

ROTEL *hi-fi*

RDD 980

Digital Compact Disc Drive

Owners Manual

Please write the serial number and purchase date of this RDD 980, in the spaces provided, for your records.

Serial Number _____.

Purchase date _____.

WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.



CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN



CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

Explanation of Graphical Symbols

The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated 'dangerous voltage' within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance instructions in the literature accompanying the appliance.



SAFETY INSTRUCTIONS

1. **Read Instructions** - All the safety and operating instructions should be read before the appliance is operated.
2. **Retain Instructions** - The safety and operating instructions should be retained for future reference.
3. **Heed Warnings** - All warnings on the appliance and in the operating instructions should be adhered to.
4. **Follow Instructions** - All operating and use instructions should be followed.
5. **Water and Moisture** - The appliance should not be used near water - for example, near a bathtub, kitchen sink, laundry tub, in a wet basement or near a swimming pool, etc.
6. **Carts and Stands** - The appliance should be used only with a cart or stand that is recommended by the manufacturer.
- 6A. An appliance and cart combination should be moved with care. Quick stops, excessive force and uneven surfaces may cause the appliance and cart combination to overturn.
7. **Wall or Ceiling Mounting** - The appliance should be mounted to a wall or ceiling only as recommended by the manufacturer.
8. **Ventilation** - The appliance should be situated so that its location or position does not interfere with its proper ventilation. For example, the appliance should not be situated on a bed, sofa, rug, or similar surface that may block the ventilation openings; or placed in a built-in installation, such as a bookcase or cabinet that may that may impede the flow of air through the ventilation openings.
9. **Heat** - The appliance should be situated away from heat sources such as radiators, heat registers, stoves or other appliances (including amplifiers) that produce heat.

**PORTABLE CART
WARNING**



10. **Power Sources** - The appliance should be connected to a power supply only of the type described in the operating instructions or as marked on the appliance.
11. **Grounding or Polarization** - The precautions that should be taken so that the grounding or polarization means of an appliance is not defeated.
12. **Power-Cord Protection** - Power supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords and plugs, convenience receptacles and the point where they exit from the appliance.
13. **Cleaning** - The appliance should be cleaned only as recommended by the manufacturer.
14. **Nonuse Periods** - The power cord of the appliance should be unplugged from the outlet when left unused for a long period of time.
15. **Object and Liquid Entry** - Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through the openings.
16. **Damage Requiring Service** - The appliance should be serviced by qualified factory-authorized service personnel when:
 - The power-supply cord or the plug has been damaged; or
 - Objects have fallen, or liquid has been spilled into the appliance; or
 - The appliance has been exposed to rain; or
 - The appliance does not appear to operate normally or exhibits a marked change in performance; or
 - The appliance has been dropped, or the enclosure damaged.
17. **Servicing** - The user should not attempt to service the appliance beyond that described in the operating instructions. All other servicing should be referred to qualified factory-authorized service personnel.

DANGER: Invisible laser radiation when you open the top cover, audio direct exposure to laser beam

CLASS 1 Laser Product. Complies with DHHS 21 CFR 1040.10 and 1040.11.

CAUTION: Use of controls or adjustments, or performance of procedures other than those specified herein may result in hazardous radiation exposure.

APPLICABLE FOR U.S.A., CANADA OR WHERE APPROVED TO THE USAGE.

CAUTION: TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF PLUG TO WIDE SLOT, FULLY INSERT.

ATTENTION: POUR ÉVITER LES CHOCS ÉLECTRIQUES, INTRODUIRE LA LAME LA PLUS LARGE DE LA FICHE DANS LA BORNE CORRESPONDANTE DE LA PRISE ET POUSSER JUSQU'AU FOND.

A WORD FROM ALL OF US AT ROTEL

Thank you for purchasing our RDD 980 Digital Compact Disc Drive. We have been designing and manufacturing high quality, high performance audio electronics for more than 30 years. This CD drive mechanism will provide accurate reproduction of the digital signal and is a natural extension of our love for music. Our passion for good sound and our love of music is well known. We believe that the music played through RDD 980 and a companion digital to analog converter (DAC), such as the Rotel RDP 980, will be a source of enjoyment to you for many years to come.

Rotel is committed to making quality products to enhance your life. We have designed and manufactured this CD drive to be durable, easy to use and *to exactly replicate the original digital signal*. Please read the owners manual to ensure that the RDD 980 is properly installed and able to offer optimum performance. We appreciate being a part of your life.

FEATURES OF THE RDD 980 DISC DRIVE

This CD drive uses the Philips CDM-9 loader and a single-beam laser system with a highly advanced servo control. These are high performance designs and help us achieve our goal of making the RDD 980 an excellent CD drive.

We have used the latest design and manufacturing techniques to ensure the lowest possible distortion and jitter in this CD drive mechanism. Careful listening tests have shown that low jitter enhances the sound quality and the enjoyment of the music played through a CD drive unit. By separating the drive and the DAC it is possible to optimize the design of both for maximum performance and sound quality. The CD drive and the DAC have separate power supplies. They are therefore free from interaction between the laser assembly's servo control power requirements and the audio circuits need for a clean, stable, ripple free power supply.

The multiple power regulation stages, and dual power transformers, in the RDD 980 ensure each critical stage has clean, stable power for operation. The printed circuit board layout (PCB), the PCB material, the star earth ground patterns and the exact part choices made during design and fine tuning (in the UK) ALL have been made for one reason only: to provide you with the finest possible Digital Compact Disc Drive mechanism at a reasonable price.

INSTALLATION OF THE RDD 980

Please place the unit on a **DRY**, level surface away from direct sunlight. Avoid placing objects on top of the RDD 980. Do not allow water to fall into the RDD 980 as this could damage the circuitry or drive components. Please avoid installing the CD drive in a location where excessive heat, humidity, vibration or moisture will be a problem.

We recommend installing the RDD 980 in furniture designed to house audio components. This will allow the CD drive to be on its own shelf. *It should not be stacked on top of another component or have something stacked on it.* This will minimize potential interference with other components in your system, such as your tuner or amplifier.

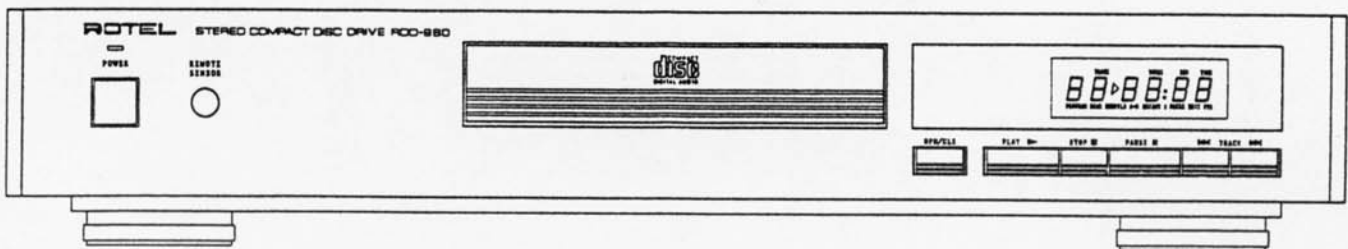
Component furniture has the added benefit that it will reduce or suppress vibration and *all audio components will provide improved sound when free from vibration*. Component furniture will improve the looks of many system installations and provide adequate ventilation for amplifiers and isolation for other components. It is also easier to dress the wires to reduce interference between sensitive audio and speaker cables and power cords for components. Ask your **ROTELhi fi Authorized Dealer** for advice about component furniture and proper installation of audio components.

ELECTRICAL REQUIREMENTS

This CD drive is designed to work on **AC** voltage and the correct voltage is displayed on the Back Panel. **Do not attempt to operate the RDD 980 on incorrect voltage as this will damage the circuitry and will void your warranty.** If you are in doubt about the correct voltage for this CD drive we suggest that you please read the label on the back panel, the label on the packing carton or consult your **ROTEL hi fi Authorized Dealer** for confirmation of the correct voltage.

Connect the **Power Cord** to your wall socket for AC power. When you wish to disconnect the power cord from the wall, always hold the plug firmly and then pull it out of the wall socket. *Do not unplug the power cord from the wall by pulling the cord only. This may damage the power cord and create a hazardous condition.* There is **NO** user serviceable part inside the RDD 980. **Please do not open the cabinet as this will expose you to the risk of potentially dangerous high voltage and the risk of shock. In addition, the LASER inside could be HAZARDOUS to your health and eyesight.**

If you wish to clean the cabinet on the RDD 980 we suggest that you clean it with a soft, DRY cloth. *Never use cleaning compounds or solvents to clean the cabinet as they may damage the finish or remove the labels.* They could damage the circuitry and drive mechanisms if any residue falls inside the CD drive.



Please refer to this drawing of the Front Panel when reading the section about Controls and the Display on your RDD 980.

THE CONTROLS AND DISPLAY ON THIS CD DRIVE

The **POWER** button will turn RDD 980 drive **ON** and **OFF**. Push it in and the RDD 980 will turn ON. The **POWER INDICATOR LIGHT** and the **DISPLAY** will illuminate at the same time. If you push the Power button again the power will go OFF and the Power Indicator Light and the Display will extinguish.

The **OPEN, PLAY, STOP, PAUSE AND TRACK** buttons are *below* the display. The Front Panel includes the **REMOTE SENSOR** for receiving the Infra Red signals from the **REMOTE CONTROL** handset. *Please be certain not to block this as the Remote Control will not function if this is covered or blocked.*

The **OPEN** button will open the drawer after you have pushed it. The display will read OPEN when you do this. A second push of the button will close the drawer and after a short time, the display will show the Track numbers and the Total Time on the disc. When the drawer closes without a disc the display will read **disc**.

Pressing the **PLAY** button while the drawer is open will cause the drawer to close and will start PLAY. The display will read PLAY when you do this. You may choose a track number before

pressing **PLAY** and the CD player will begin play with the selected track number. Press **PLAY** to begin the music.

Pressing the **PAUSE** button, during **PLAY**, will make the CD drive stay in the same place on the CD and the CD will still spin. The display will show the word **PAUSE**, the Track and the Time. The **PLAY** indicator arrow will "blink" on and off. *No sound will be heard until you press the **PLAY** button again.*

The **STOP** button will stop all functions and the display will show the Total Tracks and the Total Time of the disc.

The **TRACK** buttons (**I<<**, **>>I**) will advance to the next Track (**>>I**) or will go back to the previous Track (**I<<**) on the disc. If you playing a track (song) and you press the **I<<** Track button once, the drive will begin the *previous* song.

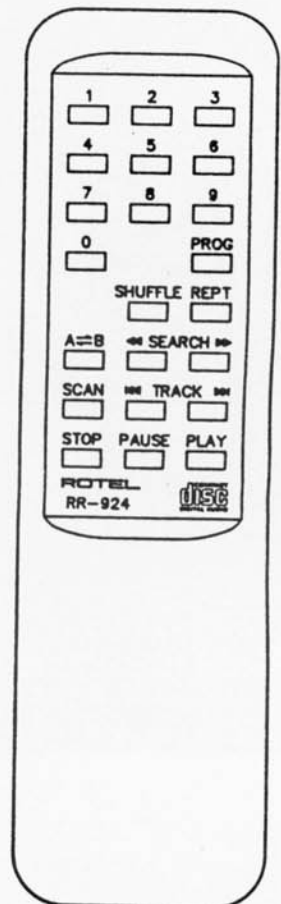
If you are in **PAUSE** and press the **I<<** or **>>I** Track button *once*, RDD 980 will proceed to the previous or next song and wait for you to press the **PLAY** button. Pressing the **I<<** or **>>I** Track button during **PLAY** will cause the CD drive to skip to the previous or next song on the disc. If you press the **PLAY** button *during* a song then the RDD 980 will begin the *same* song again.

The **REMOTE CONTROL** handset duplicates all the functions on the front panel of the RDD 980, *except* **OPEN**, and *adds* **A-B**, **SCAN**, **SEARCH**, **PROGRAM**, **SHUFFLE** and **REPEAT** buttons. The buttons on the Remote Control are *color coded* for ease of use. The Direct Access Track buttons are **grey**. The Function buttons, **STOP** and **PAUSE** buttons are **black**. The **PLAY** button is **orange**.

The **SEARCH** buttons (**<<**, **>>**) on the remote will cause the CD drive to go forward or backwards in time quickly when playing a song. This is a multi speed design. It will begin slowly and then become faster after a few seconds.

The **PROGRAM** button will be used when you Program songs for play in a specific order. To begin a Program, load a disc into the drawer and press the **OPEN** button. The RDD 980 will read the table of contents and show the Total Track Numbers and the Total Time. Select the Track Number you wish to Program *by using the Track (>>I) button*. It will show in the display. Press the Program button and the song will be entered into the Program memory. The display will show the word **PROGRAM**, the Program number for the song and the Total Time of the Program. Repeat this for **ALL** the tracks you wish to program. The RDD 980 will remember up to 20 tracks in a Program. Pressing the **OPEN** button once, or the **STOP** button twice, will erase a **PROGRAM** from the memory. **PROGRAM** *may be combined with* **SHUFFLE**, **SCAN**, **REPEAT** or **A-B**.

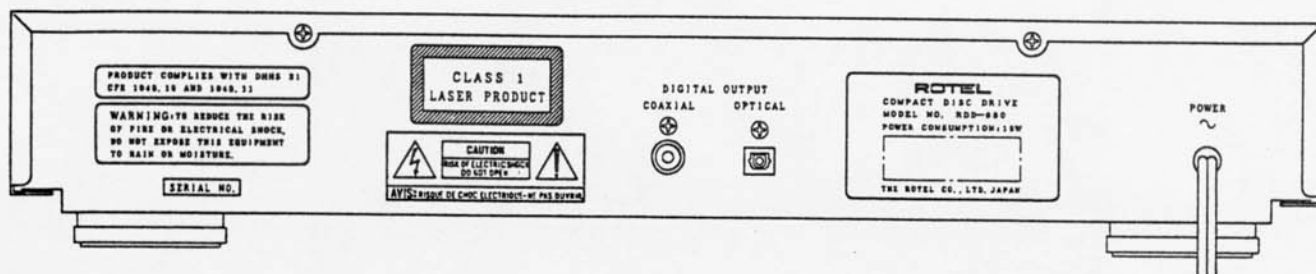
The **A-B** button will create a "time loop" in the music. Press the button once, when you reach the *start point* (time) of the loop in the music. Press it a second time to select the *end point* (time) of the loop. Pressing **STOP** or the **A to B** button a third time defeats this feature. The **A to B** feature will be useful if you wish to learn the words or the chords to a song. **A-B** will appear in the display.



Pressing the **SCAN** button will cause the RDD 980 to play the first 10 seconds of all the songs on a disc. **SCAN** will appear in the display, along with a 10 second countdown for each song on the disc.

SHUFFLE play will play a disc *randomly* till it finishes all the songs on the disc. **SHUFFLE** will appear in the display.

The **REPEAT** button will allow you to play a whole disc or a programmed song or songs repeatedly. To cancel this function, press **REPEAT** again or the **STOP** button. **REPEAT** will appear in the display during this function. **REPEAT** may be combined with **SHUFFLE**, **PROGRAM**, **A-B** or **SCAN**.



Please refer to this drawing of the Rear Panel of the RDD 980 when connecting to your Digital to Analog Converter.

CONNECTING THE RDD 980 TO YOUR DAC

The rear panel of the RDD 980 has the **OUTPUT** for the **75 ohm Coaxial Digital Output**. This should be connected with a *shielded, high quality, 75 ohm impedance RCA cable* to the **INPUT** on your Digital to Analog Converter. A TOSLINK optical connector is included if your DAC does not have a 75 ohm coaxial input. *We suggest the best sound will be from the coaxial 75 ohm output and a high quality 75 ohm characteristic impedance patch cable.* High performance patch cables will improve the sound of your stereo and we recommend them. Ask your **ROTEL hi fi AUTHORIZED DEALER** for advice about cables for analog and digital signals in your sound system.

A FINAL WORD FROM ROTEL ABOUT THIS CD DRIVE

We have designed this CD drive for high performance using test equipment *and* the human ear. We believe that both methods are useful in the design of audio electronics. *This is a time consuming process but we feel that the music benefits from this care and attention to detail.* We thank the people at Rotel UK for their invaluable help with this process.

We realize that there are many choices available in the marketplace today. We thank you again for choosing our RDD 980 Digital Compact Disc Drive as the transport to play your CD discs. ***Enjoy the music!***

SPECIFICATIONS : RDD 980 DIGITAL COMPACT DISC DRIVE

Speed Accuracy, Wow and Flutter
TOSLINK Output
Digital Output
Load Impedance

Quartz crystal precision (<0.002%)
-17 dBm @ 660 nm
0.5 Volt p-p. @ 75 ohms
75 Ohms

Power Consumption
Power Requirements (AC)

15 watts
120 volts 50/60 Hz, or
220-230-240 volts 50/60 Hz

Weight
Dimensions

4.9 Kg / 10.8 Lbs
440 mm x 72 mm x 316 mm (WxHxD)
17-3/8" x 2-7/8" x 12-7/16" (WxHxD)

All specifications are accurate at the time of printing. Rotel reserves the right to make improvements without notice. 