

Rated Output Power
HIGH IMPEDANCE SETTING minimum continuous sine-wave power, from 20Hz-20kHz with no more than:
0.3% THD (FTC) @ rated line voltage > 110 Watts into 8 Ohms (Class A operation).
0.3% THD (FTC) @ rated line voltage > 220 Watts into 4 Ohms (5S Watts Class A operation).
0.5% THD (FTC) @ rated line voltage > 400 Watts into 2 Ohms (27.5S Watts Class A operation).
1% THD (FTC) @ rated line voltage > 600 Watts into 1 Ohm (13.75 Watts Class A operation).
LOW IMPEDANCE SETTING minimum continuous sine-wave power, from 20Hz-20kHz with no more than:
0.3% THD (FTC) @ rated line voltage: 110 Watts into 4 Ohms (Class A operation).
0.5% THD (FTC) @ rated line voltage: 220 Watts into 2 Ohms (5S Watts Class A operation).
1% THD (FTC) @ rated line voltage: 400 Watts into 1 Ohm (27.5S Watts Class A operation).

Rated Output Voltage
HIGH IMPEDANCE SETTING With continuous sine waves from 20Hz-20kHz @ rated line voltage:
42 Volts peak into 8 Ohms corresponding to 220 Watts peak.
42 Volts peak into 4 Ohms corresponding to 440 Watts peak.
40 Volts peak into 2 Ohms corresponding to 800 Watts peak.
34.64 Volts peak into 1 Ohm corresponding to 1,200 Watts peak.
LOW IMPEDANCE SETTING with continuous sine waves from 20Hz-20kHz @ rated line voltage:
29.66 Volts peak into 4 Ohms corresponding to 220 Watts peak.
29.66 Volts peak into 2 Ohms corresponding to 440 Watts peak.
28.28 Volts peak into 1 Ohm corresponding to 800 Watts peak.

Rated Output Current
HIGH IMPEDANCE SETTING with continuous sine waves from 20Hz-20kHz @ rated line voltage:
5.24 Amps peak into 8 Ohms corresponding to 220 Watts peak.
10.48 Amps peak into 4 Ohms corresponding to 440 Watts peak.
20 Amps peak into 2 Ohms corresponding to 800 Watts peak.
42.43 Amps peak into 1 Ohm corresponding to 1,200 Watts peak.
LOW IMPEDANCE SETTING with continuous sine waves from 20Hz-20kHz @ rated line voltage:
7.42 Amps peak into 4 Ohms corresponding to 220 Watts peak.
14.84 Amps peak into 2 Ohms corresponding to 440 Watts peak.
28.28 Amps peak into 1 Ohm corresponding to 800 Watts peak.

Maximum (clipping) Output Power
HIGH IMPEDANCE SETTING Continuous 1 kHz sine-wave power with no more than:
1% THD (FTC) @ rated line voltage: 150 Watts into 8 Ohms.
1% THD (FTC) @ rated line voltage: 300 Watts into 4 Ohms.
1% THD (FTC) @ rated line voltage: 500 Watts into 2 Ohms.
1% THD (FTC) @ rated line voltage: 700 Watts into 1 Ohm.
LOW IMPEDANCE SETTING Continuous 1 kHz sine-wave power with no more than:
1% THD (FTC) @ rated line voltage: 150 Watts into 4 Ohms.
1% THD (FTC) @ rated line voltage: 300 Watts into 2 Ohms.
1% THD (FTC) @ rated line voltage: 450 Watts into 1 Ohm.

Maximum (clipping) Output Power
HIGH IMPEDANCE SETTING With continuous 1 kHz sine wave @ rated line voltage:
6.12 Amps peak into 8 Ohms corresponding to 300 Watts peak.
12.24 Amps peak into 4 Ohms corresponding to 600 Watts peak.
22.36 Amps peak into 2 Ohms corresponding to 1,000 Watts peak.
37.42 Amps peak into 1 Ohm corresponding to 1,400 Watts peak.
LOW IMPEDANCE SETTING With continuous 1 kHz sine wave @ rated line voltage:
8.66 Amps peak into 4 Ohms corresponding to 300 Watts peak.
17.32 Amps peak into 2 Ohms corresponding to 600 Watts peak.
30 Amps peak into 1 Ohm corresponding to 900 Watts peak.

Maximum (clipping) Output Power
HIGH IMPEDANCE SETTING With continuous 1 kHz sine wave @ rated line voltage:
49 Volts peak into 8 Ohms corresponding to 300 Watts.
49 Volts peak into 4 Ohms corresponding to 600 Watts peak.
44.72 Volts peak into 2 Ohms corresponding to 1,000 Watts peak.
37.42 Volts peak into 1 Ohm corresponding to 1,400 Watts peak.
LOW IMPEDANCE SETTING With continuous 1 kHz sine wave @ rated line voltage:
34.64 Volts peak into 4 Ohms corresponding to 300 Watts peak.
34.64 Volts peak into 2 Ohms corresponding to 600 Watts peak.
30 Volts peak into 1 Ohm corresponding to 900 Watts peak.

Small Signal Frequency Response
HIGH IMPEDANCE SETTING
At 1 Watt into 8 Ohms @ rated line voltage: (+0, -3dB) 4 Hz - 155 kHz.
LOW IMPEDANCE SETTING With continuous 1 kHz sine wave @ rated line voltage:
At 1 Watt into 4 Ohms @ rated line voltage: (+0, -3dB) 4 Hz - 155 kHz.

Frequency Response
HIGH IMPEDANCE SETTING
At 1 Watt into 8 Ohms @ rated line voltage: (+0, -3dB) 4 Hz - 155 kHz.
LOW IMPEDANCE SETTING With continuous 1 kHz sine wave @ rated line voltage:
At 1 Watt into 4 Ohms @ rated line voltage: (+0, -3dB) 4 Hz - 155 kHz.

Slew Rate
V _{out} = 83.9 Volts peak-to-peak of square-wave signal into 8 Ohms F=10kHz @ rated line voltage: 33.5 Volts per microsecond

Rise Time
V _{out} = 83.9 Volts peak-to-peak of square-wave signal into 8 Ohms F=10kHz @ rated line voltage: 2 microseconds

Noise
Signal/Noise ratio ref. 2.83 Volts RMS into 8 Ohms (1 W): 22 Hz - 22 kHz; typically 68.5 dB A weighted; typically 75.5 dB
Signal/Noise ratio ref. 29.7 Volts RMS into 8 Ohms (110 W): 22 Hz - 22 kHz; typically 89 dB A weighted; typically 96 dB

IM Distortion
HIGH IMPEDANCE SETTING (60Hz-70kHz 4-1) SMPTE:
from 0.1-110 Watts into 8 Ohms @ rated line voltage: no more than 1%
from 0.1-220 Watts into 4 Ohms @ rated line voltage: no more than 1%
from 0.1-400 Watts into 2 Ohms @ rated line voltage: no more than 1.5%
from 0.1-600 Watts into 1 Ohm @ rated line voltage: no more than 1.5%
LOW IMPEDANCE SETTING (60Hz-70kHz 4-1) SMPTE:
from 0.1-110 Watts into 4 Ohms @ rated line voltage: no more than 1%
from 0.1-220 Watts into 2 Ohms @ rated line voltage: no more than 1.5%
from 0.1-400 Watts into 1 Ohm @ rated line voltage: no more than 2%

Voltage Gain
Voltage Gain: 39 ± 2% or 31.8 ± 0.2dB.

Inputs
BALANCED 3-pin gold-plated XLR connector. Pin assignment:
pin 1 = signal ground;
pin 2 = non-inverting input (+);
pin 3 = inverting input (-).
NON-INVERTING:
brass gold plated single-ended RCA connector (connected in parallel with pin 2 of XLR connector).
INVERTING:
brass gold plated single-ended RCA connector (connected in parallel with pin 3 of XLR connector).

Input Sensitivity
HIGH IMPEDANCE SETTING
0.761 Volts RMS ± 2% for 110 Watts into 8 Ohms.
LOW IMPEDANCE SETTING
0.538 Volts RMS ± 2% for 110 Watts into 4 Ohms.
0.538 Volts RMS ± 2% for 220 Watts into 2 Ohms.
0.513 Volts RMS ± 2% for 400 Watts into 1 Ohm.

Input Impedance
41 KOhms shunted by 470pF.

Outputs
Two sets of brass gold plated binding posts.

Output Impedance
At 1 kHz: typically 0.082 Ohm. From 20 Hz - 20 kHz: typically 0.082 -0.007/-0.002 Ohm.

Damping Factor
at 1 kHz: typically 88 re: 8 Ohms. From 20 Hz - 20 kHz: typically 98 -2/-8 re: 8 Ohms.

Operating Temperature
Operating Temperature: -4 to +104 degrees Fahrenheit (-20 to +40 degrees Celsius) ambient.

Grounding
Grounding: Separated ground and earth. Floating chassis connected to mains earthing.

Power Supply
Nominal line voltage: 100-240 Volts 50/60Hz; input voltage range: ±10%.
Two power transformers two filter chokes eight separate power supplies.
AC voltage intensively filtered by special RFI power line filter.

Power Supply Energy Storage
Power Supply Energy Storage: Approximately 220 joules.

Front Panel Controls
Front Panel Controls:
LED control.

Rear Panel Connectors and Controls
Rear Panel Connectors and Controls:
POWER SWITCH.
LOAD SWITCH.
AC POWER INLET.
AC MAINS FUSE along with the corresponding fuse holder.
One input XLR connector gold-plated.
Two input RCA connectors gold-plated.
Two sets of gold plated SPEAKER BINDING POSTS.
Two DC power jacks (central pin 2mm dia.) for connecting remote link cables.
EARTHING (GROUNDING) post gold-plated.

Features
AC voltage selector: 100/120/220/230/240 Volts internally switchable.
Transformer hum reducer: Special circuit reduces power transformer core saturation and residual mechanical hum.
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 that 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.
Bias setting (load) switch: Switch-selectable biasing circuit maintains pure Class A operation of the output stage for all load conditions between 4-16 Ohms.
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.
Protection against possible damages from high voltage transients on AC power line.
Thermal resetting fuse connected in series with AC mains fuse controls heat-sink temperature.
Threshold: 176 degrees Fahrenheit (80 degrees Celsius).
Thermal resetting fuse controls internal temperature of the power transformer.
Threshold: 248 degrees Fahrenheit (120 degrees Celsius).
Unique electronic protection circuit guards against accidental abuse (e.g. overload shorts across the output excessive DC at the input or output etc.).
AC voltage fuses:
6.25 Amps slo-blo for 100/120 Volts (3 Amps slo-blo for 220/230/240 Volts);
0.125 Amps slo-blo for 100/120/220/230/240 Volts internally mounted.

General
POWER CONSUMPTION
Nominal: Typically 330 Watts @ rated output @ 8(4) Ohms (class A operation) and at idle.
Maximum: Typically 750 Watts @ rated output @ 1 Ohm (low impedance setting).
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.
DIMENSIONS
8.25"(21cm) H x 17"(43.2cm) W x 19.5"(49.5cm) D. (add 2.8125"(7.14cm) of depth for front and rear handles).
Unit weight: 68.5 Lbs (31 Kgs).
Shipping weight: 94 Lbs (42.7 Kg).
Tube Complement: V101 - 6X22 (second amplification stage)