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Introduction

Your Rega pre-amplifier has been designed to reproduce music effectively and easily. The **Cursa 3** has been built to Rega's discriminating standards of reliability and quality to ensure many years of musical enjoyment.

A pre-amplifier's function is to act as a control and switching unit for a variety of sources, and to boost the tiny signal generated by a cartridge, CD player, or other source to a level suitable for input into a power amplifier; which in turn boosts it to a higher level to drive the loudspeakers. It is vital that the amplifier achieves this without changing the signal, as this would distort the music. We have avoided superfluous gadgets such as tone controls or a headphone socket as they obstruct the signal path and degrade the produced sound quality.

The Rega amplifiers incorporate remarkable and innovative design ideas. For those interested in the technical details, these innovations are described more fully in this manual. Alternatively, you can simply switch on, sit back, and let your amplifier speak for itself...

Mission Statement

Rega's philosophy is to make high quality products at sensible prices, as a means of reproducing music as faithfully as possible. Rega is committed to the design and development of new and existing products, both in hi-fi and other areas, that will perpetuate Rega's values of quality and value for money.

Design Innovation

In common with all Rega products, the **Cursa 3** pre-amplifier has been designed without compromise. Our time and money has been spent on developing the unique circuit design and sourcing unusually high quality components. However, we have included useful features to further enhance your listening pleasure.

The **Cursa 3** amplifier has digitally controlled analog switched resistor network volume control.

The **Cursa 3** is a programmable gain pre-amplifier

The **Cursa 3** amplifier features REGA designed circuitry, developed in-house with the aid of CAD circuit simulation, computer modeling and extensive listening.

The **Cursa 3** amplifier includes extremely high quality components not normally found in a pre-amplifier of this price. These include high tolerance polypropylene capacitors, and a toroidal transformer.

Installation

The amplifier will work well on most surfaces, such as a shelf or a table, provided there is sufficient air around it to prevent overheating.

To avoid magnetic interference, site the amplifier as far away from the turntable as the tonearm lead will allow. If possible, place it to the left of the turntable.

Keep other equipment, such as tuners, cassette decks or CD players away from the amplifier. **Never** stack other hi-fi components on top of the amplifier.

Due to the layout of Rega's amplifier circuit designs, they are virtually insusceptible to electro magnetic interference, and by virtue of the extruded aluminium case, emit practically no electro magnetic radiation. However, placing any electronic equipment close together may impair the performance of one or both items.

DC Protection

The amplifier has a circuit which protects the power amplifier connected to the pre-amplifier output, from direct current in the event of a major failure of the system.
The use of this sophisticated DC protection circuit in conjunction with a servo correction stage, (on all line inputs) allows the amount of capacitors in the signal path to be kept at a minimum. This prevents unnecessary sound degradation at this crucial line level stage, providing true musical accuracy and the flexibility to drive up to 5 power amplifiers.

Pre-Amp Outputs

The pre-amplifier can drive at least 5 power amplifiers, sub bass units etc.

The 2 parallel pre-amp outputs use RCA type (phono) connectors.

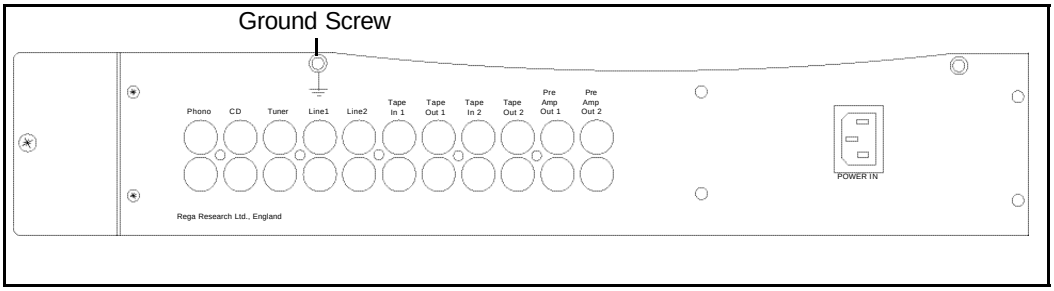
The output is at standard line level of 0.83V, but your Rega dealer will be able to modify the output level to accomodate a range of power amplifiers. See specifications on page 13 for further details.

Input Connections

All inputs and outputs are made via RCA (phono) type connectors. The sockets on the Rega amplifiers are clearly marked red and white.

Right: always the lower row and marked in **RED**.
Left: always the upper row and marked in **WHITE**.

Rear Panel Connections



Phono Input

The Phono Input uses a plug-in card allowing you to use either moving magnet (MM), moving coil (MC), or if you do not use a turntable there is a line level card option allowing you to have an additional line level input. These cards must be pre-specified on purchase, or can be changed by your Rega dealer. For input sensitivities of the different cards see the specifications on page 15.

Earthing of Tonearm

Earthing is done via the Phono socket ground for Rega turntables so a separate earth is not necessary. In the unlikely event that your tonearm needs to be earthed to the amplifier, the grounding tag may be connected to the case grounding screw above the input sockets. See Rear Panel Connections drawing (page 6).

Compact Disc Input

The Compact Disc input is suitable for use with any CD source.

Tuner Input

The tuner input is suitable for use with most types of AM/FM tuners.

Line Inputs

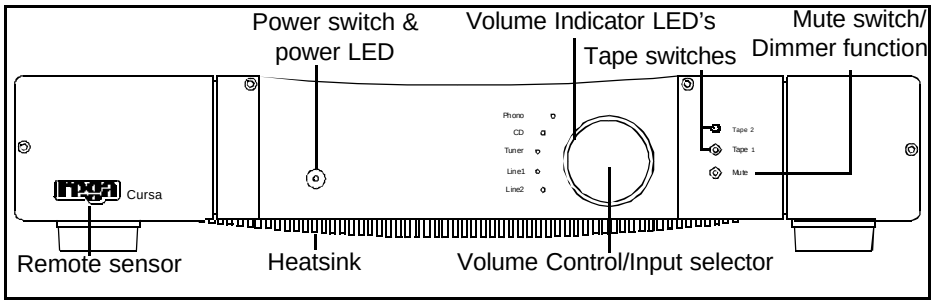
The line inputs enable the connection of additional sources, such as a second tape machine, tuner, or video recorder for use with an Audio Visual system.

Tape Input/Output

Almost any tape machine can be used with your amplifier, including compact cassette, video cassette, reel to reel, DAT, and DCC.

NOTE: All inputs, (other than the moving magnet or moving coil PHONO input options), are at standard "line level" and can therefore be used for any line level input.

In Use



Switching On

The amplifier is turned on by depressing the power switch to the left of the control panel. The LED in the power switch will glow red.

After several seconds you may hear a gentle click. This indicates that the switch-on relay has been released and the amplifier is ready for use.

Volume control

The volume of the amplifier can be adjusted using the volume knob on the amplifier and via the remote handset as described below.

The volume level is controlled via a microprocessor, which in turn takes its information from the volume knob digital encoder on the front panel or the remote control handset.

The volume control has a resolution of 1dB per step, giving a total range of 80 steps over the available gain or volume range of 80dB. There is a calibrated LED display comprising of 20 LED's, which indicates the gain level or relative position of the volume control; this is calibrated in 4dB steps, across the total gain of the volume range.

The left and right channels are matched and balanced within 0.2dB, ensuring a centrally placed soundstage no matter what the volume position or which gain level has been set.

LED Display dimmer function

To change the brightness of the volume control LED display, push the control knob once. You are now in input selection and dimmer mode. Pressing the Dimmer/Mute button three times will step through the three different levels of display brightness, you have eight seconds to press the Dimmer/Mute button.

Input Selection

The Input selector is combined with the volume control. To select your input, push the control knob in once. You are now in Input selection mode. You have eight seconds to choose your input. (When the eight seconds are up the control knob will return to the volume function). The inputs are selected by turning the knob to the required input.

Input Selector

Always allow the amplifier to fully power down (indicated by the power LED extinguishing after 2-3 seconds) before switching on again, so that the self-test circuitry can complete its reset cycle.

Tape: This input provides full tape monitoring facilities if your tape machine has 3 heads.

Mute: The mute function mutes the pre-amplifier output.

It is possible to press the control knob within the eight-second period to resume the volume control mode.

The **Cursa 3** features an optional remote control. This has additional buttons not used by the by the **Cursa 3,** but all funtions offered on the pre-amplifier can be performed using the remote control.

To change the pre-amp gain.

The **Cursa 3** amplifier output level or gain can be set to three different levels; this is performed by putting the amplifier in to a programming mode on turning on the amplifier.
Please note the amplifier is set to normal output (level 2) in the factory, this setting being suitable for most normal Hi-fi requirements.

Settings -

Pre-amp output level (with rated input levels)
Level 1 = 212mV @ 100 Ohms
Level 2 = 830mV @ 100 Ohms
Level 3 = 1.25V @ 100 Ohms
Maximum output level 8.8V

Pre-amplifier gain levels to pre-amplifier output.
Gain range or level 1 gain = 0dB (unity gain)
Gain range or level 2 gain = 11.5dB (factory setting)
Gain range or level 3 gain = 15dB

Any adjustments made to the power amp link switch and gain must be carried out by an authorised Rega dealer.

If work is carried out by any person other than a Rega dealer it will invalidate your warranty.

Power-Amp Connections

The pre-amp outputs allow the use of either stereo or mono power amplifiers.
Simply connect the left and right phono outputs into the appropriate power amplifier input.

Stereo Power Amplifier Configuration

Pre-Amp Out 1 Left	Left Channel Input
Pre-Amp Out 1 Right	Right Channel Input

Mono Power Amplifier Configuration

Pre-Amp out 1 Left	Left Amplifier Input
Pre-Amp out 1 Right	Right Amplifier Input

Stereo Amplifier Bi-Amping Configuration

Pre-Amp Out 1 Left	HF Amp Left Channel Input
Pre-Amp Out 1 Right	HF Amp Right Channel Input
Pre-Amp Out 2 Left	LF Amp Left Channel Input
Pre-Amp Out 2 Right	LF Amp Right Channel Input

Mono Amplifier Bi-Amping Configuration

Pre-Amp Out 1 Left	Left HF Amp Input
Pre-Amp Out 1 Right	Right HF Amp Input
Pre-Amp Out 2 Left	Left LF Amp Input
Pre-Amp Out 2 Right	Right LF Amp Input

Specifications

Input sensitivity for rated output levels
Note - Factory setting of gain range level 2
CD, tuner, Line 1, line 2, Tape input sensitivity = 220mV Load, 10K Ohm

Phono input sensitivity (Moving Magnet) = 2.3mV Load 47K in parallel with 100pF

Phono input sensitivity (Moving Coil) = 175uV Load 100 Ohms in parallel with 4700pF

Pre-amp output level (with rated input levels)
Level 1 = 212mV @ 100 Ohms
Level 2 = 830mV @ 100 Ohms
Level 3 = 1.25V @ 100 Ohms
Maximum output level 8.8V

Pre-amp out 1&2 are connected in parallel.
The pre-amp output is DC coupled with full DC protection.

Volume control LED display & step data
Each step of the volume control = 1dB
Each LED represents = 4dB
Total control range = 80dB (20 LED's @ 4dB/LED)

Tape output (with rated input levels)
215mV @ 560 Ohms

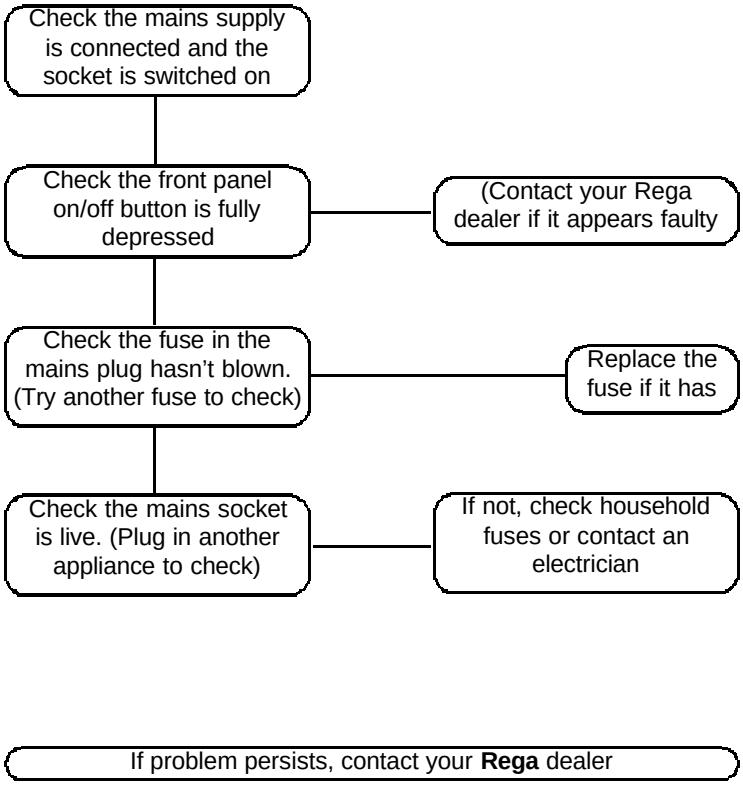
Power consumption
7 Watts @ 230/115V

Remote Control
Phillips RC5 system number 16 (audio pre-amp)

Recommended operating temperature
10 - 35°C

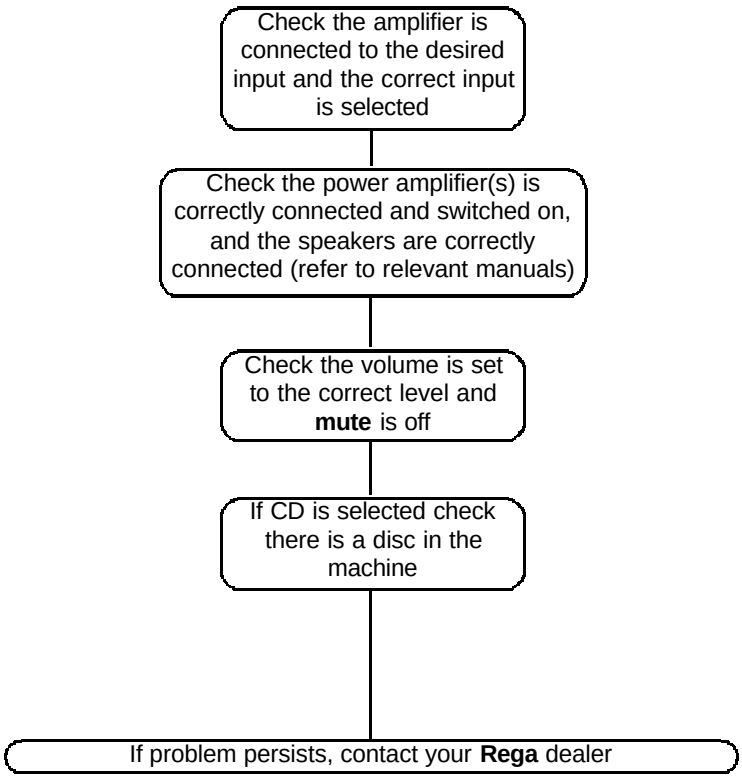
Troubleshooting

(No power, power switch LED does not light up)



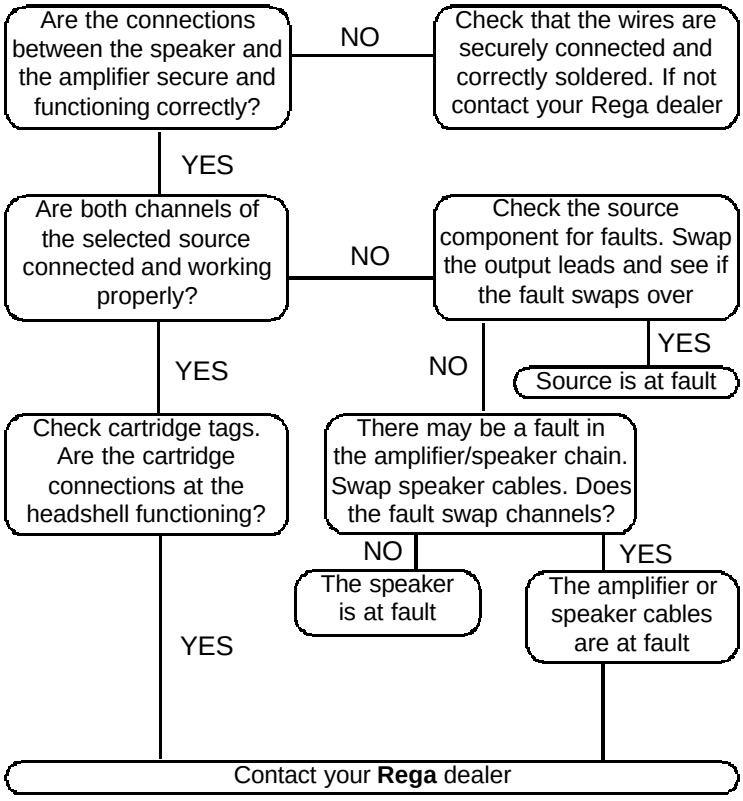
Troubleshooting

(Power on, power switch LED lit but no output)



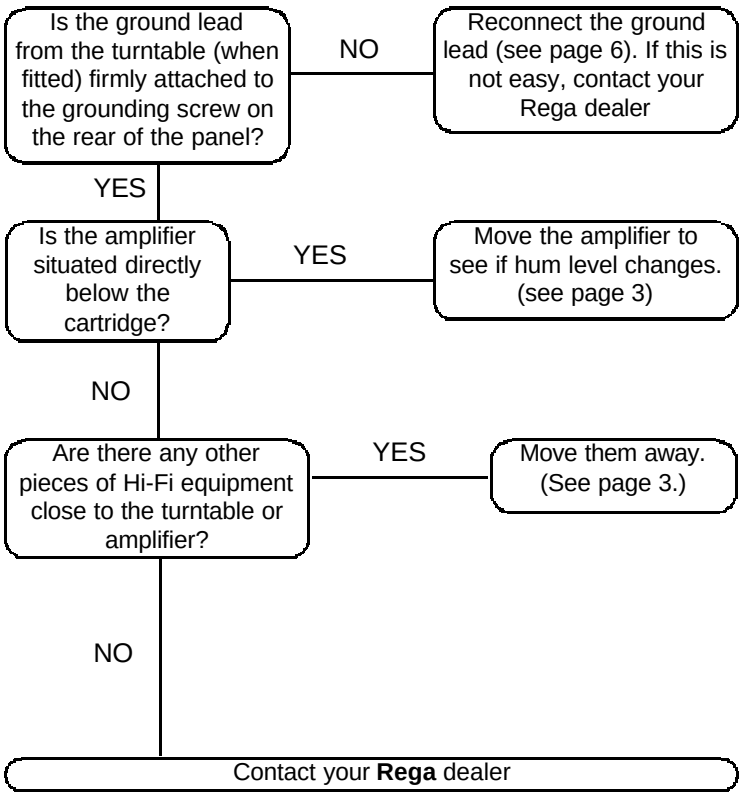
Troubleshooting

(Power on, sound from one speaker only)



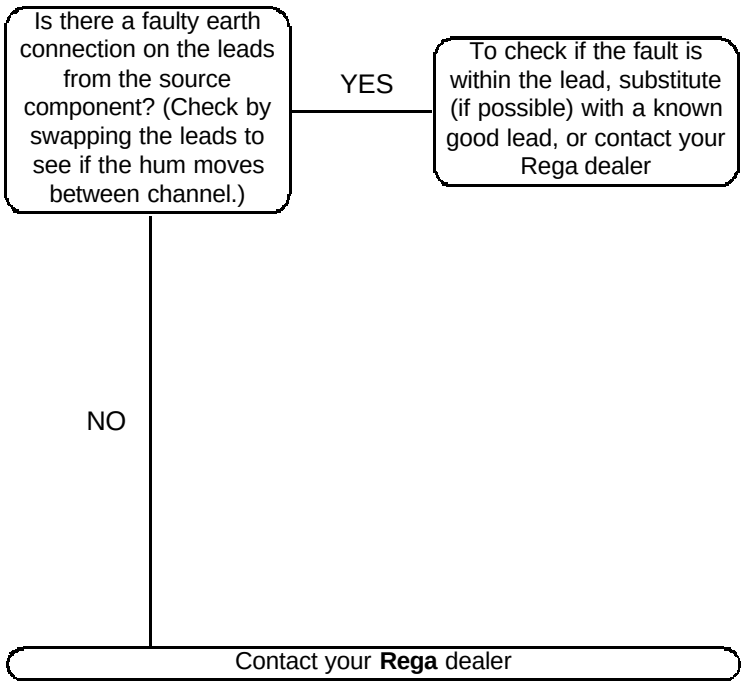
Troubleshooting

(Loud hum through both speakers when 'phono' is selected)



Troubleshooting

(Loud hum through one speaker when 'phono' is selected)



Owners Log

(1)
Owner.....
Date.....
Where Purchased.....
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(2)
Owner.....
Date.....
Where Purchased.....
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(3)
Owner.....
Date.....
Where Purchased.....
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