

User Manual for

**PHATHOM PREAMPLIFIER**  
**(for use with DisC cartridge)**



PRE

Version 1.0 (May 2018)



## Chapter 1 - Introduction

The Phædrus Audio PHATHOM is a high-quality transimpedance preamplifier for DisC phono cartridges.

## Chapter 2 - Safety

### General

Before using any piece of equipment manufactured by Phædrus Audio, be sure carefully to read the applicable items of these operating instructions and the safety suggestions. Keep them for future reference. Follow the warnings indicated on the unit, as well as in these operating instructions.

THE USER SHOULD NOT ATTEMPT TO SERVICE THE UNIT. ALL SERVICING SHOULD BE REFERRED TO QUALIFIED SERVICE PERSONNEL OR FACTORY ONLY.

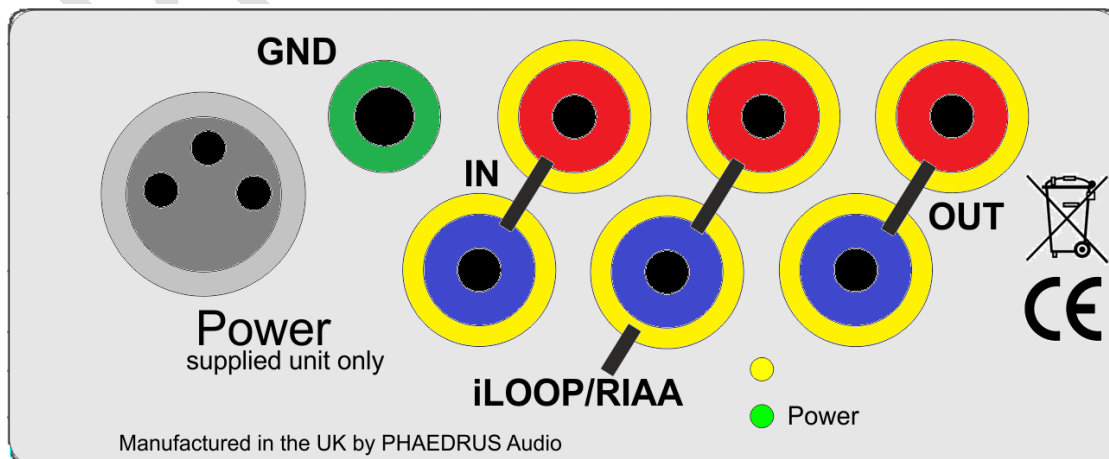
Phædrus Audio products should NEVER be connected to the external power supply or in any other way energised when the case is opened and/or the circuit boards are accessible.

### General Safety Instructions

- Do not operate this equipment near any source of water or in excessively moist environments.
- Keep this equipment away from babies, children and pets.
- Do not let objects do not fall, or liquids be spilled, onto the enclosure.
- Situate this equipment away from heat sources or other equipment that produce heat.
- Ensure this equipment has adequate ventilation. Improper ventilation will cause overheating, and can damage the equipment.
- When cleaning this equipment, remove all connections to the unit; including power and gently wipe with a clean lint-free cloth; if necessary, gently moistened with lukewarm or distilled water. Use a dry lint-free cloth to remove any remaining moisture. NEVER use aerosol sprays, solvents, or abrasives on this equipment.
- This equipment should be serviced by qualified service personnel or returned to Phædrus Audio when: an object (or objects) have fallen into the enclosure; or liquid has fallen into, or been spilled into the unit; or the unit has been exposed to rain or high humidity; or the unit does not operate normally or exhibits a marked change in performance; or the unit has been dropped, or the enclosure has been damaged

## Chapter 3 – Connecting the equipment

The rear of the panel Phædrus Audio PHATHOM is illustrated here.



Connecting the PHATHOM is straightforward. Make your audio connections first BEFORE connecting the power supply screw lock connector.

#### Turntable

**The leads from the turntable should be connected to the sockets labelled iLOOP.** The standard input connectors are not operative in the PHATHOM preamplifier. Be sure to respect the channel polarity. The convention used in the Phædrus Audio PHATHOM is the right channel is the upper of the two connectors.

#### Earth/Ground

The turntable earth (ground) wire should be connected to the green connector labelled GND. You may need to purchase a (4mm) Banana plug to mate with this connector to be sure of making a solid and reliable connection.

## Chapter 4 – Operation and facilities

The power dissipation of the Phædrus Audio PHATHOM is remarkably low: less than 1 Watt, so you are encouraged to leave this preamplifier permanently energised as this is consistent with the best audio performance and reliability. Thus, once the installation is made, there is nothing further to do or operate.

#### Output transformers

Output transformers are employed in the Phædrus Audio PHATHOM to increase isolation and improve headroom. They are also used to provide the rumble filtering which is required in a preamplifier which would

#### Output

The following preamplifier/ integrated amplifier should be fed from the phono (RCA jack) connectors labelled OUT. Once again, be sure to respect the channel convention that the right-channel is on the upper connector.

#### Power Supply

Make sure that the power supply is not energised before you connect the multi-way, screw-lock connector from the power supply to the PHATHOM. The screw lock only needs to be taken to just finger-tight. Do not overtighten,

Finally plug in the power supply to the mains supply. If you listen carefully, you will hear the muting relay click after several seconds which indicates your Phædrus Audio PHATHOM is ready to use.

otherwise have a frequency response extending down to between 1 and 3Hz.

#### Power supply & Muting

The power supply (PSU) is kept external to keep any hum fields to a minimum. The PHATHOM connects to the PSU via a high-quality screw-locking connector. The PSU is fully filtered and continually monitored.

The output phono (RCA jack) connectors are fed via a vacuum-sealed relay (with gold-plated on silver contacts). The relay is controlled by the PSU monitoring circuit. This keeps any switch-on transients out of subsequent equipment.

## Appendix 1 - Specifications

### PHATHOM Preamplifier

**Sensitivity @ 5cm/s:** DisC cartridge only

**Input load:** 100Ω

**Distortion:** Better than 0.1% THD at nominal output level

**Signal to noise (wrt nominal sensitivity and un-weighted):** 80dB

**Headroom (wrt nominal sensitivity):** 23dB

*Phædrus Audio reserves the right to change specifications without notice.*



## Appendix 2 - Warranty and service

### Service

If you experience a problem with a Phædrus Audio product, contact [support@phaedrus-audio.com](mailto:support@phaedrus-audio.com). We will diagnose the problem remotely and advise you of the warranty status. If a repair or replacement is required, we will issue a Return Merchandise Authorization (RMA) number and tell you where to send the unit to be repaired. You **MUST** have an RMA number before you return the equipment to Phædrus Audio's support service. Phædrus Audio will not accept responsibility for loss or damage in shipping or for equipment returned without valid paperwork and/or a valid RMA number. Remember, warranty is void if product serial numbers have been removed or altered, or if the product has been damaged by abuse, accident or unauthorized modification and/or repair (see Phædrus Audio Limited

Warranty for details). There are no user serviceable parts inside.

PLEASE RETAIN YOUR SALES RECEIPT. IT IS YOUR PROOF OF PURCHASE COVERING YOUR LIMITED WARRANTY. LIMITED WARRANTY IS VOID WITHOUT SUCH PROOF OF PURCHASE.

### Phædrus Audio's Limited Warranty

***Warranty service conditions are subject to change without notice. For the latest warranty terms and conditions and additional information regarding Phædrus Audio limited warranty, please see complete details online at [www.phaedrus-audio.com](http://www.phaedrus-audio.com).***

### Appendix 3 - Declaration of Conformity

The Manufacturer of the Products covered by this Declaration is

**Phædrus Audio**  
**Maidstone**  
**Kent**  
**UK**

The directives covered by this declaration are:

**89/336/EEC Electromagnetic Compatibility directive**  
**73/23/EEC Low Voltage Equipment directive**

The products covered by this declaration are:

**PHATHOM preamplifier**

The basis on which conformity is being declared: The manufacturer hereby declares that the products identified above comply with the protection requirements of the EMC directive and with the principal elements of the safety objectives of the Low Voltage Equipment directive, and that the following standards have been applied:

IEC INTERNATIONAL STANDARD 60065 - Audio, video and similar electronic apparatus – Safety requirements

The technical documentation required to demonstrate that the products meet the requirements of the Low Voltage Equipment directive has been compiled and is available for inspection by the relevant enforcement authorities. The CE mark was first applied in 2018.

Signed:



Richard Brice, Technical Director  
Date: May 2018

PRELIMINARY