

ROTEL



DX-3

Headphone Amplifier

Amplificateur pour casque

Kopfhörer-Vollverstärker

Amplificatore Auricolare

Hoofdtelefoonversterker

Amplificatore Cuffie

Hörlurarförstärkare

Наушники усилитель

Owner's Manual

Manuel d'utilisation

Bedienungsanleitung

Manual de Instrucciones

Gebbruikershandleiding

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.

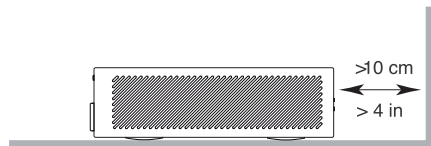
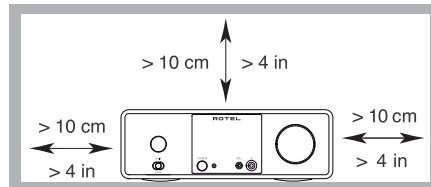
The apparatus should be used in non tropical climate.

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.

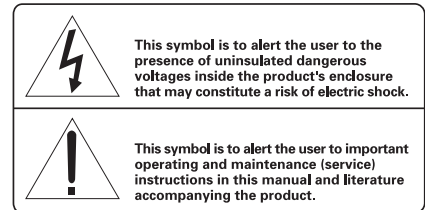
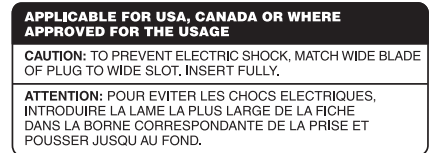
The batteries in the remote control should not be exposed to excessive temperature such as sunshine, fire or other heat sources. Batteries should be recycled or disposed as per state and local guidelines.

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.

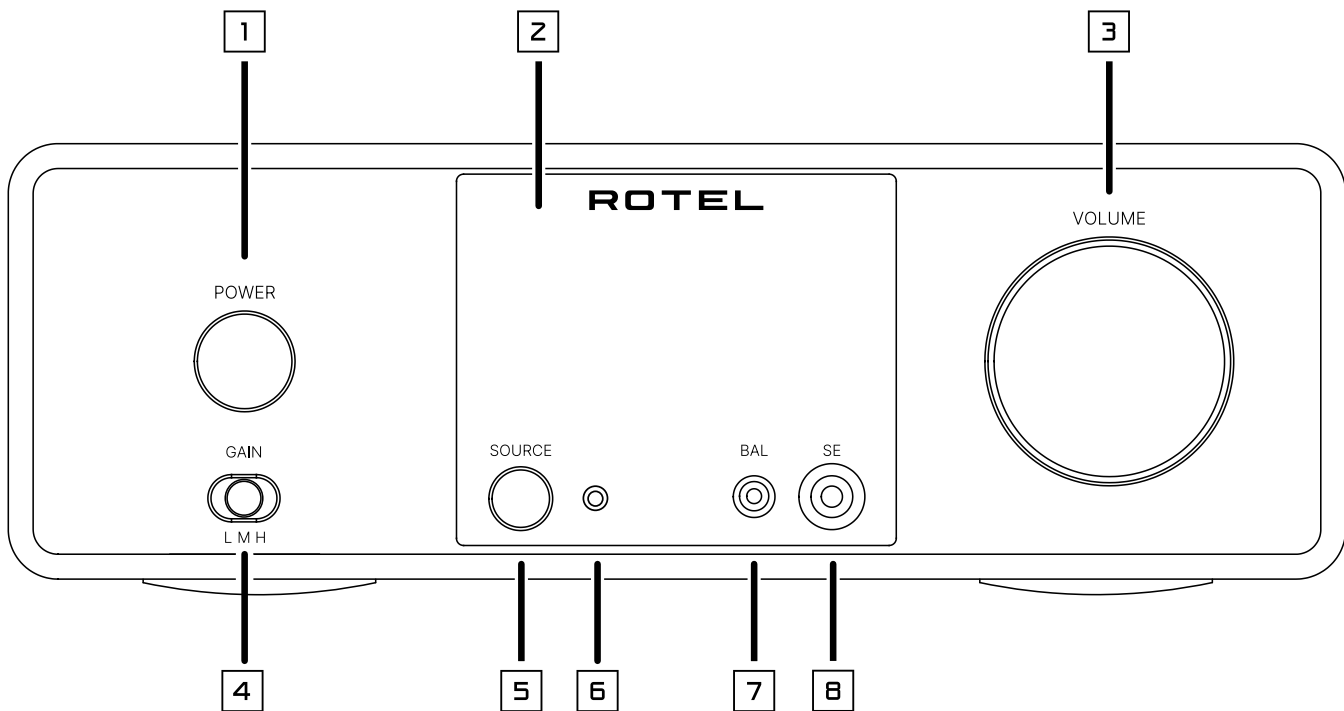
The MAINS plug or an appliance coupler is used as the disconnect device, the socket-outlet shall be installed near the equipment and shall be easily accessible.



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 Indicator

Activate the unit or put it into standby mode.

2: Display

3: VOLUME Knob

Adjust the volume output level.

4: Headphone Gain Selector

Configure the output level of the headphone connectors.

5: SOURCE Button

Used to select the desired listening source.

6: Remote sensor

Receives IR commands from the remote control.

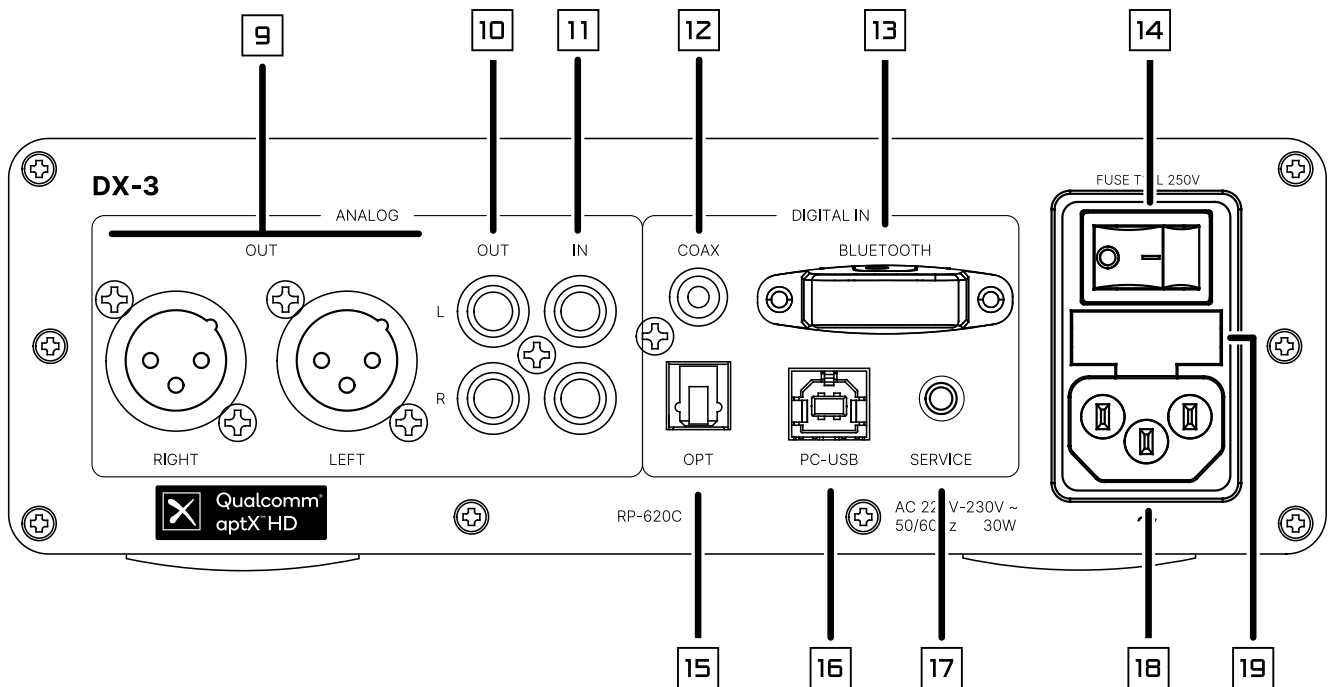
7: Balanced Headphone Connection

Accepts a standard 4.4 mm Balanced stereo headphone connector.

8: 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
Kontroller och anslutningar
Органы управления и разъемы



9: Balanced Output

10: Analog Output

11: Analog Input

12: Coaxial Input
 Connect to coaxial output of the source component.

13: Bluetooth Antenna
 Use for wireless streaming via Bluetooth.

14: Master Power Switch

15: Optical Input
 Connect to optical PCM outputs of the source component.

16: PC-USB Input

17: Service Port
 Factory use only service connection.

18: AC Power Input

19: 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

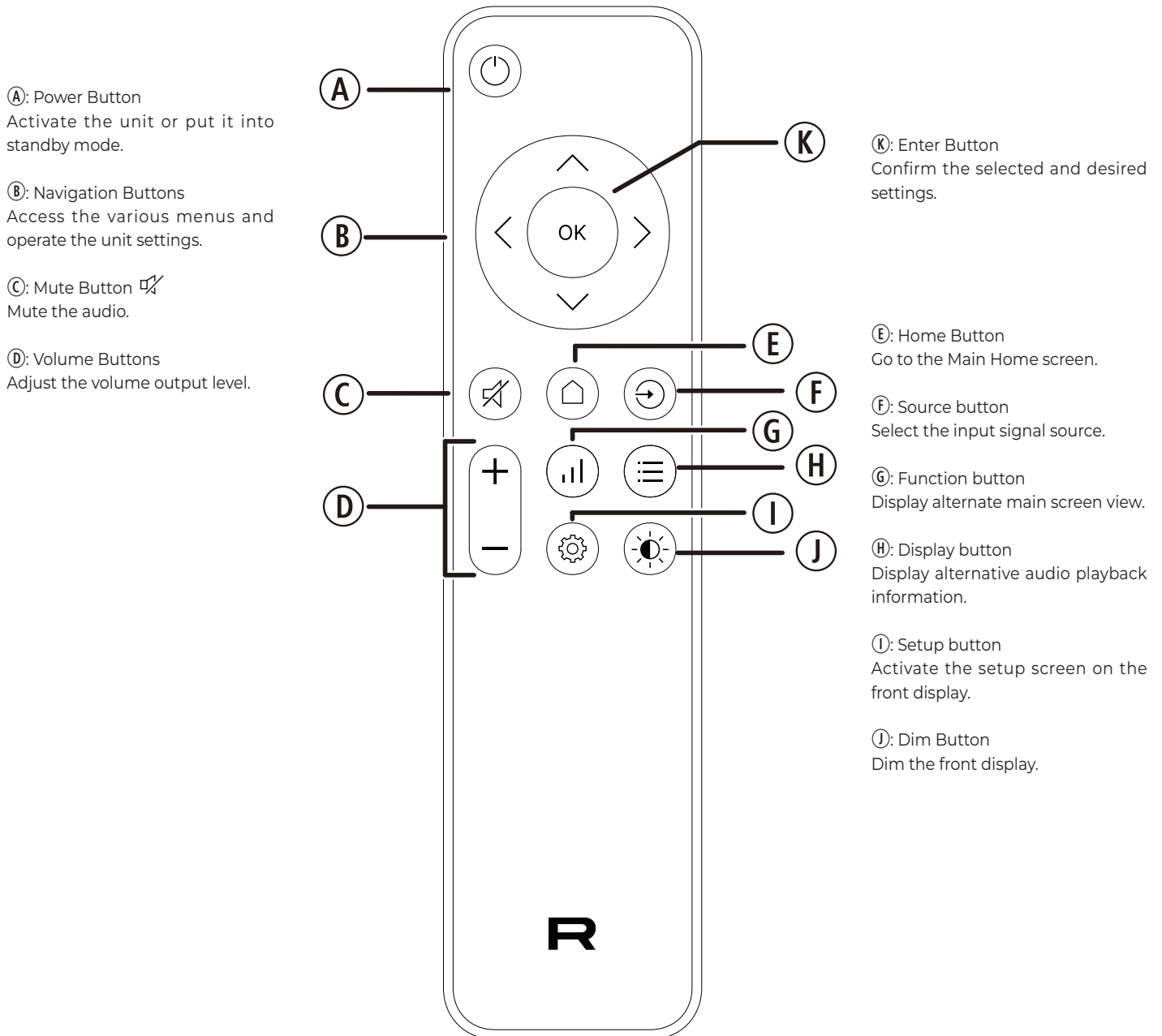


Figure 3: Digital Input and Output Connections
 Branchements des Entrées et sorties numériques
 Anschlüsse für Digitaleingänge und ausgang
 Conexiones de Entrada Digital y de Salida
 De aansluitingen voor de Digitale ingangen en uitgang
 Collegamenti ingressi digitali ed uscita
 Anslutningar för digitala ingångar och utgång
 Подсоединение Цифровой вход и выход

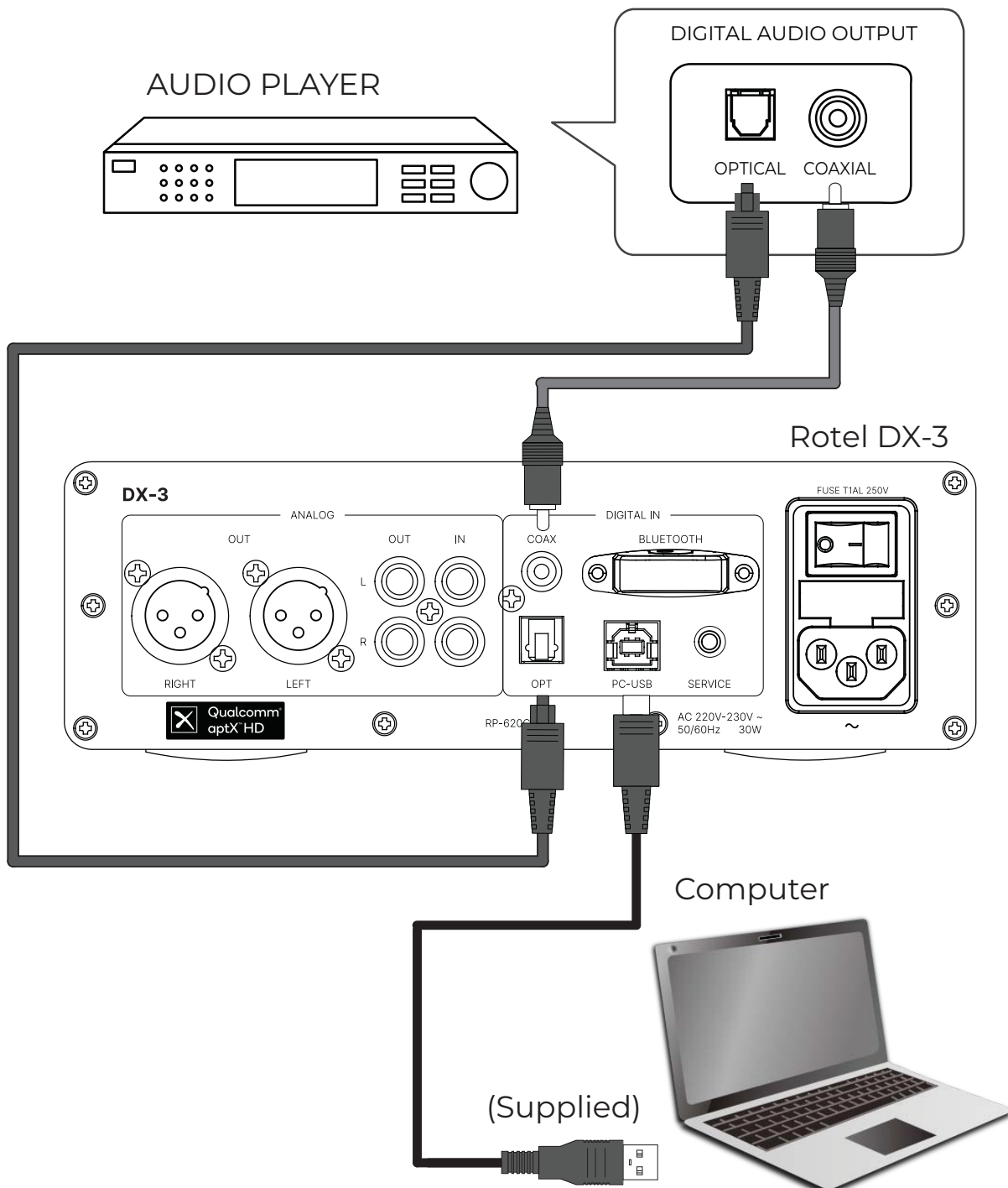
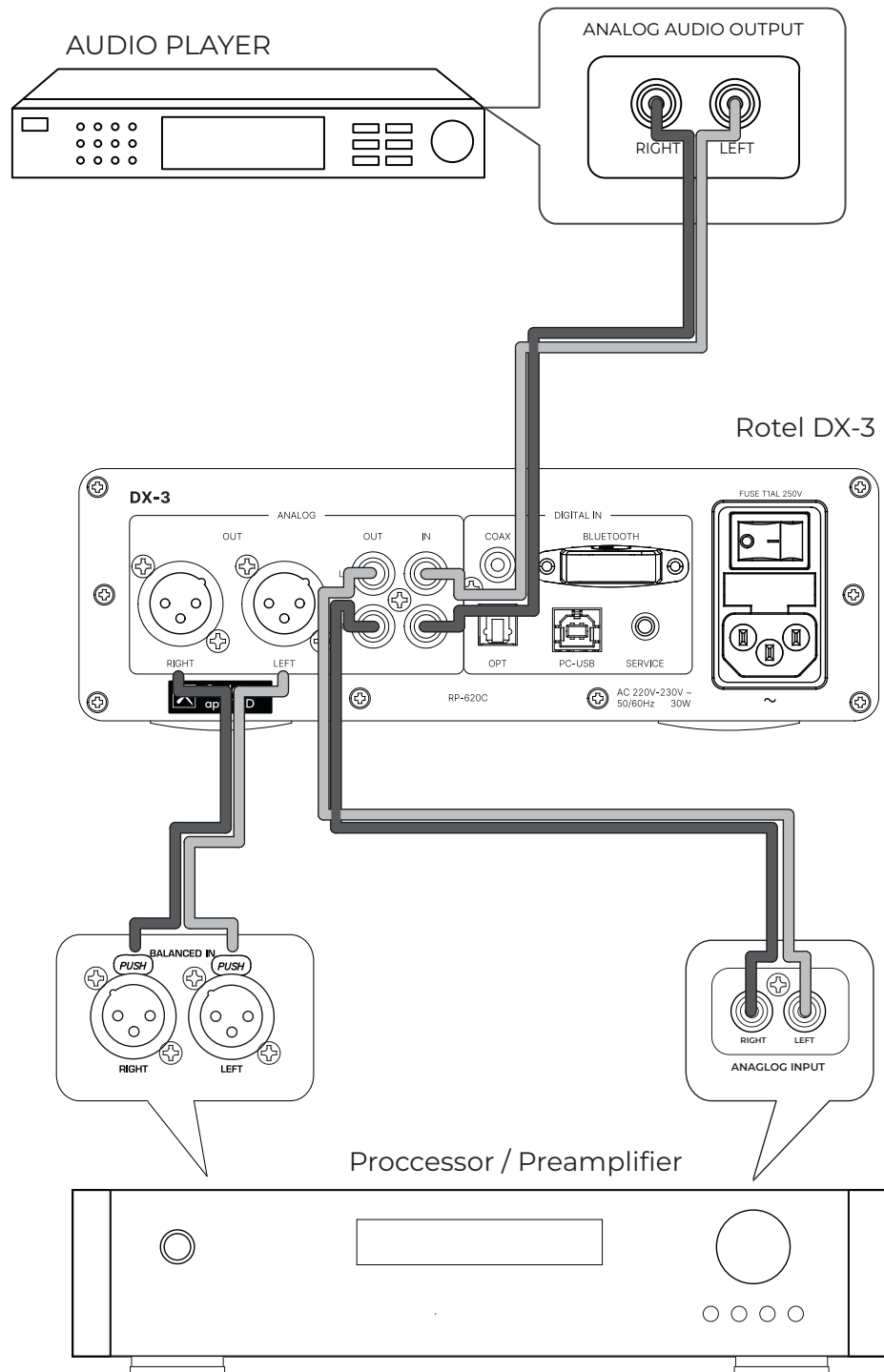


Figure 4: Analog Input and Outputs Connections
Branchements des Entrées et sorties analogiques
Anschlüsse für Analoge-ingänge und ausgang
Conexiones de Entrada y Salida Analógicas
De aansluitingen voor de Analoge ingangen en uitgang
Collegamenti ingressi ed uscita analogiche
Anslutningar för analoga ingångar och utgång
Подсоединение Аналоговые вход и выход



Important Notes

When making connections be sure to:

- ✓ Turn off **all** the components in the system **before** connecting up **any** components.
- ✓ 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 unit all the way down **before** the unit 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**.
- ✓ 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 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**.
- ✓ 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-3, maar de **gehele** installatie uitstaat, als nog niet **alle** verbindingen gemaakt zijn.
- ✓ Zorg dat niet alleen de DX-3, 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.
- ✓ 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.
- ✓ 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.
- ✓ 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.

Contents

Important Safety Instructions	2
Figure 1-1: Controls and Connections	3
Figure 1-2: Controls and Connections	4
Figure 2: RR-DX1 Remote Control	5
Figure 3: Digital Input and Output Connections	6
Figure 4: Analog Input and Outputs Connections	7
Important Notes	8
About Rotel	9
Getting Started	10
A Few Precautions	10
Placement	10
Cables	10
The RR-DX1 Remote Control	10
Remote Control Batteries	10
AC Power and Control	10
AC Power Input ¹⁶	10
Master Power Switch ¹⁴	11
Power Switch ¹¹ ^A and Power Indicator	11
Analog Signals Connections	11
Balanced Output ⁹	11
Analog Output ¹⁰	11
Analog Input ¹¹	11
Digital Signal Connection	11
Digital Inputs ¹² ¹⁵	11
aptX™ HD Bluetooth Connection ¹³	11
PC-USB ¹⁶	11
SERVICE Connector ¹⁷	12
Front Panel overview	12
Display ²	12
Headphone Gain Selector ⁴	12
IR Remote Sensor ⁶	12
Headphone Output ⁷ ⁸	12
Setup Menu	12
Overview of Buttons and Controls	12
Main Menu	13
Source Configuration	13
Audio Configuration	14
Display Configuration	14
System Configuration	15
Troubleshooting	15
Power Indicator Is Not Illuminated	15
Fuse Replacement	15
No Sound	15
Cannot Connect via Bluetooth	15
Playable Audio Formats	16
Specifications	15

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 Headphone Amplifier DX-3. When used in a high-quality music audio system, it will provide years of musical enjoyment.

The unit 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 ensures 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

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 unit.

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 unit 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 unit 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 unit 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 encircled letters refer to the remote control.

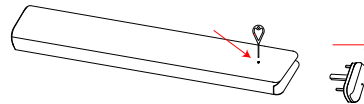
Remote Control Batteries

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.

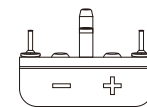


Figure 1

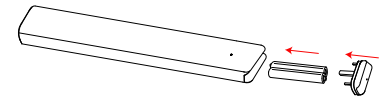


Figure 2

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

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

Master Power Switch 14

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 1A and Power Indicator

Press the front panel Power Switch button 1 to turn the unit on. The Power ring 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 A may be used to activate the unit. In Standby mode the indicator light is dimly 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.

Analog Signals Connections

See Figure 4

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

Balanced Output 9

A pair of standard XLR balanced connectors supplies an analog output signal from the unit to the source inputs of an audio preamplifier, integrated amplifier, or receiver.

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

Analog output 10

A pair of standard RCA connectors supplies an analog output signal from the unit to the source inputs of an audio preamplifier, integrated amplifier, powered speakers or receiver.

As best practices we recommend using high quality audio interconnect cables. Connect the left and right channel outputs of the unit to the corresponding inputs on the preamplifier or other component.

Analog Input 11

The analog input is for connecting components such as a CD player or other audio playback devices with an analog audio output.

The Left and Right channels are 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 unit. Ask your authorized Rotel dealer for advice about cables.

Digital signal connections

See Figure 3

Digital Input 1214

There is one set of digital inputs for COAXIAL and OPTICAL allowing you to connect the PCM outputs of your source component. The digital signals will be decoded and played by the unit. The unit is capable of decoding PCM signals up to 24 bit, 192kHz.

aptX™ HD Bluetooth Connection 13

The Bluetooth Antenna 13 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 unit supports traditional Bluetooth, AAC and aptX™ HD Bluetooth audio streaming.

PC-USB Input 16

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.

roon
TESTED

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.

SERVICE Connector 17

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.

Headphone Gain Selector 4

This function manages the amplification of the audio signal sent to the headphones and ensures the audio is clear and undistorted while matching the sensitivity and impedance of your headphones. This adjustment is only for headphone output.

Options include: Low (L) (Default), Medium (M), High (H).

NOTE: Always reduce the volume to the MINIMUM LEVEL when changing the GAIN to avoid possible damage.

NOTE: Check your headphone specs and match the gain setting accordingly. High gain settings can increase volume dramatically, please keep listening levels safe to protect your hearing.

IR Remote Sensor 6

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

Headphone Output 7 8

The headphone outputs allow you to connect headphones for private listening. There are 2 different headphone outputs accepting a standard 4.4 mm Balanced or 6.35 mm Single Ended stereo headphone.

NOTE: Because the sensitivity of 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 the IR remote control.

Power Off/Standby - To power off the unit to standby push and release the front panel Power button 1 or 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 M 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 VOL +/- buttons D on the remote and the Volume rotary 3 control on the front panel provide the master VOLUME control, adjusting the output level.

Home button E E: Quickly go back to the main display.

Source button 5 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 source. 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 I G: The unit can be configured to display the input audio source as either a dB Peak Power Meter or Spectrum. The display can also be configured as Standard during normal operation.



Push the Function button to toggle through Standard, 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 H H: Display alternative audio playback information including audio playback stream type and device configuration.

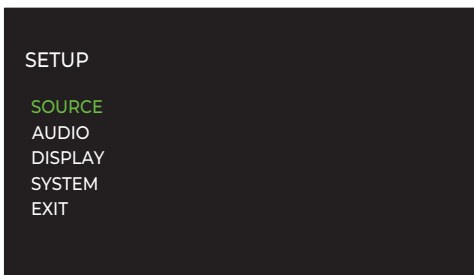
Options include: Standard, Audio format, Output mode.







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 setup menu.

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

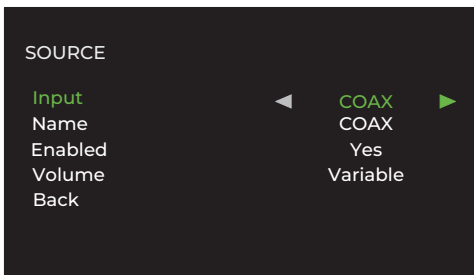
Note: The DIM level change from the remote control is only temporary until powered off. To permanently change the brightness use the BRIGHTNESS setting under the DISPLAY option in the setup menu.

Setup 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

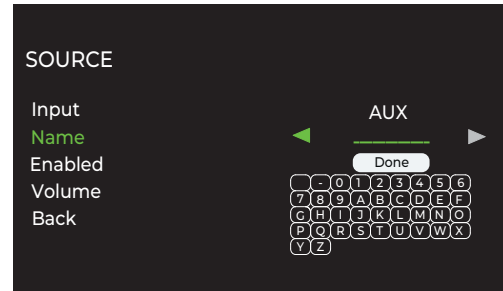






A key step in setting up the unit is to configure each source input using the Source Setup screens. Configuring the inputs allows you to set defaults for a number of settings including enable or disable the source and other options.

This 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)

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 Input. 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.

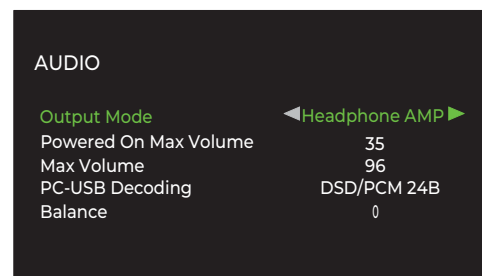
Options include: Yes (Default), No.





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, 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 </> (B) arrow buttons.

Output Mode: Configure the way that the unit outputs the analog audio signal. The unit provides 2 output modes, including Headphone and DAC, to accommodate various audio setups.

Supported output and control Mode	RCA	XLR	Headphone	Volume Control
DAC	√	√	x	x
Headphone Amp	√	√	√	√

Options include: Headphone Amp (Default) and DAC.

NOTE: Connecting headphones to the front panel will automatically disable the RCA and XLR outputs for private listening.

NOTE: DAC model will disable the Volume control. Do NOT connect directly to an amplifier to avoid damage.

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 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 unit 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.

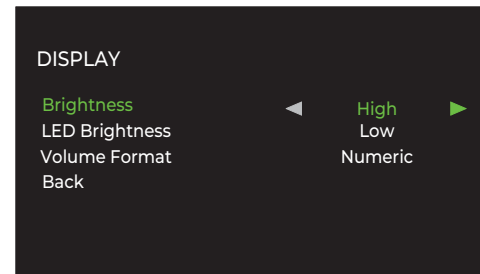
NOTE: When the unit enters standby mode via the remote control, the Signal Sense function will not operate until the unit detects the audio has stopped for the minimum 10 minute time-out period. This prevents the unit from immediately powering back on if there is still active audio playing.

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 ^/∨ (B) arrow buttons and pressing the OK button (K). This action displays the right side options allowing changes. Change the options using the </> (B) arrow buttons.

Brightness: This function sets the brightness of the front display. The OSD will always activate at the brightest 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 (J) to toggle through the display brightness options.

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

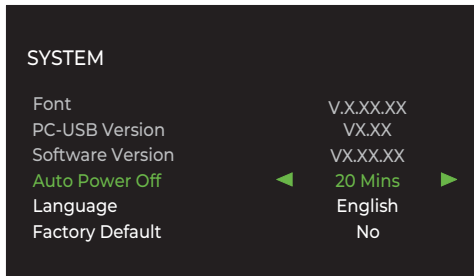
Options include: Low (Default), Medium, High.

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 </> 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 stay powered on when there is no audio signal. The unit 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, Český, 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 unit 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. Also check the OUTPUT MODE in the AUDIO SETUP menu to confirm the selected mode supports your desired system setup.

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 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 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

Headphone Output Section

Power Output (THD+N<1%)

Single-ended	765 mw (16 ohms) 383 mw (32 ohms) 41 mw (300 ohms)
Balanced	2.8 w (16 ohms) 1.4 w (32 ohms) 150 mw (300 ohms)

Total Harmonic Distortion (32 ohms, 1 kHz)

Single-ended	< 0.008% @ Output=70 mW
Balanced	< 0.004% @ Output=280 mW

Intermodulation Distortion (60 Hz : 7k Hz, 4:1)

Single-ended	< 0.01%
Balanced	< 0.006%

Frequency Response

20Hz – 20kHz (+ 0 dB, - 0.2 dB)

Output Impedance

Single-ended	< 0.3 ohms
Balanced	< 0.6 ohms

Signal to Noise Ratio (A- weighted)

Single-ended	>100 dB
Balanced	>110 dB

Gain

0 dB @ G=H
-6 dB @ G=M
-12 dB @ G=L

Recommended Headphone Impedance

16 ohms - 300 ohms

Analog Section

Total Harmonic Distortion (20 – 20k Hz)

Unbalanced (RCA)	<0.006%
Balanced (XLR)	<0.003%

Intermodulation Distortion (60 Hz : 7k Hz, 4:1)

<0.01%

Frequency Response

20 Hz – 20k Hz, +0 dB, - 0.4 dB

Line Output Level / Impedance

Unbalanced (RCA)	1 Vrms / 100 ohms
Balanced (XLR)	2 Vrms / 200 ohms

Input Sensitivity / Impedance

1.2 V / 10k ohms

Input Overload

5 V

Signal to Noise Ratio

> 107 dB

Channel Separation

> 86 dB

Digital Section

Total Harmonic Distortion (20 Hz – 20 kHz)

Unbalanced (RCA)	<0.005%
Balanced (XLR)	<0.003%

Frequency Response

10 Hz – 20 kHz (+0 dB, - 0.5 dB)

Output Level

Unbalanced (RCA)	1.6 V
Balanced (XLR)	3.5 V

Signal to Noise Ratio

>112 dB

Input Sensitivity / Impedance

0 dBFS / 75 ohms

Digital to Analog Converter

ESS ES9028PRO DAC
(768 kHz 32bit)

Digital Inputs

SPDIF LPCM (up to 192k Hz 24 bit)

PC-USB

USB Audio Class 2.0

(up to 384kHz 32bit)

Driver installation required

Support DSD (up to 11.2 M) and

DoP (up to 5.6 M)

Room Tested

General

Power Requirements

120 V, 60 Hz (USA)
230 V, 50 Hz (Europe)

Power Consumption

30 Watts

Standby Power Consumption (Normal)

< 0.5 watts

BTU

100 BTU/h

Dimensions (W, H, D)

215 x 76 x 247 mm

8 1/2 x 3 x 9 3/4 "

Panel Height

70 mm / 2 3/4".

Weight (net)

3.2 kg, 7.1 lbs.

All specifications are accurate at the time of printing.

Rotel reserves the right to make improvements without notice.

The Rotel logo is a registered trademarks of The Rotel Co., Ltd. Tokyo, Japan.



ROTEL®

The Rotel Co. Ltd.

Tachikawa Bldg. 1F.,
2-11-4, Nakane, Meguro-ku,
Tokyo, 152-0031
Japan
Email: sales@rotel.com

www.rotel.com