

MULTI-ROOM AUDIO STREAMER INSTALLATION MANUAL



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1. INTRODUCTION

Core Multi-Room Audio Streamer offers a seamless listening experience, enabling you to stream your favorite music, podcasts, radio stations, and more to different areas of your space with ease. Core Multi-Room Audio Streamer supports Spotify connect, Tidal connect, Airplay 2, Internet Radio Bluetooth and also comes with a rich selection of analog and digital inputs.

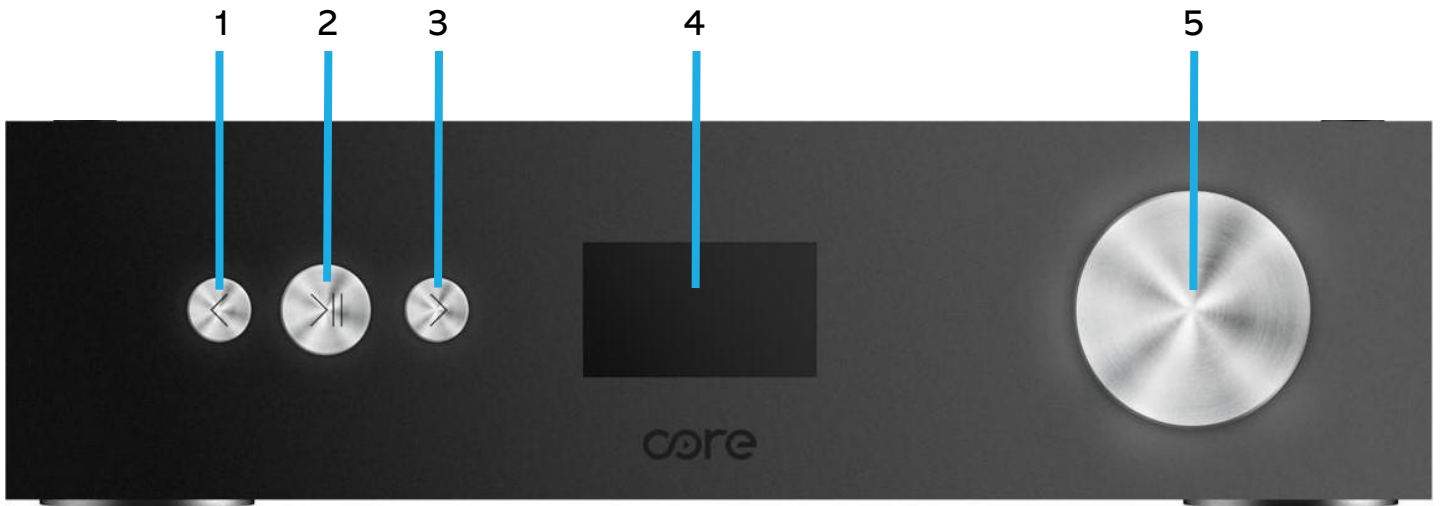
Multi-room audio solution integrates with Core's exclusive user interfaces and is embedded into the CoreOS operating system to provide seamless user experience.

2. TECHNICAL SPECIFICATIONS

	Core Streamer Single Zone Preamplifier	Core Streamer Single Zone Amplifier
Power:	12V (12W)	24-32V (100W)
Wifi:	2.4G & 5G	2.4G & 5G
Ethernet:	10/100 M	10/100 M
Analog Input:	Line In - RCA	Line In - RCA
Digital Input:	Optical	Optical
	HDMI ARC	HDMI ARC
	Coaxial	Coaxial
Analog Output:	Bluetooth RX	Bluetooth RX
	Line out	Subwoofer out
		Line out
Digital Output:	Coaxial	Coaxial
	Optical	Optical
Frequency Response:	20Hz - 20kHz	20Hz - 20kHz
Audio Decoding	16bits/44.1 kHz	16bits/44.1 kHz
Protocols:	Airplay2	Airplay2
	DLNA	DLNA
	UPnP	UPnP
	Spotify Connect	Spotify Connect
	Tidal Connect	Tidal Connect
Local Storage:	NAS	NAS
	USB	USB
Speaker Power:	No	2X50W @ 8ohm load at 32V
Trigger Out:	12V	12V
Bluetooth Antenna:	Yes	Yes
Wifi Antenna:	Yes	Yes
Control Buttons:	No	Play/Pause, Previous, Next
Display:	No	OLED Display
Rotary Switch:	No	Volume UP/Down, Mode

3. PRODUCT OVERVIEW

3.1 FRONT PANEL



1. **Previous Button**
2. **Play/Pause Button**
3. **Next Button**
4. **Display Panel:** Display the current source input and other info
5. **Knob:** Turn to change volume and press to change source input

3.2 BACK PANEL


1. **Wi-Fi Antenna**
2. **Speaker Terminals:** Used to connect speakers.
3. **Trigger Output:** Used to turn on or off an external amplifier with a 3.5 mm cable.
4. **Factory Reset Button:** Press and hold for 5 seconds to restore factory settings
5. **Subwoofer Out:** For active subwoofer connection
6. **Line Out:** Used to connect to external audio devices with a stereo RCA cable
7. **Coaxial Output:** Used to connect to external audio devices with a coaxial digital audio cable.
8. **Optical Output:** Used to connect to external audio devices with a digital optical cable
9. **HDMI ARC Input:** Used to connect TV
10. **Line Input:** Used to connect audio devices with a stereo RCA cable.
11. **Coaxial Input:** Used to connect audio devices with a coaxial digital audio cable.
12. **Optical Input:** Used to connect audio devices with a digital optical cable.
13. **LAN:** Used to connect this unit to a wired Ethernet network.
14. **USB Input:** Used to connect USB storage devices.
15. **Bluetooth Antenna**
16. **Power Input**

4. INSTALLATION

Install both antennas to the device.

 Please make sure the power is off before any connection.

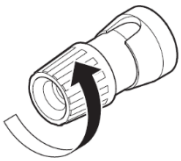
4.1 CONNECTING SPEAKERS

Be sure to connect the channels and polarities correctly.

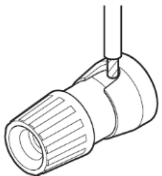
1. Peel off about 3/8 inch (10 mm) of sheathing from the tip of the speaker cable, then either twist the core wire tightly or terminate it.



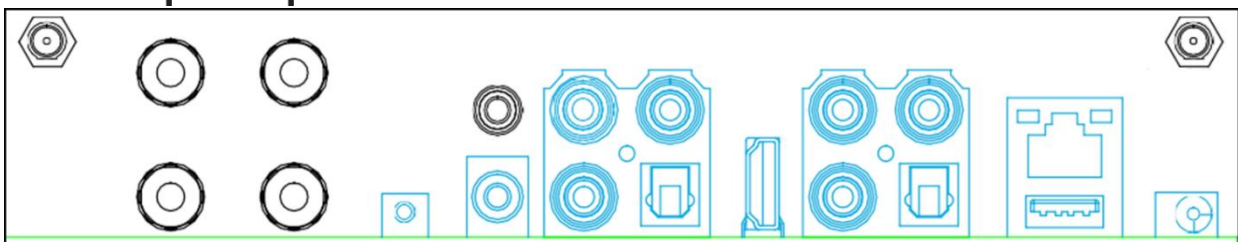
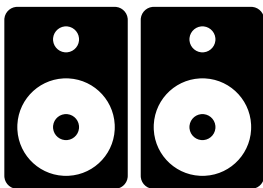
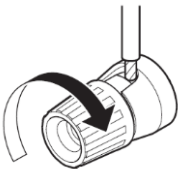
2. Turn the speaker terminal counterclockwise to loosen it.



3. Insert the speaker cable's core wire to the hilt into the speaker terminal.

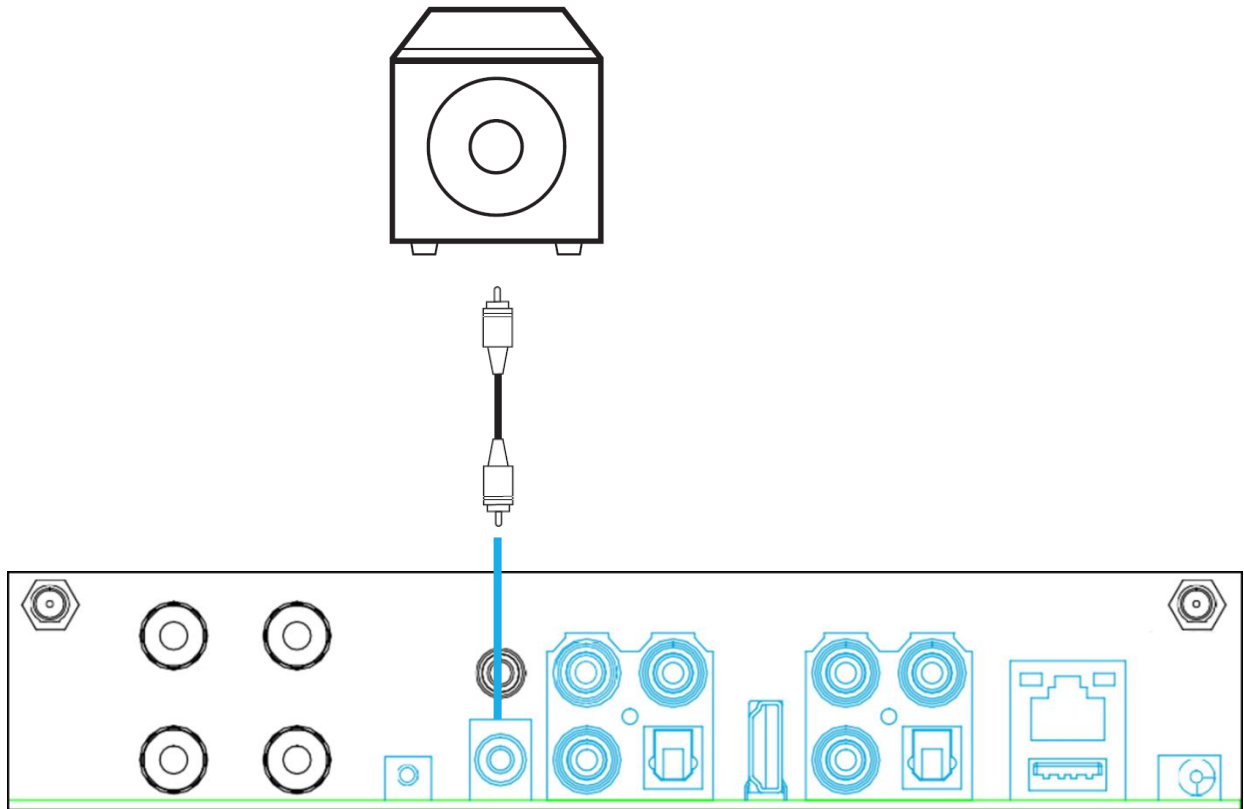


4. Turn the speaker terminal clockwise to tighten it.



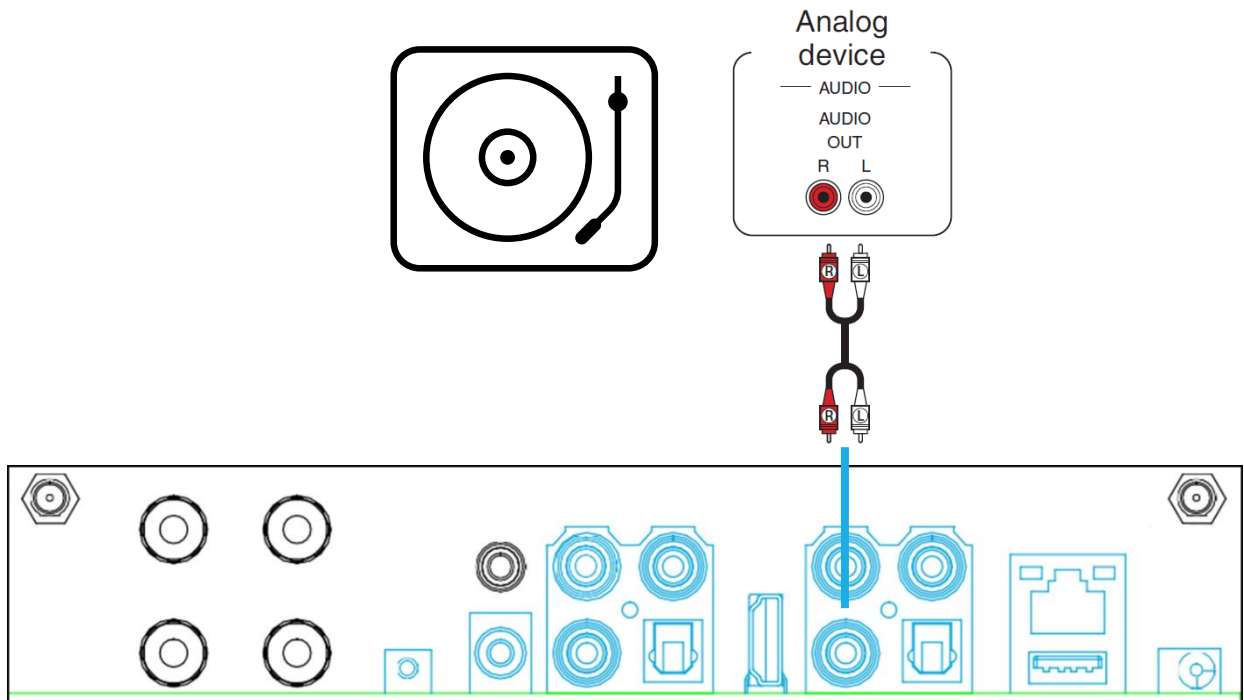
4.2 CONNECTING SUBWOOFER

Connect the Subwoofer output to an input on your powered subwoofer or your subwoofer amplifier.



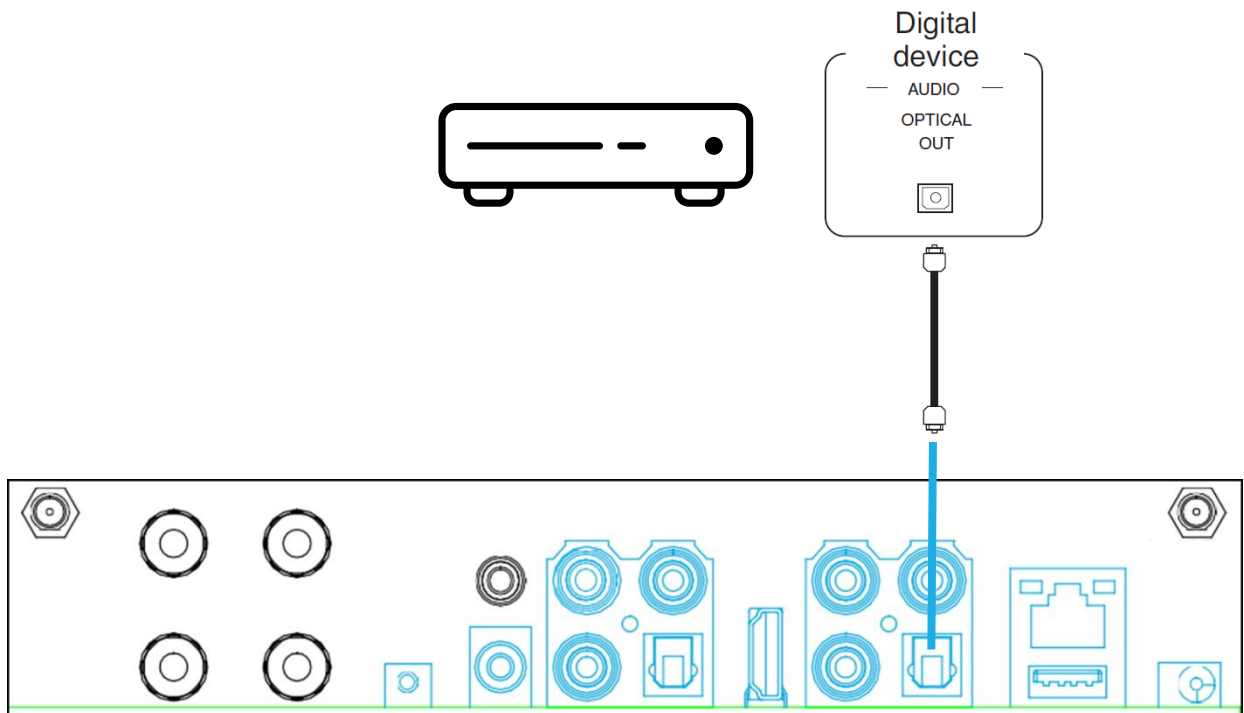
4.3 CONNECTING LINE IN

Connect any playback device with Audio out/Line out/AUX out to Line in using an RCA cable.



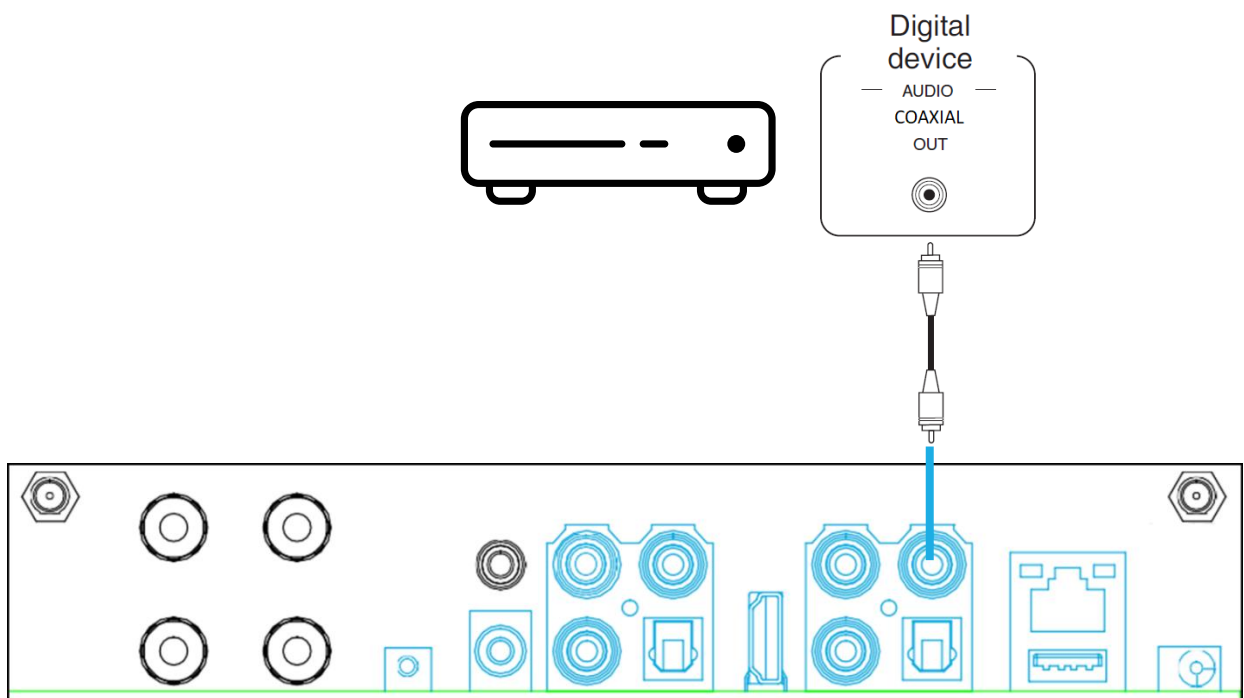
4.4 CONNECTING OPTICAL IN

Connect any playback device with Optical out to Optical in using an optical cable.



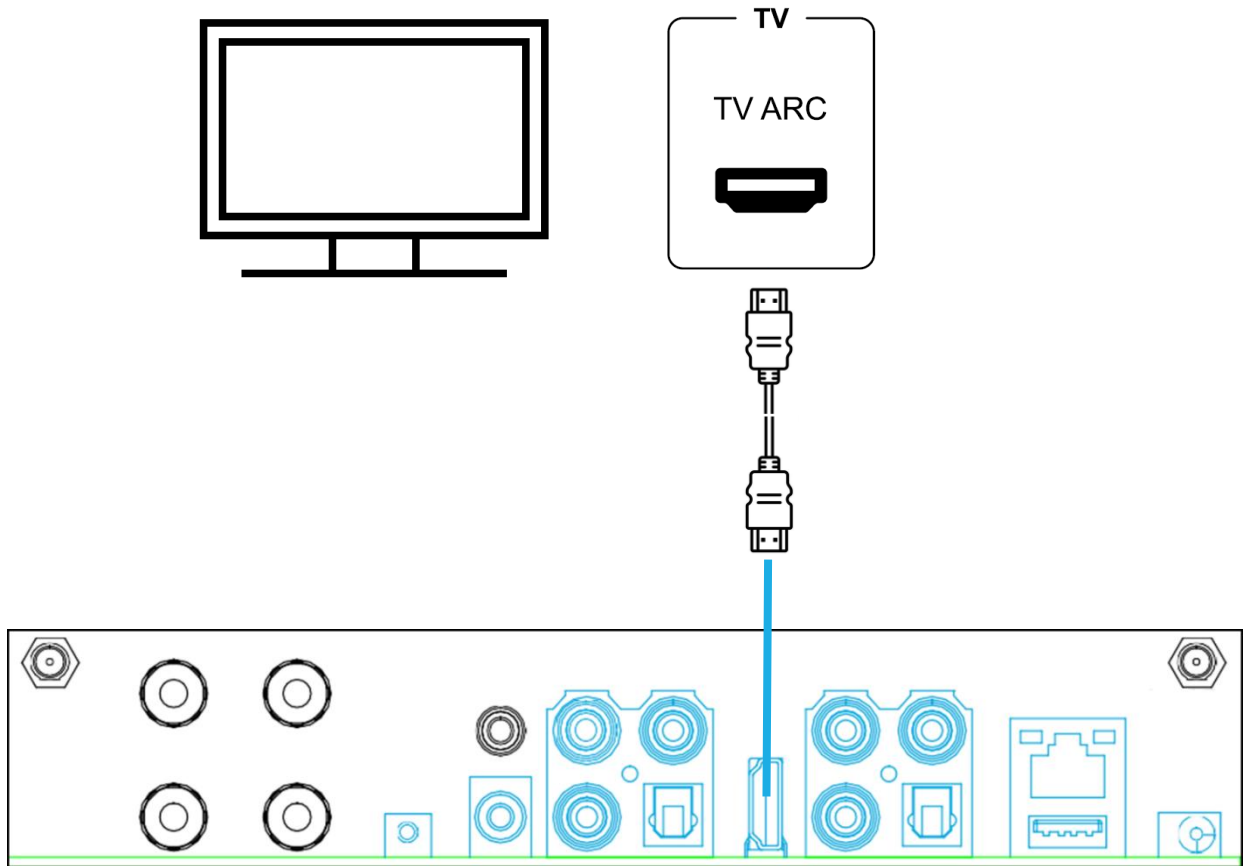
4.5 CONNECTING COAXIAL IN

Connect any playback device with Coaxial out to Coaxial in using a coaxial cable.



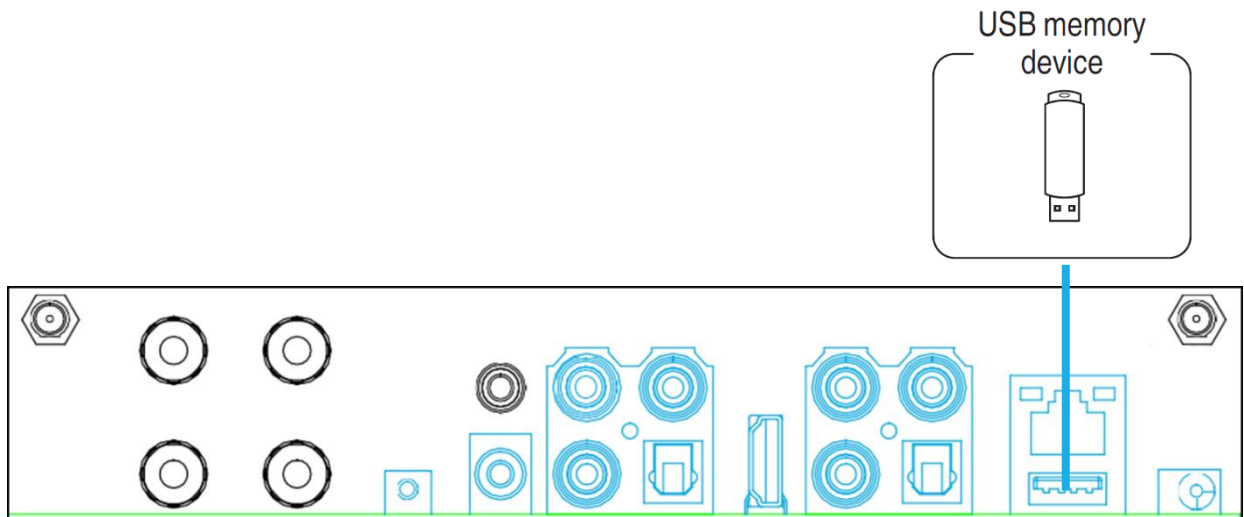
4.6 CONNECTING HDMI ARC IN

If TV has HDMI ARC port, there should be an ARC text beside. You can use a HDMI cable to connect it to the ARC port on the device.



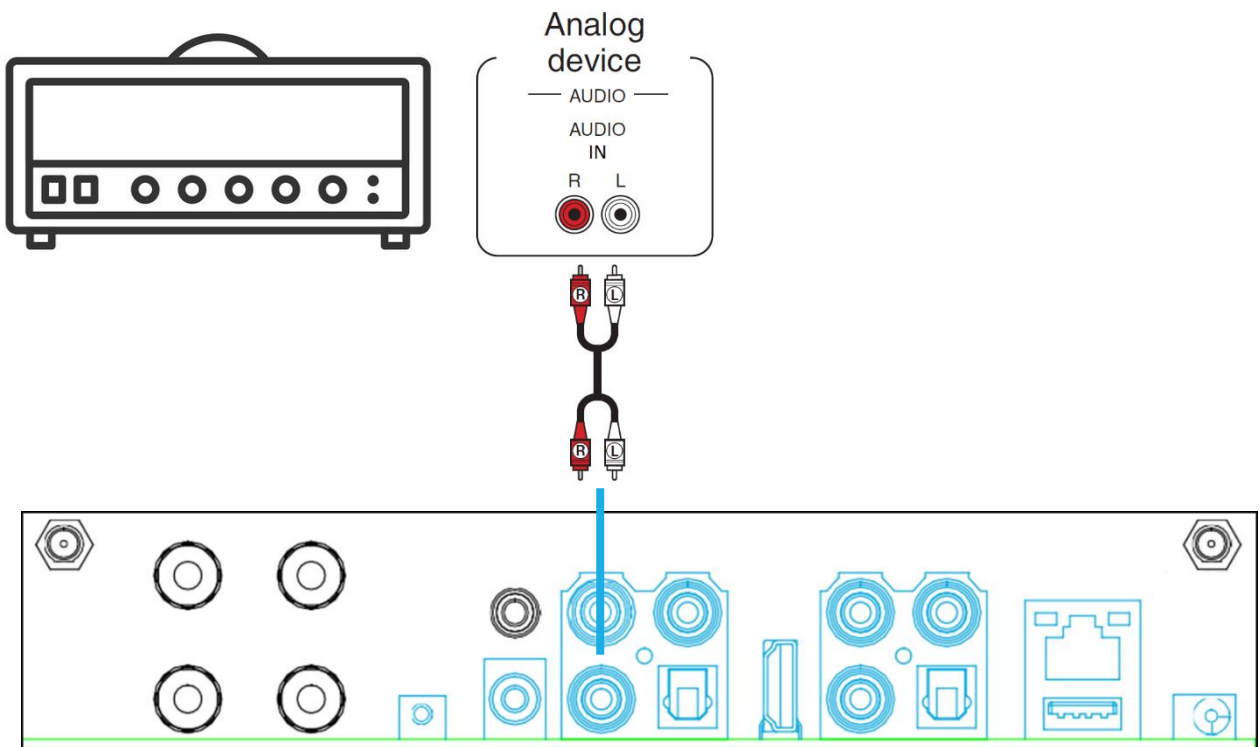
4.7 CONNECTING USB DISK DRIVE

Plug in a FAT32 or exFAT formatted USB mass storage device containing digital music files to USB port.



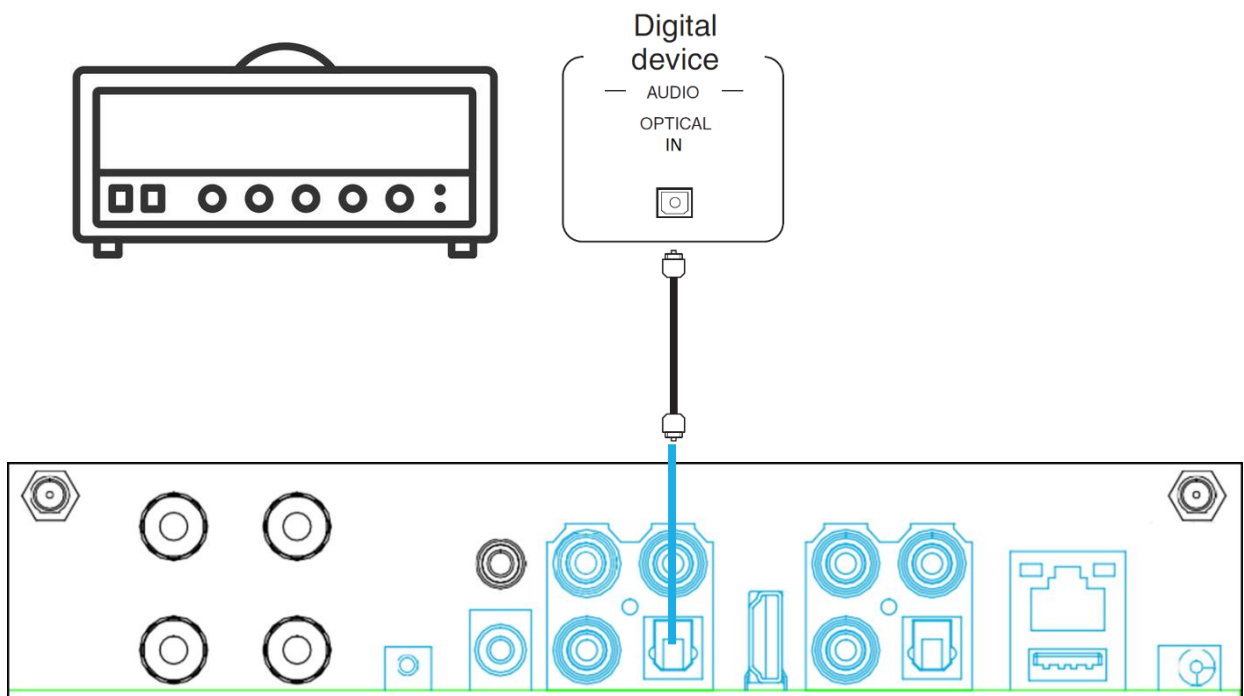
4.8 CONNECTING LINE OUT

Connect to any playback device with Audio in/Line in/AUX in using an RCA cable.



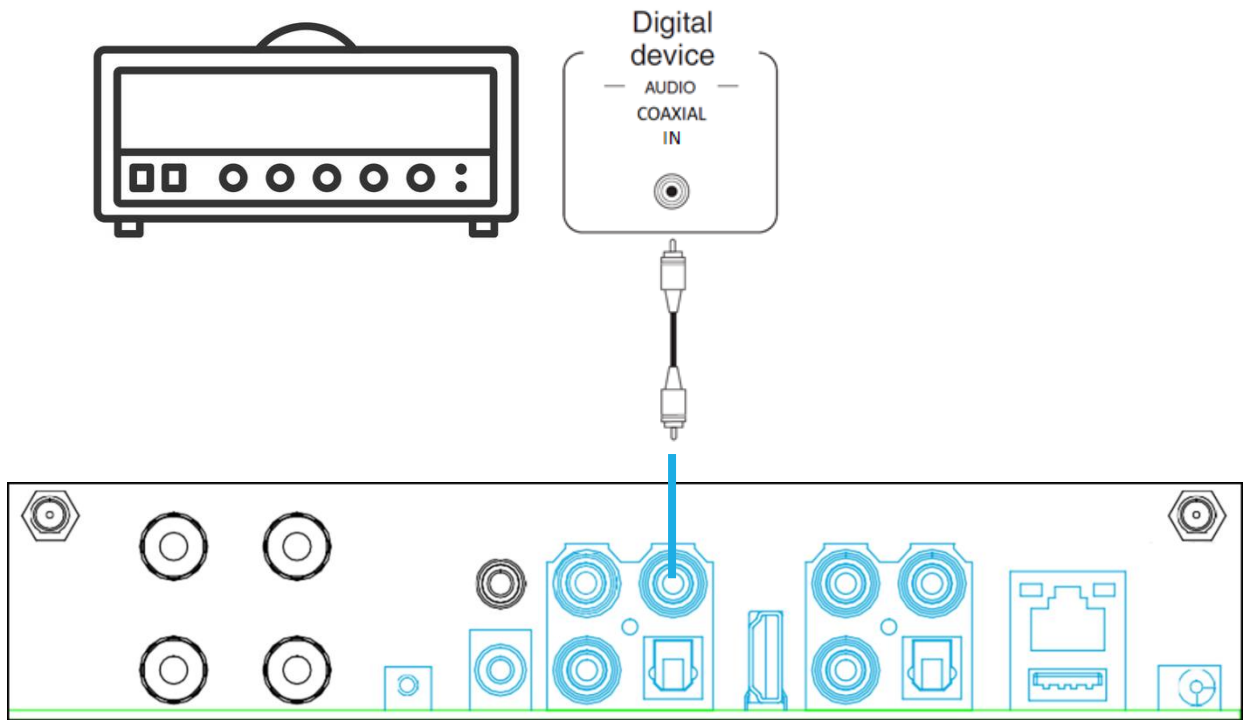
4.9 CONNECTING OPTICAL OUT

Connect to any playback device with Optical in using an optical cable.



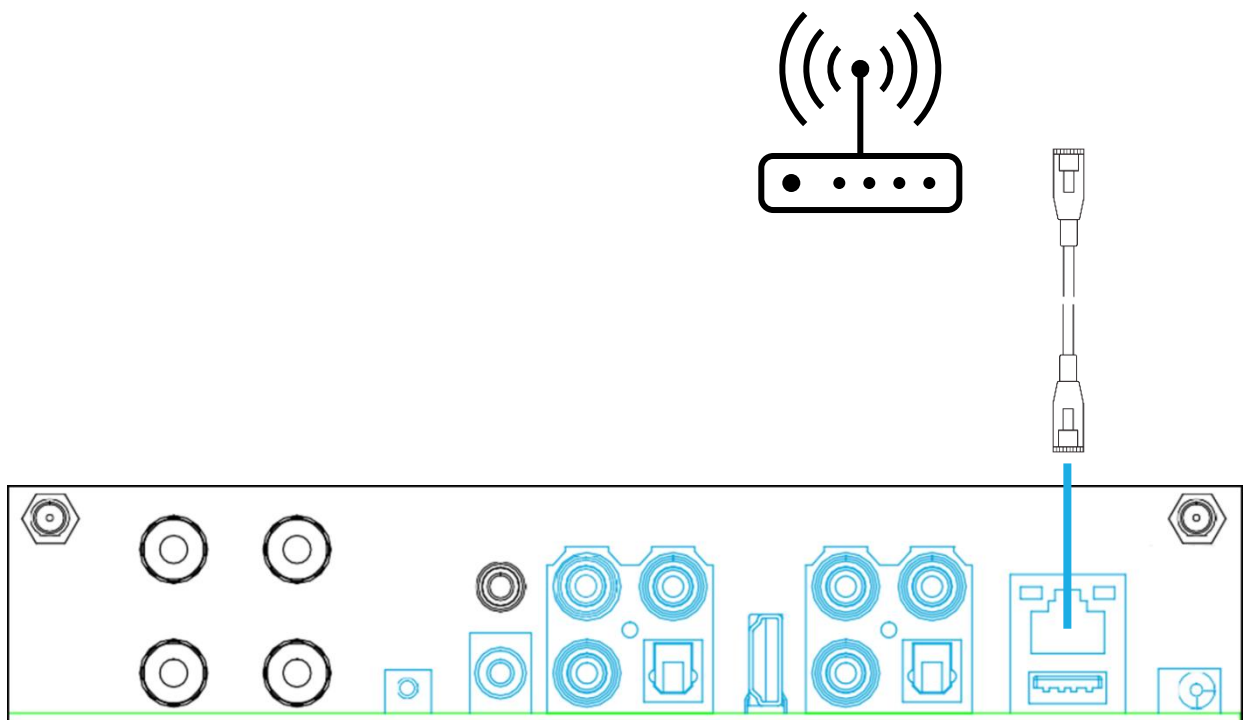
4.10 CONNECTING COAXIAL OUT

Connect to any playback device with Coaxial in using a coaxial cable.



4.11 CONNECTING WIRED ETHERNET NETWORK

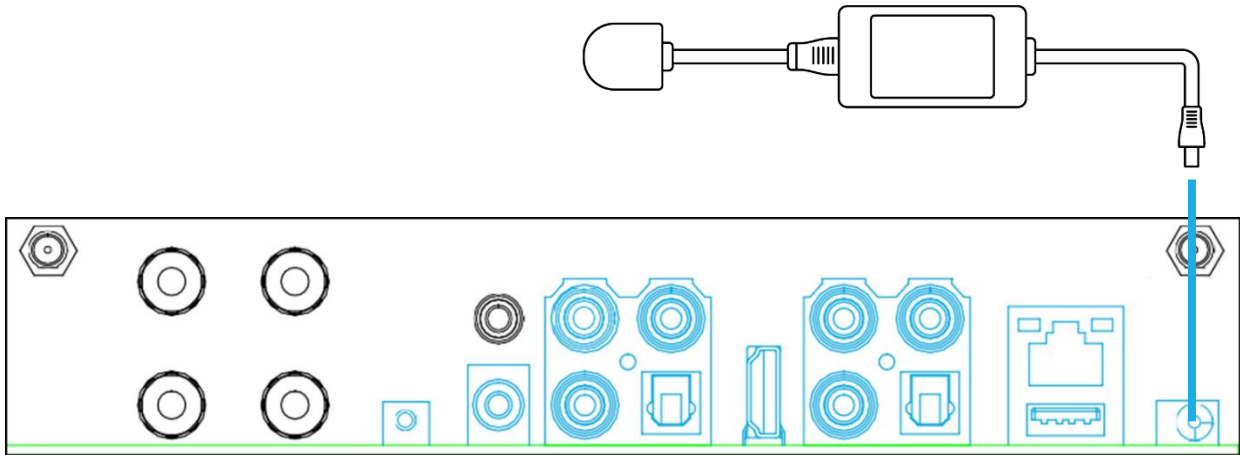
Connect wired ethernet network to a router. IP configuration is in DHCP mode by default.



4.12 CONNECTING POWER ADAPTOR

Plug in the power adaptor to power input.

 Please make sure all necessary connections are made.



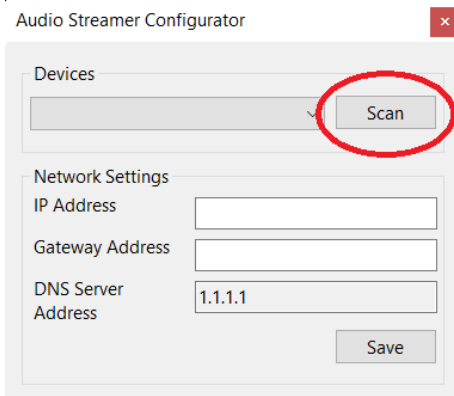
5. COREOS4 INTEGRATION

5.1 AUDIO STREAMER IP CONFIGURATION

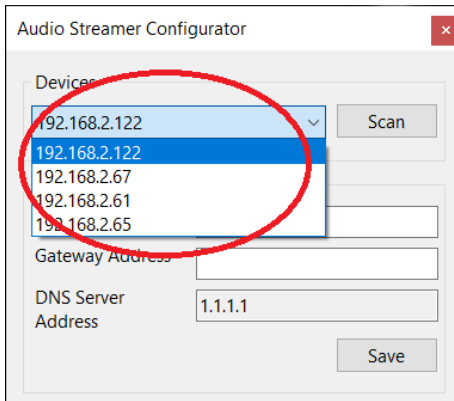
Audio streamer should have a static IP. A static IP can be assigned by using Core Audio Streamer Configurator Tool. Core Audio Streamer Configurator Tool can be downloaded at <https://core.com.tr/streamer/>

Steps for setting static IP:

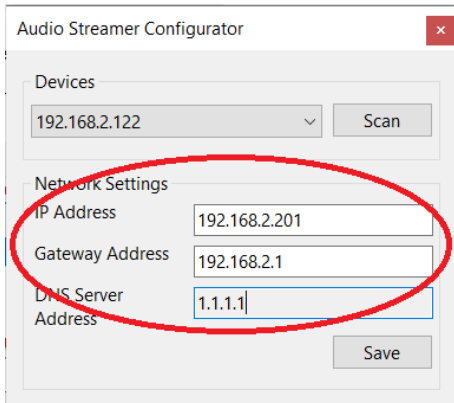
1. Connect your PC to the same network with Core Audio Streamer.
2. Open Core Audio Streamer Configurator Tool.
3. Click "Scan" button.



4. Audio Streamers on the network will be shown in the devices section.



5. Assign an available IP address for related Audio Streamer and click "Save" button.



5.2 COREOS4 CONFIGURATION

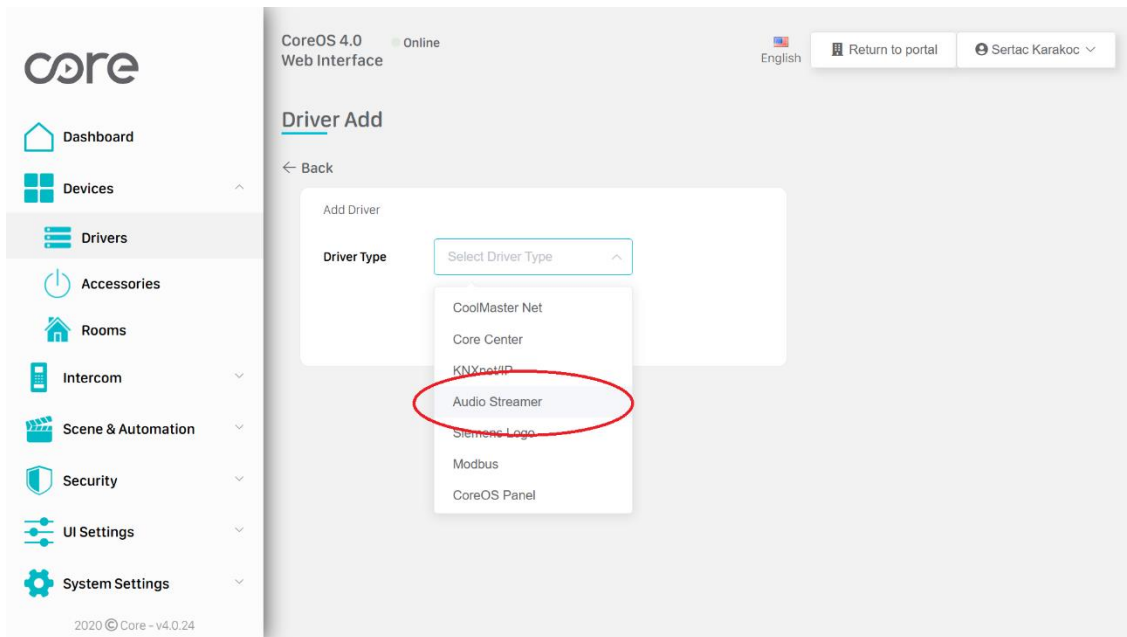
5.2.1 ADDING CORE AUDIO STREAMER

Follow the steps to add Core Audio Streamer into CoreOS4 Touch Panels:

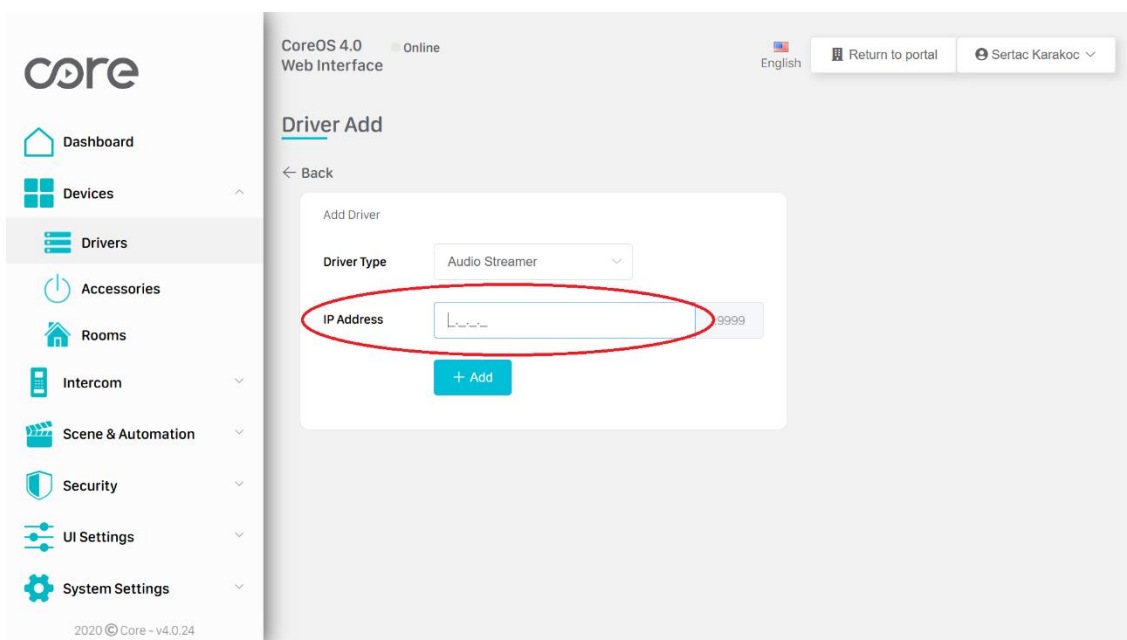
i Please see CoreOS4 Programming Manual for Touch Panel Configuration.

[CoreOS4 Programming Interface Manual](#)

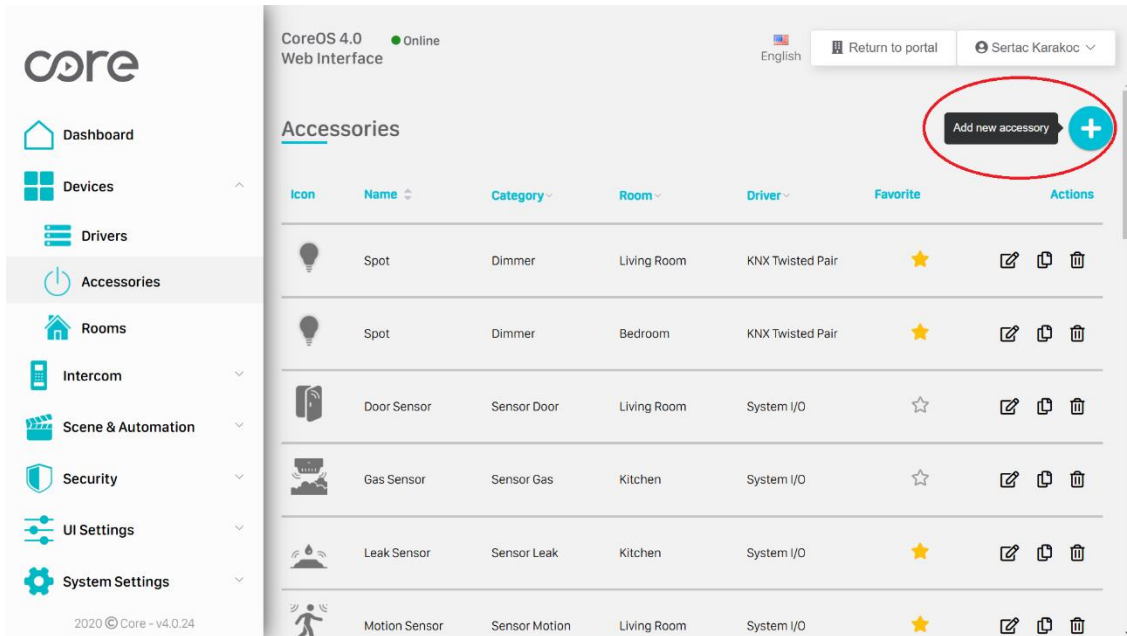
1. Connect to the web interface of Touch Panel.
2. Go to Devices > Drivers section
3. Click Add New Driver button
4. Select "Audio Streamer" for driver type



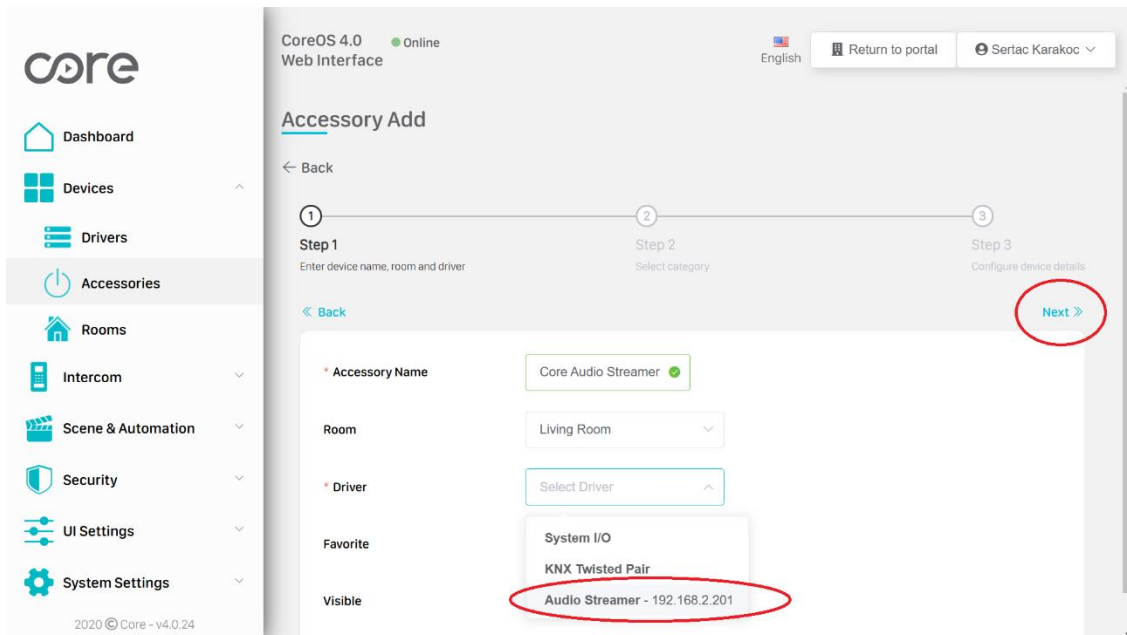
5. Enter IP address of Audio Streamer and click "Add" button



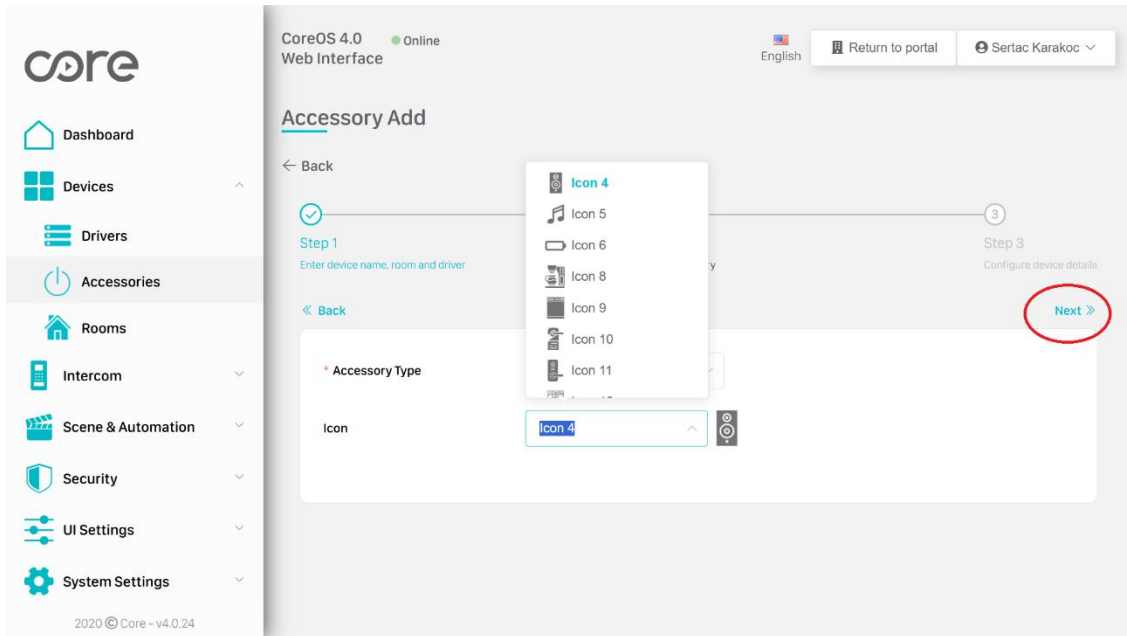
6. Now go to "Accessories" section and click "Add New Accessory" button.



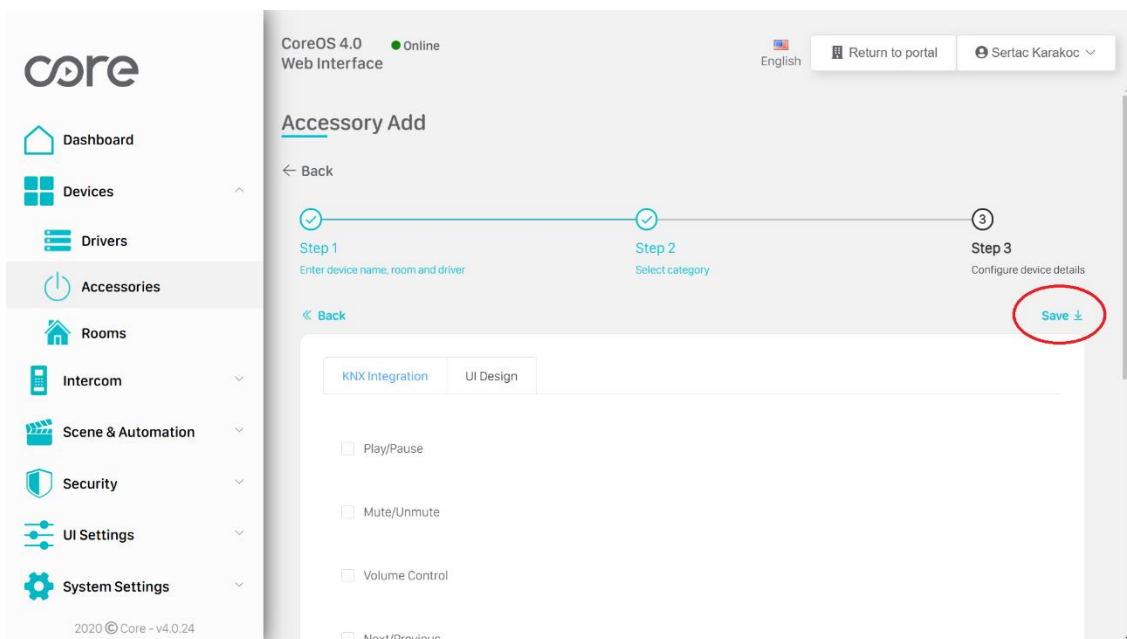
7. Select Driver as "Audio Steamer – (IP Address)", name the accessory and select the room. Then click "Next" button.



8. Select Icon and click "Next" button.



9. Click "Save" button to finish adding the accessory.



5.2.2 KNX INTEGRATION

It is possible to use CoreOS4 Touch Panels as a KNX Gateway for Core Audio Streamers and CoreOS4 Touch Panels provide two-way communication. CoreOS4 Touch Panels support the following features:

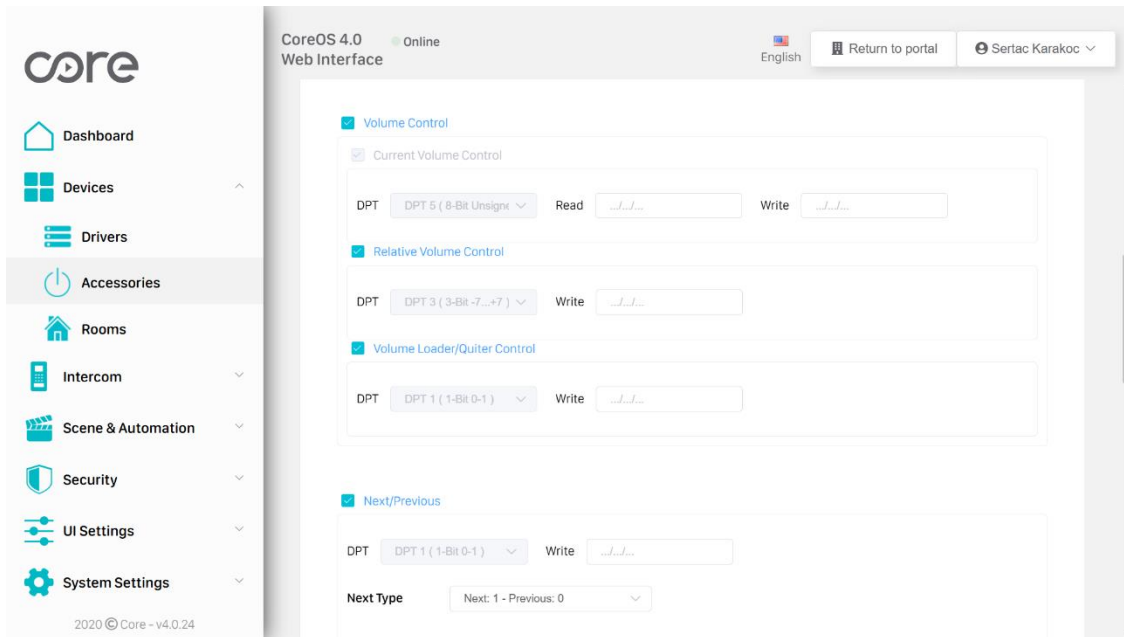
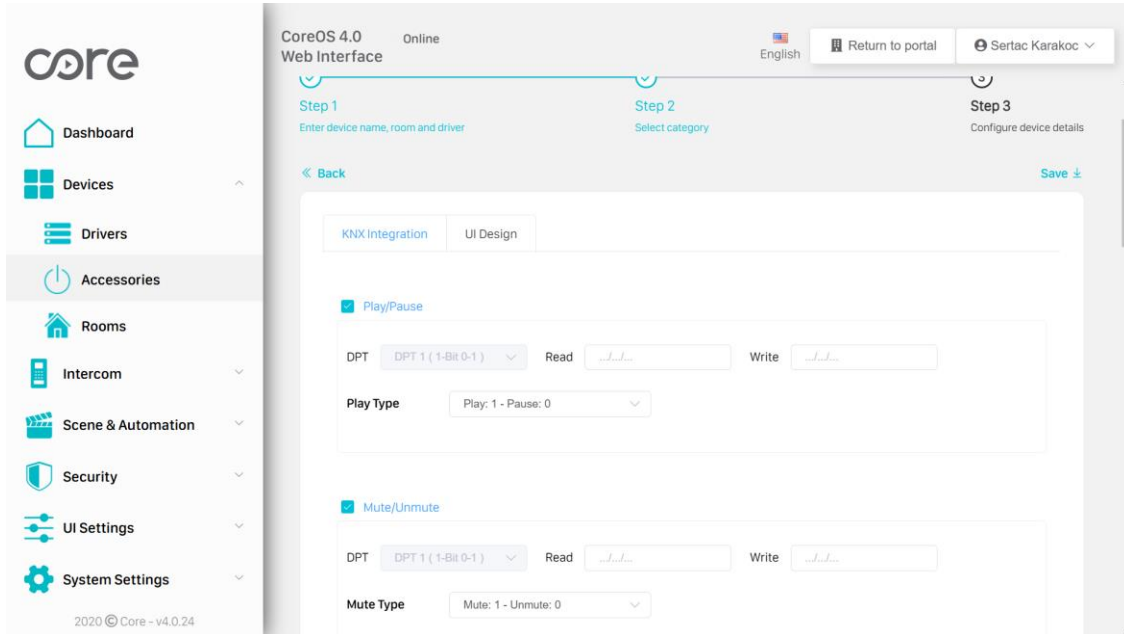
- Play/Pause
- Play/Pause Status
- Mute/Unmute
- Mute/Unmute Status
- Volume Control
 - DPT 5.001 (1 Byte Percentage) Volume
 - DPT 5.001 (1 Byte Percentage) Volume Status
 - DPT 3.007 Relative Volume Control
 - DPT 1 Volume Louder/Quiter Control
- Next/Previous Song
- Repeat/No Repeat
- Repeat/No Repeat Status
- Shuffle/No Shuffle
- Shuffle/No Shuffle Status
- Song Name Status
- Artist Name Status
- Album Name Status
- Sources
- Sources Status
- Preset Selection

Follow the steps to use CoreOS4 Touch Panels as KNX Gateway:

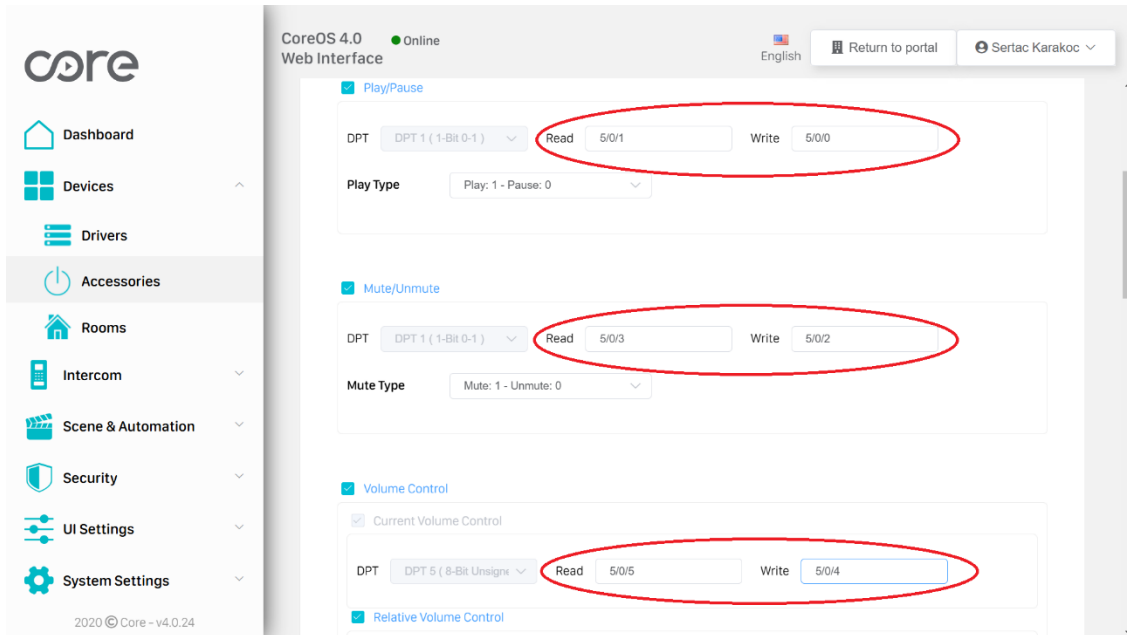
1. Create group addresses in ETS program.

Group Addresses 19						
Address *	Name	Description	Centra	Data Type	Length	
5/0/0	Play/Pause		No	start/stop	1 bit	
5/0/1	Play/Pause Status		No	start/stop	1 bit	
5/0/2	Mute/Unmute		No	enable	1 bit	
5/0/3	Mute/Unmute Status		No	enable	1 bit	
5/0/4	Volume		No	percentage (0..100%)	1 byte	
5/0/5	Volume Status		No	percentage (0..100%)	1 byte	
5/0/6	Volume Relative		No	dimming control	4 bit	
5/0/7	Volume 1 Bit		No	switch	1 bit	
5/0/8	Next/Previous		No	step	1 bit	
5/0/9	Repeat/No Repeat		No	enable	1 bit	
5/0/10	Repeat/No Repeat Status		No	enable	1 bit	
5/0/11	Shuffle/No Shuffle		No	enable	1 bit	
5/0/12	Shuffle/No Shuffle Status		No	enable	1 bit	
5/0/13	Song Name		No	Character String (ISO...	14 bytes	
5/0/14	Artist Name		No	Character String (ISO...	14 bytes	
5/0/15	Album Name		No	Character String (ISO...	14 bytes	
5/0/16	Sources		No	counter pulses (0..255)	1 byte	
5/0/17	Sources Status		No	counter pulses (0..255)	1 byte	
5/0/18	Preset Selection		No	counter pulses (0..255)	1 byte	

2. Select the features that you want to use in KNX System

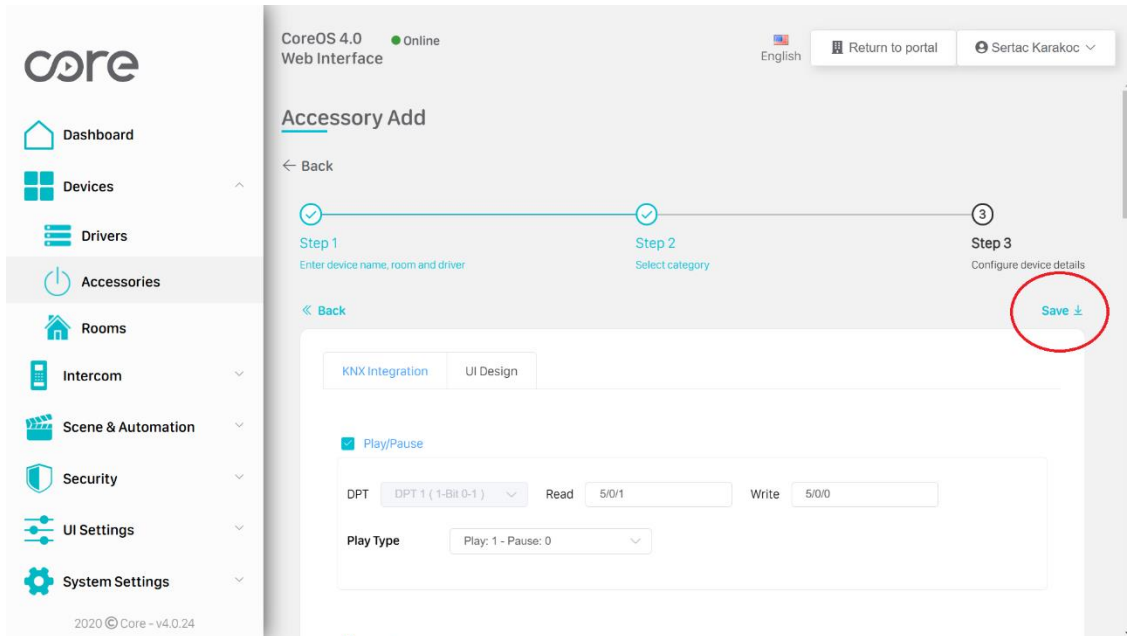


- Fill the group addresses that have already been created in ETS program as "Write" section for command group addresses and "Read" section for status group addresses.



Group Addresses 19						
Address ^	Name	Description	Centra	Data Type	Length	
5/0/0	Play/Pause		No	start/stop	1 bit	
5/0/1	Play/Pause Status		No	start/stop	1 bit	
5/0/2	Mute/Unmute		No	enable	1 bit	
5/0/3	Mute/Unmute Status		No	enable	1 bit	
5/0/4	Volume		No	percentage (0..100%)	1 byte	
5/0/5	Volume Status		No	percentage (0..100%)	1 byte	
5/0/6	Volume Relative		No	dimming control	4 bit	
5/0/7	Volume 1 Bit		No	switch	1 bit	
5/0/8	Next/Previous		No	step	1 bit	
5/0/9	Repeat/No Repeat		No	enable	1 bit	
5/0/10	Repeat/No Repeat Status		No	enable	1 bit	
5/0/11	Shuffle/No Shuffle		No	enable	1 bit	
5/0/12	Shuffle/No Shuffle Status		No	enable	1 bit	
5/0/13	Song Name		No	Character String (ISO...	14 bytes	
5/0/14	Artist Name		No	Character String (ISO...	14 bytes	
5/0/15	Album Name		No	Character String (ISO...	14 bytes	
5/0/16	Sources		No	counter pulses (0..255)	1 byte	
5/0/17	Sources Status		No	counter pulses (0..255)	1 byte	
5/0/18	Preset Selection		No	counter pulses (0..255)	1 byte	

4. Click "Save" button to finish adding accessory.



5. Now link the group objects of KNX devices with related group addresses.

464	Page 10-Audio	Play/Pause	Play/Pause	5/0/0	1 bit	C	-	-	T	-	start/stop	Low
465	Page 10-Audio	Status Play/Pause	Play/Pause Status	5/0/1	1 bit	C	-	W	T	U	start/stop	Low
466	Page 10-Audio	Volume	Volume	5/0/4	1 byte	C	-	-	T	-	percentag...	Low
467	Page 10-Audio	Status Volume	Volume Status	5/0/5	1 byte	C	-	W	T	U	percentag...	Low
468	Page 10-Audio	Mute/Unmute	Mute/Unmute	5/0/2	1 bit	C	-	-	T	-	enable	Low
469	Page 10-Audio	Status Mute/Unmute	Mute/Unmute Status	5/0/3	1 bit	C	-	W	T	U	enable	Low
470	Page 10-Audio	Next/Previous	Next/Previous	5/0/8	1 bit	C	-	-	T	-	step	Low
473	Page 10-Audio	Shuffle/No Shuffle	Shuffle/No Shuffle	5/0/11	1 bit	C	-	-	T	-	enable	Low
474	Page 10-Audio	Status Shuffle/No Shuffle	Shuffle/No Shuffle Status	5/0/12	1 bit	C	-	W	T	U	enable	Low
475	Page 10-Audio	Repeat/No Repeat	Repeat/No Repeat	5/0/9	1 bit	C	-	-	T	-	enable	Low
476	Page 10-Audio	Status Repeat/No Repeat	Repeat/No Repeat Status	5/0/10	1 bit	C	-	W	T	U	enable	Low
477	Page 10-Audio	Song Name	Song Name	5/0/13	14 bytes	C	-	W	T	U	Character...	Low
478	Page 10-Audio	Artist Name	Artist Name	5/0/14	14 bytes	C	-	W	T	U	Character...	Low
479	Page 10-Audio	Album Name	Album Name	5/0/15	14 bytes	C	-	W	T	U	Character...	Low
480	Page 10-Audio	Playlist Name	Playlist Name	5/0/15	14 bytes	C	-	W	T	U	Character...	Low
514	Page 11-List View Item 1	Value (1 Byte Unsigned)	Preset Selection	5/0/18	1 byte	C	-	-	T	-	counter p...	Low
520	Page 11-List View Item 2	Value (1 Byte Unsigned)	Preset Selection	5/0/18	1 byte	C	-	-	T	-	counter p...	Low
526	Page 11-List View Item 3	Value (1 Byte Unsigned)	Preset Selection	5/0/18	1 byte	C	-	-	T	-	counter p...	Low
532	Page 11-List View Item 4	Value (1 Byte Unsigned)	Preset Selection	5/0/18	1 byte	C	-	-	T	-	counter p...	Low
538	Page 11-List View Item 5	Value (1 Byte Unsigned)	Preset Selection	5/0/18	1 byte	C	-	-	T	-	counter p...	Low
544	Page 11-List View Item 6	Value (1 Byte Unsigned)	Preset Selection	5/0/18	1 byte	C	-	-	T	-	counter p...	Low
550	Page 11-List View Item 7	Value (1 Byte Unsigned)	Preset Selection	5/0/18	1 byte	C	-	-	T	-	counter p...	Low
556	Page 11-List View Item 8	Value (1 Byte Unsigned)	Preset Selection	5/0/18	1 byte	C	-	-	T	-	counter p...	Low
564	Page 12-List View Item 1	Value (1 Byte Unsigned)	Sources	5/0/16	1 byte	C	-	-	T	-	counter p...	Low
570	Page 12-List View Item 2	Value (1 Byte Unsigned)	Sources	5/0/16	1 byte	C	-	-	T	-	counter p...	Low
576	Page 12-List View Item 3	Value (1 Byte Unsigned)	Sources	5/0/16	1 byte	C	-	-	T	-	counter p...	Low
582	Page 12-List View Item 4	Value (1 Byte Unsigned)	Sources	5/0/16	1 byte	C	-	-	T	-	counter p...	Low
588	Page 12-List View Item 5	Value (1 Byte Unsigned)	Sources	5/0/16	1 byte	C	-	-	T	-	counter p...	Low
594	Page 12-List View Item 6	Value (1 Byte Unsigned)	Sources	5/0/16	1 byte	C	-	-	T	-	counter p...	Low

1.1.5 Eclipse Room Controller > Function Page > Page 11-List View

General	Description of the page	Presets
Settings	Page Icon	🎵 - Audio 2
	Page Function	List View
	Number of control element	8
	Control Element 1	Value
	Item 1 Function	Value
Function Page	Icon	🎵 - Audio 2
	Text	Preset 1
	Value Data Type	1 Byte Unsigned
	Value	1
	Control Element 2	Value
	Item 2 Function	Value
	Icon	🎵 - Audio 2
	Text	Preset 2
	Value Data Type	1 Byte Unsigned
	Value	2
	Control Element 3	Value
	Item 3 Function	Value
Icon	🎵 - Audio 2	
Text	Preset 3	
Value Data Type	1 Byte Unsigned	
Value	3	
Control Element 4	Value	
Item 4 Function	Value	

1.1.5 Eclipse Room Controller > Function Page > Page 12-List View

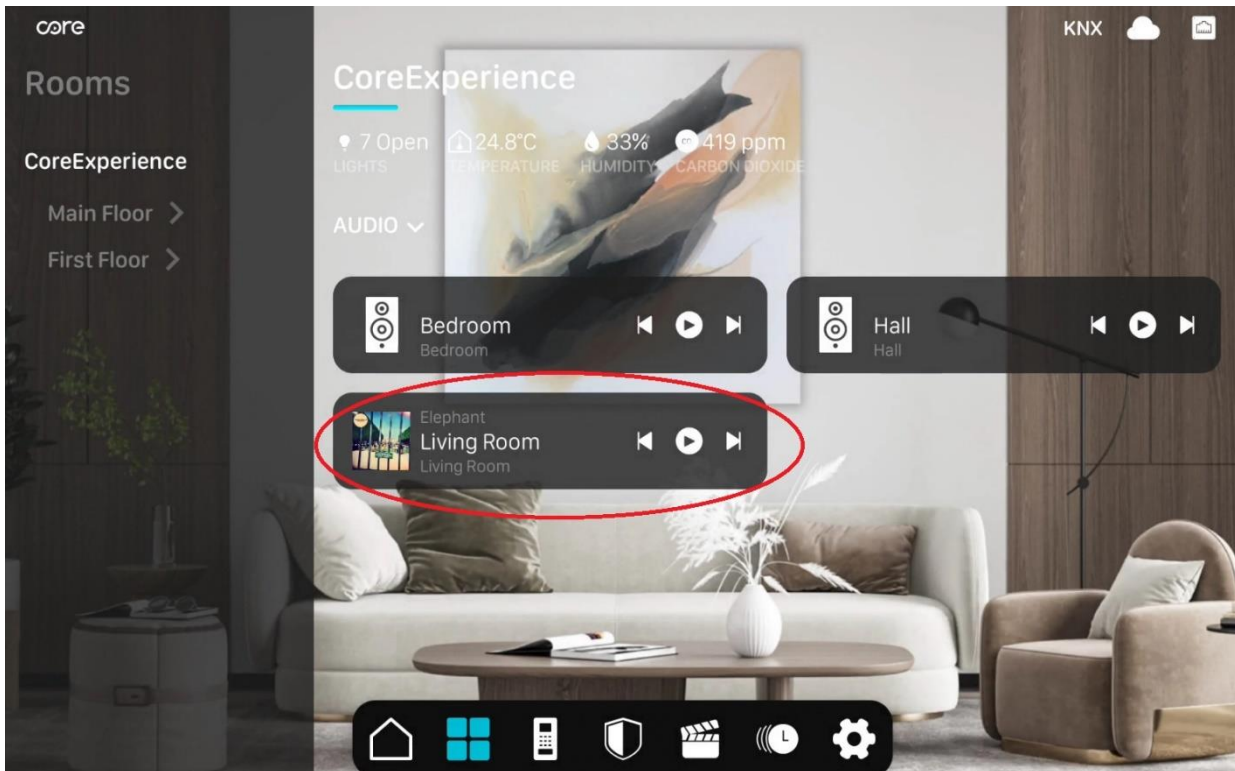
General	Description of the page	Sources
Settings	Page Icon	🏠 - Room 21
	Page Function	List View
	Number of control element	6
	Control Element 1	Value
	Item 1 Function	Value
Function Page	Icon	📺 - Scene 9
	Text	HDMI
	Value Data Type	1 Byte Unsigned
	Value	1
	Control Element 2	Value
	Item 2 Function	Value
	Icon	🎵 - Audio 1
	Text	Bluetooth
	Value Data Type	1 Byte Unsigned
	Value	2
	Control Element 3	Value
	Item 3 Function	Value
Icon	📺 - Scene 1	
Text	Coaxial	
Value Data Type	1 Byte Unsigned	
Value	3	
Control Element 4	Value	
Item 4 Function	Value	

6. HOW TO USE

6.1 COREOS4 TOUCH PANEL UI

It is possible to control Core Audio Streamer via CoreOS4 Touch Panels. You can pause the music, change the volume, skip to next song, change the source and more.

To control a Core Audio Streamer, select the accessory.

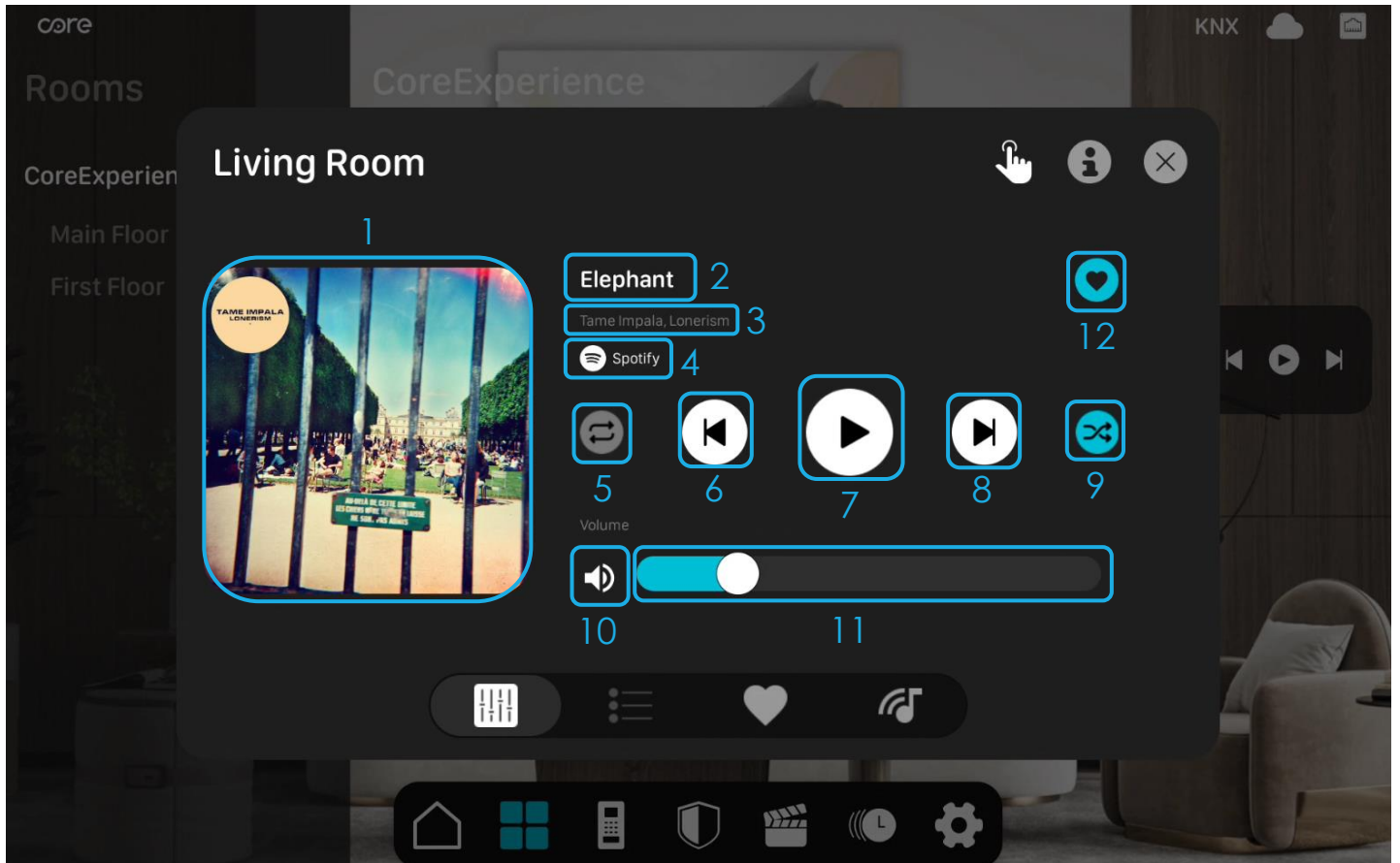


Audio Streamer accessory has 4 sub menus:

1. Dashboard
2. Sources
3. Presets
4. Zones

6.1.1 DASHBOARD

On the dashboard menu, the played music can be controlled.



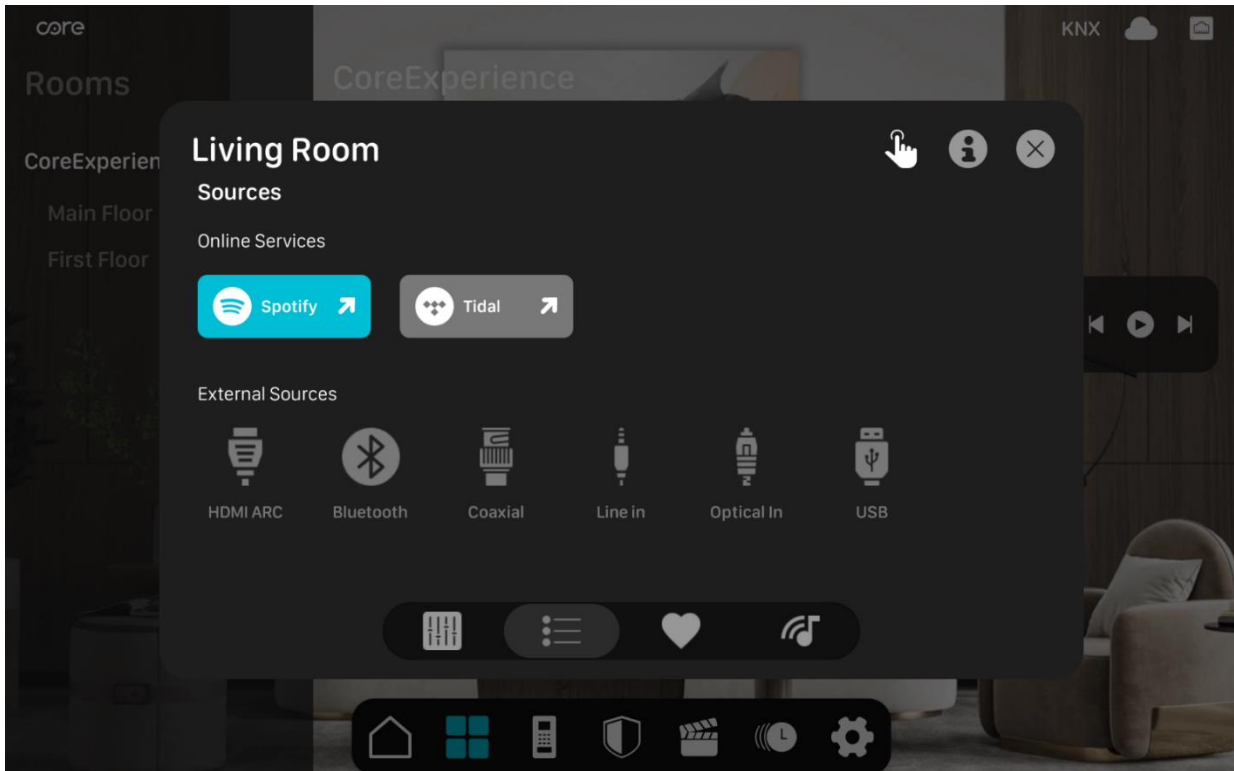
1. Album cover
2. Song name
3. Artist name and Album name
4. Source
5. Repeat/No Repeat
6. Previous song
7. Play/Pause
8. Next song
9. Shuffle/No Shuffle
10. Mute/Unmute
11. Volume control
12. Favorite button

Favorite Button:

When playing a song from a playlist, it is possible to add the playlist to presets by clicking on favorite button.

6.1.2 SOURCES

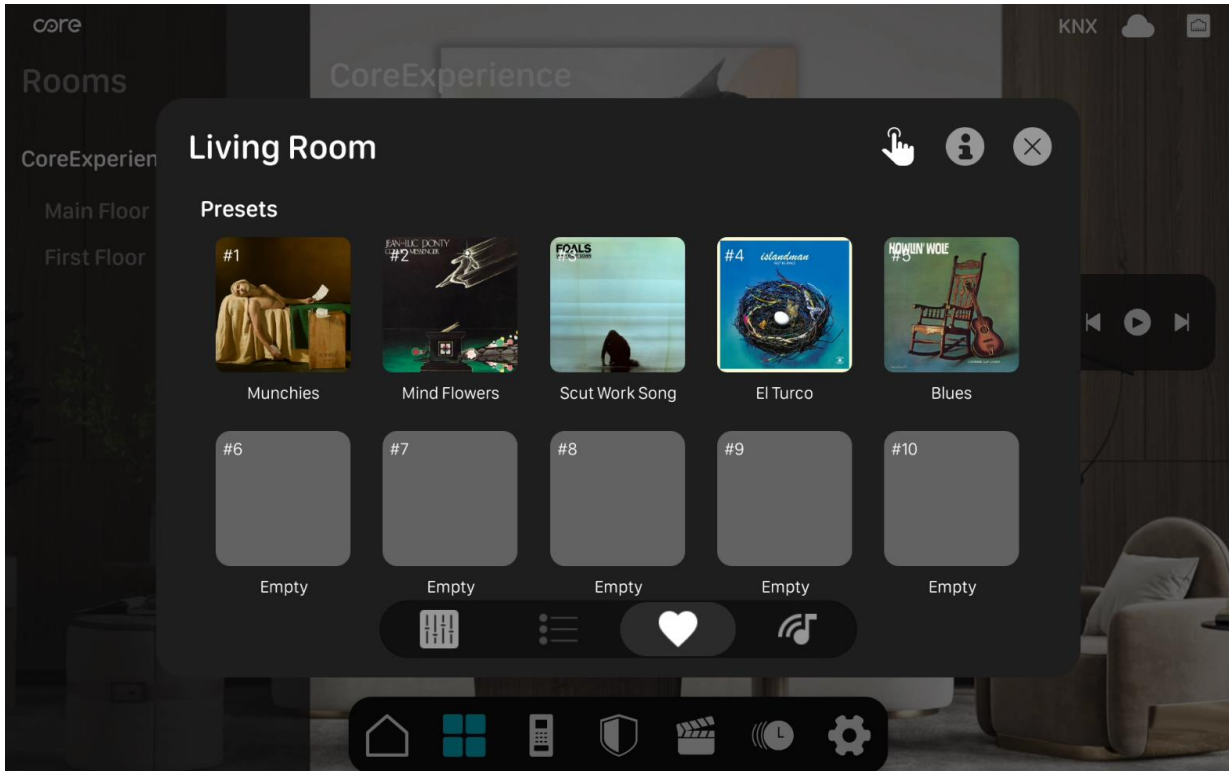
It is possible to change the source and display current source on sources menu.
To change the source, click on source button



6.1.3 PRESETS

It is possible to add favorite playlists to presets so whenever it is wanted, those presets can be called on Touch Panel or via KNX devices.

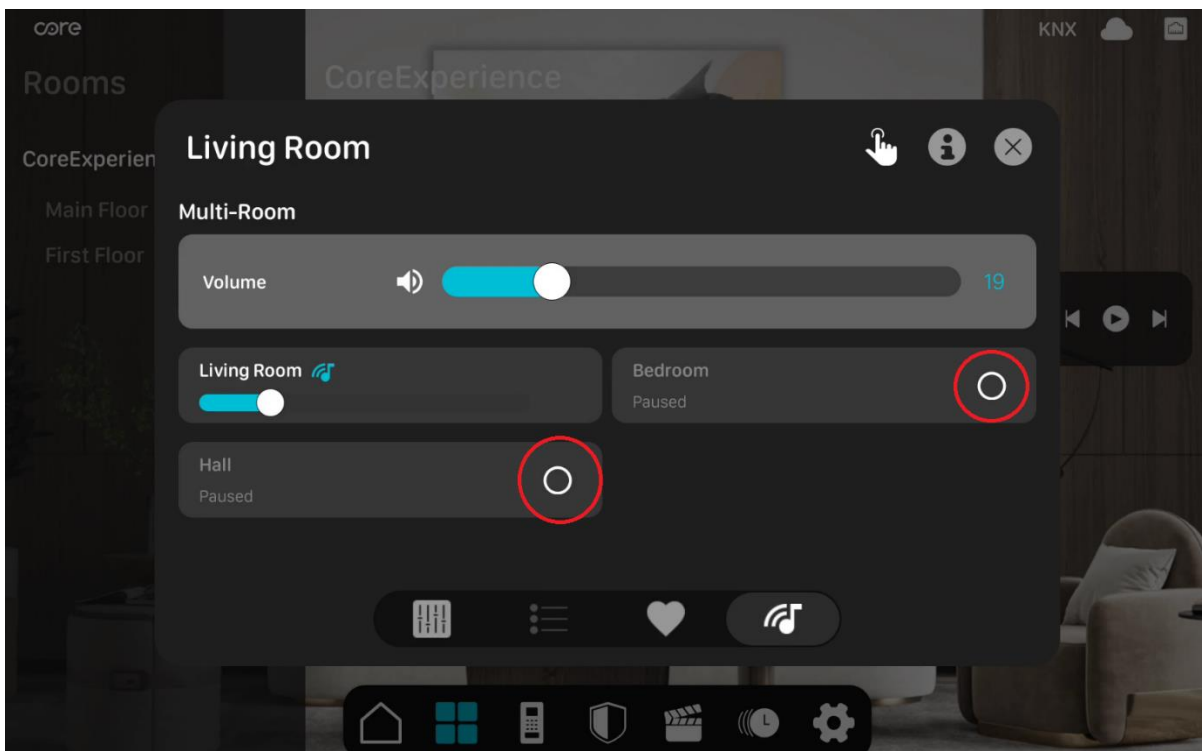
You can add a playlist to the presets list by clicking the favorite button on dashboard menu while you are listening to a song. 10 preset lists can be added to Audio streamer accessory.

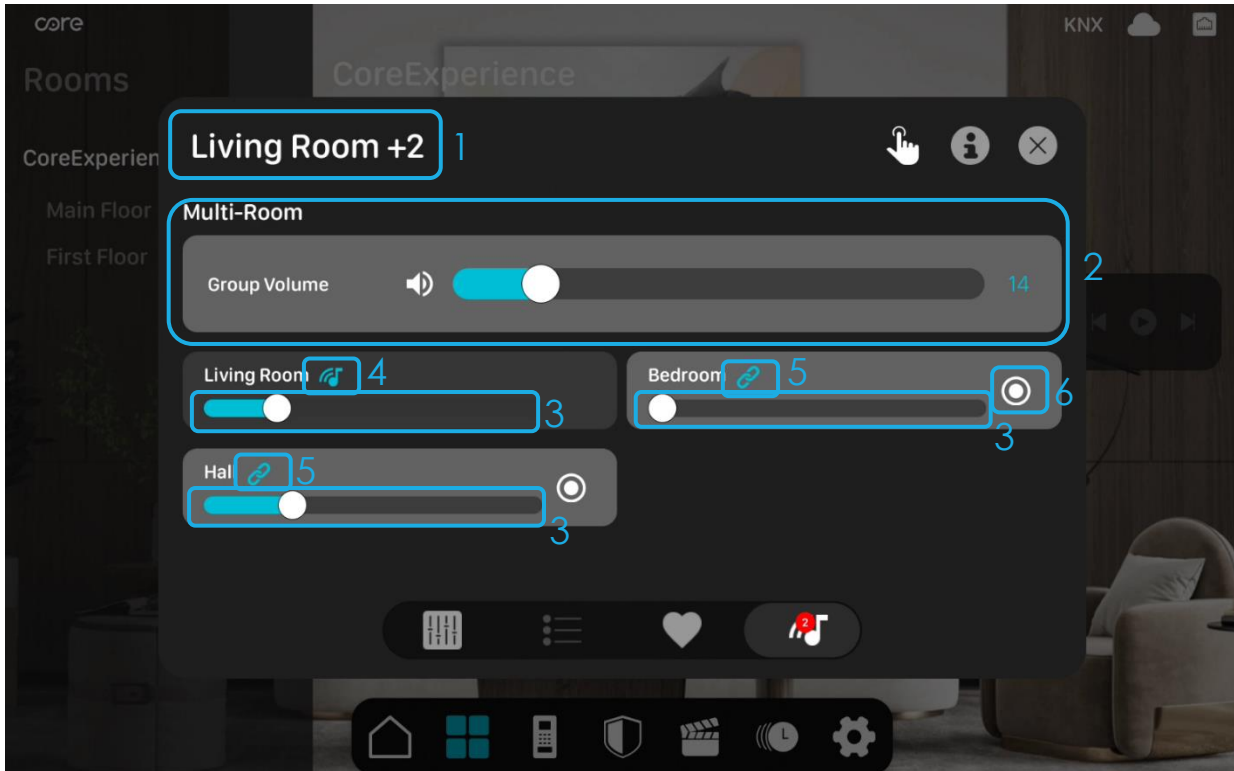


6.1.4 ZONES

It is possible to group multiple rooms and zones on Zones menu to play the same music in sync.

To add a room to multiroom function, go to zones menu on master zone and select the zones you want to add.

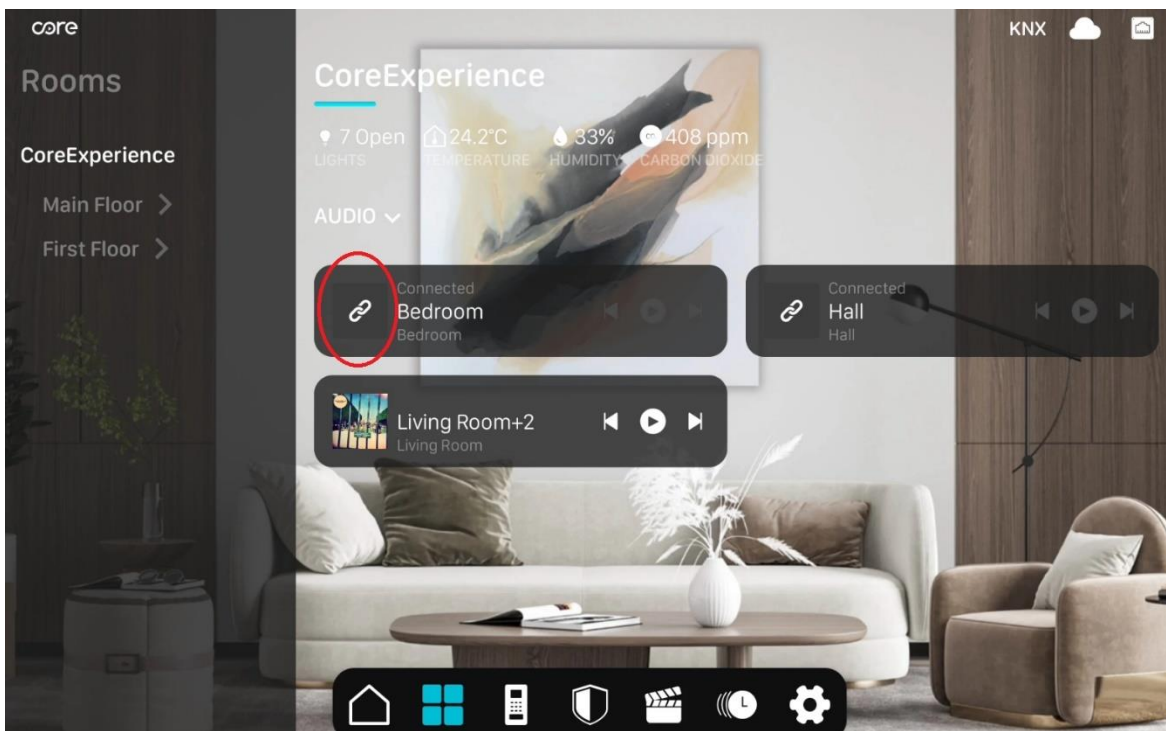




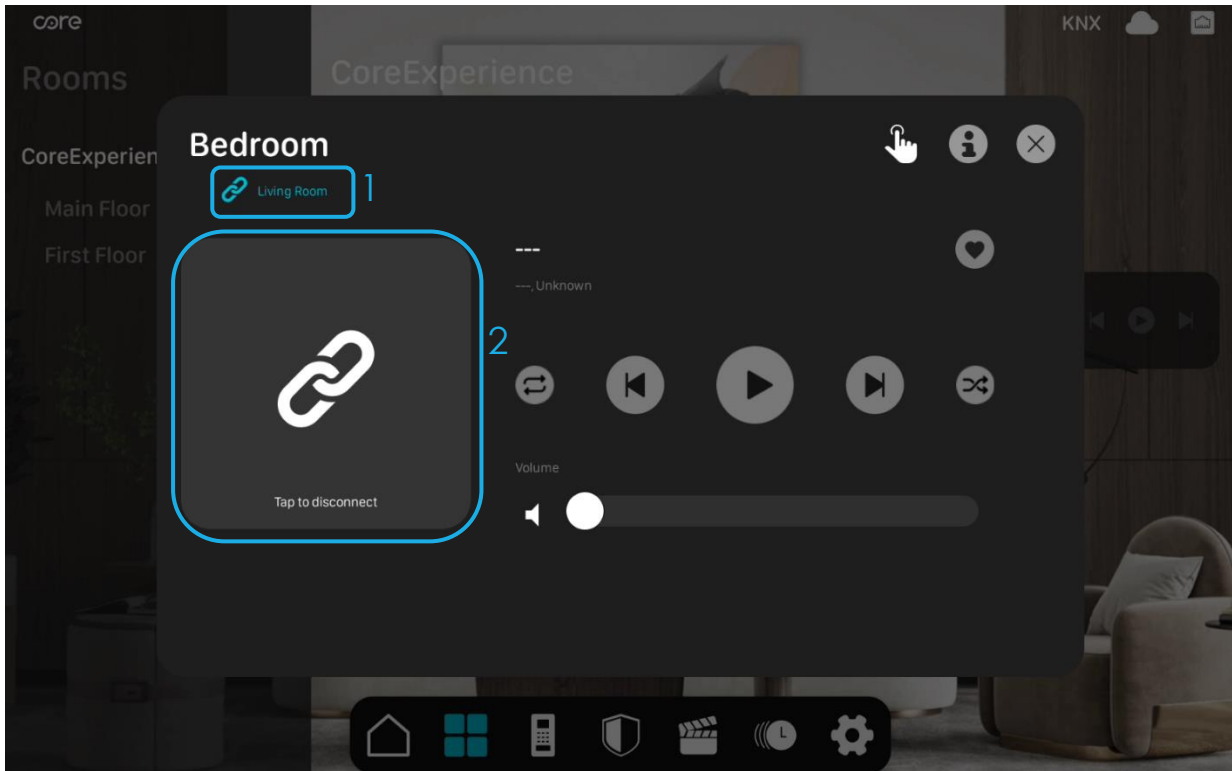
1. Shows the master room and how many slave rooms are added.
2. Group Volume. Affects to all zones volume.
3. Individual room volume control
4. Master icon
5. Slave icon
6. Connect/disconnect button

Slave Audio Streamer:

When an Audio Streamer is set to slave, a connected icon is shown on the accessory.



All controls (except volume control) on a slave audio streamer accessory become passive. To disconnect the room from multiroom function just click on disconnect button.

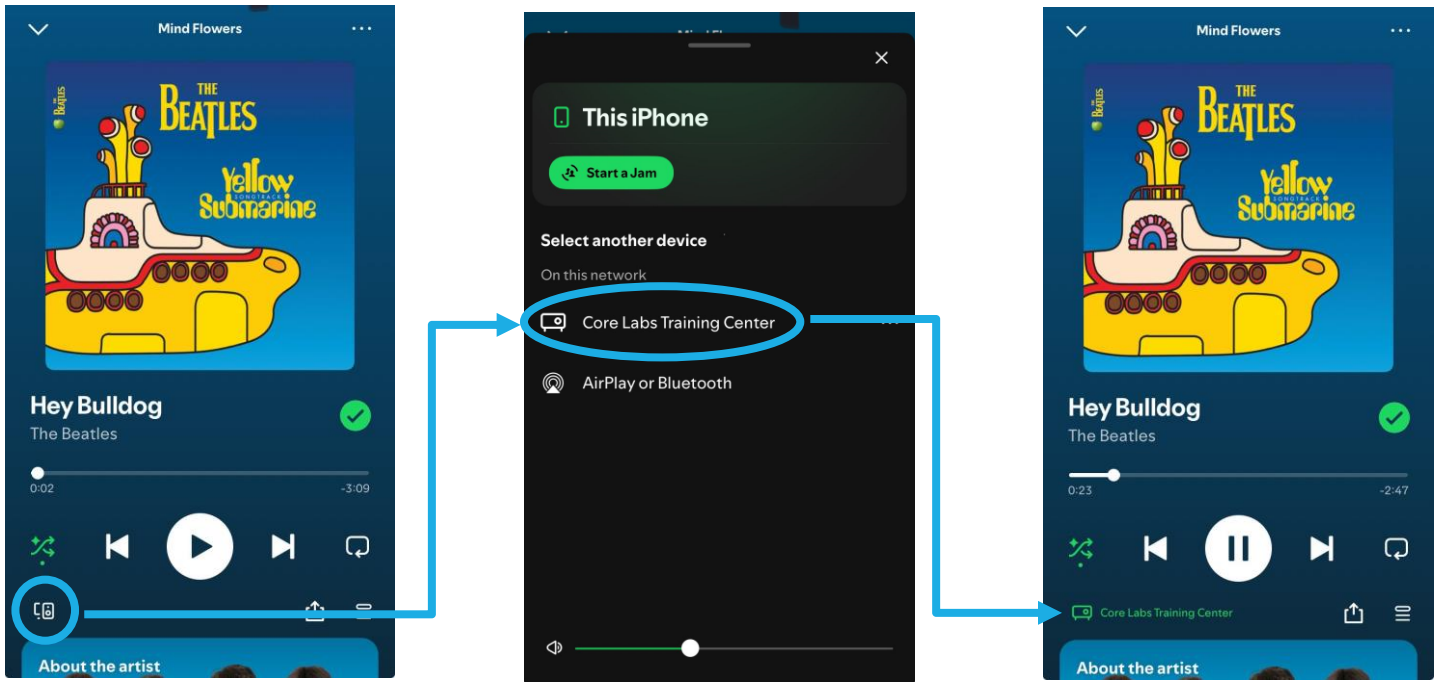


1. Shows the master room which the audio streamer is connected.
2. Disconnect Button

6.2 SPOTIFY CONNECT

To stream music from Spotify app:

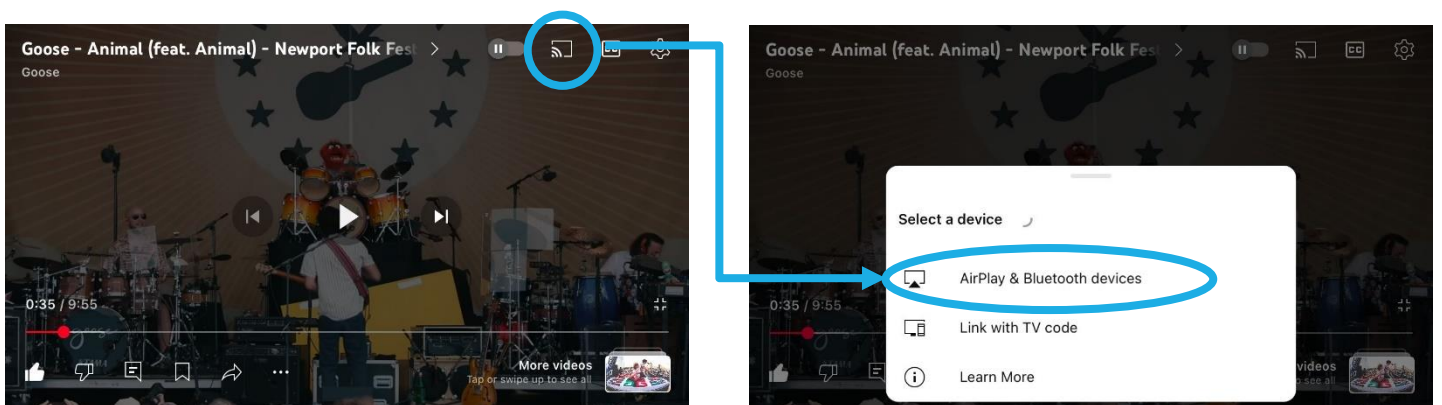
1. Connect your mobile device to the same network with Core Audio Streamers.
2. Open Spotify App on your mobile device.
3. Select a song and click on available devices.
4. Select the Audio Streamer you want to play.

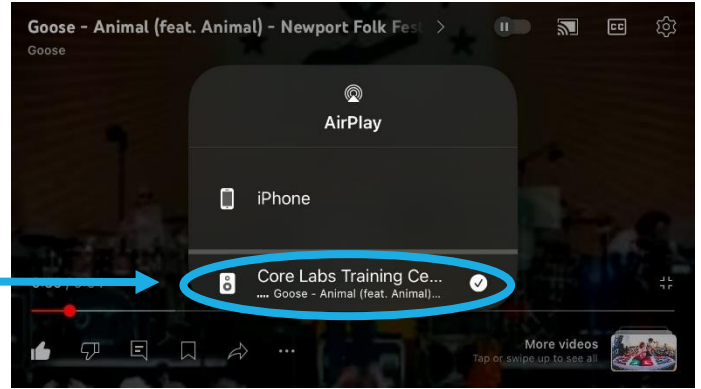
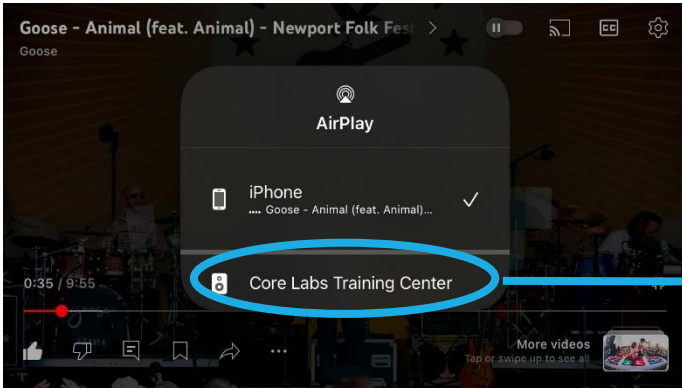


6.3 AIRPLAY 2

To stream music via AirPlay 2:

1. Connect your mobile device to the same network with Core Audio Streamers.
2. Open Airplay device list on your mobile device.
3. Select the Audio Streamer you want to play.

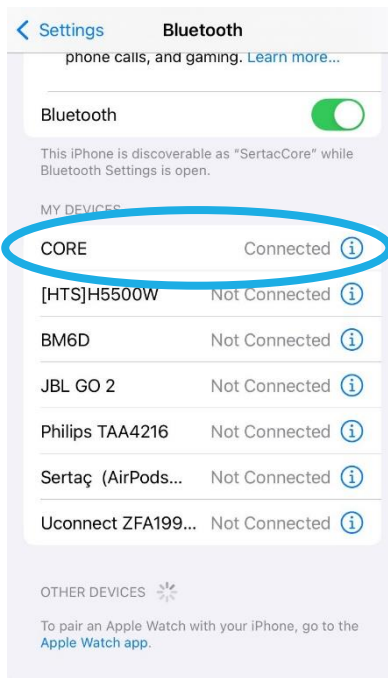
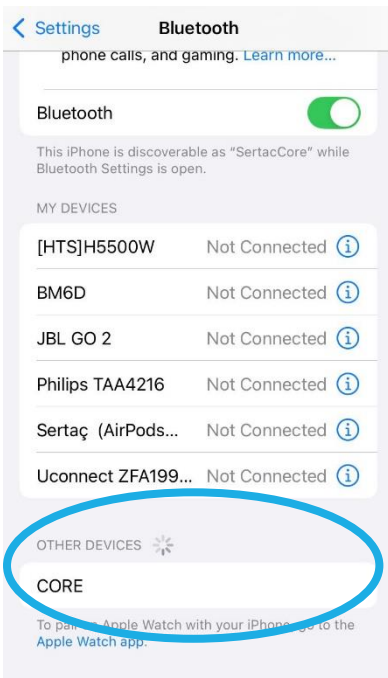




6.4 BLUETOOTH

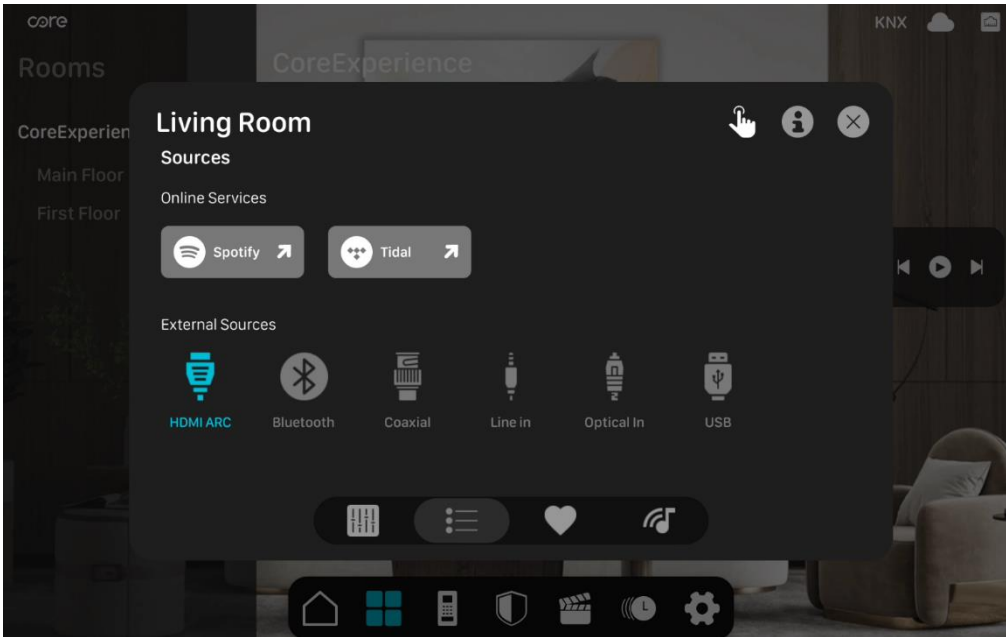
To stream music via Bluetooth:

1. Switch the source to Bluetooth on Core Audio Streamer by selecting Bluetooth source via Touch Panel or KNX device.
2. Turn on Bluetooth on your mobile device.
3. Find Core Audio Streamer and click to connect.
4. When connected, play music.



6.5 HDMI ARC

Switch the source to HDMI Arc to connect Core Audio Streamer to any device with HDMI Arc out.

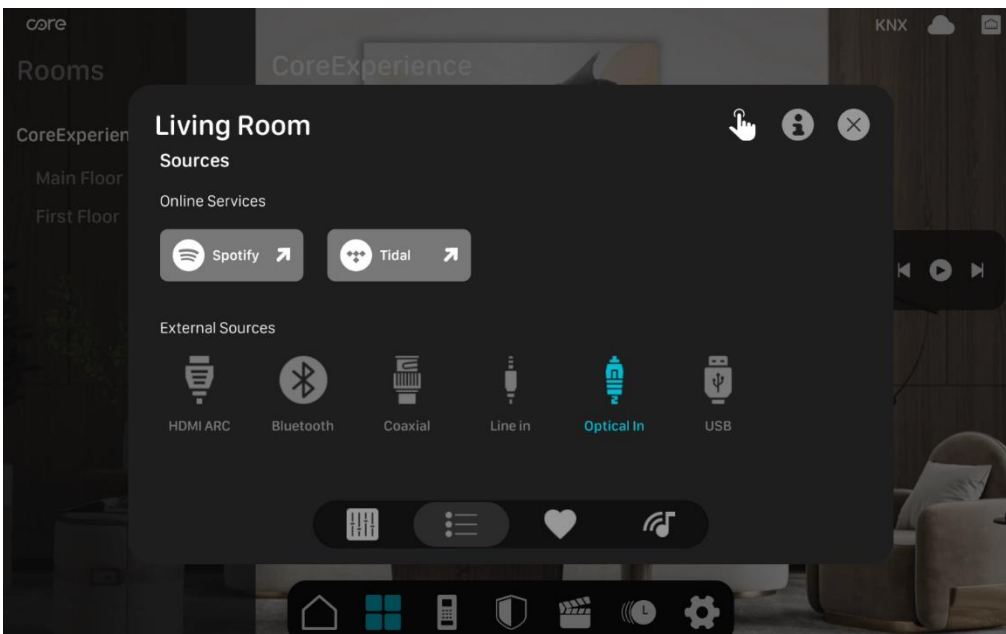


6.6 OPTICAL IN

Switch the source to Optical In to connect Core Audio Streamer to any device with optical out.

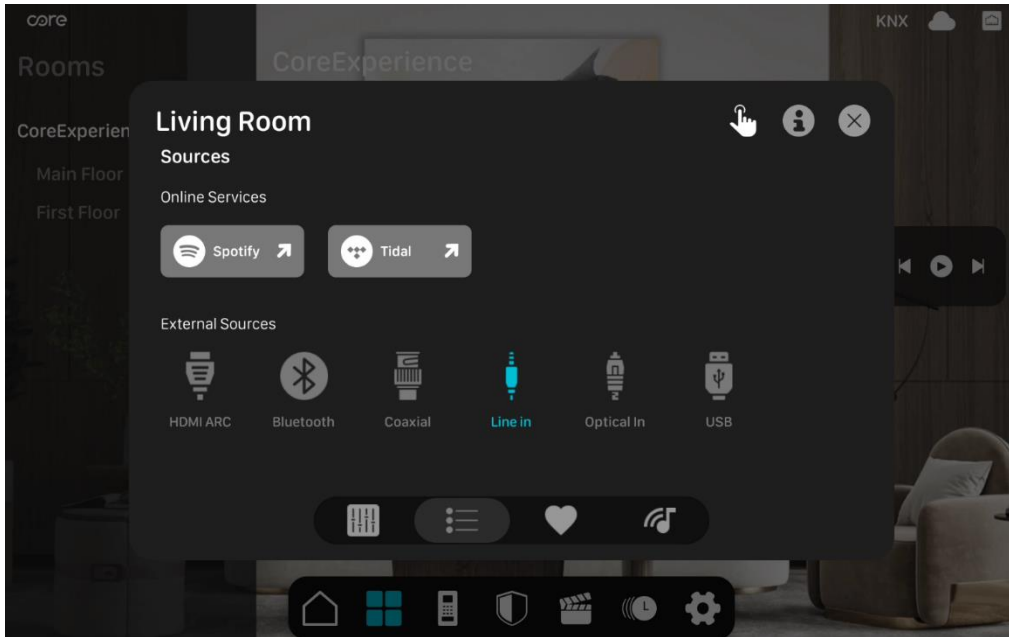


Core Audio Streamer supports only stereo audio codecs. When using optical in connection, select PCM type for digital audio for the devices with optical out.



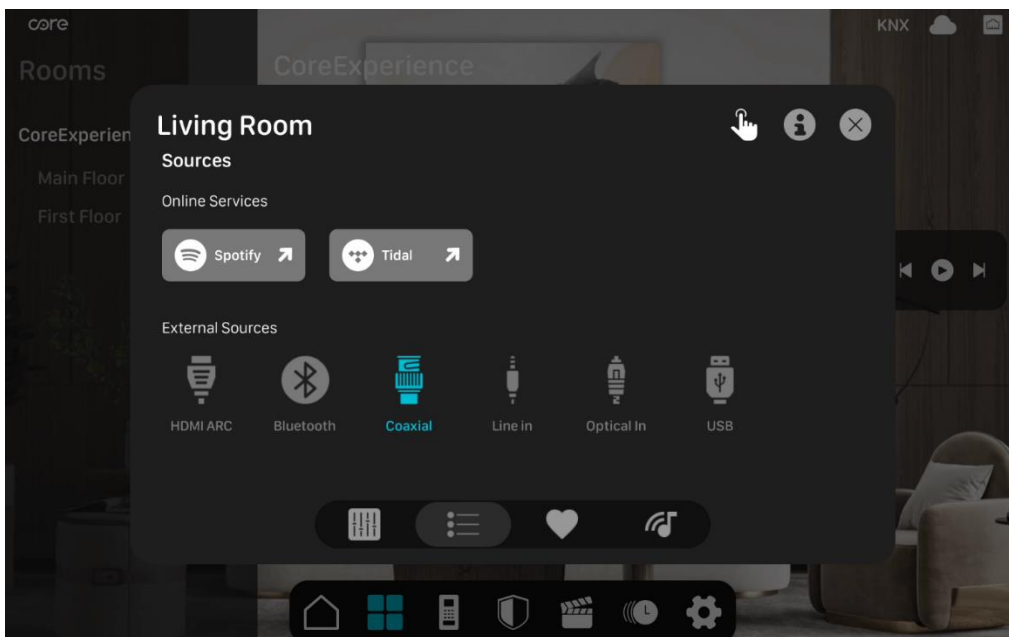
6.7 LINE IN

Switch the source to Line in to connect Core Audio Streamer to any device with line out.



6.8 COAXIAL IN

Switch the source to Coaxial In to connect Core Audio Streamer to any device with coaxial out.



6.9 USB

Switch the source to USB to play music from a USB disk drive.