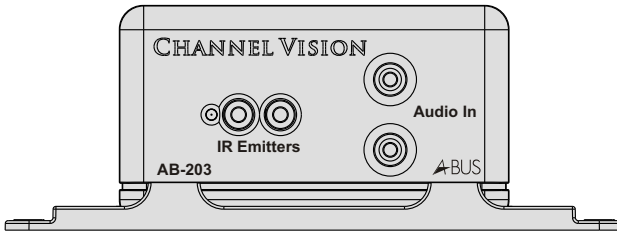
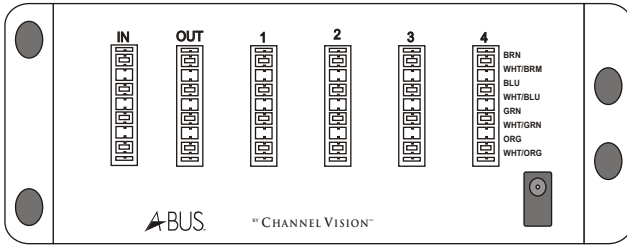
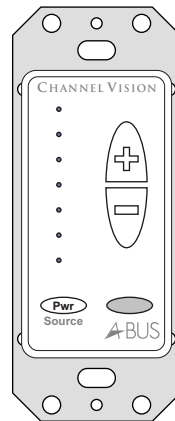
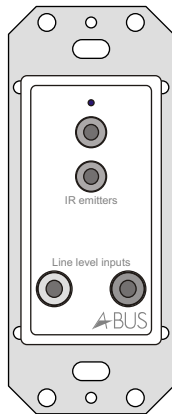


INSTRUCTIONS



AB-404
AB-203
AB-301
AB-124



A-BUS® Audio System

BY  CHANNEL VISION™

©2007 CHANNEL VISION TECHNOLOGY

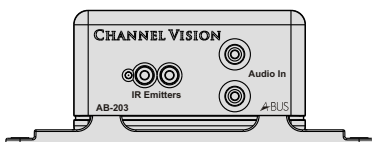
The Channel Vision A-BUS® Audio system can distribute high-quality audio to every room in your house over ordinary CAT5 data wire. Power for the entire system is delivered via the same CAT5 cable so only a single run of CAT5 is required. Each pair of speakers is powered and controlled from a local wall plate with a dedicated amplifier for that zone. Volume in that zone can be controlled manually or by an infrared remote. IR signals are also routed back to the source components enabling control of sources and functions from any zone.

Features:

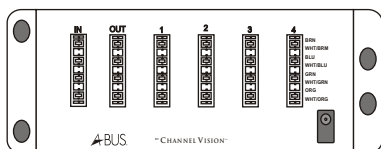
- Independent volume control in each room
- Built-in IR repeating
- Local audio input capability
- Easy installation and setup

Required components

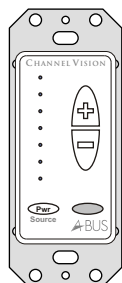
All items sold separately except where noted



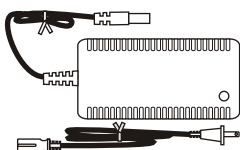
AB-203 or AB-202 ... Single Source Module. 1 per system; Connects sources to the system; Mount the unit near audio components (CD player, receiver, etc.).



AB-404 ... Distribution Module. 1 unit for every 4 amplified keypads; All CAT5 cables terminate here; Inserts power into system; Mount it in a structured wire enclosure or screw it to a wall; Compatible with enclosures from Channel Vision Central™, OpenHouse®, OnQ/Legrand® or Leviton®.

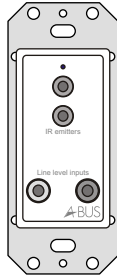


AB-124 ... Multi-source Amplified Keypad. 1 per speaker pair. Drives the speakers, controls volume and relays IR information. Mount the AB-124 in single gang low-voltage ring or deep J-box (if required by code). Blue LEDs show volume level. Pwr button allows the keypad to be turned off and it can be used to select sources when in multi-source mode.



AB-T2454 ... Power supply. 1 is needed per every AB-404. 120-240VAC

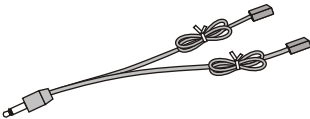
Optional Components



AB-301 ... Universal input module. Can be used to provide local source input in any room and/or to replace the AB-203. The AB-301 is a great way to enable simple connection of local sources into the zone - TV's, MP3 players, computer sources, etc.



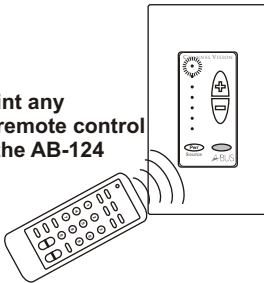
A0501 or A0502 ... Remote control. Designed to control the AB-124 as well as Channel Vision's popular iBus® wall docks.



IR-3001 & IR-3002 ... Single and dual head IR flashers. Use one head per source to control from the remote room. (IR-3002 shown).

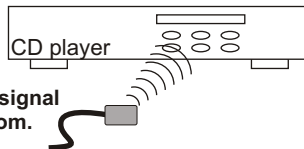
How IR Repeating Works

Point any IR remote control at the AB-124



The top LED flashes as IR information is received.

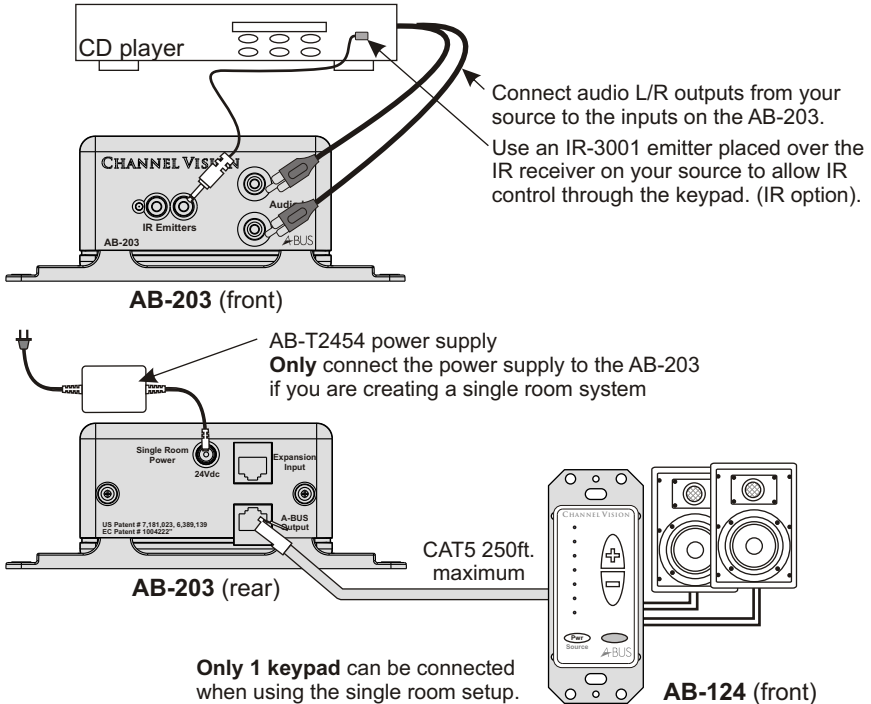
The emitter repeats the IR signal in the other room.



Be sure the flasher is attached directly over the component's IR receiver.

Single Room Diagram

In some cases it may be desirable to create a single room system that allows a source component to play through in-wall speakers. The AB-203 and AB-T2454 can be used together to supply audio and power to a single AB-124 keypad.



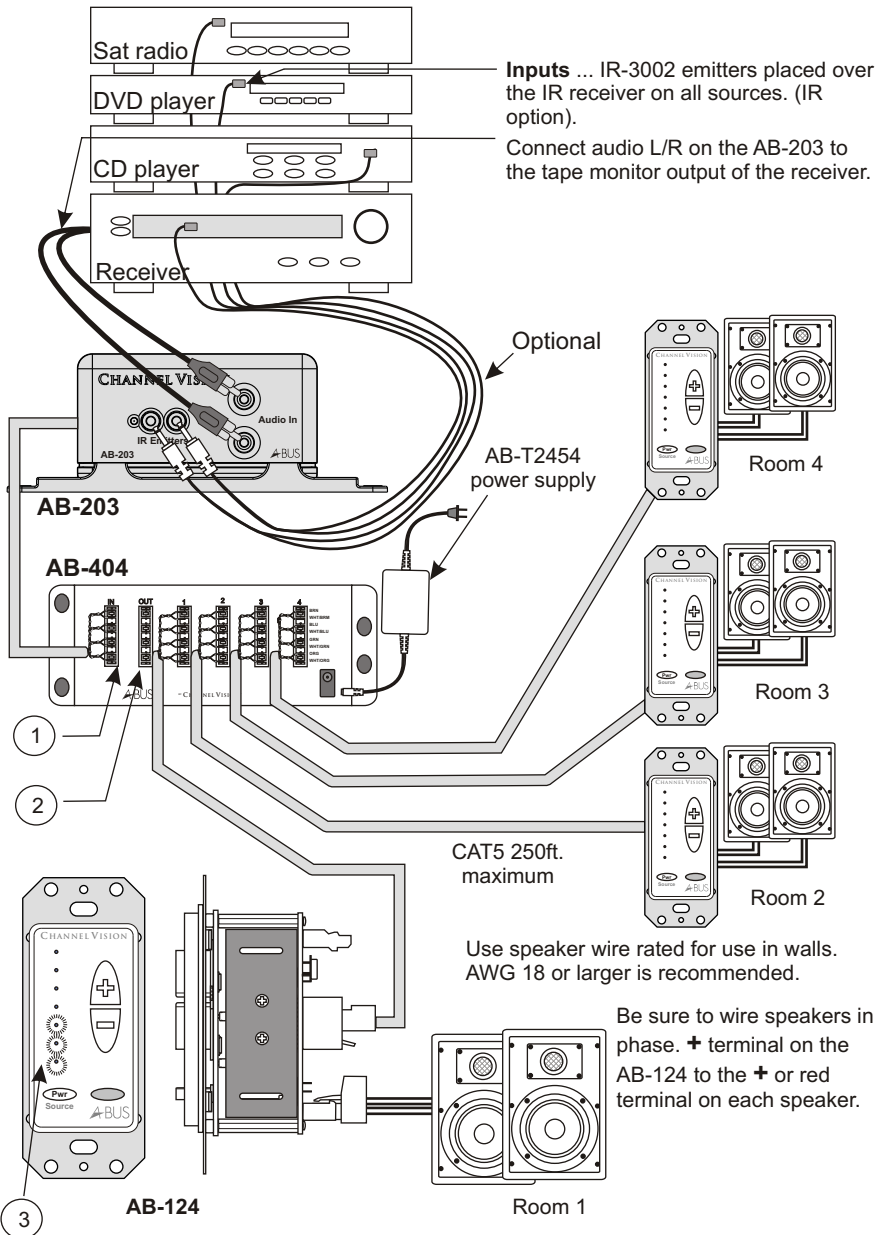
Basic System (see next page)

In this system four rooms listen to the same audio program. Each room has independent volume controls. This is a single source system. All speakers play the same audio. Using the IR option, you can control the components from any room. You can change the system input from FM to the CD player, select another satellite radio station, or pause the CD.

(See corresponding numbers on opposite page)

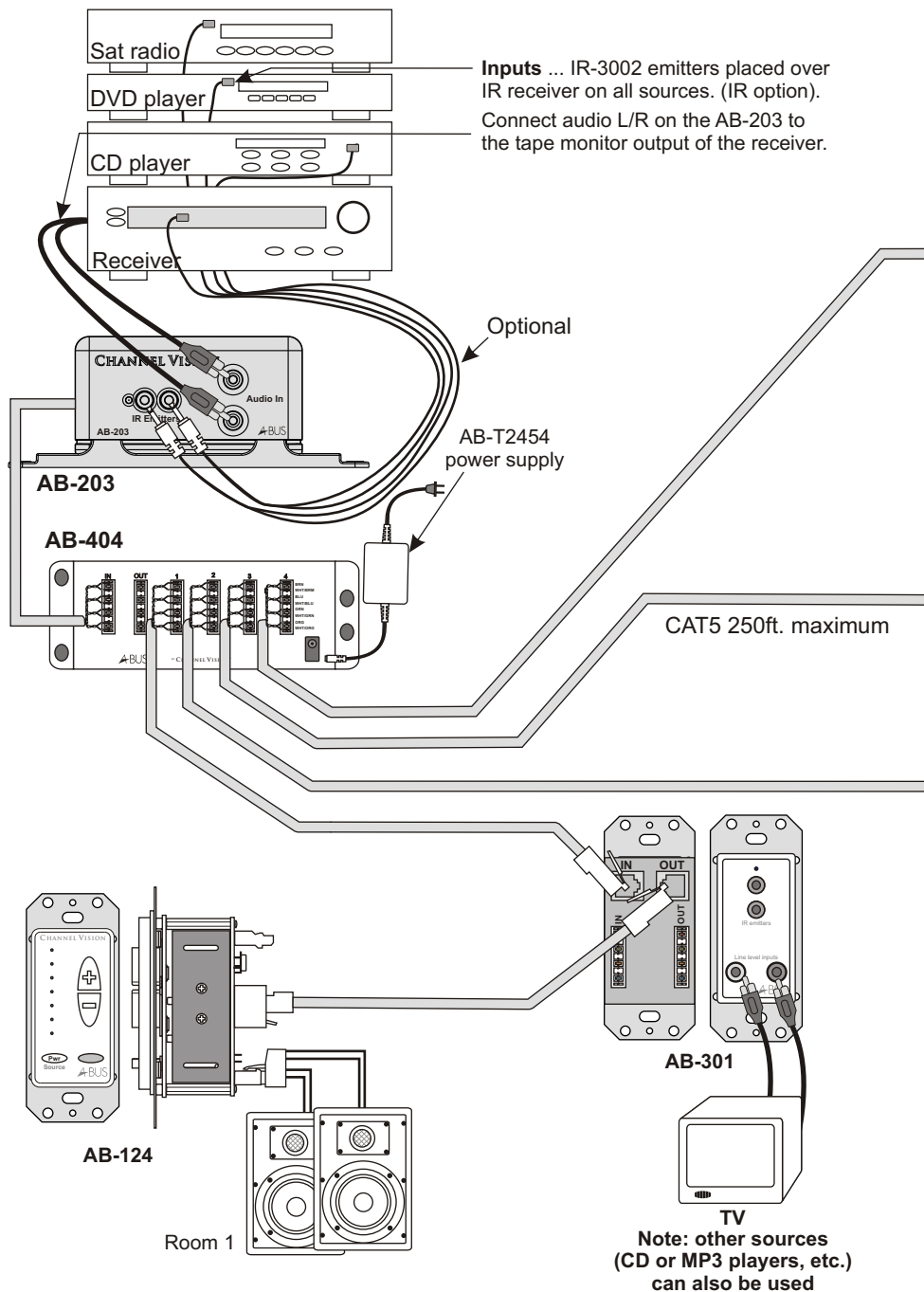
- ① **CAT5 cables** ... Follow color codes as shown on the connectors and maintain the stripe/solid sequence shown here. Use 110 punch down tool only. (Never use a screwdriver to punch down UTP wires. It will cause intermittent connections and damage or destroy the 110 connector.)
- ② **Loop out** ... Use this to expand to an additional AB-404. This connector only provides audio signals to an additional AB-404. It cannot be used to directly connect a 5th AB-124 to the system.
- ③ **Volume indicators**... The LEDs indicate the volume level. If the Status is <off>, the LEDs will be dark. Pressing the UP/DOWN keys will light the LEDs for a short period to show the stored volume level.

Basic System Diagram



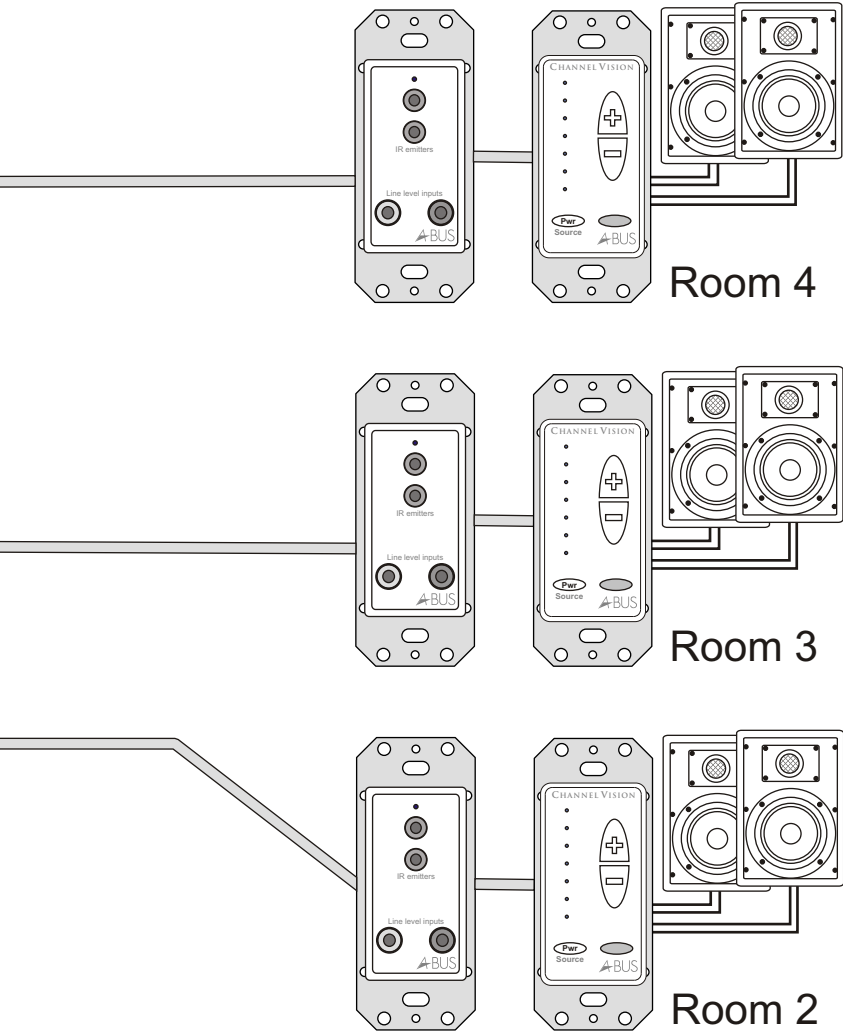
Advanced System

Using the AB-301 as a local source input module



Each room can listen to a different local source.

The RCA inputs on the AB-301 will override the main input source, allowing each room to listen to a different local source.



Using the AB-301 as a local source input:

In this configuration, the AB-301 will sense audio coming from the TV and interrupt the audio coming from the AB-404 whenever the TV audio is present. This will allow the TV audio to be heard through the in-wall speakers controlled by the AB-124.

Advanced System

Using the AB-301, AB-311, and AB-313* input module

In this system

The first AB-301 ① is used to input the main audio source. The AB-313 and AB-311 ② are iPod® docking stations that allow music from the iPod to override the main source. The AB-301 or AB-311 can be used as the main system input modules and/or in each individual room ③ to input audio that will only be heard in that room's speakers.

Using the IR option, you can control the components from any room. You can change the system input from FM to the CD player, select another satellite radio station, or pause the CD.

The AB-301, AB-311, and AB-313 are activated by audio. The system mutes and conserves power whenever there is no audio feeding AB-301 ① or AB-311/AB-313 ②. When audio is present, all amplified keypads return to the last volume level.

The Paging Option

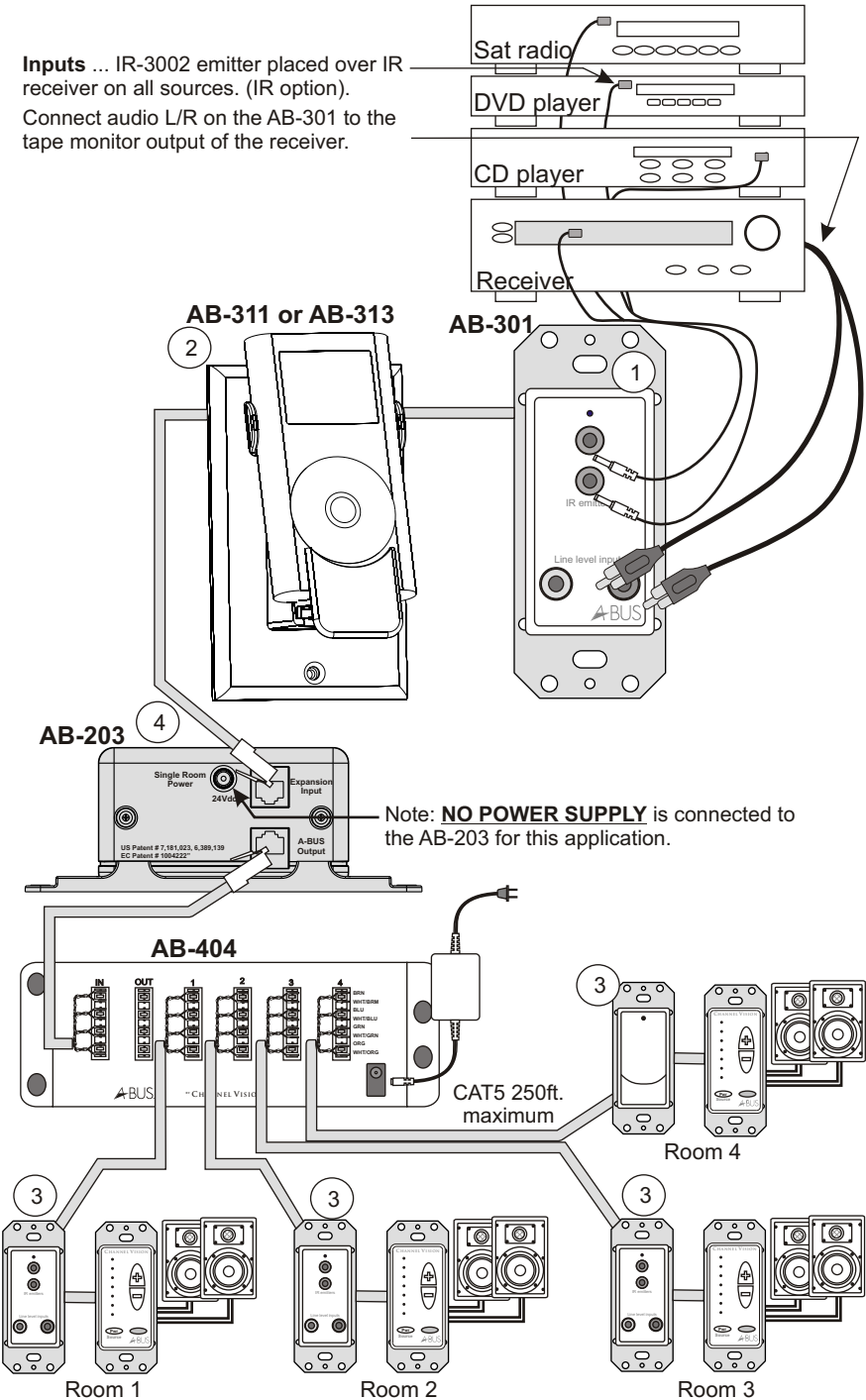
An additional AB-301 or AB-203 can be installed in the CAT5 between the main audio input module(s) and the AB-404 ④. If another audio source, such as the output from a paging system, is sensed it will interrupt the audio from the main input module(s), allowing a page announcement to be distributed to all of the rooms. This is perfect for phone systems that provide a line level output for paging.

Independent Room Inputs

The AB-301 in each individual room will interrupt all audio sources coming from the main system inputs. This includes the audio from a paging system. Therefore, if any of the rooms are using their individual AB-301 ③ they will not hear any announcements until they turn off the audio from their local source.

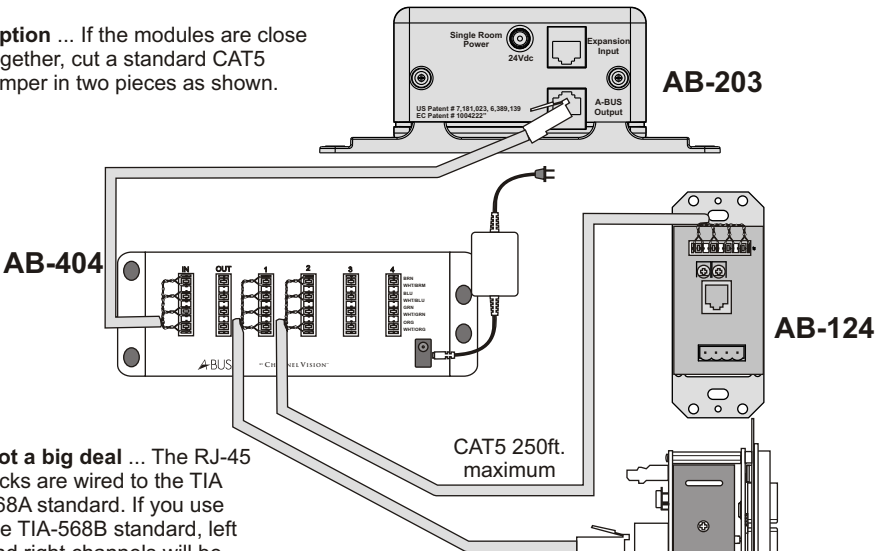
***Note:** The AB-313 is an iPod docking station similar to the AB-311, but with the added feature of IR control compatibility. When using the iBus buttons on the A0501 or A0502 remote control it is possible to operate all of the commands available on the iPod wheel such as play/pause and fwd/rev.

Inputs ... IR-3002 emitter placed over IR receiver on all sources. (IR option).
 Connect audio L/R on the AB-301 to the tape monitor output of the receiver.



CAT5 Wiring Details and Options

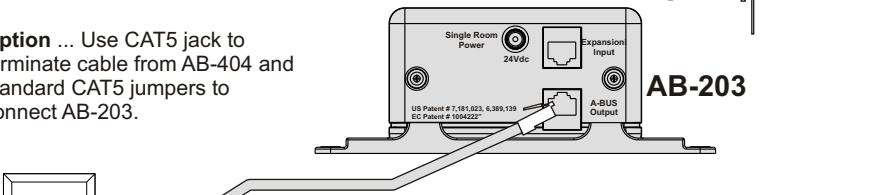
Option ... If the modules are close together, cut a standard CAT5 jumper in two pieces as shown.



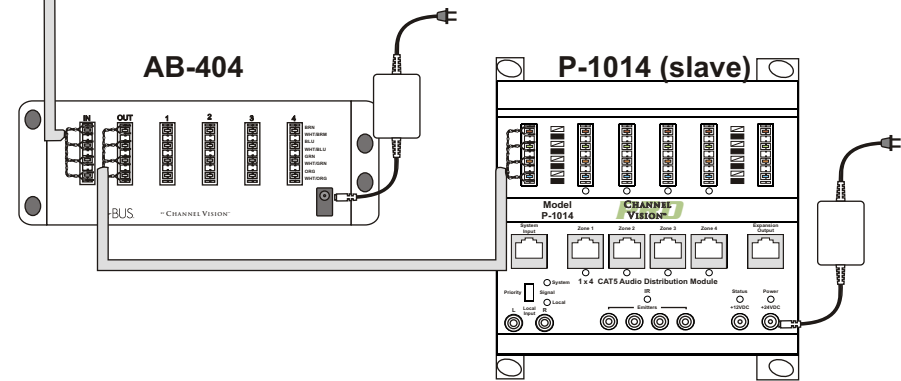
Not a big deal ... The RJ-45 jacks are wired to the TIA 568A standard. If you use the TIA-568B standard, left and right channels will be reversed.

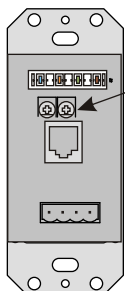
Option ... The AB-124 may be wired using either the 110 or the RJ-45 connectors.

Option ... Use CAT5 jack to terminate cable from AB-404 and standard CAT5 jumpers to connect AB-203.



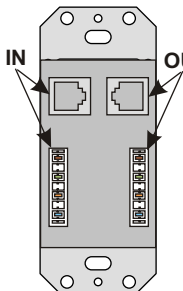
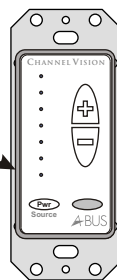
Option ... To add more zones, connect slave hubs as shown. Each slave hub requires its own power supply (AB-T2454) and will support another 4 keypads. Older AB-404 hubs do not regenerate status and should not be used as slave hubs. Models P-1014 and AB-414ES are newer modules which can regenerate status and will work well as slave hubs.





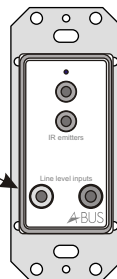
Balance ... The two potentiometers on the AB-124 adjust the volume levels of each speaker channel. Use these to adjust the speaker balance in this zone.

Gasket ... The AB-124 is shipped with a gasket. This allows you to adjust the height and fit of a decorator trim plate. Leave the gasket as is for a flush fit. Remove the gasket to have the AB-124 stand above the plate.



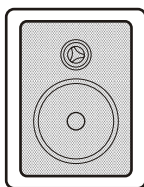
Input/Output ... To simplify installation, the AB-301 has both 110 and RJ-45 inputs and 4 RJ-45 outputs. Only one of the inputs and one of the outputs should be used at a time.

Gasket ... The AB-301 is shipped with a gasket. This allows you to adjust the height and fit of a decorator trim plate. Leave the gasket as is for a flush fit. Remove the gasket to have the AB-301 stand above the plate.

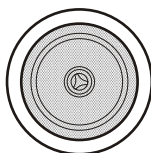


Suitable Speakers

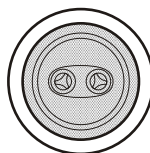
Channel Vision offers a variety of multi-room speakers.



IW601
In-wall *Soprano* series
6.5" speaker



IC612
In-ceiling *Soprano* series
6.5" speaker



ID652
In-ceiling dual voice coil speaker
Both stereo channels from a single speaker. Steerable tweeters maintain the stereo image. Use in small rooms, bathrooms or hallways.

Trouble?

- 1) Be sure you have connected the CAT5 cable correctly. Note that the stripe/solid pattern should match the labels on the product. Miss-wiring can cause distorted sound or prevent the system from working at all!
- 2) Be sure you have connected the speakers in phase. Follow the label on the product. Out of phase speakers can rob the system of its bass. Especially when driving dual-voice-coil speakers.
- 3) Be sure IR emitters are directly over the IR receiver for all devices you wish to control.

System Specifications: (typical @25° C)

Operating Voltage :	24±.5VDC
Cable requirements:	CAT-5 or better
Max CAT5 length:	250ft
Speaker impedance:	6-8 ohm
IR repeating:	30-60kHz
IR sensor range (AB-124):	40'@40kHz 25'@56kHz
Operating Temperature:	-10°C to +50°C

Specifications subject to change without notice.



2 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 two years 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.

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A-BUS is a registered trademark of LeisureTech Electronics Pty Ltd. This product may be covered by one of the following patents:
US patent no. 7,181,023, 6,389,139 EP 1004222, AU 739808, NZ 502982, Mexico Z41196, Canada CA2301062.

iBus is a registered trademark of Channel Vision Technology.



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