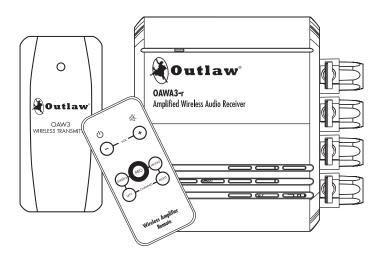


# **OAWA3**

Wireless Transmitter/ Amp-Receiver System



# **Table of Contents**

3 Safety & Warning:	3 S	atet	y &	Wa	rnin	ıgs
---------------------	-----	------	-----	----	------	-----

- 3 Safety Overview
- 4 Safety Instructions
- **5 System Function**
- 5 System Function Description
- 5 Features
- 6 Package Content
- 7 Transmitter Basic Setup
- 7 WA-50t Wireless Transmitter
- **8 Computer Media Server Connections**
- 8 PC Configurations
- 8 Apple/Mac Configuration
- 9 Basic Receiver/Amplifier Configuration
- 10 Initial Setup & Linking Procedure
- 11 Multi-Zone
- 11 Creating Multiple Zones
- 11 Examples of Multiple Zones
- 12 Remote Control Operation
- 12 Advanced Functions
- 12 Operational Configurations
- 12 Bi-Amping
- 12 Commercial/Distributed Audio Mode
- 13 Programming the Amplifier for Advanced Operation
- 14 Example of Bi-Amp Configuration
- 15 Troubleshooting
- 16 Outlaw Audio Limited Warranty

# **Safety Overview**

The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock. The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance



#### WARNING:

TO REDUCE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THE APPARATUS TO RAIN OR MOISTURE



### **CAUTION:**

TO REDUCE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER SERVICE-ABLE PART INSIDE, REFER SERVICING TO QUALIFIED SERVICE PERSONNEL

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and, (2) this device must accept any interference received, including interference that may cause undesired operation.

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

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

## **Safety Instructions**

- 1. Read these instructions.
- 2. Keep these instructions.
- 3. Heed all warnings.
- 4. Follow all instructions.
- 5. Do not use this apparatus near water.
- 6. Clean only with dry cloth.
- Do not block any ventilation openings. Install in accordance with the manufacturer's instructions
- Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus that produce heat.
- Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- Only use attachments/accessories specified by the manufacturer.
- 11. Unplug this apparatus during lightning storms or when unused for long periods of time.
- 12. Refer all servicing to qualified personnel. Servicing is required when the apparatus has been damaged in any way, such as power supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
- 13. Damage Requiring service; Unplug the apparatus from the wall outlet and refer servicing to qualified service personnel under the following conditions:
  - a. When the power-supply cord or plug is damaged,
  - If liquid has been spilled, or objects have fallen into the apparatus,
  - If the apparatus has been exposed to rain or water,

- d. If the apparatus does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions as an improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the apparatus to its normal operation,
- If the apparatus has been dropped or damaged in any way, and
- f. When the apparatus exhibits a distinct change in performance; this indicates a need for service.
- 14. Object and Liquid Entry Never push objects of any kind into the apparatus through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock. The apparatus shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases shall be placed on the apparatus. Don't put candles or other burning objects on top of this unit.
- Batteries Always consider the environmental issues and follow local regulations when disposing of batteries.
- 16. If you install the apparatus in a built-in installation, such as bookcase or rack, ensure that there is adequate ventilation. Leave 20 cm (8") of free space at the top and sides and 10 cm (4") away from the rear panel or wall, creating a flue like gap for warm air to escape.
- This device has no mains switch. To disconnect this device from mains supply, the power cord must be disconnected.
- 18. Only use the enclosed AC power adapter.

# **System Function**

## **System Function Description**

The OAWA3 System is designed to wirelessly transmit an audio source signal from one location to a dedicated wireless audio amplifier. The audio amplifier is then connected to any general purpose loudspeaker.

The OAW3-t Transmitter is a high performance device that broadcasts digital audio over the 2.4 GHz band. Analog input signals are converted to digital format for transmission. The radio frequency broadcast is digital, uncompressed, CD quality data. The broadcast signal is uniquely formatted so that either the Outlaw Audio OAW3-r or OAWA3-r Receiver can receive and convert it into useful audio output.

The OAWA3-r Receiver/Amplifier is readily configured to drive a pair of 8 Ohm speakers in Stereo mode.

**NOTE:** There is also the capability to use the OAWA3-r Receiver/Amplifier for more specialized functions. These functions are covered in the section "Advanced Functions" (pg 12)

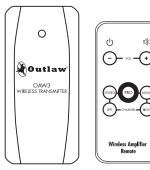
Both the OAW3-t and OAWA3-r receiver are equipped to operate with 3 different Zones. Each Zone is a unique formatting of the broadcast digital data so that components operating and linked on one Zone will not receive or interfere with other WA components operating on a different Zone.

This permits operation of up to three different zones within the same RF broadcast area.

### **Features**

- Lossless, Uncompressed, CD quality streaming audio network, sample rate 48 kHz.
- Dedicated 2.4 GHz streaming audio network to reduce interference with WiFi networks or other 2.4 GHz devices such as cordless phones and microwaves.
- Simple to set-up, plug and play
- · Virtually no time delay or data drops

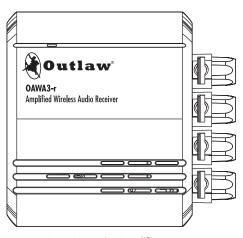
# **Package Content**



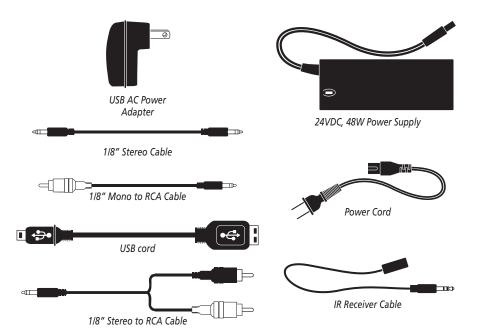
OAW3-t Wireless Transmitter



Remote

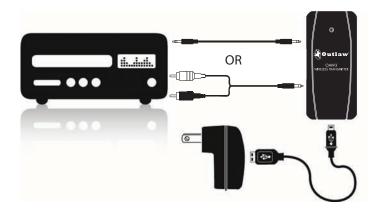


OAWA3-r Receiver/Amplifier



## **Transmitter Basic Setup**

### **OAW3-t Wireless Transmitter**



- 1. Select the "Zone" setting you wish to use when transmitting this audio signal.
- 2. Connect supplied USB cable's Mini-USB connector to the OAW3-t.
- Connect the standard USB connector to the supplied USB AC adapter. The LED will flash red/blue for 3-5 seconds.
- 4. Connect the 1/8" stereo connector into the 1/8" stereo jack on the OAW3-t.
- Connect the RCA connectors to your receiver's or processor's Pre-Out or Tape-Out jacks (There is no Master Volume control of the OAWA3-r from your receiver when using the Tape-Out jacks—you'll need to use the 5030r's remote control with its IR Receiver cable connected.)
- 6. Alternately, you may use the 1/8" stereo cable to connect the OAW3-t to the headphone jack of a portable MP3 player or a portable CD player.

Note that the 1/8" analog input is intended for line-level (1 Vrms max) signals only. Use of speaker-level signals may result in distortion and/or damage to your system.

## **Computer/Media Server Connections**

## **PC Configurations**



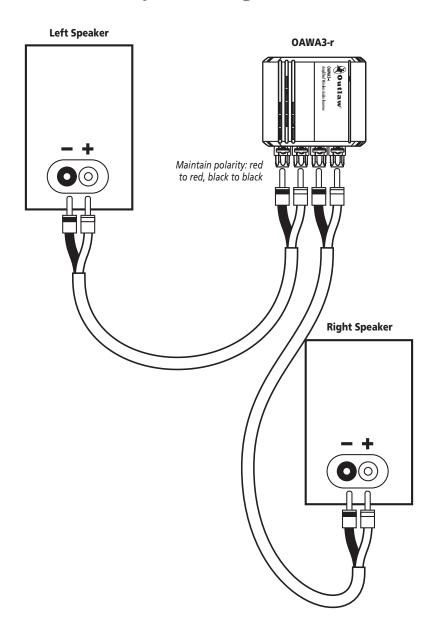
- Select the "Zone" setting you wish to use when transmitting this audio signal.
- 2. Connect supplied USB cables Mini-USB connector to the OAW3-t.
- 3. Connect the standard USB connector to an open port on your PC.
- OAW3-t status light will rapidly alternate between red and blue for 3-5 seconds.
- 5. Your PC will automatically recognize the OAW3-t as a USB Audio Device (usualy a USB headset). Please allow your PC to finish the installation process before proceeding. A message will appear in the bottom right corner of your desktop stating "Your new hardware is installed and ready to use."
- 6. Your OAW3-t is now configured as your computer or media server's default audio playback device.

**NOTE:** It may be necessary to manually select USB Headset as the default audio device under the audio tab of your computer's Sound and Audio Devices menu located in the computer's Control Panel.

## **Apple/Mac Configuration**

- 1. Select the "Zone" setting you wish to use when transmitting his audio signal.
- 2. Connect supplied USB cable's Mini-USB connector to the OAW3-t.
- 3. Connect the standard USB connector to an open port on your Mac computer.
- OAW3-t status light will rapidly alternate between red and blue for 3-5 seconds.
- 5. Click on System Preferences and select "Sound" under the "Hardware" menu.
- 6. Click "Output" and manually select "USB Headset".
- 7. Your OAW3-t will now be configured as the default audio play-back device on your Mac computer.

# **Basic Receiver/Amplifier Configuration**



## **Initial Setup & Linking Procedure**

You must configure the OAWA3-r receiver/amplifier to "talk" to the OAW3-t transmitter. After performing the Transmitter Basic Setup on Page 7-8. Follow these simple steps:

#### Step 1

Upon powering the OAW3-t Transmitter, the LED indicator will flash Red/Blue in seeking amplifier link. Upon successfully linking, it will become steady Blue.



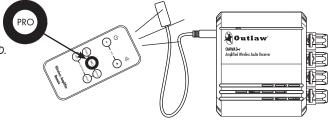
#### Step 2

OAWA3-r Receiver/Amplifier LED will indicate a steady Red upon power up. It will switch to Blue upon successful linking. If red, press "LINK" button on the receiver's bottom panel to change its zone (one-> two-> three with each pressing).



#### Step 3

Press and HOLD the "PRO" button for approximately 5 seconds until the LED flashes RED.



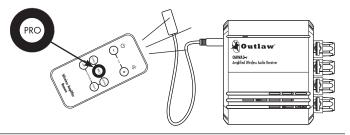
#### Step 4

Press the STEREO mode button. LED will become steady Blue, confirming selection.



#### Step 5

Press and HOLD the "PRO" button for approximately 5 seconds until the LED flashes BLUE, then it will return to steady-state BLUE.



#### Step 6

Repeat Steps 1-5 for each OAWA3-r Receiver/Amplifier to be programmed. Remember, only the Receiver/Amplifier to be programmed should be powered at this time. When programming is completed, all Receiver/Amplifiers may be powered on.

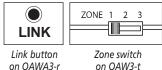
## **Multi-Zone**

The OAWA3 system permits up to 3 unique zones within a common RF coverage area.

## **Creating Multiple Zones**

The OAWA3 System is capable of supporting three independent audio networks within a common broadcast zone. Thus three different audio sources can be utilized in the same common area. The OAWA3-r Receiver/Amplifiers can be selected to link with any of the three sources.

The default setting for the OAWA3 System is Zone 1. Changing the Zone is accomplished



through the "LINK" button located on the bottom of the OAWA3-r Receiver/Amplifier and the Zone Switch on the side of the OAW3-t Transmitter. Pressing the "LINK" button sequentially steps the OAWA3-r Zone with each press.

If setting up single transmitter to multiple amplifiers, estab-

lish the link to one amplifier at a time. Make certain the transmitter and the amplifier are set to the same Zone. Power up the first Receiver/Amplifier to establish the link. Then power up the second amplifier.

## **Examples of Multiple Zones**

If you wish to use more than one OAWA3-r amplifier/receiver to operate multiple sets of speakers with different signals, do the following:

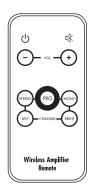
- 1. Use one OAW3-t connected to the side (5.1) surround out jacks set to Zone 1
- 2. Use OAWA3-r, set to Zone 1 to power side 5.1 speakers
- 3. Repeat above with another OAW3-t connected to back surround out jacks (7.1), set to Zone 2. Use another OAWA3-r, set to Zone 2 to power back surround speakers

or...

Use a single OAW3-t to control multiple OAWA3-r's to power different speakers in different rooms with the same signal.

- 1. Connect one OAW3-t to the Tape-Out or Pre-Out jacks on your receiver
- 2. Set OAW3-t to Zone 1
- 3. Connect first OAWA3-r to speakers in dining room
- 4. Connect second OAWA3-r to speakers in guest room
- 5. Set both OAWA3-r's to Zone 1
- 6. Speakers in both dining room and guest room will play the same program

# **Remote Control Operation**



All functions of the OAWA3-r may be controlled by the Remote Control, as long as the IR cable is connected. There are no control functions on the OAW3-t Transmitter or OAWA3-r Receiver/Amplifier units themselves.

- On/Off each press cycles the amplifier On or Off. Amplifier status is indicated by its BLUE LED.
- Mute each press cycles the amplifier output Mute or Un-Mute.
- VOL Volume Up (+) or Down (-).

## **Advanced Functions**

	Amplifier Channel		
Mode	Left	Right	
Stereo	Left	Right	
Left	Left	Left	
Right	Right	Right	
Mono	Left+Right	Left+Right	

The OAWA3-r is designed with advanced functions that configure the Left and Right output channels to: Left, Right and Mono

These functions are addressed through the system programming feature "PRO."

Please see the section titled Programming the Amplifier for Advanced Operation (pg. 13)

# **Operational Configurations**

## **Bi-Amping**

Use one OAWA3-r Receiver/Amplifier on each speaker to power its LF and HF Sections independently; see Bi-Amp set-up instruction (pg. 14). Program the Left speaker's amplifier to operate in the "LEFT" mode; see Programming section (pg. 13). Similarly, program the Right speaker's amplifier to operate in the "RIGHT" mode.

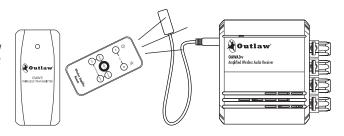
## **Commercial/Distributed Audio Mode**

Connect the OAW3-t Transmitter to the desired audio signal source. Program each OAWA3-r Receiver/Amplifier to operate in the Mono mode so that each speaker will play the full audio input, making it unnecessary to use "stereo pairs" of speakers. This will enable a fully expandable sound system to operate within range of the Transmitter.

# **Programming the Amplifier for Advanced Operation**

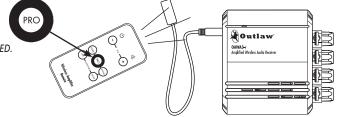
#### Step 1

Power up both the OAW3-t Transmitter and OAWA3-r Receiver! Amplifier. Establish link between two. If more than one Amplifier is to be linked to the Transmitter, make sure that only the Amplifier of interest is powered and linked for programming at a time.



#### Step 2

Press and HOLD the "PRO" button for approximately 5 seconds until the LED flashes RED.



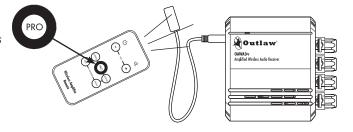
#### Step 3

Press desired MODE button: Left, Right, or Mono. LED will become steady Blue, confirming selection.



#### Step 4

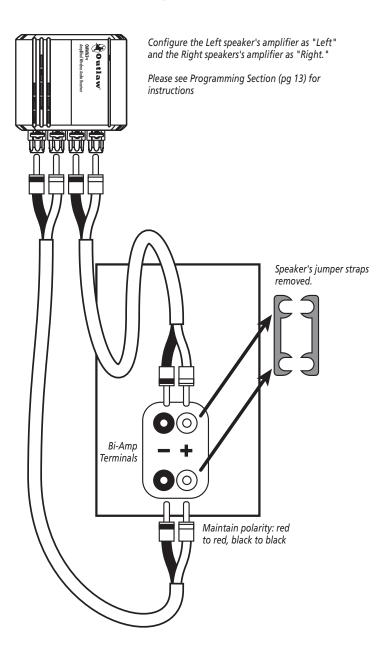
Press and HOLD the "PRO" button for approximately 5 seconds until the LED flashes BLUE, then it will return to steady-state BLUE.



#### Step 5

Repeat Steps 1-4 for each OAWA3-r Receiver/Amplifier to be programmed. Remember, only the Receiver/Amplifier to be programmed should be powered at this time. When programming is completed, all Receiver/Amplifiers may be powered on.

# **Example of Bi-Amp Configuration**



# **Troubleshooting**

# No wireless connection (no blue "Linked" indication on either the OAWA3-r or the OAW3-t)

- 1. Make sure both the transmitter and amplifier are operating on the same Zone Setting. (Use "LINK" button receiver's bottom panel)
- 2. Make sure receiver is within the broadcast range of the transmitter.

## Wireless Connection, but no sound

- 1. Make sure the audio source is properly connected and playing. Analog input requires "line level" (1 Vrms max).
- 2. Verify Transmitter and Amplifier are operating on the same Zone Setting.

# **Specifications**

- Wireless full CD quality sound
- Robust and dedicated network for your audio
- Easy setup, get wireless music in seconds
- Wireless range up to 150 ft (50m); line of sight, 300 ft (100m)
- No interference or delays
- Time delay max 10ms

- Works with both Mac & PC
- Plug'n play No software needed
- Flexible multi-zone functionality
- RF band: 2.4GHz
- Dedicated proprietary protocol
- USB 2.0 interface
- SNR: 93dB
- $\blacksquare$  2 x 30 Watts/ch, 1 kHz 8 $\Omega$

The contents of this manual are Copyright © 2012 by Outlaw Audio, LLC, and may not be duplicated or reproduced by any means, whether physical, electronic or otherwise without prior written consent from Outlaw Audio, LLC.

Outlaw Audio and the Outlaw Audio logo are registered trademarks of Outlaw Audio, LLC.

Specifications are those in effect at the time of printing. Outlaw Audio, LLC. reserves the right to change specifications or designs at any time without notice without obligation to modify existing units.

# **Outlaw Audio Limited Warranty**

This warranty protects the owner of the Outlaw Audio Wireless OAW3-t and OAWA3-r (the PRODUCT) for two (2) years from the date of purchase.

This warranty covers all defects in material and workmanship with the following specific exceptions. These are:

- Damage caused by improper installation or adjustment
- Damage caused by accident, unreasonable use or neglect
- Damage from failure to follow instructions contained in this Owner's Manual
- Damage from the performance of repairs by someone not authorized by Outlaw Audio
- Any unit on which the serial number has been effaced, modified, or removed
- · Damage occurring during shipment
- Units which have been altered or modified in design, appearance or construction.

This warranty covers only the actual defects within the PRODUCT itself. IT DOES NOT cover costs of installation in (or removal from) a fixed installation, or normal setup, claims based on any misrepresentation by the seller, or performance variations resulting from installation related circumstances such as signal quality, AC power or incompatibilities with speakers and/or other system components.

During the warranty period, Outlaw Audio will, at its option, either repair the defect, or replace the defective product, or the defective parts, or components thereof at no charge to the owner for parts and labor covered by this warranty If necessary repairs are not covered by this warranty, or if a unit is examined which is not in need of repair, you will be charged for the repairs and/or the examination. If non-warranted repairs are needed, we will notify you of the estimated cost and ask for your authorization to perform said repairs.

You must pay shipping charges incurred in getting your Product to the factory. We will pay the return shipping charges if the repairs are covered by the warranty. Please save the original shipping cartons, as the unit MUST be returned in the original carton and packing. (Replacement cartons are available at a modest charge.)

If your product needs service, please call Outlaw Audio at 866-OUTLAWS (688-5297) or 866-OUTLAWA (688-5292).

You will need to present the original bill of sale to establish the date of purchase. In the event that the proof of purchase cannot be established with the original receipt, the warranty period shall be determined by the earliest date of manufacture shown on the unit, provided that the serial number label has not been altered in any manner, or by our records relating to that serial number.

In the event that you wish to return your Outlaw Product back to us, for any reason, please call to arrange for a Return Authorization Number. This will ensure that your problem is discussed with a service technician who will determine if there is a quick solution to your problem.

Outlaw Audio shall not be liable for, in any way responsible for, any incidental or consequential damages of any kind. Some states do not allow limitations on how long an implied warranty lasts and/or do not allow the exclusion of incidental or consequential damages; therefore, the limitations and exclusions stated herein may not apply to you. This warranty gives you specific legal rights; and you may also have other rights that vary from state to state.

THERE ARE NO WARRANTIES GIVEN BY OUTLAW AUDIO THAT EXTEND BEYOND THE DESCRIPTION GIVEN HEREIN. ANY IMPLIED WARRANTIES OF FITNESS FOR PURPOSE SOLD, MERCHANTABILITY, DESCRIPTION, QUALITY OR ANY OTHER MATTERS ARE LIMITED TO THE TERMS OF THE EXPRESSED LIMITED WARRANTY STATED HEREIN.

Products are sold on the basis of specifications applicable at the time of sales. Outlaw Audio shall have no obligation to modify products once they have been sold.

This warranty is applicable only in the United States.

For applicability in other countries, please call Outlaw Audio.



www.outlawaudio.com