

Output Power
32 Watts into 16, 8, or 4 Ohms.
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 16 Ohms.
3% THD (FTC) @ rated line voltage > 30 Watts into 16 Ohms.
0.3% THD (FTC) @ rated line voltage > 1 Watt into 8 Ohms
3% THD (FTC) @ rated line voltage > 30 Watts into 8 Ohms.
0.3% THD (FTC) @ rated line voltage > 1 Watt into 4 Ohms.
3% THD (FTC) @ rated line voltage > 30 Watts into 4 Ohms.

Rated Output Voltage
With continuous sine waves at 1kHz @ rated line voltage:
30.98 Volts peak into 16 Ohms, corresponding to 60 Watts peak.
21.91 Volts peak into 8 Ohms, corresponding to 60 Watts peak.
15.49 Volts peak into 4 Ohms, corresponding to 60 Watts peak.

Rated Output Current
with continuous sine waves at 1kHz @ rated line voltage:
1.94 Amps peak into 16 Ohms, corresponding to 60 Watts peak.
2.74 Amps peak into 8 Ohms, corresponding to 60 Watts peak.
3.87 Amps peak into 4 Ohms, corresponding to 60 Watts peak.

Maximum Output Power
Maximum continuous sine-wave power, at 1 KHz, with no more than:
5% THD (FTC) @ rated line voltage > 37 Watts into 16 Ohms.
5% THD (FTC) @ rated line voltage > 37 Watts into 8 Ohms.
5% THD (FTC) @ rated line voltage > 37 Watts into 4 Ohms.

Maximum Output Voltage
With continuous sine-waves at 1kHz @ rated line voltage:
34.41 Volts peak into 16 Ohms, corresponding to 74 Watts peak.
24.33 Volts peak into 8 Ohms, corresponding to 74 Watts peak.
17.2 Volts peak into 4 Ohms, corresponding to 74 Watts peak.

Maximum Output Current
With continuous sine-waves at 1kHz @ rated line voltage:
2.15 Amps peak into 16 Ohms, corresponding to 74 Watts peak.
3.04 Amps peak into 8 Ohms, corresponding to 74 Watts peak.
4.3 Amps peak into 4 Ohms, corresponding to 74 Watts peak.

Small Signal Frequency Response
At 1 Watt into 16 Ohms @ rated line voltage:
(0, -3dB) 8.5 Hz - 32 KHz.

Frequency Response
At 30 Watt into 16 Ohms @ rated line voltage:
(0dB, -1.5dB) 20 Hz, 20 KHz.

Slew Rate
Vout=61.96 Volts peak-to-peak of square-wave signal into 16 Ohms, F=10kHz @ rated line voltage: 5 Volts per microsecond

Rise Time
Vout=61.96 Volts peak-to-peak of square-wave signal into 16 Ohms, F=10kHz @ rated line voltage: 10 microseconds

Fall Time
Vout=61.96 Volts peak-to-peak of square-wave signal into 16 Ohms, F=10kHz @ rated line voltage: 10 microseconds

Noise
Signal/Noise ratio ref. 4 Volts RMS into 16 Ohms (1 Watt): 2 Hz - 22 KHz: typically 86 dB. A weighted: typically 92 dB.
Signal/Noise ratio ref. 21.91 Volts RMS into 16 Ohms (30 Watts): 22 Hz - 22 KHz: typically 100 dB. A weighted: typically 106 dB.

Voltage Gain
30 Watts into 16 Ohms: 23.78 ± 2% or 28.22 ± 0.2dB.
30 Watts into 8 Ohms: 18.26 ± 2% or 25.2 ± 0.2dB.
30 Watts into 4 Ohms: 12.89 ± 2% or 22.2 ± 0.2dB.

IM Distortion
(60Hz:7kHz 4:1) SMPTE:
from 1-30 Watts into 16 Ohms @ rated line voltage: no more than 10%.
from 1-30 Watts into 8 Ohms @ rated line voltage: no more than 10%.
from 1-30 Watts into 4 Ohms @ rated line voltage: no more than 10%.

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 Impedance
30 Watts into 16, 8, and 4 Ohms = 0.83 Volts RMS ± 2%
Input Impedance
41 KOhms shunted by 470pF.
Outputs
Eight gold plated binding posts.
Output Impedance
At 1 KHz:
typically 6.2 Ohms; 16-Ohm tap.
typically 3.1 Ohms; 8-Ohm tap.
typically 1.55 Ohms; 4-Ohm tap.
from 30 Hz - 20 KHz:
typically 6.2 ±1.5/-0.1 Ohms; 16-Ohm tap.
typically 3.1 ±0.75/-0.05 Ohms; 8-Ohm tap.
typically 1.55 ±0.375/-0.025 Ohms; 4-Ohm tap.

Damping Factor
At 1 KHz:
typically 2.58 re: 16-Ohm load.
typically 2.58 re: 8-Ohm load.
typically 2.58 re: 4-Ohm load.
From 30 Hz - 20 KHz:
typically 2.58 ±0.043/-0.5 re: 16-Ohm load.
typically 2.58 ±0.043/-0.5 re: 8-Ohm load.
typically 2.58 ±0.043/-0.5 re: 4-Ohm load.

Operating Temperature
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
Nominal line voltage: 100-240 Volts 50/60Hz. Input voltage range: ±10%.
Two power transformers, one filament transformer, six filter chokes, seven separate power supplies, six rectifier tubes.
AC voltage intensively filtered by special RFI power line filter.

Power Supply Energy Storage
Power Supply Energy Storage: Approximately 265 Joules.

Front Panel Controls and Chassis Connectors & Controls
ML3 Front Panel Controls: LED control.
CHASSIS CONNECTORS AND CONTROLS:
MULTI-TURN TRIMMING POTENTIOMETER for setting the nominal value of plate current of the output tube V1.
Set of TESTPOINTS for measuring the value of plate current of the output tube by using an external voltmeter.
Plate FUSE for the output tube, along with corresponding fuse-holder.
LOCAL NFB ON-OFF switch, allowing to introduce small amounts of local feedback in the output stage.
NFB1 - NFB2 switch, allowing to vary the amounts of local feedback (2.4dB and 1.2dB, respectively).
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).
REAR PANEL CONNECTORS AND CONTROLS:
Eight gold- plated BINDING POSTS.
PANEL RECEPTACLE, MALE for connecting the power supply cable.
ML3-PS Front Panel Controls: LED control.
CHASSIS CONNECTORS AND CONTROLS:
Six RECTIFIER TUBES (V101 - V106).
REAR PANEL CONNECTORS AND CONTROLS:
Power switch.
AC POWER INLET.
AC MAINS FUSE, along with corresponding fuse-holder;
FRONT-END PLATE FUSE, along with corresponding fuse-holder
PANEL RECEPTACLE, FEMALE, for connecting the power supply cable.
TWO DC POWER JACKS (central pin 2mm dia.) for connecting remote control/link cables.
GROUNDING (EARTHING) POST (gold plated),DING POSTS.

Features
AC voltage selector: 100/120/220/230/240 Volts internally switchable.
Ultra low-noise power and filament transformers: 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 output transformer especially designed for handling high voltage power triodes and assuring the reproduction of a full spectrum of audio frequencies at any level of output power up to the maximum specified.
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 transformers. Threshold: 248 degrees Fahrenheit (120 degrees Celsius)
Fuses: 6.25 Amps slo-blo for 100/120 Volts (ML3-PS) 3 Amps slo-blo for 220/230/240 Volts (ML3-PS) 0.125 amp slo-blo for on/off and remote control circuitry, internally mounted (ML3-PS) 0.125 Amp slo-blo Front-End Plate Fuse (ML3-PS) 0.5 Amp fast-acting Plate Fuse for the output tube (ML3)

General
Power Consumption: Typically 400 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 100 hours.
Warm-up time: Minimum 25 minutes.
Unit dimensions: 8.25 inches (21cm) high x 16 inches (40.64cm) wide x 20.375 inches (51.75cm) deep [add 1.4375 inches (3.7cm) 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 ML3: 79 Lbs (35.9 Kg).
Unit weight ML3-PS: 80.2 Lbs (36.41 Kg).
Shipping weight ML3: 99 Lb (44.95 Kg).
Shipping weight ML3-PS: 100.2 Lbs (45.5 Kg).
Tube Complement ML3: • V101 - 12AX7(ECC83), first amplification stage; • V102, V103, V104, V105 - 6X30P-EV / 6H30P-EB (original), second amplification stage; • V1 - 6AW70, output stage. NOTE: we recommend replacing 6AW70 tube about once every 1.5-2 years to maintain the best performance of the amplifier.
Tube Complement ML3-PS: • V101, V102, V103, V104, V105, V106 - 12AX3 / 12BE3, rectifier tubes