

# Thrax Orpheus

## Phono Preamp with LCR RIAA Equalizer



The phono preamplifier's task is extracting the last bit of information from the cartridge by providing optimal loading while maintaining very high noise immunity. After vastly amplifying the input signal and applying the standard RIAA equalization it interfaces at line level with the rest of the system via balanced or unbalanced lines.

### Features

- Built in step up transformer
- Constant impedance LCR equalization
- Programmable gain and loading
- Accepts both balanced and unbalanced input signals on RCA and XLR connectors.
- Switches ground plane with input selection preventing ground loops.
- Programmable ground arrangement for large systems.
- Balanced and unbalanced output
- Programmable absolute phase per input
- Shunt regulated constant current PSU for lowest noise and best dynamic behavior
- Choke input rectifier for no switching noise
- Custom vacuum encapsulated signal relays for ultimate sound and reliability
- Modular construction
- Microprocessor controlled
- Interlocking solid aluminum chassis.

### Technology

Orpheus uses two tube gain stages with zero feedback. Each gain stage operates on it's own and there are no feedback loops enclosing them. To guarantee the highest performance we take care of a number of things often overlooked.

At the RCA input we switch the ground plane when switching between inputs so there are no hum loops and induced ground noise for the D3a input tube.

The D3a is loaded by the custom passive LCR RIAA correction. This arrangement combined with constant current source guarantees long term stability during the service life of the tube and isolates any noise that might have made it's way through the power supply.

The use of LCR equalization is vastly different from the often used equalization networks in the feedback loops or the plain passive RC networks.

The LCR filter being a constant impedance to the

source allows the input stage to behave the same way at low and high frequencies and at any level.

All other solutions have varying impedance. LCR has unmistakable sonic purity and textural richness. The equalization in Orpheus is taken to the extreme by being executed with custom coils wound with OFC wire and silver foil capacitors.

The output stage is another super low noise tube loaded by a transformer to bring the signal up to the necessary level and provide complete isolation of the sensitive LCR circuit from the following components. The EQ filter is out of any gain loops and sits between the two gain stages protected from any unpredictable influences at it's input and output.

Orpheus is one of the quietest tube phono pre-amplifiers and the fact that this is achieved in a single chassis is remarkable.

### Specifications

#### Inputs

- 2 x RCA or XLR

#### Output

- RCA or XLR

#### Gain

- 40/58/64db

#### Power supply

- 115 or 230 V

#### Power consumption

- 50W

#### Weight

- 15Kg

#### Dimensions

- 432Wx400Dx120H mm

#### Finish

- Black or Silver anodized aluminum

#### Tube compliment

- 2 x D3a amplification
- 2 x 6C4 amplification

