



# ROTEL®

## RA-6000

Stereo Integrated Amplifier

Amplificateur Stéréo Intégré

Stereo-Vollverstärker

Amplificador Integrado Estereofónico

Geïntegreerde stereoversterker

Amplificatore integrato stereo

Integrerad stereoförstärkare

Интегрированный стерео усилитель

Owner's Manual

Manuel de l'utilisateur

Bedienungsanleitung

Manual de Instrucciones

Gebruikershandleiding

Manuale di istruzioni

Instruktionsbok

Инструкция пользователя

## 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.

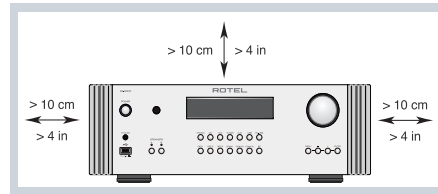
The apparatus should be used in non tropical climate.

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: 120 V/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.

Use Class 2 wiring for speaker connections to ensure proper installation and minimize the risk of electrical shock.

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

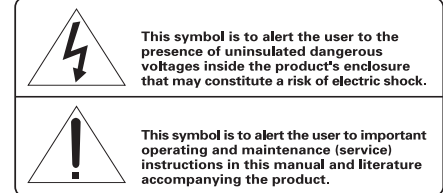
This device complies with Part 15 of the FCC Rules. Operation is subject to the following to conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.




### 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 ÉVITER LES CHOCES ÉLECTRIQUES, INTRODUIRE LA LAME LA PLUS LARGE DE LA FICHE, DANS LA BORNE CORRESPONDANTE DE LA PRISE ET POUSSER JUSQU'AU FOND.



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 wheelee 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.

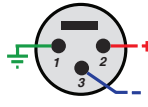
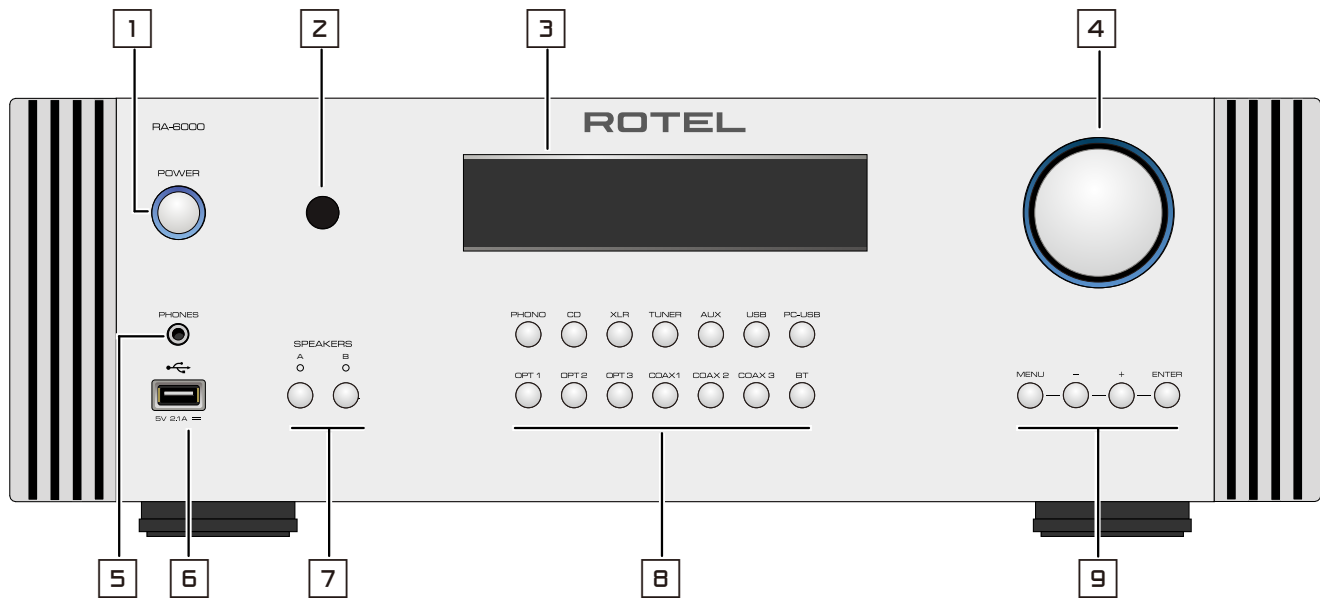
 Pin Assignments  
Balanced Audio (3 pole XLR):  
Pin 1: Ground / Screen  
Pin 2: In phase / +ve / Hot  
Pin 3: Out of phase / -ve / Cold



Figure 1-1: Controls and Connections  
 Commandes et Branchements  
 Bedienelemente und Anschlüsse  
 Controles y Conexiones

Bedieningselementen en aansluitingen  
 Controlli e connessioni  
 Controlli e connessioni  
 Kontroller och anslutningar  
 Органы управления и разъемы



**1**: Power Button

Activate the unit or put it into standby mode.

**2**: Remote Sensor

Receive IR commands from the remote control.

**3**: Display

**4**: Volume Knob

Adjust the volume output level.

**5**: Headphone Output

Allow you to connect headphones for private listening.

**6**: Front USB Input

Connect to an iPhone, iPad or iPod device.

**7**: A-B Speaker Selector

Control A / B speaker output.

**8**: Source Input Selector

Use for selecting the desired listening source.

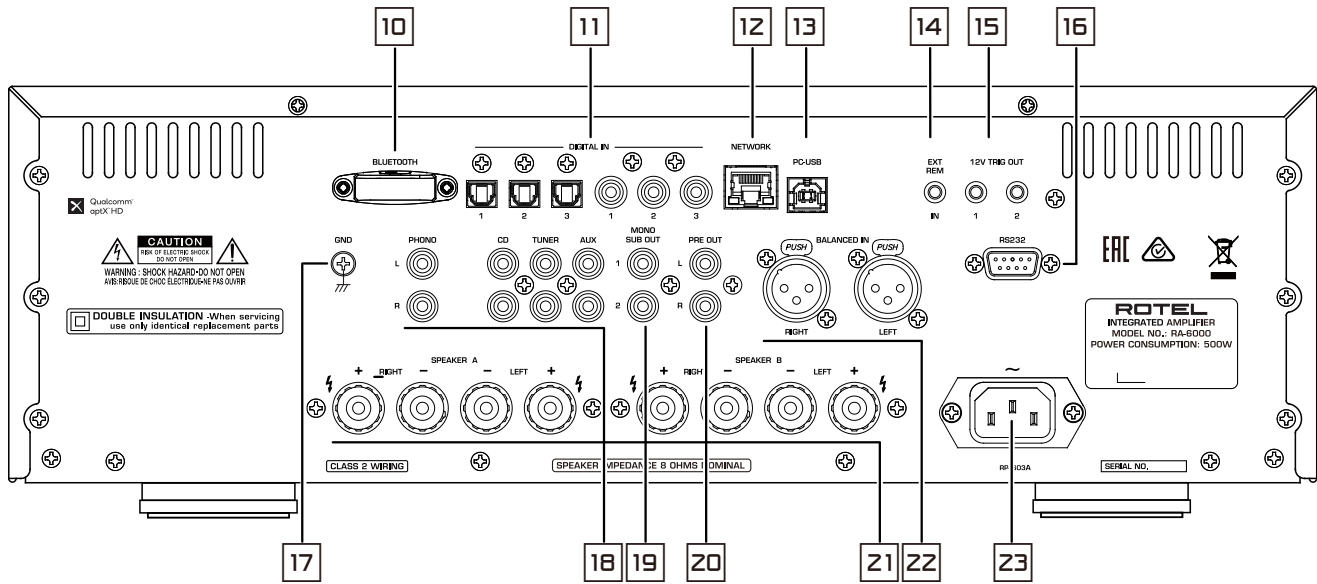
**9**: MENU Button: Access the setup menu.

-/+ Buttons: Configure the settings of the unit.

ENTER Button: Confirm the selected and desired settings.

Figure 1-2: Controls and Connections  
 Commandes et Branchements  
 Bedienelemente und Anschlüsse  
 Controles y Conexiones

Bedieningselementen en aansluitingen  
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**10:** aptX™ HD Bluetooth

Use for wireless streaming via Bluetooth.

**11:** Digital Signal Inputs

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

**12:** Network Port

**13:** PC-USB Input

**14:** EXT REM IN Jack

Receive command codes from industry-standard infrared receivers via hard-wired connections.

**15:** 12V TRIGGER Connection

Send a 12V trigger signal when powered on.

**16:** RS232

Use for integration with automation systems.

**17:** Ground Connection (GND)

Connect with a "ground" wire from the turntable.

**18:** Line Level Inputs

Analog "line level" input.

**19:** MONO SUB Output

Connect to a subwoofer.

**20:** Pre Output

Connect to the integrated amplifier or power amplifier.

**21:** Speaker Outputs

**22:** Balanced (XLR) Inputs

**23:** AC Power Input

**Figure 2: RR-AX200 Remote Control**  
**Télécommande infrarouge RR-AX200**  
**Fernbedienung RR-AX200**  
**Mando a Distancia RR-AX200**

**Afstandsbediening RR-AX200**  
**Telecomando RR-AX200**  
**RR-AX200 fjärrkontroll**  
**Пульт ДУ RR-AX200**

**(A): Power Button**  
 Activate or deactivate the unit.

**(B): Audio control buttons.**

**(D): Numeric Buttons**  
 Directly access a track/station.  
 (Available when used with a Rotel Audio player or Tuner)

**(F): Memory Button**  
 Storing a radio station in a preset  
 (Available when used with a Rotel Tuner)

**(H): Band Button**  
 Choose AM or FM  
 (Available when used with a Rotel Tuner)

**(K): RANDOM Button**  
 Play tracks from the entire disc in random order.  
 (Available when used with a Rotel Audio player)

**(M): Stop/Play/Pause Button**  
 Control the stop, play, pause of the audio.  
 (Available when used with a Rotel Audio player/BT/PC-USB)



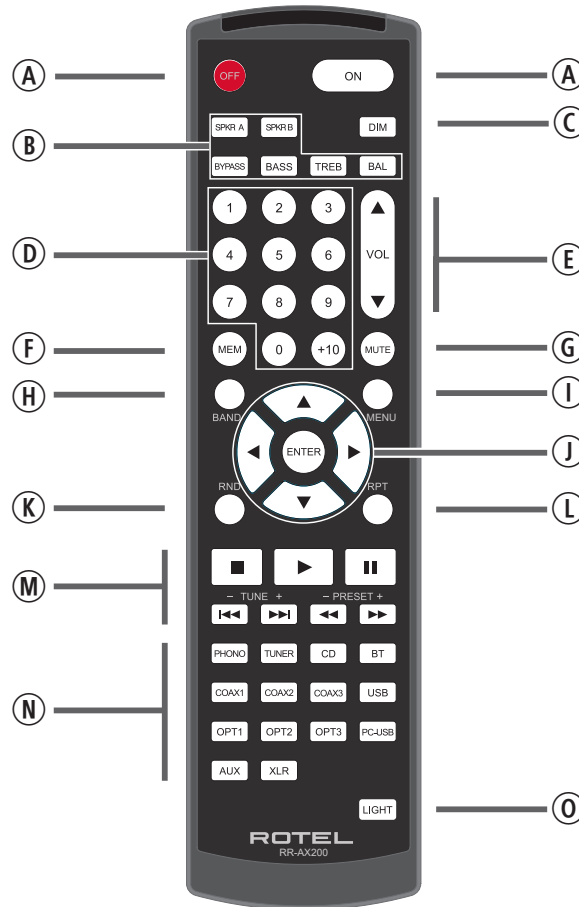
**-TUNE+ Button**  
 Control the previous track and next track, or previous station and next station.  
 (Available when used with a Rotel Audio player/Tuner)



Control the fast reverse and fast forward of the audio.  
 (Available when used with a Rotel Audio player)

**-PRESET+ Button**  
 Not Available for RA-6000.

**(N): Source Buttons**  
 Select the desired input signal source.



**(C): Dimmer**  
 Dim the front Display.

**(E): Volume Button**  
 Adjust the volume output level.

**(G): Mute Button**  
 Mute the audio.

**(I): Menu Button**  
 Access the settings menu.

**(J): Navigation and ENTER Buttons**  
 Access the various menus and operate the Amplifier settings.

**(L): REPEAT Button**  
 Repeat the current track or the entire disc continuously.  
 (Available when used with a Rotel Audio player)

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

Figure 3: Analog Input and Speaker Output Connections

Branchements des entrées analogiques et sorties enceintes acoustiques

Anschlussdiagramm (analoge Eingangsanschlüsse, Ausgangsanschlüsse für die Lautsprecher)

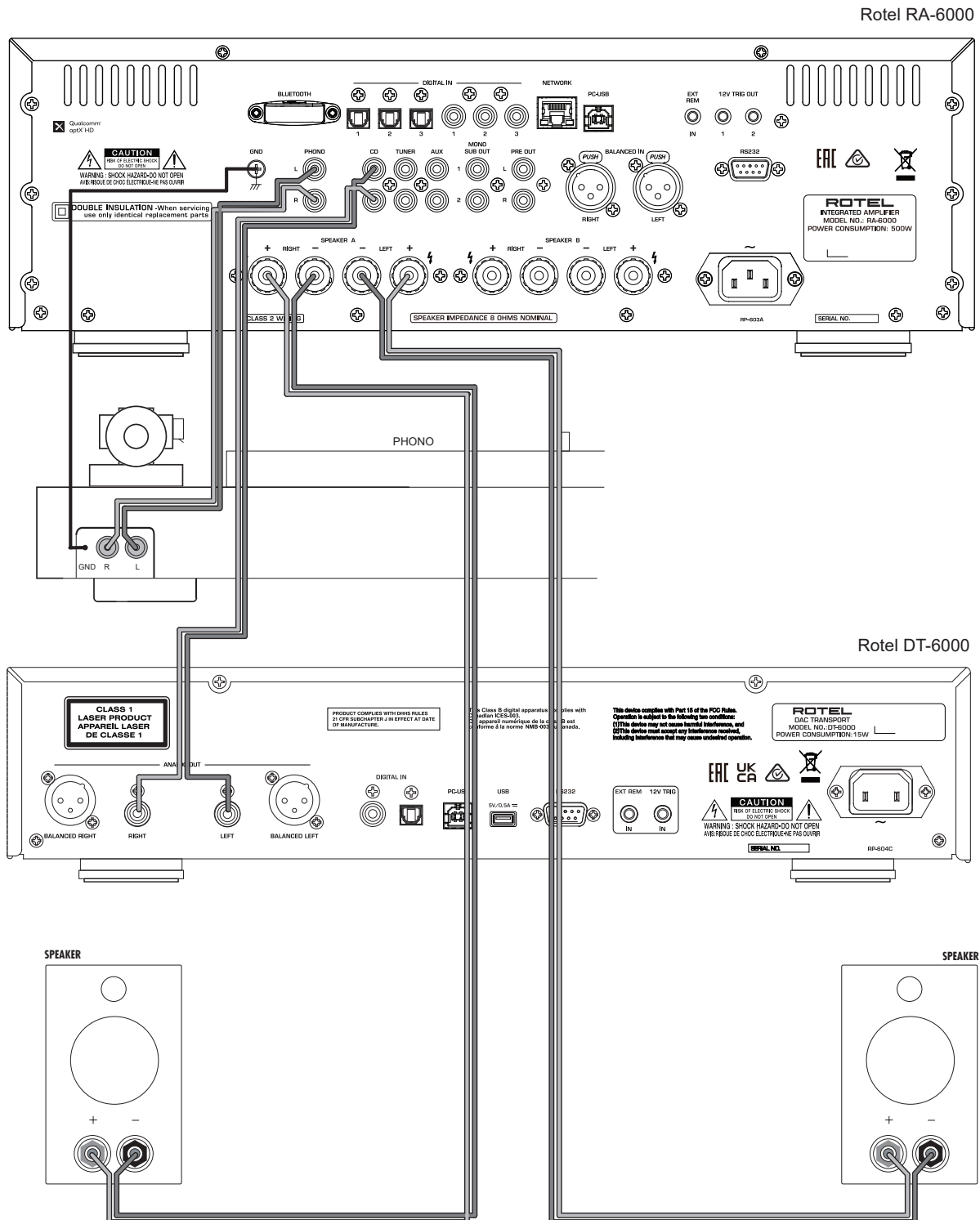
Conexiones de Entrada Analógicas y de Salida a las Cajas Acústicas

Analoge ingangen en luidsprekeruitgangen

Collegamenti ingressi analogici ed uscite diffusori

Anslutningar för högtalare och analoga ingångar

Подсоединение источников сигнала на аналоговые входы и акустических систем



**Figure 4: Digital Input and 12 Volt Trigger Out Connections**  
 Entrées numériques et Branchements des sorties trigger 12 V  
 Anschlussdiagramm (Digitaleingänge, 12V-Trigger-Ausgänge)  
 Entrada Digital y Conexiones de Salida para Señal de Disparo de 12 Voltios  
 Digitale ingangen en 12V-triggeruitgangen  
 Collegamenti ingressi digitali e segnali Trigger 12 V  
 Anslutningar för digitala ingångar och 12-volts styrsignaler  
 Цифровой вход и выход 12-В триггерного сигнала

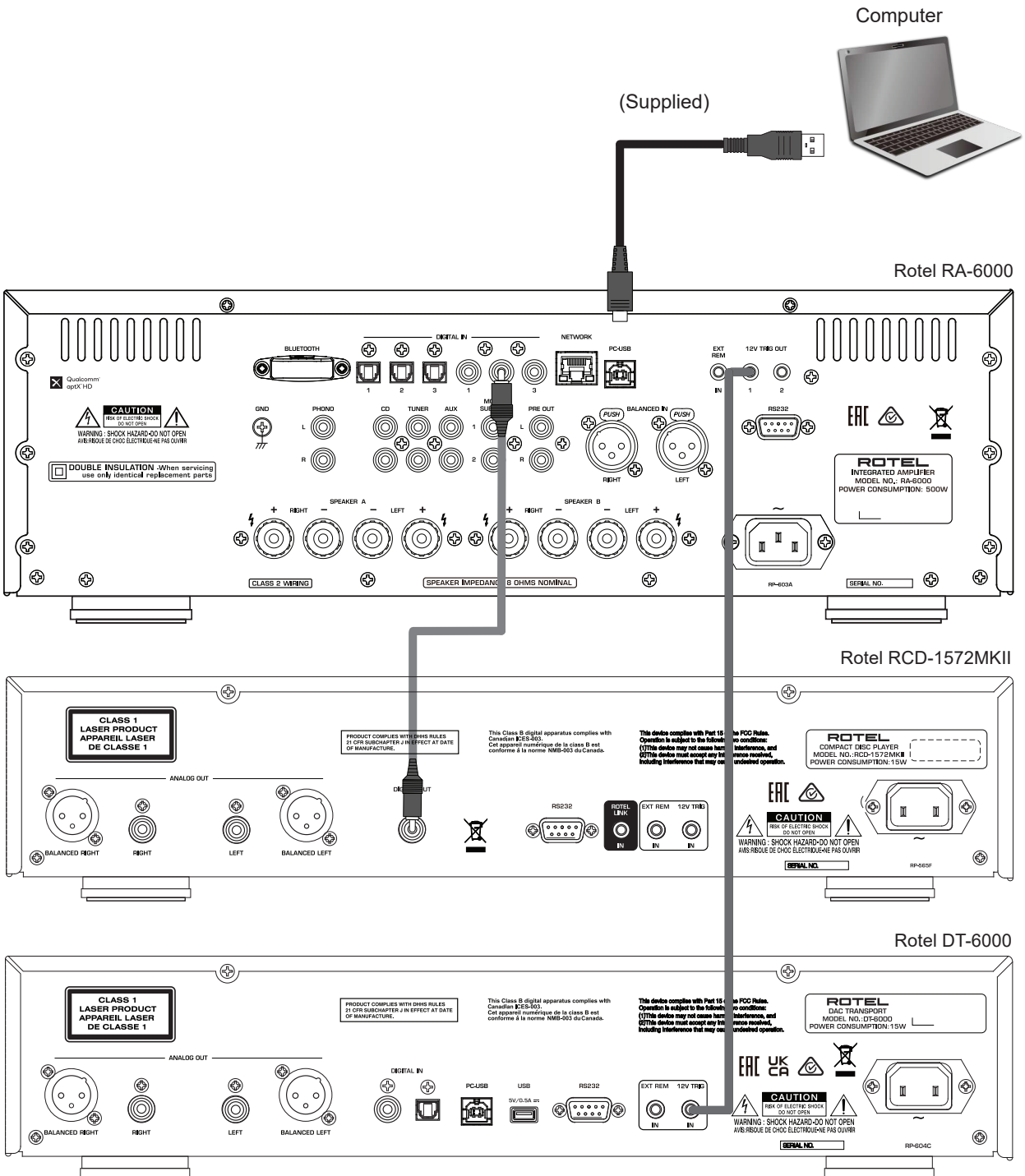
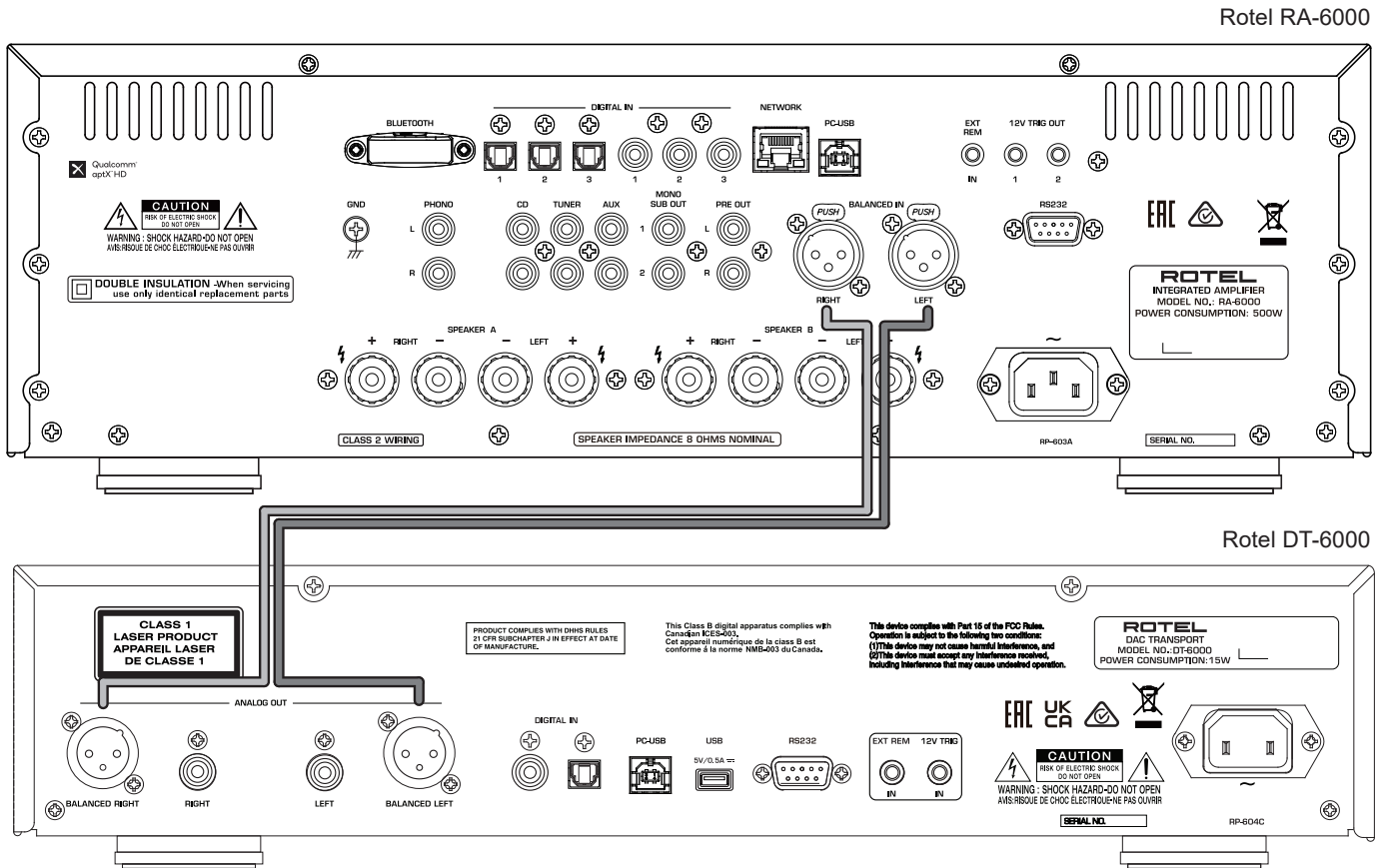


Figure 5: Balanced (XLR) Inputs  
 Entrées symétriques (XLR)  
 Anschlussdiagramm (symmetrische (XLR-) Eingänge)  
 Entradas Balanceadas (XLR)

Gebalanceerde ingangen (XLR)  
 Collegamenti ingressi bilanciati (XLR)  
 Balanserade anslutningar (XLR)  
 Балансные (XLR) входы





## 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.

### It is also recommended that you:

- ✓ Turn the volume control of the amplifier all the way down **before** the amplifier is turned **on or off**.

## 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.

### Il est également recommandé de :

- ✓ Toujours baissez le niveau sonore via le contrôle de volume, **avant d'allumer ou d'éteindre** l'amplificateur.

## 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.

### Ferner empfehlen wir, dass

- ✓ Sie die Lautstärke herunterschalten, **bevor** Sie den Verstärker **ein-** oder **abschalten**.

## 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**.

### También le recomendamos que:

- ✓ Reduzca el nivel de volumen de su amplificador a cero **antes** de **activarlo o desactivarlo**.

## Héél belangrijk

### Bij het maken van de verbindingen:

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

### Wij raden u ook aan om

- ✓ de volumeregelaar van de (voor)versterker geheel dicht te draaien (volkomen linksom) **wanneer** u uw eindversterker **aan- of uitzet**.

## Note importanti

### Quando effettuate i collegamenti assicuratevi di:

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

### Vi raccomandiamo inoltre di:

- ✓ Portare il volume a zero **prima** di **accendere o spegnere** l'amplificatore.

## 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.

### Du rekommenderas också:

- ✓ Vrida ner volymen på förförstärkaren helt och hållet **innan** förstärkaren slås **på eller av**.

## Важные замечания




































### Перед подсоединением:

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

### Рекомендуется также:

- ✓ Вывести громкость усилителя на **минимум**, перед тем как **включать или выключать** его.

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## 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.

## A Word About Watts

This amplifier's power output is rated as 350 watts for each channel, when both channels are operating together at full power. Rotel has chosen to specify the power output in this way because, in Rotel's experience, it gives the truest value of the receiver or amplifier's power capability.

When comparing specifications for different products, you should be aware that power output is often specified in other ways, so you may not be comparing like with like. For example, the power output may be quoted with only one channel operating, giving a higher maximum figure.

A loudspeaker's impedance rating indicates the electrical resistance or load it offers when connected to the amplifier, usually 8 ohms or 4 ohms. The lower the impedance, the more power the speaker will need. In effect, a 4 ohm speaker will require twice as much power as an 8 ohm speaker.

However, Rotel amplifiers are designed to work into any speaker impedance between 8 and 4 ohms, and with all the channels working up to their full power. Because Rotel designs are optimized for use with all channels operating together, Rotel is able to specify the true power output for both channels.

## Getting Started

Thank you for purchasing the Rotel RA-6000 Stereo Integrated Amplifier. When used in a high-quality music audio system, your Rotel product will provide years of musical enjoyment.

The RA-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 RA-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 RA-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 RA-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 RA-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

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**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. Pay particular attention to the speaker wires. There must be no loose strands that could contact the other speaker wires, or the chassis of the amplifier.

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Please read this manual carefully. In addition to basic installation and operating instructions, it provides valuable information on various RA-6000 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 RA-6000 in anything other than the original packing material may result in severe damage to your amplifier.

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 ever required.

### Placement

Like all audio components that handle low-level signals, the RA-6000 can be affected by its environment. Avoid placing the RA-6000 on top of other components. Also avoid routing audio signal cables near power cords. This will minimize the chance it will pick up hum or interference.

The RA-6000 generates heat as part of its normal operation. The heat sinks and ventilation openings in the amplifier are designed to dissipate this heat. The ventilation slots in the top cover must be open. There should be

10 cm (4 inches) of clearance around the chassis, and reasonable airflow through the installation location, to prevent the amplifier from overheating.

Remember the weight of the amplifier when you select an installation location. Make sure that the shelf or cabinet can support it. We recommend installing the RA-6000 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.

The RA-6000 is supplied with an RR-AX200 remote control and must be placed where the infrared signal from the remote can reach the front panel Remote Sensor.

### 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-AX200 Remote Control

Some functions can be done with either the front panel controls, or the supplied RR-AX200 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 ①

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-AX200. 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 RA-6000 consistently. Installing fresh batteries should eliminate the problem.

## AC Power and Control

### AC Power Input 23

Your RA-6000 is configured at the factory for the proper AC line voltage in the country where you purchased it (either 120 volts AC or 230 volts AC with a line frequency of either 50 Hz or 60 Hz). The AC line configuration is noted on a decal on the back panel.

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**NOTE:** Should you move your RA-6000 to another country, it is possible to reconfigure your amplifier for use on a different line voltage. Do not attempt to perform this conversion yourself. Opening the enclosure of the RA-6000 exposes you to dangerous voltages. Consult a qualified service person or the Rotel factory service department for information.

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

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Because of its relatively high power rating, the RA-6000 can draw considerable current. Therefore, it should be plugged directly into a 2-pin polarized wall outlet. Do not use an extension cord. A heavy duty multi-tap power outlet strip may be used if it (and the wall outlet) is rated to handle the current demanded by the RA-6000 and all the other components connected to it.

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 amplifier (as well as other audio and video components) while you are away.

### POWER Switch and Power Indicator 1

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 RA-6000. In Standby mode the power LED remains lit, but the display is turned off.

### 12V TRIGGER Connection 15

See Figure 4

Some audio components can be turned on automatically when they receive a 12V turn on signal. The two 12V Trigger Outputs of the RA-6000 provide the required signal. Connect compatible components to the RA-6000 with a conventional 3.5mm mini plug cable. When the RA-6000 is in turn off mode, the trigger signal is interrupted, so the components controlled by it are turned off.

## Input Signal Connections

---

**NOTE:** To prevent loud noises that neither you nor your speakers will appreciate, make sure the system is turned off when you make any signal connections.

---

### Phono Input 16 and Ground Connection (GND) 17

See Figure 3

Plug the cable from the turntable into the appropriate left and right phono inputs. If the turntable has a "ground" wire, connect it to the screw terminal to the left of the Phono inputs. It will help prevent hum and noise.

### Line Level Inputs 18

See Figure 3

The CD, Tuner, and Aux inputs of the amplifier are analog "line level" inputs. These inputs are for connecting components such as CD players or other audio playback devices with an analog audio output.

The left and right channels are clearly labeled and should be connected to the corresponding channels of the source component. The Left connectors are white, the Right connectors are red. Use high quality RCA cables for connecting input source components to the RA-6000. Ask your authorized Rotel dealer for advice about cables.

### Balanced (XLR) Inputs 22

See Figure 5

A pair of balanced XLR inputs accept audio signals from CD player, Blu-ray player or other source components with XLR outputs.

---

**NOTE:** You should choose only one method of analog connection from a source component to RA-6000. Do not connect both the RCA and XLR outputs of a source component to the RA-6000 at the same time.

---

### Digital Signal Inputs 11

See Figure 4

There are three sets of digital inputs labeled 1, 2 and 3, for COAXIAL and OPTICAL respectively. Connect the COAXIAL or OPTICAL PCM outputs of your source component into these sockets. The digital signals will be decoded and played by the RA-6000. The unit is capable of decoding PCM signals up to 24 bit, 192kHz.

## Output Connections

### MONO SUB Output 19

There are 2 connectors for mono subwoofer output to connect to a subwoofer. These mono outputs are summed with both the left and right audio signal. They are parallel outputs allowing 2 subwoofers to be connected to the RA-6000.

### Preamp Output 20

The RA-6000 has a set of preamp outputs labeled PRE OUT. The currently selected source input is available from this output. Typically the PRE OUT output is used to provide a signal to another integrated amplifier or power amplifier, which is used to drive remote speakers.

---

**NOTE:** Changes to the settings of the Volume, Balance or Tone controls affect the signal from the Preamp Output.

---

## Speaker Outputs 21

See Figure 3

The RA-6000 has two sets of speaker outputs, labeled SPEAKER A and SPEAKER B. The speaker outputs are controlled by the A-B speaker selector buttons 7 on the front panel and the buttons K on the remote control.

### Speaker Selection

If only one set of speakers will be used at any given time, the speakers may have an impedance as low as 4 ohms. If there are times when both the A and B speakers will be used, all the speakers should have an impedance of 8 ohms or more. Speaker impedance ratings are less than precise. In practice, very few loudspeakers will present any problems for the amplifier. See your authorized Rotel dealer if you have any questions.

### Speaker Wire Selection

Use insulated two-conductor stranded wire to connect the amplifier to the speakers. The size and quality of the wire can have an audible effect on the performance of the system. Standard speaker wire will work, but can result in lower output or diminished bass response, particularly over longer distances. In general, heavier wire will improve the sound. For best performance, you may want to consider special high-quality speaker cables. Your authorized Rotel dealer can help in the selection of cables for your system.

## Polarity and Phasing

The polarity – the positive/negative orientation of the connections – for every speaker and amplifier connection must be consistent so all the speakers will be in phase. If the polarity of one connection is reversed, bass output will be very weak and stereo imaging degraded. All wire is marked so you can identify the two conductors. There may be ribs or a stripe on the insulation of one conductor. The wire may have clear insulation with different color conductors (copper and silver). There may be polarity indications printed on the insulation. Identify the positive and negative conductors and be consistent with every speaker and amplifier connection.

## Speaker Connections 21

Turn off all the components in the system before connecting the speakers. The amplifier has color-coded binding post type speaker connectors on the back panel. These connectors accept bare wire, connector lugs, or dual banana type connectors. (except in European Community countries where their use is not permitted.)

Route the wire from the amplifier to the speakers. Give yourself enough slack so you can move the components to allow access to the speaker connectors.

If you are using dual banana plugs, connect them to the wires and then plug into the backs of the binding posts. The thumbscrews of the binding posts should be screwed in all the way (clockwise).

If you are using terminal lugs, connect them to the wires. If you are attaching bare wires directly to the binding posts, separate the wire conductors and strip the insulation from the end of each conductor. Be careful not to cut into the wire strands. Unscrew (turn counterclockwise) the binding post. Place the connector lug or wire around the binding post shaft. Turn the binding post clockwise to clamp the connector lug or wire firmly in place.

---

**NOTE:** Be sure there are no loose wire strands that could touch adjacent wires or connectors.

---

## Headphone Output 5

The headphone output allows you to connect headphones for private listening. This output accepts a standard 3.5mm (1/8") mini stereo headphone connector. Plugging in a set of headphones does not cut off the signal to the speakers. Use the front panel 7 or remote control K A-B Speaker Selector to turn off the speakers.

---

**NOTE:** Because the sensitivity of speakers and headphones can vary widely, always reduce the volume level before connecting or disconnecting headphones.

---

## Remote Sensor 2

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

## Display 3

The front panel display shows the source selected, volume level and tone settings. The display provides access to the setup and configuration menu options of the amplifier.

## Front USB Input 6

The front USB input can be connected to an iPhone, iPad or iPod device providing music playback to the amplifier. To enable audio playback using one of these devices, simply plug the device into the front USB and select USB as the desired source. The device remain active allowing search and play functions.

## aptX™ HD Bluetooth Connection 10

The Bluetooth Antenna 10 on the amplifier's back panel is for wireless streaming via Bluetooth, from your device (i.e. mobile phones, tablets or computers). From your device, look for "Rotel Bluetooth" and connect to it. Connection is normally automatic, but if prompted for a password, please press "0000" on your device. The amplifier's supports both traditional Bluetooth, AAC and aptX™ HD Bluetooth audio streaming.

## Audio Controls

### VOLUME Control 4 E

Turn the knob clockwise to increase the volume, or counter clockwise to decrease the volume. From the remote control press the volume + or - button to turn the volume up or down. Press the MUTE G button to completely mute the volume.

### BALANCE Control 9 B

The Balance Control adjusts the left-to-right balance of the sound output. The factory default is the center position or "0". To change the balance from the front panel, press the MENU 9 button to toggle the front display to BALANCE SETTING mode. Then press the - or + buttons on the front panel to change the value to LEFT or RIGHT. The value can change from L15 to R15.

---

**NOTE:** This setting is saved permanently including after powering off the RA-6000.

---

To make temporary changes not saved after power off, from the remote, press the BAL B button to access the BALANCE SETTING menu, then press the up/down/left/right 1 arrow buttons to adjust. When finished, press the BAL B button again to exit the menu.

### Tone Control Bypass 9 B

Bass and Treble Control (Tone Control) circuits are bypassed at factory default to ensure the purest possible sound. The front display will show TONE BYPASS. To turn on the tone control from the front panel, press the MENU 9 button to toggle to the Bypass control then press the - or + buttons on the front panel to turn bypass on or off.

---

**NOTE:** This setting is saved permanently including after powering off the RA-6000.

---

To temporarily changes the Tone Control Bypass, press the BYPASS B button on the remote control to toggle the Bypass mode enabled and disabled.

### Bass and Treble Controls 9 B

Set the Bass or Treble controls from the front panel by pressing the MENU 9 button to toggle to the BASS / TREBLE menu. Press ENTER 9 button to toggle between the options. Press the - or + 9 button to adjust the value. The Bass and Treble values range from -10 to +10.

---

**NOTE:** These settings are saved permanently including after powering off the RA-6000.

---

To temporarily change the Bass and Treble settings from the remote control, press the BASS or TREB button **B**, then press the up/down/left/right **J** arrow buttons on the remote to adjust the value.

---

**NOTE:** Bass and Treble changes are only available when Tone Bypass is disabled (see Tone Control Bypass section).

---

A properly setup high-performance audio system produces the most natural sound with little or no adjustment of the tone controls. Use these controls sparingly. Be particularly careful when turning the controls up as this increases the power output in the bass or treble range, increasing the load on the amplifier and speakers.

---

**NOTE:** Setting the Bass and Treble controls does not automatically turn on the tone control. To turn on tone control, refer to previous section Tone Control Bypass.

---

### Source Input Selector **B** **N**

Press the corresponding input button on the front panel **B** or remote control **N** to select the desired listening source.

Push the front panel source buttons to toggle between Optical 1 - 3, Coaxial 1- 3 and Aux or use the dedicated source button on the remote control.

## Dimmer Control

### Display Dimmer **9** **C**

To change the brightness of the front display, press the MENU **9** button to toggle to the Display Settings. Then press the - or + buttons on the front panel to change the brightness.

---

**NOTE:** This setting is saved permanently including after powering off the RA-6000.

---

To temporarily change the display brightness, press the DIM **C** button on the remote.

### POWER LED Dimmer **9**

To change the brightness of the Power LED and the two Speaker Selector LEDs on the front panel, press the MENU **9** button to toggle to the POWER LED Setting. Then press the - or + button on the front panel to change the brightness. The default setting is DIM.

Valid settings include: LOW (Default), MID, HIGH.

---

**NOTE:** This setting is saved permanently including after powering off the RA-6000.

---

## PC-USB Input **13**

See Figure 4

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

The RA-6000 supports USB Audio Class 2.0 mode. 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 RA-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 RA-6000 has been certified as Roon Tested and compatible with Roon software via PC-USB.

roon  
TESTED

Being Roon Tested means that Rotel and Roon have collaborated to ensure you have the best experience using Roon software and the RA-6000 together, so you can just enjoy the music.

The RA-6000 PC-USB connection also supports MQA rendering and decoding audio up to 24b/384K.

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 RA-6000.

---



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

---



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

---

## RS232 **16**

The RA-6000 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 RA-6000, contact your authorized Rotel dealer.

## EXT REM IN Jack **14**

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.



## Network Connection 12

The RA-6000 can be attached to a network using the rear panel NETWORK socket 12. The NETWORK configurations allow both STATIC and DHCP IP addressing. See the Network section of this manual under Setting Menu for IP address configuration information.

The NETWORK connection allows software updates to be downloaded from the Internet. The NETWORK connection also allows IP control for integration with automation systems.

For additional information on the IP control please contact your authorized Rotel dealer.

## Protection Circuit

The amplifier has both thermal and over-current protection circuitry that protects the amplifier against damage in the event of extreme or faulty operating conditions. The protection circuits are independent of the audio signal and have no impact on sonic performance. Instead, the protection circuits monitor the temperature of the output devices and shut down the amplifier if temperatures exceed safe limits.

Most likely, you will never see this protection circuitry in action. However, should a faulty condition arise, the amplifier will stop playing and will display "AMP PROTECTION" on the front panel.

If this happens, turn the amplifier off. Let it cool down for several minutes, and attempt to identify and correct the problem that caused the protection circuitry to engage. When you turn the amplifier back on, the protection circuit will automatically reset.

In most cases, the protection circuitry activates because of a fault condition such as shorted speaker wires, or inadequate ventilation leading to an overheating condition. In very rare cases, highly reactive or extremely low impedance speaker loads could cause the protection circuit to engage.

If the protection circuitry triggers repeatedly and you are unable to isolate and correct the faulty condition, contact your authorized Rotel dealer for assistance in troubleshooting.

## Settings Menu

You can access the settings menu from the front panel by pressing the MENU 9 button or 1 on the remote. You can change the value of the selected option by pressing the +/- button on the front panel or up/down/left/right 1 arrow buttons on the remote. Step through the sub-menus by pressing the MENU 9 button on the front panel or 1 on the remote.

- TONE BYPASS: TONE BYPASS on/off (For more information refer to Tone Control Bypass section).

---

**NOTE:** This setting is stored permanently even after the RA-6000 is powered off.

---

- BASS: BASS level can be changed to desired settings. (For more information refer to Bass and Treble Control section.)

---

**NOTE:** This setting is stored permanently even after the RA-6000 is powered off.

---

- TREBLE: TREBLE level can be changed to desired settings. (For more information refer to Bass and Treble Control section.)

---

**NOTE:** This setting is stored permanently even after the RA-6000 is powered off.

---

- BALANCE: Change left/right balance (For more information on Balance sections refer to the Balance Control section).

---

**NOTE:** This setting is stored permanently even after the RA-6000 is powered off.

---

- HT BYPASS: This option enables the Home Theater Bypass mode allowing audio signals to be routed directly through the RA-6000 from a Surround Sound Processor or Receiver output. Typical use is to connect the analog output RCA Preoutput Front Left and Front Right signals from the processor or receiver to the AUX INPUT or XLR INPUT on the RA-6000. The audio is routed on the most direct path disabling Tone control at a unity gain setting or fixed level to the RA-6000's amplifier circuits. To active the Home Theater Bypass select the desired source input connection in the setup menu then select the specified source using the front panel or remote control. When the HT BYPASS source is selected the volume controller is disabled allowing the volume to be controlled by the Home Theater Processor or Receiver.

Valid settings include: Disabled (Default), AUX, XLR.

- HT BYPASS LEVEL: This option allows customization of the amplification level used in the Home Theater Bypass mode. Select the + or - amplifier gain levels if needed to match the home theater processor or receiver output levels.

---

**NOTE:** Most level adjustments are done in the Home Theater Processor or Receiver so these adjustments should only be used if the amplifier gain output cannot be matched with the Home Theater source.

---

Valid settings include: 0 (default), +1 to +10, -1 to -10.

- FIXED VOLUME: Configures a Fixed Volume level for a specified input. To enable this feature press the +/- buttons to select the desired fixed volume level for Aux 1, USB, PC-USB, Optical 1, Optical 2, Coax 1, Coax 2 or Bluetooth. When enabled and the input with a Fixed Volume is selected, the Volume level will immediately be set to the specified level.

Valid settings include: VARIABLE, FIXED 01-95, FIXED MAX.

- AUX1 VOL: VARIABLE (disabled) is factory default.
- USB VOL: VARIABLE (disabled) is factory default.
- PC-USB VOL: VARIABLE (disabled) is factory default.
- OPT1 VOL: VARIABLE (disabled) is factory default.
- OPT2 VOL: VARIABLE (disabled) is factory default.
- COAX1 VOL: VARIABLE (disabled) is factory default.

- COAX2 VOL: VARIABLE (disabled) is factory default.
- BLUETOOTH VOL: VARIABLE (disabled) is factory default.

---

**NOTE:** The Volume knob on the front panel and Volume +/- buttons on the IR remote are disabled when the volume is Fixed. To disable this feature set the Fixed Volume level to "Variable".

---

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

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

- SIGNAL SENSE: Check if an audio signal is present on the configured Signal Sense input. The RA-6000 monitors the data stream to determine if there is audio. If there is no audio detected for 10 minutes, the RA-6000 will enter Signal Sense Power Mode. When in Signal Sense Power Mode and the RA-6000 detects audio on Signal Sense input, the unit will automatically power on. The RA-6000 can be configured to monitor an individual digital input source or monitor all digital input sources (Coax, Optical, Bluetooth). When configured to "Auto" and a signal is detected on one of the available sources the unit will power on and select the active source. To disable this function, select the DISABLE option which is the factory default setting.

Valid settings include: DISABLE, AUTO, COAX, OPT, BTOOTH.

---

**NOTE:** When the SIGNAL SENSE function is activated, the RA-6000 will consume additional power in signal sense standby mode.

---



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**NOTE:** Due to local power consumption regulations the SIGNAL SENSE function is not available in all markets.

---

- AUTO POWER OFF: The RA-6000 can be configured to automatically power off if unused for a specified period. If no changes are made to the unit within the specified "Auto Power Off" time the unit will automatically go to STANDBY mode. The Auto Power Off timer will be restarted if changes are made to the volume, source or playback. The default for Auto Power Off is set to 20 Mins.

Valid settings include: 20 Mins (Default), DISABLE, 1 HOUR, 2 HOURS, 5 HOURS, 12 HOURS.

- AC POWER OPTION: If set to ON the unit will be powered on when pressing the POWER switch on the front panel. If set to STANDBY, the unit will be enter standby mode and can be activated by pressing the ON button on the remote control. "ON" is the factory default. This function is useful to prevent the unit from powering to ON in the event of an AC Power failure if set to the STANDBY mode.

Valid settings include: ON (Default), STANDBY.

- NETWORK WAKEUP: Enables or Disables power on and power off via the network connection. Enable this function for use with automation systems using IP control.

---

**NOTE:** When Network Wakeup is configured to enabled, the RA-6000 will consume additional power in standby mode.

---

- NETWORK SETUP: The RA-6000 supports both DHCP and STATIC IP addressing. Select the desired IP address method and press ENTER.

If DHCP is selected you can refresh IP address by pressing ENTER or press MENU to view IP address information. Press the MENU button to toggle through IP address settings. If the IP address is renewed the network will be tested and connection status reported.

If STATIC IP address mode is selected you must configure all settings for the network including IP Address, Subnet Mask, Gateway and DNS Server. Use the up/down/left/right or +/- buttons to adjust the values and press ENTER to move to the next value. When the proper IP information is configured press MENU to go to the next setting. After entering the STATIC IP address information the network will be tested and connection status reported.

- NETWORK INFO: Shows the network connection status. If the network is properly configured and attached, "CONNECTED" will be displayed. If not it will show "NETWORK DISCONNECTED". To renew the IP address, press the ENTER button.

---

**NOTE:** For more information regarding network connection please contact your authorized Rotel dealer.

---



---

**NOTE:** A network connection is not required for the RA-6000 to operate.

---

- DISPLAY DIMMER: Dims the display.

---

**NOTE:** This setting is stored permanently even after the RA-6000 is powered off.

---

- POWER LED DIMMER: Dims the Power LED and the LEDs above the Speaker Selector buttons on the front panel.

Valid settings include: LOW(Default), MID, HIGH.

---

**NOTE:** This setting is stored permanently even after the RA-6000 is powered off.

---

- POWER ON MAX VOLUME: This sets the maximum volume level when the unit is turned ON. "45" is the factory default.

---

**NOTE:** Power On Max Volume settings do not apply to sources configured with Fixed Gain.

---

- SOFTWARE VERSION: This shows the current software version loaded into the RA-6000.

- PC-USB VERSION: This shows current loaded software version for PC-USB processor.

- SOFTWARE UPDATE: The software can be updated if the RA-6000 is properly connected to the Internet.

- Press ENTER to check if a new software version is available.

- If a new software version is available press the + button on the front panel or the up/right button on the remote control to select YES then press ENTER button to begin the software update process.



- The new software will be downloaded from the Internet. The RA-6000 will power cycle when the software update is complete.

**NOTE:** Do NOT power off the RA-6000 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 + button on the front panel or RIGHT arrow button on the remote control to select <YES> then press the "ENTER" button on the front panel or on the remote control.

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

## 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 RA-6000, refer to the suggestions for the following conditions:

### Power Indicator Is Not Illuminated

The Power Indicator ring around the power button and the basic items in the Display window should be illuminated whenever the RA-6000 is plugged into the wall power outlet and the POWER switch 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 still will not illuminated when the RA-6000 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 signal source to see if it is functioning properly. Make sure the cables from the signal source to the RA-6000 inputs are connected properly. Check the wiring between the RA-6000 and the speakers.

### Cannot Connect via Bluetooth

If you cannot pair your Bluetooth enabled device to the RA-6000, delete the memory of the previous connection on your device. On your device this is often listed as "Forget this Device". Then try to make the connection again.

## Playable Audio Formats

### USB Apple (iPhone, iPod, iPad)

Format	Notes
Any supported file loaded to Apple device.	Any supported file loaded to Apple device. Phone may resample depending on stored format. May exclude Apps designed to play formats not originally supported by the sending device.

### aptX™ HD and AAC Bluetooth

Format	Notes
Any format supported by the sending device.	May exclude Apps designed to play formats not originally supported by the sending device.

### 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, 352.8k 384k (16 bit, 24 bit and 32 bit) MQA, MQA Studio (24 bits/384kHz) Room Tested

### Coax/Optical

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

## Specifications

<b>Maximum Power Output</b>	350 watts/channel, 4 ohms
<b>Continuous Power Output</b>	200 watts/channel, 8 ohms
<b>Total Harmonic Distortion</b>	< 0.0075%
<b>Intermodulation Distortion</b> (60 Hz : 7kHz, 4:1)	< 0.03%
<b>Frequency Response:</b>	
Phono Input	20 Hz - 20kHz, 0 ± 0.5 dB
Line Level Inputs	10 Hz - 100kHz, 0 ± 0.5 dB
<b>Damping Factor</b> (20 Hz - 20kHz, 8 ohms)	600
<b>Input Sensitivity / Impedance</b>	
Phono Input (MM)	5.2 mV / 47k ohms
Line Level Inputs (RCA)	340 mV / 5.6k ohms
Line Level Inputs (XLR)	540 mV / 100k ohms
<b>Input Overload</b>	
Phono Input (MM)	52 mV
Line Level Inputs (RCA)	3.5 V
Line Level Inputs (XLR)	4.5 V
<b>Preamplifier Output Level / Impedance</b>	1.9 V / 100 ohms
<b>Signal to Noise Ratio</b> (A weighted)	
Phono Input (MM)	80 dB
Line Level Inputs	103 dB
<b>Digital Section</b>	
<b>Frequency Response</b>	10 Hz - 90k Hz (0 ± 2 dB, Max)
<b>Signal to Noise Ratio</b> (IHF "A" weighted)	102 dB
<b>Input Sensitivity/Impedance</b>	0 dBfs / 75 ohms
<b>Preamplifier Output Level</b>	1.43 V (at -20 dB)
<b>Coaxial/Optical Digital Signals</b>	SPDIF LPCM (up to 192k Hz 24 bit)
<b>PC-USB</b>	USB Audio Class 2.0 (up to 384kHz 32bit)* *Driver installation required Support MQA and MQA Studio (up to 24 bits/384kHz) Room Tested.
<b>Power Requirements:</b>	
USA:	120 volts, 60 Hz
EC:	230 volts, 50 Hz
<b>Power Consumption</b>	500 watts
<b>Standby Power Consumption</b>	
Normal	< 0.5 watts
Network Standby	< 2 watts
<b>BTU</b> (4 ohms, 1/8th power)	1239 BTU/h
<b>Dimensions</b> (W x H x D)	431 x 144 x 425 mm ( 17 x 5 <sup>7</sup> / <sub>8</sub> x 16 ins.)
<b>Front Panel Height</b>	3U (132.6 mm, 5 <sup>1</sup> / <sub>4</sub> ins)
<b>Weight</b> (net)	18.81 kg, 41.47 lbs.

All specifications are accurate at the time of printing.

Rotel reserves the right to make improvements without notice.

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'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.

"Made for iPod," and "Made for iPhone," means that an electronic accessory has been designed to connect specifically to iPod or iPhone, respectively, and has been certified by the developer to meet Apple performance standards. Apple is not responsible for the operation of this device or its compliance with safety and regulatory standards. Please note that the use of this accessory with iPod, or iPhone may affect wireless performance.

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# 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

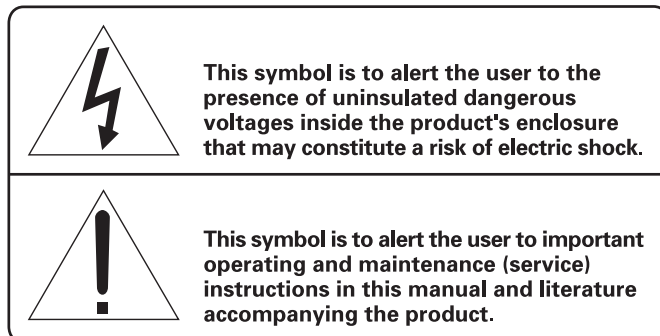
Инструкция пользователя



**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 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.



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

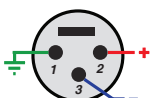
**Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.**



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 wheeled 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.

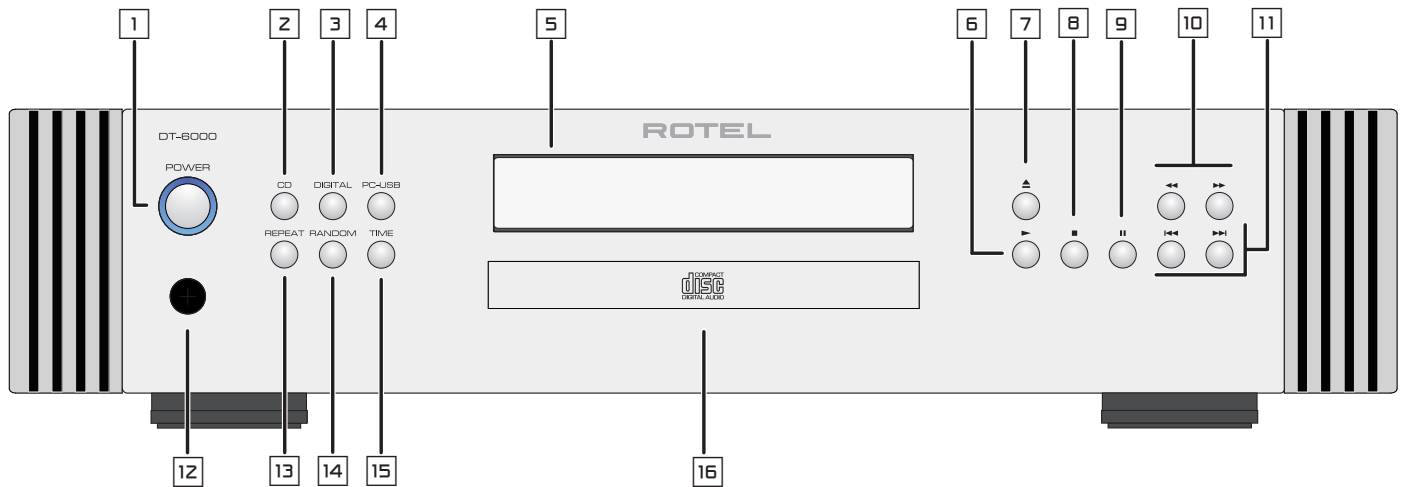
**NOTE:** This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against interference in a residential installation. This equipment generates and can radiate radio 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**  
**Controlles 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.

**2** **3** **4**: Source Input

Used to select the desired listening source.

**5**: Display

**6**: PLAY Button

Start playing the disc.

**7**: OPEN Button

To open the tray loading mechanism.

**8**: STOP Button

Stop disc play.

**9**: PAUSE Button

Used to temporarily suspend play.

**10**: SEARCH Button

Use for fast searching through the currently playing disc.

**11**: TRACK Buttons

Select tracks on the disc.

**12**: 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.

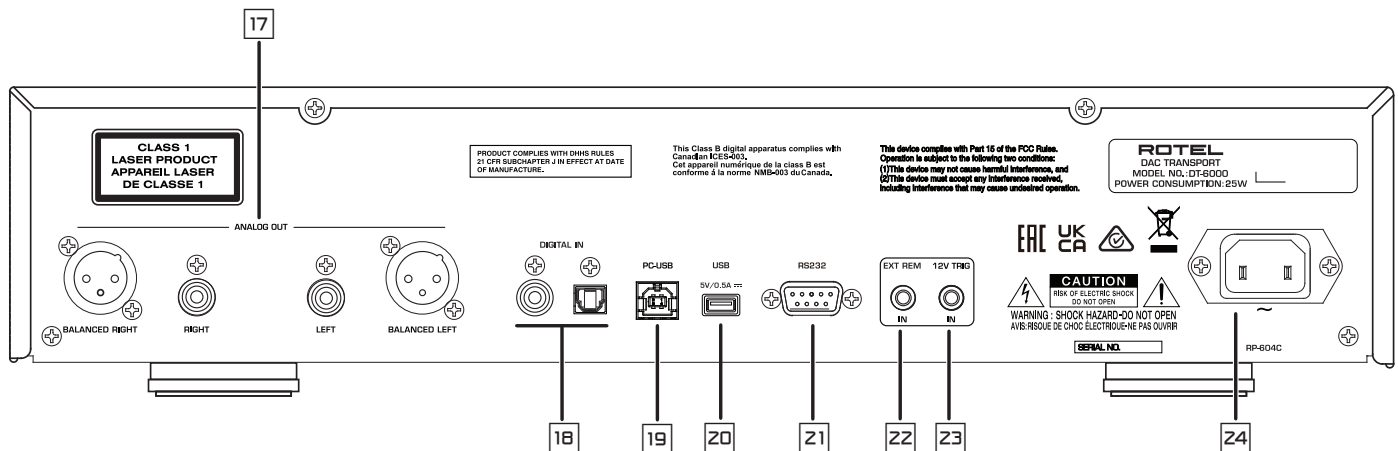
**15**: TIME Button

Select the time display of the currently playing track.

**16**: 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.

**18:** Digital Signal Inputs

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

**19:** PC-USB Input

**20:** Rear USB Power Port  
 Used for software update.

**21:** RS232

Use for integration with automation systems.

**22:** EXT REM IN Jack

Receive command codes from industry-standard infrared receivers via hard-wired connections.

**23:** 12V Trigger Connection

Receive a 12V trigger signal.

**24:** 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

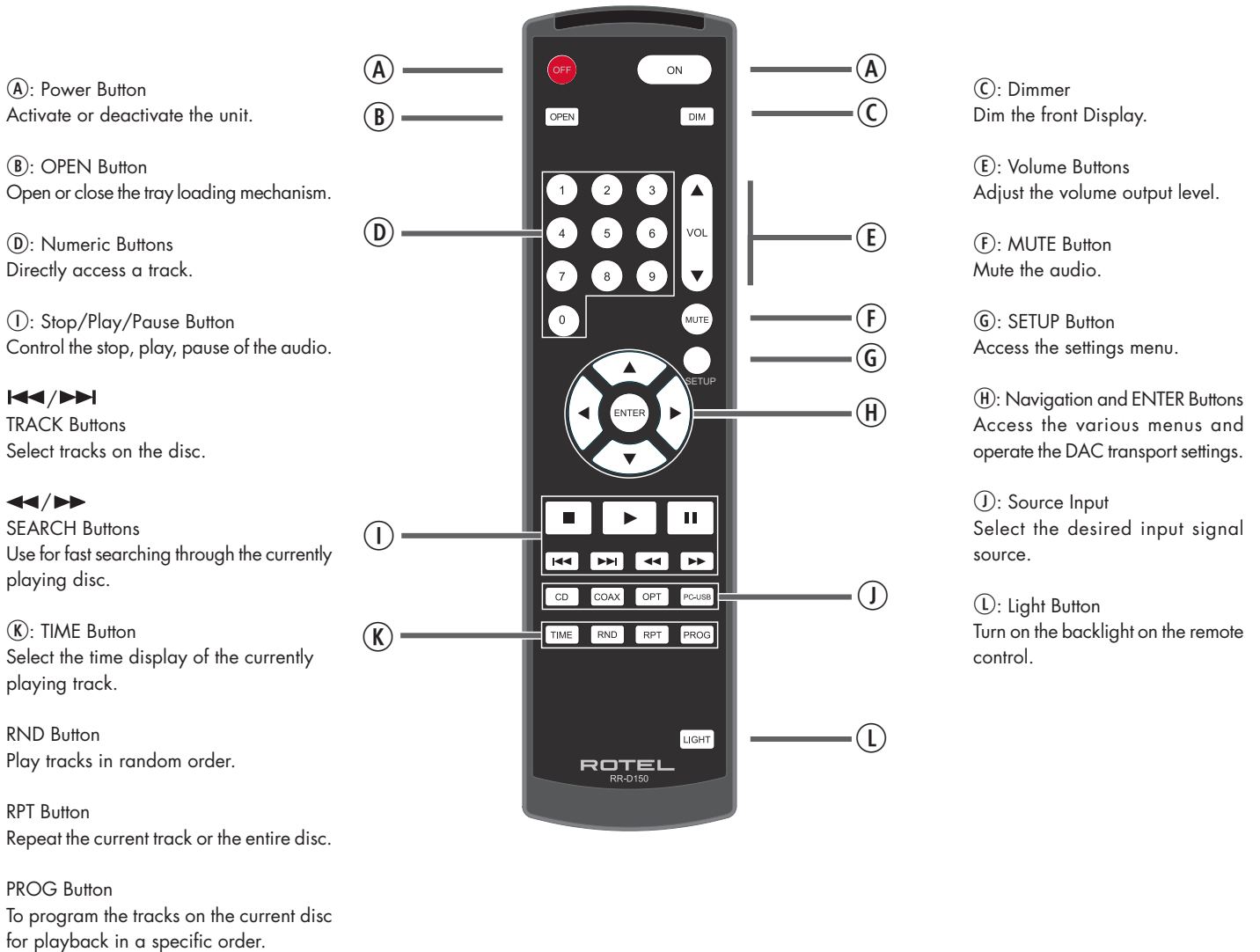


Figure 3 : Analog RCA Outputs Connection  
 Connexion Sorties analogiques RCA  
 Analoge RCA Ausgänge Anschluss  
 Conexión de Salidas Analógicas RCA

Analoge RCA uitgangen aansluiting  
 Connessione di uscite audio analogiche RCA  
 Analoga RCA utgångar anslutning  
 Аналогового RCA выхода соединения

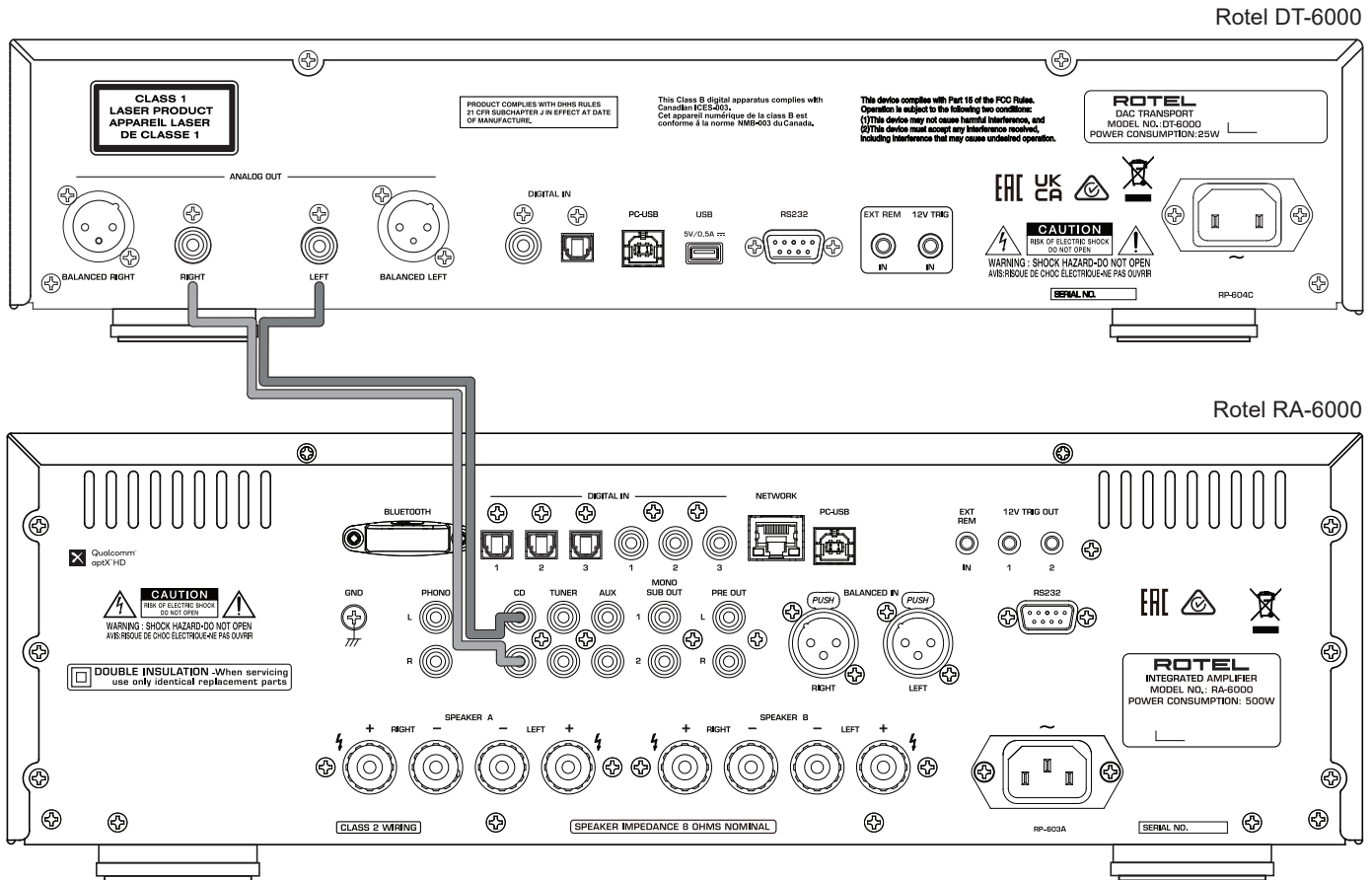
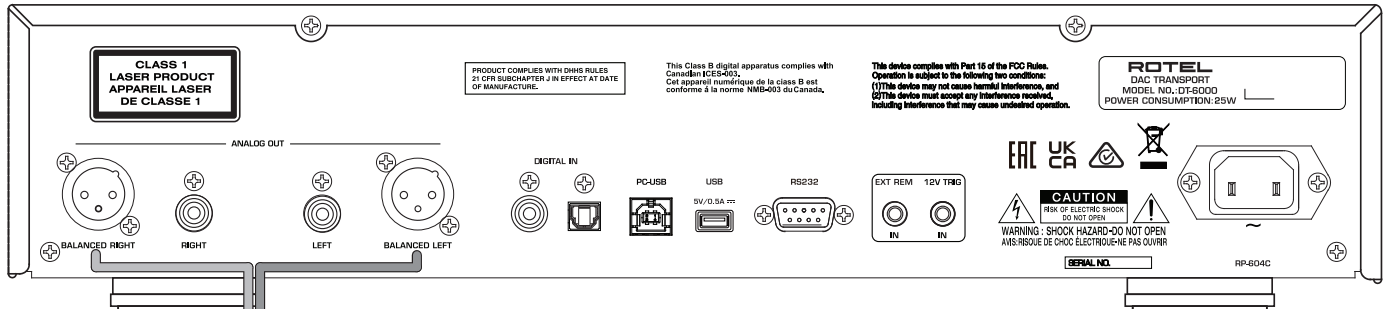


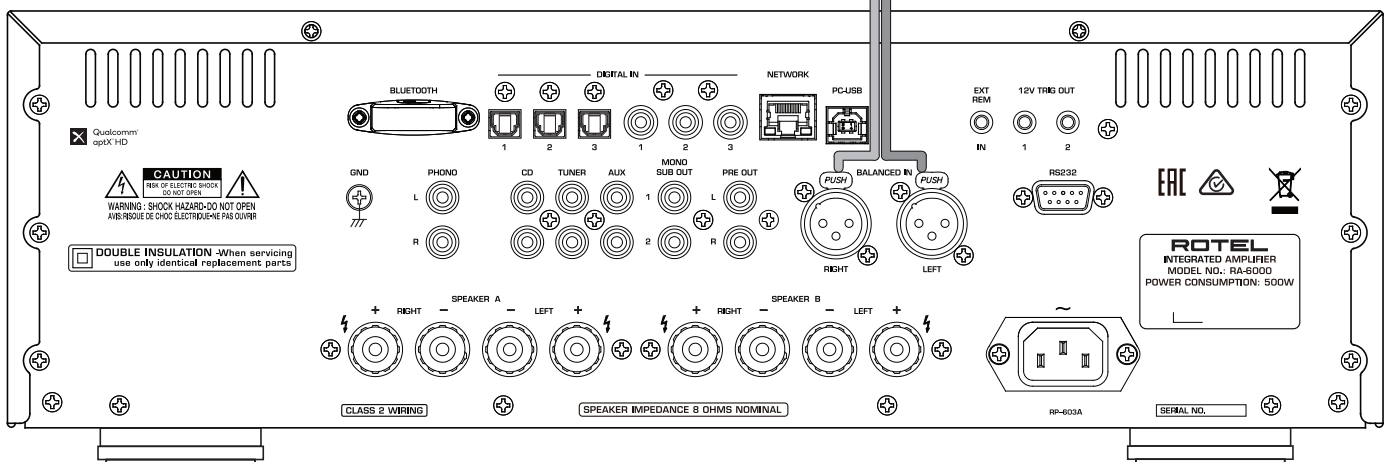
Figure 4 : Balanced Outputs Connection  
 Connexion Sorties symétriques  
 Symmetrische Ausgänge Anschluss  
 Conexión de Salidas Balanceadas

Gebalanceerde uitgangen aansluiting  
 Connessione di uscite audio bilanciate  
 Balanserade utgångar anslutning  
 БАЛАНСНЫЕ ВЫХОДЫ СОЕДИНЕНИЯ

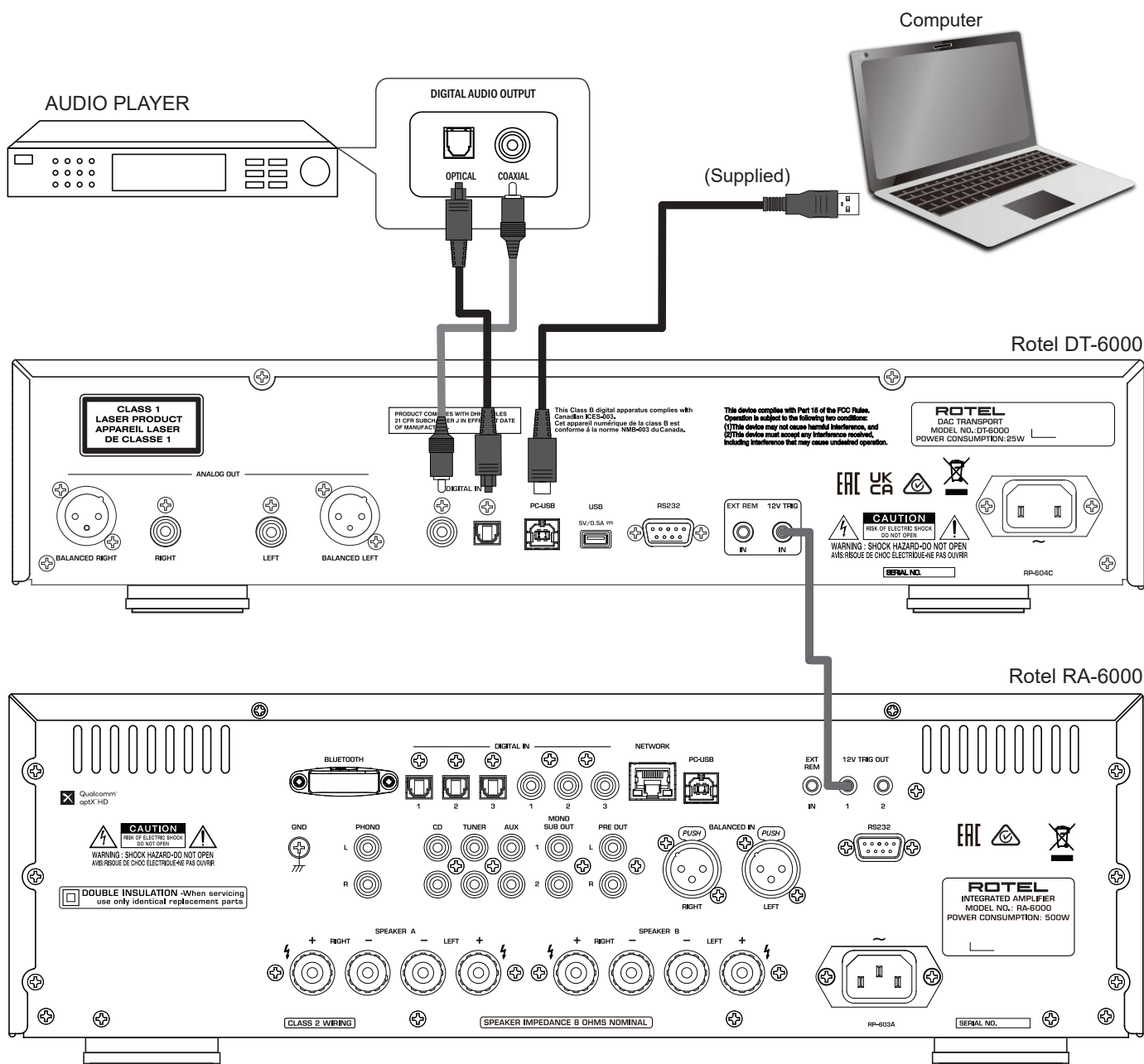
Rotel DT-6000



Rotel RA-6000



**Figure 5 :** Digital Inputs and 12V Trigger In Connections  
 Connexion pour entrée numérique et d'entrée trigger 12V  
 Digitale Eingänge und 12-V-TRIG IN-Anschlüsse  
 Conexión para Entrada Digitale y Señal de Disparo de 12V  
 Digitale ingangen en 12 V Trigger IN-aansluitingen  
 Collegamenti per ingressi digitale e segnali Trigger 12V  
 Anslutningar för Digitala ingångar och 12-volts styrsignaler  
 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:

- ✓ Spegnerne **tutti** i componenti del sistema **prima** di collegare **qualsiasi** componente, inclusi i diffusori.
- ✓ Spegnerne **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**.

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## 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 ①

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 ㉕

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 ㉖

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

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 Input

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

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



### Disc Tray

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



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

After the disc is loaded, press the PLAY button  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  to start playing a different selection.




### STOP Button


Press the STOP button  to stop disc play and the display shows STOP indicator. When the PLAY button  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

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  returns to the beginning of the current track. Pressing the TRACK button  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

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 10 1

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 2 3 4 1

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 Ⓚ

*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.
2. 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.
3. 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 Ⓚ

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 13 Ⓚ

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 15 Ⓚ

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.

roon  
TESTED

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.

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

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

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

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**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.

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## Rear USB Power Port 20

The rear USB port is only used for software update.

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

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## RS232 21

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 22

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.

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

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- POWER LED DIMMER: Changes the Power LED brightness.

---

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

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- 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 latest 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.

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

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

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- 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.

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

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- 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.

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**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.

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### DIM Button C

Remote Only

Press the DIM button sequentially to change the DISPLAY brightness.

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

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## 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

<b>Total Harmonic Distortion + Noise</b>	
Optical/Coaxial Input	< 0.0007%
CD/PC-USB Input	< 0.0012%
<b>Intermodulation Distortion</b>	< 0.0012%
<b>Frequency Response</b>	20 Hz - 20k Hz, +0, -0.15dB 10 Hz - 70kHz, +0, -3dB
<b>Channel Balance</b>	± 0.5 dB
<b>Channel Separation</b>	> 115 dB @ 10k Hz
<b>Signal to Noise Ratio (A Weighting)</b>	> 115 dB
<b>Dynamic Range</b>	> 99 dB
<b>Input Sensitivity</b>	0dBfs / 75 Ohms
<b>Digital to Analog Converters</b>	ESS 32-Bit/768kHz DAC
<b>Analog Output Level / Impedance (0dBfs)</b>	
Unbalanced (RCA)	2.1 V / 10 Ohms
Balanced (XLR)	4.3 V / 20 Ohms
<b>Decodable Coaxial/Optical Digital Signals</b>	SPDIF LPCM (up to 192k Hz 24 bit)
<b>Decodable PC-USB Digital Input Signals</b>	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.
<b>Power Requirements</b>	
USA	120V, 60 Hz
EC	230V, 50 Hz
<b>Power Consumption</b>	25 Watts
<b>Standby Power Consumption</b>	< 0.5 Watts
<b>Dimensions (W x H x D)</b>	431 x 104 x 320 mm 17 x 4 x 12 <sup>3</sup> / <sub>5</sub> ins
<b>Front Panel Height</b>	2U / 3 <sup>1</sup> / <sub>2</sub> ins / 88.1 mm
<b>Weight (net)</b>	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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