

## Reference C301 high resolution preamplifier



*Reference C301*  
Ultra High resolution preamplifier

- Dual Mono Configuration
- Stabilized and separated power supplies for each channel
- Balanced native circuitry
- Two frames for high noise rejection
- Line Signal Process Processing via RCA for Balanced Output Transformation

C301 Preamps from the REFERENCE series offer a significant step forward in capturing subtleties, nuances and emotions of recorded music. Designed in and out to reflect the improvements of the entire range of EamLab products, these new preamps fit perfectly with our range of REFERENCE Amplifiers.

All aspects of signal processing have improved considerably, with lower noise, total distortion less than 0.002%, separation of channels greater than 90 db up to rejection of any kind of disturbance it is due to the separate power stage incorporating also a last-generation EMI / RFI filter with iron-ceramic core-wound inductors and capacitors specially designed for this purpose.

Circuits are housed in 3mm thick steel chassis to reduce the effects of electromagnetic interference and vibrations introduced by the environment.

input and output stages (true signal amplification) through proprietary HDCA modules in multi-stage, emitter tracker configurations provide less distortion and better response linearity than conventional "monostable" preamps

Every single preamp is hand-assembled and tested for 100 hours to ensure unmatched reliability and performance for many years to come.

## Power supply highlights

The audio circuits of the REFERENCE C301 receive energy from an analog power supply housed in your dedicated chassis. The power supply avoids the topology of the integrated circuits commonly used in many preamps and mimics the topology of the REFERENCE amplifier design.

Circuitry is completely discrete and offers the ability to quickly respond to immediate energy demands and not be affected by all the more severe network voltage fluctuations.

Over-sized for a preamplifier, the power supply has 2 toroidal transformers of 80 VA each and over 40,000  $\mu\text{F}$  of capacity per channel.

Disconnection of power in your chassis has the ideal configuration to isolate parasitic electrical and magnetic interferences from the critical path of the signal to the preamplifier circuits.

The power stage can provide current and voltage variations for any music event, in any condition of use, and at any level of network variation.



## Features

**Solidity-** efficient frame structure made of a 30/10 steel chassis for minimizing vibrations and high volume listening resonances

**Galvanic isolation** – transformers and separate network filter to eliminate possible sources of noise from the amplification circuits

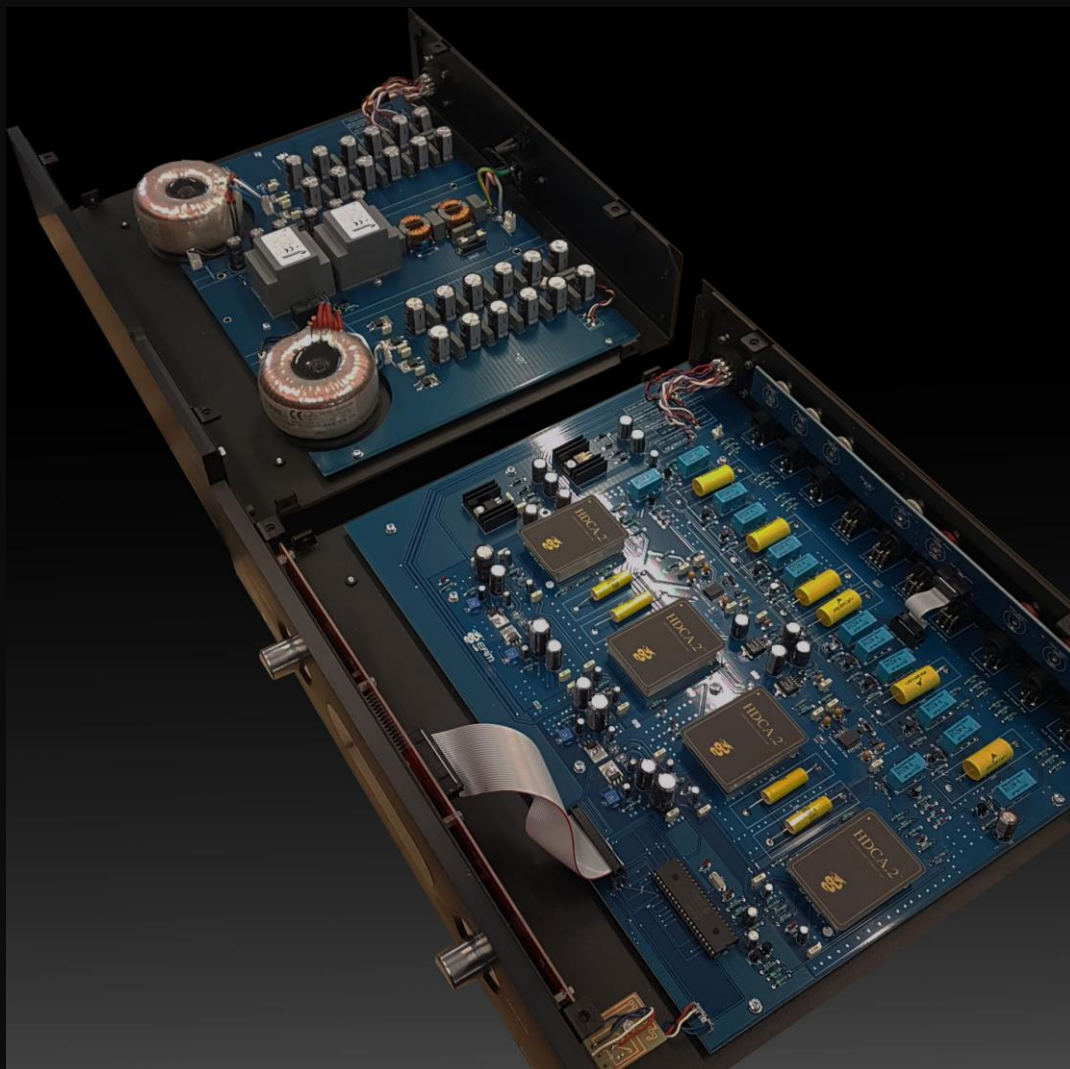
**PFC – Power Factor Correction** on the power line reduces acoustic pollution from network harmonics and increases the use of network voltage to 95%. the voltage and current remain in phase between them and eliminate the off-axis transient at high current pulses in circuitry without PFC

**HDCA.2** – the input stage is mounted on ceramic multilayer pcb at low-dielectric MIL-Spec standards. the ceramic support guarantees a very high circuit rigidity, which is essential for the efficient handling of input signals free from any interference. All armored and resinous.

**Film resistor** – all resistors are low noise and 1% tolerance to minimize the thermal noise of active circuitry

**Native balanced circuitry** the preamplifier uses native balanced circuitry for processing audio signals via XLR

**Balanced via RCA** all RCA line signals are converted to balanced signals and returned to the perfectly symmetrical XLR outputs



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#### Input

- 3 pair XLR input
- 3 pair line input via RCA

#### Output

- 2 pair XLR output
- 1 pair RCA output

#### THD+N

- Balanced Output: <0.003%, 20 Hz to 20 kHz, @ 4 Vrms

#### Input impedance

- 47Kohm XLR
- 22Kohm RCA

#### Signal to noise ratio

- >109 db "A" weighted

#### Frequency response

- 0.20 Hz to 90 KHz +/- 0.2db

#### Phone output

- 32 ohm = 1.5W
- 300 ohm = 0.5 W

Dimension 420 \* 330 \* 85 mm / each module