AB-135 A-BUS®
1-Source Amplified Key Pad for A-BUS® systems, w/o IR control
The **AB-135** is an amplified keypad for Channel Vision’s single-source CAT5 audio systems. It provides convenient volume control capabilities while its elegant decorator styling blends seamlessly with other wall switch devices.

### Features:
- Compatible with Channel Vision single source CAT5 audio systems
- Easy to use volume control
- Status - Always on
- Volume - Turns back on at the last level
- Single source keypad only

### Volume Controls...
Increase or decrease volume level.

### Pwr/Source Button...
Keypad On/Off control.

### Green LEDs...
These LED’s illuminate green to indicate volume level

### Compatibility
The AB-135 adheres to the same protocols as Channel Vision’s other CAT5 audio hubs to ensure maximum compatibility. Single-source CAT5 audio products from other manufacturers may not (and typically will not) use the same control codes for the AB-135 keypad.

### How it Works
The AB-135 can be used to control a single source with a CAT5 audio hub. The unit provides basic controls: volume up, volume down, and power on/off.

### Basic Operation
**Using the AB-135 Amplified keypad...**
The Pwr (power) button located at the lower left of the keypad is used to turn the unit on or off. Press and hold the power button to turn the keypad off.

After volume is changed, the LEDs will stay lit for 5 seconds, showing the current volume level. Volume adjustments can be made using the up/down buttons to the right hand side of the keypad.
Installation

Gasket ... The AB-135 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-135 stand above the plate.

Connectors ... To simplify installation, the AB-135 uses an RJ-45 input and speaker level output connectors.

Connect the AB-135 as shown.

*For IR control of source equipment, use the AB-134 keypad.
Typical System Setup

When using the AB-135, pressing the PWR button will turn off the individual keypad, but other keypads will continue to play.
Adding More Power

Using the A0240 with the A0302

The A0302 is the perfect complement to Channel Vision’s A0240 amplifier. It can utilize the Amp-Link connection, which provides a clean way to interrupt the speaker-level audio from a low-power system and output 40 Watts per channel to the speakers. This is the perfect way to add power to low-power distributed audio systems.

A-Speakers powered by AB-135 keypad

Place switch in L/R mode. Speaker level audio is converted to line level to drive the amp. Amplified audio is returned to the A0302 through the Amp-Link cable.

B-Speakers powered by A0240 40Watt Amplifier

Set switch to “SPKRS IN”
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:

Specifications: (typical @25° C)

**Operating Voltage:** 24VDC 2.3 Amps ~300mA max

**Cable requirements:** CAT5 or better

**Speaker impedance:** 6-8 ohm

**IR repeating:** 30-60kHz

**IR sensor range:** 40’@40kHz, 25’@56kHz

**Operating Temperature:** -10°C to +50°C

Specifications subject to change without notice.
Connection Tips and Troubleshooting

1) Verify you have connected the CAT5 cable correctly. Follow the TIA-568A standard at both ends. Mis-wiring can cause distorted sound, prevent the system from functioning, or possibly cause damage to the components in the system.

2) Verify 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) If no audio is heard, check to make sure that the audio source is playing, then press the power button on the AB-135 to make sure it is turned on.
   a. Check power supply and voltage. Each Abus hub is powered by 24vDC. The solid brown wire is +, and the striped brown wire is -. If proper voltage is not fed to each amplified keypad, the system will not function normally.

4) Observe wiring distance specifications. The maximum recommended wire length between the audio hub output and AB-135 is 150 feet. Although the AB-135 can work at greater distances, such extreme distances are not recommended because erratic performance may result due to the power loss caused by the CAT5 wire. Locally powering the keypad may be an option.

5) If you need additional help troubleshooting the AB-135 please contact Channel Vision technical support (1-714-424-6500) or check our website for more details: www.channelvision.com.

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One 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, acts of God, or alteration of the equipment. This warranty is extended only to the original purchaser when purchased through an authorized reseller. 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 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.

Tested To Comply With FCC Standards

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.

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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