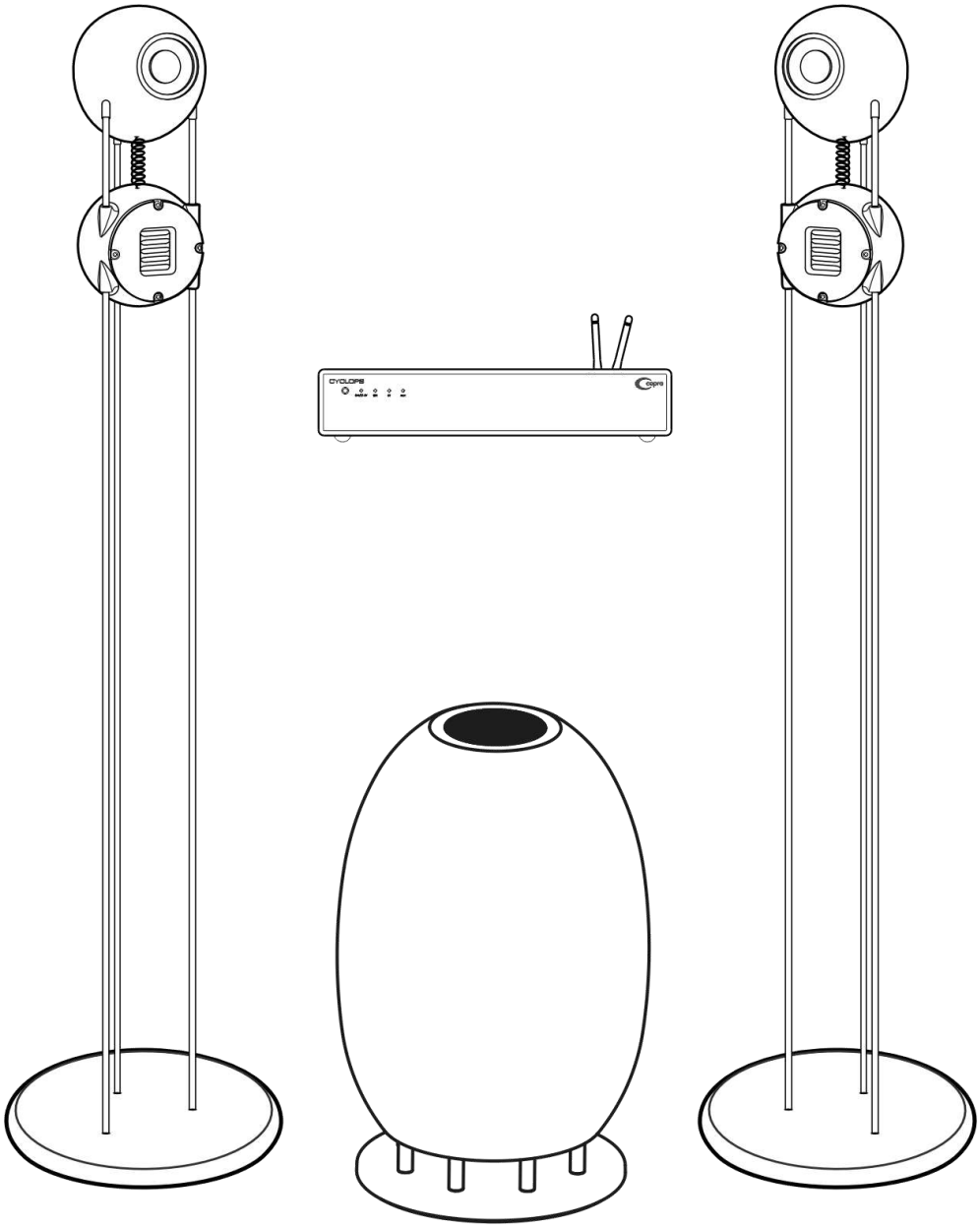
copra

CYCLOPS

HIGH FIDELITY AUDIO SYSTEM



User Manual
Model: CACLEAFA_BK
Version 1.0.1 | January 2025

Introduction

The Cyclops audio system is a high-precision floor-standing stereo system designed for home audio playback. It includes an amplifier with a built-in streaming player, two compact speaker systems (left and right channels, satellites), and a subwoofer. Control is performed using the 4STREAM mobile app or the remote control.

This manual provides detailed information about the audio system and instructions for its setup, use, and maintenance. Please read this manual carefully and keep it in an accessible place.

1. Copyright

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COPRA's production facilities are located in Odesa, Ukraine.

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References to other companies, trademarks, and equipment are provided solely for explanatory purposes and do not infringe upon intellectual property rights.

Information may be updated periodically without prior user notification. For up-to-date information, detailed device descriptions, connection instructions, certificates, and warranty claims, please visit: https://copra-acoustic.com/

2. Liability and Technical Support

This document is prepared in accordance with all necessary requirements and contains complete and detailed information on the installation, configuration, and operation of the device. The information is current as of the date specified in the document.

Strict adherence to the recommendations in this manual is essential for the proper, reliable, and safe operation of the device.

This manual, along with the quick start guide, is an integral part of the product and should always be kept by the user as a reference document.

The manufacturer reserves the right to modify the device, as well as to make changes and additions to this document without prior notice.

The manufacturer is not liable for any negative consequences resulting from the use of an outdated version of this document, nor for any technical or typographical errors, omissions, accidental or indirect damages that may occur from sharing this document with third parties or improper use of the device.

The manufacturer does not guarantee the accuracy, completeness, or suitability of the information contained in this document.

In the event of discrepancies between different language versions of this document, the Ukrainian version shall prevail.

For all technical inquiries, please contact technical support via the website: https://copra-acoustic.com/

Common issues are described in the 'Troubleshooting' section of this document and on the website, where the latest version of this manual can also be downloaded.

3. Compliance with Standards

The device has a CE Certificate of Conformity and meets the requirements of the following European Union directives:

EN IEC 62368-1:2020

RED (EMC):

- ETSI EN 301 489-1 V2.2.3 (2019-11)
- ETSI EN 301 489-17 V3.2.4 (2020-09)

Ecodesign mode – Standby and Off Mode Regulation:

- Regulation (EC) No 1275/2008
- Regulation (EC) No 801/2013

The device complies with the requirements of the RoHS Directive 2011/65/EU, including amendments introduced by Directive 2015/863/EU, regarding the restriction of hazardous substances.

The following symbols indicate the need to comply with Waste Electrical and Electronic Equipment (WEEE) regulations when disposing of the device.

According to established regulations, the device, its batteries and accumulators, as well as electrical and electronic accessories, must be disposed of separately at the end of their service life. Disposal of the device together with unsorted household waste is prohibited, as this may harm the environment.

To dispose of the device, return it to the point of sale or take it to a local recycling facility.

For detailed information on recycling this device, please contact your local household waste disposal service.

* Waste Electrical and Electronic Equipment (WEEE) refers to electrical or electronic equipment that has reached the end of its operational life, including all its components, assemblies, and consumables that were part of the device at the time of disposal.

Such waste includes, among other things, batteries and rechargeable batteries (if present), mercury-containing components, and other elements included in the delivery set.

4. Simplified Declaration of Conformity

COPRA hereby declares that the device complies with Directive 2014/53/EU. The full text of the EU Declaration of Conformity is available at the following web address: **https://acoustic.com/certificates**

Warning Symbols and Signs

Risk of Electric Shock

Indoor Use Only

Prolonged listening to audio signals at high volume is not recommended to avoid hearing damage

Protect from moisture; store in dry locations only

Fragile item. Risk of damage under strong mechanical impact

Packaging material – corrugated cardboard

The product packaging is fully or partially made from recyclable materials and can be reused

The device packaging can be disposed of with household waste

5. Safety Instructions

Before using the device, carefully read this section. Follow the operating and safety instructions provided in this manual. Failure to do so may result in damage to the device, personal injury, or property damage.

The manufacturer is not liable for any damage caused by improper use of the device.

⚠ **WARNING!** The warnings, precautions, and instructions contained in this document do not cover all possible hazardous situations. Use common sense when operating the device.

6. Installation

If you have no experience with technical work, it is recommended to contact your local dealer for assistance with installation and connection.

Exercise caution during installation and relocation of the audio system to avoid injury and damage to its components.

Use the audio system indoors only. Do not expose its components to high temperatures (from electric heaters, direct sunlight, etc.).

Install the audio system components only on flat and stable surfaces. Prevent them from falling or being subjected to impacts.

Avoid getting liquids on the audio system components and prevent dust accumulation on their surfaces.

Do not block the amplifier's ventilation openings. Install the audio system in a well-ventilated room.

Observe polarity when connecting the speakers to the amplifier. Do not allow the terminals to come into contact with each other or with any metal parts of the audio system.

Connect the equipment to a stable 230 V, 50 Hz power supply. If necessary, use a voltage stabilizer with a capacity of at least 1 kW.

Satellites and the subwoofer are sources of magnetic fields. Items sensitive to magnetic exposure (watches, magnetic data storage devices, etc.) should be kept at least 0.5 meters away from the satellites and subwoofer.

If the audio system was transported at a temperature below +10 °C, unpack it and wait 3 hours before use to allow its components to reach room temperature.

7. Operation

- Use of the audio system by children under the age of 14 is permitted only under the supervision of adults responsible for their safety. Individuals with physical, mental, or cognitive impairments must either be instructed on the proper use of the device or be supervised by a responsible person. The purchaser of the product is responsible for its use by the aforementioned categories of users, as well as for its use in public facilities and in the presence of pets.
- Do not touch the support spikes of the satellites while the audio system is in operation.
- Do not remove the cover of the amplifier while it is powered on to avoid electric shock or short circuit.
- Do not insert foreign objects into the amplifier's connectors and do not use force when connecting cables.
- Do not decline automatic software updates for the audio system in the mobile application on your smartphone or tablet.
- To fully power off the audio system, disconnect the power cable from the AC mains.
- Disconnect the audio system from the AC mains during thunderstorms.
- If you notice smoke, unusual noise, or odor during operation of the audio system, immediately disconnect it from the power supply and contact technical support.

8. Use of Cables

- Avoid bending or pinching the cables used for the operation of the audio system. Route the cables in areas where they are protected from accidental external impact (preferably in protective cable channels, if possible).
- Do not disassemble the power cable plugs. Do not use homemade, damaged, or uncertified cables.
- In some cases, differential circuit breakers may be incorrectly installed in the power supply network. If the breaker is triggered when the amplifier is plugged in, it may be necessary to either correct the wiring of the power system or use an adapter without grounding.
- Connect and disconnect cables to and from the amplifier only with dry hands and when the power is turned off.
- When connecting the satellites and subwoofer, use the cables supplied with the system to avoid power loss, quality degradation, or overheating of the devices.

9. Maintenance

Maintain the system using the microfiber cloth included in the package. Standard furniture care products may be used, provided their instructions are followed. To remove dirt from surfaces, use the same microfiber cloth. Cleaning should only be performed when the system's power cable is disconnected from the mains.

- If the audio system will not be used for an extended period, disconnect it from the power supply.
- To prevent electric shock, do not disassemble the equipment. There are no user-serviceable parts inside.
- Service and repairs must be carried out only by qualified and authorized personnel. Unauthorized interference with the design may void the warranty. For maintenance inquiries, contact the manufacturer or the dealer who supplied the system.
- Before cleaning the audio system, turn it off and disconnect it from the power supply. Then wipe the surfaces with a dry, soft cloth (microfiber). Do not use harsh detergents, abrasive cleaners, or metal sponges. It is recommended to use household furniture polish for maintenance.
- Keep the device, accessories, and packaging out of reach of children and pets.

If you experience any problems or have questions while operating the device, please contact technical support before returning it to the retailer: service@copra-acoustic.com

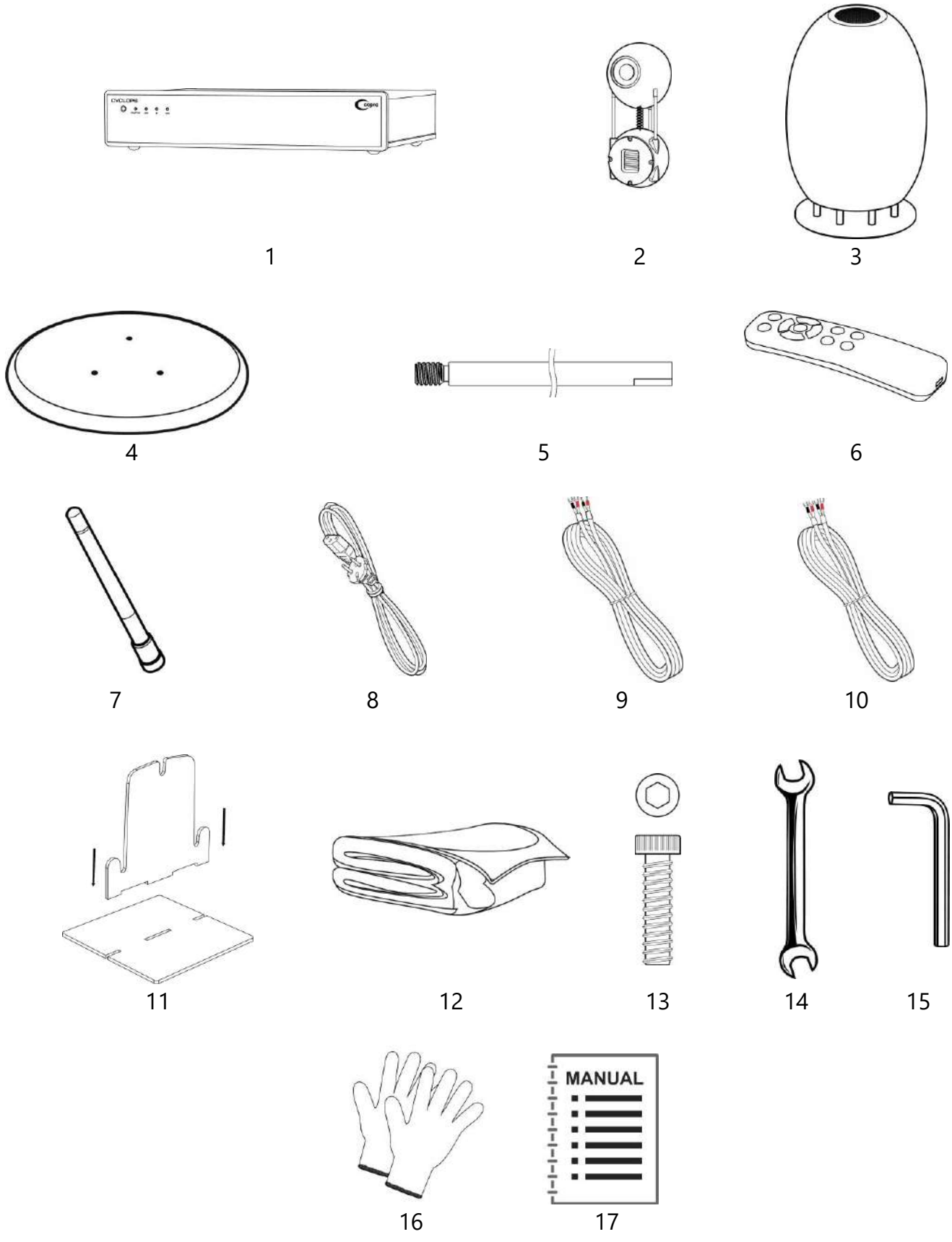
If you notice a malfunction, do not use the device. Contact the dealer from whom you purchased the system to promptly arrange a return, replacement, or repair.

10. Package Contents

The Cyclops audio system package includes the following devices and components:

1. Power amplifier (1 pc.)
2. Satellite module (2 pc.)
3. Subwoofer (1 pc.)
4. Satellite base (2 pc.)
5. Support spike 6×990 mm for satellite (6 pc.)
6. Remote control (1 pc.)
7. Wireless communication antenna (2 pc.)
8. Power cable, 1.8 m (1 pc.)
9. Satellite speaker cable, 3.5 m, 2×2.5 mm^2 cross-section, oxygen-free copper (2 pc.)
10. Subwoofer speaker cable, 4 m, 2×2.5 mm^2 cross-section, oxygen-free copper (1 pc.)
11. Assembly stand for satellite setup (1 pc.)
12. Microfiber cloth (1 pc.)
13. Bolt M4×10 (6 pc.)
14. Wrench 5 mm (1 pc.)
15. Hex key 3 mm (1 pc.), 2 mm (1 pc.)

16. Gloves (1 pair)
17. Quick Start Guide (1 pc.)



1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17

Figure 1 – Package contents

11. Packaging Specifications

The high-fidelity CYCLOPS audio system is delivered in an individual cardboard package measuring 100 cm × 42 cm × 43 cm. The packaging contains the full product name and labeling, a list of included components, key technical specifications, and information about the manufacturer and importers.

Net weight: 33 kg

Gross weight: 45 kg

12. General Description and System Specifications

12.1 Purpose of the Audio System

The Cyclops audio system is designed for home audio playback. It consists of an amplifier, two satellite speakers, and a subwoofer. The system enables sound reproduction through both wired and wireless connection to an audio source.

Functional Capabilities of the Cyclops Audio System:

- Control via mobile application
- Playback of audio recordings from online sources and local storage
- Wired and wireless connection of audio sources
- Support for multi-room and multi-zone systems
- Remote control via IR remote

12.2 Amplifier

The Cyclops amplifier provides audio signal amplification for the satellite speakers and subwoofer. It features a built-in streaming player and supports audio playback via BT and AirPlay. The amplifier is equipped with connectors for connecting various external audio devices.

Operating mode indicators are located on the front panel of the amplifier. There are no physical control elements (such as buttons or knobs).

The audio system is controlled using the infrared remote control and a mobile application for Android or iOS devices.

◆ **NOTE:** The amplifier is calibrated for audio playback through the speaker systems included in the package (satellites and subwoofer) and is intended to be used exclusively with them.

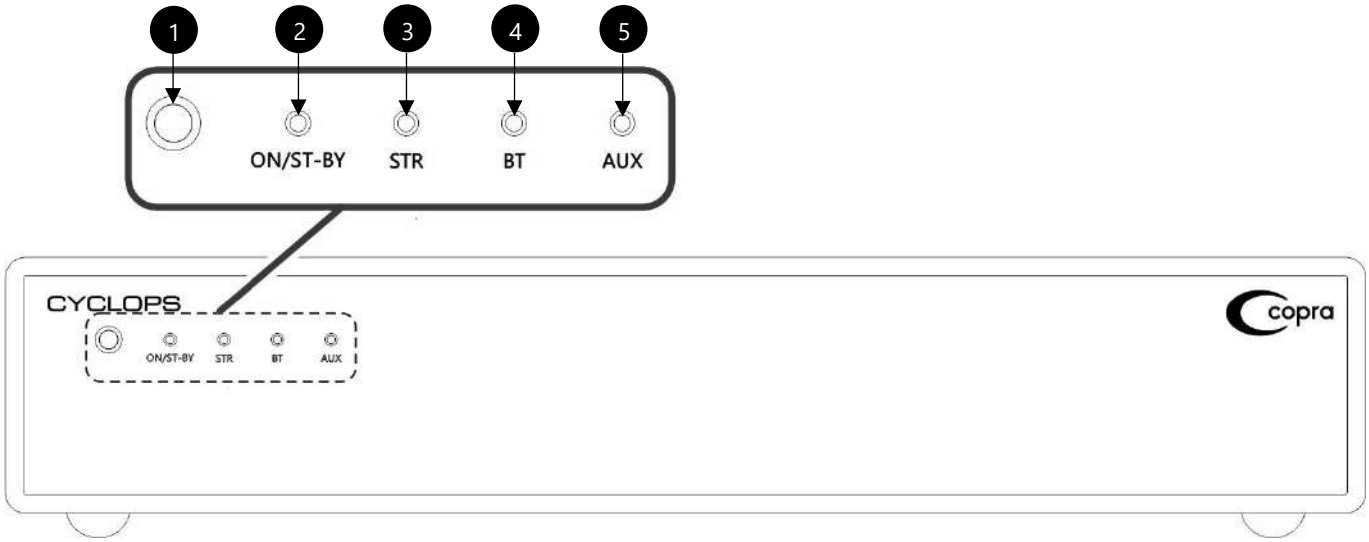


Figure 2 – Front panel of the amplifier

Table 1 – Front panel elements of the amplifier

№	Element	Function
1	IR Remote Signal Receiver	Receives signal from the remote control
2	ON/ST-BY Indicator	Indicates the power status of the amplifier. Steady red – the amplifier is in standby mode. Steady green – the amplifier is powered on.
3	STR Indicator	Indicates connection to a Wi-Fi wireless network. Flashing white – waiting for connection. Steady white – connected successfully.
4	BT Indicator	Indicates Bluetooth pairing status. Flashing blue – waiting for pairing. Steady blue – paired successfully.
5	AUX Indicator	Indicates wired connection status. Flashing red – waiting for connection. Steady red – connection established.

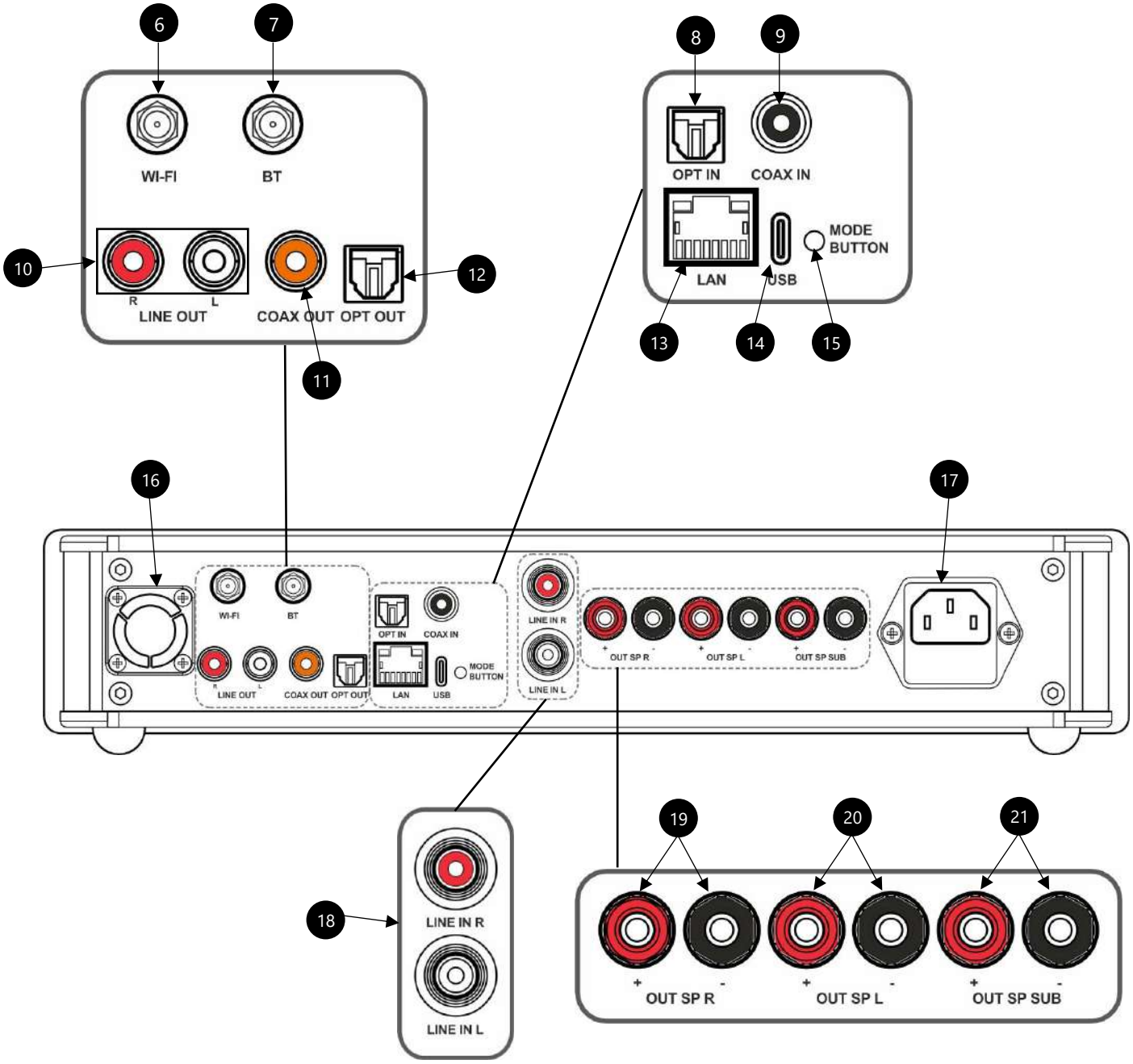


Figure 3 – Rear panel of the amplifier

Table 2 – Rear panel elements of the amplifier

№	Element	Function
6	Wi-Fi Antenna Connector	Connects the antenna for Wi-Fi network access
7	BT Antenna Connector	Connects the antenna for pairing with an external device via Bluetooth
8	OPT IN (Toslink) Connector	Receives digital audio signal from devices equipped with an optical output (TV, stationary media player, etc.)
9	COAX IN (RCA) Connector	Receives digital audio signal from devices equipped with a coaxial output (TV, stationary media player, etc.)
10	LINE OUT (RCA) Connectors – Right (R) and Left (L) Channels	Transmits analog audio signal to devices equipped with a line-in connector (additional amplifier, recording device, etc.)
11	COAX OUT (RCA) Connector	Transmits digital audio signal to devices equipped with a coaxial input (active speaker systems, recording device, etc.)
12	OPT OUT (Toslink) Connector	Transmits digital audio signal to devices equipped with an optical input (active speaker systems, recording device, etc.)
13	LAN (RJ45) Connector	Connection to home local network (Ethernet)
14	USB (C) Connector	Data reading and processing during servicing (testing, firmware updates, etc.)
15	MODE Button	– Power the device on/off (press and hold for 3–4 seconds) – Switch the input source (press once or multiple times with at least a 2-second interval) – Reset Wi-Fi or BT connection settings (double press quickly in Wi-Fi or BT mode, respectively) – Restore factory settings (press quickly three times)
16	Fan	Dissipates heat during device operation
17	Power Connector	Power cable connection
18	LINE IN (RCA) Connectors – Right (R) and Left (L) Channels	Receives analog audio signal from devices equipped with a line-out connector (media player, turntable with built-in phono preamp, etc.)
19	Terminals for Connecting Satellite Speaker (Right Channel)	Transmits analog audio signal from the amplifier to the satellite speaker (right channel)
20	Terminals for Connecting Satellite Speaker (Left Channel)	Transmits analog audio signal from the amplifier to the satellite speaker (left channel)
21	Terminals for Connecting Subwoofer	Transmits analog audio signal from the amplifier to the subwoofer

12.3 Speaker Systems

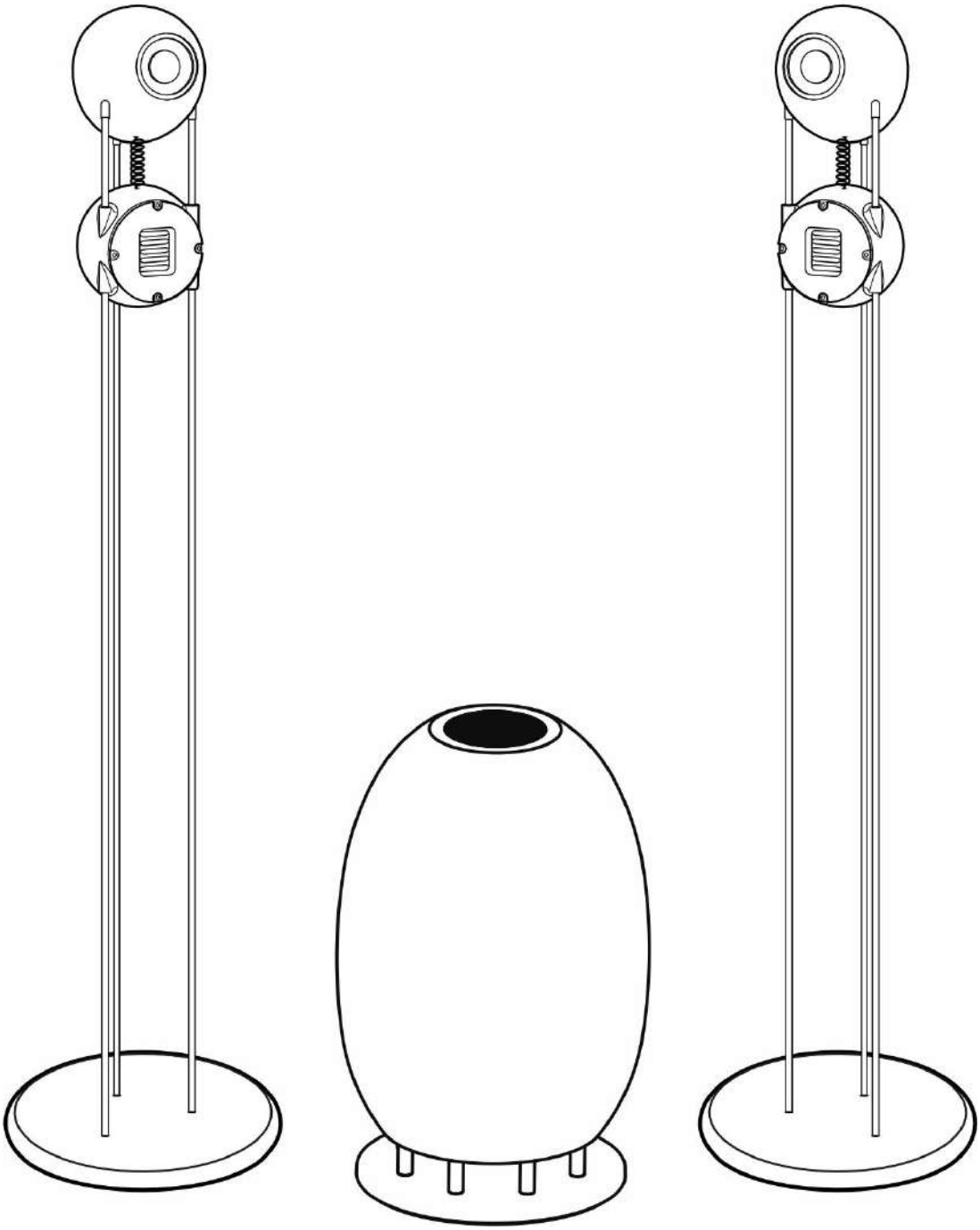


Figure 4 – Speaker system set

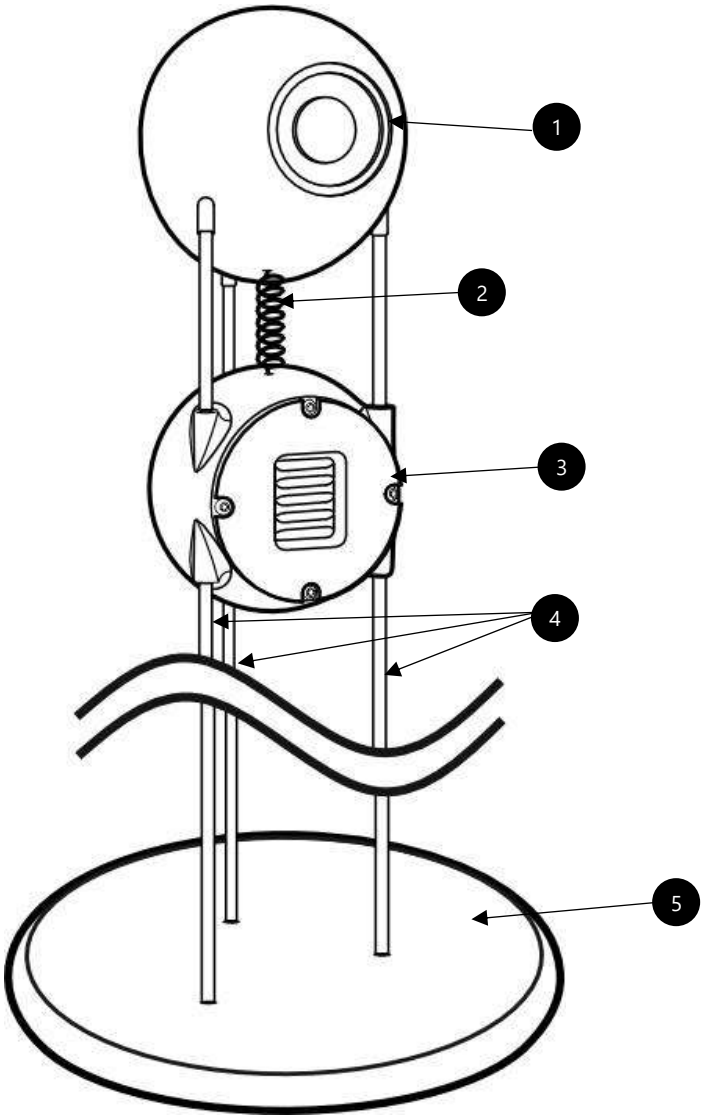


Figure 5 – Satellite speaker

Table 3 – Satellite speaker elements

№	Element	Function
1	Midrange driver housed in a coconut endocarp enclosure	Reproduces audio signal (midrange frequencies)
2	Signal Cable	Transfers audio signal between midrange and high-frequency drivers
3	High-frequency driver housed in a polymer concrete enclosure	Reproduces audio signal (high frequencies)
4	Support Spikes	Structural support element that also transmits the audio signal
5	Base	Provides stability for the satellite speaker

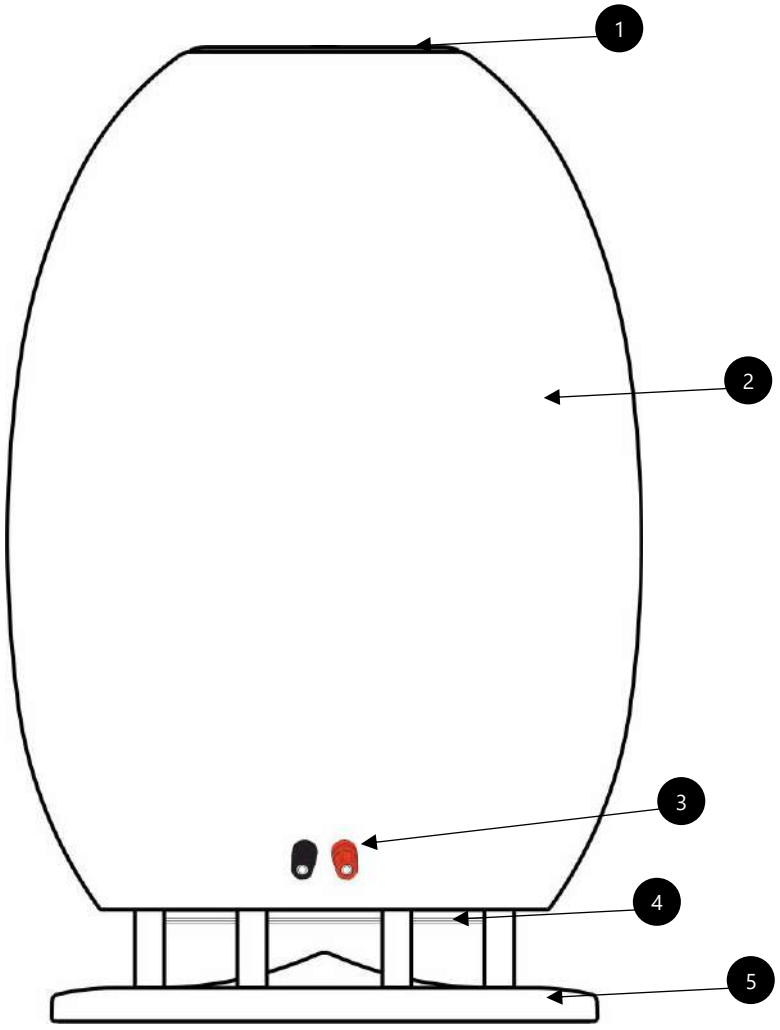


Figure 6 – Subwoofer

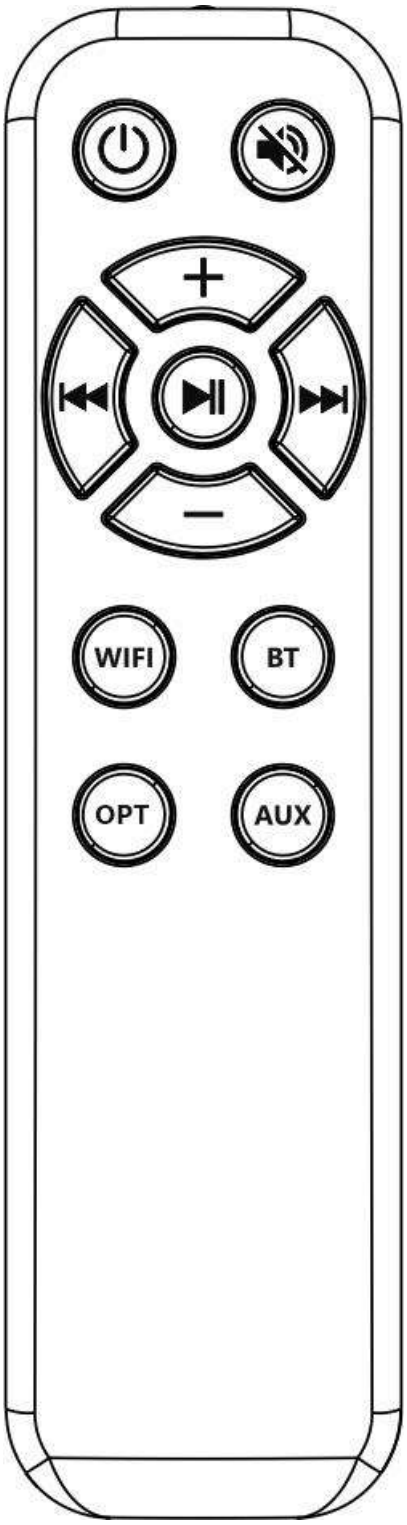
Table 4 – Subwoofer elements

№	Element	Function
1	Bass reflex port outlet	Low-frequency amplification, providing additional sound depth and volume
2	Enclosure	Made of polymer concrete
3	Terminals	Speaker cable connection
4	Low-frequency driver	Reproduces audio signal (low frequencies)
5	Base	Provides stability for the subwoofer and disperses the sound wave

12.4 Remote Control

Basic functions of the Cyclops system are controlled using the included remote control (see figure below).

Table 5 – Remote control buttons



	Power On/Off. Press once to turn the device on or switch it to standby mode.
	Mute/Unmute. Press once to turn the sound on or off.
	Volume Up. Press once or multiple times to increase the volume.
	Previous. Press once or multiple times to return to the previous track.
	Play/Pause. Press once to pause or resume playback.
	Next. Press once or multiple times to skip to the next track.
	Volume Down. Press once or multiple times to decrease the volume.
WIFI	Wi-Fi Connection. Press once to connect to the network.
BT	BT Activation. Press once to activate Bluetooth.
AUX	Wired Connection (Analog Interface). Press once to activate the connection.
OPT	Wired Connection (Digital Interface). Press once to activate the connection.

Figure 7 – Remote control

The remote control operates on a built-in lithium-polymer battery (400 mAh). Charging is performed using a wall charger (not included) connected via the USB-C port.

When the remote control is in use, the corresponding LED indicator on the amplifier briefly turns off, indicating the device's response.

To charge the remote control, simply connect it to a charger using a USB-C cable. Charging via a computer or power bank is also supported.

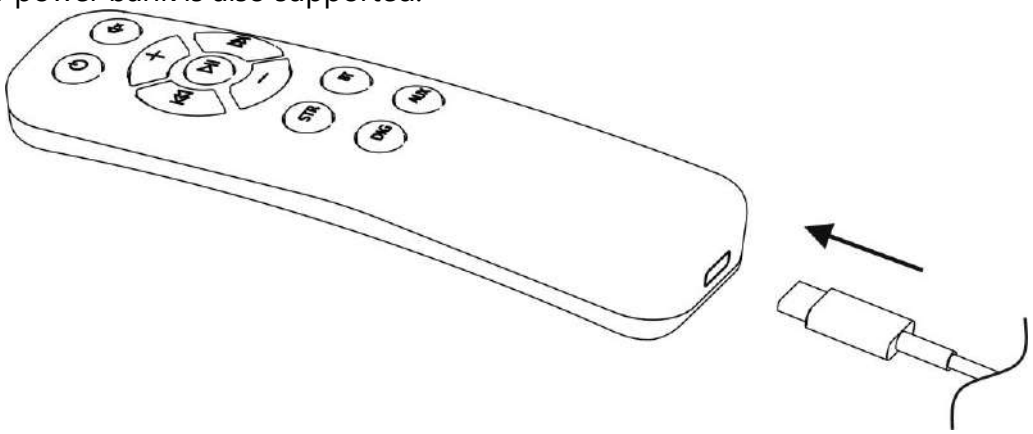


Figure 8 – Remote control charging

12.5 Technical Specifications

Table 6 – Main technical specifications of the amplifier

Parameter	Value
Model	CACLEAFA_BK
Amplifier class	D
Amplifier channel configuration	2.1
Power supply	Input: 230 V (AC), 2 A, 50/60 Hz, 400 W max. (≤ 0.5 W in standby mode)
Frequency range	28–22000 Гц (infrasonic filter)
Total harmonic distortion (THD)	≤ 0,01 %
Signal-to-noise Ratio (SNR)	100 дБ
DAC	ESS Sabre
Digital audio signal resolution	PCM 24 бит / 192 кГц
Supported audio formats	Uncompressed audio formats: • ALAC (up to 24-bit / 192 kHz) • FLAC and AIFF (up to 24-bit / 192 kHz) • WAV (up to 24-bit / 192 kHz). Compressed audio formats: • AAC (up to 96 kHz, 320 kbps) • MP3 (up to 48 kHz, 320 kbps) • OGG and WMA (up to 96 kHz, 320 kbps)
Functional Features	
Installation	On a flat horizontal surface
Control	Remote control (IR remote, **4STREAM** mobile application)
Protection types	• Protection against undervoltage/overvoltage

Parameter	Value
	in the power supply (100/265 V) • Short circuit protection • Overheat protection (+45 °C) • Overload protection (speaker protection)
Protection activation delay	3 seconds
Auto power-off in the absence of signal	The system powers off after 15 minutes of no audio signal.
Network Specifications	
LAN	10/100 Mbps
Wi-Fi	802.11 b/g/n • (2,4 GHz) ≤ 17.75 dBm • (5 GHz) ≤16.99 dBm
BT	5.0 with aptX HD audio codec support ≤ 9.65 dBm
AirPlay	AirPlay 2
Network function support	Multi-room, NAS
Streaming service support	AMAZON MUSIC, BBC Radio, Calm Radio, Internet Radio, Napster, Open Network Stream, Pandora, QQFM, QQMusic, Qobuz, Radio Paradise, SoundCloud, SoundMachine, Spotify, Tidal, TuneIn, iHeartRadio
Connection ports	
LAN	RJ45
LINE IN	RCA (×2), left and right channels
LINE OUT	RCA (×2), left and right channels
COAX IN	RCA
COAX OUT	RCA
OPT IN	Toslink
OPT OUT	Toslink
USB	Type C (сервисный)
Terminals for subwoofer connection	Screw-type (×2)
Terminals for satellite speaker connection	Screw-type (×2)
Physical specifications	
Enclosure material	Aluminum
Color	Anodized, black
Dimensions (В×Ш×Г)	65 × 330 × 230 mm
Net weight	4,5 kg
Operating conditions	Temperature: +20…+30 °C Relative Humidity: 40–60% (non-condensing)
Storage conditions	Temperature: +5…+35 °C Relative Humidity: 30–70% (non-condensing)
Protection rating	IP10

Table 7 – Main technical specifications of the satellite speakers

Parameter	Value
Type	Passive, two-way
Color	Black Gloss
Frequency range	100–30 000 Hz
Sensitivity	88 dB
Sound pressure level (from two satellite speakers)	100 dB
Crossover	2nd-order passive high-pass filter located in the satellite base
Crossover frequency	3500 Hz
THD (1 kHz/90 dB/1 m)	<0,4%
Size (Ø×H)	280 × 1235 mm
Weight	5,5 kg
Operating conditions	Temperature: +20…+30 °C Relative Humidity: 40–60%
Storage conditions	Temperature: +5…+35 °C Relative Humidity: 30–70% (non-condensing)
Protection rating	IP20
Tweeter	
Type	Planar (ribbon) AMT technology
Diaphragm material	Kapton
Magnetic system	Neodymium
Crossover	2nd-order passive high-pass filter located in the satellite base
Crossover frequency	3500Hz
Rated power	20 W
Maximum power	35 W
Frequency range	2300–25000Hz
Enclosure material	Polymer concrete with black coating
Metal parts	Brass, stainless steel
Midrange driver	
Type	Dynamic
Diaphragm material	Anodized aluminum
Magnetic system	Neodymium
Crossover	2nd-order passive high-pass filter
Crossover frequency	120 Hz
Rated power	35 W
Maximum power	70 W
Frequency range	100–20000 Hz
Enclosure material	Coconut endocarp

Warranty period:	
Speaker systems	3 years

Parameter	Value
Amplifier	2 years
Certificates	CE, RoHS, EAC

Table 8 – Main technical specifications of the subwoofer

Parameter	Value
Type	Passive, bass reflex design
Diaphragm material	Cellulose, kevlar
Magnetic system	Ferrite
Rated power	350 W
Maximum power	1000 W
Frequency range	28–200 Hz
Input impedance	4 Ohm
Sound pressure level (SPL)	100 dB
Sensitivity	86 dB
Mechanical excursion	up to 52 mm
Linear excursion	±12 mm
Physical Specifications	
Enclosure material	Polymer concrete
Color	Black Gloss
Size (Ø×H)	325×503 mm
Net weight	17,5 kg
Operating conditions	Temperature: +20…+30 °C Relative humidity: 40–60%
Storage conditions	Temperature: +5…+35 °C Relative Humidity: 30–70% (non-condensing)
Protection rating	IP30

13. Installation and Operation

13.1 Getting Started

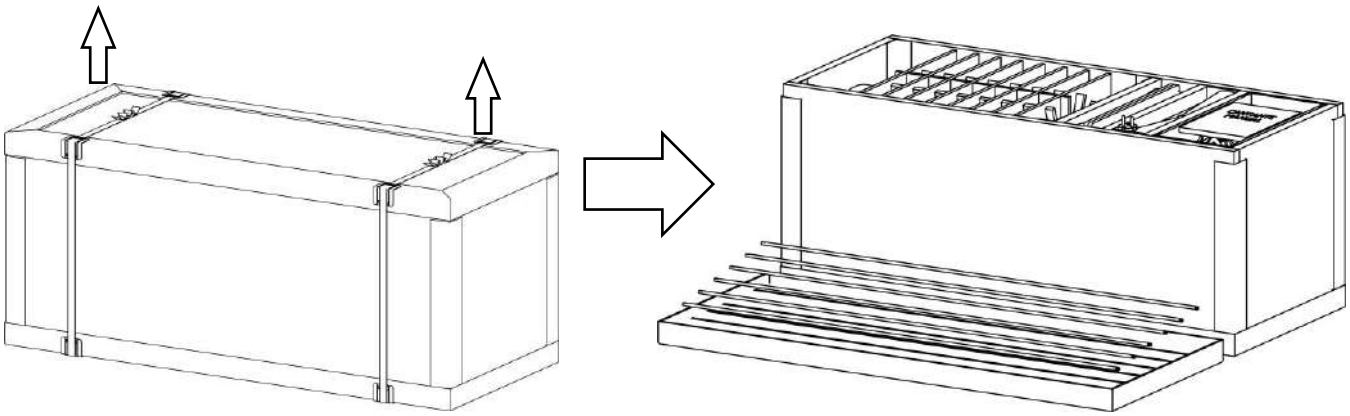
It is recommended to unpack and assemble the audio system directly at the intended installation site. When selecting a location for installing the audio system, consider the following:

- The installation surface must be flat, sturdy, and stable (e.g., a table or shelf for the amplifier, and the floor for the speaker systems).
- Avoid tension on connected cables when using a wired connection.
- A power outlet must be accessible for supplying the audio system, and the power cable should be connected without tension.
- The room where the audio system will be placed should be free from sources of noise or electromagnetic interference.
- Access to the audio system installation area should be restricted for children and pets.

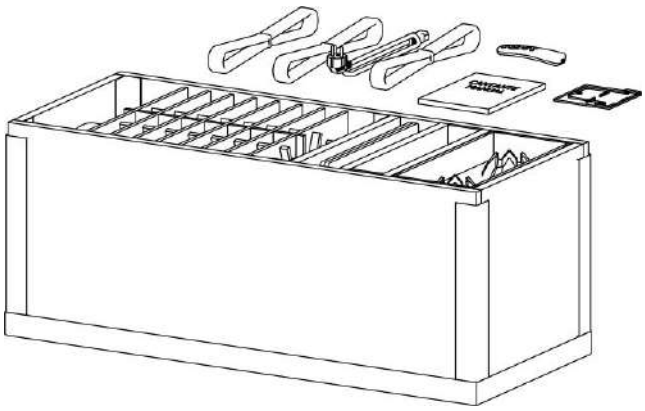
⚠ **WARNING!** To prevent falls and damage to the audio system components, unpacking, assembly, and installation should be carried out by at least two people.

13.2 Unpacking

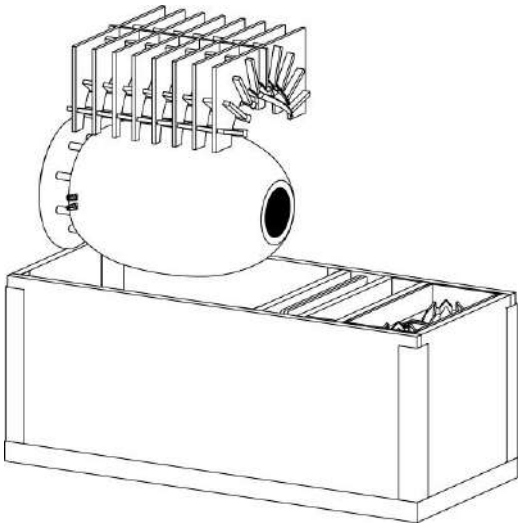
Step 1. Open the box lid and place it on the floor. Remove the 6 support spikes from inside.



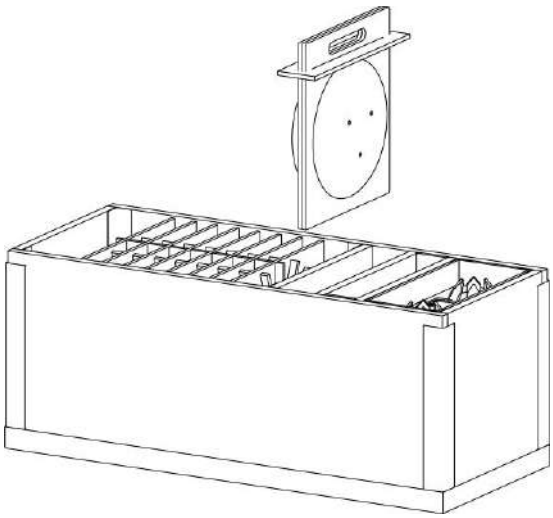
Step 2. Remove the accessories: tool kit (wrench, hex key), remote control, assembly stand, 3 sets of cables, power cable, mounting screws, and documentation set (quick start guide, warranty card).



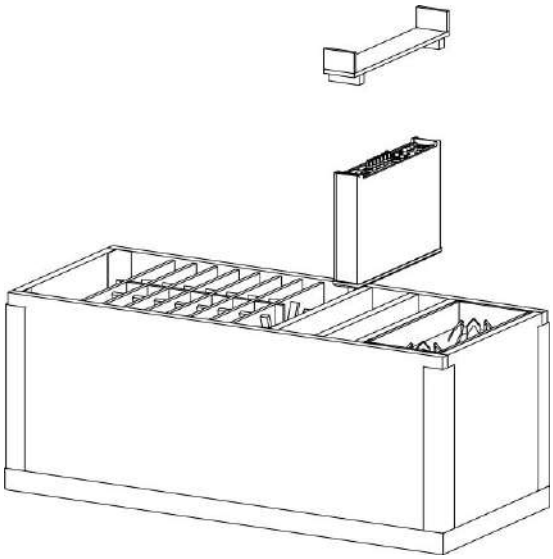
Step 3. Remove the upper part of the foam insert and take out the subwoofer.



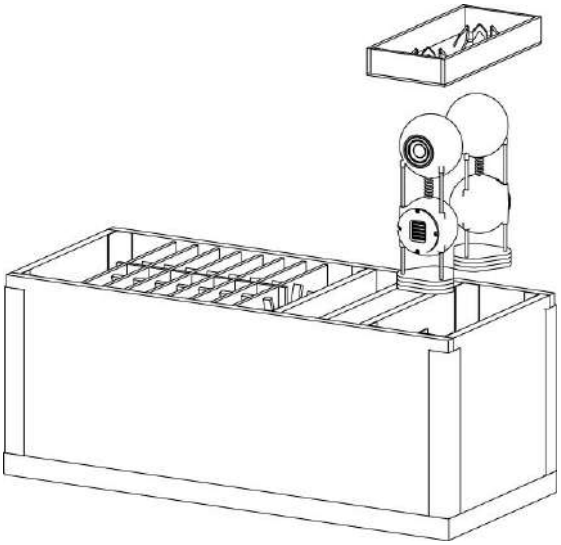
Step 4. Remove the 2 satellite bases and detach the transport holder from each of them.



Step 5. Remove the amplifier.



Step 6. Remove the satellite modules.

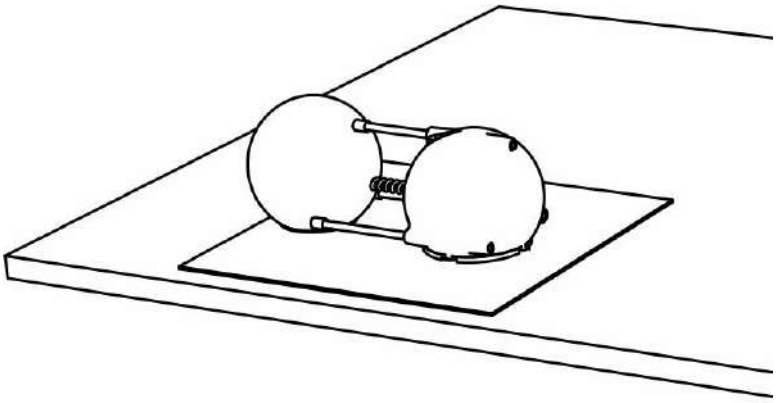


13.3 Satellite Assembly

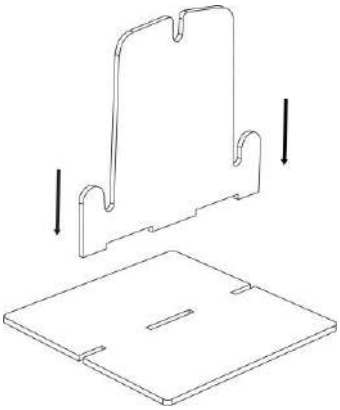
Step 1. Use the included gloves to protect the glossy surfaces of the product. Place the supplied microfiber cloth on a flat, stable horizontal surface (such as a table). Carefully place the satellite module on the cloth with the drivers facing down (see figure below).

⚠ **IMPORTANT!**

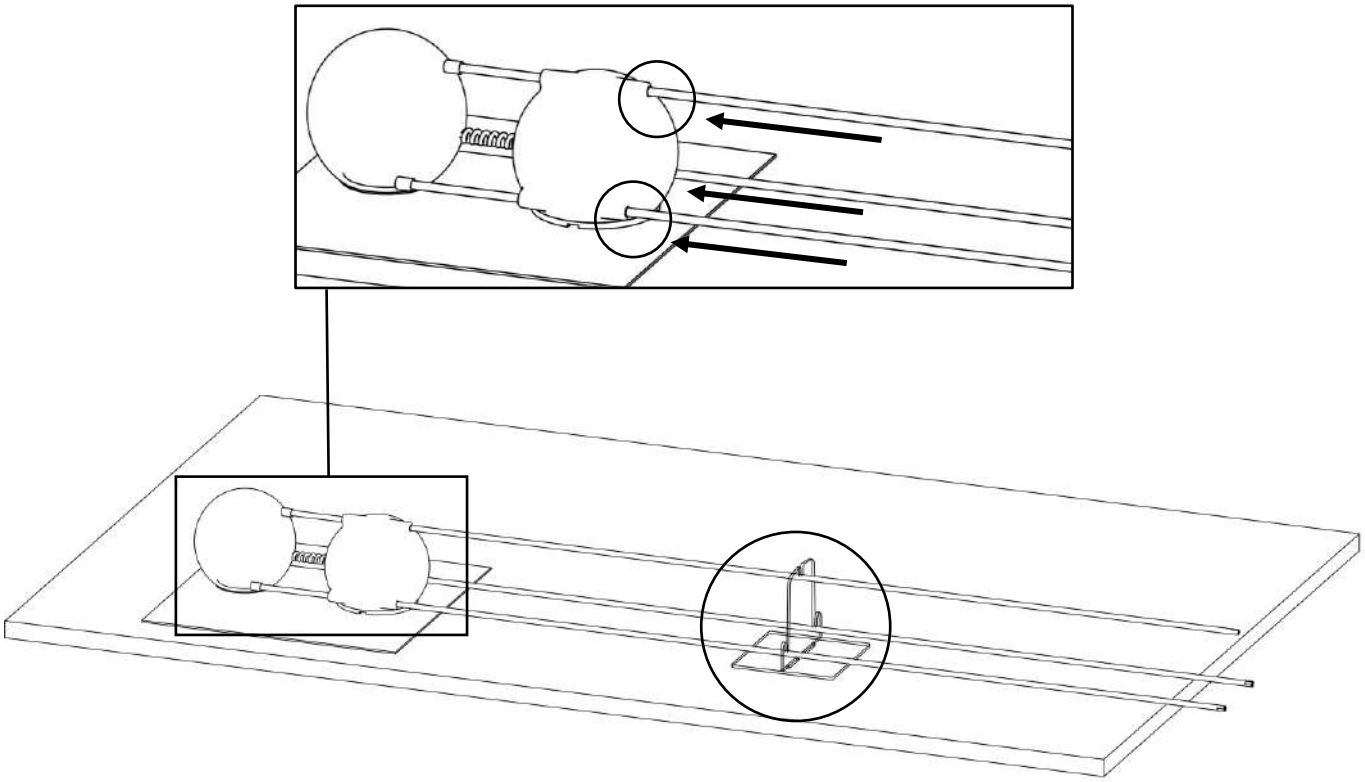
The midrange driver enclosure, located at the top of the satellite, is not fixed and moves freely on the support spikes. During assembly, it is necessary to hold it in place to prevent shifting relative to the support spikes, as the connecting cable, which is designed as a spring, may be irreversibly stretched.



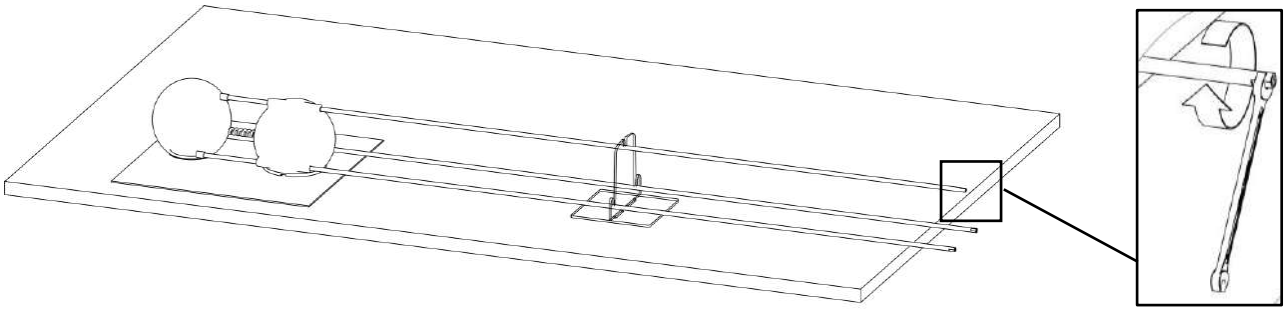
Step 2. Assemble the assembly stand by connecting its two parts.



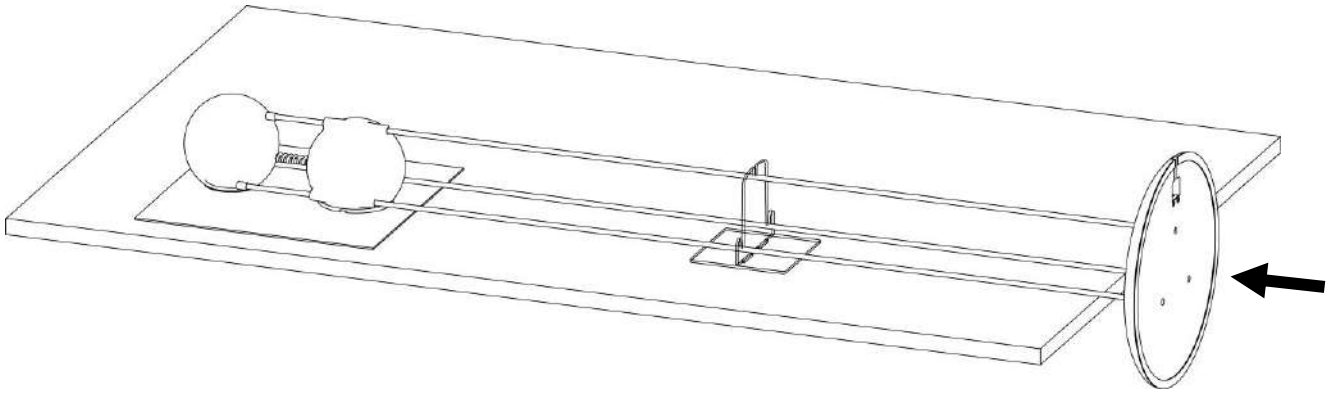
Step 3. Secure the satellite module so that it does not shift during further assembly. Insert the three metal spikes (with external threads) into the holes in the high-frequency driver enclosure. Place the assembly stand approximately in the middle of the spikes, positioning the spikes into the stand's grooves. Ensure that the opposite ends of the spikes with internal threads extend beyond the edge of the table.



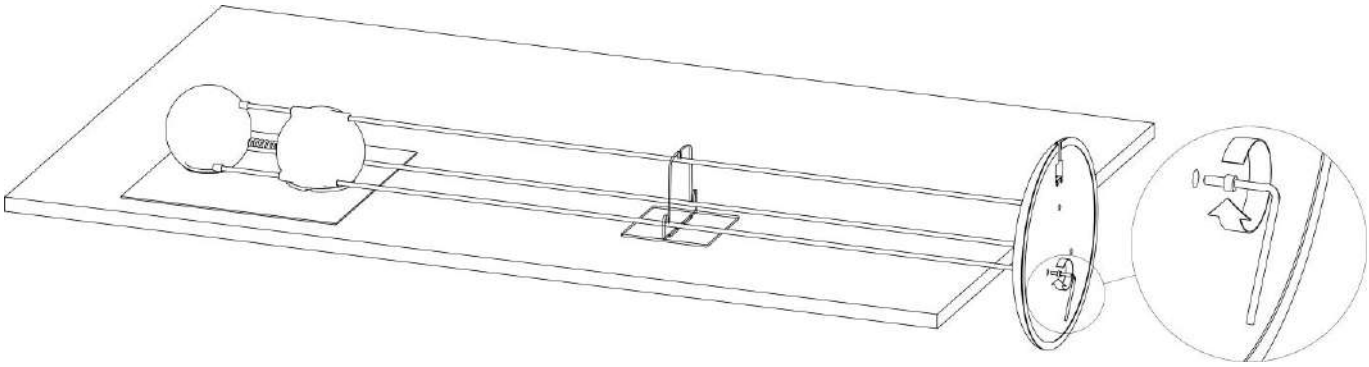
Step 4. Using a 5 mm wrench, screw all three spikes into the holes until they are fully tightened.



Step 5. Slide the satellite base with the upper (rounded) side onto the ends of the support spikes with internal threads. The ends of the spikes should fully fit into the mounting holes in the rounded part of the base. The terminals for connecting the speaker cable, located on the underside of the base, should be on top (opposite the side with the drivers).



Step 6. Screw the fixing screws onto the threaded ends of the spikes on the opposite side of the base using the hex key. Ensure that the screws are tightly secured.



Repeat the described steps for the second satellite.

13.4 Cable connections

After assembling the satellite, without removing it from the table, connect the satellite speaker cable. It has tubular contacts on one side and "plug" contacts on the other.

Insert the tubular contacts of the cable into the terminal holes in the satellite base. Observe the polarity: connect the contact with the red mark to the terminal with the red mark. Tighten the contact terminals with the fixing screws using the included 2 mm hex key).

Route the connected cable through the output groove on the underside of the base.

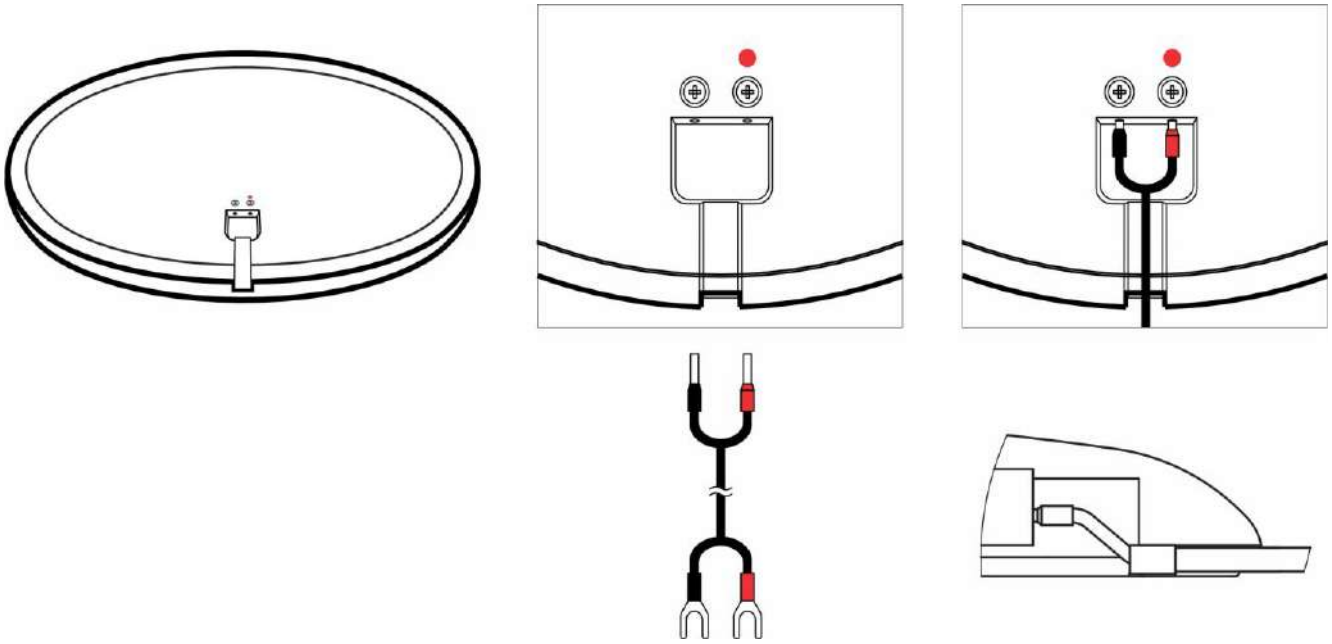


Figure 9 – Connecting the speaker cable to the satellite

Carefully holding the midrange driver enclosure, place the assembled satellite vertically on the floor.

Repeat the described steps for the second satellite.

Connect the speaker cable intended for the subwoofer. The cable has "plug" contacts on both ends. Observe the polarity (connect the contacts with the red and blue marks to the red and blue terminals, respectively).

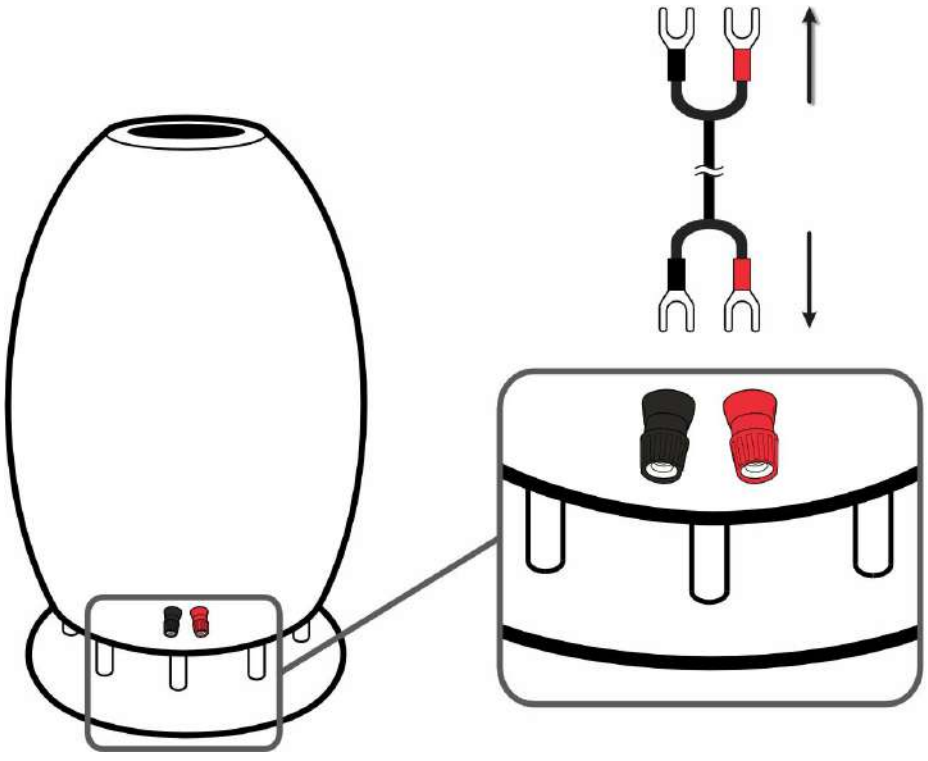


Figure 10 – Connecting the speaker cable to the subwoofer

13.5 Placement

⚠ **IMPORTANT!**

❌ Avoid direct sunlight exposure to the speaker systems.
❌ Do not place the system near heat sources.
❌ Prevent water from coming into contact with the system and avoid condensation on its components.

☑ Ensure adequate airflow around the front and rear panels of the amplifier.
☑ Leave a gap of at least 5 cm above and on the sides of the amplifier.

When positioning the satellites, keep in mind that the distance between them should be approximately equal to the distance from each satellite to the listener. These distances should be as large as possible, depending on the available space. The recommended distance is 2.5–3 meters.

The distance from the wall to the speaker systems should be at least 0.5 meters.

It is recommended to place the subwoofer in the corner of the room. If you experience an excessive amount of low frequencies during music playback, move the subwoofer between the satellites, but not in the center—closer to one of them.

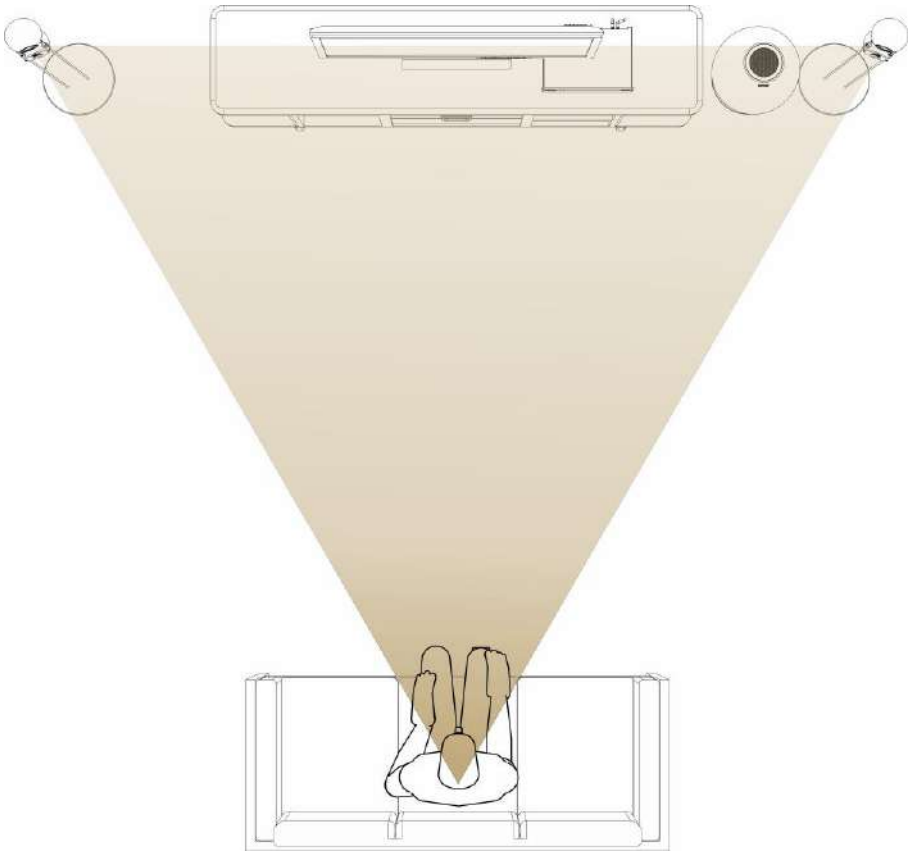


Figure 11 – Speaker placement

In the classic setup, both sound sources in the satellite should be directed towards the listener. However, in some cases, adjusting the direction of the midrange driver can help compensate for the negative effects of the room's acoustic characteristics where the Cyclops audio system is place.

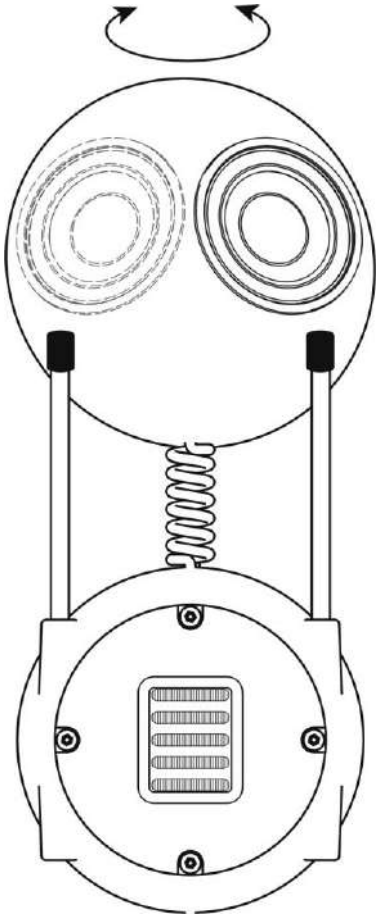


Figure 12 – Adjusting the direction of the midrange driver

Connect the speaker cables to the amplifier according to the markings on the rear panel of the enclosure.

Observe the polarity: connect the contacts with the red mark to the terminals marked in red, and the contacts with the blue mark to the terminals marked in blue. Place the satellites connected to the right and left channel terminals to the right and left of you, respectively.

⚠ **WARNING!** Do not connect the satellites to the subwoofer terminals and vice versa. This may cause damage to the system, which is not covered by the warranty.

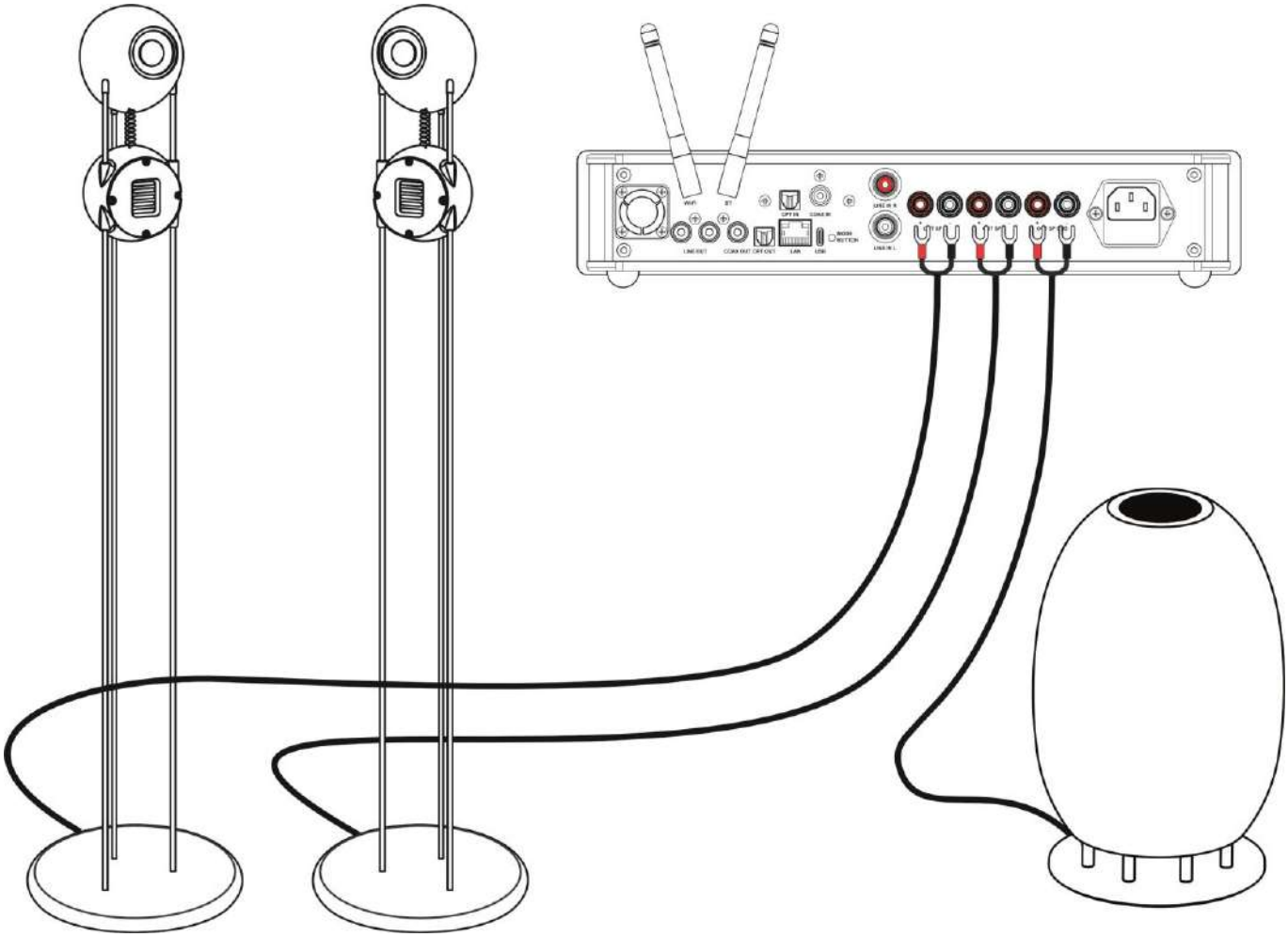


Figure 13 – Speaker system connection diagram to the amplifier

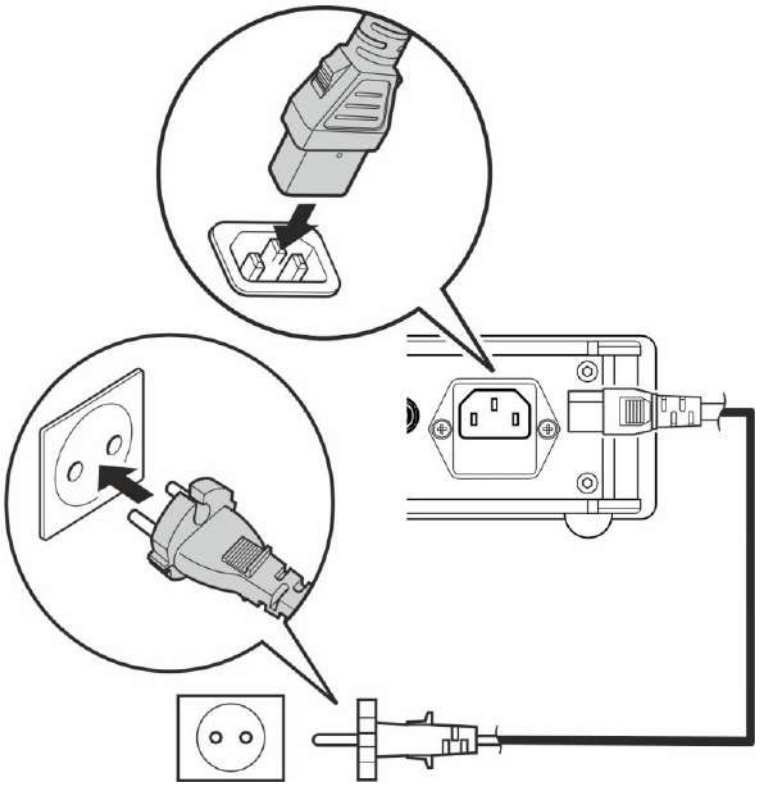
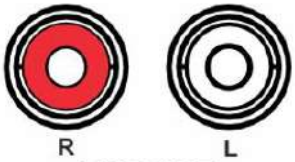
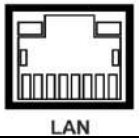


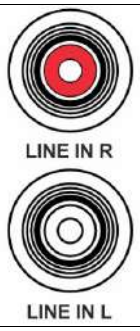
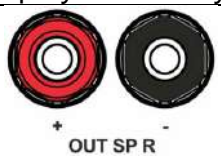
Figure 14 – Amplifier power supply connection diagram

14. Amplifier Connection Options

External signal sources can be connected to the amplifier. Use the analog input, optical, or coaxial digital input for this purpose. After connecting the signal source, connect the power cable.

Table 9 – Rear panel connectors of the amplifier.

 WI-FI	SMA connector for connecting the included antenna 2.4 GHz, Wi-Fi.
 BT	SMA connector for connecting the included antenna 2.4 GHz, BT.
 R L LINE OUT	Used when synchronous operation of an external speaker system with its amplifier in another zone is required via an analog signal.
 COAX OUT	Used when synchronous operation of an external speaker system with its amplifier in another zone is required via a digital S/PDIF signal through a coaxial cable connection.
 OPT OUT	Used for integration with other audio sources via a digital S/PDIF signal through an optical cable connection. Typical sources with this connection include smart TVs, set-top boxes for TVs or projectors, and game consoles.
 OPT IN	Used for integration with other audio sources via a digital S/PDIF signal through an optical cable connection. Typical sources with this connection include smart TVs, set-top boxes for TVs or projectors, and game consoles.
 COAX IN	Used for integration with other audio sources via a digital S/PDIF signal through a coaxial cable connection. Typical sources with this connection include smart TVs, set-top boxes for TVs or projectors, and game consoles.
 LAN	Used for connecting to the internet via Ethernet. Provides a more stable connection compared to Wi-Fi, especially in cases where the router is located far away.

 USB	This connector should only be used by qualified service center technicians.
Firmware update data for the device is transferred from an external USB storage during servicing. **WARNING!** Service maintenance is provided only by the manufacturer, COPRA.	
 LINE IN R LINE IN L	Analog input for connecting a source via a coaxial analog cable. Typical source options include: output from a phono preamp of a turntable, an external high-quality DAC, another player (such as a CD player), and any other sources with an analog output, such as a karaoke system.
High-precision analog audio signal is transmitted from an external device (such as a player, etc.) and played back by the audio system.	
 + - OUT SP R	Terminals for connecting the left and right channels of the included satellite speakers. The amplifier is calibrated for accurate sound reproduction with the included speaker system and is designed to work exclusively with it.
 + - OUT SP SUB	Terminals for connecting the included subwoofer. The amplifier is calibrated for accurate sound reproduction with the included speaker system and is designed to work exclusively with it.

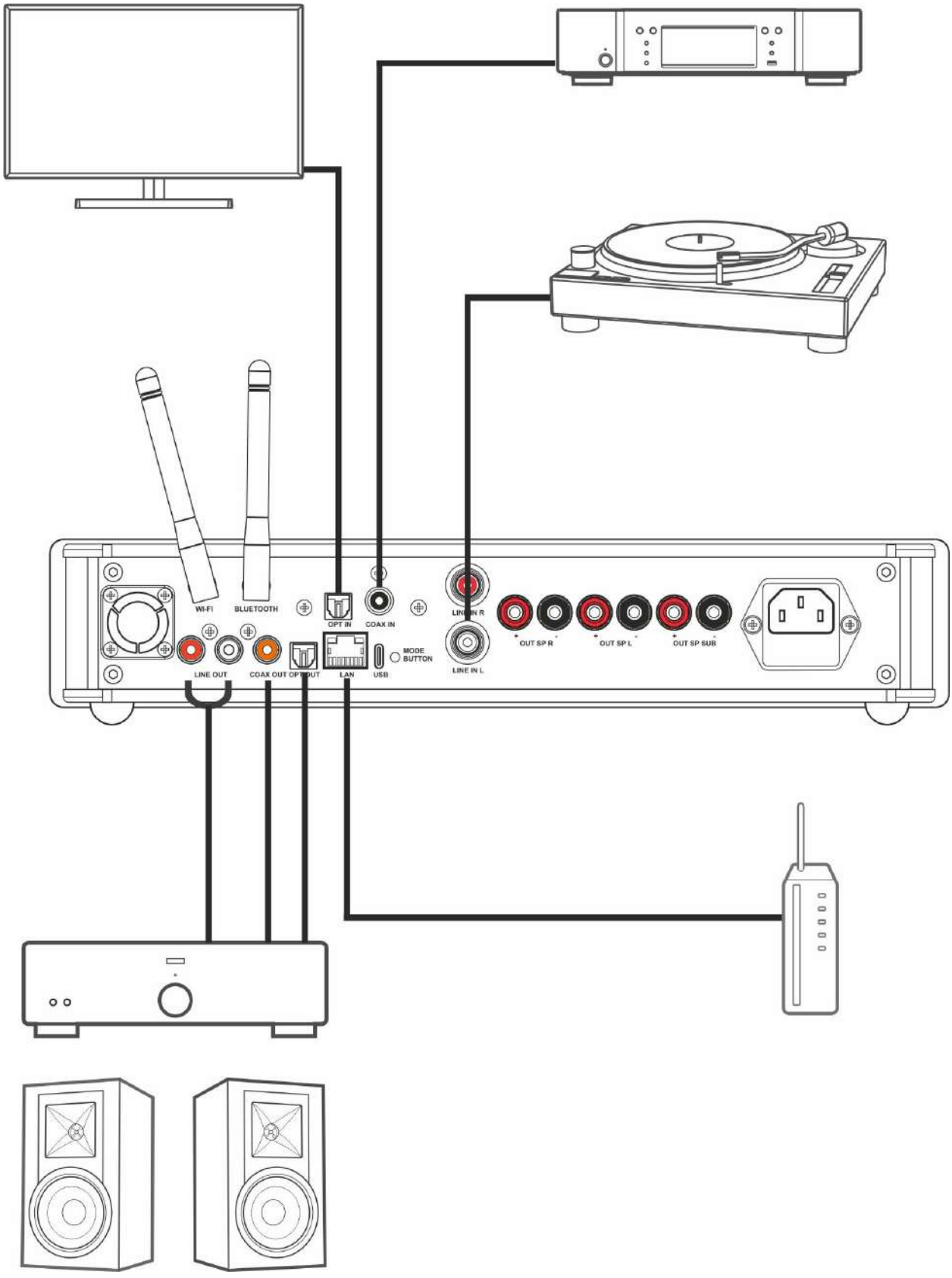


Figure 15 – Examples of connecting external devices

15. Getting Started

Ensure that all components of the Cyclops audio system are correctly and securely connected according to this **User Manual**.

Since the system's amplifier contains an internal signal source and control is done via a mobile application, follow the setup instructions below.

15.1 Mobile App Setup

To use the network features of the amplifier with the streaming player, it is necessary to install the 4STREAM mobile application.

Download it from Google Play or the App Store, depending on the operating system you are using. The app can also be downloaded using the QR code:

apps.apple.com

play.google.com

⚠ **NOTE:** The following setup and usage of the **4STREAM** app are described using the Android operating system as an example.

1. Ensure that your mobile phone is connected to the home Wi-Fi network on the 2.4 GHz frequency, and that GPS and Bluetooth (BT) are enabled.

⚠ **NOTE:** For stable data transmission, it is recommended to connect the amplifier to the internet via a wired connection (LAN port).

2. Connect the device to a power outlet.
3. When the ON/ST-BY LED lights up green, press the MODE button three times consecutively to reset the amplifier to factory settings. The white STR LED will start flashing rapidly (4 times per second), indicating that the device is rebooting. Wait 30–35 seconds until the LED starts flashing slowly, 2 times per second, which indicates that the device is ready for connection.

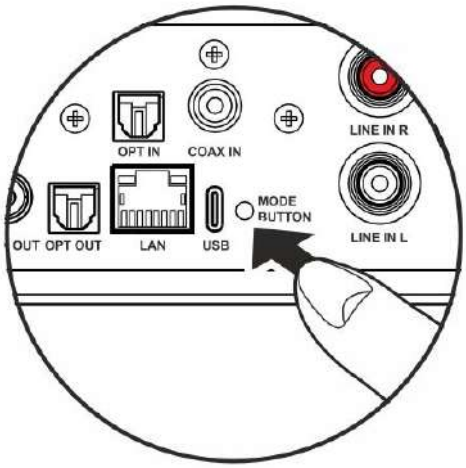
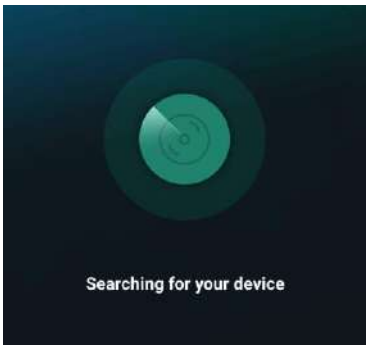
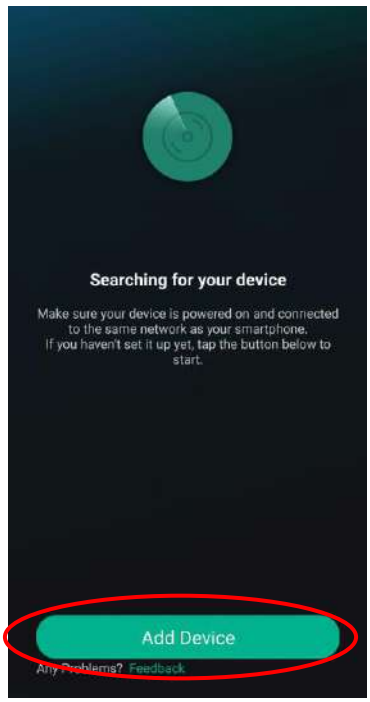


Figure 16 – Getting started

4. Open the **4STREAM** app. It will begin searching for available devices.

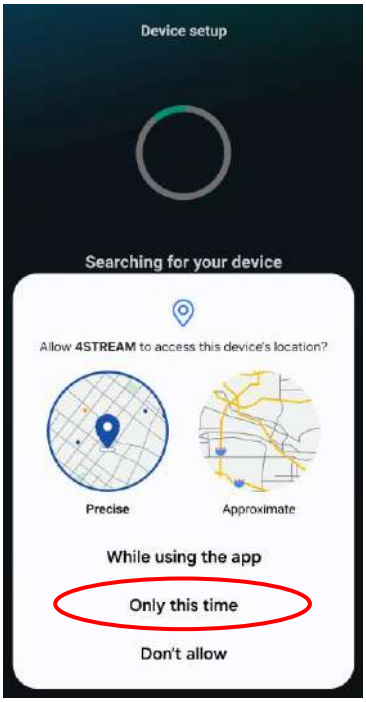


Tap "Add Device."

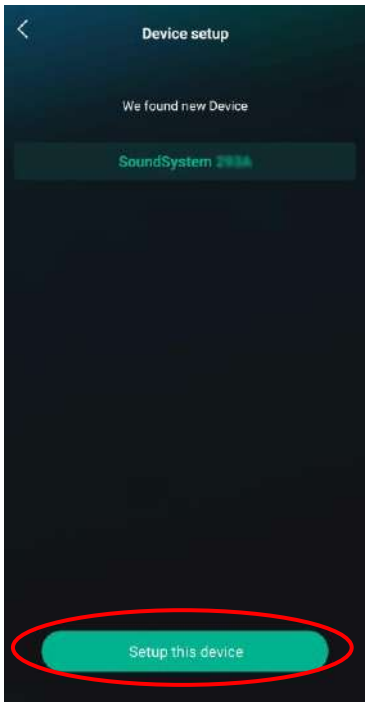


5. When the "Device Setup" dialog appears, ensure that the indicator on the front panel of the amplifier is flashing. Confirm this by pressing the button on the screen:

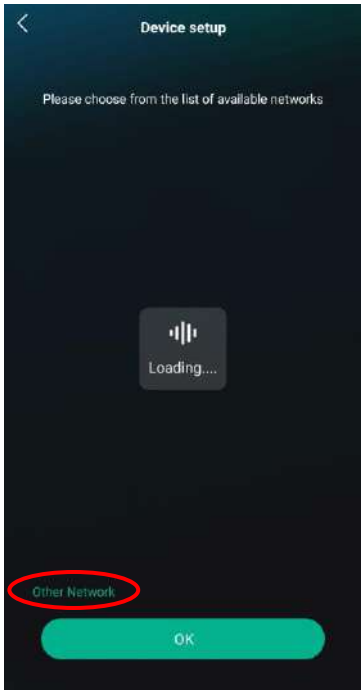
6. The app will request access to the device's location data. Grant one-time permission at this stage of the setup (this will prevent further location tracking).



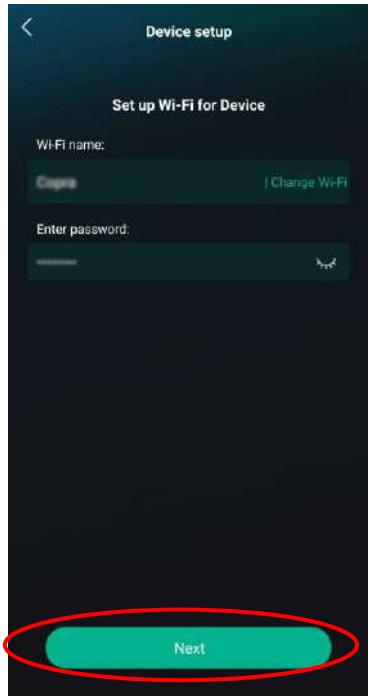
7. After the list of available devices appears on the screen, select the device "SoundSystem...". Confirm your selection by pressing the "Set this device" button on the screen:



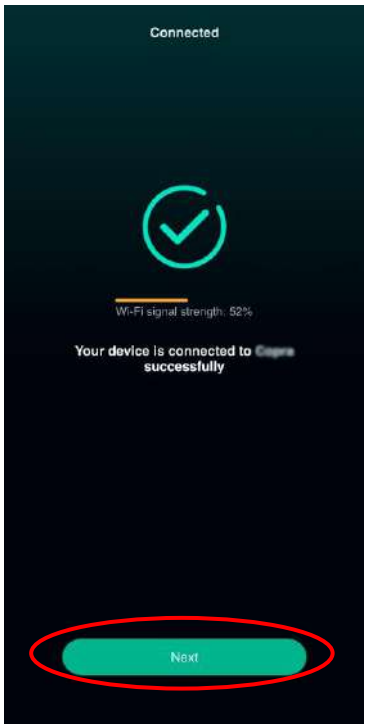
8. Select the network you will use, or tap the "Other networks" button:



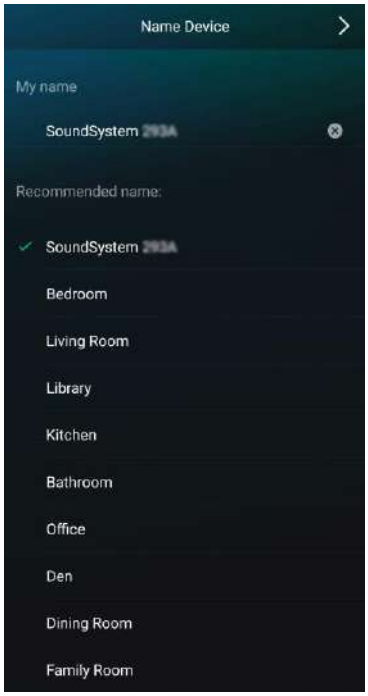
9. Enter the network name and password, then tap "Next":



10. A notification about the successful connection will appear. Tap "Next" to proceed to the app's menu.



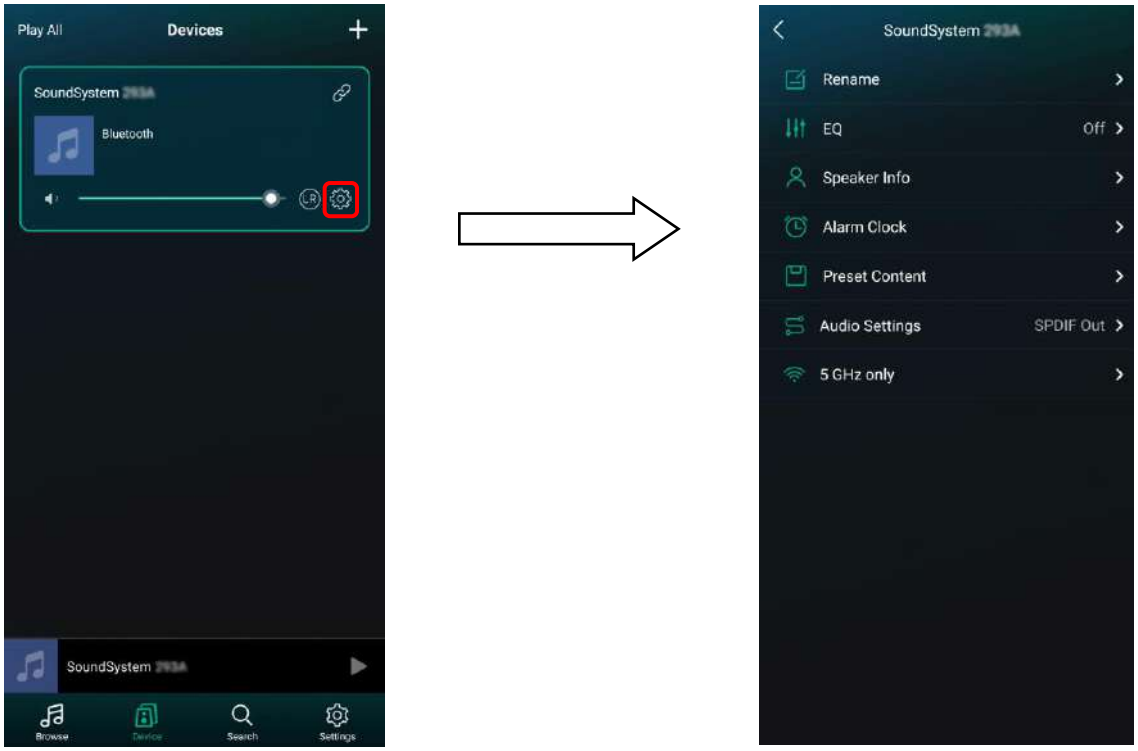
11. You can change the device name or choose from the list of suggestions.



NOTE: If you have changed the router or its password, repeat steps 1–11 as described above.

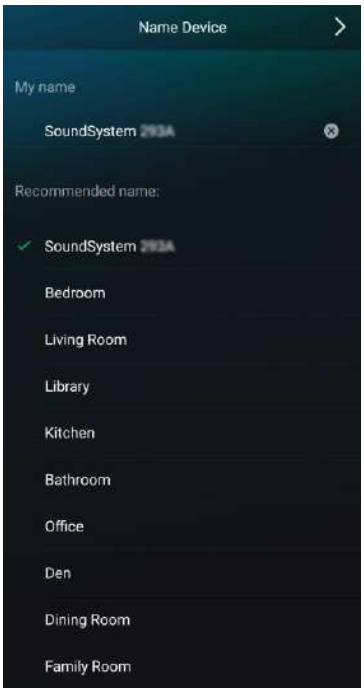
15.2 Setting up the audio system parameters

1. To access the audio system parameters menu, tap the icon ⚙:



The following parameters are available in this menu:

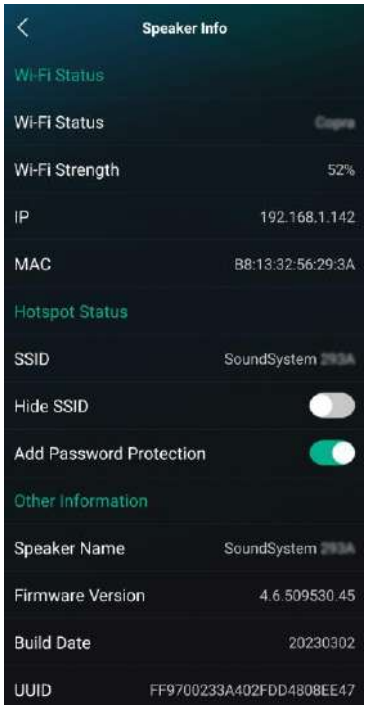
- Assigning/changing the device name.

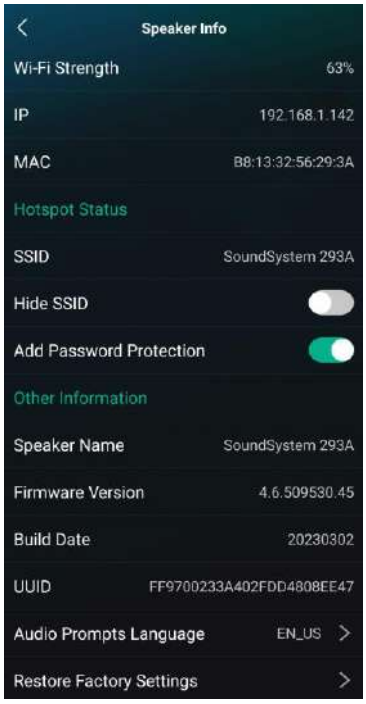


- Adjusting frequencies using the equalizer.

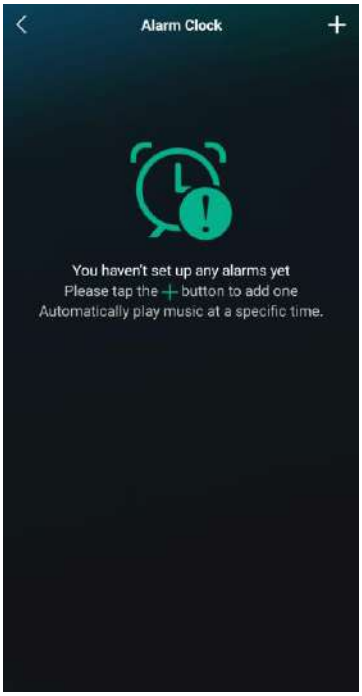
- Information about the built-in streaming player.

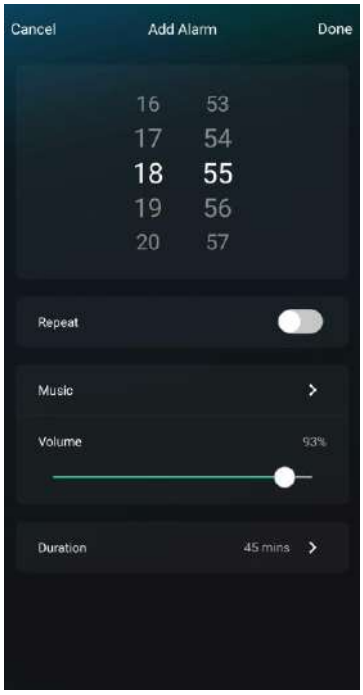
Here, you will find all the main connection and setup parameters. This section is intended for professionals.



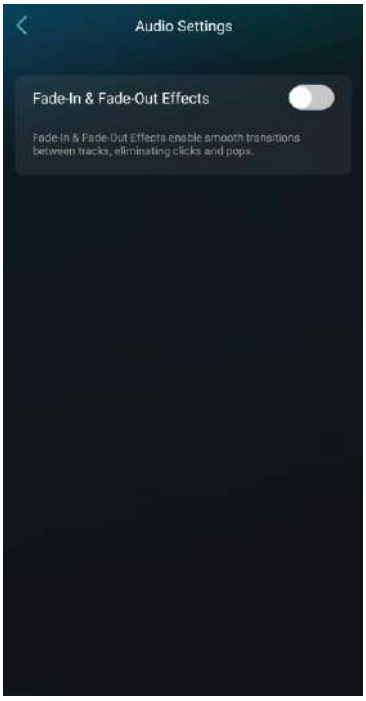


- Setting the alarm.





- S/PDIF output audio signal mode, which ensures smooth transitions between tracks, eliminating clicks and pops.

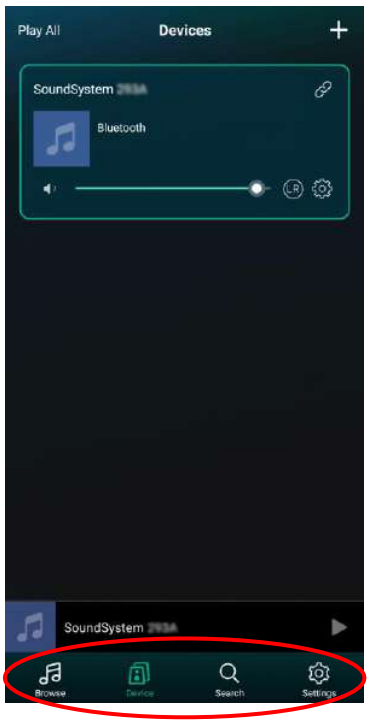


- Using Wi-Fi connection only on the 5 GHz frequency.

Ensure that your Wi-Fi router supports the 5 GHz range. Enabling this mode disables the 2.4 GHz range and ensures connection to the router with the 5 GHz range. This helps with faster device discovery and provides smoother audio playback.

15.3 Audio signal playback

The main menu of the app, displayed after it is launched, looks as follows:



The menu contains three main sections that allow you to choose and use different content sources.

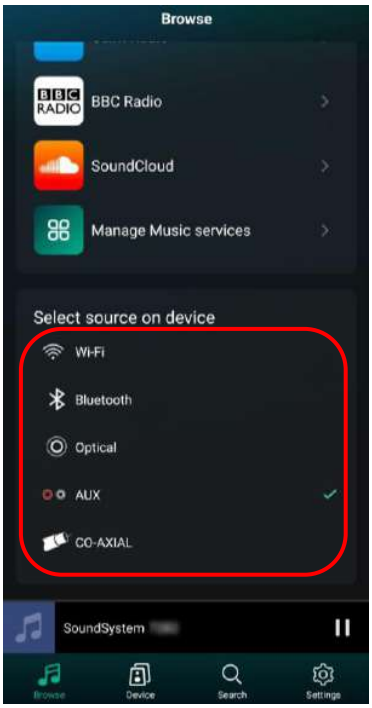
- Browse – selecting a streaming service or an external signal source.
- Device – selecting music content stored on the mobile device.
- Search – searching for desired content on the device.
- Settings – viewing the firmware version and other settings.

15.4 Selecting the Source

The "Browse" section allows you to select the signal source:

- Internal Wi-Fi streaming player (indicated as "STR" on the device).
- Source connected via Bluetooth (BT).
- Source connected via a digital interface using an optical cable.
- Source connected via a digital interface using a coaxial cable.
- Source connected via an analog interface.

To select one of the listed sources, use the app or the remote control.

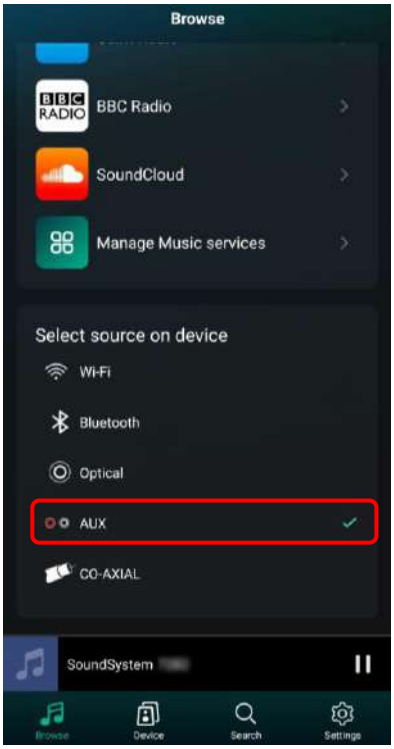


15.5 Audio signal playback from a wired source.

Connect the audio source to the **LINE IN** connector on the rear panel of the amplifier using a cable (not included).

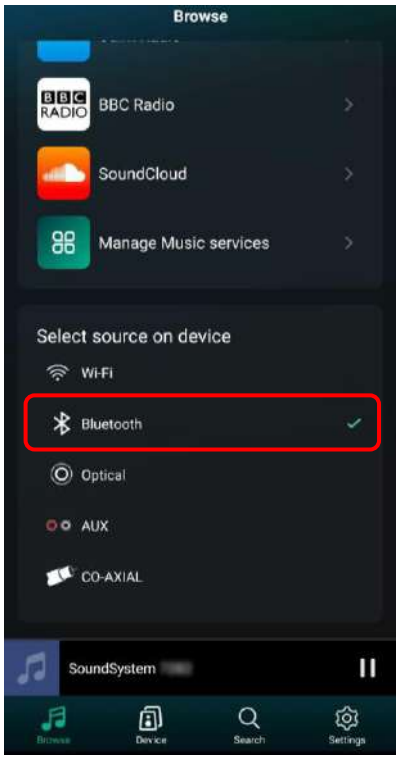
Select the **AUX** interface as the audio source in the app menu or press the **AUX** button on the remote control. The **AUX** indicator on the front panel of the amplifier will light up red.

Start playback on the device used as the audio source. Control playback using the controls on the source device (buttons, remote control, app).



15.6 Audio signal playback via Bluetooth (BT).

Select **BT** as the signal source in the app menu or press the **BT** button on the remote control. The **BT** indicator on the front panel will start flashing blue.

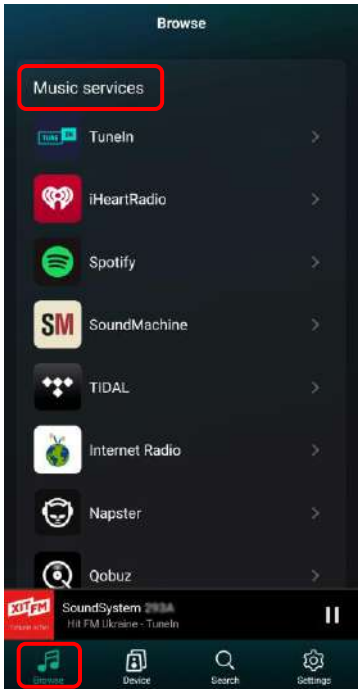


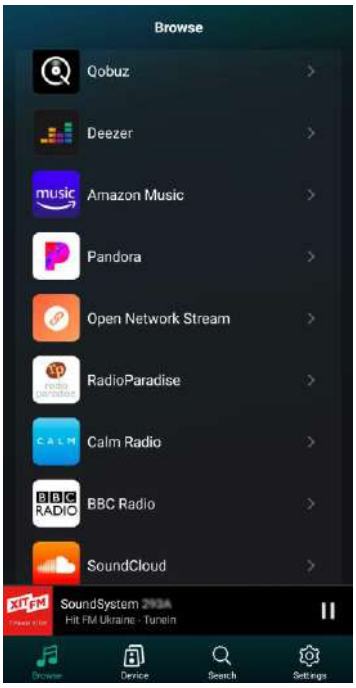
Then, find the SoundSystem audio system in the Bluetooth settings of your mobile device and pair it (the "**BT**" indicator on the front panel of the amplifier will turn solid blue). Start the audio file using the music player installed on your mobile device.

15.7 Audio signal playback from streaming services.

To use online streaming services such as AMAZON MUSIC, BBC Radio, Calm Radio, Internet Radio, Napster, Open Network Stream, Pandora, QQFM, QQMusic, Qobuz, Radio Paradise, SoundCloud, SoundMachine, Spotify, Tidal, TuneIn, and iHeartRadio (see also the "Technical Specifications" section above), you may need to register an account in the respective apps. To download the apps, use the Google Play Store or the App Store (depending on your mobile device's operating system). Manage playback using the streaming service interface.

Selecting one of the available streaming services can be done in the "Browse" section under "Music services."

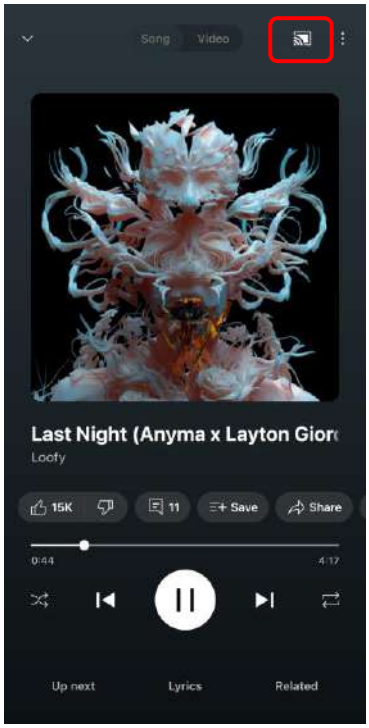




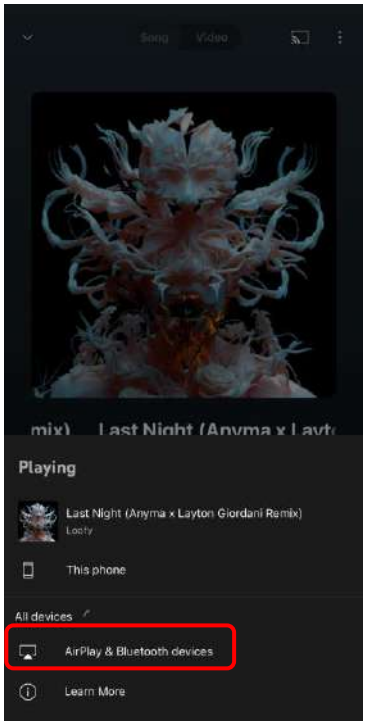
NOTE. Devices running iOS do not have access to the iTunes 10 library.

15.8 Audio signal playback via AirPlay

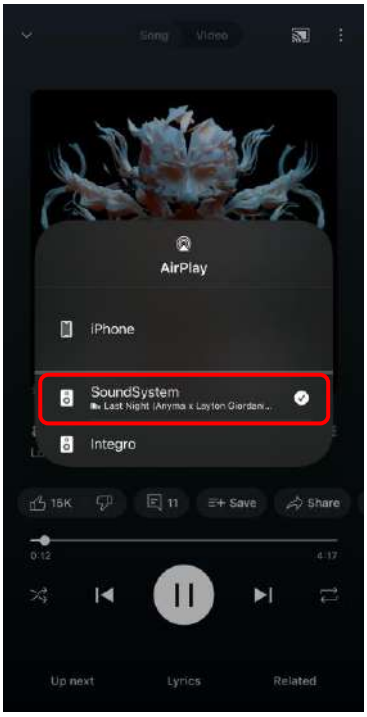
The device supports AirPlay2, allowing you to select AirPlay and play music. Start playback on your Apple mobile device and tap the cast icon.



Select "AirPlay & Bluetooth devices."



Select the "SoundSystem" audio system.

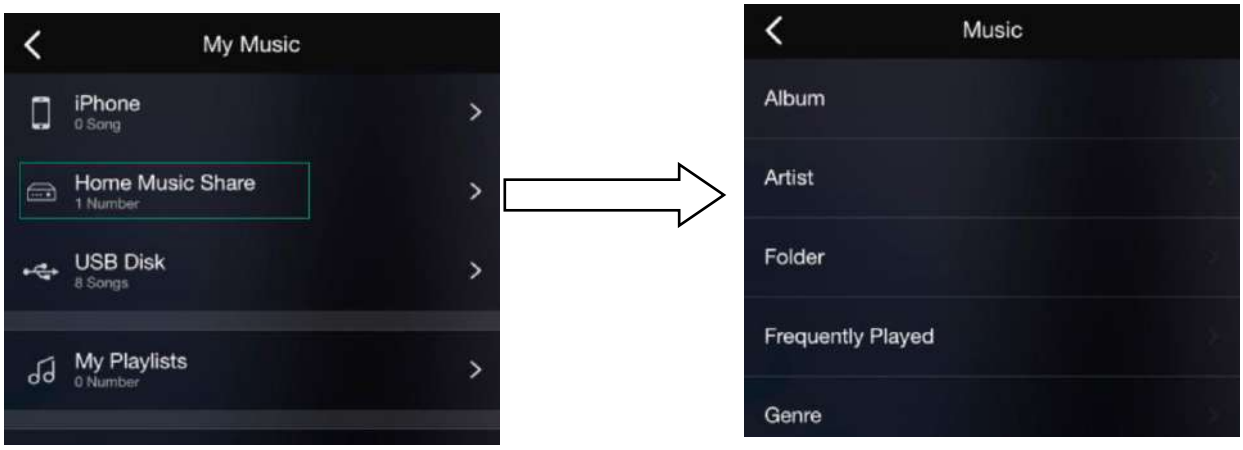


15.9 Audio signal playback from external audio file storage

The amplifier with a built-in streaming player also allows audio files to be played from external NAS storage via a network connection using the DLNA protocol.

Настройка NAS осуществляется специалистом службы технической поддержки или представителем поставщика оборудования.

When the app is launched, it will automatically start searching for the device.



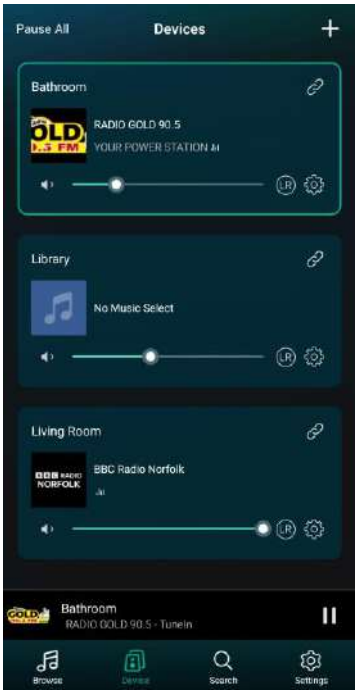
15.10 Audio signal playback in "multi-room" and "multi-zone" modes

The Cyclops system allows you to cover multiple individual rooms or a large area with several identical audio systems.

By purchasing multiple Cyclops systems, the user can:

- Place systems in different rooms, such as the living room, bedroom, library, and, within a single app, provide independent full functionality control of these systems – multi-room.

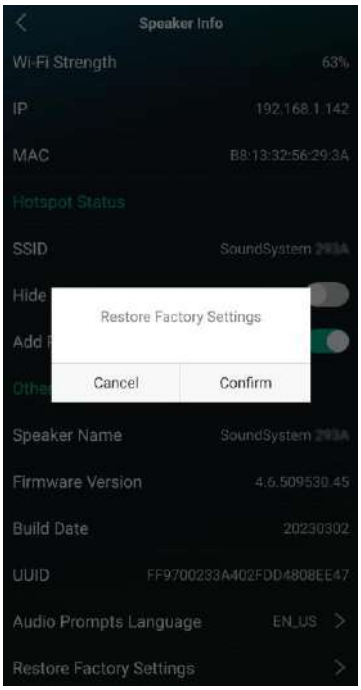
To enable this mode, installation and configuration of the systems must be completed, after which they will be available in the app:



- Place the systems in one large room, such as a hall, and ensure their synchronized operation. In this mode, the systems can be grouped, with left and right channels assigned, or grouped as stereo systems:

16. Restoring factory settings

In case of issues with the audio system or when it's necessary to revert it to its original settings after configuration or firmware update, you can perform a factory reset.



Method 1

- Press the **MODE** button three times consecutively.

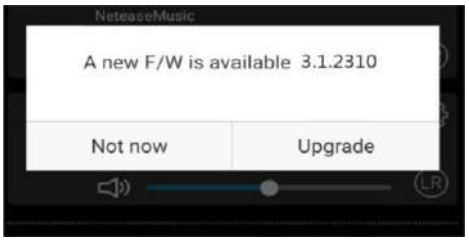
Method 2

- In the app, select: **App Settings → Speaker Info → Restore Factory Settings.**
- Confirm your selection.

In each of these cases, resetting the settings can help restore the functionality and performance of the audio system.

17. Firmware Update

The app will notify you when a new firmware version is available. It is recommended to perform the update as soon as you receive the notification. Updates may fix bugs, improve security, and add new features and services.



18. Frequently asked questions (FAQ)

Question: Does the system support DLNA streaming and third-party apps?
Answer: Yes, it supports streaming and third-party apps such as BubbleUPNP.

Question: How many zones can be combined into one system?
Answer: Up to 12 rooms, with 8 zones being recommended.

Question: What is the range of the wireless audio system?
Answer: Once the system is connected to the Wi-Fi router, you can stream music anywhere Wi-Fi signal is available.

Question: Can the system play high-resolution music?
Answer: Yes. The device supports playback of APE and FLAC files at standard bit rates. It also supports decoding music files with 24-bit/192 kHz parameters.

Question: How many languages are supported?
Answer: The device automatically detects the language of your mobile device and adjusts accordingly. Currently, it supports English, French, German, Spanish, Chinese, Portuguese, Korean, and Japanese.

Question: Which online music services are supported?
Answer: Spotify, Deezer, Qobuz, Tidal, iHeartRadio, TuneIn, Napster, and others.

Question: Can music be played from local devices?
Answer: Yes. You can play music from the "MY MUSIC" section in the app from local storage devices such as mobile device memory, USB drives, and NAS.

Question: Can all music sources be played in multi-room mode?
Answer: Yes, streaming online music, line-in, and BT can be played in multi-room mode.

Question: Does the device support Google Assistant or Alexa?
Answer: Alexa is not supported, but the device can work with Google Assistant via Bluetooth.

19. Warranty obligations and warranty service procedure

COPRA provides a limited international warranty through exclusive distributor partners. The warranty period is valid in all regions where the product is distributed by official dealers.

For warranty service assistance or to find the nearest authorized COPRA service center, please contact us:

📧 service@copra-acoustic.com

The warranty is provided in accordance with the terms outlined in Section 20.

20. Manufacturer's limited warranty

It is essential to keep the product warranty card and this user manual. Service cannot be provided without these documents.

20.1 The warranty covers

☑ COPRA products purchased from an authorized dealer.
☑ Defects in materials, design, or workmanship.
☑ Customers who have a completed warranty card and the original proof of purchase.
☑ The original purchaser, provided the product has been registered for warranty coverage.

☑ Resold products, provided the new owner has all supporting documents (remaining warranty applies).

20.2 The warranty does not cover

❌ Damage resulting from rough handling, misuse, or normal wear and tear.
❌ Products with missing, damaged, or altered serial labels.
❌ Items purchased from unauthorized dealers (parallel imports, black market).
❌ Defects caused by the use of non-original components.
❌ Damage caused by:

- careless handling or accidents;
- incorrect installation or connection;
- power surges or electromagnetic interference;
- exposure to water, moisture, chemicals, or insects;
- force majeure events (fire, flood, earthquake, etc.).

20.3 Limitation of Liability

🔹 COPRA and its authorized distributors shall not be liable for:

- any losses related to the use of the product;
- damage caused by improper installation, maintenance, or operation;
- defects resulting from the actions of the user or third parties;

🔹 The maximum compensation under the warranty shall not exceed the actual purchase price of the product.

20.4 Warranty service conditions

🔹 Defects are repaired free of charge during the warranty period.
🔹 If repair is not possible, COPRA reserves the right to replace the product with a similar model.
🔹 In case the product needs to be transported for warranty service, transportation costs are borne by the customer.

Standard warranty coverage:

- 3 years – speaker systems
- 2 years – amplifiers

⚠ IMPORTANT!
When purchasing, make sure the warranty card includes:
☑ Serial number
☑ Purchase date
☑ Dealer information
Without this information, warranty service is not available.

21. Storage, transportation and disposal guidelines

If it is necessary to repack a COPRA product for storage and/or transportation, this must be done strictly in accordance with the unpacking procedure described in Section 2 of this manual, but in reverse order.

Use the original cardboard box and internal packing materials if they are in good condition. If the box or its internal components are missing or damaged, please contact COPRA Customer Service to order replacements.

COPRA products must be stored under the following environmental conditions:

- Temperature: 5–35 °C
- Relative humidity: 30–70%

Follow the storage and operating conditions specified by the manufacturer (see sections “Safety Guidelines” and “Technical Specifications”).

Long-term storage is permitted only in factory packaging, in dark, dry, clean, well-ventilated indoor areas.

The product may be transported by any covered means of transport (rail cars, enclosed trucks, sealed and heated aircraft compartments, etc.) over any distance, in compliance with applicable regulations for fragile, moisture-sensitive goods.

During transportation, the device and its accessories must remain in factory packaging. These same regulatory requirements also apply to storage conditions at the supplier’s warehouse.

When disposing of the device, its batteries, rechargeable batteries, and electrical or electronic accessories, it is essential to follow the rules for handling Waste Electrical and Electronic Equipment (**WEEE**) and battery waste.

According to these regulations, this equipment must be disposed of separately at the end of its service life. The device, its batteries, and electronic accessories must not be discarded with unsorted household waste, as this may harm the environment.

Components from defective equipment should be separated and sorted by material type. In this way, each user can contribute to the reuse, recycling, and other forms of recovery of electrical and electronic waste.

Proper collection, recycling, and disposal of such devices help prevent potential harm to the environment and human health caused by hazardous substances contained in the equipment.

To dispose of this equipment, return it to the point of sale or take it to a local recycling facility.

For detailed information, please contact your local household waste disposal service. If the user is unable to deliver the device to a specialized recycling center, it may also be handed over to a hardware store, local emergency services, or a similar institution.

Disposal must be carried out in accordance with current legislation and the regulations of the relevant country.

22. Information on obtained declarations of conformity

1. The declaration of conformity has been issued under the sole responsibility of the manufacturer:
   LLC “Copra Acoustic”, 24 Prymorska Street, Odesa, Ukraine.
2. Object of the declaration:
   "Amplifier with streaming player"
3. The object described above complies with the following requirements: Directive 2014/53/EU (RED Directive)
   (A more detailed RED compliance assessment may be conducted upon provision of the model list specifying: 1) wireless functions, 2) power type – internal or external, 3) presence of a rechargeable battery.)

Additional mandatory requirements:

- Electrical safety: EN IEC 62368-1:2020
- RED (ЭМС):
  - ETSI EN 301 489-1 V2.2.3 (2019-11)
  - ETSI EN 301 489-17 V3.2.4 (2020-09)
- Ecodesign Directive 2009/125/EC
  (Standby / off mode / networked standby – Regulation 1275/2008)
- Directive EC RoHS 2011/65/EU
- Регламент REACH 1907/2006

If a rechargeable battery is present:

- IECEE CB IEC 62133 (for batteries)

This audio system complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. The audio system may not cause harmful interference under normal operating conditions.

2. The audio system must accept any interference received, including interference that may cause undesired operation.

⚠ Changes or modifications not expressly approved by the party responsible for compliance may void the user's authority to operate the equipment.

23. Troubleshooting guide

If a malfunction occurs, first check the following:

1. **Are all connections properly made ?**
2. **Is the device being operated in accordance with the "User Manual"?**
3. **Is the equipment connected to the device functioning correctly ?**

If the signs of malfunction do not match any of the cases described above, please contact your dealer, as this may indicate a fault in the device itself. In such a case, immediately disconnect the device from the power supply and contact the seller.

The table below lists common errors and issues that may occur during operation, along with possible solutions.

Table 11– Common issues and troubleshooting steps

№	Issue	Possible causes	Solution
1.	The device does not turn on.	No power supply	Check that the power cord is securely connected to both the AC power source and the amplifier's power socket.
		The remote control battery is depleted.	Charge the remote control for 1 hour
		The control signal is not reaching the amplifier.	Make sure the remote control is within 7 meters of the amplifier and positioned at an angle of no more than 30°. Remove any obstacles between the amplifier and the remote control. Relocate the amplifier to a place where the remote signal receiver is not exposed to direct light.
2.	No sound.	The cable is incorrectly connected to the amplifier or speaker system.	Make sure all cables are connected correctly and securely.
		The cable is damaged.	Check the integrity of the cables and connectors.
		Sound is muted.	Unmute the sound using the remote control. Check the audio settings on the connected device.

№	Issue	Possible causes	Solution
		Volume level is set to zero.	Adjust the volume level.
3.	Sound is distorted.	Volume is too high.	Lower the volume. This applies especially to an external signal source connected through one of the input ports.
		Issue with the signal source.	Check the quality of the audio track being played and the performance of the source device connected to the amplifier-streamer.
4.	Sound is interrupted when using a Wi-Fi connection.	The frequency band used by the wireless LAN may also be used by microwave ovens, cordless phones, wireless game controllers, and other devices.	- Place potential sources of interference at least 1 meter away from the device. - Turn off the power of devices that may be causing interference. - Change the router's channel settings to which the device is connected. (For more details, refer to the router's user manual.) - Use a wired LAN connection.
5.	The AirPlay icon is not displayed in iTunes, iPhone, iPod touch, or iPad.	The device and the computer / iPhone / iPod touch / iPad are not connected to the same LAN network.	Connect them to the same local network as the device.
		The system software of iTunes / iPhone / iPod touch / iPad does not support AirPlay.	Install the latest version of the system firmware.
		The volume level on iTunes, iPhone, iPod touch, or iPad has been set to the minimum level.	The volume level of iTunes, iPhone, iPod touch, or iPad is synchronized with the unit's volume. Please adjust the volume as needed.
		Playback via AirPlay has not started, or the device has not been selected from the list.	Click the AirPlay icon on the iTunes, iPhone, iPod touch, or iPad screen and select the device.
		Playback is being interrupted by an application that has not been closed.	Close any background applications on the iPhone, iPod touch, or iPad before playing files via AirPlay.
	When playing music from an	The wireless connection may be	Reduce external interference, such as by decreasing the distance to the wireless LAN

№	Issue	Possible causes	Solution
6.	iPhone, iPod touch, or iPad via AirPlay, the audio is intermittently interrupted.	affected by external sources of interference.	access point.
		The necessary settings have not been configured.	In iTunes, enable the option 'Allow remote speakers to control playback'. This will allow you to use the remote control to play, pause, and skip tracks.
7.	Playback cannot be started from iTunes using the remote control.	The necessary settings have not been configured.	The Bluetooth function of the Bluetooth device is not enabled. Please consult the device's user manual for instructions on how to activate Bluetooth.
8.	It is not possible to connect Bluetooth devices to this unit.	The device has exceeded the range for maintaining a stable connection.	Move the Bluetooth device closer to this unit. Power off the Bluetooth device, then power it back on and attempt to reconnect.
		Obstacles causing signal shielding and sources of interference.	"Remove any obstacles and sources of interference between the Bluetooth device and this unit. To prevent electromagnetic interference, keep this unit away from microwave ovens, wireless LAN devices, and other Bluetooth devices. Reconnect the Bluetooth device."
		A firewall on the computer or router is currently active.	Check the firewall settings on the computer or router.
9.	Server not found or unable to connect to the server.	The computer is not powered on.	Turn on the power.
		The server has not been started.	Ensure the server is running.
		The IP address of this unit is incorrect.	Verify the IP address assigned to this unit.

If the issue remains unresolved or you have other questions, please contact customer support. The contact details are provided in the warranty card.

24. Glossary

Software – Procedures and programs, as well as their resulting combinations, for use on specific computers, provided to the Customer by Volumio SRL in accordance with the technical specifications agreed upon by both parties.

OTA Update – Over-the-air software update that updates the device's software and is initiated by the end user through explicit action.

Intellectual property rights – All rights granted by patent law, copyright, trade secret rights, trademark rights, and all other rights related to intellectual property.

Multiroom – A multimedia system for distributing audio and video signals within or outside a building. It is typically a part of a smart home system and is commonly used in apartments, private houses, or other spaces with multiple zones.

Multizone – A part of a multiroom system grouped together, for example, based on room location.

Optical and coaxial interfaces – Interfaces used for wired transmission of digital audio signals.

Subwoofer – A speaker system designed to reproduce low-frequency (bass) sounds.

Satellite – In this context, a speaker used to create spatial (stereo) sound.

Streaming Player – A device used to play audio transmitted in real time over a computer network.

Streaming Service – A service that provides audio content in real time over a computer network.

Triphonic – A stereo speaker system consisting of a subwoofer and two satellite speakers.

DAC – A device that converts digital audio signals into analog audio output.

BLE — A low-power wireless audio transmission technology designed for energy-efficient connectivity.

DLNA — Digital Living Network Alliance (DLNA). A set of interoperability standards for sharing digital media content across various multimedia devices within the same network. DLNA allows users to stream or share stored media files between certified devices such as PCs, smartphones, TVs, game consoles, stereo systems, and NAS devices.

NAS (Network attached storage) — a network-connected storage device that provides file-level data access to other devices within the local network.

Mobile App – **4STREAM** – An application for managing the audio system, installed on compatible gadgets such as smartphones and tablets.

Polymer Concrete — A category of advanced concretes in which the traditional mineral binder (such as cement or silicate) is partially or fully replaced with polymers (typically polyester resins, less commonly epoxy). This allows for the reduction or elimination of the drawbacks associated with conventional cement concrete.

Endocarp of a Coconut – The hard shell of a coconut.

TABLE OF CONTENTS

DRAWINGS

TABLES