

# Reference 2 Phono Stage Preamp

Owners Manual - Issue 1.0 - January 2013



## Content of the box

Thank you for purchasing this Reference 2 Phono Stage Preamplifier.

Please make sure you have received all of the following components in the package:

- The preamplifier module
- DC Power supply
- This manual

## Device Connections

Diagram below shows the rear of the unit and available connections.



## Connecting the Preamp to the Hi-Fi

**WHEN CONNECTING YOUR PRE AMP, TAKE GREAT CARE NOT TO CAUSE DAMAGE.  
DO NOT FORCE YOUR CONNECTORS INTO THE UNITS SOCKETS.**

**BEFORE CONNECTING OR DISCONNECTING THE PREAMP  
ENSURE THAT IT IS DISCONNECTED FROM ANY POWER SOURCE.**

Connections should be as follows:

- The right (R) and left (L) phono inputs should be connected to your turntable's respective outputs.
- The right (R) and left (L) outputs should be connected to your HiFi amplifier's or other audio equipment's inputs.
- The turntable signal earth lead should be connected to the earth post.
- The power supply should then be connected to the preamp.

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## Using the Preamp

Once the preamp is connected, as explained previously, using it is simply a matter of switching the unit on: the front panel RED LED should light. The front panel green LED indicates if the mains power is connected.

You will also need to select the appropriate input on your HiFi amplifier, and you're off. Enjoy!

## Virtual Battery Function (Where fitted)

The status of the VB function is shown by a front panel green LED:

- LED flashing = fast charging.
- LED steady = trickle charge only.
- LED off = mains power disconnected.

The front panel switch positions are:

- Up 'Charge' = Charge battery, phono stage off.
- Down 'On' = Phono stage On (RED LED on), battery trickle charge.

Whenever the unit is switched to 'On' the battery will be held in trickle charge mode. This means that it is possible to flatten the battery if the unit is left in the 'On' position for over 24 hours (typical, subject to battery charge level/condition).

In 'Charge' mode the unit will select trickle/fast charge depending on battery status. A very flat battery may be held in trickle mode until it has enough charge to accept fast charge operation.

**NOTE: This unit includes a NiMh battery, the battery is always on trickle charge when power is connected. NiMh batteries are specified to be safe when left on charge but it is not recommended to leave this unit permanently connected to the power.**

This unit can be used without the mains power being switched on but this will eventually flatten the battery. If the battery is drained too much it will not be capable of powering the phono stage and will have to be left in 'charge' mode until it has recovered sufficient charge to operate correctly.

## Specifications

### MM/HMC

- Input Level – 1.25mv to 5mV
- Input Resistance – 47KOhm
- Gain - 42dB
- Output Resistance 680Ohm

### MC

- Input Level – 0.15mV to 0.5mV
- Input Resistance – 470 Ohm
- Gain - 61dB
- Output Resistance 680Ohm