



PREAMPLIFICATEUR PHONO 1

Preamplifier Type: Phono Stage

Chassis: Single

Dual Mono: Yes

Harmonic Structural Integrity: Yes

EQ Curves: Passive RIAA & IEC

RIAA Precision: 20 Hz - 20KHz +/- 0.1dB

Voltage Gain: 55dB - 70dB (selectable in 5dB increments)

Rated Input*: 12V rms Single Ended or Balanced

Maximum Output*: 25V rms Single Ended or Balanced

Nominal Output: 2V rms Single Ended or Balanced

S/N Ratio Reference: <-87 dBA @ 70 dB Gain

Channel Separation*: <-90dBA

Frequency Response: 2-100KHz*

Bandwidth Response: 1-1MHz*

THD + Noise*: .< 0.02%

Load Impedance: 100Ω, 200Ω, 300Ω, 400Ω, 500Ω, HIGH, CUSTOM

Output Impedance*: 10Ω Single Ended / 100Ω Balanced

Global Negative Feedback: Zero

Balanced Input Pin Configuration: 1: Ground, 2: Positive, 3: Negative

Input Tubes (per Channel): 2 x NOS 8416 & 2 x 6n6p

Soft Start: 1 Minute 40 Seconds

Sequential Remote Turn On: 12 V Mini-Phone Plug

Cooling: Natural Convection

Microphonic Isolation: Suspended Audio Board/Tube Vibration Control

Fuses Phono 1: 1

Maximum Power Consumption during Operation: 75 Watts

Maximum Power Consumption during Standby: <1 Watt

Supply Voltage Factory Set: 100 to 250VAC, 50/60 Hz

AC Mains Input: 15A IEC Detachable Power Cord

Weight Phono 1: 58.5 lb/26.5 kg

Shipping Weight Phono 1: 102.5 lb/46.5 kg

Dimensions Phono 1: 19.5in W x 21in D (including connectors) x 9.5in H (including ventilation) / 495 mm W x 533mm D x 241mm H

Dimensions Shipping: 24.5in W x 26.5in D x 12.5in H / 622 mm W x 673mm D x 318mm H

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Tenor Inc. reserves the right to make improvements without notice that may result in specification changes

Phono 1 Production Features:

Same general electromechanical features as the power supply and line preamplifier units. Microprocessor controlled with front panel VFD display and internal USB port for software upgrade.

Medical grade low leakage AC inlet module with integrated EMI filter.

Oversize custom made ultra low noise, low stray magnetic field, dual electrostatic shields power transformers. In addition these transformers are potted in a steel can with special epoxy resin for further noise reduction.

Each DC supply are individually choke filtered and regulated independently for each channels with oversize low noise circuitry providing clean DC voltages to the amplification stages.

High quality PTFE insulation rhodium plated RCA connectors for reliable contacts and low emf.

High quality pro-audio grade gold plated XLR connectors used for reliable long term contacts.

A three position GND selector is provided to equalize ground potentials, That feature is also unique, giving to the user the necessary tools to adjust the system residual noise to a minimum and eliminate "Ground loops".

Wide bandwidth triple shielded moving coil step up transformers with ultra low distortion are used to provide the maximum CMRR, low noise and transparency.

The first amplification stage is a discrete symmetrical topology using very low noise bipolar transistors for the moving coil, this circuit also contain the gain adjustment selector (55 - 60 - 65 - 70 dB for MC) as well as the load adjustment selectors.

The entirely passive equalizer section use a proprietary split EQ configuration to reduce the noise and increase RIAA precision.

Two different EQ curves can be selected (RIAA standard 1954, RIAA + IEC).

Two pure class A amplification stages using high quality selected vacuum tubes are used to amplify further the phono signal.

An absolute phase and mono/stereo selector complete the phono preamplifier section.

High current pure class A ultra low distortion unity gain solid state buffer stages are used to provide isolation from the vacuum tube circuit. This buffer use discrete transistors instead of IC's to get the maximum of sonic performances, it's 10 Ohm output impedance is low enough to drive hundreds of feet of audio cable with unchanged distortion and noise characteristics.

Wide bandwidth double shielded hum bucking balancing transformers with ultra low distortion are used to provide the maximum performances when driving balanced audio cables.

All vacuum tubes are selected after a 200Hrs burning for electrical and noise specs, in addition they are also selected for microphony with a proprietary process.

Main audio board is mounted on a special suspension with a resonant frequency of 20Hz in order to suppress external and internal transmission of vibrations.

Special shielding arrangements are used for limiting the influence of magnetic stray fields.

Acoustical damping of main chassis part to avoid microphonics.

Inrush current limiters used in conjunction with a slow start circuitry to optimize long term reliability of sensitive components like electron tubes and high voltage capacitors.

Silver plated copper wires with 600V PTFE insulation used everywhere with high quality crimped connectors for long term stability.

Relatively low operating temperature and high quality printed circuit boards insure long term reliability.

Each power supply section are hand assembled and intensively tested in our factory as usual for all Tenor products. All Tenor products are in conformity to IEC and KR as well as CE safety regulations.

Low EMF input and output switching is used for very low level signal integrity and low distortion.

