

# ROTEL®

# DT-6000

DAC Transport Convertisseur Numérique/Analogique D/A-Wandler Procesador Digital de Audio Digitaal-analoogomzetter Convertitore Digitale/Analogico Digital-till-analog-omvandlare Цифроаналоговый преобразователь (ЦАП)

Owner's Manual Manuel de l'utilisateur Bedienungsanleitung Manual de Instrucciones Gebruikershandleiding Manuale di istruzioni Instruktionsbok Инструкция пользователя



#### APPLICABLE FOR USA, CANADA OR WHERE APPROVED FOR THE USAGE

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

**ATTENTION:** POUR EVITER LES CHOCS ELECTRIQUES, INTRODUIRE LA LAME LA PLUS LARGE DE LA FICHE DANS LA BORNE CORRESPONDANTE DE LA PRISE ET POUSSER JUSQU AU FOND.



This symbol is to alert the user to the presence of uninsulated dangerous voltages inside the product's enclosure that may constitute a risk of electric shock.



This symbol is to alert the user to important operating and maintenance (service) instructions in this manual and literature accompanying the product.

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.



Rotel products are designed to comply with international directives on the Restriction of Hazardous Substances (RoHS) in electrical and electronic equipment and the disposal of Waste Electrical and Electronic Equipment (WEEE). The crossed wheelie bin symbol indicates compliance and that the products must be appropriately recycled or processed in accordance with these directives.



This symbol means that this unit is double insulated. An earth connection is not required.



Pin Assignments

Balanced Audio (3 pole XLR): Pin 1: Ground / Screen Pin 2: In phase / +ve / Hot Pin 3: Out of phase / -ve / Cold





#### **IMPORTANT FOR LASER PRODUCTS**

1. CLASS 1 LASER PRODUCT

2. **DANGER:** Visible laser radiation when open and interlock failed or bypassed. Avoid direct exposure to beam.

3. **CAUTION:** Do not open the top cover. There are no user serviceable parts inside the player; leave all servicing to qualified service personnel.

#### WARNING!

To reduce the risk of electrical shock, fires, etc.:

- 1. Do not remove screws, covers or cabinet.
- 2. Do not expose the unit to rain or moisture.
- 3. Do not touch the power cord or plug with wet hands.



# **Important Safety Instructions**

#### Notice

The RS232 connection should be handled by authorized persons only.

WARNING: There are no user serviceable parts inside. Refer all servicing to qualified service personnel.

**WARNING:** To reduce the risk of fire or electric shock, do not expose the unit to moisture or water. Do not expose the unit to dripping or splashing. Do not place objects filled with liquids, such as vases, on the unit. Do not allow foreign objects to get into the enclosure. If the unit is exposed to moisture, or a foreign object gets into the enclosure, immediately disconnect the power cord from the wall. Take the unit to a qualified service person for inspection and necessary repairs.

Read these instructions.

Keep these instructions.

Heed all warnings.

Follow all instructions.

Do not use this apparatus near water.

Clean only with dry cloth.

Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.

Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.

Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other.A grounding type plug has two blades and a third grounding prong.The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.

Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.

Only use attachments/accessories specified by the manufacturer.

Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.



Unplug this apparatus during lightning storms or when unused for long periods of time.

Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

The apparatus should be used in non tropical climate.

The ventilation should not be impeded by covering the ventilation openings with items, such as newspapers, table-cloths, curtains, etc.

No naked flame sources, such as lighted candles, should be placed on the apparatus.

Touching uninsulated terminals or wiring may result in an unpleasant sensation.

#### You must allow a minimum 10 cm or 4 inches of unobstructed clearance around the unit.

WARNING: The rear panel power cord connector is the mains power disconnect device. The device must be located in an open area that allows access to the cord connector.

The unit must be connected to a power supply only of the type and voltage specified on the rear panel. (USA: 120V/60Hz, EC: 230V/50Hz)

Connect the component to the power outlet only with the supplied power supply cable or an exact equivalent. Do not modify the supplied cable. Do not use extension cords.

The mains plug is the disconnect of the unit. In order to completely disconnect the unit from the supply mains, remove the main plug from the unit and the AC power outlet. This is the only way to completely remove mains power from the unit.

The batteries in the remote control shall not be exposed to excessive heat such as sunshine, fire or the like. Batteries should be recycled or disposed as per state and local guidelines.

## **FCC Information**

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.(TV, radio, etc.)
- Increase the separation between the equipment and receiver.
- Connect the equipment to an outlet on circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for additional help.

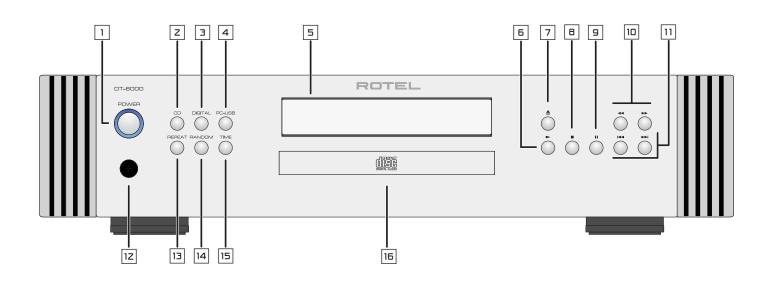
#### Caution

This device complies with part 15 of the FCC Rules. Operation is subject to the following to conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against interference in a residential installation. This equipment generates and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause interference to radio or TV communications. There is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment off and on, try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the unit and the television tuner.
- Connect the unit to an AC power outlet on a different electrical circuit.
- Consult your authorized Rotel retailer for assistance.

Figure 1-1: Controls and Connections Commandes et Branchements Bedienelemente und Anschlüsse Controles y Conexiones Bedieningselementen en aansluitingen Controlli e connessioni Kontroller och anslutningar Органы управления и разъемы



1: Power Button Activate the unit or put it into standby mode.

Z 3 4: Source Input Used to select the desired listening source.

5 : Display

5: PLAY Button Start playing the disc.

7: OPEN Button To open the tray loading mechanism.

B: STOP Button Stop disc play.

9: PAUSE Button Used to temporarily suspend play. SEARCH ButtonUse for fast searching through the currently playing disc.

11: TRACK Buttons Select tracks on the disc.

IZ: Remote Sensor Receive IR commands from the remote control.

13: REPEAT Button Repeat the current track or the entire disc.

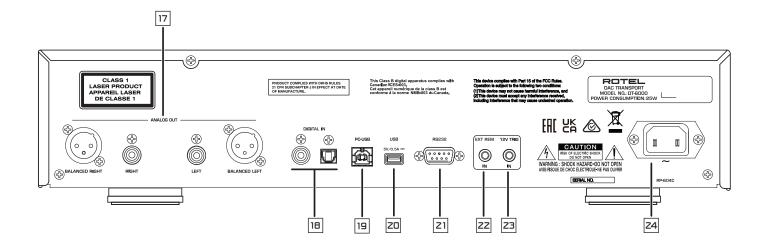
14: RANDOM Button Play tracks in random order.

 IS: TIME Button

 Select the time display of the currently playing track.

15 : Disc Tray

Figure 1-2: Controls and Connections Commandes et Branchements Bedienelemente und Anschlüsse Controles y Conexiones Bedieningselementen en aansluitingen Controlli e connessioni Kontroller och anslutningar Органы управления и разъемы



17: Analog Outputs

A pair of standard RCA jacks and XLR balanced connectors supplies an analog output signal.

 IB: Digital Signal Inputs

 Connect to coaxial or optical PCM outputs of the source component.

19: PC-USB Input

ZD: Rear USB Power Port Used for software update.

### Z1: RS232

Use for integration with automation systems.

ZZ: EXT REM IN Jack Receive command codes from industry-standard infrared receivers via hard-wired connections.

**Z3**: 12V Trigger Connection Receive a 12V trigger signal.

Z4: AC Power Input

Figure 2 : RR-D150 Remote Control Télécommande infrarouge RR-D150 Fernbedienung RR-D150 Mando a Distancia RR-D150 Afstandsbediening RR-D150 Telecomando RR-D150 RR-D150 fjärrkontroll Пульт ДУ RR-D150

 $(\mathbf{A})$  $(\mathbf{A})$ ON (A): Power Button  $\mathbf{C}$ Activate or deactivate the unit.  $(\mathbf{B})$ OPEN DIM (B): OPEN Button Open or close the tray loading mechanism.  $(\mathbf{D})$ **(E)** D: Numeric Buttons Directly access a track. 0 (F) (1): Stop/Play/Pause Button Control the stop, play, pause of the audio.  $(\mathbf{G})$  $(\mathbf{H})$ TRACK Buttons Select tracks on the disc. **4**/**>** Ш **SEARCH Buttons**  $(\mathbf{I})$ Use for fast searching through the currently **I** 44 44 playing disc.  $(\mathbf{J})$ OPT (K): TIME Button  $(\mathbf{K})$ TIME PROG RPT Select the time display of the currently playing track. **RND** Button  $(\mathbf{L})$ LIGHT Play tracks in random order. ROTEL **RPT Button** Repeat the current track or the entire disc.

©: Dimmer Dim the front Display.

(E): Volume Buttons Adjust the volume output level.

(F): MUTE Button Mute the audio.

G: SETUP Button Access the settings menu.

(H): Navigation and ENTER Buttons Access the various menus and operate the DAC transport settings.

(1): Source Input Select the desired input signal source.

(1): Light Button Turn on the backlight on the remote control.

**PROG Button** 

To program the tracks on the current disc for playback in a specific order.

Figure 3 : Analog RCA Outputs Connection Connexion Sorties analogiques RCA Analoge RCA Ausgänge Anschluss Conexión de Salidas Analógicas RCA Analoge RCA uitgangen aansluiting Connessione di uscite audio analogiche RCA Analoga RCA utgångar anslutning Аналогового RCA выхода соединения

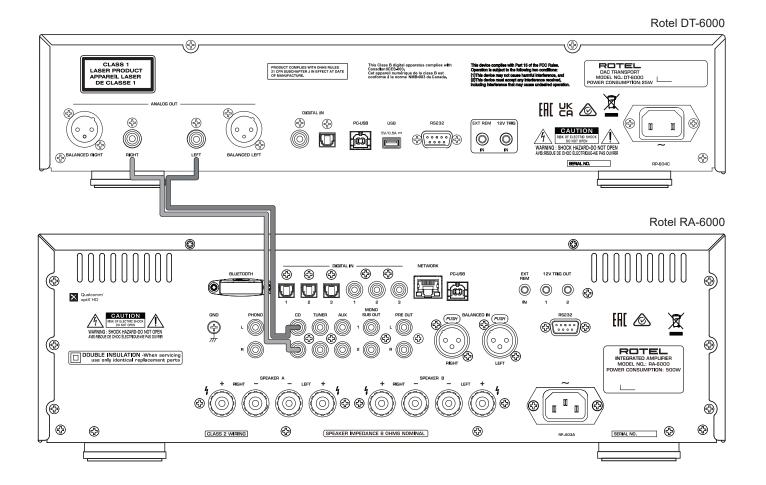


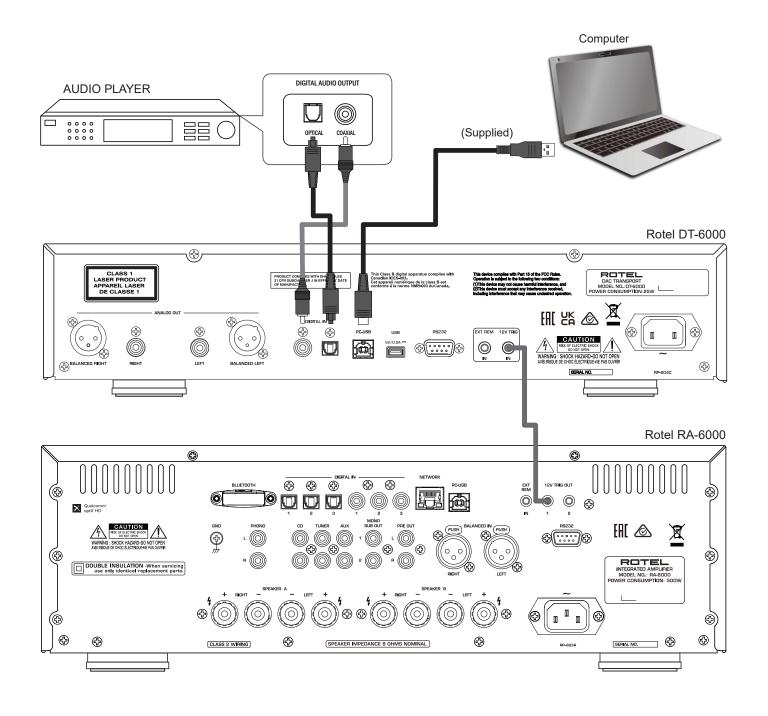
Figure 4 : Balanced Outputs Connection Connexion Sorties symétriques Symmetrische Ausgänge Anschluss Conexión de Salidas Balanceadas Gebalanceerde uitgangen aansluiting Connessione di uscite audio bilanciate Balanserade utgångar anslutning БАЛАНСНЫЕ ВЫХОДЫ СОЕДИНЕНИЯ

Ð Ð DAC TRANSPOR MODEL NO.:DT-60 CLASS 1 LASER PRODUCT APPAREIL LASER DE CLASSE 1 PRODUCT COMPLIES WITH DHHS RULES 21 CFR SUBCHAPTER J IN EFFECT AT DATI OF MANUFACTUPE ue de la ciass B est NMB-003 du Canada. X EAE 54 🖉 ዏ ዏ 12V TRIG 4 ዏ R5232 EXT BEM CAUTION Ò 5V/0.5A = S.....B  $\bigcirc$  $\bigcirc$ Ø RIGHT \$ SERIAL NO. Rotel RA-6000 ٢ 0 Ð Ð Ð EXT REM 12V TRIG OUT  $( \mathbb{S} )$ ⊕ R ð 0 6 0 0 ⊕ Qualcomr aptX'HD GND C EAE 💩 X &(....) ⇔ \$ ( $(\mathcal{D})$ ROTEL NTEGRATED AMPLIFIER MODEL NO.: RA-6000 VER CONSUMPTION: 50 NSULATION vicing parts \$ 6  $\bigcirc$  $\bigcirc$ � �  $\bigcirc$ (C Ø Ð (\$ ዏ \$ ዏ CLASS 2 WIRING SPEAKER IMPEDANCE 8 OHMS NOMINAL RP-603A SERIAL NO.

Rotel DT-6000

# English

Figure 5 :Digital Inputs and 12V Trigger In Connections<br/>Connexion pour entrée numérique et d'entrée trigger 12V<br/>Digitale Eingänge und 12-V-TRIG IN-Anschlüsse<br/>Conexión para Entrada Digitale y Señal de Disparo de 12V<br/>Digitale ingangen en 12 V Trigger IN-aansluitingen<br/>Collegamenti peer ingressi digitale e segnali Trigger 12V<br/>Anslutningar för Digitala ingångar och 12-volts styrsignaler<br/>Цифровой вход и соединения запускающих триггерных входов 12 В



### **Important Notes**

#### When making connections be sure to:

- ✓ Turn off **all** the components in the system **before** hooking up **any** components, including loudspeakers.
- ✓ Turn off all components in the system before changing any of the connections to the system.

#### **Remarques importantes**

#### Pendant les branchements, assurez-vous que :

- ✓ Tous les maillons sont éteints avant leur branchement, quels qu'ils soient, y compris les enceintes acoustiques.
- ✓ Éteignez tous les maillons avant de modifier quoi que ce soit au niveau de leurs branchements, quels qu'ils soient.

### Wichtige Hinweise

#### Achten Sie beim Herstellen der Verbindungen auf Folgendes:

- ✔ Schalten Sie **alle** Komponenten im System ab, **bevor** Sie Geräte (einschließlich Lautsprecher) anschließen.
- ✔ Schalten Sie **alle** Komponenten im System ab, **bevor** Sie Anschlüsse im System verändern.

#### **Notas Importantes**

#### Cuando realice las conexiones, asegúrese de que:

- ✔ Desactiva todos los componentes del equipo, cajas acústicas incluidas, antes de conectar cualquier nuevo componente en el mismo.
- ✔ Desactiva todos los componentes del equipo antes de cambiar cualquier conexión del mismo.

## Héél belangrijk

#### Bij het maken van de verbindingen:

- ✔ Zorg dat niet alleen de DT-6000, maar de **gehele** installatie uitstaat, als nog niet **alle** verbindingen gemaakt zijn.
- ✔ Zorg dat niet alleen de DT-6000, maar de **gehele** installatie ook uitstaat, **als** u verbindingen gaat **wijzigen.**

### Note importanti

#### Quando effettuate i collegamenti assicuratevi di:

- ✔ Spegnere **tutti** i componenti del sistema **prima** di collegare **qualsiasi** componente, inclusi i diffusori.
- ✓ Spegnere tutti i componenti del sistema prima di modificare qualsiasi connessione nel sistema.

#### Viktigt

#### Tänk på följande när du gör anslutningar:

- ✔ Stäng av **alla** apparater i anläggningen **innan** du ansluter nya komponenter eller högtalare.
- ✓ Stäng av alla apparater i anläggningen innan du ändrar någon anslutning.

## Важные замечания

#### Перед подсоединением:

- Выключите все компоненты, включая колонки.
- ✔ Выключите все компоненты в вашей системе, прежде чем что-то в ней менять.

# Contents

Important Safety Instructions	3
Figure 1-1: Controls and Connections	4
Figure 1-2: Controls and Connections	5
Figure 2: RR-D150 Remote Control	6
Figure 3: Analog RCA Outputs Connection	7
Figure 4: Balanced Outputs Connection	8
Figure 5: Digital Inputs and 12V In Trigger Connections	9
	10
About Rotel	11
Getting Started	11
A Few Precautions	12
Placement	12
Cable	12
The RR-D150 Remote Control	12
	12
	12
AC Power and Control	12
···········	12
	12
55	13
Connections	13
	13
J · · ·	13
Operation 1	13
Display 🖻	13
Remote Sensor 12	13
Disc Tray 📧	13
Transport Control Buttons	13
OPEN Button 28	13
PLAY Button 🖻 🛈	13
STOP Button 🗉 🛈	13
PAUSE Button 90	13
TRACK Buttons 111 (1)	13
DIRECT ACCESS Buttons (D)	14
	14
Additional Features	14
Source Input Z340	14
	14
RANDOM Button 🖻 🗷	14
	14
	14
PC-USB Input 19	
Rear USB Power port 🔤 1	
RS232 21 1	
EXT REM IN Jack 🗵	
Remote Control Advanced Buttons.	
	15
	16
Troubleshooting	
	16
· ····	16
	16
	16
Specifications	17

# About Rotel

Our story began over 60 years ago. Over the decades, we have received hundreds of awards for our products and satisfied hundreds of thousands of people who take their entertainment seriously – like you!

Rotel was founded by a family whose passionate interest in music led them to manufacture high-fidelity components of uncompromising quality. Through the years, that passion has remained undiminished and the family goal of providing exceptional value for audiophiles and music lovers, regardless of their budget, is shared by all Rotel employees.

Rotel's engineers work as a close team, listening to, and fine tuning, each new product until it reaches their exacting musical standards. They are free to choose components from around the world in order to make that product the best they can. You are likely to find capacitors from the United Kingdom and Germany, semiconductors from Japan or the United States, while toroidal power transformers are manufactured in Rotel's own factory.

We all have concerns about our environment. And, as more and more electronics are produced it is especially important for a manufacturer to do all it can to engineer products that have a minimum impact on the environment.

At Rotel, we are proud to do our part. We have reduced the lead content in our products by using special lead-free ROHS solder and components. Our engineers continually strive to improve power supply efficiency without compromise to quality. When in standby mode Rotel products use minimal power to meet global Standby Power Consumption requirements.

The Rotel factory is also doing their part to help the environment through constant improvements to product assembly methods for a cleaner and greener manufacturing processes.

All of us at Rotel thank you for buying this product. We are sure it will bring you many years of enjoyment.

# **Getting Started**

Thank you for purchasing the Rotel DT-6000 DAC (Digital to Analog Converter) Transport. When used in a high-quality music or home theater system, your Rotel product will provide years of musical enjoyment.

The DT-6000 is a full featured, high performance component. All aspects of the design have been optimized to retain the full dynamic range and subtle nuances of your music. The DT-6000 has a highly regulated power supply incorporating a Rotel custom-designed toroidal power transformer and custom-made slit foil capacitors. This low impedance power supply has ample power reserves, which enables the DT-6000 to easily reproduce the most demanding audio signals. This type of design is more expensive to manufacture, but it is better for the music.

The printed circuit boards (PCB) are designed with Symmetrical Circuit Traces. This insures that the precise timing of the music is maintained and faithfully recreated. The DT-6000 circuitry uses metal film resistors and polystyrene or polypropylene capacitors in important signal paths. All aspects of this design have been examined to ensure the most faithful music reproduction. The main functions of the DT-6000 are easy to install and use. If you have experience with other stereo systems, you shouldn't find anything perplexing. Simply plug in the associated components and enjoy.

## **A Few Precautions**

**WARNING:** To avoid potential damage to your system, turn off ALL the components in the system when connecting or disconnecting the loudspeakers or any associated components. Do not turn the system components back on until you are sure all the connections are correct and secure.

Please read this manual carefully. In addition to installation and operating instructions, it provides valuable information on various unit system configurations as well as general information that will help you get optimum performance from your system. Please contact your authorized Rotel dealer for answers to any questions you might have. In addition, all of us at Rotel welcome your questions and comments.

Save the shipping carton and all enclosed packing material for future use. Shipping or moving the unit in anything other than the original packing material may result in severe damage to your unit.

If included in the box please complete the owner's registration card or register on line. Also be sure to keep the original sales receipt. It is your best record of the date of purchase, which you will need in the event warranty service is required.

#### Placement

Like all audio components that handle low level signals, this unit can be affected by its environment. Also avoid routing audio signal cables near power cords. This will minimize the chance it will pick up hum or interference.

Remember the weight of the unit when you select an installation location. Make sure that the shelf or cabinet can support it. We recommend installing the unit in furniture designed to house audio components. Such furniture is designed to reduce or suppress vibration which can adversely affect sound quality. Ask your authorized Rotel dealer for advice about component furniture and proper installation of audio components.

### Cables

Be sure to keep the power cords, digital signal cables and analog audio signal cables in your installation away from each other. This will minimize the chance of the analog audio signal cables picking up noise or interference from the power cords or digital cables. Using only high quality, shielded cables will also help to prevent noise or interference from degrading the sound quality of your system. If you have any questions see your authorized Rotel dealer for advice about the best cable to use with your system.

# The RR-D150 Remote Control

Some functions can be done with either the front panel controls, or the supplied RR-D150 remote control. When these operations are described, the square call out numbers refer to the main unit, while the encircled letters refer to the remote control.

### LIGHT Button (L)

Push the LIGHT Button (1) to turn on the backlight on the remote control. This light can be used to easily see the buttons in a dimly lit room. The backlight will automatically turn off after 10 seconds.

## **Remote Control Batteries**

Two AA size batteries (supplied) must be installed before the remote control can be used. To install the batteries, remove the cover on the back of the RR-D150. Install the batteries as shown in the illustration in the battery well. Test the control for proper operation, then replace the cover. When the batteries become weak the remote control won't operate the unit consistently. Installing fresh batteries should eliminate the problem.

# **AC Power and Control**

## AC Power Input 24

Your unit is configured at the factory for the proper AC voltage in the country where you purchased it (either 120 volts or 230 volts). The AC line configuration is noted on a decal on the back panel.

**NOTE:** Should you move your unit to another country, it may be possible to reconfigure it for use on a different line voltage. Do not attempt to perform this conversion yourself. Opening the enclosure of the unit exposes you to dangerous voltages. Consult a qualified service person or the Rotel factory service department for information.

**NOTE:** Some products are intended for sale in more than one country and as such are supplied with more than one AC cord. Please use only the cord appropriate for your country/region.

The unit should be plugged directly into a polarized wall outlet using the supplied cable or other high current compatible cable as recommended by your authorized Rotel dealer. Do not use an extension cord.

Be sure the power switch on the front panel of the unit is turned off (in the "out" position). Then, connect the supplied power cord to the AC power receptacle on the rear of the unit and the AC power outlet.

If you are going to be away from home for an extended period of time such as a month-long vacation, it is a sensible precaution to unplug your unit (as well as other audio and video components) while you are away.

## Power Switch and POWER Indicator 1 (A)

Press the front panel Power Switch button, to turn the unit on. The Power Indicator light is illuminated when the unit is on. Press Power Switch button again to turn the unit off.

When the power switch is in the ON position, the remote control ON and OFF buttons may be used to activate the unit or put it in Standby mode. In Standby mode the power LED remains illuminated, but the display is turned off.

**NOTE:** If you are using a switched outlet to turn on and off your unit, you should leave the power switch in the "ON" position. When AC power is applied to the unit, it will power up in fully active mode.

# 12V Trigger Connection 23

See Figure 5

The unit can be activated by a 12 volt trigger signal. The trigger input accepts any control signal (AC or DC) ranging from 3 volts to 30 volts. When a cable is connected to the 12V input and a trigger signal is present, the unit is activated. When the trigger signal is turned off, the unit goes into standby mode. The front panel power indicator will remain illuminated, but the display goes dark and the unit will not operate.

**NOTE:** When using the 12V Trigger feature, leave the POWER button in the ON position.

# Connections

The DT-6000 built in D/A converter provides digital to analog conversion allowing connection using either XLR Balanced or RCA analog output connectors.

**NOTE:** To prevent loud noises that could damage your speakers, turn off all the system components when you make any signal connections.

## Analog Outputs 17

#### See Figure 3 and 4

A pair of standard RCA jacks and XLR balanced connectors supplies an analog output signal from the DT-6000 to the source inputs of an audio preamplifier, integrated amplifier, or receiver. You should choose only one method of analog connection from the DT-6000. Do not connect both the RCA and XLR at the same time.

Select high quality audio interconnect cables. Connect the left and right channel outputs of the DT-6000 to the corresponding inputs on the preamplifier or other component.

## Digital Intput 📧

#### See Figure 5

There is one set of digital inputs to connect the COAXIAL or OPTICAL PCM outputs of your source component. The digital signals will be decoded and played by the DT- 6000. The unit is capable of decoding PCM signals up to 24 bit, 192kHZ.

# Operation

The unit can be operated using its front panel buttons or from corresponding buttons on the supplied infrared remote control. Specific instructions for each of these controls are detailed below. Most of the buttons are duplicated on the front panel and on the IR remote control. However, there are a few exceptions where the buttons are only available on one or the other. These exceptions are noted in the instructions.

# Display 🗉

A back-lit display on the front panel of the unit provides useful information about the status of the unit, activation of special features, and track/time information for the disc being played. Each of these indicators is described in the detailed operating instructions that follow.



### Remote Sensor 12

This remote sensor window receives IR commands from the remote control. Please do not block this sensor.

# Disc Tray 15

A motor-driven disc loading tray located in the center of the unit, accepts a compact disc. Press the OPEN button then place the disc into the tray, label-side up. Make sure the disc is properly centered before loading. The disc can be ejected by pressing the OPEN button again.

# **Transport Control Buttons**

These buttons provide basic control functions for the disc transport mechanism and PC-USB playback. Except where noted, all functions are available on the unit front panel and the IR remote control.

# OPEN Button 7 B

To open the tray loading mechanism press the OPEN button  $\blacktriangle$ . The tray will open allowing the CD to be loaded label side up. To close the tray press the OPEN button  $\blacktriangle$  again.

If no disc is loaded when the tray is closed the display will read "No Disc". When a disc is loaded, the display will indicate the number of tracks on the disc and the total time of the disc in hours, minutes and seconds.

## PLAY Button **b**()

After the disc is loaded, press the PLAY button  $\blacktriangleright$  to start playing the disc. The number of the track being played and the elapsed time will be shown in the display, along with the PLAY indicator. Normally, the disc will start playing with the first track. However, you can select a different track using the TRACK buttons or the DIRECT ACCESS buttons (see below) before pressing the PLAY button  $\blacktriangleright$  to start playing a different selection.

# STOP Button **B**()

Press the STOP button  $\blacksquare$  to stop disc play and the display shows STOP indicator. When the PLAY button  $\blacktriangleright$  is pressed, the disc begins playing from the first track or the first programmed track in PROGRAM mode (see below).

# PAUSE Button 🗉 🛈

This button is used to temporarily suspend play. The disc continues to spin and play will be resumed from the current position. The PAUSE indicator will light in the display. To resume playing the disc, press the PAUSE button ■ again or press the PLAY button ►.

## TRACK Buttons 111

These buttons are used to select tracks on the disc. When a disc is playing, pressing the TRACK button ►► advances to the beginning of the next track. Pressing the TRACK button I<< tracter track track button is to the beginning of the current track. Pressing the TRACK button I<< tracter twice quickly in succession returns to the beginning of the previous track. The new track number appears in the display.

These buttons are also used to select a track before pressing the PLAY button ▶ or when memorizing tracks for the PROGRAM play mode (see below). These selections are made by continuously pressing the TRACK buttons until the desired track is reached.

In PROGRAM mode, the TRACK buttons advance or reverse to the next track in the memorized selection list.

## DIRECT ACCESS Buttons D

#### Remote Only

These ten numeric buttons (labeled 0 through 9) are used to directly access a track from the IR remote control instead of stepping through the tracks using the TRACK buttons.

The first nine tracks on a disc can be selected by pressing the corresponding button. For example, to play the third track, press the 3 button on the remote control.

When accessing track numbers greater than 9, enter the 2 digit track number on the remote control.

The number of the selected track will appear in the main numeric area at the center of the display.

#### SEARCH Button III ()

These fast forward and fast reverse buttons ◀◀ / ▶▶ allow fast searching through the currently playing disc. One press of these buttons will fast forward or fast reverse at 2X normal speed. Pressing these buttons repeatedly will fast forward or fast reverse at 4X and 8X normal speed. Pressing the PLAY button returns the player to normal speed. While the fast search function is active, you will hear high-speed audio.

# **Additional Features**

These convenience features add extra functionality to the DT-6000, including the ability to select the input source, to memorize a group of tracks to be played, to repeat a disc, program, or track over and over, to play the tracks on a disc in random order, and to select from several available time displays.

# Source Input $\mathbb{Z} \mathbb{3} \mathbb{4} \mathbb{J}$

The Source Input selects the input signal source. From the front panel press the corresponding input key to select the source to listen to.

Push the front panel source buttons to select the desired source. Use the DIGITAL source button to toggle between the Coax and Optical source inputs.

### **PROGRAM Button** (K)

#### Remote Only

This button, labeled PROG, allows you to memorize as many as 20 tracks on the current disc for playback in a specific order. For example, you could instruct the DT-6000 to play track 5, followed by track 3, followed by track 8.

To begin a program:

- 1. Insert a disc into the tray loader. The DT-6000 will read the contents of the disc.
- Press the PROG button on the remote control. The PROGRAM indicator will light up in the display, along with "PROG-01" indicating that the unit is waiting for the first track to be memorized.
- Enter the first track number using the DIRECT ACCESS buttons. Your selection will be memorized automatically. Press PROG button again then the display indicator will change to "PROG-02". Continue entering the rest of your selections using the DIRECT ACCESS buttons.

Once you have memorized a play list, the DT-6000 remains in PROGRAM mode until you eject the disc or press the PROG button. If you press the PLAY button ▶, the memorized program will play instead of the entire disc, starting with the first selection in the memorized list.

When a PROGRAM has been memorized, most functions that would normally affect the entire disc operate on just the memorized program. For example, the TRACK buttons advance to the next track in the memorized program, not the next track on the disc. Likewise, the REPEAT button (see below) continuously plays the memorized program, not the entire disc.

**NOTE:** The Random button does not function when playing a program. To activate the Random button the unit must exit Program playback. **NOTE:** Direct track access is not available when in the PROGRAM mode.

## RANDOM Button 14 (K)

This instructs the unit to play tracks from the entire disc in random order. Once all of the selections have been played once, the disc will stop playing, unless the REPEAT Button (see below) has been engaged, in which case the random play will continue until the STOP button **■** is pressed.

# REPEAT Button IB (K)

This button allows you to repeat the current track or the entire disc continuously until the feature is cancelled by disengaging the REPEAT button or pressing the STOP button ■. The REPEAT button steps sequentially through the available options. Press the button once and the DT-6000 will repeat just the current track. Press the button a second time and the DT-6000 will repeat the entire disc. Press the button a third time to cancel the REPEAT function.

As noted above, REPEAT can be used in conjunction with the RANDOM play feature.

**NOTE:** The REPEAT function is automatically cancelled when the disc is ejected.

## TIME Button 🖭 🛞

Normally, the DT-6000 displays the elapsed time of the currently playing track. The TIME button allows you to step through two alternative time displays. Pressing the button once displays the time remaining in the current track, which counts down as the track continues playing. Pressing the button a second time displays the time remaining on the entire disc (or memorized program). Pressing the button a third time reverts to the standard elapsed time display.

**NOTE:** If a disc has CD Text information on it, pressing the play button during playback will alternate between standard disc information and any CD Text data being shown on the display.

# PC-USB Input 19

#### See Figure 5

Connect this input using a USB cable to the USB socket of your computer.

The DT-6000 supports USB Audio Class 2.0 modes. To take advantage of USB Audio Class 2.0 audio playback supporting up to 384kHz sampling rates you will need to install the Windows driver supplied on the USB stick included with the DT-6000.

Many audio playback applications do not support 384kHz sampling rate. Please confirm your audio player supports 384kHz audio and you have 384kHz audio files to properly playback this sample rate. Also, you may need to configure the audio driver in your PC to output 384kHz or your computer may "down sample" to a lower audio sample rate. For more information please refer to your audio player or operating system information.



The unit has been certified as Roon Tested and compatible with Roon software via PC-USB.

Being Roon Tested means that Rotel and Roon have collaborated to ensure you have the best experience using Roon software and the unit together, so you can just enjoy the music.

For the best user experience it is suggested to use USB Audio Class 2.0 when using Roon.

**NOTE:** USB Audio Class 2.0 requires installation of the Windows PC driver on the USB stick included with the unit.

**NOTE:** MAC computers do not require a driver to support PC-USB 2.0 audio.

**NOTE:** Upon successful installation of the driver, you may need to select the ROTEL audio driver from the audio/speaker setup of your computer.

**NOTE:** The DT-6000 supports both DSD and DOP audio playback in 1X, 2X and 4X formats. Consult your audio player to confirm proper operation for playback of these audio formats.

# Rear USB Power Port 20

The rear USB port is only used for software update.

**NOTE:** This port does not allow playback of audio or charging / powering USB devices.

# **RS232** Z1

The unit can be controlled via RS232 for integration with automation systems. The RS232 input accepts a standard straight DB-9 Male-to-Female cable.

For additional information on the connections, software, and operating codes for RS232 control of the unit, contact your authorized Rotel dealer.

# EXT REM IN Jack ZZ

This 3.5mm mini-jack receives command codes from industry-standard infrared receivers via hard-wired connections. This feature could prove useful when the unit is installed in a cabinet and the front-panel sensor is blocked. Consult your authorized Rotel dealer for information on these external repeaters and the proper wiring of a jack to fit the mini-jack receptacle.

# **Remote Control Advanced Buttons**

#### SETUP Button **G**

Remote Only

By pressing the SETUP button, you can enter the following setup menu:

 PC-USB DECODING: Change PC-USB Audio mode to support DSD, MQA and PCM Audio up to 24bits or PCM Audio Only up to 32bits. When PCM 32B is selected DSD/MQA audio is not supported. To playback DSD/MQA the DSD/MQA/PCM 24B option must be selected.

Valid settings include: DSD/MQA/PCM 24B (Default), PCM 32B Only.

• DISPLAY DIMMER: Changes the display brightness.

**NOTE:** The setting is stored permanently even after the unit is powered off.

• POWER LED DIMMER: Changes the Power LED brightness.

**NOTE:** The setting is stored permanently even after the unit is powered off.

 AUTO POWER OFF: The unit can be configured to automatically power off if unused for a specified period. If no changes are made to the unit within the specified "Off Timer" period, the unit will automatically go to STANDBY mode. The auto power off timer will be restarted if changes are made to the source or playback. The default for Auto Power Off is set to 20 MINS.

Valid settings include: 20 MINS (Default), 60 MINS, 90 MINS, DISABLE.

- MAIN VERSION: Shows the current software version.
- PC-USB VERSION: This shows current loaded software version for PC-USB processor.
- SOFTWARE UPDATE: Insert a USB flash drive with the lastest software to the rear USB port, the unit will detect the new software, then start to update and power cycle when the software update is complete. For more information on the software update process please contact your authorized Rotel dealer.

NOTE: Do NOT power off the unit during the software update process.

**NOTE:** It is recommended to Reset Factory Defaults after the software update is complete.

 FACTORY DEFAULT: This sets the unit back to the original state as when it left the factory. Press the ENTER button on the remote control to enter factory reset setting. And then press the right arrow button and ENTER button to begin reset, or press the SETUP button to cancel.

**NOTE:** All previously configured options will be erased and reset to the factory default settings.

• EXIT: Exits this SETUP menu.

From the remote control, press the up/down arrow buttons to change the contents of the menu, and press ENTER to enter the settings or confirm.

**NOTE:** You can also access the SETUP menu without the remote control. Press the STOP button on the front panel for 5~10 seconds. Press the TRACK buttons to change the contents of the menu and press STOP button to enter the settings or confirm.

#### DIM Button ©

Remote Only

Press the DIM button sequentially to change the DISPLAY brightness.

**NOTE:** Adjustments made using the C button are temporary only and not saved after powering off the unit.

# Troubleshooting

Most difficulties in audio systems are the result of incorrect connections, or improper control settings. If you encounter problems, isolate the area of the difficulty, check the control settings, determine the cause of the fault and make the necessary changes. If you are unable to get sound from the unit, refer to the suggestions for the following conditions:

# Power Indicator Is Not Illuminated

The Power Indicator and the basic items in the display window should be illuminated whenever the unit is plugged into the wall power outlet and the Power button is pushed in. If it does not light, test the power outlet with another electrical device, such as a lamp. Be sure the power outlet being used is not controlled by a switch that has been turned off.

## **Fuse Replacement**

If another electrical device works when plugged into the power outlet, but the Power Indicator and the display still will not light when the unit is plugged into the wall outlet, it indicates that the internal power fuse may have blown. If you believe this has happened, contact your authorized Rotel dealer to get the fuse replaced.

## No Sound

Check the cables between the unit and the amplifier inputs to be sure they are connected properly. Be sure the correct amplifier input is selected. Be sure the tape monitor system of the amplifier has not been activated. Check the wiring between the amplifier and the speakers.

#### Playable Audio Formats PC-USB

Format	Notes
Format determined by the Media Player/ Server software that you use.	Any supported format by the PC software PCM Audio: 44.1k, 48k, 88.2k, 96k, 176.4k, 192k, 384k (16 bit, 24 bit and 32 bit) DSD64, DSD128 and DSD256 MQA, MQA Studio (24 bit / 384k) Roon Tested

#### Coax/Optical

Format	Notes
SPDIF LPCM	44.1k, 48k, 88.2k, 96k, 176.4k, 192k 16 bit, 24 bit

'MQA' or 'MQA.' indicates that the product is decoding and playing an MQA stream or file, and denotes provenance to ensure that the sound is identical to that of the source material. 'MQA.' indicates it is playing an MQA Studio file, which has either been approved in the studio by the artist/producer or has been verified by the copyright owner.

'OFS' confirms that the product is receiving an MQA stream or file. This delivers the final unfold of the MQA file and displays the original sample rate.

# Specifications

#### Total Harmonic Distortion + Noise

Optical/Coaxical Input			
CD/PC-USB Input			
Intermodulation Distortion			
Frequency Response			

Channel Balance Channel Separation Signal to Noise Ratio (A Weighting) Dynamic Range Input Sensitivity Digital to Analog Converters Analog Output Level / Impedance (OdBfs) Unbalanced (RCA) Balanced (XLR) Decodable Coaxial/Optical Digital Signals Decodable PC-USB Digital Input Signals < 0.0007% < 0.0012% < 0.0012% 20 Hz - 20k Hz, +0, -0.15dB 10 Hz - 70kHz, +0, -3dB ± 0.5 dB > 115 dB @ 10k Hz > 115 dB > 99 dB 0dBfs / 75 Ohms ESS 32-Bit/768kHz DAC

2.1 V / 10 Ohms 4.3 V / 20 Ohms SPDIF LPCM (up to 192k Hz 24 bit) USB Audio Class 2.0 (up to 384kHz 32bit) \*Driver installation required\* Support native DSD (up to 11.2M) and DoP Support MQA and MQA Studio (up to 24 bits/384kHz) Roon Tested.

Power Requirements USA EC

Power Consumption Standby Power Consumption Dimensions (W × H × D)

Front Panel Height Weight (net) 120V, 60 Hz 230V, 50 Hz 25 Watts < 0.5 Watts 431 x 104 x 320 mm 17 x 4 x 12 <sup>3</sup>/s ins 2U / 3 <sup>1</sup>/2 ins / 88.1 mm 8.11 kg, 17.88 lbs.

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

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