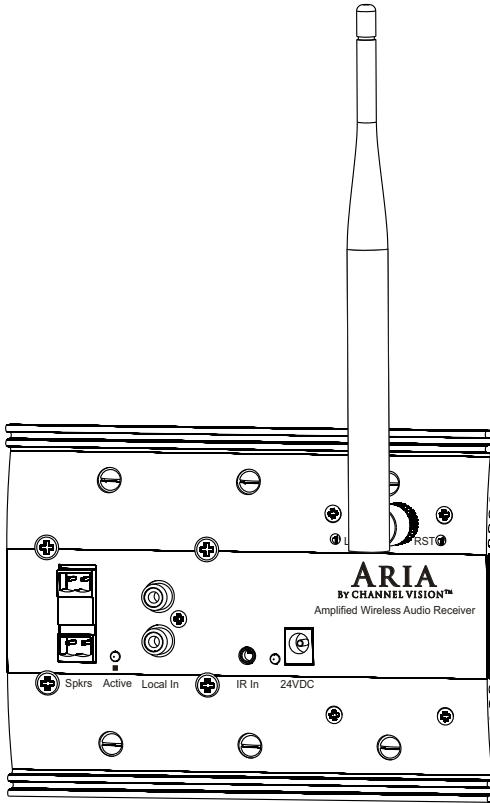


INSTRUCTIONS



WA-350

**Point-To-Point Amplified Wireless
Audio Receiver**

WA-351

**1-To-Unlimited Amplified Wireless
Audio Receiver**

The **WA-350** Point-To-Point Amplified Wireless Audio Receiver and **WA-351** 1-To-Unlimited Amplified Wireless Audio Receiver work with Channel Vision's WA-320 and WA-321 to create distributed audio systems without the need for running wires from one room to another. The integrated 100Watt amplifier is ideal for powering distributed audio speakers as well as wireless home theater applications.

Features:

- Receive wireless audio from up to 300ft. away
- 100Watt integrated class D amplifier
- Pre-amp audio outputs for easy connection to powered subwoofer
- Local audio input to override the wireless audio signal
- Input for compatibility with Channel Vision's CAT5 audio systems
- Easy installation and linking

Antenna... Receives RF signal from the transmitter

Reset Button... Press to reset receiver

Link LED... Indicates when receiver is linked to a transmitter

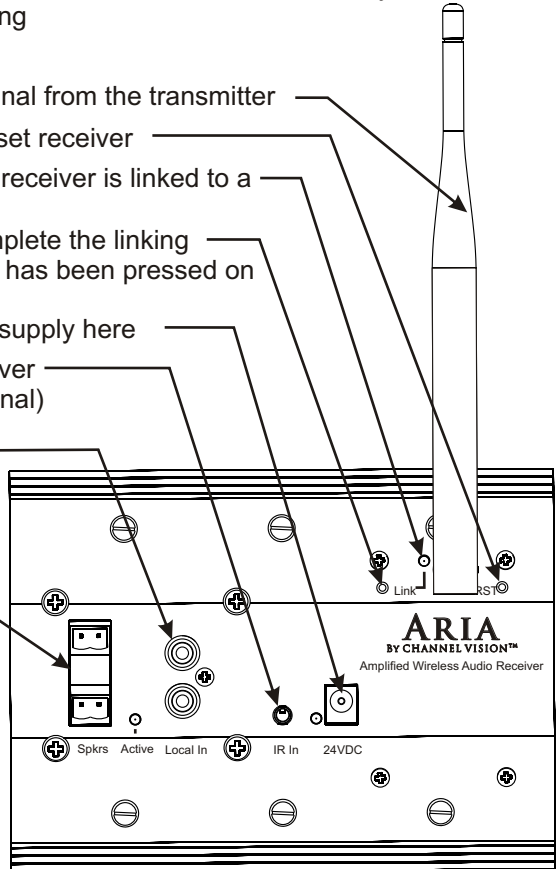
Link Button... Press to complete the linking process after the link button has been pressed on the transmitter

Power In... Connect power supply here

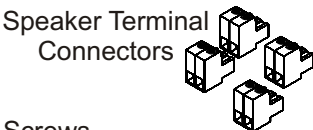
IR Input... Connect IR receiver such as IR-2400 here (optional)

Local Audio In... Line-level audio sensing input that overrides the primary wireless or CAT5 audio

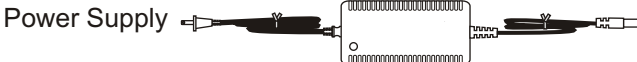
Speaker Outputs... Connect speakers here



Accessories

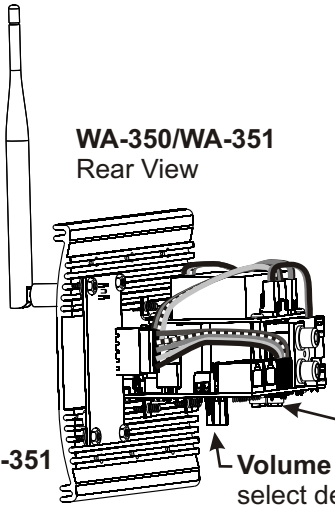


Screws



Power Supply

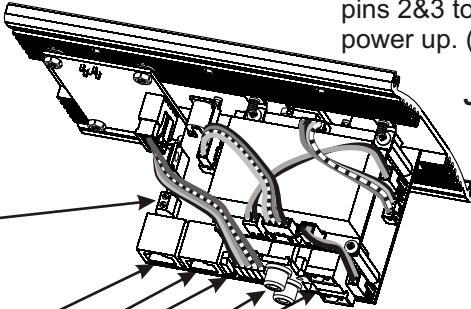
Rear Panel Features and Connections:



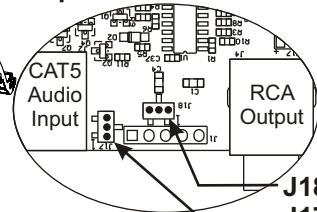
Left & Right Audio Trim Pots...
Control the maximum output level of the amplifier. If audio input level is quiet, the trim pots will have little noticeable effect.

WA-350/WA-351
Top View

Volume Jumper... Set J6 to pins 1&2 to select default power up volume. Set J6 to pins 2&3 to select previous volume level on power up. (J7 is currently not implemented)



Jumper 17 & 18 Locations



Rear Speaker Outputs... Connect in-wall speakers to these jacks

RCA outputs... Connect to powered subwoofer or external amplifier

J17 & J18 Input Select Jumpers... Set J17 and J18 to pins 1&2 to allow primary input from the wireless audio receiver, or to pins 2&3 to allow primary input from the CAT5 audio jack. The wireless audio and CAT5 audio inputs cannot be used simultaneously. The front RCA inputs will always function as a local source override.

CAT5 Audio Input... Connect the output of your CAT5 audio hub here

Keypad Input... Connect an IR control keypad, such as A0127, here

24VDC Power Input... These terminals allow the power supply to be connected from the rear of the unit. When these terminals are used, the front power connection should not be used. Follow the voltage polarity markings on the screw terminals.

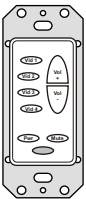
IMPORTANT SAFETY INSTRUCTIONS

1. Read these instructions.
2. Keep these instructions for future reference.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this device near water.
6. Clean only with a dry cloth.
7. Do not block any ventilation openings. Install in accordance with these instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. This apparatus must not be exposed to dripping or splashing liquid and no objects filled with liquids, such as vases, shall be placed on the apparatus.
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. Unplug this apparatus during lightning storms or when unused for long periods of time.
- 12.



Warning: To reduce the risk of electric shock, do not remove the cover (or back), no user serviceable parts inside, refer servicing to qualified service personnel.

Accessories & Complementary Products (sold separately)



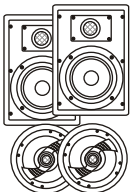
A0127 ... IR repeating keypad. The A0127 contains the IR codes to operate the volume controls in the Amplified Wireless Audio Receiver. You may also use a standard IR receiver or a 3rd party keypad. When using a simple IR receiver, you will need to use the A0505 remote control which contains the IR codes to control the WA-350, WA-351, and A0350. IR codes can be downloaded from www.channelvision.com, or learned from an A0505 remote control.



A0501, A0502, or A0505 ... Remote control. Contains IR codes for controlling the Amplified Wireless Audio Receiver as well as many other Channel Vision audio products.



IR-2400 ... Plasma-Proof IR receiver.



In-wall, In-ceiling Speakers, and Free Standing Speakers... Channel Vision offers a full line of premium speakers. These speakers are perfect for whole-house music or home theater applications.

Linking the WA-350 to the WA-320

The WA-350 and WA-320 operate on a 1-to-1 basis and therefore they must be “Linked” to each other prior to the first use. Once linked they will maintain their paired status even if a power loss occurs. The “RST” button can be used to reset and separate a linked pair.

Make sure audio is playing into the WA-320.

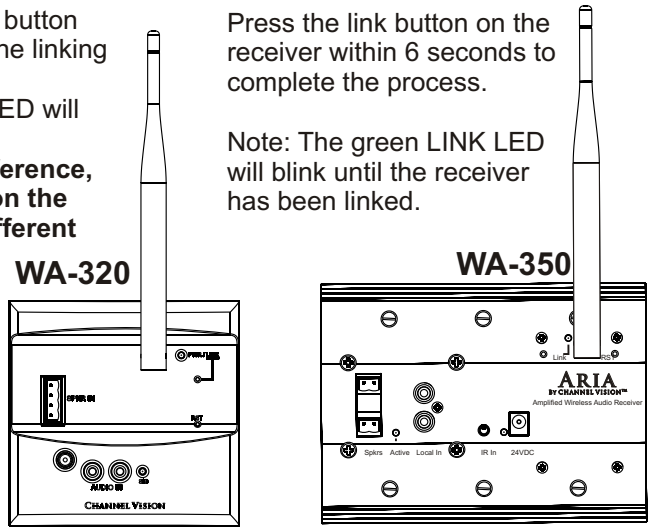
Press and hold the Link button for 3 seconds to begin the linking process.

The green PWR/LINK LED will turn orange.

If you encounter interference, press the link button on the WA-320 to skip to a different broadcast channel.

Press the link button on the receiver within 6 seconds to complete the process.

Note: The green LINK LED will blink until the receiver has been linked.

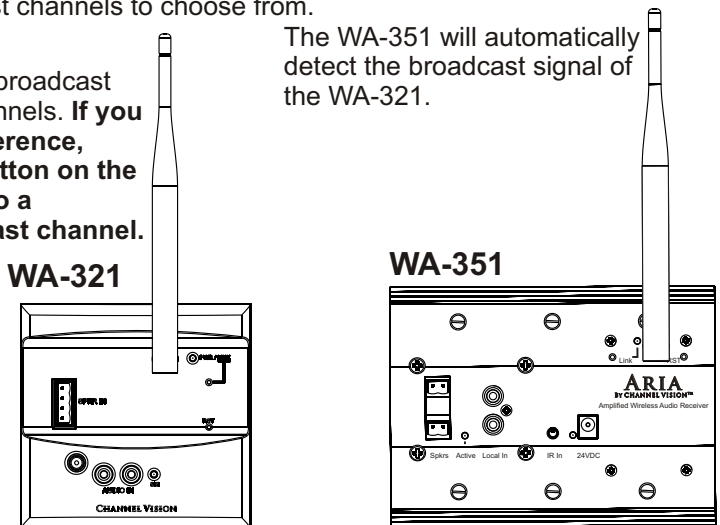


Linking the WA-351 to the WA-321

The WA-321 and WA-351 operate on a 1-to-Unlimited broadcast basis. When the WA-351 is within range of the WA-321, it will automatically detect and receive the audio signal. If distortion or reception problems occur, press the “Link” button on the WA-321 to change the broadcast channel. There are 8 possible broadcast channels to choose from.

The WA-321 can broadcast on 8 different channels. **If you encounter interference, press the link button on the WA-321 to skip to a different broadcast channel.**

The WA-351 will automatically detect the broadcast signal of the WA-321.



WA-350 and WA-351 Installation

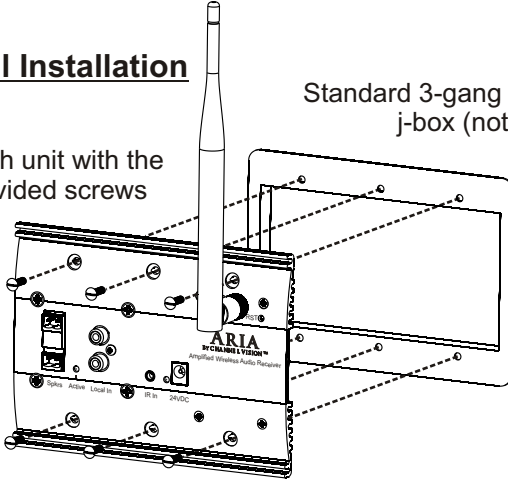
The WA-350 and WA-351 can be installed in the wall using a standard 3-gang junction box or low-voltage mounting ring. The Amplified Wireless Audio Receiver can also be installed into the back of Channel Vision's SP525, SP650, or SP800 Free Standing Speakers.

In-Wall Installation

Attach unit with the provided screws

Standard 3-gang ring or extra deep j-box (not included)

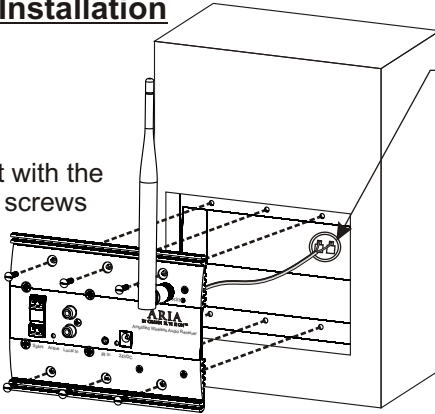
Note: if using a j-box, it must have a minimum depth of 3.5"



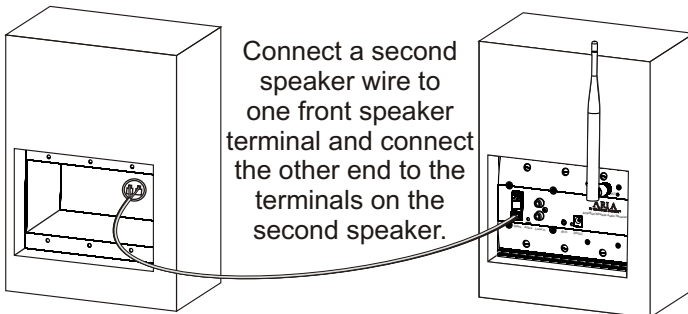
In-Speaker Installation

Attach unit with the provided screws

Connect speaker wire to one rear speaker terminal and connect it to the terminals on the speaker.

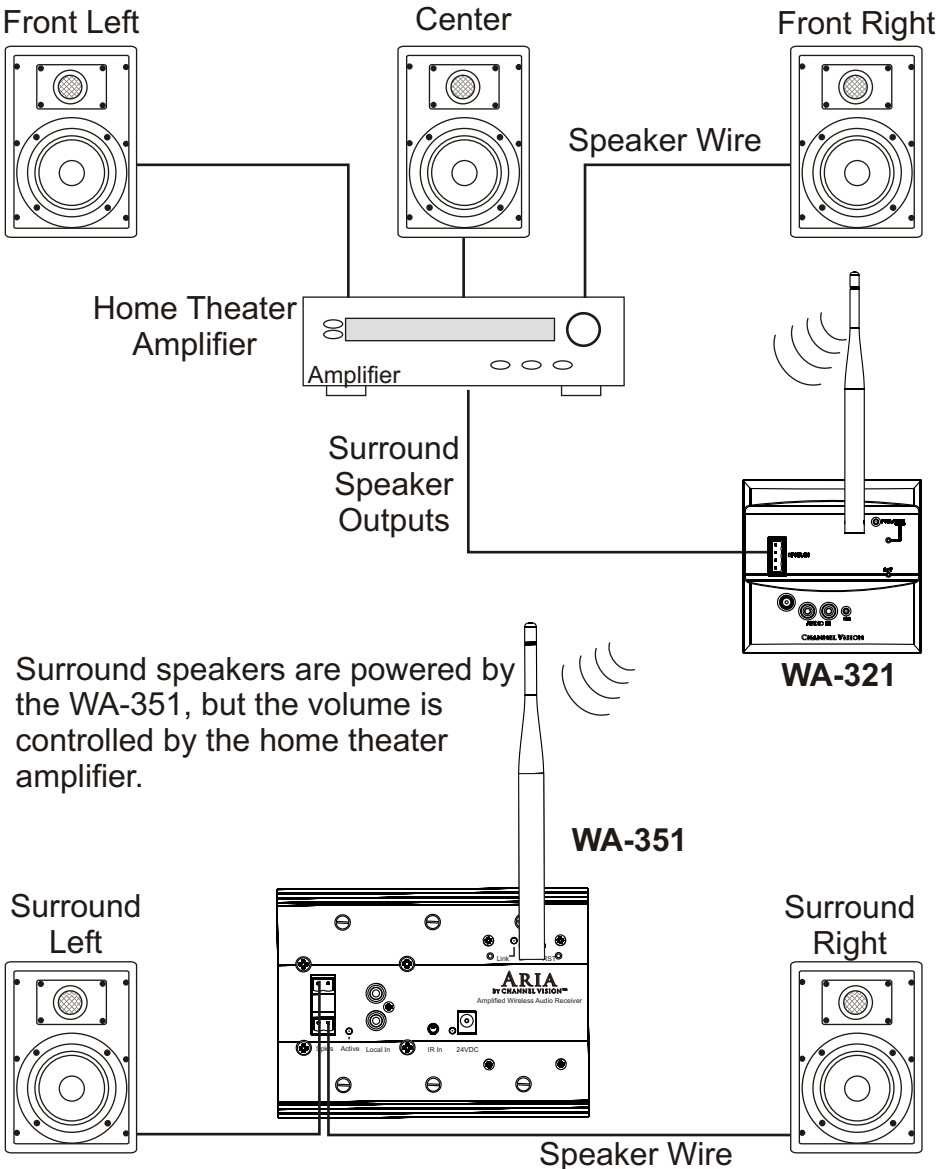


One Amplified Receiver can serve one pair of speakers.



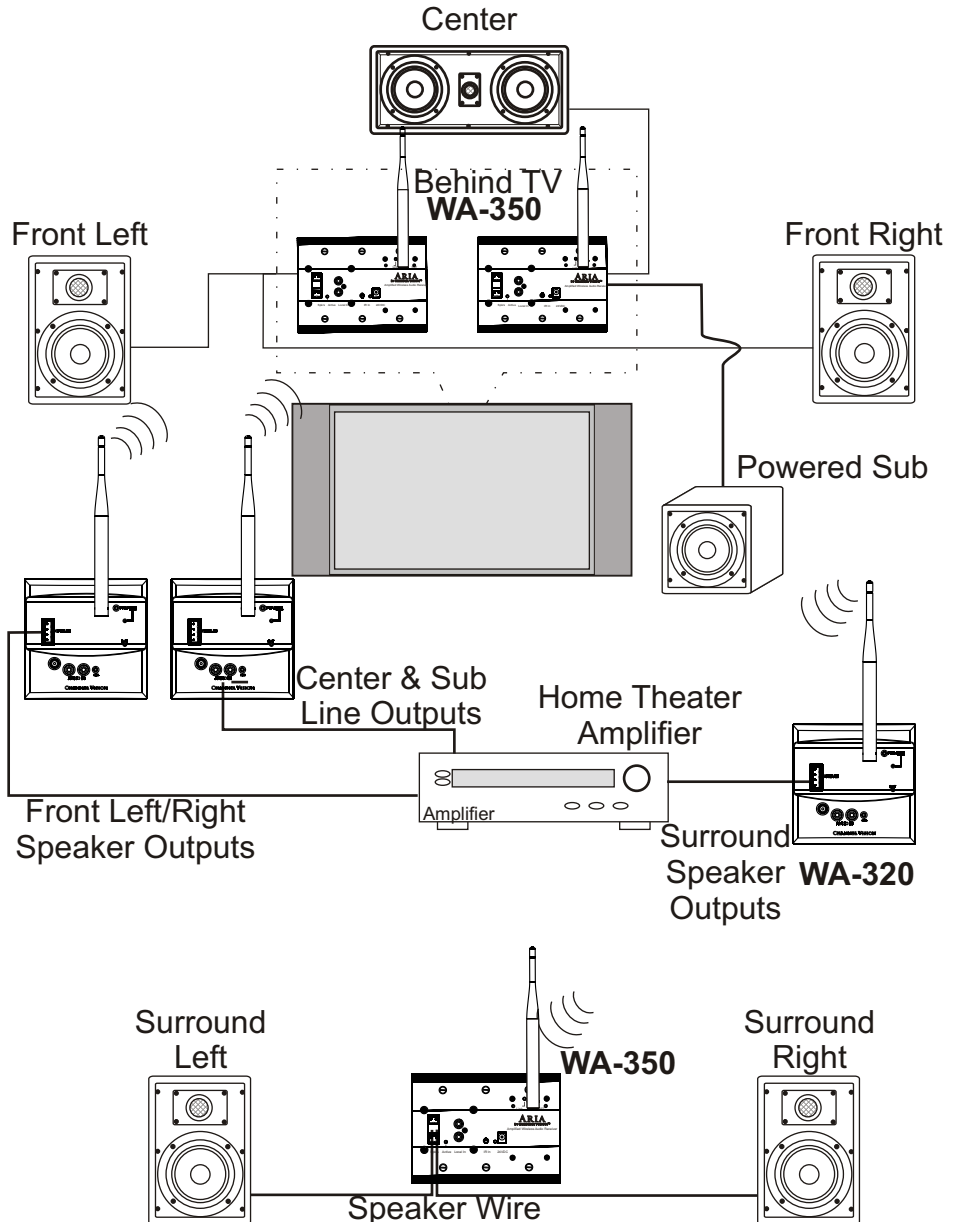
Using the WA-321 & WA-351 in a Home Theater

The WA-321 can accept the left/right surround speaker outputs from a home theater amplifier and transmit the signal to the WA-351. The WA-351 can then amplify the signal and power the speakers. The volume level of the surround speakers will be raised and lowered by the volume control of the home theater amplifier.



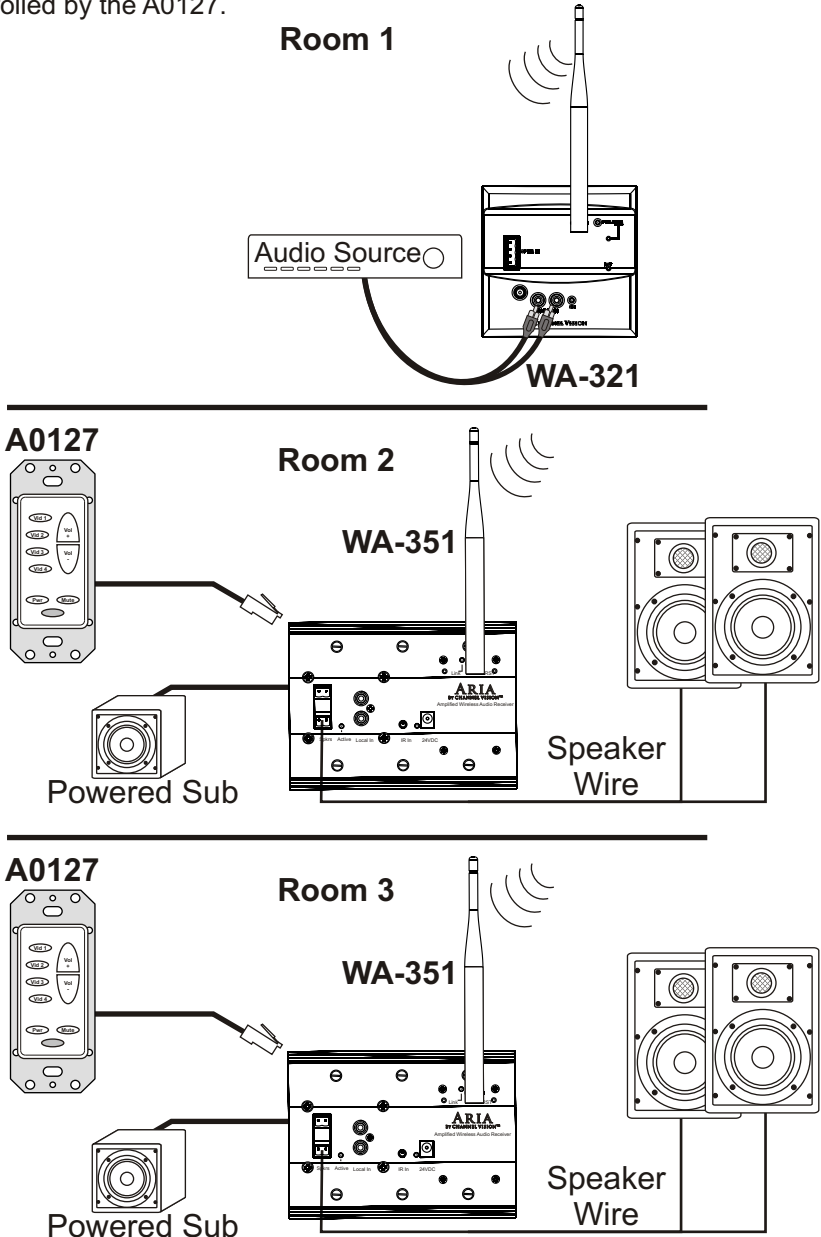
Using the WA-320 & WA-350 in a Home Theater

The WA-320 can accept the 5.1 outputs from a home theater amplifier and transmit the signal to several WA-350 Wireless Audio Receivers. The WA-350's can then amplify the signal and power the speakers. The volume level of the surround speakers will be raised and lowered by the volume control of the home theater amplifier.



Using the WA-321 & WA-351 for Distributed Audio

These wireless audio products make it easy to transmit audio from one room to another. Connect any standard audio component to the input connectors of the WA-321 in Room 1 which will broadcast the signal to the WA-351 in other rooms of the home. The A0127 can be connected to the rear panel of the WA-351 to allow volume control of the WA-351 amplifier. If a powered subwoofer is connected to the rear panel of the WA-351, its volume will be controlled by the A0127.



Troubleshooting:

Problem: Hum in System

Troubleshooting: Plug all parts of the system into the same outlet to see if the hum goes away.

Cause: The different components in the system are connected to different electrical grounds. This forces electrical currents to find alternate paths to ground causing an audible 60Hz hum.

Solution: Plug products into an electrical circuit with a common ground. Lift the ground with a ground lifting plug.

Problem: Transmitter is not linking with the receiver.

Troubleshooting: Make sure you are linking compatible models (WA-320 with WA-360). Check if pwr/lnk LED indicator on the transmitter is turning amber and that the signal LED is lit.

Cause: Link button on WA-350 is not being pressed quickly enough. Review the linking procedure in this manual. Please note that a transmitter and receiver will remain paired even after being unplugged. This allows you to complete the linking process before placing the receiver in it's final location.

Solution: Press the Link button on the WA-320 and confirm that the pwr/lnk LED turns amber. Within 6 seconds, press the Link button on the WA-350.

Problem: Can't link to the transmitter, or audio is cutting out.

Troubleshooting: Check the source, is it sending a signal? Consider setting the jumpers on the transmitter (WA-320/WA-321) to the "disable audio-sensing" position during setup procedure (see the Rear Panel Features and Connections section). This will ensure that the transmitter will not mute during pauses or very quiet passages.

Cause: Either there is no audio going into the transmitter, or the audio is very quiet which is causing the transmitter to mute.

Solution: Use a known good audio source. If you can't find any other problems, try using a different source component even if you think your audio source is OK.

Specifications: (typical at 25 degrees C)

Amplifier:

Power input:	24VDC
Output power:	50 Watts/ch RMS into 6 ohms @ <10% THD
Frequency Response:	20-20kHz (+/-3dB)
Signal to Noise Ratio:	>85dB
Input Sensitivity:	500mVRMS
Auto On Threshold:	10mVRMS

Wireless Receiver:

Input Voltage:	5 VDC
THD+N:	0.7% Max
S/N Ratio:	80 dB
Audio Latency:	3.8 ms
Operating Frequency:	2400 MHz
Data Rate:	1.152 Mbps
Audio Sampling Rate:	48 kHz
Channels:	8 (User Selectable)
RX Sensitivity:	-85 dBm
Image Rejection:	47 dBc
Audio Output Level:	2.6 Vpp
Audio Output Impedance:	16 Ohm
Frequency Response:	20-20kHz +/- 3dB
Adjacent Channel Rejection:	>45 dB
Storage Temperature:	-40 to +85° C
Operating temperature:	0 to +55° C

Specifications subject to change without notice

Note: 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.
- Modifications not expressly approved by the manufacturer could void the user's authority to operated the equipment under FCC rules.

Channel Vision WA-350



Tested To Comply
With FCC Standards

FOR HOME OR OFFICE USE

Channel Vision WA-351



Tested To Comply
With FCC Standards

FOR HOME OR OFFICE USE



1 Year Limited Warranty

Channel Vision Technology will repair or replace any defect in material or workmanship which occurs during normal use of this product with new or rebuilt parts, free of charge in the USA, for one year from the date of original purchase. This is a no hassle warranty with no mail in warranty card needed. This warranty does not cover damages in shipment, failures caused by other products not supplied by Channel Vision Technology, or failures due to accident, misuse, abuse, or alteration of the equipment. This warranty is extended only to the original purchaser, and a purchase receipt, invoice, or other proof of original purchase date will be required before warranty repairs are provided.

Mail in service can be obtained during the warranty period by calling (800) 840-0288 toll free. A Return Authorization number must be obtained in advance and can be marked on the outside of the shipping carton.

This warranty gives you specific legal rights and you may have other rights (which vary from state to state). If a problem with this product develops during or after the warranty period, please contact Channel Vision Technology, your dealer or any factory-authorized service center.

Channel Vision products are not intended for use in medical, lifesaving, life sustaining or critical environment applications. Channel Vision customers using or selling Channel Vision products for use in such applications do so at their own risk and agree to fully indemnify Channel Vision for any damages resulting from such improper use or sale.



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