# Rated Output Voltage

F = 1KHz:

MM input to output: 0.125 Volts RMS.

MC input to output: 0.125 Volts RMS.

# Voltage Gain\*, \*\*

F = 1KHz:

MM input to output: typically 100 or 40dB.

MC input to output: typically 1000 or 60dB

## RIAA Accuracy\*

From 20 Hz - 20 KHz; better than + 0.0 dB/-0.5 dB, typically.

## Phono Overload

Phono MM: 225 + 15 millivolts RMS.

Phono MC: 22.5 + 1.5 millivolts RMS.

# Total Harmonic Distortion\* from 20 Hz - 20 KHz; RIAA de-emphasis

Vout=0.25 Volts RMS:

MM input to output: no more than 0.1%.

MC input to output: no more than 0.16%.

Vout=10 Volts RMS:

MM input to output: no more than 1%.

MC input to output: no more than 1%.

### Inputs

Unbalanced: gold plated single-ended RCA connectors.

### Input Sensitivity

Vout=0.125 Volts RMS, F = 1KHz:

MM input: typically 1.25 millivolts RMS.

MC input: typically 1.25 millivolts RMS.

### Input Impedance

MM input: 47 KOhms shunted by 200 pF.

MC input: 400 Ohms

# Outputs

Unbalanced: gold plated single-ended RCA connectors.

# Corrected Impedance

Corrected output impedance: typically 2.3 KOhms.

# Noise

Signal-to-noise ratio, below 1 Volts RMS output, A weighted:

MM input to output (shorted input): typically 88dB.

MC input to output (shorted input): typically 86 5dB

MM input to output, with IHF dummy load in MM position: typically 84dB

MC input to output, with IHF dummy load in MC position: typically 82.5dB

MM input to output; non-inverting.

MC input to output; non-inverting.

# Operating Temperature

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

# **Power Supply**

Each LP1 contains two identical external power supplies - one for each channel. Therefore, all further information regarding power supply is shown for ONE power supply, unless otherwise indicated).

Nominal line voltage: 100-240 Volts, 50/60Hz.

Input voltage range: ±10%.

One power transformer; two filter chokes; one full-wave vacuum rectifier; one solid-state analog non-switching voltage regulator.

AC voltage intensively filtered by special RFI power line filter

# Power Supply Energy Storage

Regular version: approximately 125 Joules.

Deluxe version: approximately 150 Joules.

# Front Panel Controls

LED control

## Rear Panel Connectors & Controls: Preamplifier

EC320 power inlet (3 lug).

EARTHING post.

PHONO grounding post.

Two pairs of INPUT CONNECTORS RCA for PHONO inputs.

Two SELECTOR/GAIN switches.

One pair of OUTPUT CONNECTORS RCA

### Features

Pure class A vacuum tube design. All stages are single-ended.

No loop feedback is employed. High-current drive capability, in combination with unique reasonable real world load, while maintaining its practically inaudible sonic signature.

Tremendous reserves of headroom and output drive capability are engineered into the LP2.1.

Specially designed damping panel installed in the LP2.1's deluxe version effectively isolates all sensitive electronic components from any induced resonances.

Absolutely outstanding signal-to-noise ratio makes the LP2.1 one of the quietest phono preamps available on the market.

This design is unique to LAMM INDUSTRIES, INC.

AC voltage selector:

100/120/220/230/240 Volts, internally switchable.

### Safety:

Unique electronic protection circuit enables muting of the outputs until the preamplifier is stabilized after a turn-on, as well as functioning of the preamplifier in a "muting" mode during operation, and automatic switching to muting in case the AC line drops or is interrupted.

AC voltage fuses: 2 Amps slo-blo for 100/120 Volts. 1 Amp slo-blo for 220/230/240 Volts.

### General

Power Consumption: Typically 75 Watts.

Burn-in Time at Factory: Minimum 72 hours.

Recommended Burn-in Time in End-user's System: Minimum 100 hours.

Warm-up time: Minimum 45 minutes.

Unit dimensions: 4.5 inches high x 19 inches wide x 13.875 deep + 1.375 inches for front

Crate dimensions:  $23" \times 19" \times 10"$  ( $58.42cm \times 48.26cm \times 25.4cm$ ).

Unit weight regular version: 22 Lbs (10 Kg).

Unit weight deluxe version: 41.5 Lbs (18.84 Kg).

Shipping weight regualr version: 43.1 Lbs (19.57 Kg).

Shipping weight deluxe version: 62.6 Lbs (28.42 Kg).

Tube Complement: V101 -6C3P / 6C3Π, left channel, first amplification stage;

V102 - 6C37 / 6C317, right channel, first amplification stage; V103 - 6C45P-E / 6C45П-E (original), left channel, second amplification stage; V104 - 6C45P-E / 6C45П-E (original), right channel, second amplification stage;

V105 - 6X4, full wave voltage rectifier.

<sup>\*</sup> All measurements were taken with the 41 KOhm load connected to the preamplifier's output.

 $<sup>^{\</sup>star\star}$  Voltage gain and Input sensitivity may vary within a -15% range of the specified value, as it is dependant upon the tube selection; however, the amplification variance between the left and right