Rated Output Voltage

From 20Hz-20KHz into 41-KOhm load: 1 Volt RMS

Voltage Gain

7.43 ± 2% or 17.43 ± 0.2dB.

Attenuation

3.98 ± 2% or 12 ± 0.17dB

Absolute Phase

Inverting

Frequency Response

From 1-50 Volts RMS into 41-KOhm load: (-0.1dB) 20 Hz - 20 KHz. (-3dB) 5 Hz -140 KHz.

Slew Rate

Vout=36 Volts peak-to-peak of square-wave signal, F=10KHz; into 41-KOhm load: 47 Volts per microsecond

Rise Time

Vout=36 Volts peak-to-peak of square-wave signal, F=10KHz; into 41-KOhm load: 0.61

Total Harmonic Distortion from 20 Hz - 20 KHz

Vout=1 Volt RMS into 41-KOhm load: no more than 0.03%

Vout=50 Volts RMS into 41-KOhm load: no more than 1%

Vout=1 Volt RMS into instrument load: no more than 0.03%

Vout=50 Volts RMS in to instrument load: no more than 1%

Vout=1 Volt RMS into IHF load: no more than 0.03%

Vout=30 Volts RMS into IHF load: no more than 1%

IM Distortion

60Hz: 7KHz 4:1 SMPTE:

Vout=1 Volt RMS into 41-KOhm load: no more than 0.09%

Vout=10 Volts RMS into 41-KOhm load: no more than 1%

Vout=1 Volt RMS into instrument load: no more than 0.09%

Vout=10 Volts RMS in to instrument load: no more than 1%

Inputs

Unbalanced gold plated single-ended RCA connectors.

Input Sensitivity

Vout = 1 Volt RMS into 41-KOhm load: 0.135 Volts RMS ± 2%.

Input Impedance

F=1KHz: Typically 16.5 KOhms.

Outputs

Unbalanced: gold plated single-ended RCA connectors.

Pseudo-balanced: 3-pin gold plated XLR connectors.

Balanced pin assignment: pin 1 = signal ground; pin 2 = signal output; pin 3 = not connected.

Corrected Output Impedance

F=1KHz: Typically 16.5 KOhms.

Noise

Signal-to-noise ratio, below 2 Volts RMS output, unweighted: typically 88 dB.

Signal-to-noise ratio, below 2 Volts RMS output, 22Hz - 22KHz: typically 96 dB.

Signal-to-noise ratio, below 2 Volts RMS output, A-weighted: typically 105 dB.

Operating Temperature

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

Power Supply

Nominal line voltage: 100-240 Volts 50/60Hz. Input voltage range: ±10%.

One power transformer, two vacuum tube rectifiers, five filter chokes, one high voltage (350 vdc) high energy power supply, two solid-state analog non-switching voltage regulators.

AC voltage intensively filtered by special RFI power line filter.

Power Supply Energy Storage

Power Supply Energy Storage: Approximately 257 joules.

Front Panel Controls: Preamplifier (two units)

LED control.

OUTPUT LEVEL control.

SELECTOR switches

MONITOR switches.

ATTENUATOR (-12dB) switch.

MUTING switch.

OUTPUT 1 switch.

OUTPUT 2 switch.

Rear Panel Connectors & Controls: Preamplifier

Four INPUT CONNECTORS RCA for line inputs and TAPE (play).

One OUTPUT CONNECTOR RCA for TAPE (record).

Three OUTPUT CONNECTORS RCA (single-ended outputs).

Three gold-plated XLR CONNECTORS (pseudo-balanced outputs).

One XLR CONNECTOR (6 pins, gold-plated) for connecting the power supply cable.

Front Panel Controls: Preamplifier Power Supply (two units)

POWER switch.

OUTLETS switch.

REMOTE 1 turn-on/off switch for LAMM power amplifiers.

REMOTE 2 turn-on/off switch for LAMM power amplifiers.

Four LED controls.

Rear Panel Connectors & Controls: Power Supply

IEC 320 POWER INLET (3 lug)

Two AC OUTLETS, switched.

One XLR CONNECTOR (6 pins, gold-plated) for connecting the power supply cable.

Two REMOTE CONTROL plugs.

EARTHING POST (gold plated).

Features

Pure class A, single-stage zero feedback design, providing the shortest signal path possible.

Four low internal impedance (about 800 Ohms per triode!) very linear medium-mu duo triodes are connected in parallel, thus minimizing the internal noise of the preamplifier and ensuring the unprecedentedly low output impedance for this type of topology.

High-current drive capability, in combination with unique single-ended class A circuitry, assure the preamplifier's capability to drive any cable and any real world load, while maintaining its practically inaudible sonic signature.

Specially designed damping panel installed in the LL1.1 Signature preamplifier effectively isolates all sensitive electronic components from any induced resonances.

Absolutely outstanding signal-to-noise ratio makes the LL1.1 Signature one of the quietest line-stage preamplifiers available on the market.

This design is unique to LAMM INDUSTRIES. INC.

AC voltage selector:

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

Remote Control:

Special built-in circuit enables the remote turn on/off of LAWM power amplifiers.

Available remote link cable coordinates the remote functions of two or more amplifiers.

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.

Plate voltage overload protection: 0.3 Amps slo-blo fuse, internally mounted.

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

General

Power Consumption: Typically 96 Watts.

Burn-in Time at Factory: Minimum 72 hours.

Recommended Burn-in Time in End-user's System: Minimum 80 hours.

Warm-up time: Minimum 25 minutes.

Unit dimensions: 4.5 inches high \times 19 inches wide \times 13.875 deep + 1.375 inches for front handles.

Crate dimensions: 23" x 19" x 10" (58.42cm x 48.26cm x 25.4cm).

Unit weight preamplifier: 35.8 Lbs (16.2 Kg).

Unit weight power supply: 21.2 Lbs (9.6 Kg).

Shipping weight preamplifier: 53.8 Lbs (24.4 Kg).

Shipping weight power supply: 39.2 Lbs (17.8 Kg).

Tube Complement Preamplifier: four (eight) 6N30P-EB / 6H30П-EB, first (single) amplification stage.

Tube Complement Power Supply: two (four) 6X4, rectifier tubes.