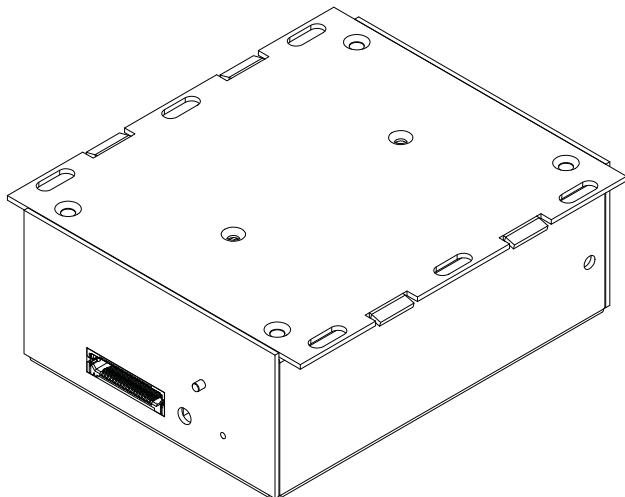


# User Manual and Installation Guide

peerSound<sup>TM</sup>  
Amplifier



FC CE c UL us

peerless-AV<sup>®</sup>

**Models:**  
ADS100-A252

**FCC statement:**

" 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."

**FCC Caution:**

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

**FCC Statement:**

"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."

# Contents

<b>Important Safety Instructions.....</b>	<b>4</b>
<b>Introduction.....</b>	<b>6</b>
Installation Planning .....	6
What's In ADS100-A252 Box.....	6
Tools Needed For Installation.....	6
<b>Installation.....</b>	<b>7</b>
Product Overview .....	7
Installing IN-WALL the ADS100-A252 Wireless Receiver/Amplifier .....	8
Transmitter and Amplifier Pairing .....	9
Returning To Finish The Installation .....	9
Stereo VS Mono Setup.....	10
Multiple Amplifiers to Same Inputs .....	10
Power Outages.....	10
<b>Limited Warranty .....</b>	<b>11</b>

# Important Safety Instructions

## Warnings/Safety

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.
7. Do not block any ventilation openings. Install in accordance with manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11. Only use attachments/accessories specified by the manufacturer.
12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
13. Unplug this apparatus during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified service 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.
15. The product was submitted and evaluated for use at the maximum ambient (Tma) à 40°C
16. **WARNING:** To reduce the risk of fire or electrical shock do not place this apparatus in a position where it is exposed to dripping or splashing liquid, rain, moisture, or exceedingly high humidity. Objects containing liquid shall not be placed in proximity to the unit such that they present a risk of spillage onto the apparatus.



	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 a sufficient magnitude to constitute a risk of electric shock to persons.
	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.
	Le symbole de l'éclair avec une flèche à son extrémité, dans un triangle équilatéral, a pour but de vous avertir de la présence d'une « tension électrique dangereuse » et non isolée à l'intérieur de l'enceinte de l'appareil, qui peut être suffisamment puissante pour constituer un risque d'électrocution pour les personnes.
	Le point d'exclamation dans un triangle équilatéral vous avertit de l'existence d'instructions importantes de fonctionnement et d'entretien (intervention) dans la documentation accompagnant l'appareil.

## Important Safety Instructions

17. To avoid electric shock, never stick anything in the slots on the case or remove the cover.
18. This product is intended for indoor use only.



Model: ADS100-A252

FCC ID: 2AAW2ADS100-A252

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.

## Introduction

This instruction sheet is meant for **adding** additional amplifiers to the base system and presume one amplifier is already set up and running per instructions provided.

This wireless audio distribution system provides for 8 total independent mono zones, or 4 total stereo zones, or any combination in-between. By connecting your source(s) to either the RCA line level or speaker level inputs, you can wirelessly receive the audio signal and amplify it for the remote speakers.

The installation process starts with a little planning, understanding the options you have for installation.

## Installation Planning

There is much flexibility in the component installations. The amplifier/receiver also has installation options including:

- Inside a drywall cavity (flush to the outer surface). The maximum drywall thickness is 5/8".
- Attached to a structure, such as ceiling beams
- On top of a wall surface (requires accessory kit ADS100-OWK)

It helps to have your amp locations in mind when starting the installation process. Generally the amplifier is placed near to a 120/240 VAC power source, capable of 150 watts peak demand.

*Tip: While this device does not require Line-of-Sight, the signal still can be affected by certain building materials. For best wireless performance, try to keep cement or a lot of steel (like ductwork or a refrigerator) out of the imaginary Line-of-sight between transmitter and receivers.*

## What's In The ADS100-A252 Box

Before you start the installation, make sure you have the following items:

- ADS100-A252 Amplifier Kit
  - Amplifier In/On-Wall, 25X2, 120/240V
  - In-Wall Holder For Amp
  - In-Wall Bracket Screw For Amp
  - Drywall Clamp
  - Conduit Adapter Bracket
  - 2 Gang Oversize Wall Plate
  - In-Wall Amp Template
  - System Instructions

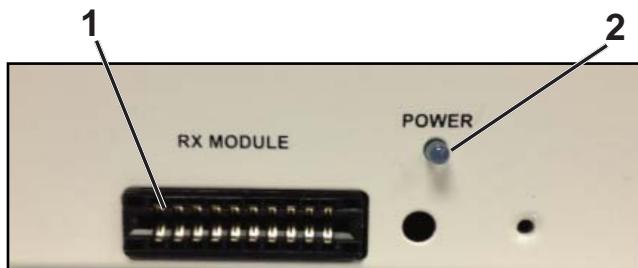
## Tools Needed For Installation

- Bubble Level
- Phillips Screwdriver
- Small straight screwdriver
- Drywall Saw
- Wire Strippers
- Side Cutters
- Tape Measure
- Pencil

# Installation

## Product Overview

### Front



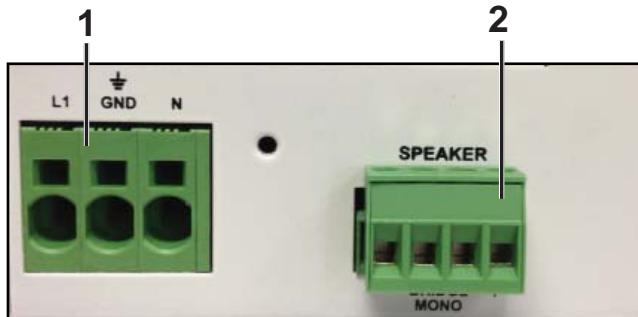
#### 1. RX MODULE

- Insert RXS or RXM Module here

#### 2. POWER INDICATOR

- Blue when power is on.

### Back



#### 1. Power Connector

#### 2. Speaker Connector

# Installation

## Installing IN-WALL the ADS100-A252 Wireless Receiver/Amplifier

### **Step 1**

Locate area that In-Wall amp will be installed.

### **Step 2**

Conduct a stud search to investigate wall stud layout to verify mounting of amplifier and speaker placement. For In-Wall Amplifier scenario, the installer will want to choose a stud bay to mount within which also provides access to the AC Outlet/Receptacle that will be used to tap on to power the amplifier.

### **Step 3**

Once location for the stud placement is identified, place IN-WALL Template on wall and ensure it is level. Trace outline of template and cut away drywall for in-wall placement. The hole size is 4 1/8" high x 4 3/16" wide.

### **Step 4**

Using the access hole that has been cut, the installer will want to run the speaker lines to the speaker locations decided upon. When conduit is required in UL2043 plenum rated areas, the installer will then want to connect the accessory armored wire whip\* (ADS100-PW) to the AC box through its punch-outs located in-wall and attach this to the Conduit Adapter supplied. Or a standard flexible conduit whip may be used for non UL2043 plenum areas. Refer to local electrical code requirements.

**Note:** This step needs to be completed by a certified electrician. When conduit is not required by code, the user may use Romex or similar (at least 16 AWG shielded wire stranded or solid) routed from the power source directly to the power input plug.

### **Step 5**

Connect power at the amplifier. For solid wire, simply strip back 1/4" insulation, and insert firmly into the proper polarity cavity. For stranded wire, it's recommended to twist the wire, and also use a small straight screwdriver to release the clamp then insert the wire. Test all connections by trying to pull the wire back out.

### **Step 6**

Connect speaker wires to the speaker terminal plug. Strip 3/16" insulation off the speaker wires, loosen the screw clamp, insert the wire, tighten screw clamp. Be sure to follow the positive (left) and negative (right) nomenclature.

### **Step 7**

Take the ADS100-RXS Stereo RX module and plug into the port on the amplifier. Install the locking screw through the RX module into the amplifier.

### **Step 8**

The installer will want to leave the amp out of the wall to verify pairing has taken place between the TX and the RX. Once pairing can be verified, the amp can then be installed in the wall.

### **Step 9**

Skip to "Transmitter and Amplifier Pairing" next section

## **Transmitter and Amplifier Pairing**

The following presumes at least 1 amplifier is already paired with the transmitter.

### **Step 1**

Apply power to the ADS100-T8 transmitter by pressing the power button on the front left. The two right side front face LED's will illuminate red. The audio source(s) also should be present and on, and connected to inputs 1-4 at least. A portable music player with rca outputs can be used also for channel assignment.

### **Step 2**

Apply power to the amplifier(s) installed. Also ensure the speakers are connected, or at least a single speaker. Both blue LED's will blink about every second.

### **Step 3**

At the transmitter face, depress the "SYNC 1-4" button once. The face LED and TX LED will both blink allowing 2 minutes to sync the appropriate amplifier. This allows any and all 4 inputs matched to that TX module to be synced. If not synced, resumes previous assignment. The process can start again.

### **Step 4**

At the amplifier, press "Sync" button once. The blue LED will top blink indicating it has locked onto the TX module. If not on the input channel desired, press the "CH-SEL" button to scroll through the inputs to find the correct one(s). LED on transmitter face and TX module will illuminate solid blue to indicate successful pairing.

### **Step 5**

Repeat the above procedure for additional amplifiers. Each amplifier needs to be synced from start to finish as above. Return to the amplifier to finish the installation.

## **Returning To Finish The Installation**

### **Step 1**

Install the Drywall Clamps onto each side of the amplifier using the center slot.

### **Step 2**

Feed the amplifier through the wall cut out, using the oval cutouts on the holding bracket with your fingers. Guide the amp in and toward the wiring first, then back up so the top of the holding bracket is outside of the wall, then pull out slightly and drop down onto cut out bottom edge. The holding bracket should be outside but flush to the drywall surface.

### **Step 3**

Snug clamp screws to secure the amp.

### **Step 4**

Attach 2 gang cover plate to amplifier holding bracket.

## **Stereo VS Mono Setup**

The amplifier is fixed 2 channel operation. When Mono operation is used (by using a ADS100-RXM module, sold separately) the receiver syncs to only 1 channel/input at the transmitter. However both amplifier speaker outputs will have mono output and can be used. Bridging for more power to one output is not possible. The amplifier is configured as Stereo or Mono by utilizing the proper RX module. The system is supplied with the ADS100-RXS with is the stereo 2 channel module. For Mono, the accessory part ADS100-RXM is utilized. Simply plug the ADS100-RXM RX Module into the amplifier instead of the ADS100-RXS. The Sync process is the same with Mono as with Stereo modules. The only difference being, when the "Ch-Sel" button is pressed, it scrolls through transmitter inputs 1 at a time, not 2 at a time.

## **MULTIPLE AMPLIFIERS TO SAME INPUTS**

This system has the ability for multiple Receiver/Amplifiers to be paired to the same transmitter inputs. I.E. pair four stereo amplifiers to transmitter inputs 1 and 2. The limit to maintain the highest QOS is two stereo or four mono signals per TX module. More can be done but the QOS will go down, however installation situation and environment might allow more to work.

## **POWER OUTAGES**

Once paired and set up per the installation requirements, the transmitter module, and receiver modules will remember their paired channels should the power be removed from part or all of the system. The power-on and re-sync takes about 1 second from when power is restored.

## Limited Warranty

Peerless Industries, Inc. ("Peerless-AV®") warrants to original end-users of Peerless-AV® products that Peerless-AV® products will be free from defects in material and workmanship, under normal use, for the periods listed below, from the date of purchase by the original end-user. At its option, Peerless-AV® will repair or replace with new or refurbished products or parts, or refund the purchase price of, any Peerless-AV™ product which fails to conform with this warranty.

**In no event shall the duration of any implied warranty of merchantability or fitness for a particular purpose be longer than the period of the applicable express warranty set forth above.** Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

This warranty does not cover damage caused by (a) service or repairs by the customer or a person who is not authorized for such service or repairs by Peerless-AV®, (b) the failure to utilize proper packing when returning the product, (c) incorrect installation or the failure to follow Peerless-AV®'s instructions or warnings when installing, using or storing the product, or (d) misuse or accident, in transit or otherwise, including in cases of third-party actions and force majeure. This warranty also does not cover corrosion or rust resulting from damaged, scratched or chipped paint or other surfaces.

**In no event shall Peerless-AV® be liable for incidental or consequential damages or damages arising from the theft of any product, whether or not secured by a security device which may be included with the Peerless-AV® product.** Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

This warranty is in lieu of all other warranties, express or implied, and is the sole remedy with respect to product defects. No dealer, distributor, installer or other person is authorized to modify or extend this Limited Warranty or impose any obligation on Peerless-AV® in connection with the sale of any Peerless-AV® product.

This warranty gives specific legal rights, and you may also have other rights which vary from state to state.

<u>Product</u>	<u>Warranty Period</u>
Mounts	5 years
Furniture	1 year
Cables	25 years
Cleaning Products	1 year
Electronic Products and components	1 year



Peerless -AV  
2300 White Oak Circle  
Aurora, IL 60502 USA  
[peerair.peerless-av.com](http://peerair.peerless-av.com)

©2013 Peerless-AV. All rights reserved. Peerless-AV is a trademark of Peerless Industries, Inc.  
Other parties' marks are the property of their respective owners.