

ROTEL



DX-5

Integrated Amplifier

Amplificateur Intégré

Integrierter Verstärker

Amplificador Integrado

Geïntegreerde Versterker

Amplificatore integrato

Integrerad förstärkare

Интегрированный усилитель

Owner's Manual

Manuel d'utilisation

Bedienungsanleitung

Manual de Instrucciones

Gebruikershandleiding

Manuale di istruzioni

Instruktionsbok

Инструкция пользователя

Important Safety Instructions

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 with 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.

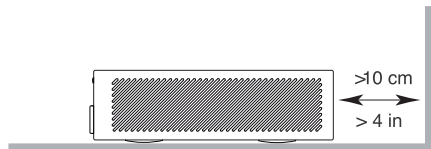
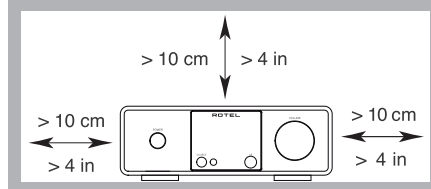
The apparatus should be used in non tropical climate.

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 power cord connector located on the rear panel acts as the primary power disconnect device. Ensure this device is placed in an open area for easy access to the power 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.

In order to completely disconnect the unit from the mains supply, 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.

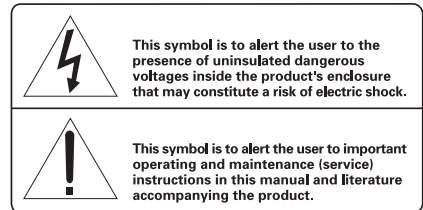
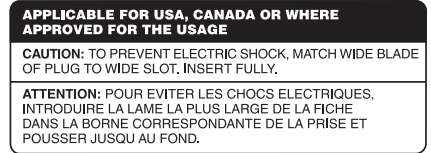
This device complies with Part 15 of the FCC Rules. Operation is subject to the following conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

WARNING: The master power switch is located on the rear panel. The unit must allow unobstructed access to the main power switch.

This product shall be connected to a MAINS socket outlet with a protective earthing connection.

The MAINS plug or an appliance coupler is used as the disconnect device, the socket-outlet shall be installed near the equipment and shall be easily accessible.

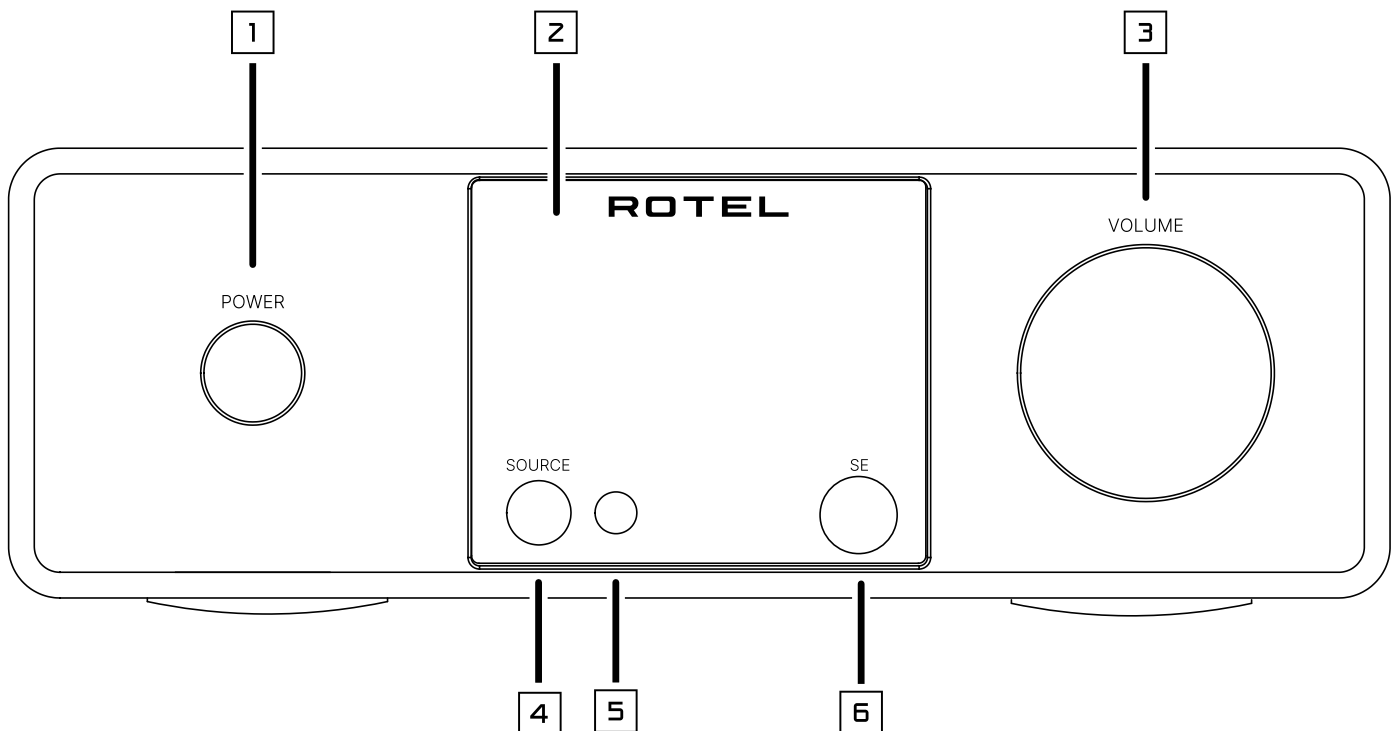
Do not longly touch the unite during its normal operating. If you want to move the unit, please power it off first and please use remote control to do additional function selection/setting.



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 wheellie bin symbol indicates compliance and that the products must be appropriately recycled or processed in accordance with these directives.



Figure 1-1: Controls and Connections
Commandes et branchements
Bedienelemente und Anschlüsse
Controles y Conexiones
De bedieningsorganen en de aansluitingen
Controlli e collegamenti
Kontroller och anslutningar
Органы управления и разъемы



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

2: Display

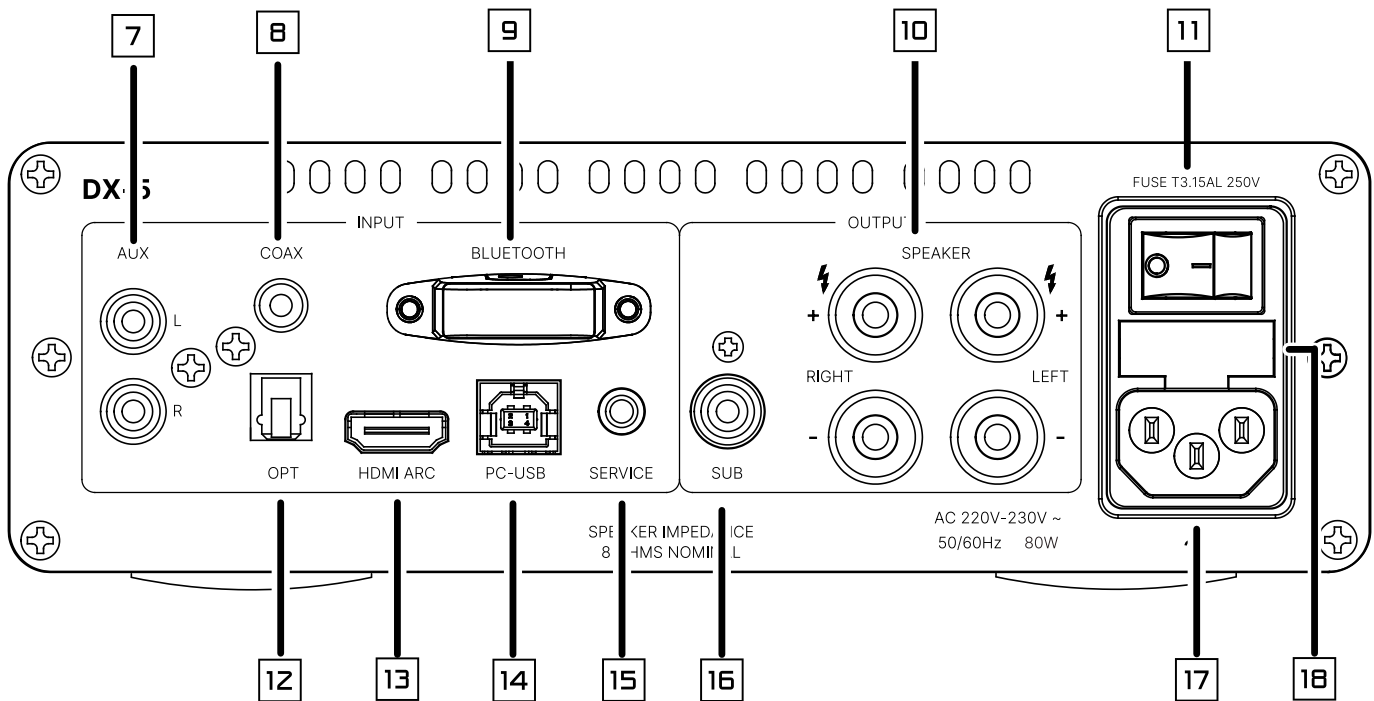
3: VOLUME Knob
Adjust the volume output level.

4: SOURCE Button
Used to select the desired listening source.

5: Remote sensor
Receives IR commands from the remote control.

6: Single Ended Headphone Connector
Accepts a standard 6.35mm Single Ended stereo headphone connector.

Figure 1-2: Controls and Connections
Commandes et branchements
Bedienelemente und Anschlüsse
Controles y Conexiones
De bedieningsorganen en de aansluitingen
Controlli e collegamenti
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- 7**: Aux Input
Analog “line level” input.
- 8**: Coaxial Input
Connect to coaxial output of the source component.
- 9**: Bluetooth Antenna
Use for wireless streaming via Bluetooth.
- 10**: Speaker Connectors
- 11**: Master Power Switch
- 12**: Optical Input
Connect to optical PCM outputs of the source component.
- 13**: HDMI ARC
Connect an HDMI ARC compatible cable from this socket to the HDMI ARC port on your TV to receive 2-channel audio on the DX-5.
- 14**: PC-USB Input
- 15**: Service Port
Factory use only service connection.
- 16**: SUB Output
Connect to a subwoofer.
- 17**: AC Power Input
- 18**: Main Fuse

Figure 2: RR-DX1 Remote Control
Télécommande infrarouge RR-DX1
Fernbedienung RR-DX1
Mando a Distancia RR-DX1

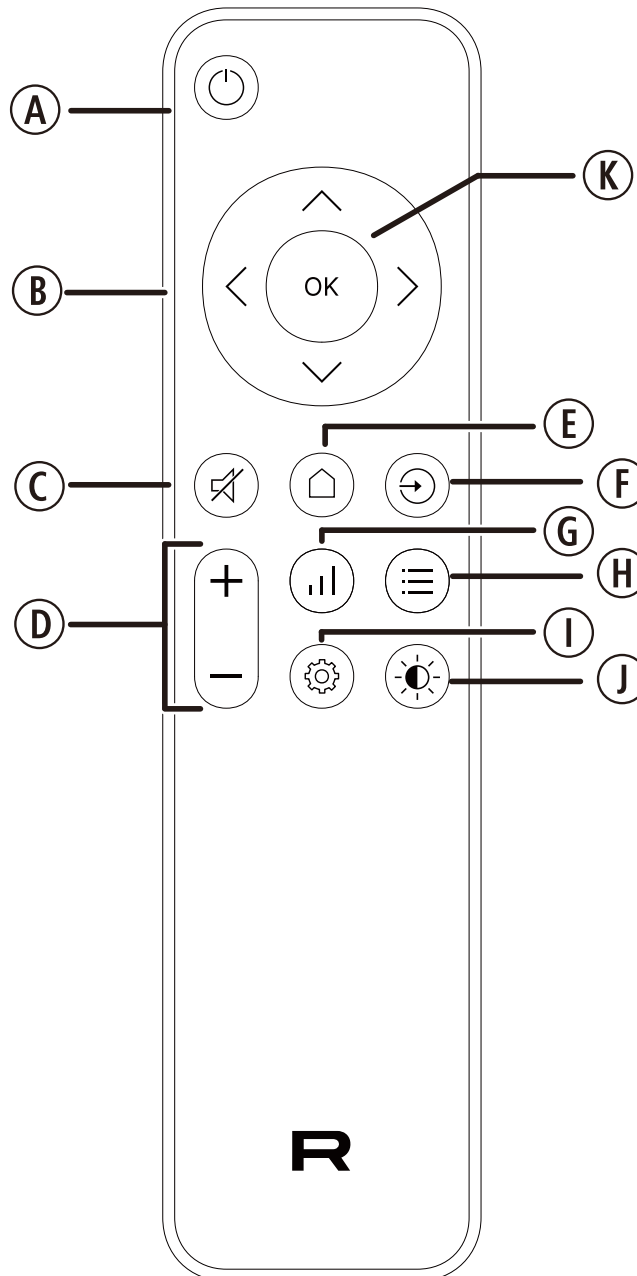
Afstandsbediening RR-DX1
Telecomando RR-DX1
RR-DX1 fjärrkontroll
Пульт ДУ RR-DX1

(A): Power Button
 Activate the unit or put it into standby mode.

(B): Navigation Buttons
 Access the various menus and operate the unit settings.

(C): Mute Button 
 Mute the audio.

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



(K): Enter Button
 Confirm the selected and desired settings.

(E): Home Button
 Go to the Main Home screen.

(F): Source Button
 Select the input signal source.

(G): Function Button
 Display alternate main screen view.

(H): Display Button
 Display alternative audio playback information.

(I): Setup Button
 Activate the setup screen on the front display.

(J): Dim Button
 Dim the front display.

Figure 3: Digital Input and Speaker Output Connections
 Entrées numériques et Branchements des sorties enceintes
 Anschlüsse für Digitaleingänge und Lautsprecherausgang
 Conexiones de Entrada Digital y de Salida a las Cajas Acústicas
 De aansluitingen voor de Digitale ingangen en de luidsprekers
 Collegamenti ingressi digitali ed uscita per diffusori
 Anslutningar för digitala ingångar och högtalare
 Подсоединение Цифровой вход и акустических систем

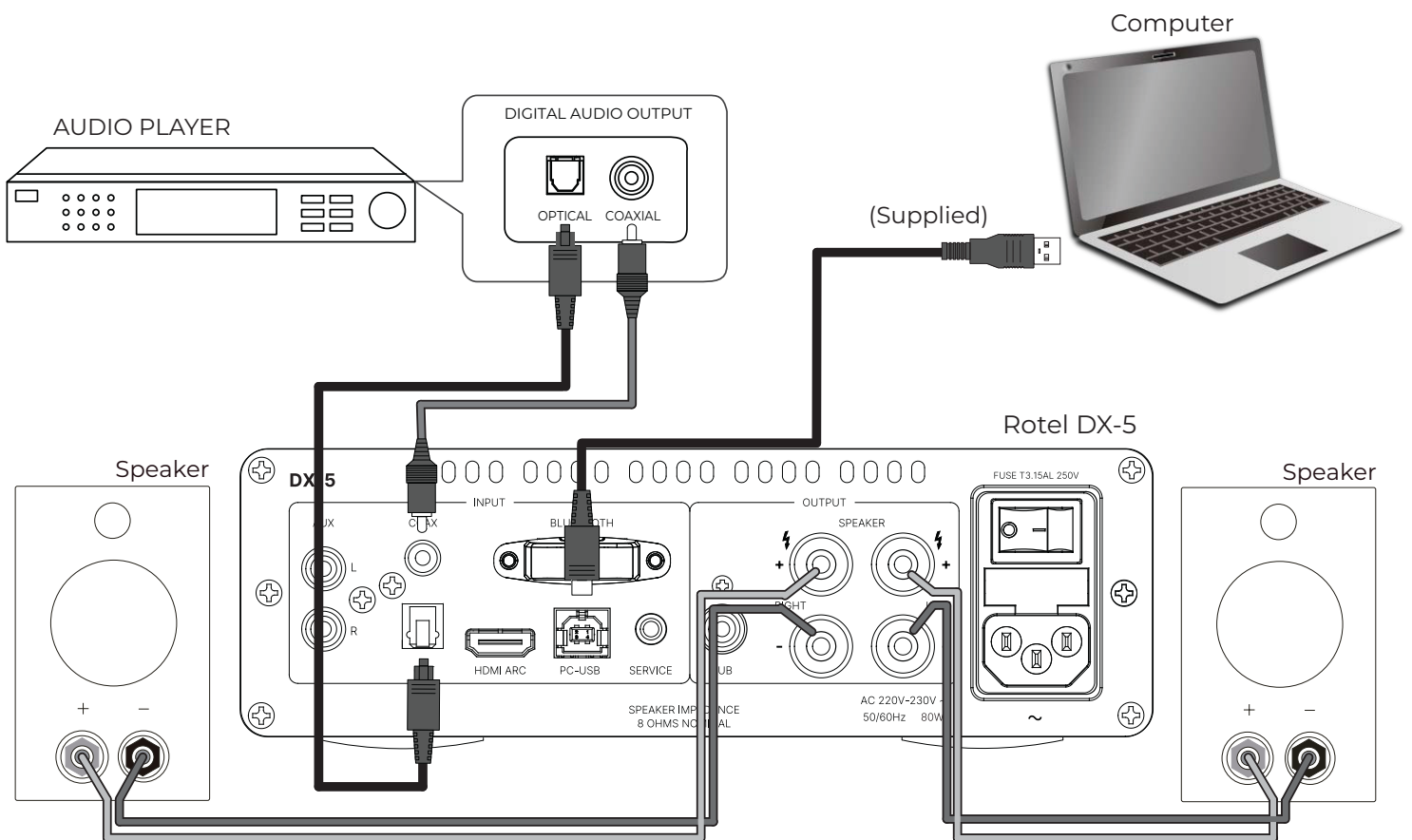


Figure 4: Analog Input Connections
Branchements des Entrées analogiques
Anschlüsse für Analoge-ingänge
Conexiones de Entrada Analógicas
De aansluitingen voor de Analoge ingangen
Collegamenti ingressi analogiche
Anslutningar för analoga ingångar
Подсоединение Аналоговые вход

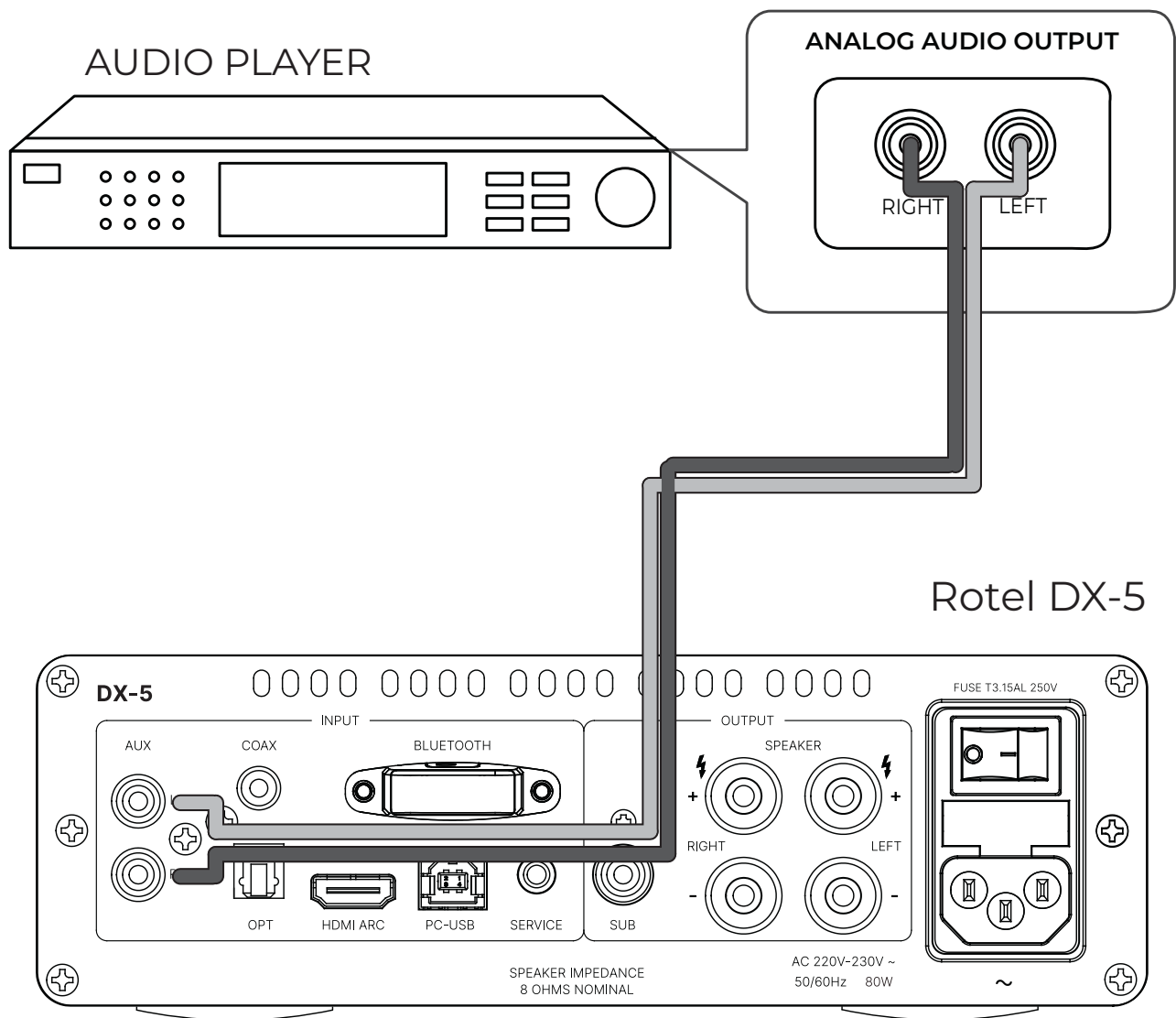
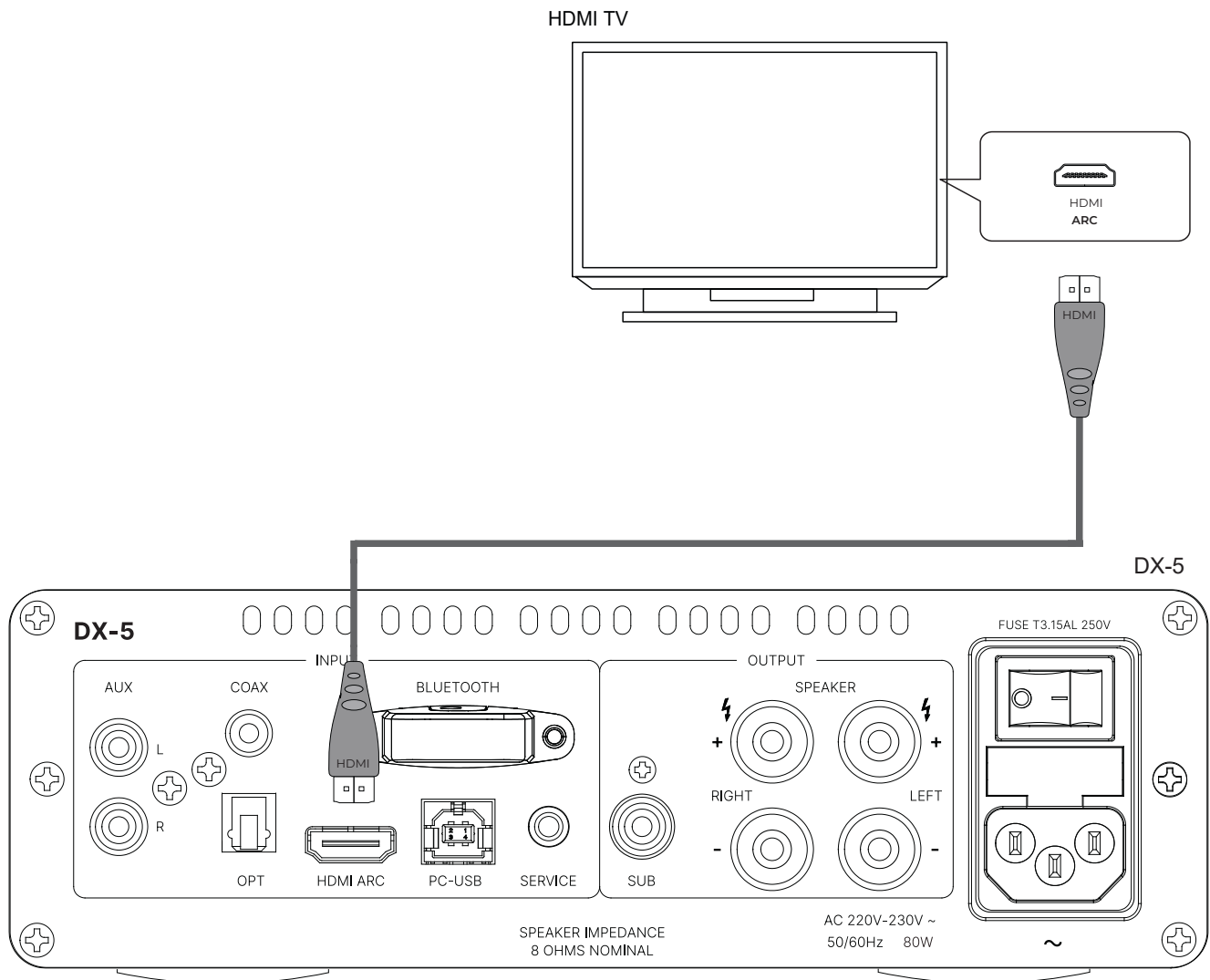


Figure 5: HDMI ARC Connections
 Connexions HDMI ARC
 HDMI ARC-Verbindungen
 Conexiones HDMI ARC Posterior

HDMI ARC-aansluitingen op de achterkant
 Collegamento delle prese HDMI ARC posteriori
 HDMI ARC-anslutning på baksidan
 Подключение к HDMI ARC разъему
 на задней панели



Important Notes

When making connections be sure to:

- ✓ Turn off **all** the components in the system **before** connecting 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 herunterdrehen, **bevor** Sie die Endstufe **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 DX-5, maar de **gehele** installatie uitstaat, als nog niet **alle** verbindingen gemaakt zijn.
- ✓ Zorg dat niet alleen de DX-5, maar de **gehele** installatie ook uitstaat, **als** u verbindingen gaat **wijzigen**.

Wij raden u ook aan om

- ✓ de volumeregelaar van de voorversterker geheel dicht te draaien (volkomen naar links) **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** komponenter i anläggningen **innan** du ansluter nya komponenter, inklusive högtalare.
- ✓ Stäng av **alla** komponenter i anläggningen **innan** du ändrar någon anslutning **i anläggningen**.

Vi rekommenderar också följande:

- ✓ Vrid ner volymen på förstärkaren 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.

Getting Started

Thank you for purchasing the Rotel Integrated Amplifier DX-5. When used in a high-quality music audio system, it will provide years of musical enjoyment.

The amplifier 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 unit has a highly regulated power supply incorporating a Rotel custom-designed toroidal power transformer. This low impedance power supply has ample power reserves, which enables the unit 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 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 unit 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. 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.

Please read this manual carefully. It provides information on how to incorporate the unit into your system as well as information that will help you get optimum sound performance. 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 unit 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 amplifier.

If included in the box please complete the owner's registration card or register online at www.rotel.com/register. 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 amplifier can be affected by its environment. Avoid placing the unit 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 unit generates heat as part of its normal operation. The heat sinks and ventilation openings in the amplifier are designed to dissipate this heat. 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.

The Unit is supplied with an RR-DX1 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 regular audio signal cables in your installation away from each other. This will minimize the chance of the regular 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.

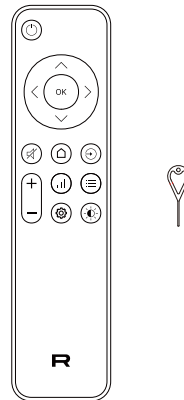
The RR-DX1 Remote Control

Some functions can be activated with either the front panel controls, or the supplied RR-DX1 remote control. When these operations are described, the square call out numbers refer to the main unit, while the circled letters refer to the remote control.

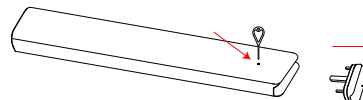
Remote Control Batteries

Two AAA size batteries must be installed before the remote control can be used. To install the batteries, follow the steps as below:

1. Locate the battery compartment opener tool.



2. Push the supplied tool into the hole on the back of the remote then the battery cover will pop out.



3. Install the batteries as shown in the illustration in the battery compartment (Figure 2). Please note there are negative and positive marks shown on the battery cover (Figure 1). Check carefully to ensure the polarity of the batteries match the markings on the cover.

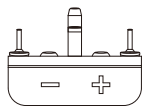


Figure 1

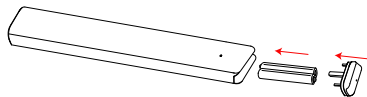


Figure 2

When the batteries become weak the remote control won't operate the device consistently. Installing fresh batteries should eliminate the problem.

NOTE: Use only the tool supplied with the unit to remove the battery cover to avoid damage to the cover.

AC Power and Control

AC Power Input 17

Your unit 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.

NOTE: Should you move your amplifier to another country, it is 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 only use the one appropriate for your country/region.

The unit does not draw high levels of current from the power outlet. However, it should be plugged directly into a polarized wall outlet using the supplied cable or other compatible cable as recommended by your authorized Rotel dealer. Do not use an extension cord. A heavy duty multi-tap power outlet strip may be used if it (and the wall outlet) can handle the current demanded by the unit 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.

Master Power Switch 11

The rocker switch on the rear panel is a master power switch. When it is in the OFF position, power to the unit is completely off. When it is in the ON position, the front panel Power 1 button and remote control Power A button can be used to activate the unit or put it into standby mode.

Power Switch 1 and Power Indicator

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

When the master power switch is in the ON position, the remote control ON and OFF buttons may be used to activate the unit. In Standby mode the Indicator light is dimly illuminated green, 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.

Protection Circuit

The unit 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 unit will stop playing, the Display 2 will show a red warning message and the unit will auto power off.

If this happens, 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 and the POWER indicator 1 should be green, the red warning message disappears, indicating that the amplifier is operating normally.

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.

Input Signal Connections

See Figure 3 and Figure 4

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.

Line Level Inputs 7

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

The Left connectors are white, the Right connectors are red. Use high quality RCA cables for connecting input source components to the unit. Ask your authorized Rotel dealer for advice about cables.

Digital Signal Inputs 8 12

There is one set of digital inputs for COAXIAL and OPTICAL respectively. Connect the COAXIAL or OPTICAL outputs of your source component into these sockets. The digital signals will be decoded and played by the amplifier. The unit is capable of decoding PCM signals up to 24 bit, 192kHz.

HDMI ARC Input ¹³

See Figure 5

The HDMI ARC (Audio Return Channel) input allows audio from a TV to be received by the DX-5. Audio sent via ARC from the source device must be down-mixed to 2-channel stereo. The DX-5 cannot process multi-channel audio such as Dolby® digital audio. To use the ARC input the HDMI cable must be connected to the TV's ARC HDMI connector and the relevant settings on the display device set-up correctly.

The HDMI CEC function includes HDMI-CEC power control and HDMI-CEC volume control. HDMI-CEC power control allows the DX-5 to be powered ON or OFF automatically when the TV power state changes. Vice versa, the TV will also follow the DX-5 to be powered on or off via DX-5 remote control. HDMI-CEC volume control allows the DX-5's volume to be controlled by the TV remote. To utilize this function the current listening source on the DX-5 must be set to HDMI ARC.

NOTE: Not all TVs support power control or volume control of DX-5. The TV must also have CEC Power Control and CEC Volume Control set to be Enabled if these 2 options are available in the TV setup.

aptX™ HD Bluetooth Connection ⁹

The Bluetooth Antenna ⁹ on the 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 enter "0000" on your device. The amplifier supports both traditional Bluetooth, AAC and aptX™ HD Bluetooth audio streaming.

PC-USB Input ¹⁴

Connect this input using a PC-USB cable to the USB socket of your computer or audio streamer.

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

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

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



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

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

NOTE: MAC computers do not require a driver to support PC-USB 1.0 or 2.0 audio.

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

NOTE: The unit supports both DSD and DOP audio playback in 1X and 2X formats. Consult your audio player to confirm proper operation for playback of these audio formats.

Output Connection

SUB Output ¹⁶

The SUB output provides a connection to an active subwoofer for a 2.1 setup. This sub output is summed with both the left and right audio signal. The output signal is full range. To tune your active subwoofer to match your main left and right speakers, follow the manufacturer's guidance on setting up the low-pass filter correctly.

Speaker Outputs ¹⁰

See Figure 3

Speaker Wire Selection

Use insulated two-conductor stranded wire to connect the unit 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 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 Connection

NOTE: The following text describes both binding post and plug-in connections. DO NOT use both connection methods in combination to connect multiple speakers.

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

Route the wire from the unit 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 thumbscrews. Place the connector lug or wire around the binding post shaft. Turn the thumbscrews 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.

SERVICE Connector 15

The SERVICE connector is for use by Authorized Service Centers only.

Front Panel Overview

The following is a brief overview of the controls and features on the front panel of the unit.

Display 2

The front panel display shows the source selected, volume level and stream format when using a digital source. The display can be dimmed using the setup menu or the IR remote controller. See the Display Configuration section of this manual for details.

IR Remote Sensor 5

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

Headphone Output 6

The headphone output allows you to connect headphones for private listening. This output accepts a standard 6.35mm Single Ended stereo headphone. Plugging in a set of headphones automatically disables the speaker outputs and sub output.

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

Setup Menu

The unit features an information display to help operate the system. A more comprehensive ON-SCREEN DISPLAY (OSD) menu system is available at any time by pressing the setup button on the remote control. These OSD menus guide you through the configuration and setup of the unit. The settings configured during the setup process are permanently saved as the default settings and do not need to be adjusted again for normal operation of the unit.

Overview of Buttons and Controls

This section provides a basic overview of the buttons and controls on the remote control. Detailed instructions on the use of these buttons are provided in the more complete operating instructions in the following sections.

Power Button 1 A: The Power button on the front panel and on the remote control activate or deactivate the unit. To power on the unit, the rear panel master POWER switch must be in the ON position for the front panel and the remote standby function to operate.

Power On - To power on the unit push and release the Power button 1 on the front panel or A on the IR remote control.

Power Off/Standby - To power off the unit to standby push and release the front panel Power button 1 or push the remote control Power button A.

Navigating B and OK K Buttons: Use the navigation buttons ^/v/</> and the OK button K on the remote control to access the various menus and operate the unit settings.

Mute Button C: Push the M button once to mute the audio. An indication appears in the front panel on-screen display. Press the button again to restore the previous volume level.


VOLUME Knob 3 and VOL +/- Buttons D: The VOLUME +/- buttons on the remote and the rotary control on the front panel provide the master VOLUME control, adjusting the output level.

Home button E: Go back to the main display.

Source button 4 F: The SOURCE button on the front panel and the SOURCE button on the remote control selects the input signal source. From the front panel press the SOURCE button to toggle through the listed source. After 1 second of no action the listed source will be selected as the active source.


On the remote control push the Source button to enter the source menu then press the Source button to toggle through the listed sources. After 1 second of no action the listed source will be selected as the active source.

NOTE: Only sources that are configured as ACTIVE in the setup menu will be displayed as options.


Function button : The unit can be configured to display the Standard volume level, dB Peak Power or Spectrum during normal operation.


Push the Function button to toggle through volume level, VU meter and Spectrum on the display. After 1 second of no action the last display will be selected as the normal display.

Options include: Standard (Default), VU Meter, Spectrum.

Display button : Display alternative audio playback information including audio playback stream type and device configuration. Press the button to toggle through the display option screens.

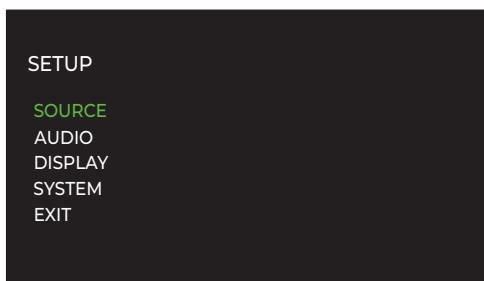
Options include: Standard, Audio format, Output mode.







Setup button : The SETUP button activates the OSD setup screen on the front display. Push the setup button again to move to the previous setup menu as a “back” key or exit setup menu if on the first level of the setup menu.

Dim button : Dims the front display. To dim the display push the DIM button to toggle through the display brightness options.

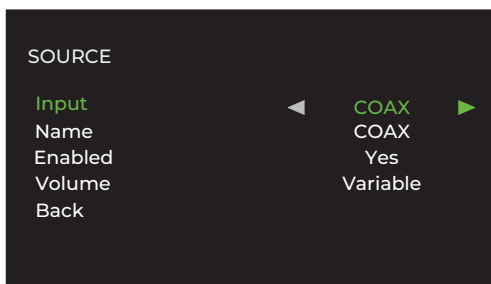
NOTE: The DIM level change from the remote control is only temporary until powered off. To permanently change the brightness use the BRIGHTNESS setting under the DISPLAY option in the setup menu.

Main Menu










The SETUP menu provides access to OSD screens for various configuration options. The Setup menu is reached by pressing the Setup  button on the remote. To select the desired menu, move the highlight using the /  buttons and press the OK  button on the remote control. Press the Setup  button to return to the previous menu or select “EXIT” on the OSD to end setup and return to normal operation.





Source Configuration







A key step in setting up the unit is to configure each source input using the Source Setup screens. Configuring the inputs allows you to set defaults for a number of settings including the type of input connector, enable or disable the source and other options.

The Source menu in the Setup menu, provides the following options, selected by placing the highlight on the desired line using the /  arrow buttons and pressing the OK  button. This action displays the right side options allowing changes. Change the options using the /  arrow buttons.

Input: Changing this input allows you to select a specific input for configuring. (COAX, OPT, PC-USB, BLUETOOTH, AUX, ARC)

Name: The name of the source can be customized. For example Aux can be named “TV” for easier reference. The default NAME is the same as the SOURCE. Place the highlight on this option and use the /  buttons on the remote control to select “Custom” then press the OK  button to enter the source name edit sub menu as below.





1. Press the /  arrow buttons on the remote control to change the first letter, scrolling through the list of available characters.
2. Press the OK  button on the remote control to confirm that letter and move to the next position.
3. Repeat steps 1 and 2 until all 9 characters have been completed. You can select the “Done” button on the OSD to confirm if you have less than 9 characters to enter.

Enabled: Allows a source input to be enabled and appear in the list of source input options when using the source selection on the front panel or IR remote control. Unused sources should be set to disabled by selecting the “No” option.

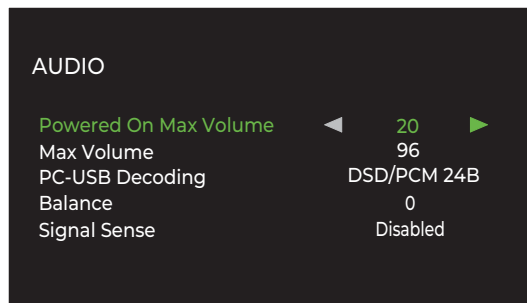
Options include: Yes(Default), No.

Volume: Configures a Fixed Volume level for a specified input. This volume level is immediately set when this source input is selected and cannot be changed using the front panel or IR remote. This is useful for input sources that include their own volume setting like common Apps on phones or tablets.

Options include: Variable (Default), 30 - 90.

Press the Setup  on the remote control to exit the setup menu or select “Back” on the OSD to return to the main menu. Press Home  button on the remote control to return to the main display.

Audio Configuration



The Audio menu in the Setup menu, provide the following options, selected by placing the highlight on the desired line using the \wedge/\vee (B) arrow buttons and pressing the OK button (K). This action displays the right side options allowing changes. Change the options using the \langle/\rangle (B) arrow buttons.

Power-on Max Volume: This setting adjusts the maximum volume level when the unit powers on, preventing it from being too loud based on the previous listening session.

Options include: 20 - 90, 35(Default).

Max Volume: This sets the absolute max volume level for the audio of the unit.

Options include: 30 - 96, 96(Default).

PC-USB Decoding: Set to DSD/PCM 24B Audio to support DSD audio files up to 4X (DSD256) and PCM audio files up to 24-bit. To support PCM audio files up to 32-bit select the PCM 32B Only however DSD audio is not supported under this option.

Options include: DSD/PCM 24B (Default), PCM 32B Only.

Balance: The Balance Setting adjusts the left-to-right balance of the sound output. The factory default is the center position or "0".

Options include: -10 -- +10, 0 (Default).

Signal Sense: Monitors if an audio signal is present on the configured Signal Sense input. The unit monitors the data stream to determine if there is audio. If there is no audio detected for 10 minutes, the Amplifier will enter Signal Sense Power Mode. When in Signal Sense Power Mode and the unit detects audio on the Signal Sense input, the unit will automatically power on. To disable this function, select the "Disabled" option which is the factory default setting.

Options include: Disabled (Default), COAX, OPT, PC-USB, BLUETOOTH, ARC.

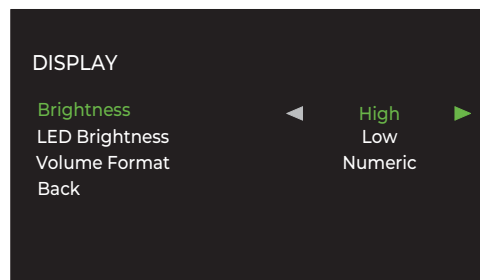
NOTE: When the unit enters standby mode via the remote control, the Signal Sense function will not operate until the unit detects the audio has stopped for the minimum 10 minute time-out period. This prevents the unit from immediately powering back on if there is still active audio playing.

NOTE: When the Signal Sense function is activated, the unit will consume additional power in signal sense standby mode.

NOTE: Due to local power consumption regulations the Signal Sense function is not available in all markets.

Press the Setup (1) on the remote control to exit the setup menu or select "Back" on the OSD to return to the main menu. Press Home (E) button on the remote control to return to the main display.

Display Configuration



The Display menu in the Setup menu, provides the following options, selected by placing the highlight on the desired line using the \wedge/\vee (B) arrow buttons and pressing the OK button (K). This action displays the right side options allowing changes. Change the options using the \langle/\rangle (B) arrow buttons.

Brightness: This function sets the brightness of the front display. The OSD will always activate at the most bright level regardless of the Brightness setting to ensure the unit configuration options can easily be accessed and modified.

Options include: High (Default), Medium, Low.

NOTE: To temporarily dim the display push the DIM button on the remote control to cycle through the brightness levels.

LED Brightness: Sets the brightness of the ON level of the front panel Power LED.

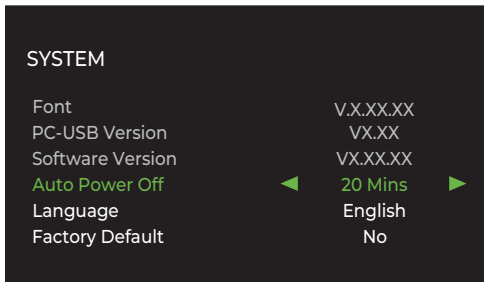
Options include: Low (Default), Medium, High.

Volume Format: The unit can be configured to display the volume as a numeric scale or in dB format. Select the desired setting using the \langle/\rangle arrow buttons (B).

Options include: Numeric (Default), dB Scale.

Press the Setup (1) on the remote control to exit the setup menu or select "Back" on the OSD to return to the main menu. Press Home (E) button on the remote control to return to the main display.

System Configuration



The System menu in the Setup menu, provides the following options, selected by placing the highlight on the desired line using the \wedge/\vee $\text{\textcircled{B}}$ arrow buttons and pressing the OK button $\text{\textcircled{O}}$. This action displays the right side options allowing changes. Change the options using the \langle/\rangle $\text{\textcircled{B}}$ arrow buttons.

Font: This shows the font software version loaded in the unit.

PC-USB Version: This shows the current software version for PC-USB processor.

Software Version: This shows the current main software version.

Auto Power Off: Set the amount of time the units stays powered on when there is no audio signal. The amplifier will automatically go to standby mode if audio is not detected for the specified timer period. Default: 20 Mins.

Options include: Disabled, 20 Mins (Default), 1 Hour, 2 Hours, 5 Hours, 12 Hours.

Language: Select a language for the On Screen Display.

Options include: English (Default), 中文, Español, Português BR, Français, Deutsch, Italiano, Русский, Česky, Svenska, Polski.

Factory Default: This option sets the unit back to the original setting as when it left the factory. All user settings will be erased.

NOTE: Use caution when resetting the Amplifier to factory defaults as all user configured options will be erased and reset to original factory settings.

Press the Setup $\text{\textcircled{1}}$ on the remote control to exit the setup menu or select "Back" on the OSD to return to the main menu. Press Home $\text{\textcircled{E}}$ button on the remote control to return to the main display.

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 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 of the unit does not light when plugged into the same outlet and the Power Switch is pushed in, 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 unit inputs are connected properly. Be sure the Listening Selector is set to the proper input. Check the wiring between the unit and the speakers.

Cannot Connect via Bluetooth

If you cannot pair your Bluetooth enabled device to the unit, 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

aptX™ HD Bluetooth and AAC

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 384k (16 bit, 24 bit and 32 bit) DSD64, DSD128 and DSD256 Roon Tested

Coax/Optical

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

Specifications

ANALOG SECTION

Power Output (FTC)	25 watts/ch
Continuous Power Output (Non FTC)	25 watts/ch (1k Hz, 8 ohms)
Maximum Power Output (Non FTC)	33 watts/ch (1k Hz, 4 ohms)
Total Harmonic Distortion	< 0.03%
Intermodulation Distortion (60 Hz : 7k Hz, 4:1)	< 0.03%
Frequency Response	10 Hz - 100k Hz, 0±0.19 dB
Damping Factor (20 - 20,000 Hz, 8 ohms)	140
Input Sensitivity / Impedance	680 mV / 100k ohms
Input Overload	4.2 V
Signal to Noise Ratio (IHF "A" weighted)	> 100 dB

DIGITAL SECTION

Frequency Response	10 Hz – 80k Hz (0±2 dB, Max)
Signal to Noise Ratio (IHF "A" weighted)	> 100 dB
Input Sensitivity / Impedance	-10.3 dBFS / 75 ohms
Digital Inputs	SPDIF LPCM (up to 192k Hz 24 bit)
PC-USB	USB Audio Class 2.0 (up to 384k Hz 32 bit) *Driver installation required* Support DSD(up to 4X, 11.2M Hz) and DoP(up to 2X, 5.6M Hz)
HDMI	Support ARC function

GENERAL

Power Requirements	
USA	120 V, 60 Hz (USA)
EC	230 V, 50 Hz (Europe)
Power Consumption	80 Watts
Standby Power Consumption	
Normal	< 0.5 watts
BTU (4 ohms, 1/8 power)	241 BTU/h
Dimensions (W, H, D)	215 x 76 x 251 mm 8 1/2" x 3" x 10" mm
Panel Height	70 mm / 2 3/4" mm
Weight (net)	4.1 kg, 9.1 lbs.

All specifications are accurate at the time of printing.

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The logo consists of the word "ROTEL" in a bold, white, sans-serif font, centered within a dark green square background.

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