

Jupiter

CD Player

owners manual



WARNING

To prevent fire or shock hazard, do not expose the unit to rain or moisture.

To avoid electrical shock, do not separate the top and bottom case halves. Refer the servicing to qualified **Rega** dealers only.

The laser component in this product is capable of emitting radiation exceeding the limit for Class 1.



This appliance is classified as a CLASS 1 LASER product.

CAUTION -	INVISIBLE LASER RADIATION WHEN OPEN AND INTERLOCKS DEFEATED. AVOID EXPOSURE TO BEAM.
VORSICHT -	UNSICHTBARE LASERSTRAHLUNG TRITT AUS, WENN DECKEL, GEÖFFNET UND WENN SICHERHEITSVERREGELUNG ÜBERBRÜCKT IST. NICHT DEM STRAHL AUSSETZEN!
VARNING -	OSYNLIG LASERSTRÅLNING NÄR DENNA DEL ÄR URKOPPLAD. STRÅLEN ÄR FARLIG.
ADVARSEL -	USYNLIG LASERSTRÅLING VED ÅBNING NÄR SIKKERHEDSÅFBRYDERE ER UDE AF FUNKTION. UNDGÅ UDSÆTTELSE FOR STRÅLING.
ATTENTION -	RAYONNEMENT LASER ET ELECTROMAGNETIQUE DANGEREUX SI OUVERT AVEC L'ENCLICHEMENT DE SECURITE ANNULÉ.
VAROI -	AVATTAESSA JA SUOJALUKITUS OHTETTAESSA OLET ALTTINA NÄKYMÄTTÖMÄLLE LASERSÄTEILYLLE. ÄLÄ KATSO SÄTEESSEEN.
ADVARSEL -	USYNLIG LASERSTRÅLING NÄR DEKSEL ÅPNES OG SIKKERHEDSLÅS BRYTES. UNDGÅ EKSPONERING FOR STRÅLEN.

This label is located inside the unit.





Contents

Introduction.....	2
Design Innovation.....	3-4
Installation.....	5
Interconnects.....	5
Output Connections.....	6
In Use.....	7-10
Additional CD Functions.....	11-18
The handling of CD's.....	19
Care of the Player.....	20
Troubleshooting.....	21-23
Specifications.....	24
Owners Log.....	25

Introduction

Your Rega **Jupiter** has been designed to be effective, easy to use and with the performance to rival even the most expensive and esoteric CD players, but at a sensible price. We have omitted all the useless gimmicks and genuinely concentrated the manufacturing costs on high quality component parts, and employed a unique design direction, both necessary to reproduce a musical sound quality from a digital source of information.

For example: A complex sub-chassis suspension is normally necessary to isolate the CD player. However, they are detrimental to the sound quality and degrade in time, causing malfunction. Rega have designed a VCS* foot system which minimises footfall shock, and therefore eradicates the need for a suspension, while maximising sound quality by reducing error correction.

Rega's design skill and the use of extremely high quality components ensure that your **Jupiter** will perform at its optimum. The tips that follow may help to give you maximum musical enjoyment and ease of use for many years.

***VCS - Viscous Coupled System**

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

The **Jupiter** is the old **Jupiter And Io** in a single case. It is housed in the new Rega custom built extruded aluminium case and includes the heat sink base assembly to give added stability to the mechanical parts. It uses the same basic circuit topology as the existing **Jupiter And Io** but with improvements in the DAC, power supply & clocking stages. The **Jupiter** has additional sonic improvements, to give a higher level of performance over that of the planet. The **Jupiter** also has the new lid assembly.

Digital to analog converter

The dual differential Digital to Analog converter is based around two custom built IC40 DAC chips with separate DAC's for the left and right channels. DC servo control has been used in the post DAC amplifier and filter stages thereby keeping the capacitors in the signal path to a minimum.

Power supply

The power supply is made up from 7 separate power supply's feeding the mechanism, PLL, DAC digital & analog sections, micro controller, display, analogue amplifier and filter.

All the stages for the clock PLL and in the signal path are double regulated. There are two physically separate raw supplies for the noisy stages (motor drivers etc) and for the clean stages (DAC, clock & DSP etc). The Jupiter has a generously rated toroidal transformer with separate windings for the two raw power supplies.

Data Regeneration process

The signal from the mechanism is processed by a data regeneration stage, where the data, Bit Clock & Word Clock are re-aligned and then fed to the Rega IC40 DAC's for conversion.

Clock

The **Jupiter** uses a high stability oscillator module for the main clock. The Master clock feeding the CD mechanism and DSP is derived from a PLL clock stage for added stability.

Mechanism

The **Jupiter** uses a high performance CDM145BL-5BD25 kit with an improved display and a better level of user functionality.

Rega has developed an 'intelligent' auto locating puck system and has incorporated this high performance HMSS (High Mass Stainless Steel) puck into the top loading design of the **Jupiter**.





Installation

Ensure the operating voltage of the **Jupiter** (stated on the rear) is the same as that of your local power supply.

The **Jupiter** will work well on most surfaces, such as a shelf, table, stand, or wall bracket.

The **Jupiter** should be placed to allow adequate access to the lid and aperture. If access is limited there is a danger of scratching the CD when sliding it over the hub.

NOTE: The foot suspension has been designed to absorb the shock of normal footfalls, but can be made to skip if exposed to more extreme impacts. If this could be a problem then the player should be further isolated by a wall bracket or other method.

Interconnects

The **Couple** interconnect is available for your **Jupiter** CD Player. It uses high specification cable with Neutrik phono (RCA) connectors.

Output Connections

All the outputs are made via RCA (Phono) type connectors. The sockets on **REGA** products are clearly marked red, white and black.

Line Out: For output to an audio amplifier.

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

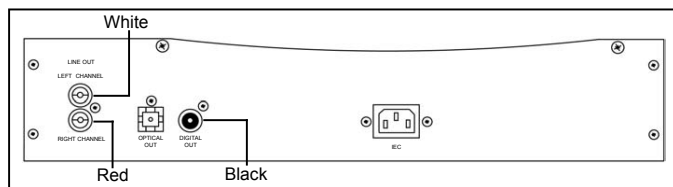
Left: always the upper row and marked in **WHITE**.

Digital Out: for output to digital components such as D.A converter, digital processor, DAT, or MD, and marked in **BLACK**.

(Always check that the connecting component is compatible with 44.1k coaxial S/PDIF input.)

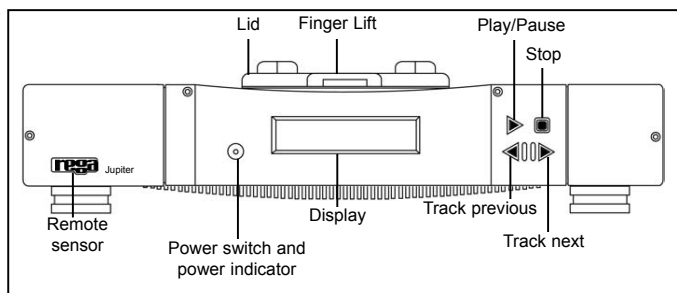
IMPORTANT: Always turn off the player when changing leads.

Rear Panel Connections





In Use

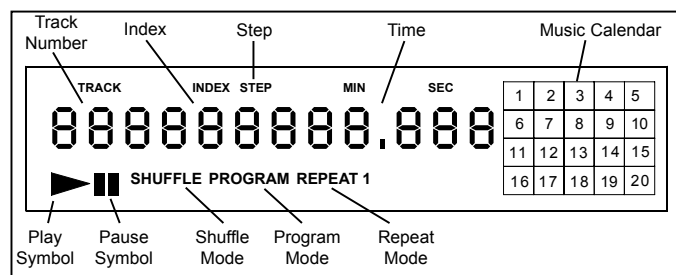


Powering up

Press the power switch on the front panel, the power indication LED on the power switch will illuminate.

If there is a disc in the player the number of tracks and the total running time is briefly displayed, before returning to 0.

If there is no disc in the player, "NO DISC" is displayed.



Loading a disc

1. Use the finger lift to open the lid.
2. Holding the disc at opposite sides, place onto the hub in the CD tray.
3. Close the lid - the puck will clamp the disc onto the hub. If the player is on, the disc will be read. If the player is off, the disc will be read on power up.
4. To remove the disc: Press **STOP** if in play mode. When the disc has stopped playing, lift the lid and remove the disc.





Play/Pause

Press the **PLAY** button with a disc loaded and the disc will start playing from track 1.

The display will show the play symbol, track number, index number, and the playing time.

Pressing again toggles between play and pause*. In pause mode the pause symbol will be displayed.

Optional Remote Control has separate **play and **pause** buttons.*

Stop

Press the **STOP** button to stop playing the disc. The display will return to track 0.

Track Previous

When pressed while the disc is playing, the current track will start again from the beginning.

Pressing again in quick succession will take you to the start of the previous track.

Track Next

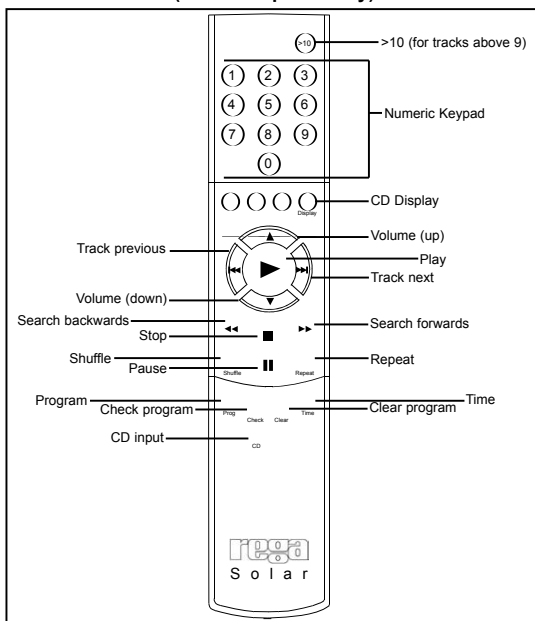
Pressing once while the disc is playing, the next track will start from the beginning. Pressing again takes you to the beginning of the next track after that, etc.....

If the **TRACK** buttons are pressed in pause and stop modes, a specific track can be selected, and when the **PLAY** button is pressed the selected track will start from the beginning. In the case of stop mode, if **PLAY** is not pressed within **16** seconds of track selection, the display will return to track 0.





Additional CD Functions (Remote Option Only)



11

Play, pause, stop, track previous, and track next

The **PLAY** and **PAUSE** buttons on the remote control are the same as **PLAY/PAUSE** on the front panel except they have been separated. Stop, track previous, and track next work in the same way as on the front panel of the player. (See pages 8 & 9.)

Search Back, Search Forward.

Pressing the **SEARCH BACK / SEARCH FORWARD** buttons in play mode, plays the disc at high speed at reduced volume, allowing you to find a specific position in a track. In pause mode, the track is scanned at a higher speed without playing music.

Note: If the lead out (end) of the disc is reached during search forward mode, **TL TL** will appear on the display. To resume play, press **SEARCH BACK** or **PREVIOUS TRACK**.

Numeric Keys.

You can start from the beginning of a desired track by pressing the corresponding **NUMERIC KEY**. If the track number is greater than 9, press **>10** before selecting your track.

12





Shuffle

To play tracks in a random order press **SHUFFLE** then press **PLAY**. To play tracks in a random order whilst in play mode, press the **SHUFFLE** button once. "SHUFFLE" will read on the display and the tracks will be played in a sequence generated by the player. To cancel shuffle play, press the **SHUFFLE** button again. "CONTINUE" will be displayed and Play will continue in the discs original sequence.

Repeat

To repeat the whole disc, press the **REPEAT** button once. The display will read "REPEAT". To repeat the current track, press the **REPEAT** button until the display reads "REPEAT 1". To cancel, press the **REPEAT** button until "REPEAT OFF" appears on the display.

When the disc is played in...	The Jupiter repeats...
Continuous Play	All the tracks
Shuffle Play	All the tracks in random order
Program play (see page 17-18)	The same program



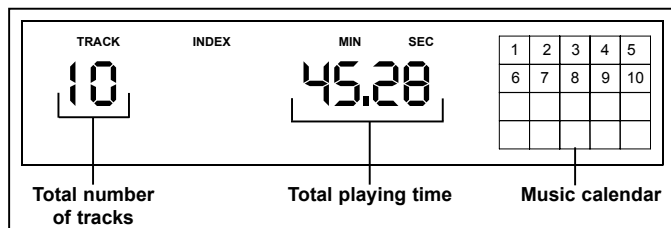
Display

Checking the total number and playing time of the tracks

Press **TIME** before you start playing.

The display shows the total number of tracks, total playing time, and music calendar.

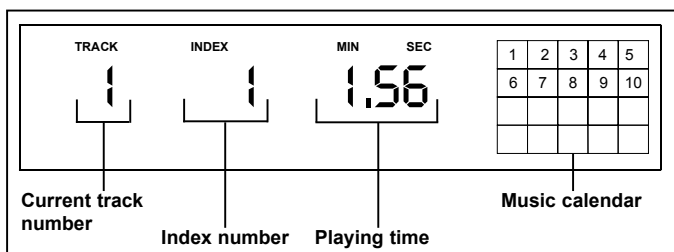
While in Shuffle Play mode ("SHUFFLE" appears in the display; see page 12), a one-second access time blank is added between each track. This increase is automatically added to the total playing time in the display.





Display information while playing a disc

While playing a disc, the display shows the current track number, index number, playing time, and the music calendar. The track numbers in the music calendar disappear after they are played.



Turning off the display

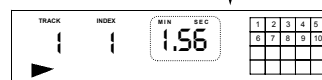
Each time you press **DISPLAY** on the remote while playing a disc, the display turns off and on alternately. In the "display off" mode, if any button on either the player or remote are pressed, the display will be switched on for about 3 seconds to allow you to verify your command.



Checking the remaining time

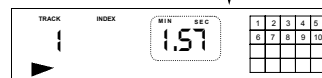
Each time you press **TIME** while playing a disc, the display changes as shown in the chart below.

Playing time of the current track



Press

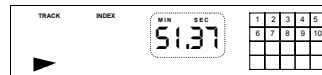
Remaining time on the current track



Press

If the track number exceeds 24 "--.--" appears instead of the remaining time.

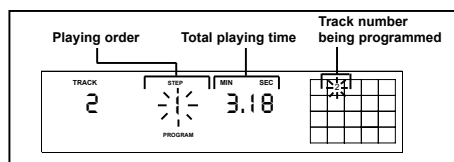
Remaining time on the disc



If the remaining time exceeds 100 minutes in Program Play mode or when the disc has more than 24 tracks, "--.--" appears instead of the remaining time.



Creating a program



The program function allows you to play up to 24 tracks from a disc in any order you specify.

1) Press **PROGRAM** to create your new program list. "PROGRAM" will appear on the display.

2) Enter up to 24 tracks, one after the other, in the order you want them to play. Use the **>10** button on the remote for tracks above 9.

Creating a Program (continued)

3) If you make a mistake, pressing **CLEAR** will erase the last track you entered. Keep pressing **CLEAR** to erase more than one track from the play list. Hold down **CLEAR** for 3 seconds if you want to delete the whole program list. To continue programming, enter the tracks you want from where you left off.

4) Press **PLAY** on the remote. Your selected tracks will now play.

5) Pressing **PROGRAM** again will display "CONTINUE" and you will be back to normal play mode. Pressing **PROGRAM** once more will return the programmed tracks.

6) To create a new program list, press **STOP**. Clear the previous program list, then to re-program, repeat from step 2.





The handling of CD's

To keep the CD clean, handle by its edge only. Do not touch the surface; natural oils from skin can stop the laser from reading the disc accurately.

Do not expose the disc to bright sunlight, or leave near hot places such as electrical equipment or in a parked car. Excess heat can cause the disc to warp.

Do not use any cleaning fluids or anti-static sprays on the disc, they can damage the disc and the player.

To clean the disc, use a lint free cloth and wipe from centre to edge, never in a circular motion.

Store the disc in its case when not in use to prevent it from becoming scratched.



Care of the Player

WARNING

Misuse of the player could invalidate your Rega warranty.

Do not touch the lens or electronic parts inside the player, it is a very sensitive optical device and is easily damaged. Also if dirt gets on the lens, the player may not work.

Do not attempt to clean the lens or lubricate in any way. Fluids and abrasive materials could easily damage the lens. Your Rega dealer will be trained in cleaning this component, but provided you take care with your player, it should not need any servicing.

Do not leave the lid open, as dust will get into the player and onto the lens.

Do not drop objects into the player. If any objects fall into the player, switch off and disconnect from the mains supply immediately, and contact your Rega dealer. Do not open the case or stick implements into it to retrieve the item.

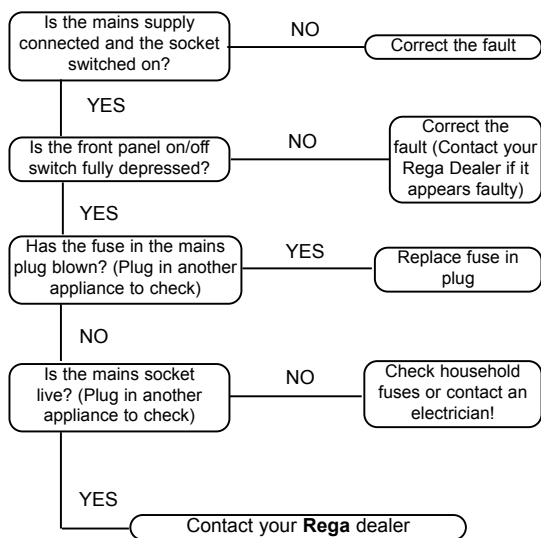
If you are not going to use the player for a long time, we recommend that you switch it off, as it is not disconnected from the mains even if the player itself has been turned off.

Always pull the plug itself when disconnecting from the wall socket, never the cord.



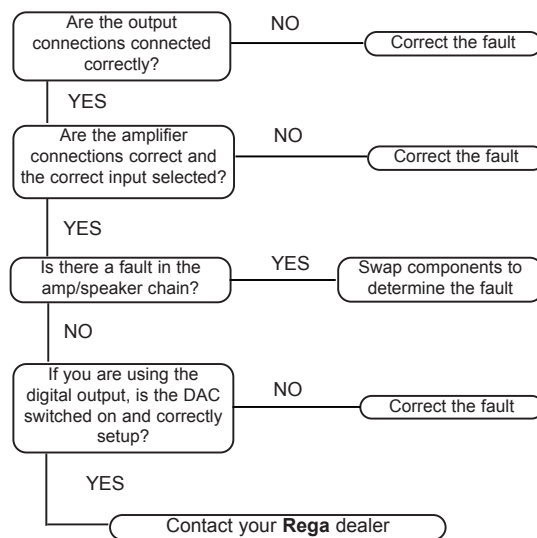
Troubleshooting

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



Troubleshooting

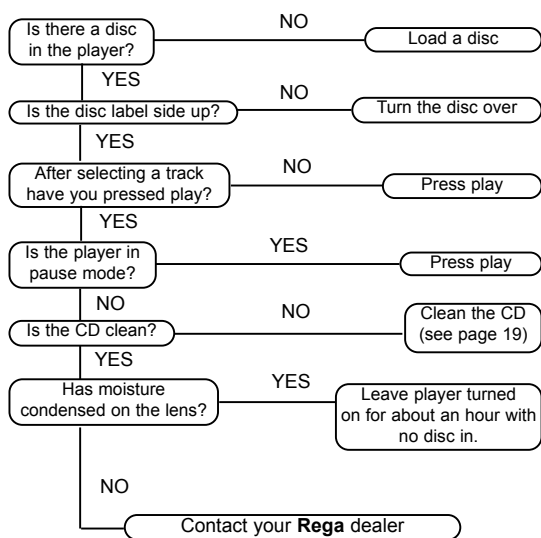
(Power on, no output)





Troubleshooting

(Power on, power switch LED and display on, but CD does not play)



Specifications

Laser	Semiconductor laser
Wavelength	780nm
Line Output Maximum Level	2V (load impedance minimum 75Ω)
Digital Output Maximum Level	0.5V (load impedance 75Ω)
Digital Sampling Frequency	44.1kHz
Mains Voltage	230V (minimum 190V maximum 250V) 115V (minimum 95V maximum 125V)
Power Consumption	13W
Dimensions	435Wx100Hx270D
Required Space for operation	435Wx180Hx315D



Owners Log

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

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

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

