



The Sound That Will Move You

ARO-300

Multi-Zone/Source WiFi Audio Router
User Manual



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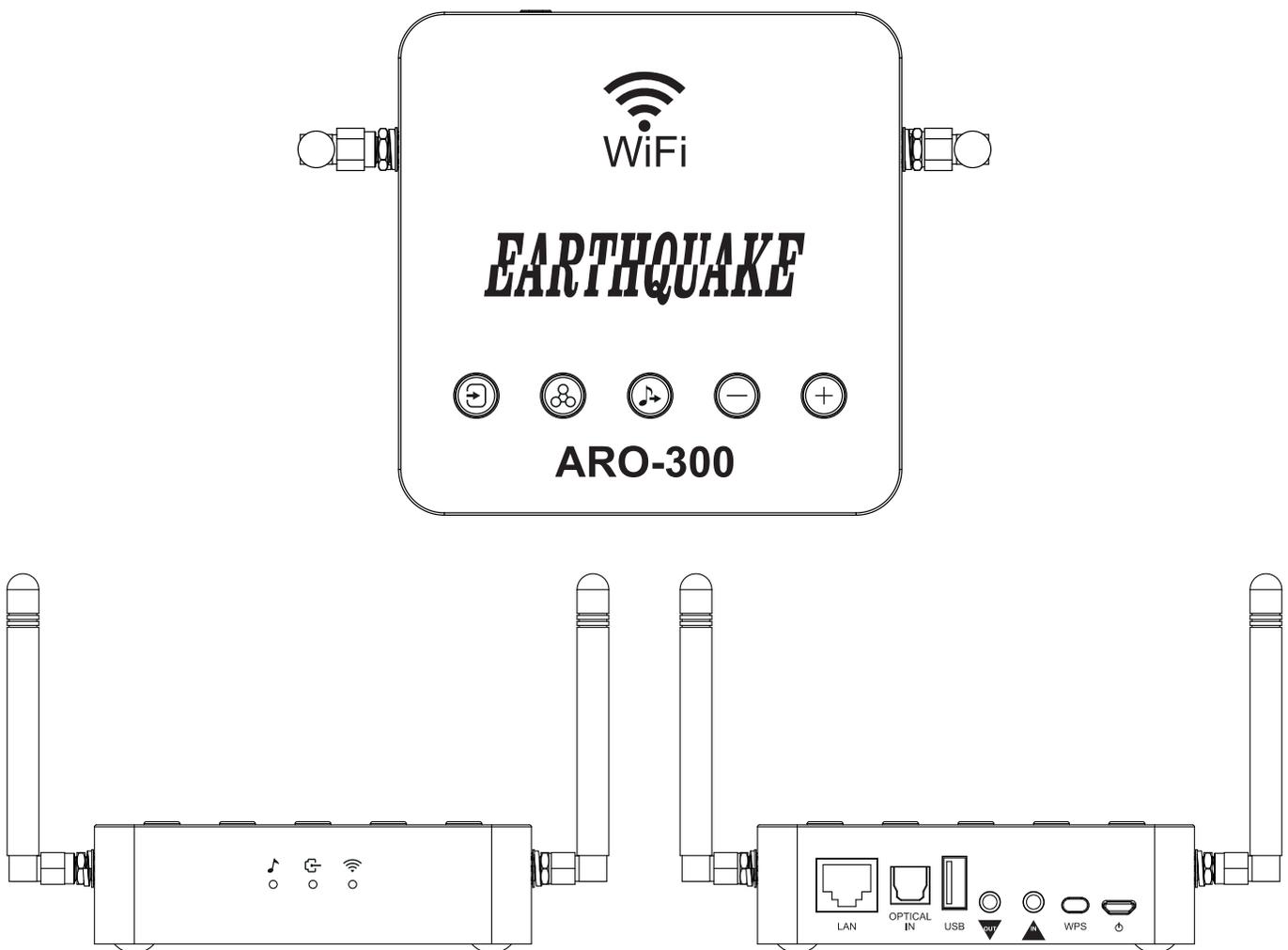
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Introduction

Thank you for purchasing an ARO-300 Wireless Audio Router. The ARO-300 is the fastest streaming 2.4GHz WiFi router module on the market. It can handle a data rate of up to 300Mbps and its DAC supports 24 bit/192KHz. Building off of the AR-300's success, the ARO-300 maintains the open source app usage while offering superior range as well as 3.5mm line and optical inputs.

The 2.4GHz is one of the most common WiFi spectrums due to its long range. Additionally, the 2.4GHz can navigate through obstacles with less interference.

With the applied proprietary algorithm, the ARO-300 optimizes your bandwidth and produces high quality audio processing.



Included Hardware

- 1 x ARO-300 WiFi Audio Router
- 1 x 5V (2A) USB power supply
- 1 x Micro USB cable
- 1 x 3.5mm to RCA cable

Requirements

1. The ARO-300 is intended to work with the Earthquake Player App using any iOS® or Android® based device. The user must download the app and install it prior to setup. Similarly, Android based products should download the app from the Google Play Store® prior to ARO-300 installation. Please note that although we recommend the EARTHQUAKE PLAYER, the ARO-300 is open source so other applications may work as well.
2. WiFi router that supports 2.4GHz band.
3. WiFi enabled mobile device (ie. iPod®, iPad®, Android®) or other WiFi enabled audio player devices.
4. Portable or home stereo system that has Optical or a 3.5mm audio AUX-IN connection (sold separately).



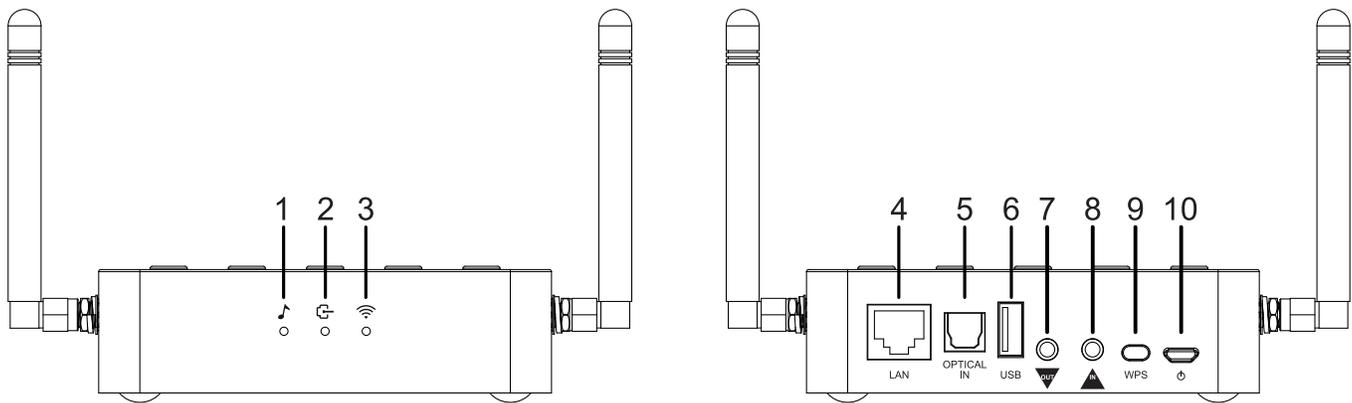
Android®



iOS®

iOS® and Android® are the property of their respective trademark holders and have no affiliation with Earthquake Sound Corp.

ARO-300 Overview



1. Green LED

Illuminates when 3.5mm line in mode is enabled. Green and red LED lights will flash when factory reset is initiated.

2. Blue LED

Illuminates when Optical In is enabled.

3. Red LED

Illuminates when WiFi mode is enabled and flashes when in pairing mode.

4. LAN Connector

This connector allows you to hard wire the ARO-300 module to a local WiFi router for faster internet access. This will bypass the WiFi setup process.

5. Optical In

Allows you to connect the ARO-300 to devices that offer an Optical Output.

6. USB Port

Used for connecting a USB drive for music storage on the ARO-300 module.

7. Audio Output

Use 3.5mm jack to connect the ARO-300 module to an amplifier or powered speakers.

8. Audio Input

Allows you to connect the ARO-300 to devices that offer a Line Output.

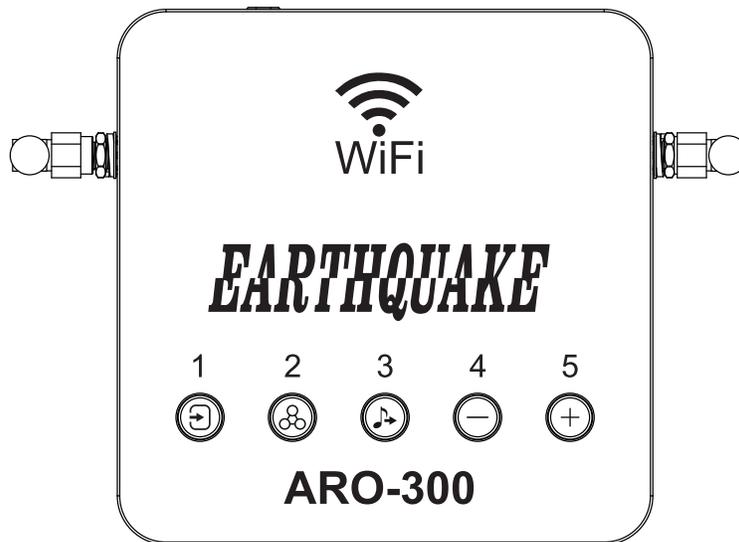
9. WPS Button

Press and hold this button for two seconds to pair the ARO-300 module to the local router. Hold for 8 seconds to reset to factory settings and the red and green LED lights will flash.

10. Micro USB Port

This 5V (2A) USB input is used to power the ARO-300.

ARO-300 Overview



1. Cycle Input

Used to switch between Line In, Optical In, and WiFi In.

2. Party Mode

Makes the selected router the “master” for all ARO-300’s on the network. All other ARO’s will reproduce the “master” output.

3. Cycle Playlist

When pressed this button will switch between programmed playlists from the app.

4. Volume Down

Press to decrease volume.

5. Volume Up

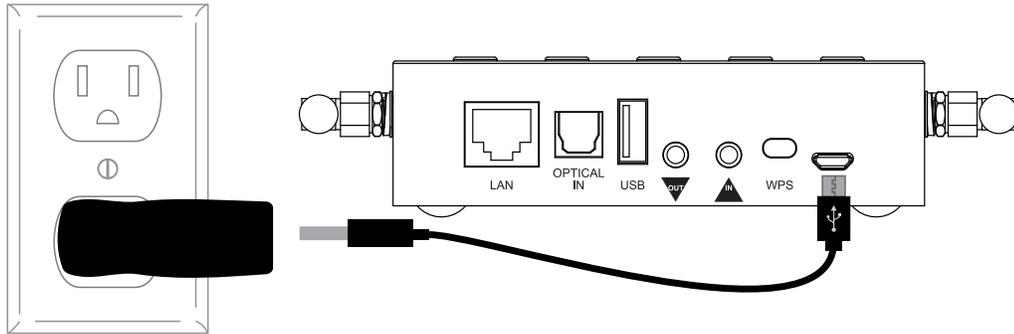
Press to increase volume.

Hardware Installation

For WiFi Connection

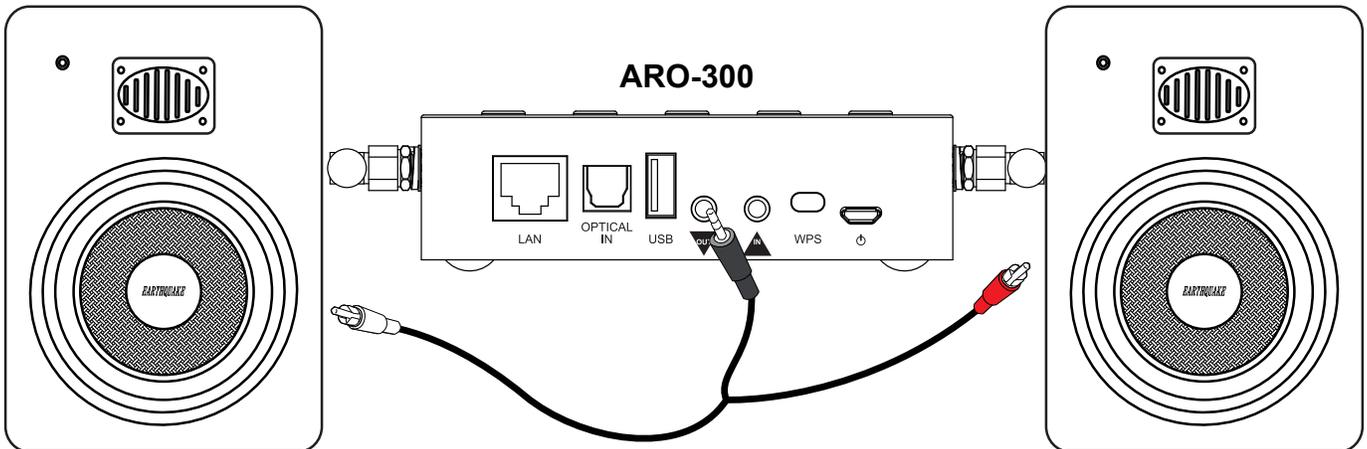
Step 1.

Connect the ARO-300 to power via the supplied 5V USB power supply. The power LED indicator will light up red once the ARO-300 is connected to a power source.

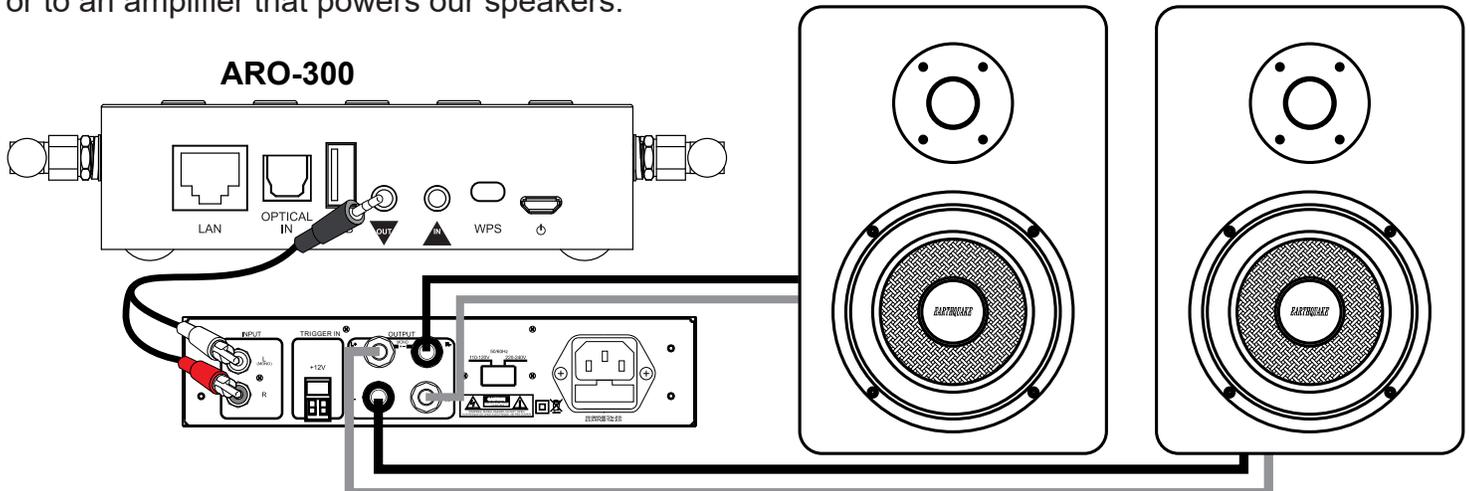


Step 2.

Using the provided 3.5mm to RCA cable, connect the ARO-300 to your powered speakers.

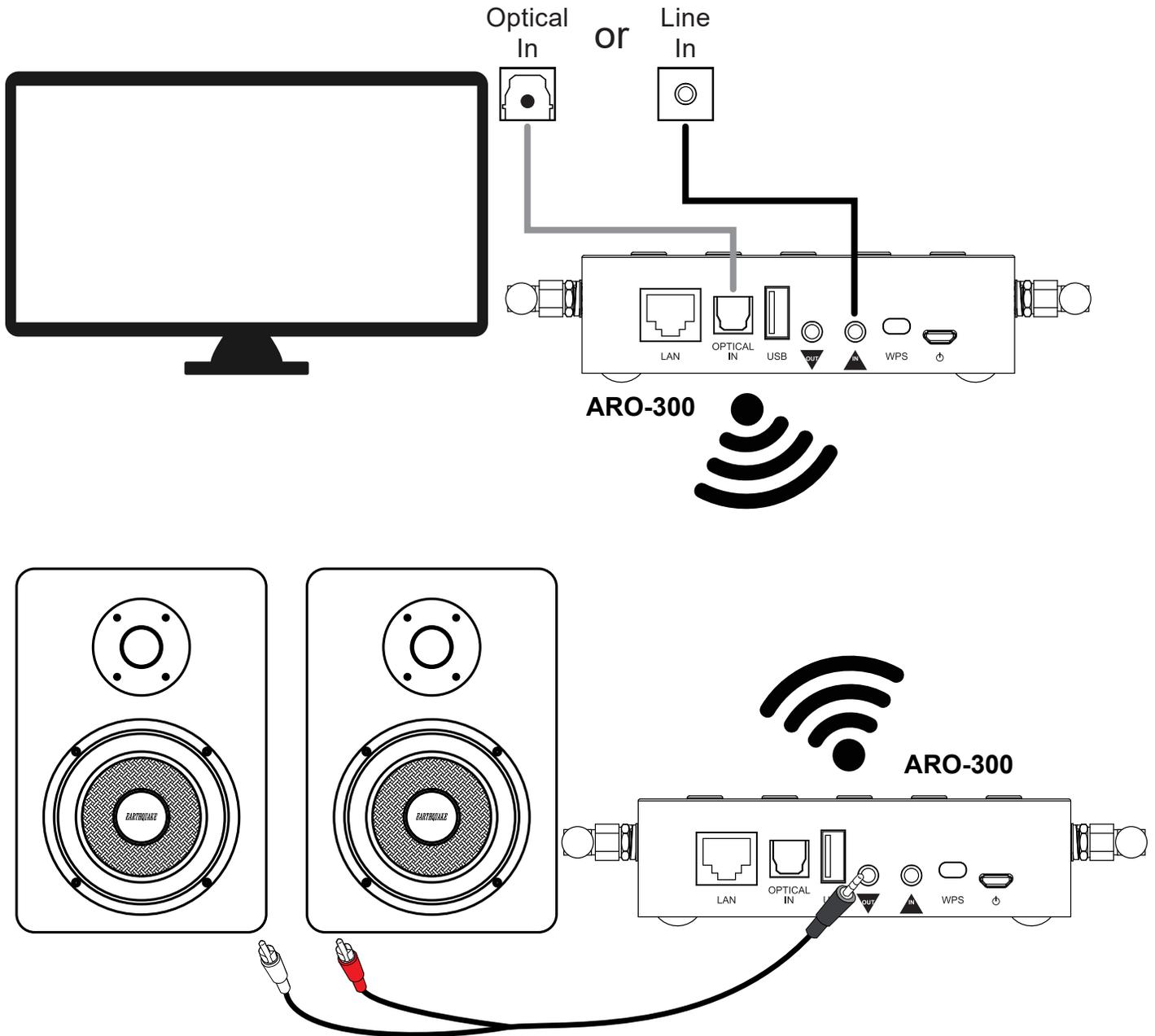


or to an amplifier that powers our speakers.



Line or Optical In Connections

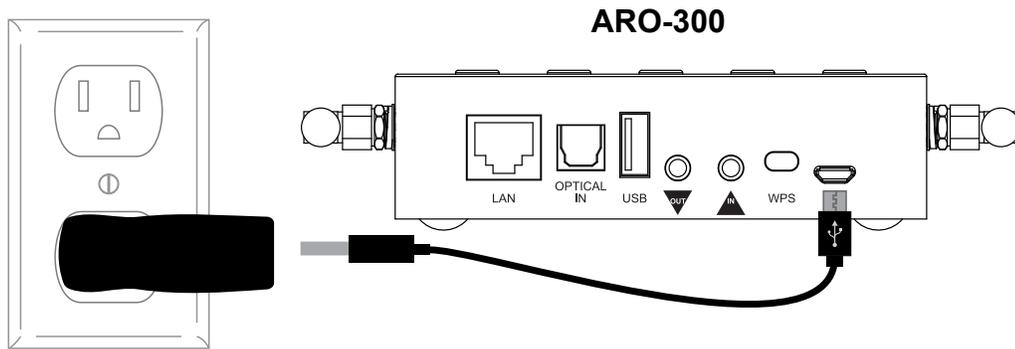
Optical or Line In setup from the back of a TV to an ARO-300 to be broadcasted over WiFi network.



For Ethernet Connection

Step 1.

Connect the ARO-300 to power via the supplied 5V USB power supply. The power LED indicator will light up red once the ARO-300 is connected to a power source.

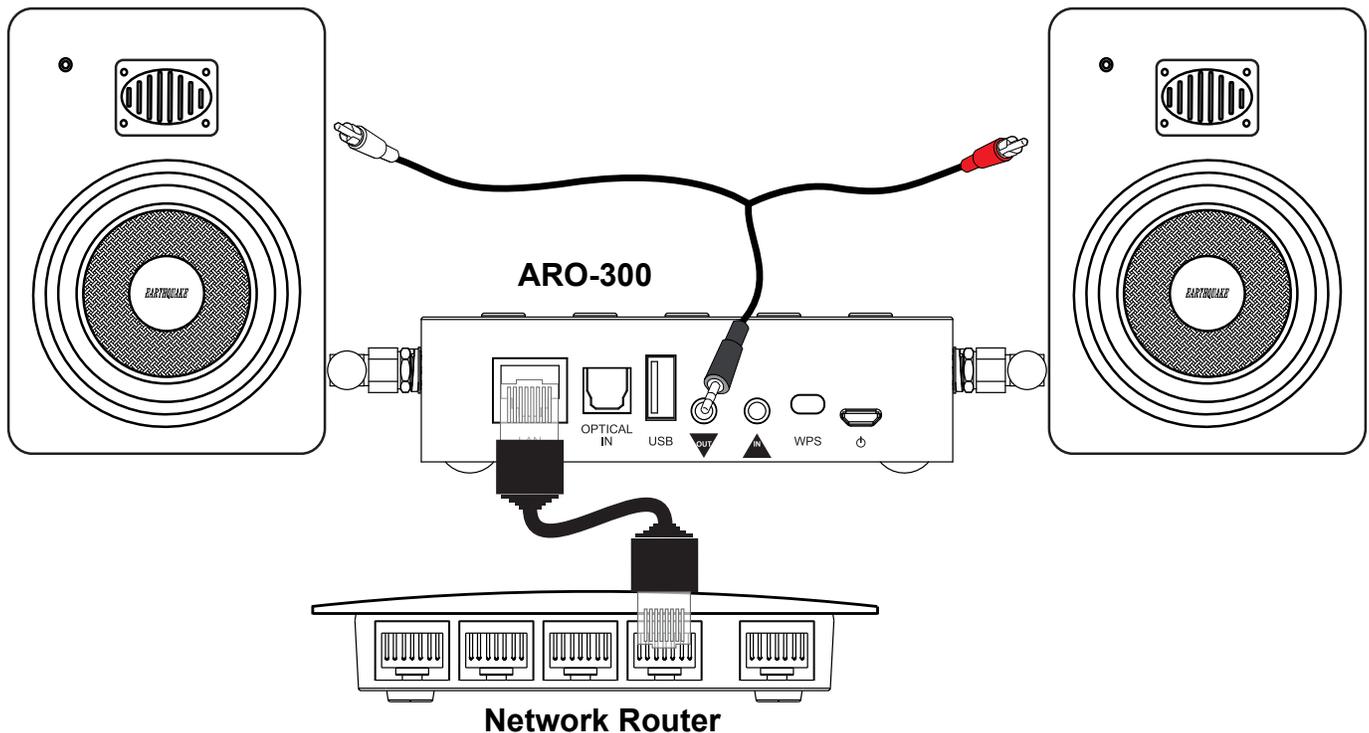


Step 2.

Using the provided 3.5mm to RCA wire, connect the ARO-300 to your powered speakers.

Step 3.

Using an ethernet cable (sold separately), connect the ARO-300 to your WiFi network router.

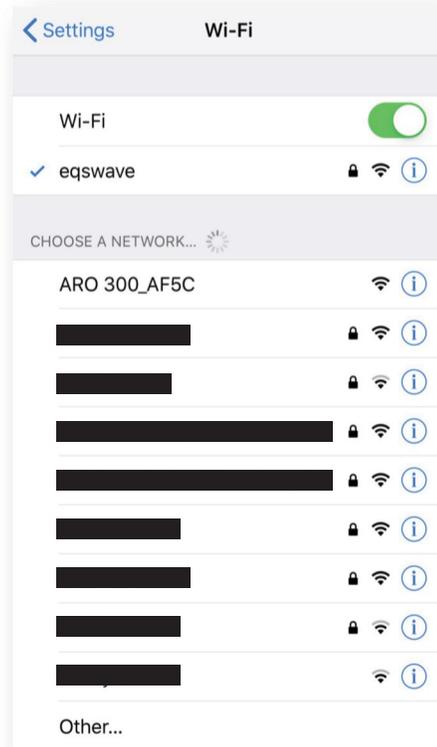


Pairing Method

Step 1.

Connect your iOS® or Android® device to your local 2.4GHz WiFi network.

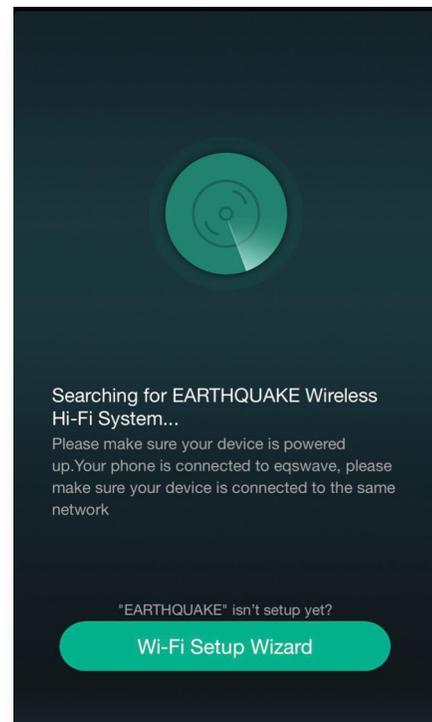
NOTE: The WiFi router in your network must support a 2.4GHz band.



Step 2.

When opening the Earthquake Player app for the first time, you will see the screen as shown on the right.

Click “WiFi Setup Wizard” at the bottom of the screen.



Step 3.

Press and hold the WPS Button for approximately 2 seconds on your ARO-300 module to begin the pairing process, as instructed.

NOTE: The red LED will flash.

Step 4.

Click “Next” on the upper right hand corner.

Step 5.

Once prompted, enter the password to your WiFi network.

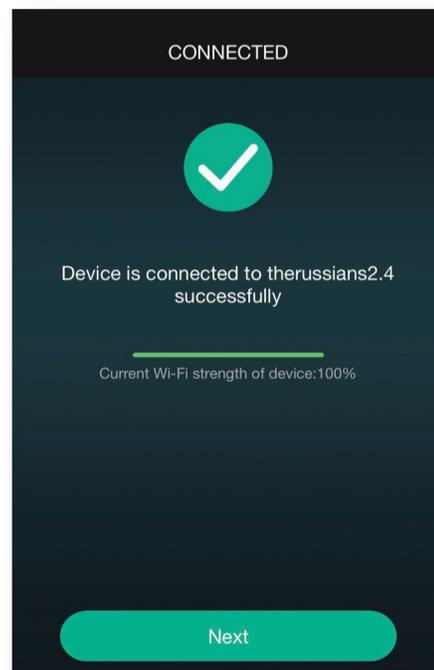
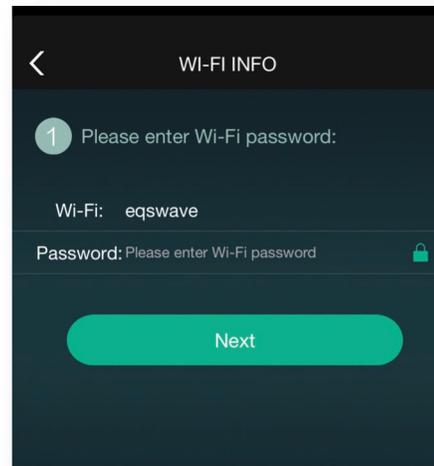
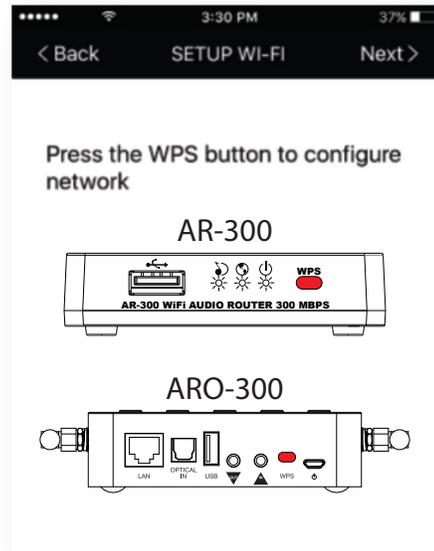
Click “Next”.

Step 6.

Wait for the pairing process to finish.

Once pairing is achieved, the screen will show that the connection was successful.

Click “Next” to begin streaming music.



Alternative Pairing Method

Due to possible channel interferences, the pairing process may fail.

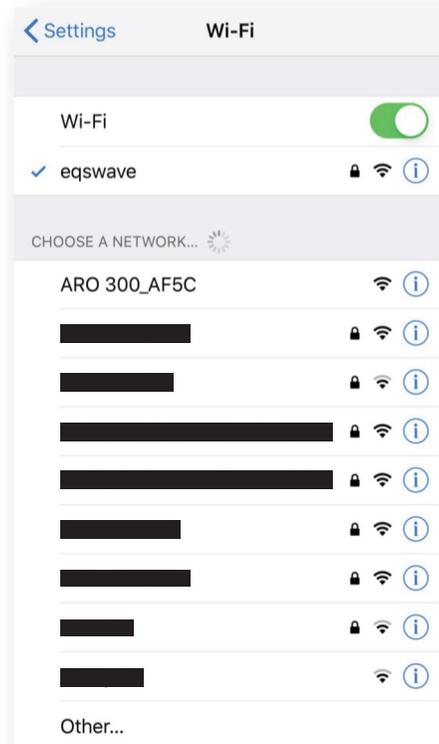
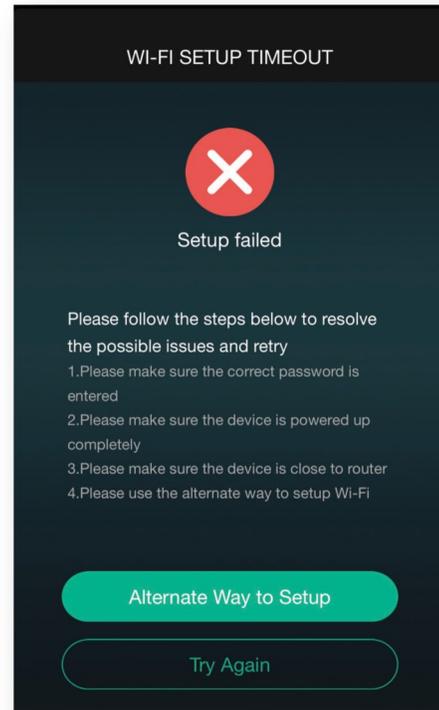
If the pairing process was unsuccessful, you will see “Setup Failed” on the screen.

You may repeat the previous steps of the pairing process or use an alternate pairing method as follows:

Step 1.

Click “Alternate Way to Setup”.

The app will instruct you to connect your device directly to the ARO-300 module.



Step 2.

Connect your iOS® or Android® device directly to the ARO-300's WiFi Signal.

For example, you want to connect to "ARO-300's-XXX".

Go To your device's WiFi settings and choose "ARO-300-XXX".

Make sure your device is connected to ARO-300-XXX before going to the next step.

Step 3.

Go back to the Earthquake Player app and click "Next" on the upper right side of the screen.

Step 4.

Select the 2.4Ghz network you want your ARO-300 to pair with. Once prompted, enter the password to your WiFi network, if applicable.

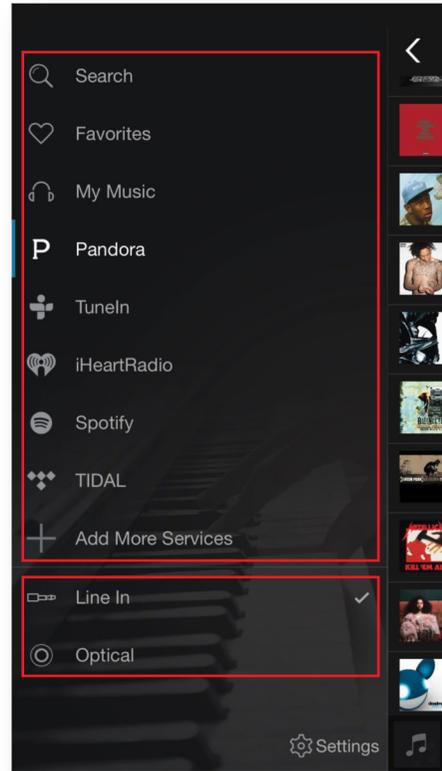
Click "Done".



In App Input Switching

Press the Line In or Optical to switch between inputs in the Earthquake Player app.

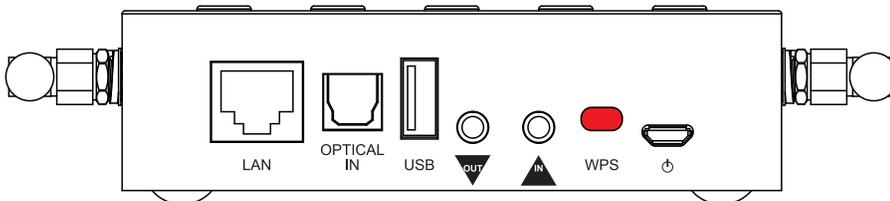
Note: Pressing any of the options above the Line In and Optical will default back to the WiFi mode.



Factory Reset

To reset all settings to factory defaults, press and hold the WPS button for 10 seconds. The red and green LEDs will flash and a voice will confirm that the factory defaults have been restored on the device. The pairing process will have to be repeated once the device has been restored.

Note: Please do not use the device while the red and green LEDs are flashing.



Features

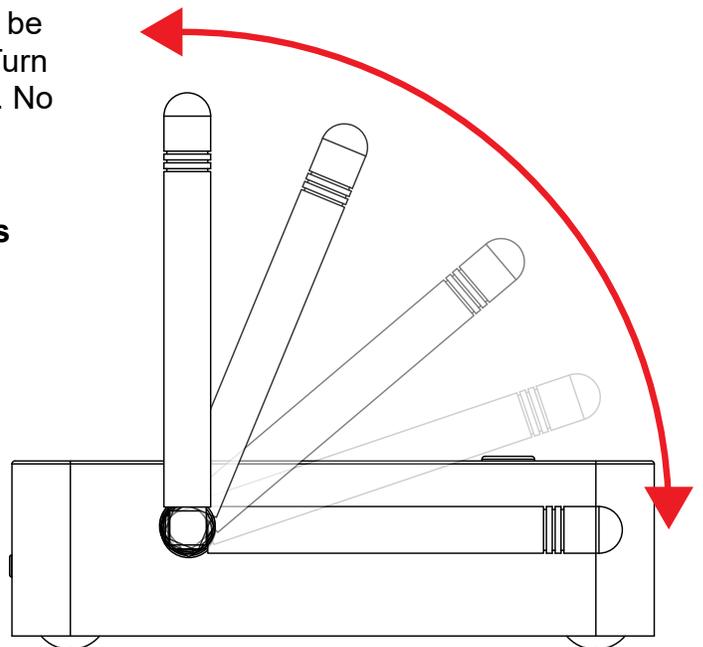
- Stream music from your WiFi enabled mobile devices (i.e. iPhone®, iPad®, iPod®, Android®) or other WiFi enabled audio player devices
- Control your music directly from your WiFi enabled mobile device
- High fidelity lossless audio transmission with up to 300 mbps
- WiFi transmission range over 50 feet (15 m)
- 5V DC power supply
- One-to-One and One-to-Multiroom operations
- 3.5mm audio output connector
- Supports 802.11 b/g/n/ac 2.4GHz networks
- Supports 10/100 mbps Ethernet
- Optical Input
- Line In input
- Dual long range antennas

Antenna Positioning

The dual long range antennas on the ARO-300 can be pivoted in a way that suites the needs of the user. Turn the antennas clockwise or counterclockwise by 90°. No tools are necessary to reposition the antennas.

Do not continuously rotate the antennas as this could damage the internals of the ARO-300.

Do not remove antennas from ARO-300



Specifications

Working Voltage.....	3.5-5.0 V DC
Current	
Work.....	130~320 mA
Peak.....	350 mA
Standby.....	20 mA
Operation Temperature.....	23–104°F (-5–40°C)
Frequency Range.....	2.412–2.484 GHz
DAC.....	SNR 96 dB
Wireless Specs	
Certification.....	FCC/CE
Standard.....	802.11 b/g/n/ac
Distance.....	> 50 ft (15 m)
Dimensions (H x W x D).....	32.3mm x 151.5mm x 110mm 1.27in x 5.96in x 4.33in

Customer Support

Email.....	tech@earthquakesound.com
US Toll Free.....	1-800-576-7944
Telephone.....	510-732-1000
Fax.....	510-732-1095

Warranty Guidelines

Earthquake warrants the original purchaser that all factory sealed new audio products to be free from defects in material and workmanship under normal and proper use for a period of one (1) year from the date of purchase (as shown on the original sales receipt with serial number affixed/written on it).

(A) One (1) year limited warranty plan coverage guidelines:

Earthquake pays for labor, parts, and ground freight (only in US mainland, not including Alaska and Hawaii. Shipping to us is not covered).

(B) Warning:

- Products (sent in for repair) that are tested by Earthquake technicians and deemed to have no problem will not be covered by the limited warranty. Customer will be charged a minimum of one (1) hour of labor (at ongoing rate) plus shipping charges back to customer.
- Each product sent in for repair must be packaged in its original packaging. Otherwise, repackaging charges will apply in addition to the labor, parts and shipping charges.

(C) Earthquake will repair or replace at our option all defective products/parts subject to the following provisions:

- Defective products/parts have not been altered or repaired by anyone other than an Earthquake factory approved technician.
- Products/parts are not subjected to negligence, misuse, accident or damage by improper line voltage.
- Products/parts were used with incompatible products.
- The serial number or any part of the product has been altered, defaced or removed.
- Products/parts have been used in any way that is contrary to Earthquake's written instructions.

(D) Warranty Limitations:

Warranty does not cover products that have been modified or abused, including but not limited to the following:

- Damages to unit casing finish due to misuse, abuse or improper use of cleaning material/methods.
- Broken/bent connectors.
- Fading and/or deterioration of components & finish due to improper exposure to elements.
- Burnt tracers on PCB.
- Product/part damaged due to poor packaging or abusive shipping conditions.
- Subsequent damage to other products.

A warranty claim will not be valid if the warranty registration card is not properly filled & returned to Earthquake with a copy of the sales receipt.

(E) Service Request:

To receive product service, contact Earthquake Service Department at (510) 732-1000 and request an RMA number (Return Material Authorization). Items shipped without a valid RMA number will be refused. Make sure you provide us with your complete/correct shipping address, a valid phone number, and a brief description of the problem you are experiencing with the product. In most cases, our technicians might be able to resolve the problem over the phone, thus eliminating the need to ship the product.

(F) Shipping Instructions:

Product(s) must be packaged in its original protective box(es) to minimize transport damage and prevent repackaging cost (at the ongoing rates). Shipper claims regarding items damaged in transit must be presented to carrier. Earthquake Sound Corporation reserves the right to refuse improperly packed product. A copy of the sales receipt must accompany product returned to service. We encourage you to include with the package a written description of the problem. Ship product to:

Earthquake Sound Corp.
2727 McCone Ave. Hayward, CA 94545
Tel: (510) 732-1000

You are responsible for the cost of shipping the product to Earthquake Sound Corporation.

(G) Disputes Resolution:

All disputes between clients and Earthquake Sound Corporation resulting from the one (1) year limited warranty policy must be resolved according to the laws & registration of the county of Alameda, California.



The Sound That Will *Move* You

Earthquake Sound reserves the right to amend details of the specifications without notice.

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