



The Sound That Will *Move* You

# AR-300

**MULTI-ZONE/SOURCE 300MBPS WiFi AUDIO MODULE  
USER MANUAL**



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Earthquake Sound Corporation  
2727 McCone Avenue  
Hayward, CA 94545, USA  
Tel: 510-732-1000  
Fax: 510-732-1095



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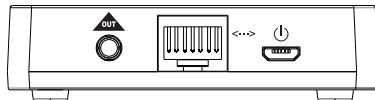
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## Introduction

Thank you for purchasing an AR-300 Wireless Audio Router. The AR-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.

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 AR-300 optimizes your bandwidth and produces high quality audio processing.



## Included Hardware

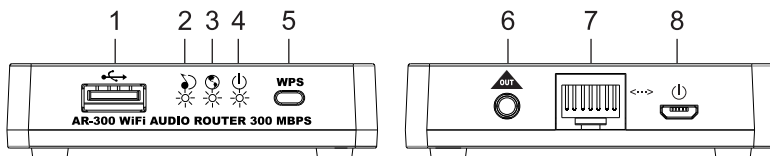
- 1 x AR-300 WiFi Audio Module
- 1 x 3.5mm-to-RCA adapter
- 1 x USB power cable
- 1 x 5V (2A) USB power supply

## Requirements

- The AR-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 Google Play Store® prior to AR-300 installation. Please note that although we recommend the EARTHQUAKE PLAYER, the AR-300 is open source so other applications may work as well.
- WiFi router that supports 2.4GHz band.
- WiFi enabled mobile device (ie. iPod®, iPad®, Android®) or other WiFi enabled audio player devices.
- Portable or home stereo system that has an RCA or a 3.5mm audio AUX-IN connection (sold separately).



## AR-300 Overview



### 1. USB Port

This 5V (2A) USB input can be used to power the AR-300 module (up to 3 stacked units).

### 2. Signal LED

This blue LED will light up when the module is processing audio signal.

### 3. Internet Connectivity LED

This green LED continuously lights up if the AR-300 is connected to the internet.

### 4. Power Status LED

This red LED indicates the power status of the AR-300. When the AR-300 is connected to a power source, this LED will light up.

### 5. WPS Button

Use this button to pair the AR-300 module to the local router.

### 6. Audio Output

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

### 7. LAN Connector

This connector allows you to hard wire the AR-300 module to a WiFi router for faster internet access.

### 8. Mini USB Port

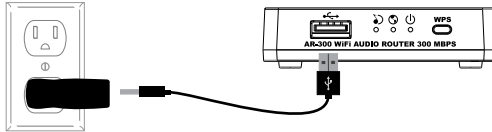
This alternate 5V (2A) USB input can also be used to power the AR-300 module (up to 3 stacked units).

## Hardware Installation

### For WiFi Connection

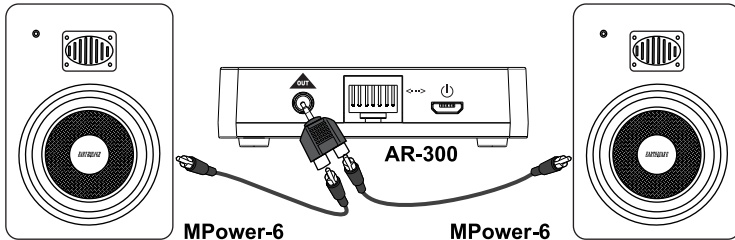
#### Step 1.

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

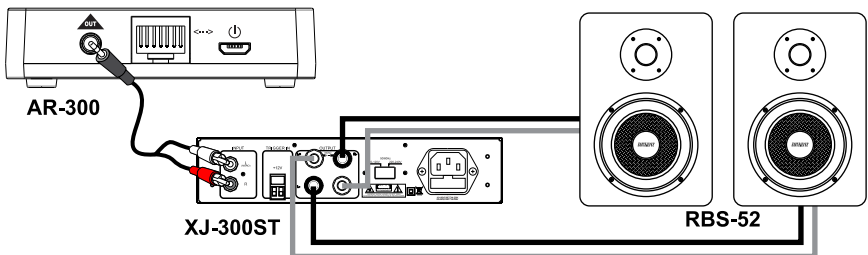


#### Step 2.

Using the provided RCA-to-3.5mm adapter, connect the AR-300 to your powered speakers



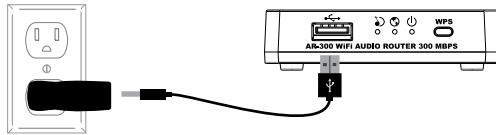
or to an amplifier that powers your speakers.



## For Ethernet Connection

### Step 1.

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

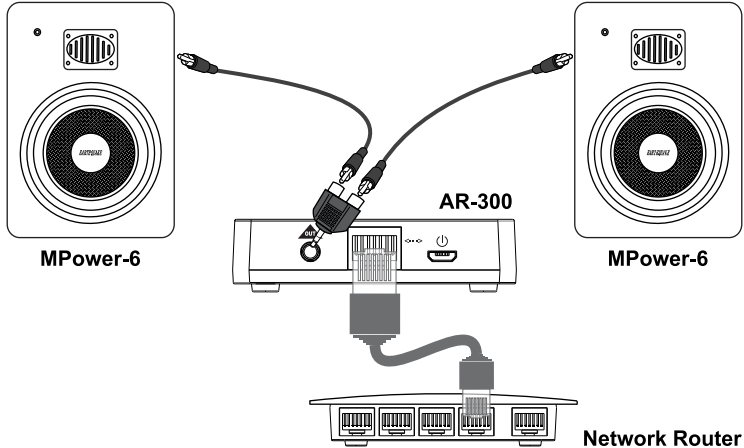


### Step 2.

Using the provided RCA-to-3.5mm adapter, connect the AR-300 to your powered speakers

### Step 3.

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

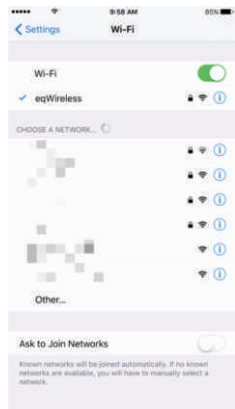


## Pairing Method

### Step 1.

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

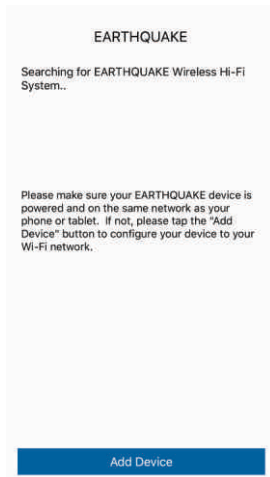
NOTE: The WiFi router in your network must support a 2.4GHz band.



### Step 2.

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

Click “Add Device” at the bottom of the screen.





### Step 3.

Press the WPS button on your AR-300 module to begin the pairing process, as instructed.

### Step 4.

Click "Next" on the upper right hand corner.

### Step 5.

Once prompted, enter the password to your WiFi network.

Click "Connect".

### 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.



connect success



## Device Pairing (cont'd)

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

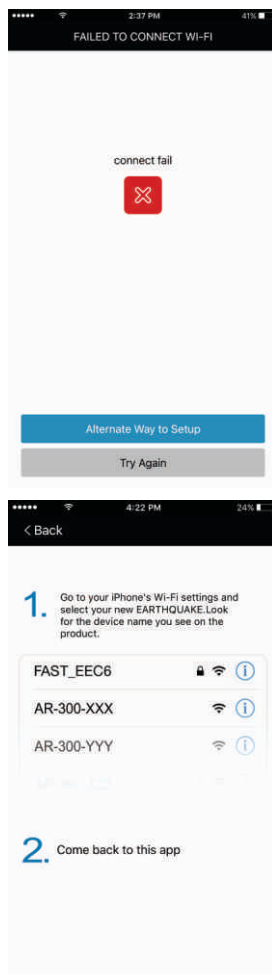
If the pairing process was unsuccessful, you will see “Connect Fail” on the screen.

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 AR-300 module.



Step 2.

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

For example, you want to connect to "AR-300-XXX".

Go to your device's WiFi Settings and choose "AR-300-XXX".

Make sure your device is connect to AR-300-XXX before going to the next step.

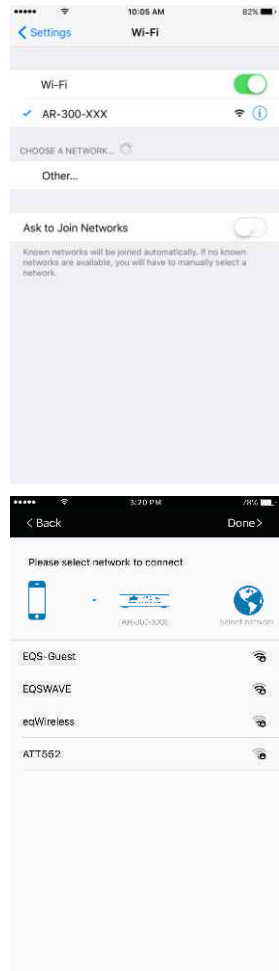
Step 3.

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

Step 4.

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

Click "Done".



## Features

- Stream music from your WiFi enabled mobile device (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 bandwidth up to 300 mbps
- WiFi transmission range over 50 feet (15 m)
- 5V DC power supply that can power up to 3 stacked units at once
- One-to-One and One-to-Multiroom operations
- 3.5mm audio output connector
- Supports 802.11 b/g/n networks
- Supports 10/100 mbps Ethernet

## Specifications

Working Voltage.....	3.5 - 5.0 VDC
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
Distance.....	> 50 ft (> 15 m)
Dimensions (H x W x D).....	13/16" x 3-1/16" x 3-1/16" (20mm x 78mm x 78mm)

## Customer Support

E-mail.....	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 Avenue, 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.



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

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