A0350
Flush Mount Amplifier
The **A0350** Flush Mount Amplifier can be used with Channel Vision’s CAT5 audio hubs to provide a powerful 50 Watts per channel in the listening zone. Alternatively, the A0350 can be added to the SP525, SP650, and SP800 Free Standing Speakers to create a high-quality amplified speaker system.

**Features:**
- 100 Watt 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

**Power In...** Connect power supply here

**IR Input...** Connect IR receiver here (optional)

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

**Speaker Outputs...** Connect speakers here

**Accessories**
- Speaker Terminal Connectors
- Screws
- Power Supply
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**100 Watt integrated class D amplifier**

**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.

- **Front RCA Input Sensitivity...** Control the sensitivity of the front RCA input. Adjust trim pot clockwise for least sensitivity. Adjust trim pot counter-clockwise for most sensitivity.

- **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)

- **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 2&3 to allow primary input from the CAT5 audio jack. Pin 1&2 are not implemented on the A0350.

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 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. CAUTION

   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.
A0350 Installation
The A0350 can be installed in the wall using a standard 2-gang junction box or low-voltage mounting ring. The Flush Mount Amplifier 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 2-gang ring or extra deep j-box (not included)
- Note: if using a j-box, it must have a minimum depth of 3.5”
- Take care not to pinch wires when installing into 2-gang box.

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.

Connect a second speaker wire to one front speaker terminal and connect the other end to the terminals on the second speaker.
Using the A0350 Behind a TV
The A0350 can be flush-mounted behind a wall-mounted TV to power in-wall speakers. By connecting the audio outputs from the TV to the RCA inputs of the A0350, the TV’s audio signal will be amplified to the in-wall speakers. If the TV has variable audio outputs, the sound level will simply be controlled by the TV’s volume buttons. If the TV only offers a fixed audio output, A0350 volume level can be adjusted by connecting an IR-2400 and using a compatible remote such as model A0505. The RCA audio outputs on the back of the A0350 can be connected to a powered subwoofer to add more bass to your audio system.
Using the A0350 in a Stand-alone System
The A0350 can be flush-mounted in a room to power in-wall speakers. By connecting the audio outputs from an audio source to the RCA inputs of the A0350, the audio signal will be amplified to the in-wall speakers. Most audio sources only offer a fixed audio output, A0350 volume level can be adjusted by using an A0129 keypad or by connecting an IR-2400 and using a compatible remote such as model A0505. The RCA audio outputs on the back of the A0350 can be connected to a powered sub-woofer to add more bass to your audio system.

The keypad volume control will determine the volume of the in-wall speakers as well as the powered subwoofer.
Using the A0350 with a CAT5 Audio Hub

The A0350 can accept the signal from one Channel Vision’s CAT5 Audio Hubs, such as the P-2044. Audio and IR signals are transmitted through the CAT5 cable, while power is connected directly to the front of the A0350. Alternatively, power can be connected via a pair of 16AWG wires to the power screw terminals on the back side of the A0350.

![Diagram of A0350 with CAT5 Audio Hub connection]
Using the A0350 with a CAT5 Audio Hub - Alternate Setup
The A0350 can accept the signal from one Channel Vision’s CAT5 Audio Hubs, such as the P-2044. An A0125 keypad can be wired in the CAT5 line along with other input modules to accommodate a more traditional CAT5 Audio wiring scheme. If an additional 2-conductor 16 AWG wire is run between the A0350 and main equipment location, the A0350 power supply can be remotely located and connected via the rear-panel screw terminals.

Note: Local input modules such as A0313 and A0301 can be installed between the A0125 and the P-2044.

Wiring Key
G - GreenWhite & OrangeWhite
RT - Orange (solid)
LT - Green (solid)

1. Place the CAT5 between the blade and the first notch of the J-110 tool.
2. Rotate the tool only once. Multiple turns could damage the inner wires.
3. Inspect the inner wires for damage. If any wires are cut start over at step 1.

Check for damage
Green/White - Left channel ground
Green - Left channel
Orange/White - Right channel ground
Blue - Signal
Blue/White - Status
Orange - Right channel
Brown/White - Ground
Brown - 24vDC
Stripping and Connecting CAT5 Wire

CAT5 cable should be stripped with a proper stripping tool, such as Channel Vision’s J-110 tool.

1. Place the CAT5 between the blade and the first notch of the J-110 tool.

2. Rotate the tool only once. Multiple turns could damage the inner wires.

3. Inspect the inner wires for damage. If any wires are cut start over at step 1.

TIA-568A RJ-45 Modular Plug

Side view:

Top view:

<table>
<thead>
<tr>
<th>Color Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green/White</td>
<td>Left channel ground</td>
</tr>
<tr>
<td>Green</td>
<td>Left channel</td>
</tr>
<tr>
<td>Orange/White</td>
<td>Right channel ground</td>
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<td>Ground</td>
</tr>
<tr>
<td>Brown</td>
<td>24vDC</td>
</tr>
</tbody>
</table>
Troubleshooting:

**Problem:** Hum in System

**Troubleshooting:** Plug all parts of the system into the same outlet to see if the hum goes away. Try lifting the ground with a ground lifting plug.

**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.

**Problem:** CAT5 Audio input is not working.

**Troubleshooting:** Make sure there is a strong and constant signal coming from the CAT5 Audio Hub. Make sure audio signals are NOT connected to the front RCA jacks (these signals will override the CAT5 input). Make sure jumper J17 and J18 are on pins 1&2. Check if “Active” LED indicator on the front panel is lit.

**Cause:** There is no signal (or very weak signal) coming from the source. There is a source connected to the front RCA jacks that is overriding the CAT5 input. Jumpers J17 and J18 are on the wrong pins causing the CAT5 audio input to be disabled.

**Solution:** Remove or turn off any audio source connected to the front RCA jacks. Set jumpers J17 and J18 to pins 1&2. Make sure the source audio is playing.

**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
- **Storage Temperature:** -40 to +85º C
- **Operating temperature:** 0 to +55º C

Specifications subject to change without notice
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 (714) 424-6500. 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.

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:

A Reorient or relocate the receiving antenna.
A Increase the separation between the equipment and receiver.
A Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
A Consult the dealer or an experienced radio/TV technician for help.
A Modifications not expressly approved by the manufacturer could void the user's authority to operated the equipment under FCC rules.