

# ***Leema Acoustics***

## **Essentials High Resolution Phono Amplifier**



## **INSTRUCTION MANUAL**

**ISSUE 1**

## Introduction

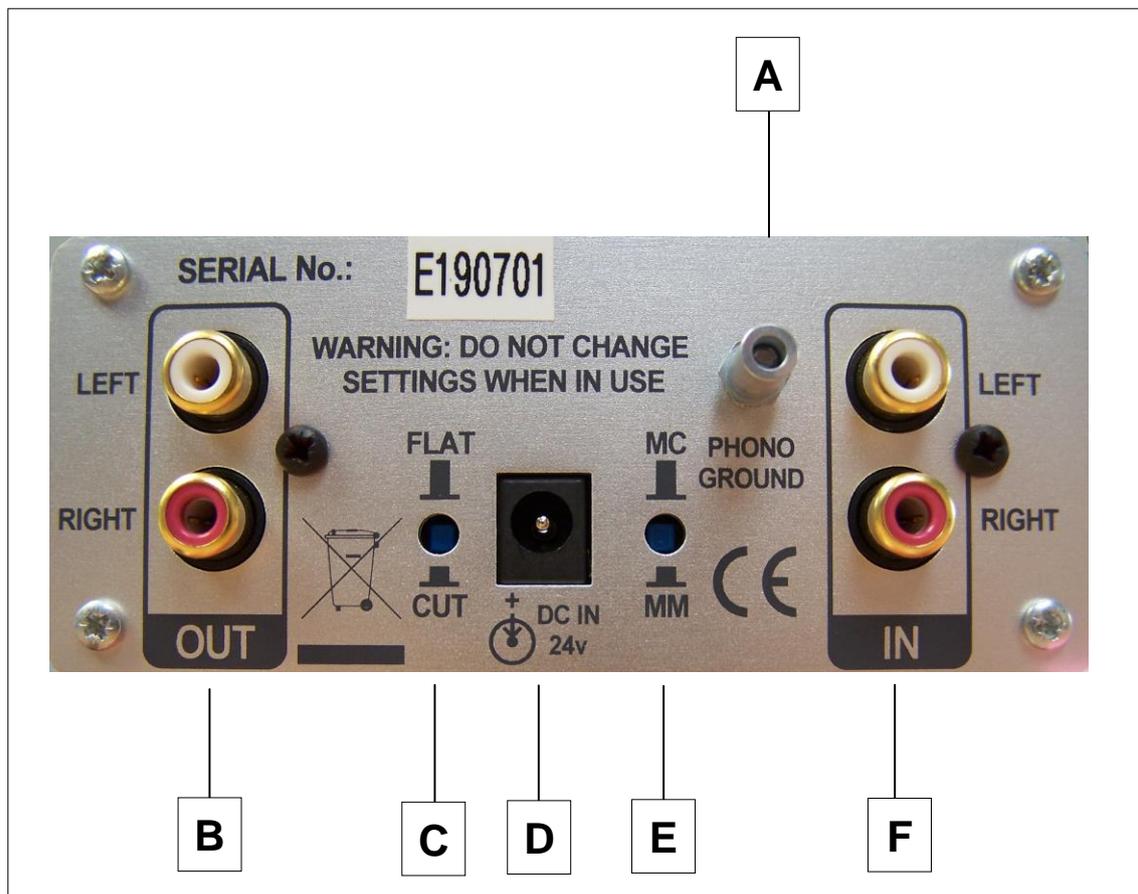
Congratulations on your purchase of our Essentials series Phono Amplifier. Its circuitry has been derived from that of our class leading Agena Phono Amplifier, from the Reference series of products.

The unit features a switchable moving coil or moving magnet input, together with a switchable bass cut filter to minimise rumble.

The selections must only be made with the unit powered off.

**Changing settings while the unit is on may damage other components in your system. Turn amplifier off first.**

On initial powering, the unit undergoes a soft start routine which means no audio is produced for approx 30 seconds on power up.



**A** **Turtable ground point.** Some of the more esoterically wired turntables may produce a hum loop when connected here. If hum is generated, do not use.

**B** **Line output.** Two RCA Phono output connectors, marked left and right. Connect these to a suitable line input on your amplifier or pre-amplifier, for example, auxiliary, using high quality RCA to RCA leads. Do Not connect to a Phono input. The output of the Essentials Phono Amplifier is at line level and would severely overload such an input.

- C Bass cut switch.** Using a suitable small pointed object such as a small screwdriver, the bass cut can be switched in or out of circuit as required, by pushing the small latching switch accessed through a small hole next to the power input connector. As can be seen above, when the switch is down (pushed in) the bass cut (rumble filter) is switched in to the circuit.
- D Power input.** This is where the included power unit is connected. Do Not use any power supply which is not a Leema Acoustics supplied model. Doing so will invalidate the manufacturer's warranty.
- E Cartridge sensitivity.** The input sensitivity is changed using the same method as selecting the bass cut circuit. Using a suitable small pointed object, such as a small screwdriver, the selection switch can be accessed through the small hole. The unit is set for moving coil when the switch is up, and for moving magnet when the switch is pushed down.
- E Turntable input.** The output RCA leads from the turntable plug in here. Ensure that the left and right orientation is correctly observed.

## Specifications

Moving magnet gain	36 dB
Moving coil gain	62 dB
Frequency response	+/- 0.5 dB ref RIAA curve 20 Hz to 20 kHz
Distortion	Less than 0.02 % at 1 kHz
Residual noise	Moving magnet better than -86 dBA input short circuit
Residual noise	Moving coil, better than -75 dBA input short circuit
Load characteristics	Moving magnet 47 k Ohm + 100 pF
Load characteristics	Moving coil 90 Ohms + 1 nF
Input sensitivity	Moving magnet 4 mV RMS for 250 mV RMS out at 1 kHz
Input sensitivity	Moving coil 180 uV RMS for 250 mV RMS out at 1 kHz
Headroom	Greater than +26 dB at 1 kHz
High pass filter	-3 dB at 20 Hz
Dimensions	H: 50 mm inc feet,    W: 110 mm D: 100 mm including earth terminal

Best regards..... The Leema Team