Manuals+ — User Manuals Simplified.

HiFi ROSE
RS201 Series
High
Performance
Network
Streamer

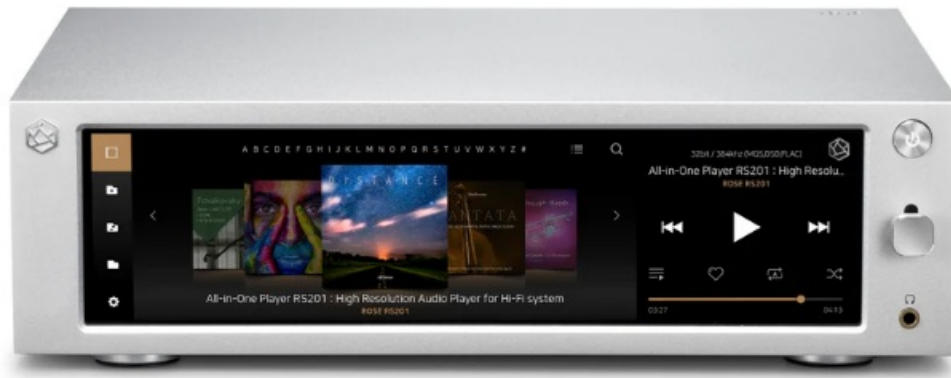# HiFi ROSE RS201 Series High Performance Network Streamer Owner's Manual

Contents

HiFi ROSE

HiFi ROSE RS201 Series High Performance Network Streamer

Product Specifications

- **Brand:** HiFi ROSE
- **Model:** RS150B
- **Type:** High Performance Network Streamer
- **Dimensions:** 430*300*110 mm
- **Weight:** 11 kg
- **Color:** Black, Silver
- **High-Resolution Music Playback:** DSD512, PCM32bit/768kHz
- **Network Connection:** Ethernet, WiFi, Bluetooth

Product Usage Instructions

Connections
Connect the HiFi ROSE RS150B to your audio system using the appropriate ports such as Optical, Coaxial, AES/EBU, HDMI ARC, USB Audio, etc. Ensure a secure connection for optimal performance.

Power Supply
Make sure to use the provided linear power supply for the HiFi ROSE RS150B to minimize electrical noise and ensure stable power delivery.

Network Setup
Configure the network settings on the RS150B by connecting to Ethernet, WiFi, or Bluetooth based on your preferred network connection. This will enable you to stream high-resolution music seamlessly.

Playback
Use the wide viewing angle touch screen to navigate through your music library and select your desired tracks for playback. The RS150B supports high-resolution music formats for an immersive audio experience.

Frequently Asked Questions (FAQ)

Q: Can I use the HiFi ROSE RS150B without connecting it to a network?
A: While network connectivity enhances the functionality of the RS150B for streaming music and accessing online platforms, you can still enjoy local playback by connecting directly to your audio sources.

Q: What is the purpose of the Femto Clock in the RS150B?
A: The Femto Clock in the RS150B provides ultra-precision timing for digital audio processing, ensuring high accuracy and low jitter for superior sound quality.

Q: How do I update the firmware on the HiFi ROSE RS150B?
A: To update the firmware, navigate to the settings menu on the touch screen display and select the firmware update option. Follow the on-screen instructions to complete the update process.

HiFi Network Streamer RS201 Series

- Reference Grade All-in-One Network Streamer

- Network Streamer + DAC + AMP

- Built-in High-Performance Power Amplifier(50W*2ch)

- High-Resolution Music Playback available(DSD256, PCM32bit/384kHz)

- A Femto Clock provides High Precision

- Digital equipment, PreAmplifier connection available

- Awarded the world's three major design awards(Reddot, GOOD DESIGN, PIN-UP)

Hi-Res	DSD	Native DSD 256	In/Out Port	Headphone Out	3.5mm
	PCM	32bit / 384kHz		USB Out	USB A Type 3.0 / 2.0
In/Out Port	Digital In	Optical	AMP	AMP	50W X 2CH(4Ω)
	Digital Out	Optical		Ethernet	10/100/1000 BASE-T
	Analog In	Line In	Network Connection	WiFi	802.11 a/b/g/n/ac (2.4GHz/5GHz)
	Analog Out	Pre-out_RCA			
	HDMI Out	4K		Bluetooth	V4.0 / V3.0+HS

Connectivity Bluetooth, DLNA, Airplay, Spotify Connect, Roon Ready
Design 278*202*76 mm / 2.3 kg / 8.8" Wide viewing angle touch screen / Color: Silver

Innovative ROSE OS System

Spotify Connect

Spotify Connect allows you to play and wirelessly control Spotify music on your ROSE OS over a network. With the Spotify Connect function, you can enjoy a variety of music with HiFi sound quality on your ROSE device.

Hi-Res Audio

HiFi ROSE devices are certified with a 'High-Resolution Audio' license from the JAS (Japan Audio Society).

TIDAL

Enjoy music streaming and videos with TIDAL's unique features. Supports MQA Full Decoder, so you can enjoy high-resolution music.

4K Video

You can enjoy high-definition videos on YouTube, TIDAL, and Bugs, and play video files in various formats.

Qobuz

Enjoy music streaming with Qobuz's various functions. Support for Hi-Res Audio(24bit/192kHz) means you can enjoy high-resolution music.

MQA

Supports MQA's Full Decoder. Enjoy studio mastering sound quality.

Roon Ready

ROSE OS is fully compatible with Roon Core, with Roon Ready certification in compliance with all requirements of Roon Labs. You can enjoy HiFi sound quality on your ROSE device with the powerful music management capabilities of Roon.

ROSE Tube

You can enjoy all content and music on YouTube.

Bugs

Listen to high-resolution music on Bugs. Easily connects existing functions, including login, playlists, and playback.

CD Player

Play CDs by connecting an external USB CD-ROM.

Radio

Listen to various Internet radio channels from around the world. Keep track of your favorite channels.

CD Ripping

Rip CDs by connecting an external USB CD-ROM and save them on a storage device.

ROSE Podcast

Listen to various podcasts from around the world.

Music Library

Manage your music files under various categories, such as albums, artists, and genres.

Clock

Various design clock functions are provided, such as alarms and weather information.

My Playlist

Create your own playlist. You can also register your friends and share it with them.

ROSE Connect Remote Application

A dedicated Remote App is provided that allows users to conveniently control and smartly manage their ROSE device. The Remote App is supported on various platforms, including the iPhone, iPad, Android phone, and PCs.

Control

You can freely and conveniently control various HiFi ROSE functions wirelessly.

- **Control**

  You can control a variety of functions remotely including Music, ROSE Tube, TIDAL, Qobuz, Bugs, Radio, Podcasts, and CD Ripping

- **Remote**

  ROSE Connect includes the remote control function.

- **Search**

  You can conveniently search for a variety of music in the Media Library.

Streaming

You can simply and easily play music stored on your phone on your ROSE device. Enjoy a lossless, high-quality streaming service.

Playlist
You can create your own playlist.
Make a playlist on Music and ROSE Tube and check it out at Home – My Music.

Share with Friends
You can share your playlists with your friends or listen to music recommended by them. Communicate with your friends through music.

Media Library
Scan the music in your local memory to organize it into various categories.

Safety Precautions

Warnings

- Do not apply excessive force on the product, throw it, or strike it with sharp objects.
- Children should only use the product under adult supervision to ensure proper usage.
- Use within a temperature range of 0°C to 40°C and do not use in hot or humid conditions. Install the product in a well-ventilated area, not an enclosed space. The product may break, corrode, overheat, or catch fire in an environment below 0°C or in a sealed environment with a high temperature, such as a sauna. Moisture or liquid can also damage the surface of the product and its circuit components.
- Be sure to use a genuine power cable provided by ROSE. Any other cable may cause operational errors or damage (decreased performance) to the product.
- Do not spill dirt or liquid on the product. It may damage the components and circuits. If the product gets wet, do not turn it on and contact your nearest service center. However, free repairs are not available in this case.
- Do not connect antennas or accessories that are not certified by ROSE to the product, and do not place the product on objects that may interfere with radio waves (steel desk, microwave oven, etc.).
- Because the product is sensitive to radio waves, using it near steel or electromagnetic devices can lead to poor performance.
- How to replace the fuse: After turning off the product, remove the fuse and replace it with a fuse of the same type.
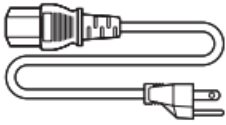
Precautions

- The contents of the owner's manual are described based on the default settings of the product.
- Some contents of this manual may be changed without prior notice to the user in order to improve product performance.
- The features and additional services of the product may vary depending on the country, software specifications, and policy changes of the service provider.
- Repairs due to user negligence or product failure may erase user data (music files, video files, etc.). ROSE is not responsible for any damage or loss of data.
- If you use Bluetooth and 2.4GHz band wireless LAN together, the WiFi connection may be slow or audio playback through Bluetooth may not work properly due to signal interference. If you are using them at the same time, we recommend using wireless LAN connections in the 5GHz band.
- Do not use chemical solutions (alcohol, thinner, solvents, etc.) or detergent to clean the product. Rubbing the product with a chemical solution can create heat and cause the product to catch fire. When cleaning the
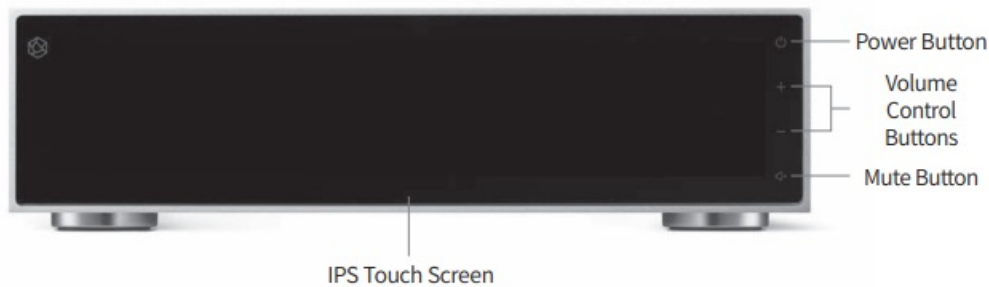
product, wipe it with a soft cloth or towel.

- Do not disassemble, modify or repair the product on your own. If you do, you will no longer qualify for free repairs. If a malfunction occurs because of this, contact an authorized service center for repairs.
- Only programs provided by the manufacturer are available. Transferring independently created files or user-modified files to the product can cause operational errors or cause serious problems with the product. ROSE is not responsible for any problems that arise in this case.
- If the touch screen is damaged, do not touch it with your hands. Contact the service center immediately, as it may cause injury.
- Install the product close to an outlet so that it is easy to remove the plug from the outlet.

Components List

|		
1	**Main Device**	
2	**Bluetooth Remote Control (Sold Separately)**	
3	**Power Cable**	
4	**User Manual**	MANUAL
5	**SSD Mounting Screws**	
6	**AAA Batteries for Remote Control**	
7	**WiFi/BT Dongle (Sold Separately)**	

Location / Function of Buttons and Ports

1. Front Side of the Product

BPuotwtoenr	Wbohoetns.you press the power button, the LCD screen turns on and the product ※ For detailed functions, refer to "Default Settings" – "Power Button". (p. 36)
VConutmroel Buttons	Yoeukcnaonbaudpju/sdtotwhen voonluthmeevloelvueml beycpornetsrosilnsgcrtehenv.oVloulmume +e/c-abnubtteonasdjoursdterdagfgroinmg 0 to 99 in 100 steps. **Caution:** cPaleuasesehneoatreintghdatamlisategnei.ng to music at high volume for a long time may
Mute Button	You can disable/enable the sound by pressing the mute button.
IPSScTreoeunch	You can move the screen by touching it several times.

Rear Side of the Product
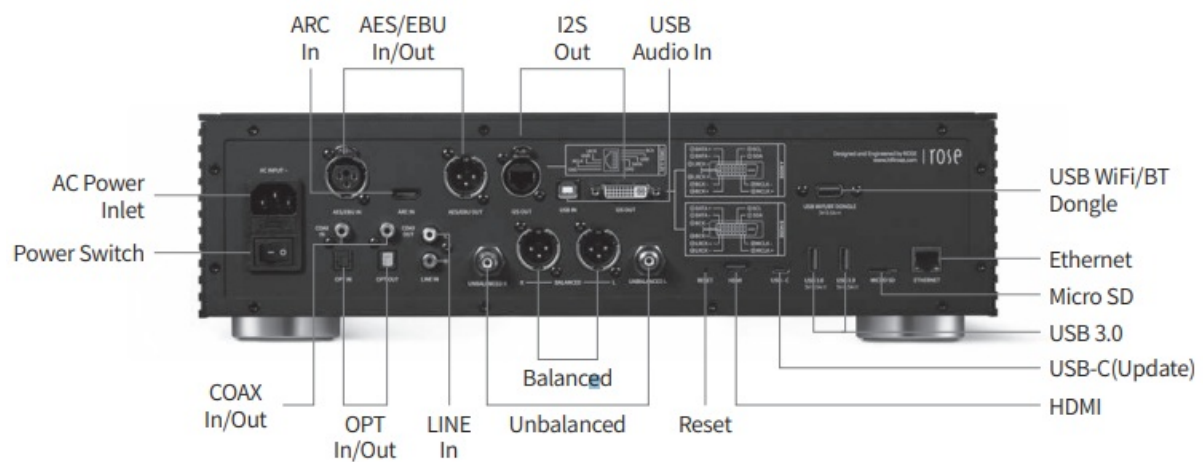
| AC Power Inlet	AC INPUT ~	Connect the AC power cable here.
Power Switch		This is the power switch of the product.
COAX In/Out		Connect the COAX cable to this port to input and output digital signals (44.1kHz - 192kHz).
OPT In/Out		Connect the OTP cable to this port to input and output digital signals (44.1kHz - 192kHz).
LINE In		Connect the RCA cable to this port to input analog signals (Max: 9 .0dBu / 2.2Vrms).
Unbalanced		Connect the RCA cable to this port to output analog signals (Max: 9 .0dBu / 2.2Vrms).
Balanced		Connect the Balanced cable to this port to output analog signals (Max: 18.4dBu / 6.5Vrms).
Reset		Press the Reset button to restart the system.
HDMI		Connect the HDMI cable to this port to play the video output signals(up to 3840 x 2160/60Hz) on a TV or monitor.
USB-C(Update)		This port is used for system updates.
USB 3.0	USB 3.0 5V 0.5A=	Connect the USB storage device to this port to play music files, or connect the CD ROM to use the ripping function.
Micro SD		Connect the Micro SD card to this port to play music stored on the card.
Ethernet		Connect the wired LAN cable to this port.
USB WiFi/BT Dongle	USB WIFI/BT DONGLE 5V 0.5A=	Connect the USB dongle to this USB port for wireless network and Bluetooth.
I2S Out		Connect the DVI cable to this port and connect it to the I2S input port of the external device.
USB Audio In		Connect the USB B-type cable to this port and the computer for using this product as the USB DAC of the computer.
ARC In		Connect the HDMI cable to this port and the ARC output port of the external device.
AES/EBU In/Out		Connect the AES/EBU cable to this port to output the digital signals.

Remote Control

	Function	Note
1	Sleep mode function	Power On/Off
2	Mute function	
3	Play previous song	Works only on the playback screen
4	Play or stop the current song	Works only on the playback screen
5	Play next song	Works only on the playback screen
6	Go back	
7	Go to the home screen	
8	Move focus up	
9	Move focus left	
10	Move focus right	
11	Move focus down	
12	Select current focus	
13	Option key	Works only when playing songs and videos with sub-options (favorite, queue, subscribe) in the list
14	Sleep timer function	
15	Go to the favorites menu	Go to the favorites menu set on this device
16	Go to the External Input/Output menu	Local, Optical, Analog change
17	Volume down	Press and hold to adjust the volume down
18	Volume up	Press and hold to adjust the volume up

It is compatible with Bluetooth 4.0, Bluetooth BLE support, and 2.4GHz frequency.
The Bluetooth remote control has an average battery life of about 3~4 months. If the power is weak due to battery consumption, the Bluetooth remote control may malfunction, so use it after changing the battery.

Product Installation

Product Design Method and Recommended Installation Location

- This product is designed to be used on a table or shelf.
- This product can malfunction during cold weather or hot weather.

  (Operating temperature: 0 to 40℃, Storage temperature: -10 to 50℃)
- If the space where the product is installed is small, provide adequate ventilation for the product. A longer operating life is ensured when electronics are properly ventilated and maintained so that they do not overheat more than necessary. Do not install this product directly on a device that generates a lot of heat, such as a power amplifier.
- The figure below shows the minimum ventilation requirements required for the product.
- Keep at least 2.5cm apart on each side of this product to prevent airflow from clogging.
- Secure a depth of 40cm for airflow and cabling.
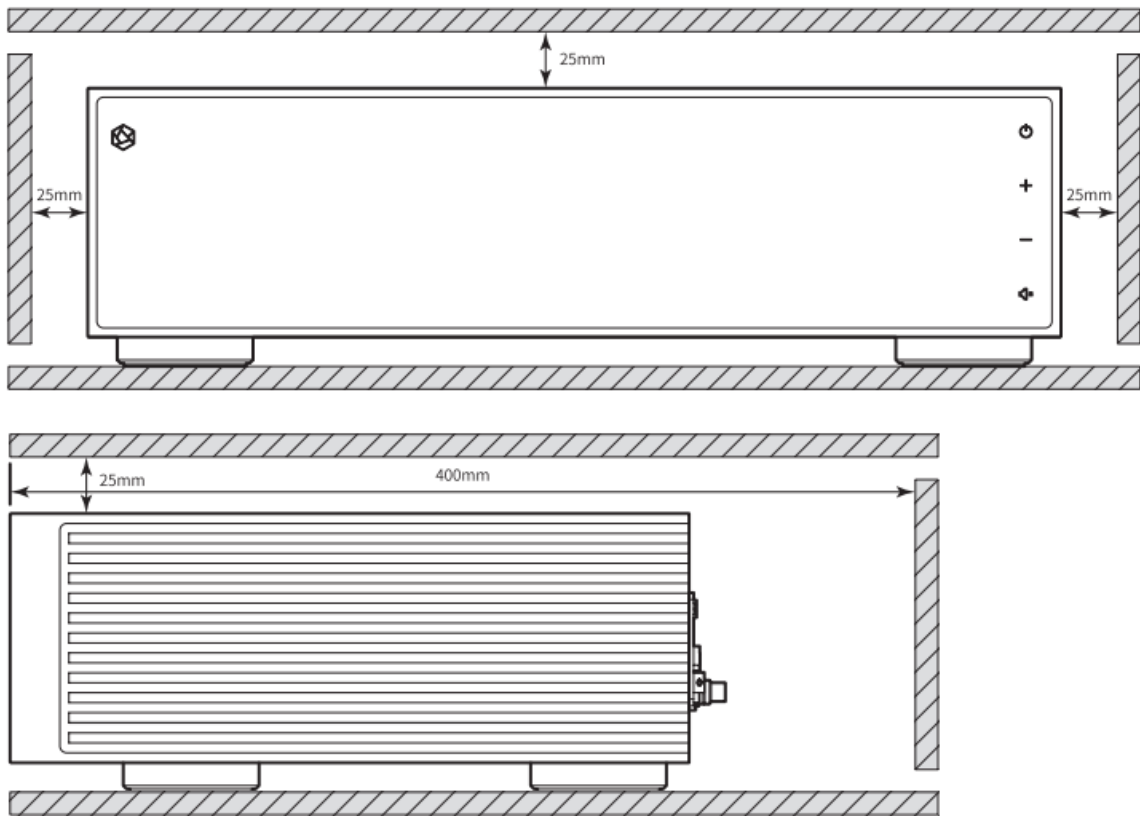
How to Connect the Power Cord

- This product includes a removable power cord. Please connect the power cord after connecting all audio cables.

- Turn the power switch off( ), connect the power cord to the product first. Then connect the power cord to an outlet and turn the power switch on( ) before use.
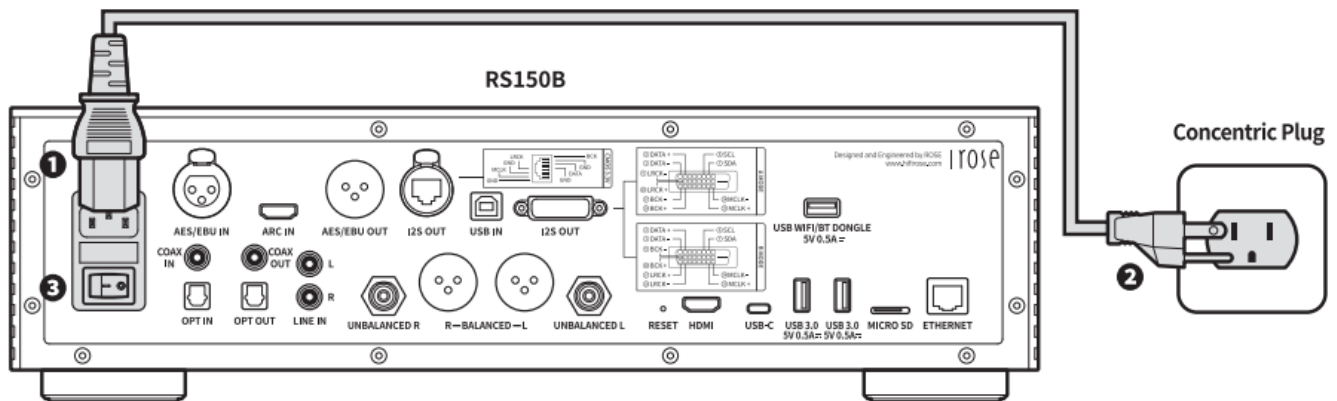
Caution: When disconnecting the power cord, always disconnect the power outlet first with the power switch off. As 140-179Vac is rated "Blank", the product cannot operate.

How to Properly Connect Rear Ports and Cables

Connection Between Analog Output Port and Power Amplifier or AV Receiver

- You can connect the analog (BALANCED/UNBALANCED) audio output of this product to the analog input port

of the power amplifier or AV receiver as shown in the figure below.

- The analog audio output volume adjustment for this product can be selected as "Variable" and "Fixed" through the pre-out level settings.
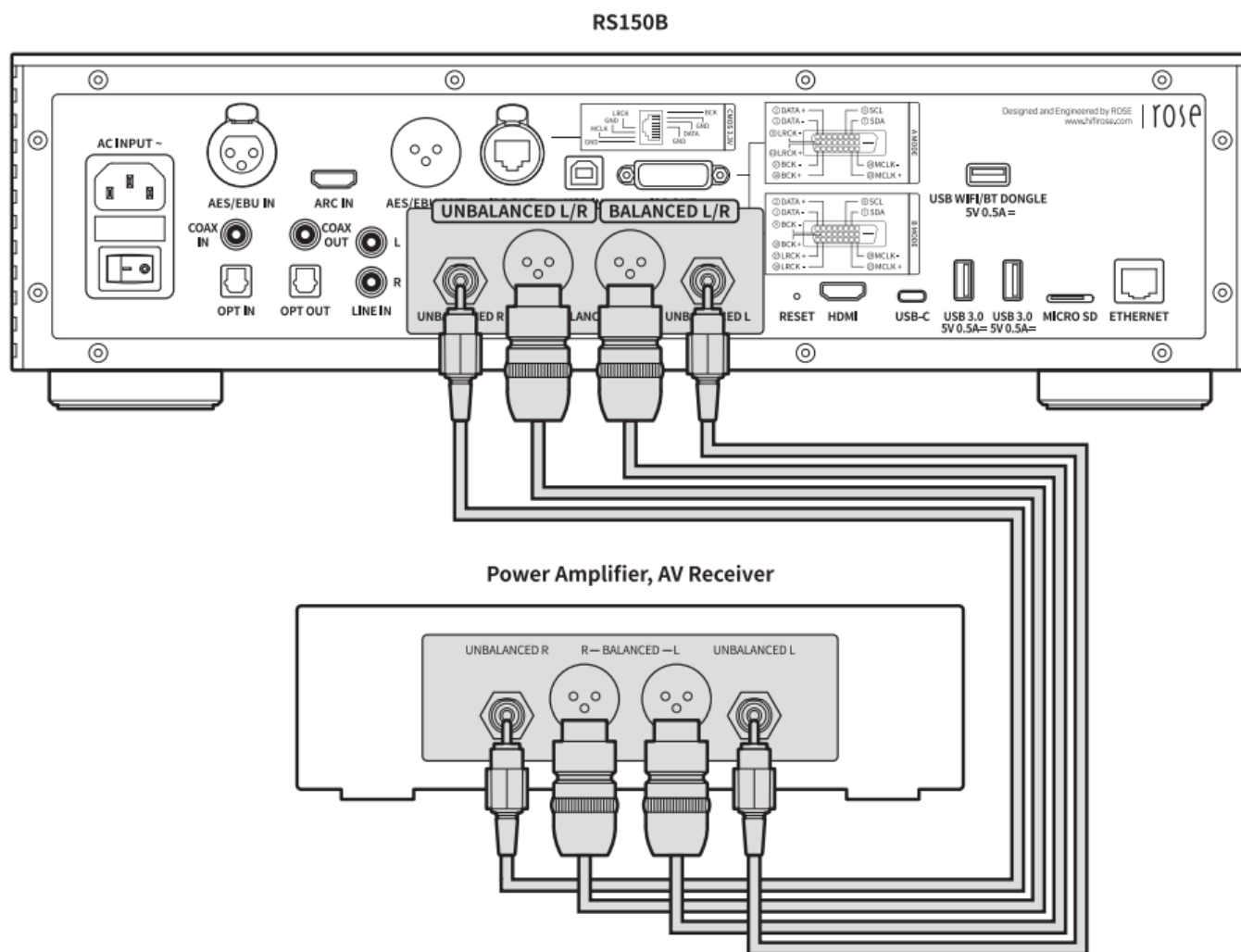

Caution: Before connecting this product to the power amplifier, set the volume of the product to mute or below level 5, and then connect it using an RCA cable. If you connect the cable while the product is playing music at a high volume, a loud shock sound may occur.

Connection Between Analog Input Port and Audio Device

- You can connect the analog output port of an external device such as a CD player to the analog audio input port (LINE IN) of this product as shown in the figure below.
- When using analog audio input as a source, you need to switch the input source to "LINE IN" in the In/Out Setting. You can change the In/Out Setting from the home screen, settings, settings on the ROSE Connect Premium App, and the remote control.
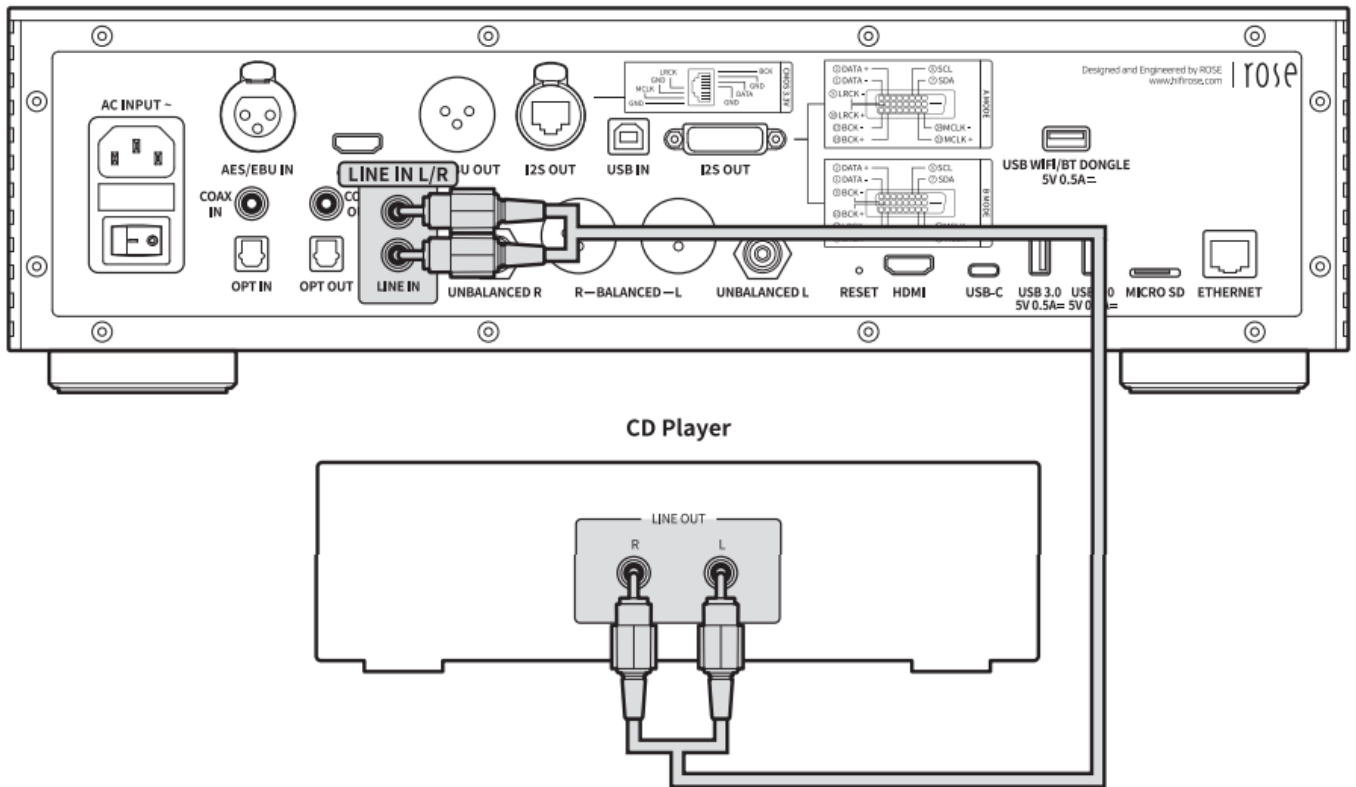
Connection Between Analog Input/Outport Port and Audio Device (TV or Devices That Provide Digital Input / Output Capabilities)

OPT, COAX

- You can connect the digital input/output port of an external device to the digital (OPT/COAX) input/output port of this product as shown in the figure below.
- This product can reproduce linear PCM signals with sampling frequencies of 44.1kHz, 48kHz, 88.2kHz, 96kHz, 176.4kHz and 192kHz.
- When using analog audio input as a source, you need to switch the input source to "OPT IN" or "COAX IN" in the In/Out Setting.
- To export digital output, you must activate the output mode as "OPT OUT" or "COAX OUT" in the In/Out Setting.
- You can change the In/Out Setting from the home screen, settings, settings in the ROSE Connect Premium App, and the remote control.
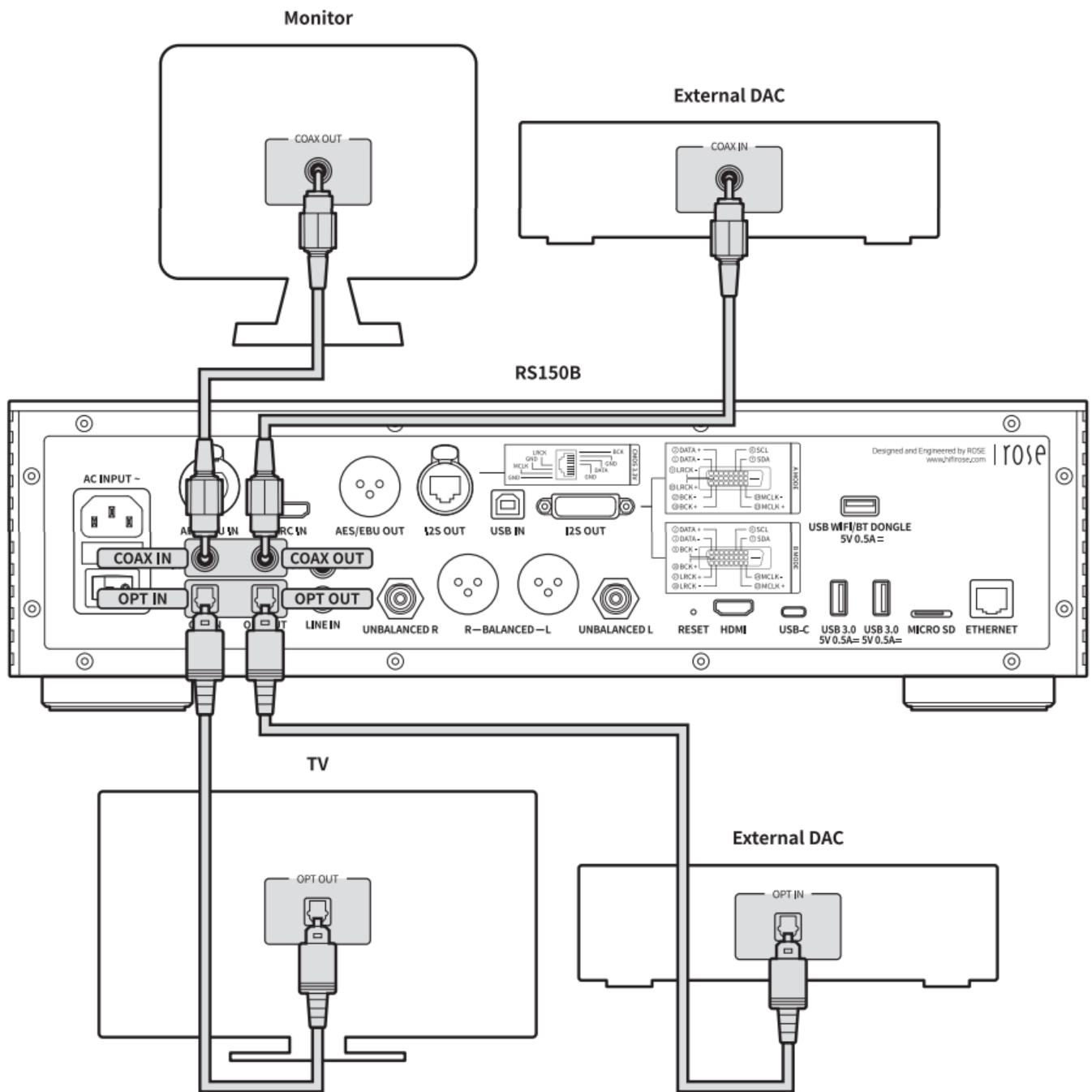
Caution: Do not input signals other than linear PCM signals such as Dolby Digital, DTS, and AAC to this device. It may cause noise and damage to the speakers.

AES/EBU

- You can connect the digital input/output port of an external device to the digital (AES/EBU) input/output port of this product as shown in the figure below.
- You can connect an external CD player or other source device to the AES/EBU IN port of this product.
- Also, you can use an external DAC by connecting it to the AES/EBU OUT port of this product.
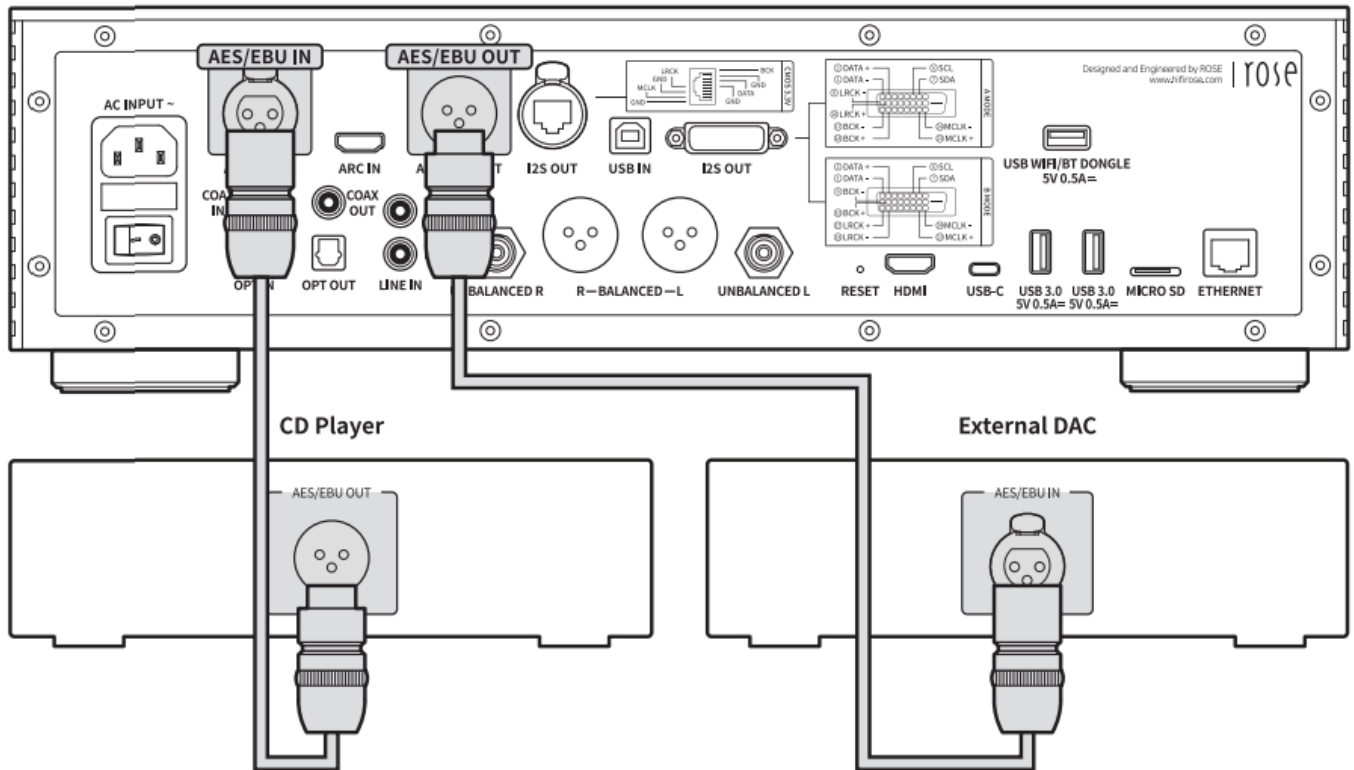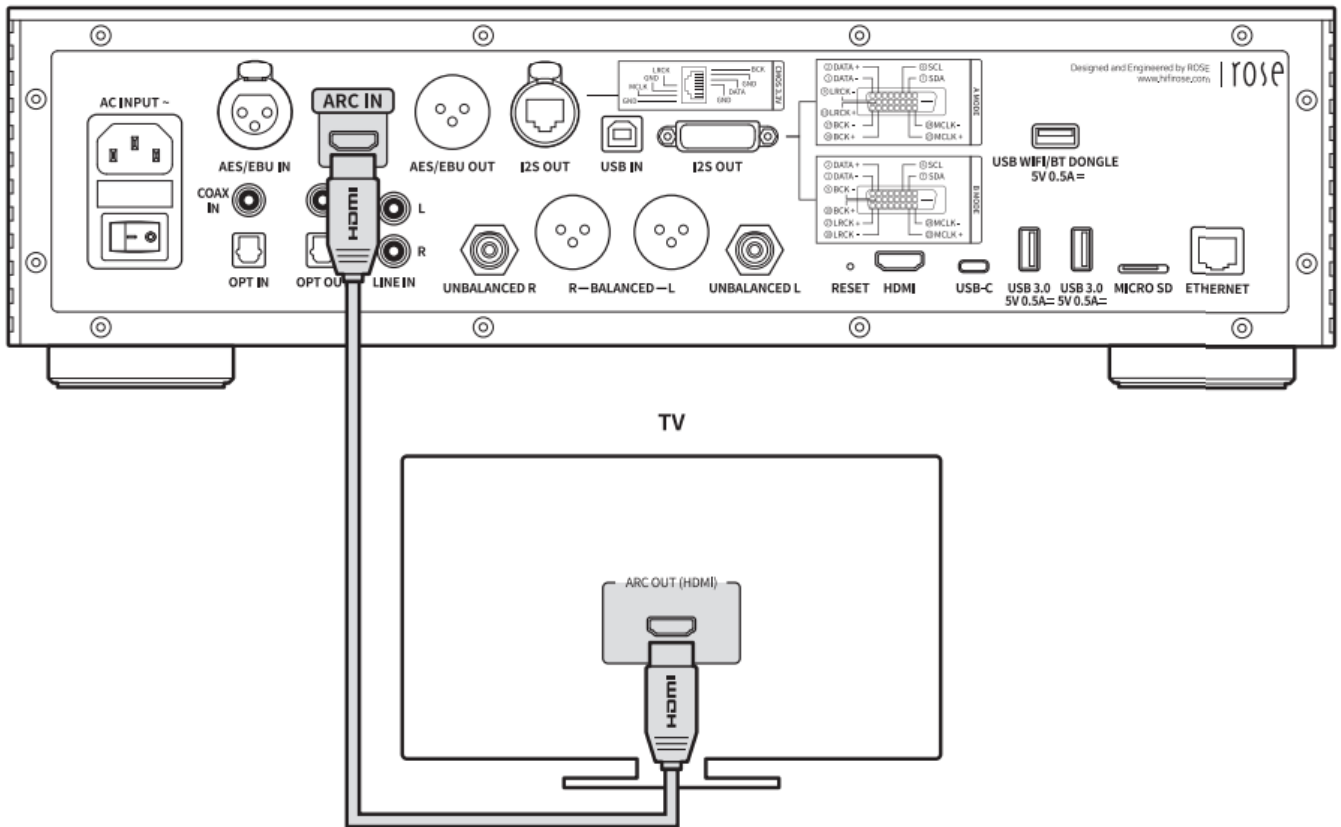
ARC IN

- You can connect the TV to the ARC IN (HDMI) port of this product as shown in the figure below.
- If you connect this product to the HDMI port of a TV that provides an ARC connection with an HDMI cable, you can receive audio signals from the TV from the product and listen to music through speakers connected to an external amplifier device.
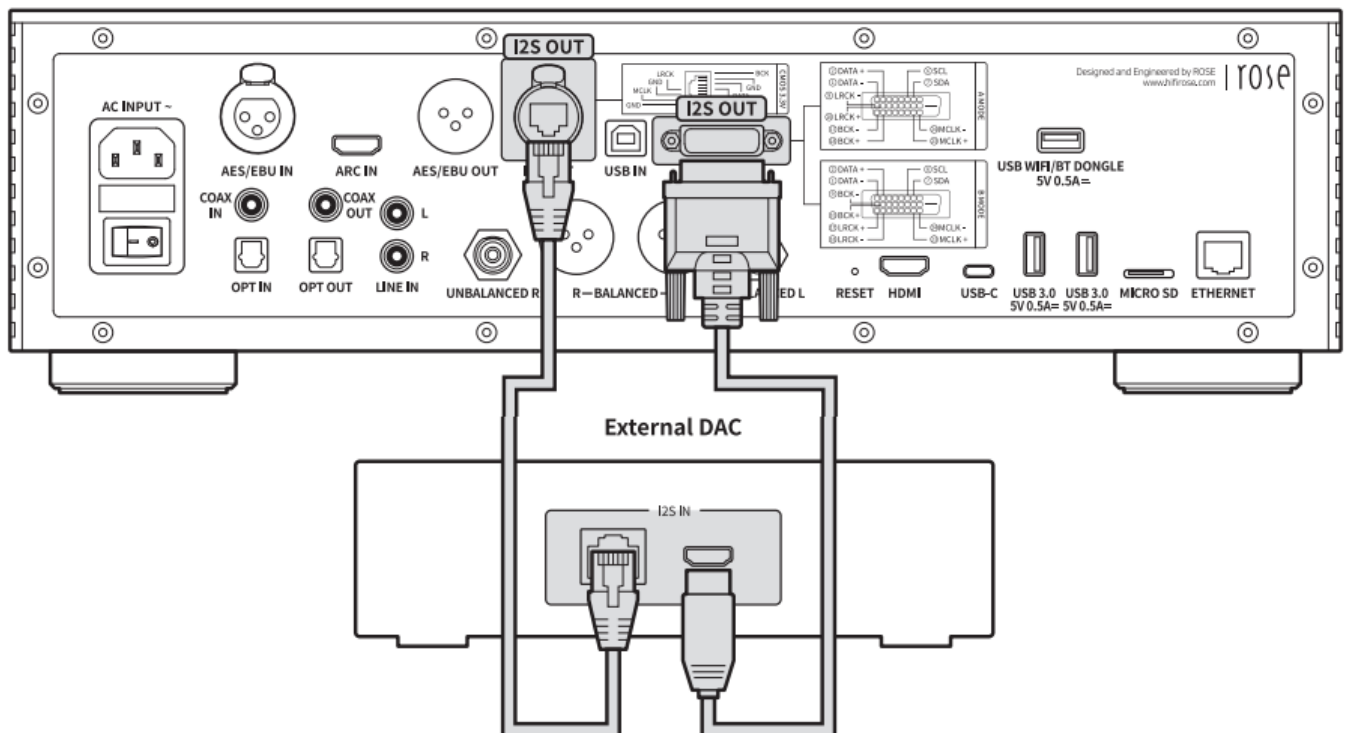
I2S OUT

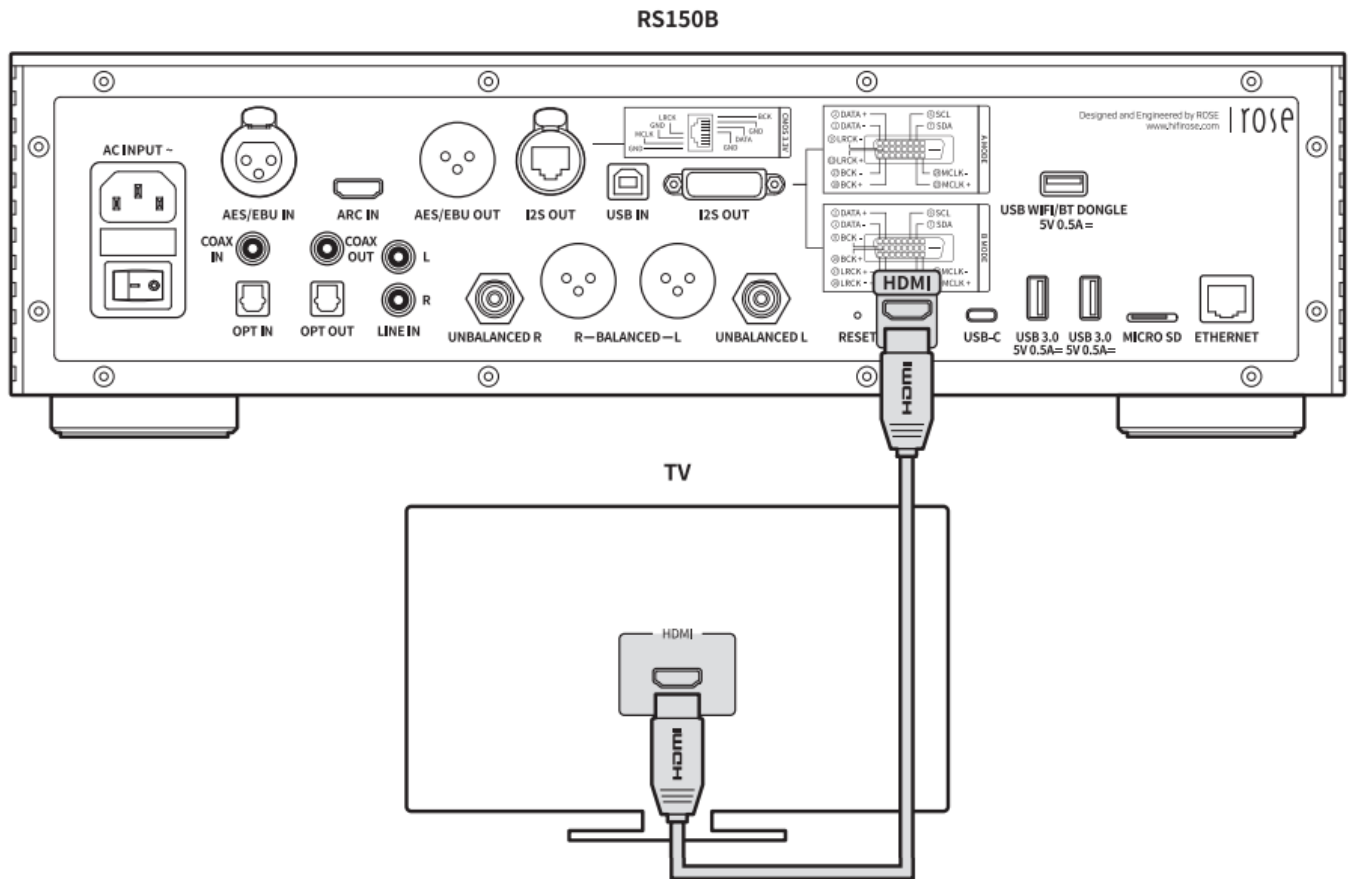- You can connect the input port of an external DAC to the I2S OUT port of this product as shown in the figure below.
  For more information, refer to "In/Out Setting" – "OUTPUT" – "Digital". (p. 43)
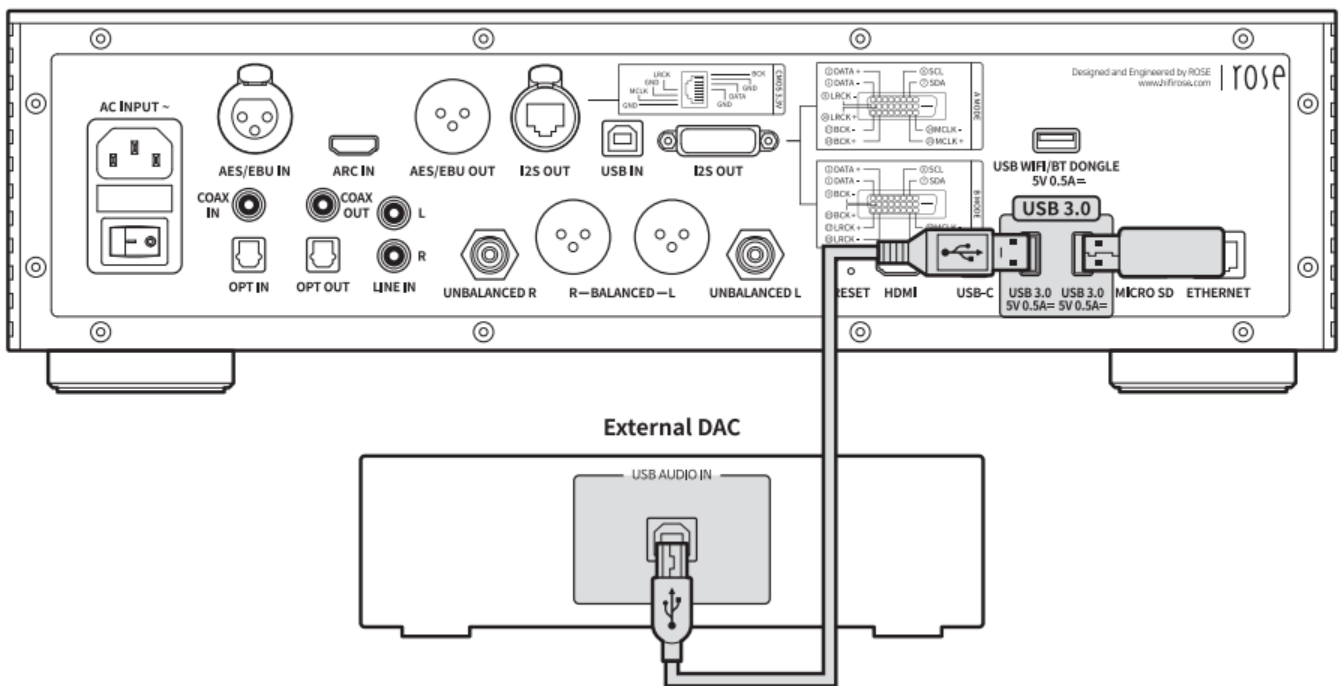

HDMI Connection

- You can connect the TV to the HDMI port of this product as shown in the figure below.
- Video output signals (up to 3840 x 2160/60Hz) can be played back by connecting this product to a TV.

Connection Between USB 3.0 Audio Output Port and External DAC

- You can play music or video by connecting a separate USB DAC or a USB memory device to the USB 3.0 port of the product.
- After connecting an external USB DAC to the USB AUDIO OUT port of the product, you need to activate the output device as an external USB DAC in the In/Out Setting.

External DAC

This product complies with the USB Audio Class 2.0 specification.

USB IN Connection

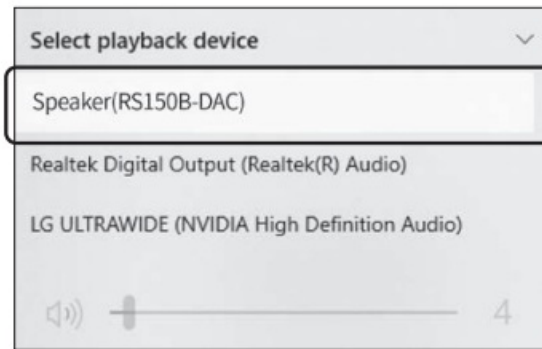- Connect the device as shown in the figure below.

PC
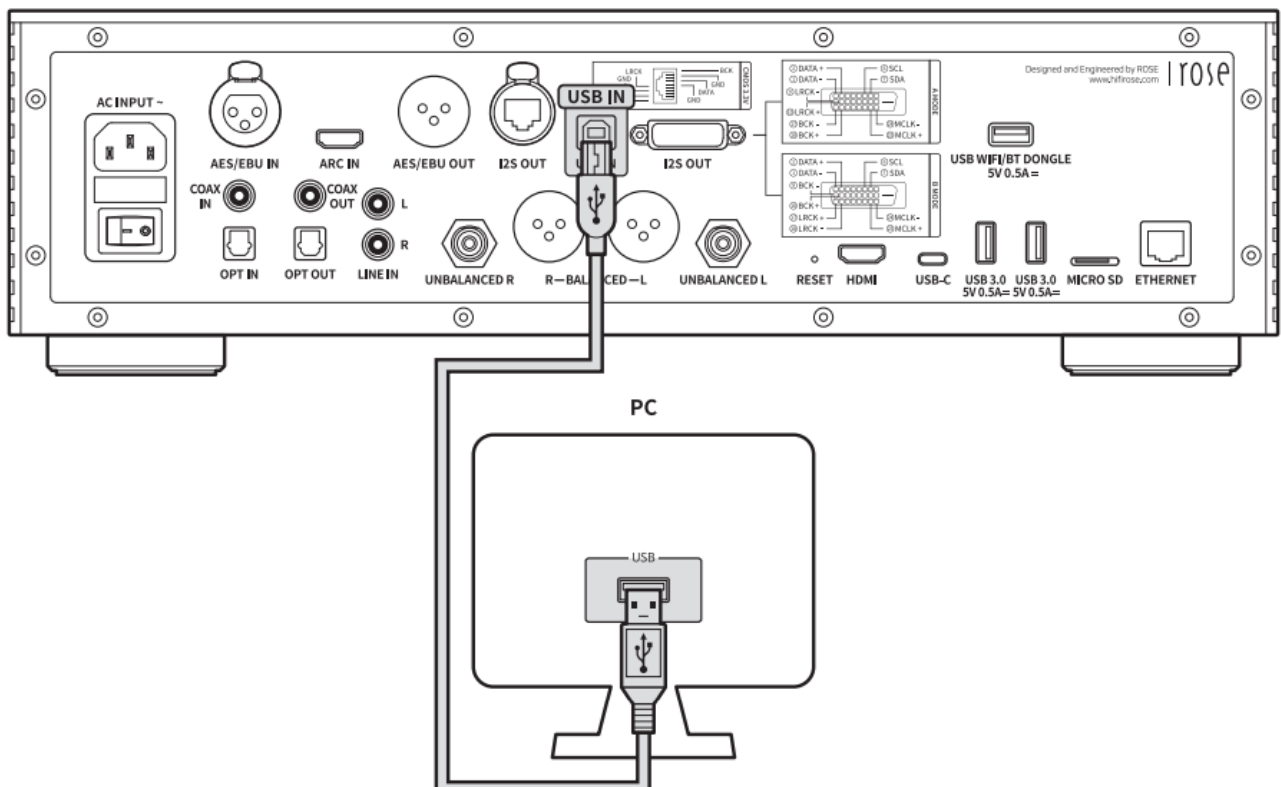
- Download Rose_UsbAudio_[VERSION].zip from ROSE website (**www.hifirose.com**).
- When you unzip the downloaded Rose_UsbAudio_[VERSION] file and run Rose_UsbAudio_ [VERSION].exe, the screen appears as shown in the picture below. Please select Next.
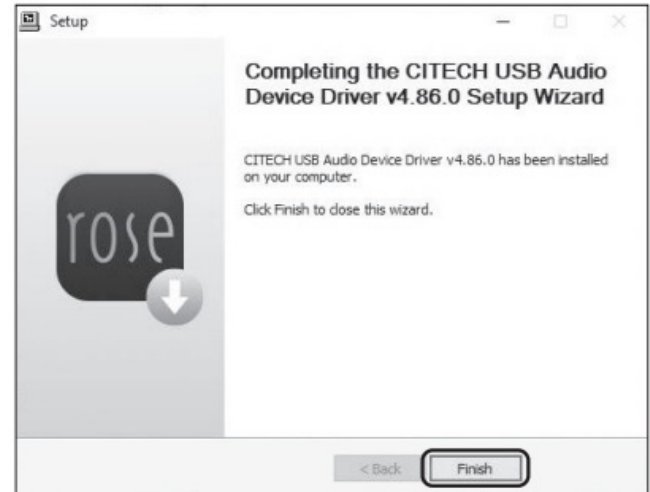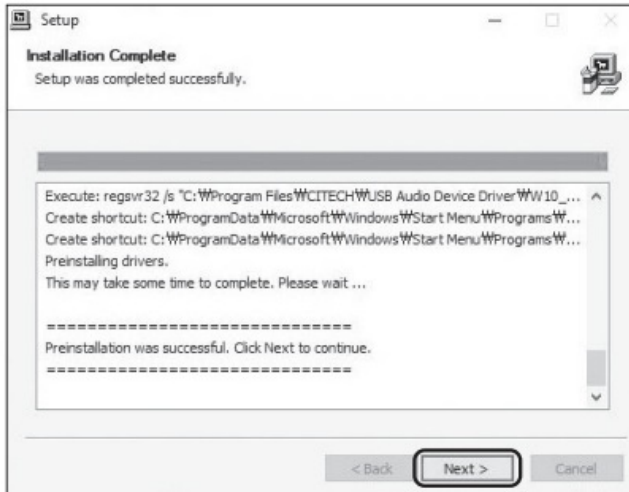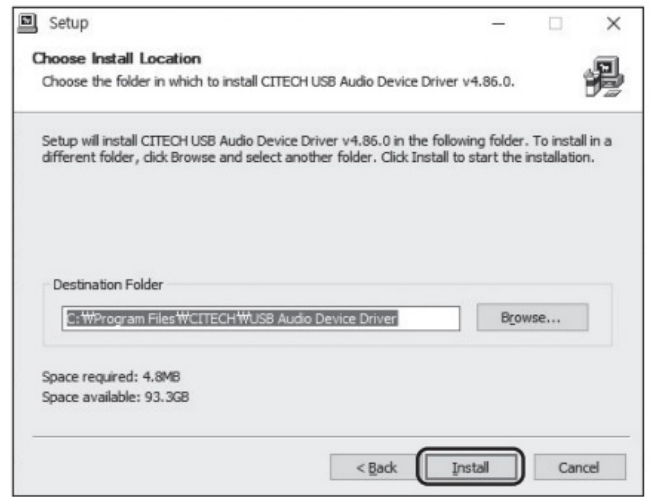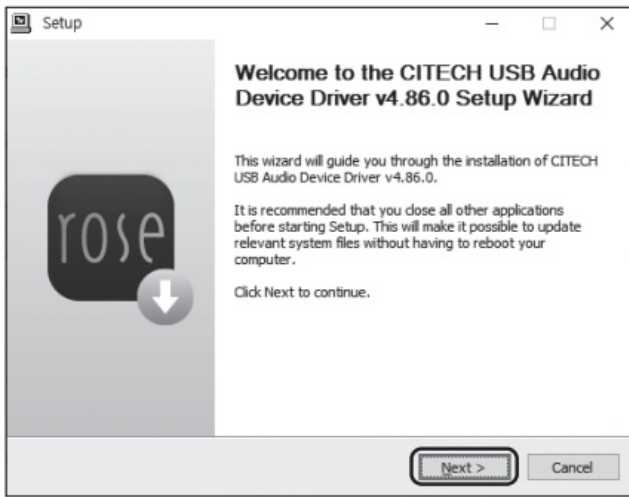
- Reboot after installing UsbAudio Sound and USB Controller.
- After driver installation is complete, switch the source to USB IN in the In/Out Setting, and you can check the RS150B-DAC on your PC as shown below.
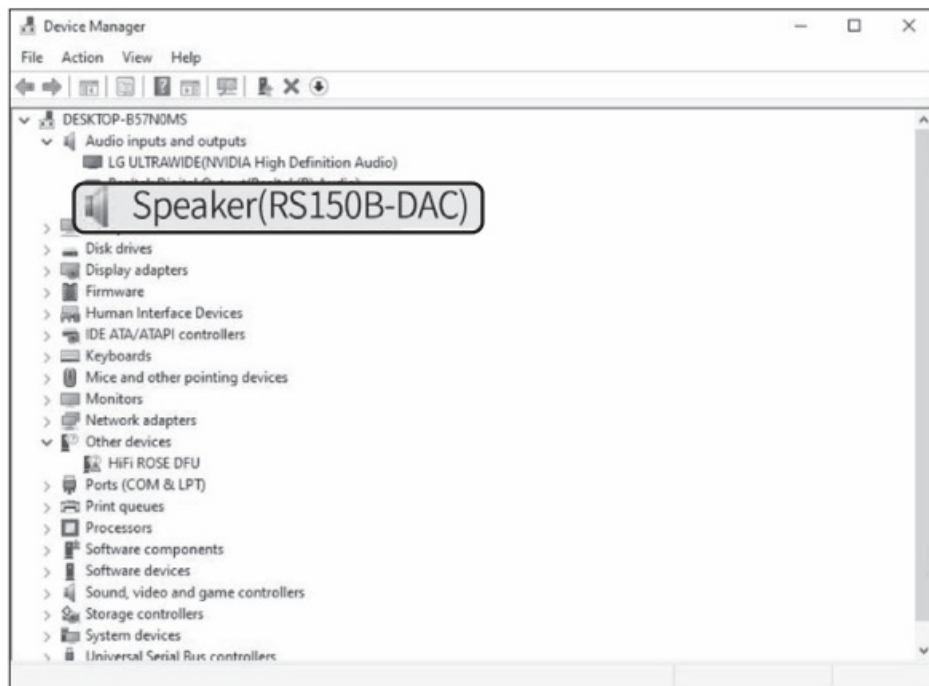

- When you set the sound device to RS150B-DAC in the system tray area of your PC, you are ready to use the device connected to the USB IN port.

WiFi / Bluetooth Connection

- You can connect the USB WiFI/BT dongle module to the USB WiFi/BT DONGLE port of this product as shown in the figure below.

For the WiFi / BT DONGLE, it is recommended to use Bluetooth 4.0 or higher and 2.4GHz/5GHz dual-band WiFi. For a detailed description of WiFi, refer to "Network Connection" – "WiFi Connection (Wireless)".
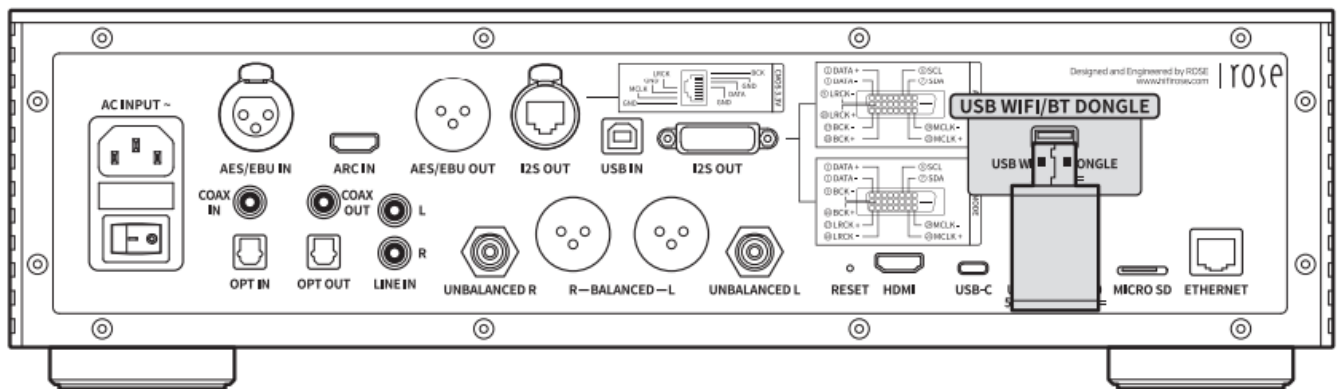
External Memory Devices (USB, Micro SD) and SATA Storage Devices

- This product can connect external memory devices and SATA type storage devices.
- When connecting a storage device using SATA, it is recommended to use an SSD.
- USB storage devices are compatible up to 10TB, Micro SD up to 400GB, and SATA storage devices up to 4TB.

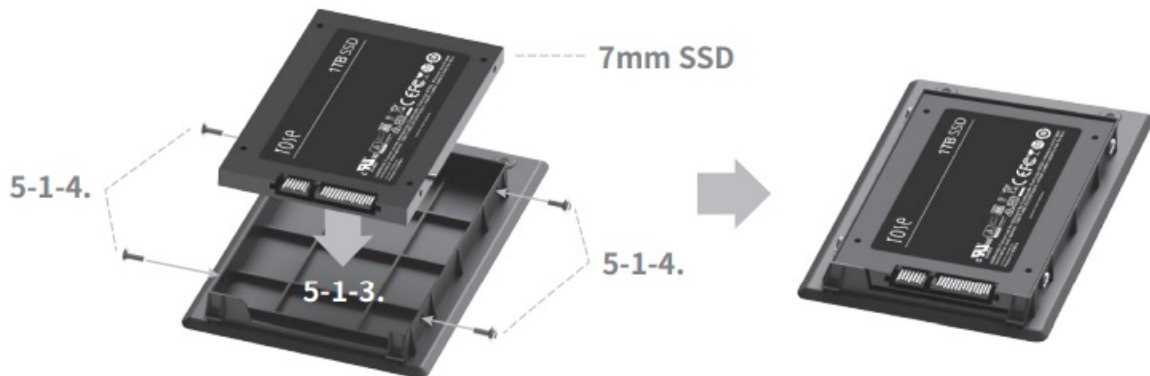SSD can be purchased separately, and only 7mm thickness can be used.

How to Connect SSD

How to Insert SSD

1. Remove the SSD cover fixing screws (2 pcs) on the bottom of the main body.
2. Remove the SSD cover by pushing the part marked OPEN.

3. Install the SSD in line with the port on the SSD cover.
4. Fix the SSD to the SSD cover with the SSD mounting screws (4 pcs).

5. Assembly the SSD cover with the SSD installed on the main body.
6. Push the part marked LOCK to re-fix the screws.
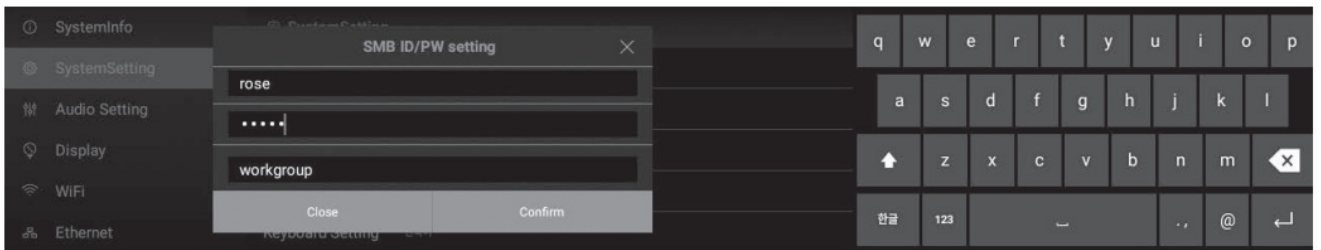

How to Format After Installing SSD

- You can format the SSD connected to this product from the SSD Format menu in System Settings.
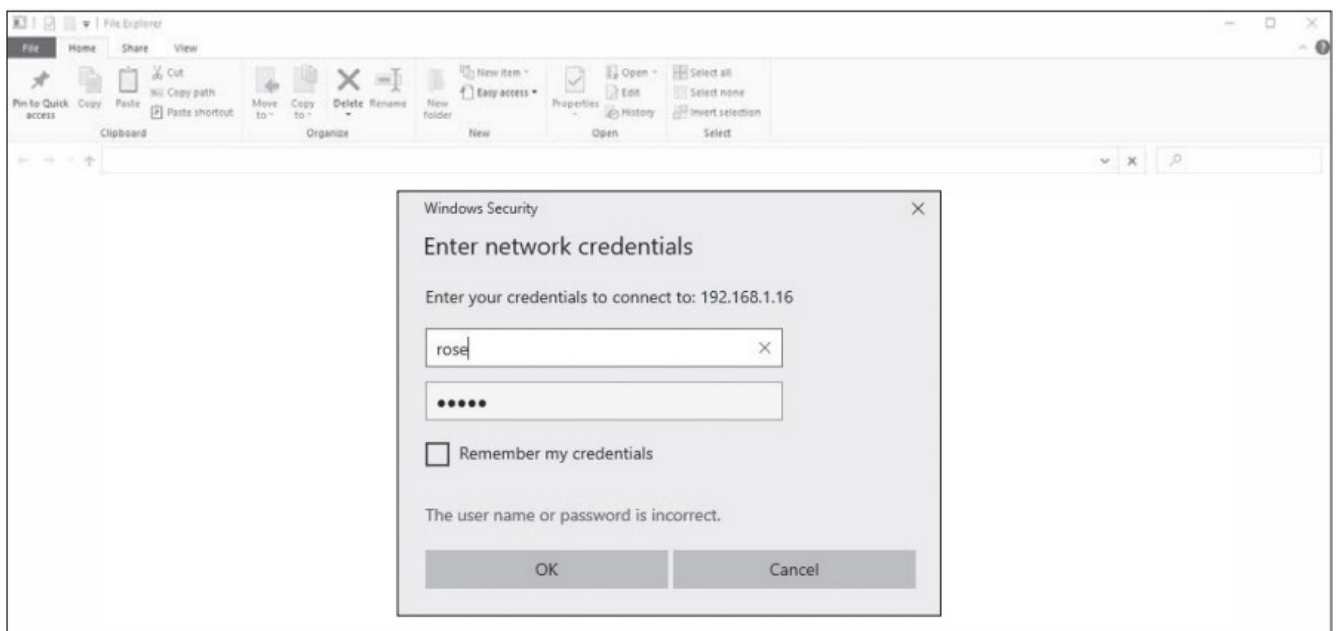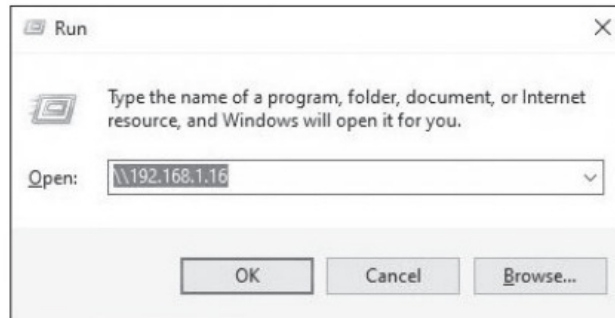

How to Copy Files Through the Network

- Set SMB ID/PW in Storage Settings in System Settings.

- After entering \\ROSE IP on your PC, enter the ID/PW that you set up in SMB, and the storage connected with this product will appear and you can copy the files directly from your PC.

To connect to the SMB of this product from a PC, both devices must be connected to the same network.

Network Connection

- This product can be connected to the network via wired/wireless connection.

Ethernet Connection (Wired)

- After you connect a LAN to the rear Ethernet port, select ON from the Settings – Ethernet menu to connect to the network.
- When connected normally, the IP address and other information are automatically received.

Display	Ethernet	Ethernet		Static IP Settings	ON
WiFi	Tethering	IP Address	192.168.2.148		
Ethernet		MAC	EE:B2:A4:DD:10:04		
BlueTooth		Netmask	255.255.255.0		
Date and Time		Gateway	192.168.2.1		
User Account		DNS1	168.126.63.1		

- After Ethernet connection, you can use this product as a WiFi hotspot.

  After entering the network name and password, you can enable the hotspot function, and other devices can use the password to connect to this WiFi hotspot.

Display	Ethernet	Tethering		Settings	ON
WiFi	Tethering	Network Name	AndroidAP		
Ethernet		Password	············		
BlueTooth		Security	WPA2 PSK		
Date and Time		AP Band	2.4GHz		
User Account					

WiFi Connection (Wireless)

- When you turn on WiFi from the Settings – WiFi menu, a list of currently accessible SSIDs appears, and you can select the desired SSID to connect to the network.

SystemInfo	WiFi		ON
SystemSetting	designRoom5G	Connected	
Audio Setting	Test5_5G		
Display	QA_EasyMesh		
WiFi	Linksys		
Ethernet	Test5_2.4G		

You can remotely control this product by downloading and installing the ROSE Connect Premium App supported through the Google Play Store and App Store on your smartphone.

To control this product on your smartphone (ROSE Connect Premium), it must be connected to the same network. (You can configure a single network using wireless network extenders, bridges, etc.)

**How to Pair with the Bluetooth Remote Control**

1. Press the Home(⌂) and Options buttons(≡) on the remote control at the same time for about 5 seconds.
2. When the red LED light on the remote control turns on, go the Settings – Bluetooth menu. Set the Bluetooth switch to ON and then select "Devices Search".
3. After selecting "ROSE RCU" from the "Scanned Device List", if you select "ROSE RCU" from "Paired Devices", the light will change to gold and the pairing is completed.

How to Connect to RoonReady

- Before using RoonReady, first access the homepage (**http://roonlabs.com**) and create an account. Download RoonCore and install the software on your PC.
- Various music managed by RoonCore will appear.
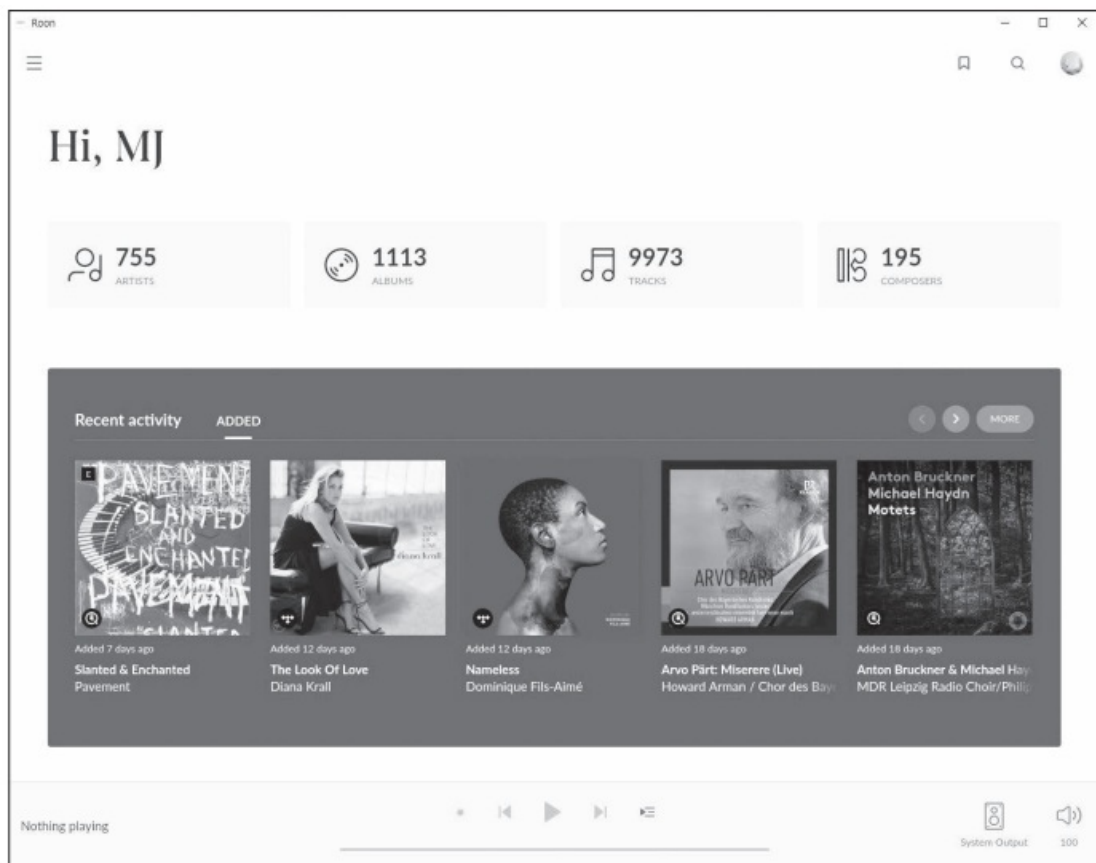
- Select this product from "Select Audio" in Settings – Audio.
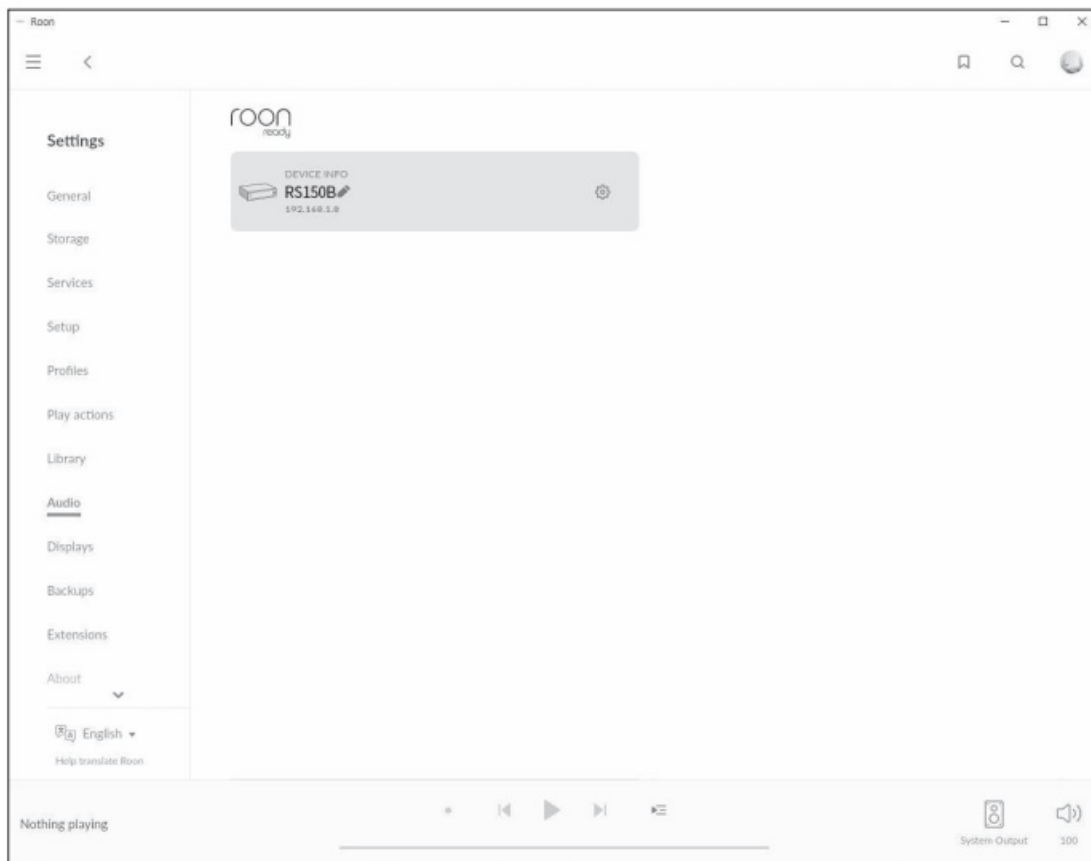
- Once the connection with ROSE is complete, you can play and listen to music on the RoonReady.
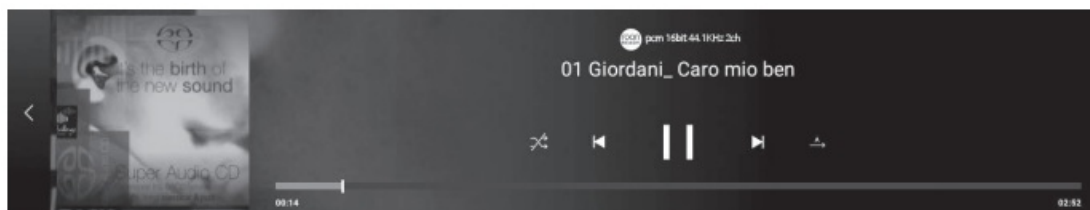
To control this product from RoonReady, both the product and RoonReady must be connected to the same network.

Default Settings

Power Button

- You can turn this product on and off by pressing the power button briefly.
  - If you press the power button briefly, the product will enter the standby mode when the power is on, and the product will be turned on when the power is off.
  - If you press the power button during booting, the product will turn off.
- Press the power button for 3 seconds to display the [LCD OFF | Power OFF | Reboot] menu.
  - LCD OFF ( ) : Music is played and only the screen is turned off.
    If you press the power button again while the LCD is off, the screen will be turned on.
    ※ This function can only turn off the screen while using the product.
  - Power OFF ( ) : The power will be turned off.
  - Reboot ( ) : The product will be turned off and on and then display the home screen.

※ If you touch a screen other than the menu, it will be canceled.

- Power button LED status : Screen on (LED OFF) / Screen off (LED ON)
- Press and hold the power button for more than 5 seconds to force a reboot.

In/Out Setting

- Select the "In/Out Setting" icon on the main screen to move to the In/Out Setting menu.
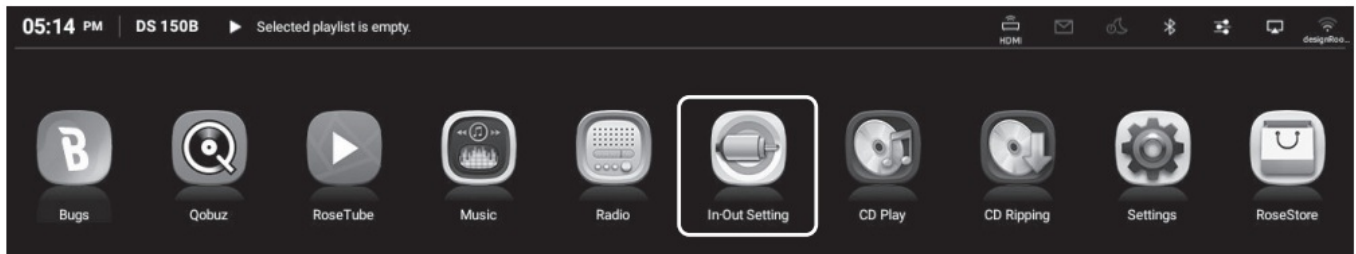
INPUT

- You can select an input by selecting the icon from the INPUT Settings menu.
  When activated, the icon changes to gold color and a check mark appears.
  ※ Only one input can be selected at a time.

RS150

- This function sets this product to the Internal mode. This is the default mode at first start-up; select it when playing music or streaming sources from a storage device.
- If external input is in use, it is automatically selected if you play the music or streaming on the storage device.

AES/EBU IN

- When using analog audio input as a source, select the input source as "AES/EBU IN" in In/Out Setting.

USB IN

- When connecting this product to a PC and using it as a USB DAC, select the source as USB IN in the In/Out Setting.
  Please refer to "Product Installation" – "USB IN Connection".

- When using ARC IN as a source, select the input source as "ARC IN" in the In/Out Setting.

LINE IN

- When using LINE IN as a source, select the input source as "LINE IN" in the In/Out Setting.

COAX IN

- When using COAX IN as a source, select the input source as "COAX IN" in the In/Out Setting.

OPT IN

- When using OPT IN as a source, select the input source as "OPT IN" in the In/Out Setting.

OUTPUT

- You can enable/disable output settings by selecting the icon in the Output Settings menu.
- When activated, the icon changes to gold color and a check mark appears.
- Only one of USB, HDMI, and Internal DAC can be selected.
- For Internal DAC, you can enable multiple output ports.

USB DAC

- When you connect a USB DAC and select USB, a list of connected USB DACs appears. Select the USB DAC you want to use from the list.
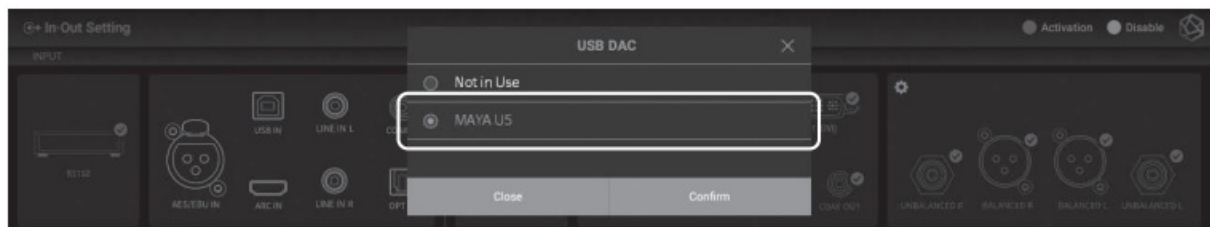

- If you select USB DAC, the model name of the selected USB DAC appears and becomes available.

- If you select the setting icon for USB DAC, you will see the USB DAC Setting screen below.

MQA Type

- This is the menu to set the MQA playback mode. You can select Authenticator or Decoder mode.
  Only original sound or decoded audio data can be exported to digital output; full-decoded audio data cannot be exported.
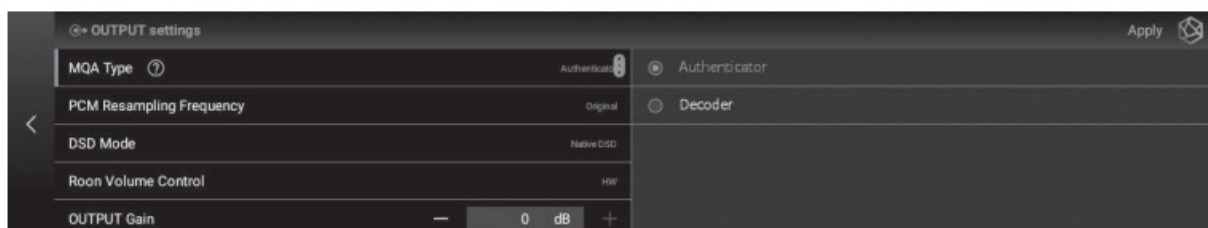

- This is the menu to set the Sampling Frequency. Select Original Sampling Rate if you want to output the original sound or select the desired sampling rate (44.1kHz, 48kHz, 88.2kHz, 96kHz,176.4kHz, or 192 kHz) to use the re-sampling function.
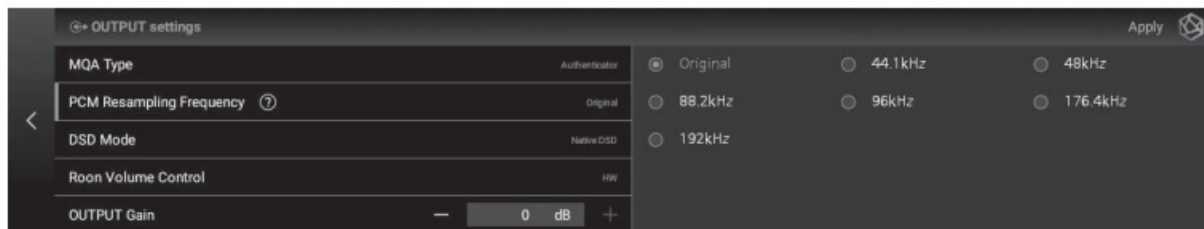
DSD Mode

- This is the menu to select the transmission format (Native, DOP, PCM) of audio samples to be delivered to the DAC when playing DSD music files. For USB DACs, you need to select and use Native, DOP, and DSD to PCM to play DSD music files, depending on the type of DAC you connected to.
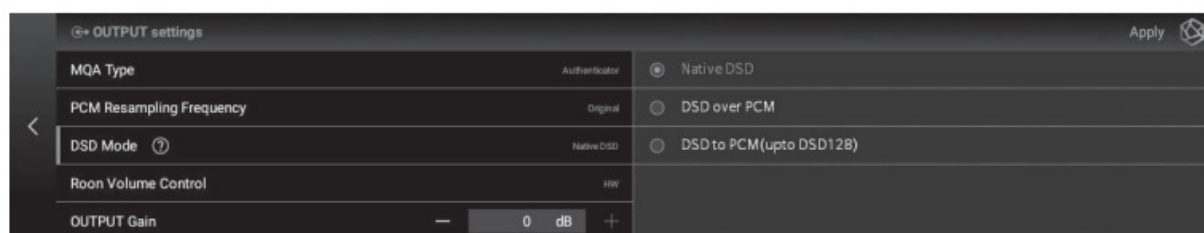

Roon Volume Control

- This is the menu to select the volume control method (Hardware, Software, Fixed) in RoonReady mode. You can select Hardware/Software/Fixed for USB DAC, but if USB DAC does not support the hardware volume control function, the volume will not be adjusted for hardware selection.
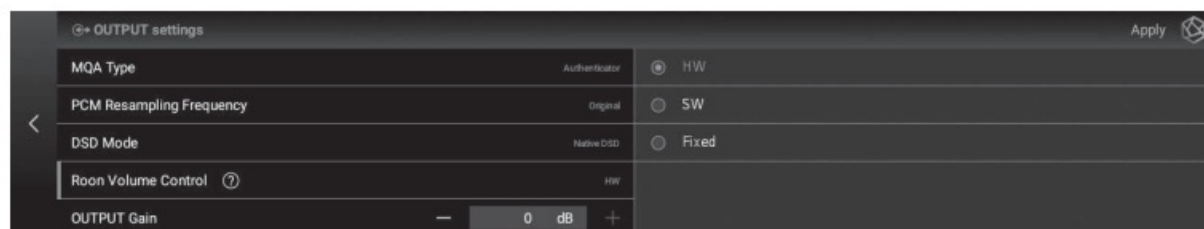
OUTPUT Gain

- This is the menu to adjust the Gain value of Digital Output. If distortion occurs when connecting with an external receiver or DAC, adjust the Output Gain value accordingly.
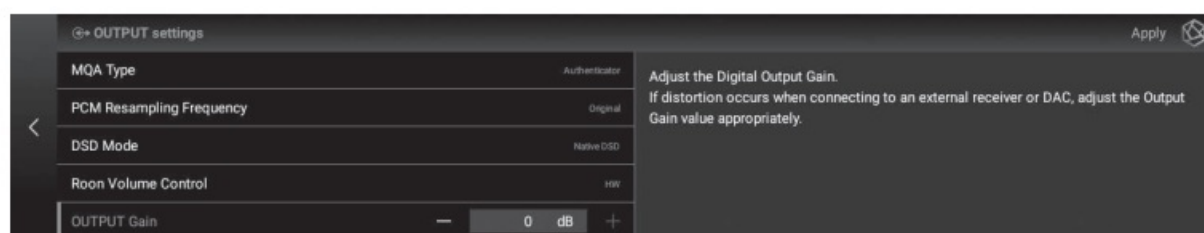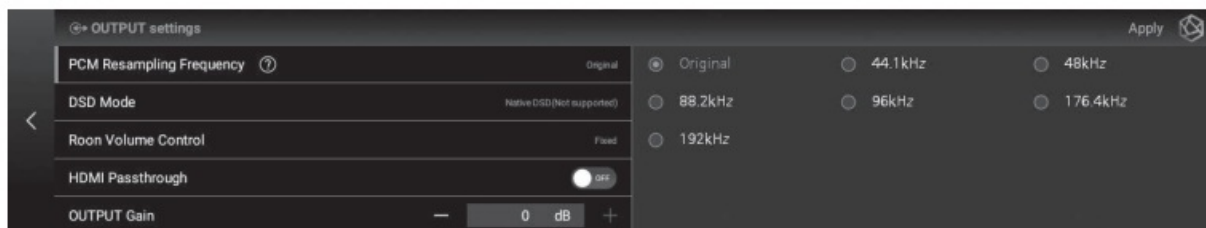

HDMI

- You can set up HDMI.

- When you select the setting icon for the HDMI, the HDMI Setting screen appears as shown below.

PCM Resampling Frequency

- This is the menu to set the Sampling Frequency. Select Original Sampling Rate if you want to output the original sound or select the desired sampling rate (44.1kHz, 48kHz, 88.2kHz, 96kHz,176.4kHz, or 192kHz) to use the re-sampling function.

DSD Mode

- This is the menu to select the transmission format (Native, DOP, PCM) of audio samples to be delivered to the DAC when playing DSD music files. For HDMI output, only DSD to PCM is possible.
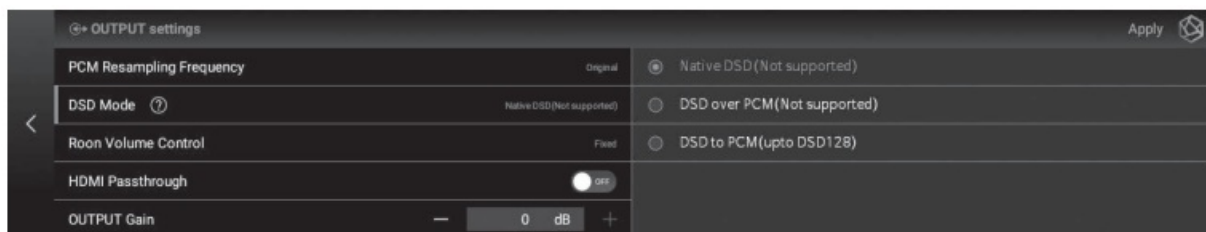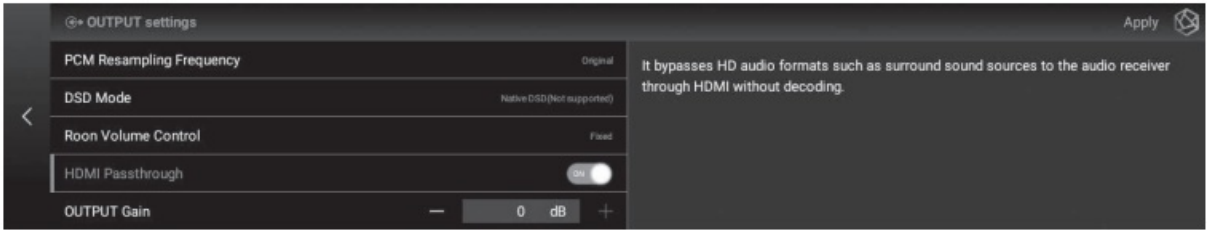

Roon Volume Control

- This is the menu to select the volume control method (Hardware, Software, Fixed) in RoonReady mode. For HDMI output, you can select "Software" or "Fixed".
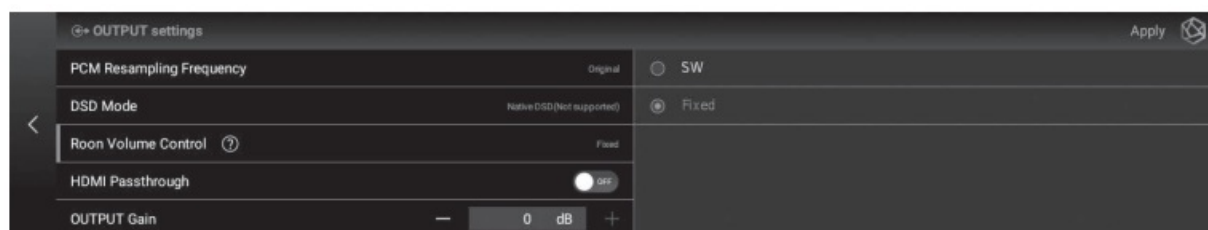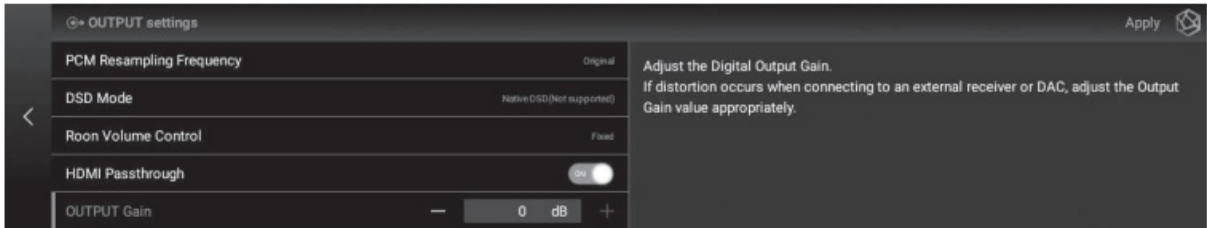

HDMI Passthrough

- When you activate it, HD audio formats such as surround music files bypass audio receiver via HDMI without

decoding.

OUTPUT Gain

- This is the menu to adjust the gain value of digital output. If distortion occurs when connecting with an external receiver or DAC, adjust the Output Gain value accordingly.


Digital

- You can set AES/EBU OUT, I2S OUT(RJ45), I2S OUT(DVI), OPT OUT, and COAX OUT.

- If you select the Digital setting icon, the Digital output setting screen appears as follows.
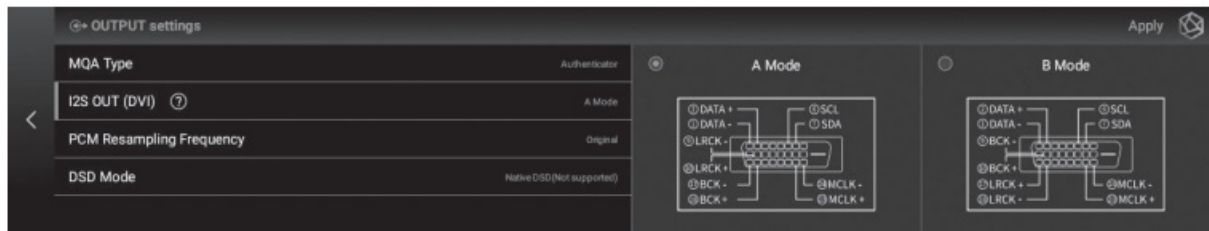
MQA Type

- This is the menu to set the MQA playback mode. You can select Authenticator or Decoder mode.
  Only original sound or decoded audio data can be exported to digital output; full-decoded audio data cannot be exported.
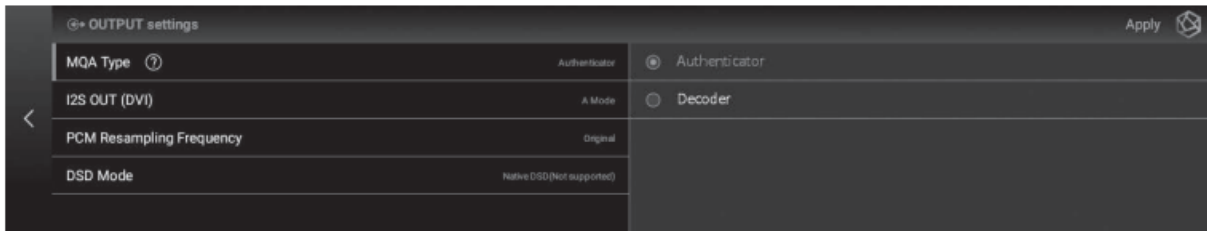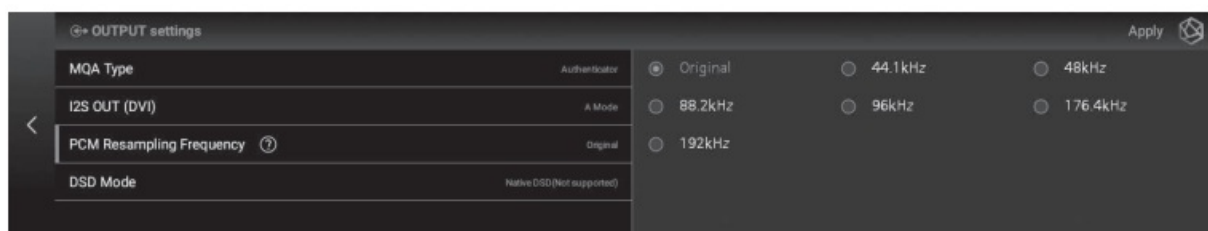

I2S OUT(DVI)

- This is the menu to set the I2S signal output. Select the appropriate mode for the I2S input port you are using

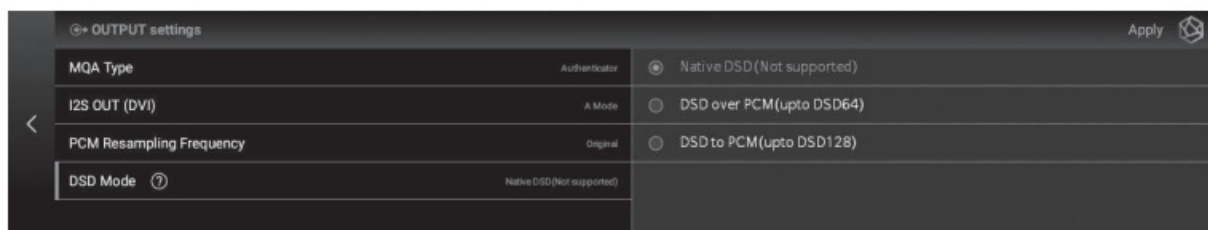by referring to the pin layout of A and B mode.

PCM Resampling Frequency

- This is the menu to set the sampling frequency. Select Original Sampling Rate if you want to output the original sound or select the desired sampling rate (44.1kHz, 48kHz, 88.2kHz, 96kHz,176.4kHz, or 192kHz) to use the re-sampling function.

DSD Mode

- Select the transmission format (Native, DOP, PCM) of audio samples to be delivered to the DAC when playing DSD music files.
- In Native mode, analog output supports up to DSD512 when playing DSD, but digital output does not produce sound.
- In the case of DOP mode, no sound is produced through analog output, and audio data is transmitted up to DSD256 through digital output. For Optical and COAX, it supports up to DSD64.
- The DSD to PCM mode supports up to DSD128 and sounds simultaneously from digital and analog outputs.
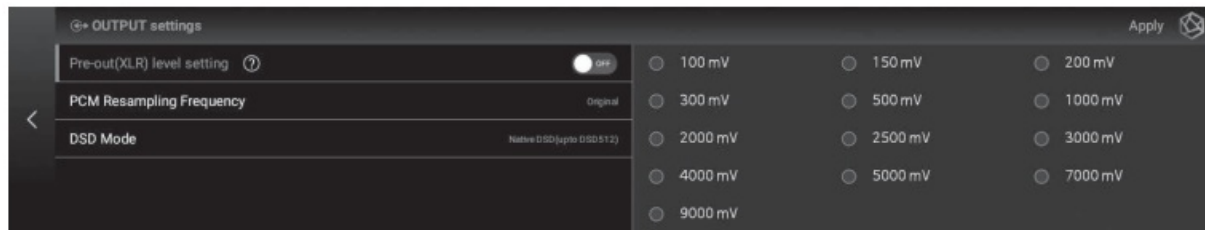

Analog

- You can set the Analog Out.

- If you select the Analog setting icon, the Analog output setting screen appears as follows.
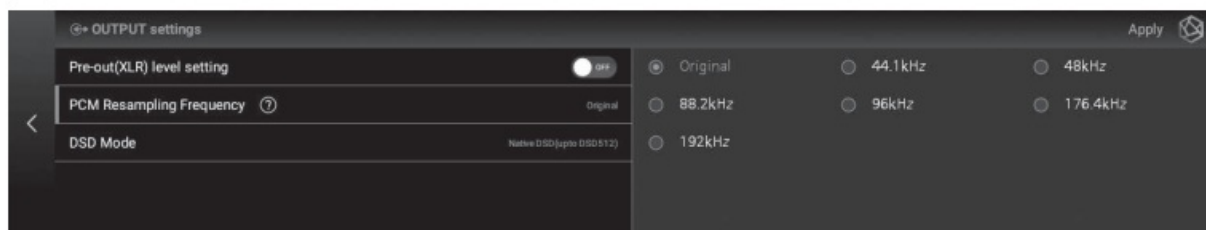
Pre-Out Level Settings
This is the menu to fix the pre-output level. The output level of this product can be fixed with the input value within the allowable range of the connected AMP without using the volume control of this product.
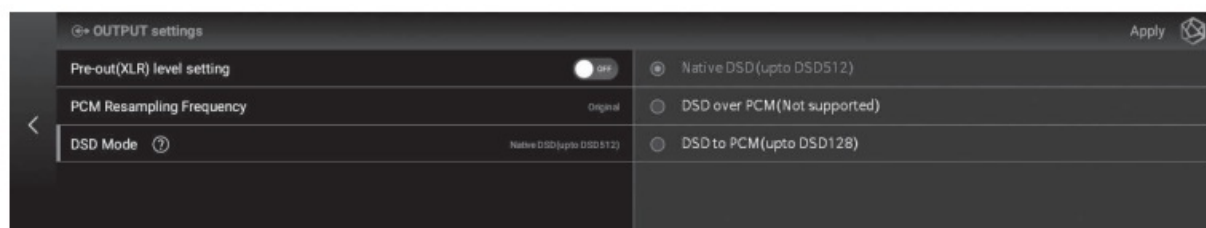

PCM Resampling Frequency

- This is the menu to set the Sampling Frequency.
- Select Original Sampling Rate if you want to output the original sound or select the desired sampling rate (44.1kHz, 48kHz, 88.2kHz, 96kHz, 176.4kHz, or 192kHz) to use the re-sampling function.

DSD Mode

- Select the transmission format (Native, DOP, PCM) of audio samples to be delivered to the DAC when playing DSD music files.
- In Native mode, analog output supports up to DSD512 when playing DSD, but digital output does not produce sound.
- In the case of DOP mode, no sound is produced through analog output, and audio data is transmitted up to DSD256 through digital output. For Optical and COAX, it supports up to DSD64.
- The DSD to PCM mode supports up to DSD128 and sounds simultaneously from digital and analog outputs.

Playback

Default Playback

- You can play music and video files by connecting a USB storage device to a USB port on the rear of this

product.

- SATA HDD/SSD can be installed at the bottom of this product. ※ Thickness: 2.5inch / 7mm
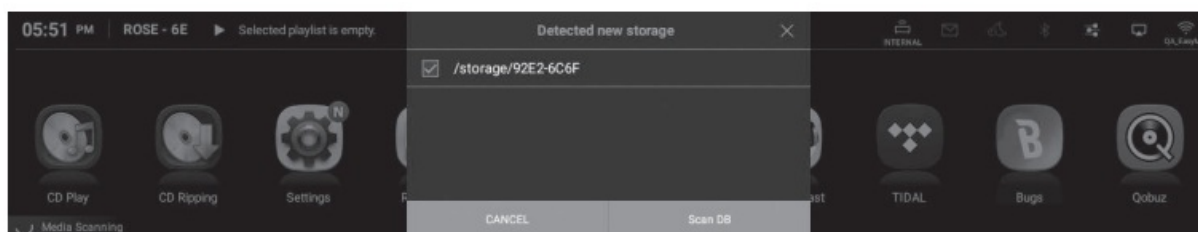- You can play files on the storage device by entering the "Music/Video" – "Folder" tab.
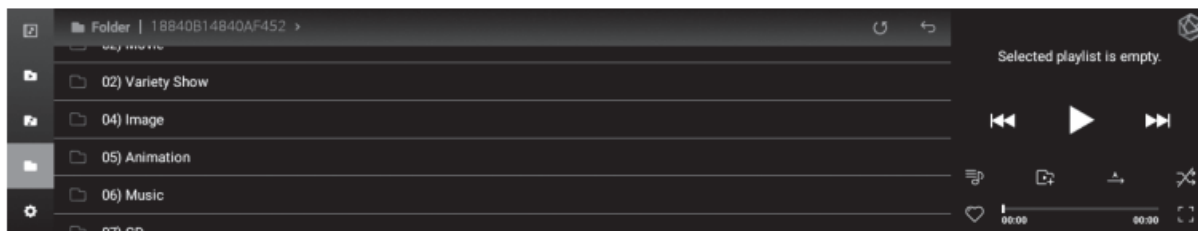

Media Library

- You can save the music in storage media or network shared folder as a database (DB) by scanning the media.

**Activate Media Scanning**

- When you connect a new storage device to a USB port on the rear of the device, a new storage detection pop-up appears.

- When you select the "Scan DB" button in the new storage pop-up, media scanning starts from the connected storage device. (Depending on storage capacity, media scanning time may vary.)
- During DB scanning, the "Media Scanning" loading image is displayed at the bottom left of the main screen of this product.
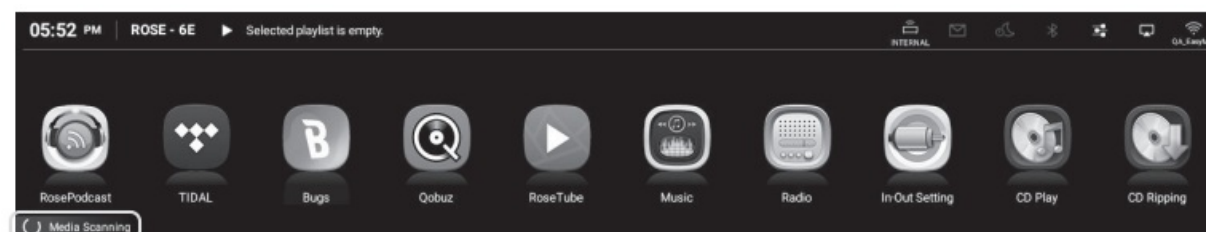
- After the DB scanning is complete, the album art and list of music and videos are displayed, and you can play the music.
- You can also add, research, and delete DB through the Music/Video and Settings menu.
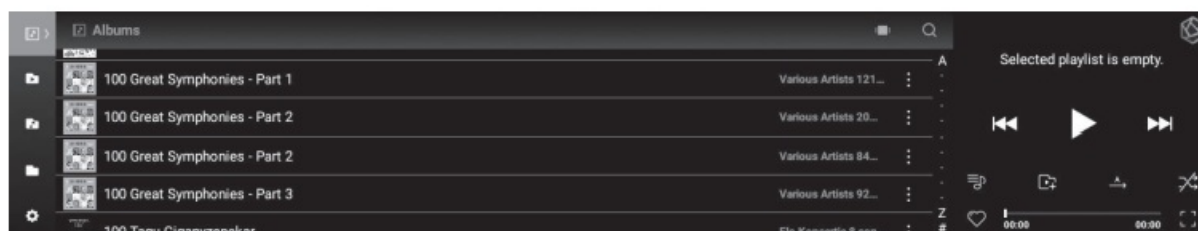
After Media Scanning

- The album list is displayed in the form of album art, and you can play the entire list in the album.
- You can sort and play music by album, artist, genre, and composer.
- You can search for music by artist and album name.
- You can save your favorite music and albums using the Playlist and Favorite features.
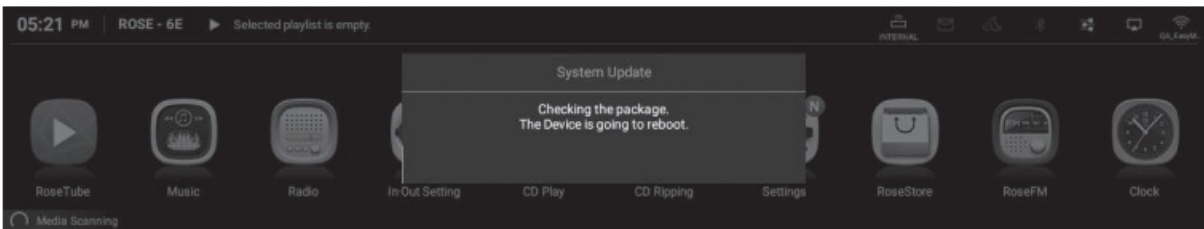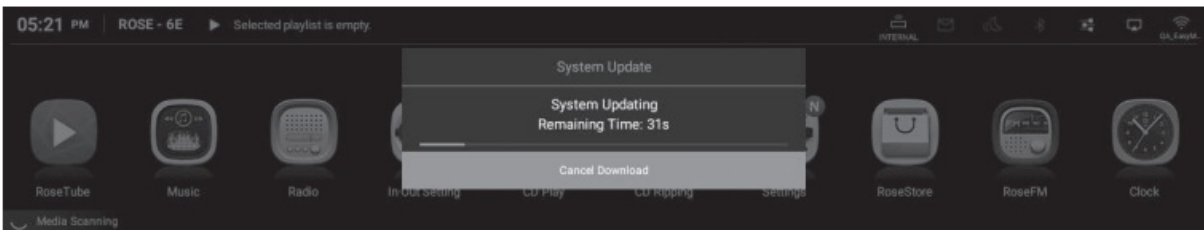
Supplementary Information

Firmware Update

Run OTA Update

- The system update pop-up appears if the latest version of the update is available while the network is connected.

- If you select the "Yes" button in the system update pop-up, the OTA update is in progress.
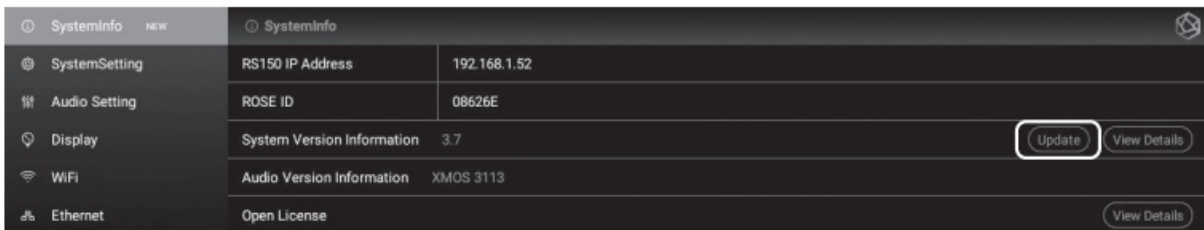

- After rebooting, the SW system update is complete.

Caution: Never remove the power as it may cause problems if you forcibly remove the power during the update.

Update Via Settings Menu

- If a newer version update is available, the "Update" button is displayed in the system version information in the Settings menu.

- If you select the update button, the system update pop-up is displayed.

- If you select the "Yes" button in the system update pop-up, the OTA update is in progress.
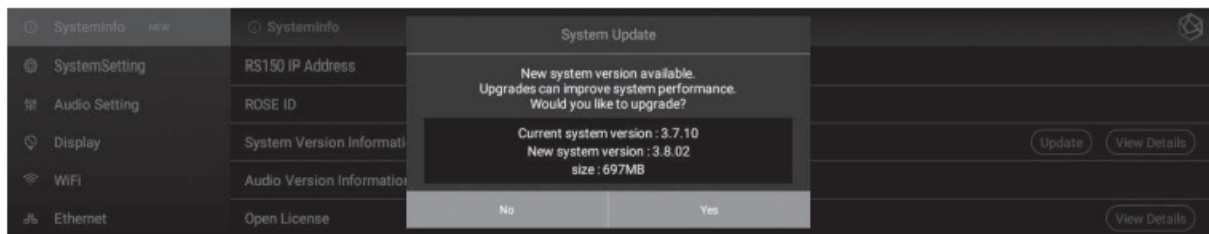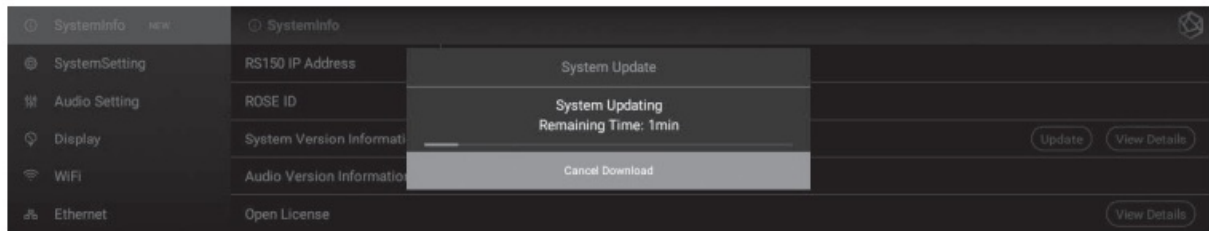

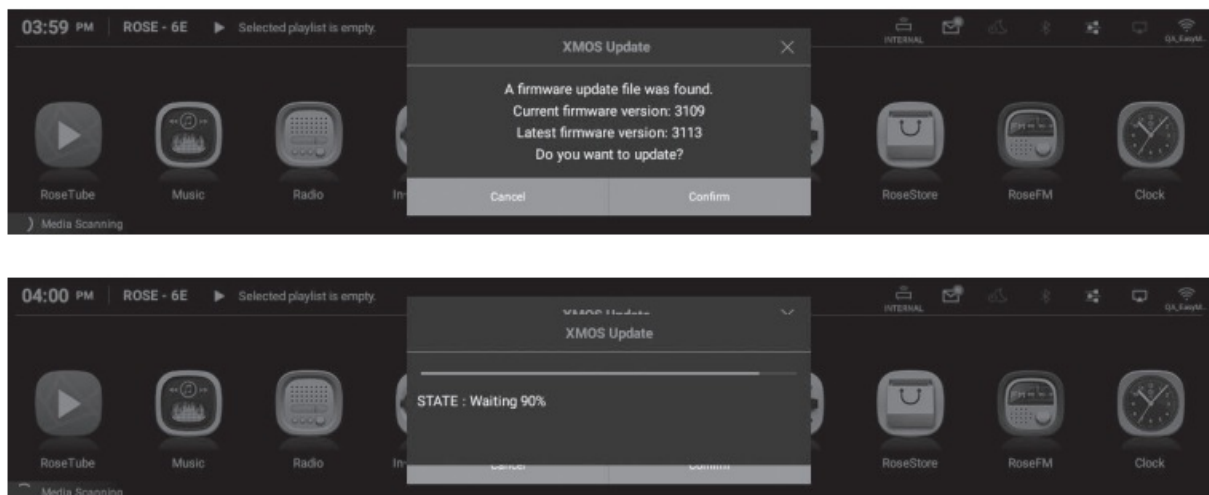- After rebooting, the SW system update is complete.

Caution: Never remove the power as it may cause problems if you forcibly remove the power during the update.

How to Install the Firmware When the XMOS/MCU Update Pop-Up Occurs

- If a firmware update is available after the system update, the update window will automatically appear and you can proceed with the firmware update.
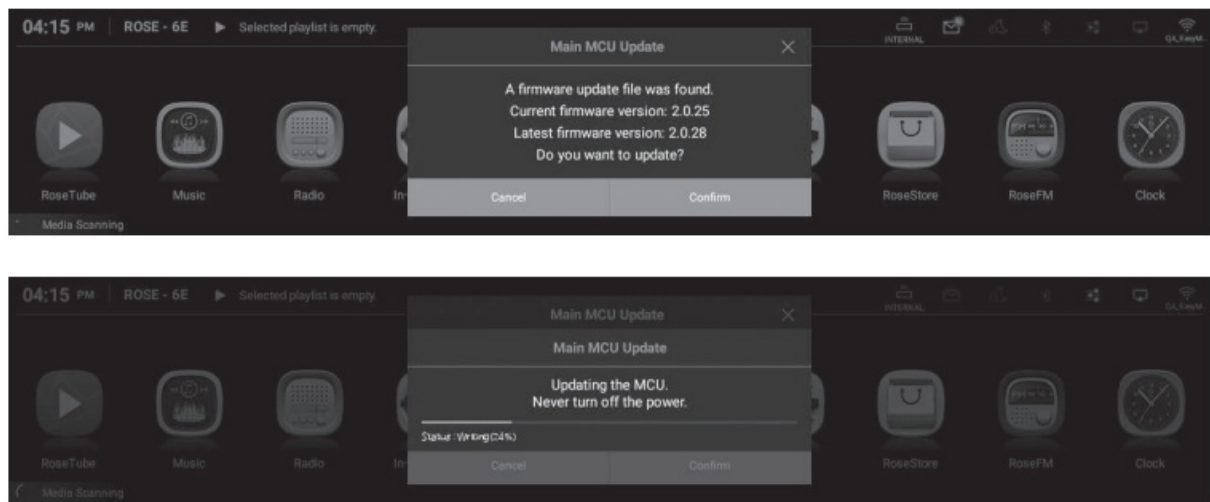- Updates can occur in the following cases.

If there is only an XMOS update

- The device automatically reboots after executing the XMOS update.

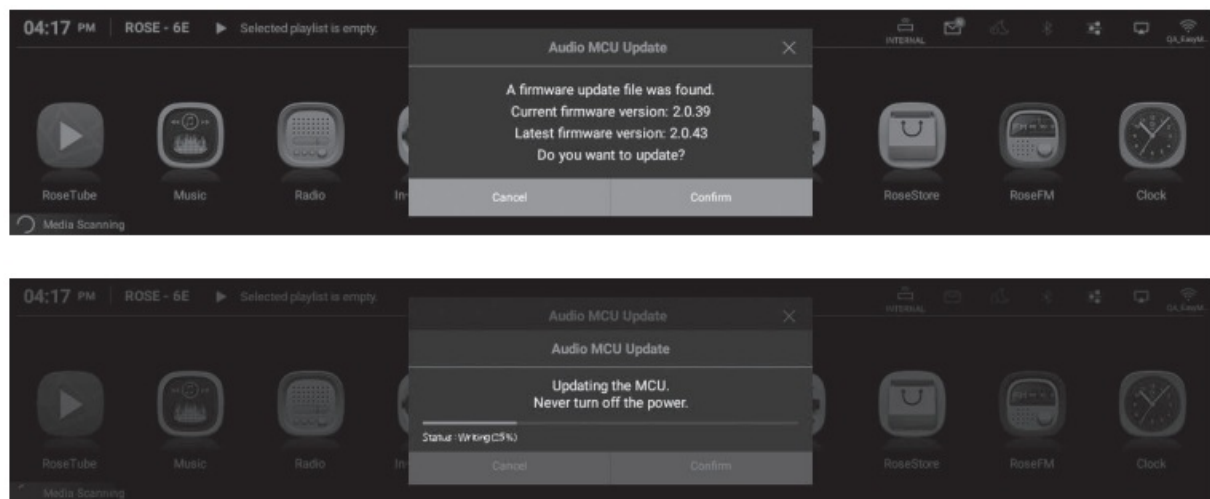**If there is only a Main MCU update**

- The device automatically reboots after executing the Main MCU update.

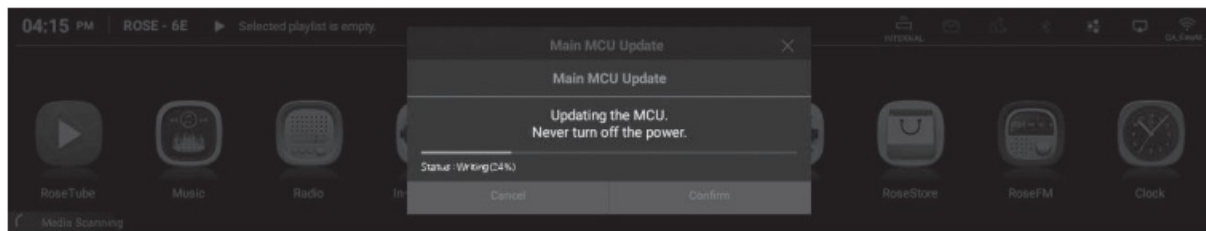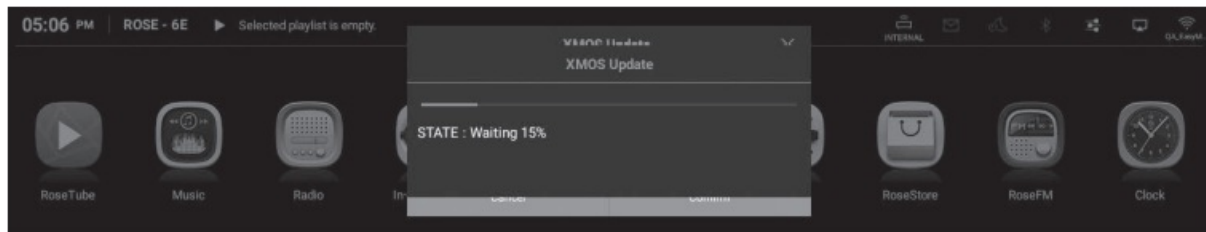**If there is only an Audio MCU update**

- The device automatically reboots after executing the Audio MCU update.

If there is XMOS update and Main MCU update

- The device automatically reboots after executing the XMOS update and the Main MCU update.

Caution: Never remove the power as it may cause problems if you forcibly remove the power during the update.

If there is XMOS update and Audio MCU update

- The device automatically reboots after executing the XMOS update and the Audio MCU update.

Caution: Never remove the power as it may cause problems if you forcibly remove the power during the update.

If there is XMOS update and Main/Audio MCU update

- The device automatically reboots after executing the XMOS update and the Main MCU update.
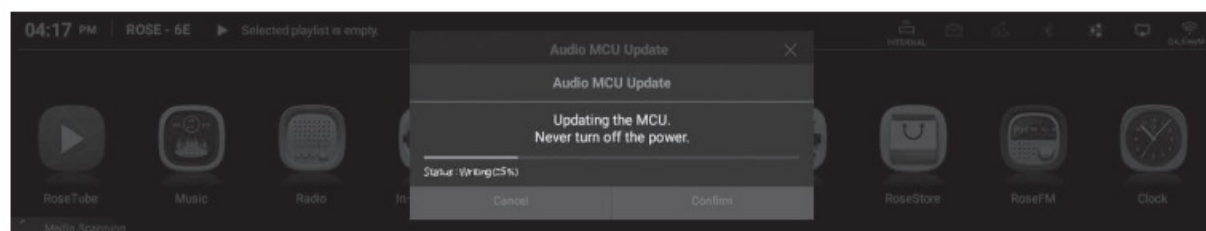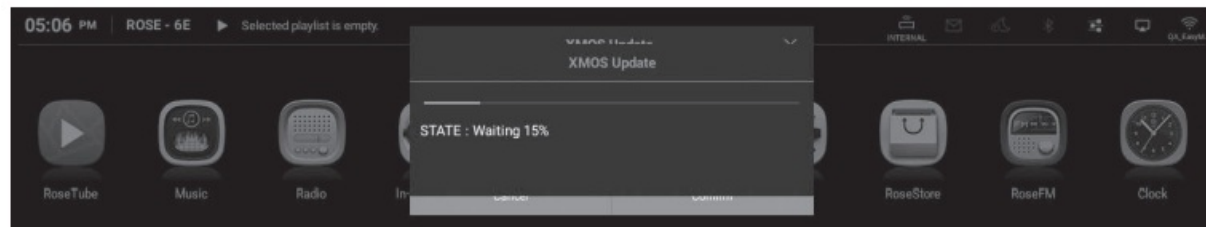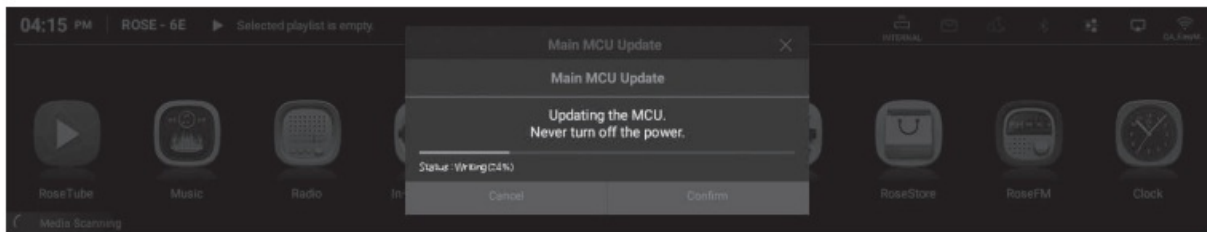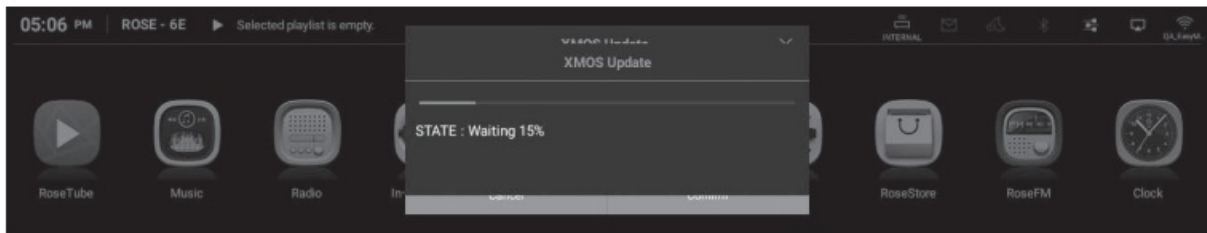
- Afterwards, the device automatically reboots after executing the Audio MCU update.
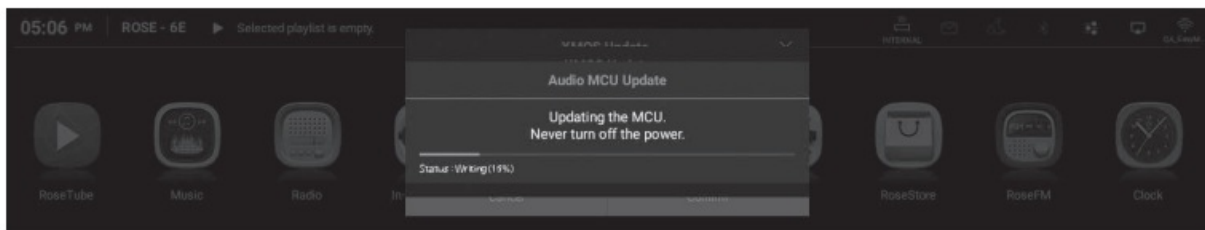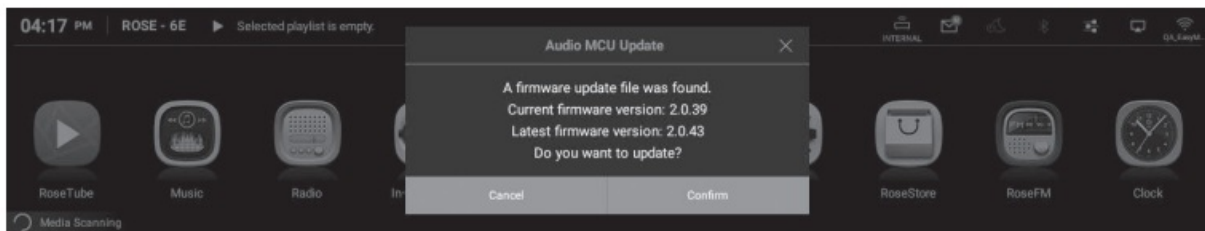
Caution: Never remove the power as it may cause problems if you forcibly remove the power during the update.

Factory Reset

- Factory reset is recommended when this product does not work or firmware update via Internet fails. Upon factory reset, all custom settings including DB Scan data, settings and storage data for each app, apps installed through ROSE Store, WiFi network settings, shared files, and saved playlists are reset. Reset is required after factory reset.
- This product can be reset or restored to default settings.
- You can return the system to the default settings in the "Settings – System Settings – Factory Reset" menu option.

Product Specifications

Specifications

Part		Specifications
Display		14.9inch Wide HD IPS Touch Screen LCD
OS		Customized Android 7.1 based Rose OS
Size		430(W) x 300(D) x 110(H) mm (Including feet: 430(W) x 300(D) x 123(H) mm)
Weight		11 kg
Power		Input Voltage: AC100-230V 50/60Hz Input Power: 55W
Audio	Supported Codec	WAV, FLAC, ALAC, AIFF, WMA, MP3, OGG, APE, DFF, DSF, AAC, CDA, AMR, APE, EC3, E-EC3, MID, MPL, MP2, MPC, MPGA, M4A
	Supported Sampling Rate	PCM: 8kHz~768kHz(8/16/24/32bit per Sample) DSD: DSD64(2.8MHz)/DSD128(5.6MHz)/DSD256(11.2MHz)/DSD512(22.5792MHz)
	MQA	Full Decoding
Video	Supported Codec	ASF, AVI, MKV, MP4, WMV, MPEG-1, MPEG-2, MPEG-4 H.263, H.264, H.265, VC-1, VP9, VP8, MVC,H.264/AVC (Base/Main/High/High10 profile@level5.1 upto 4Kx2K@30fps) H.265/HEVC (Main/Main10 profile@ level 5.1 High-tier upto 4Kx2K@60fps)
H/W	CPU	Hexa Core Dual-core Cortex-A72 up to 1.8GHz Quad-core Cortex-A53 up to 1.4GHz
	Memory	LPDDR3 4GB
	GPU	Mali-T864 GPU, OpenGL ES 1.1/2.0/3.0/3.1, OenVG1.1, OpenCL, DX11
	DAC	ES9038 PRO(ESS)
	Oscillator	High Precision Femto Clock
Preout	Output Level	2.2Vrms(Unbalanced), 6.5Vrms(Balanced)
	THD	0.0001%(Balanced, 1kHz 6.6Vrms), 0.0002%(Unbalanced, 1kHz 2.2Vrms)
	THD + N	-112dB(Balanced, 1kHz 6.6Vrms), -110dB(Unbalanced, 1kHz 2.2Vrms)
	IMD	103dB(Unbalanced), 103dB(Balanced), SMPTE 4:1, 60Hz:7kHz
	Signal to Noise Ratio	119dB(Unbalanced), 121dB(Balanced), A-wt
	Dynamic Range	Max 130dB(CCITT filter)
	Stereo Crosstalk	Max -138dB, 20-20kHz
	Output Frequency Response	20Hz to 20,000(+/-0.5dB)
	Output Impedance	50Ω

Part		Specifications
Network Connectivity	Bluetooth	External USB BT/WiFi Dongle supported. (A2DP Sink, AVRCP v1.3)
	WiFi	External USB Type WiFi Dongle supported
	Ethernet	10/100/1000 BASE-T(1Port)
I/O Port	Digital In	OPT x 1, COAX x 1, AES/EBU x 1, HDMI ARC x 1, USB Audio x 1
	Digital Out	OPT x 1, COAX x 1, AES/EBU x 1, I2S-DVI x 1, I2S-RJ45 x 1
	Analog In	LINE-In x 1
	Analog Out	Pre-out (Full-balanced XLR x 1, Unbalanced RCA x 1)
	USB Audio In	USB B Type 2.0
	USB Audio Out	USB A Type 3.0
	HDMI	HDMI 2.0 x 1(up to 3840 x 2160 / 60Hz)
	USB	USB 3.0 x 2, USB C Type x 1(Only for service), USB WiFi/BT Dongle
	Micro SD	Micro SD x 1
	SSD	SATA 3.0, SSD x 1(NTFS, Supported protocol - FTP/WebDav)
Storage	SATA	4TB
	USB	10TB
	MicroSD	400GB
	File System	NTFS / exFAT / FAT32
Connectivity	Roon Ready	Support
	Spotify Connect	Support
	Streaming Protocol	Airplay / DLNA Service / Bluetooth
	Network Storage	SMB / FTP / WebDav
CD Ripping		Support(By external USB CD Drive)

Quality Guaranteed

Model Name	RS150B
PDuarctehaosfe	Y Y Y Y / M M / D D
PPularccheaosfe	Name of Store
	Telephone
Serial No.	
Telephone	
GTuearrmanotefe	1 year from the date of purchase

- Name of the Company that Received the Conformity Assessment: Citech Co., Ltd.
- Manufacturer / Country of Manufacturer: CI Tech Co., Ltd. / Republic of Korea
- Identification Code of the Certified Company: SYH
- Certification No.: R-R-SYH-RS150, XA090073-20001

Things to Check Before Contacting a Service Center

- Please restart the product if touch does not work or if the screen freezes. Press and hold the power button for more than 5 seconds to force a reboot.
- In small spaces that are not suitable for product installation conditions (p. 17), heat can cause the product and affect the life and performance of the product.
- When the device is connected to the Internet, the sound may be cut off during playback if the radio wave is unstable or weak, or if the Internet usage is heavy, and the wireless Internet may also be delayed or not received due to the nature of wireless communication, so please move your device to another location and try to reconnect.
- Content-specific files are optimized according to product characteristics, design specifications, and business needs. Therefore, even with the same content, there may be differences in volume, tone, etc. with other manufacturers and other models.

Product Website: **www.hifirose.com**
• Subscribe to our newsletter to get the latest news, events and new products from ROSE.

Documents / Resources

HiFi ROSE RS201 Series High Performance Network Streamer [pdf] Owner's Manual
RS150B, RS201 Series, RS250, RS201 Series High Performance Network Streamer, RS201 Series, High Performance Network Streamer, Performance Network Streamer, Network Streamer, Streamer

References

- **Roon**
- **HiFi ROSE**
- **User Manual**