Atlona HDBaseT Distribution Amplifier Family

AT-HDCAT-4, 8, & 8ED (HDCAT-8ED pictured below)

USER MANUAL

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Introduction

The HDCAT allows you to send one source to multiple displays over long distances. With built in audio de-embedding, all audio needs are met in zone and locally. The Atlona HDBaseT HDMI® Distribution Amplifier over Single Category Cable extends audio and video signals up to 230ft (328ft with HDCAT-8ED).

Package Contents

- 1 x AT-HDCAT
- 1 x Female Captive Screw Connector (5 pin for audio)
- 1 x 24V/6.25A DC power supply adaptor
- 1 x Pair of dual purpose wall/rack mounts
- 1 x User manual

Features

- Extend a source at 1080p up to 230ft over a single category cable (receive up to 328ft with the HDCAT-8ED)
- Send a single source to multiple displays or HDCATs
- Two HDMI source inputs with smart auto switching feature
- EDID learning feature to ensure the best audio and video passed to a display
- Field serviceable firmware port for quick and easy updating
- Optional redundant power supply (AT-PW24V6.25A) provides uninterupted power in the event of a main power supply failure
- Local HDMI output for in room display, AVR, or cascading to another HDCAT device
- Built in S/PDIF and Analog audio de-embedding, enables multi-channel or stereo audio to be transmitted to an AVR or amplifier
- Provides PoCc™ (Power over category cable) to compatible receivers
- Full 3D pass through
- Lossy and lossless audio formats pass through (up to Dolby TrueHD® and DTS-HD Master Audio™)
- HDCP compliant

Specifications

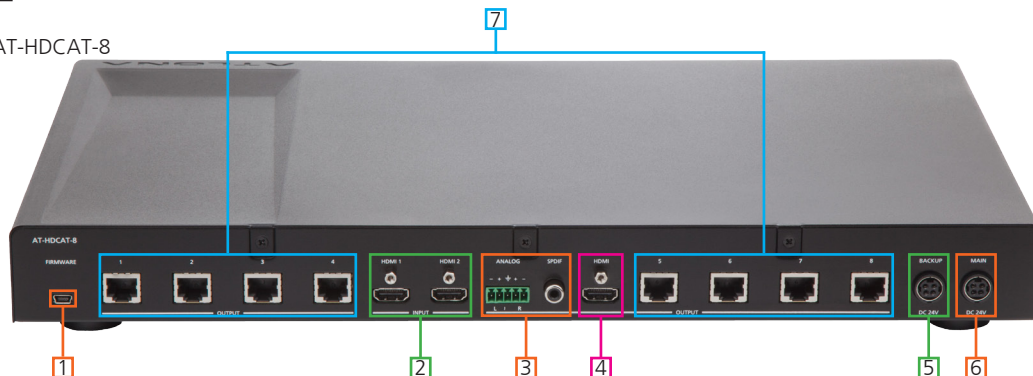| Bandwidth	6.75Gbps	Power Consumption	HDCAT-4: 47W HDCAT-8/8ED: 93W
Video	Video: up to 1080p@60Hz VESA®: up to 1920x1200	Dimensions (H x W x D)	1.74 x 17.25 x 10 (inch) 44.2 x 438 x 254 (mm)
Audio	passes through up to Dolby TrueHD or DTS-HD Master Audio	Weight	HDCAT-4: 6.30lbs or 2.86kg HDCAT-8/8ED: 6.38lbs or 2.90kg
Distance	HDCAT-4/8: 230ft (70m) over CAT6a/7 HDCAT-4/8: 197ft (60m) over CAT5e/6 HDCAT-8ED: 328ft (100m) over CAT5e/6/7	Operating Temperature	32°F to 104°F 0°C to 40°C
Rack Size	1U	Storage Temperature	-4°F to 140°F -20°C to 60°C

Panel Description

Front Panel

AT-HDCAT-8

1. Power LED - Red LED will illuminate to display connected power supplies. M is main. B is back up.
2. Sync LED - Blue LED indicates it is receiving signal from the selected source.
3. Lock LED - When the function keys are locked the blue LED will illuminate
    Lock - Press the Input button and hold for 5 seconds. All function keys will lock.
    Unlock - Press the Input button and hold for 5 seconds. All function keys will unlock.
4. Output LED - Blue LED will light up for each output connected and sending signal.
    **Number of LEDs will vary by HDCAT device
5. Input Button - Press to manually switch between sources.
6. Auto Button - Press to activate or deactive the smart switching feature.
    **This feature auto-detects incoming source signals and switches to the corresponding input
7. EDID Button - Press to switch between internal and learned EDID™ options.
8. HDMI® LED - Blue LED will illuminate to indicate the current active input.
9. Auto LED - Blue LED will light up when the auto switching feature is enabled.
10. INT/Learn LED - Blue LED will illuminate to indicate EDID operational status (INT or Learn).
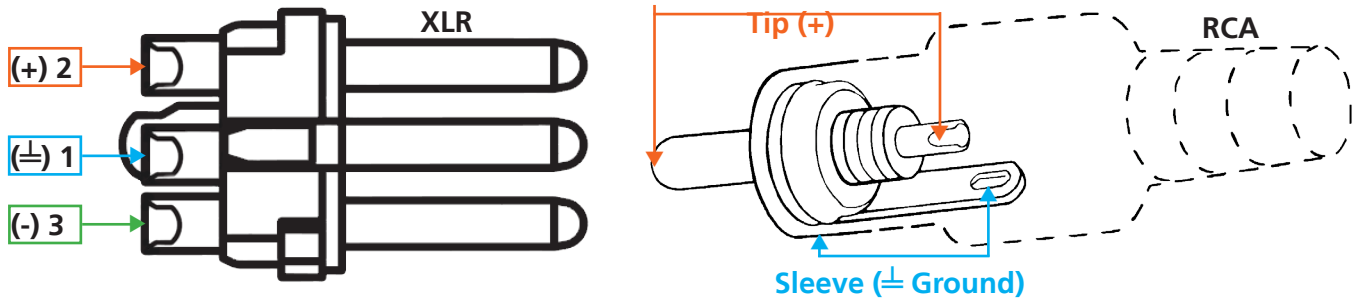
Back Panel

AT-HDCAT-8

1. Firmware port - Field serviceable USB port for updating firmware.
2. HDMI input - Connect HDMI sources here
3. De-embedded audio - Connect audio from these ports to a local audio receiver or amplifier.
4. Local HDMI output - Local output for in room display, AVR or HDCAT cascading.
5. Back up power port - Connect second optional power supply (AT-PW24V6.25A - sold separately)
6. Main power port - Connect main power supply to this port.
7. CAT5e/6/7 Output - Connect to a receiver (purchased separately @ atlona.com) to pass signals
    over extended distances.
Ex. Optional receivers AT-HDRX for 230ft with all HDCAT products. For extended distance with the
    AT-HDCAT-8ED use AT-HDRX-RSNET (328ft)
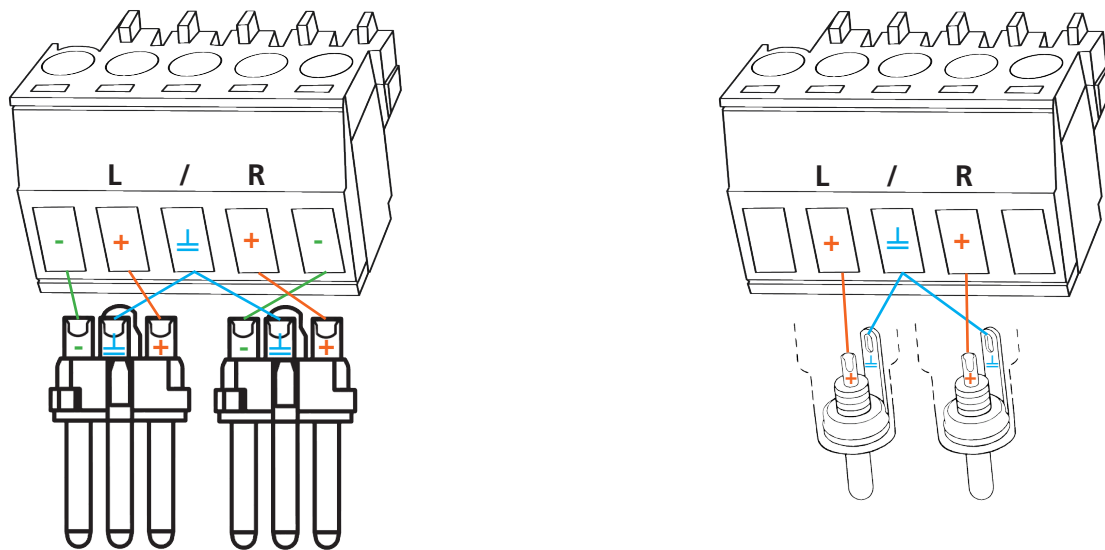
Captive Screw Analog Audio

A captive screw analog audio connector is provided to ensure a more reliable and secure connection. The captive screw connector outputs supports balanced (XLR) and unbalanced (RCA) audio output.

Balanced audio connections use two signal wires and a ground to ensure the least amount of interference to an audio signal over longer cable runs. Unbalanced audio connections use two wires for shorter audio runs.

Note: Pin outs may vary, please refer to the audio amplifier's manual to ensure a correct connection.
Important! When terminating cables, please ensure exposed adjacent wires do not touch. This may result in a short that can damage connected devices.

EDID

When the HDCAT is completely connected and turned on it will load the **Internal EDID™** automatically, which supports the highest common native video resolution and audio format of the devices.

Example: *With a mix of resolutions and audio formats the HDCAT will default to the highest common video resolution and audio format. In the diagram below the default would be 720p with 2ch audio.* **Multi-channel audio and 3D are not enabled on internal mode, unless all devices have these features.**

1080p-Dolby TrueHD (3D)
Output 1

1080p-Dolby TrueHD (3D)
Input 1

720p-2ch
Output 2

EDID learn will choose the highest common resolution and audio format between output 1 and the selected source. To learn a specific display's EDID it will need to be connected to output 1.
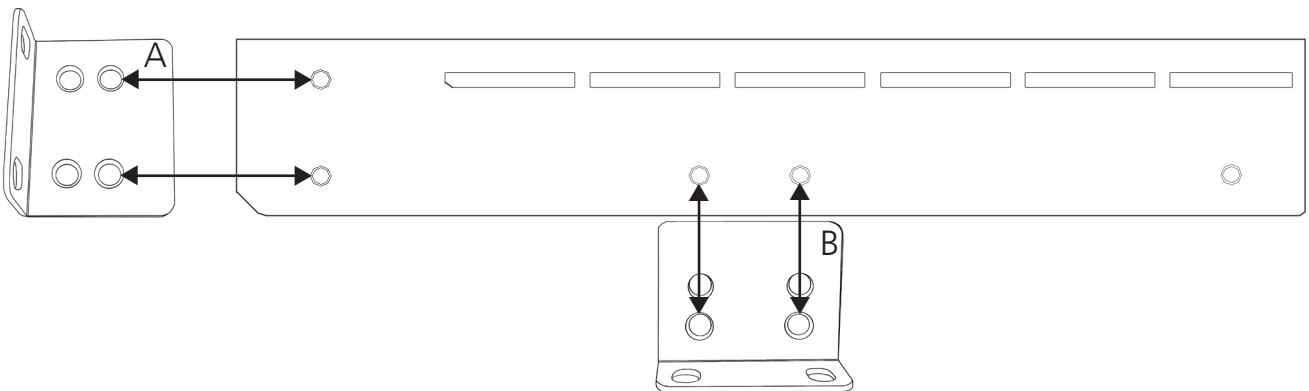
To learn EDID press and hold the EDID button until the EDID learn LED starts flashing. Learning is completed once the LED is solid.

Note: Using the above diagram, output 2 will receive no audio or video once EDID is learned.

Wall/Rack mounts

A pair of mounts have been included for quick and easy installation to a rack or wall.
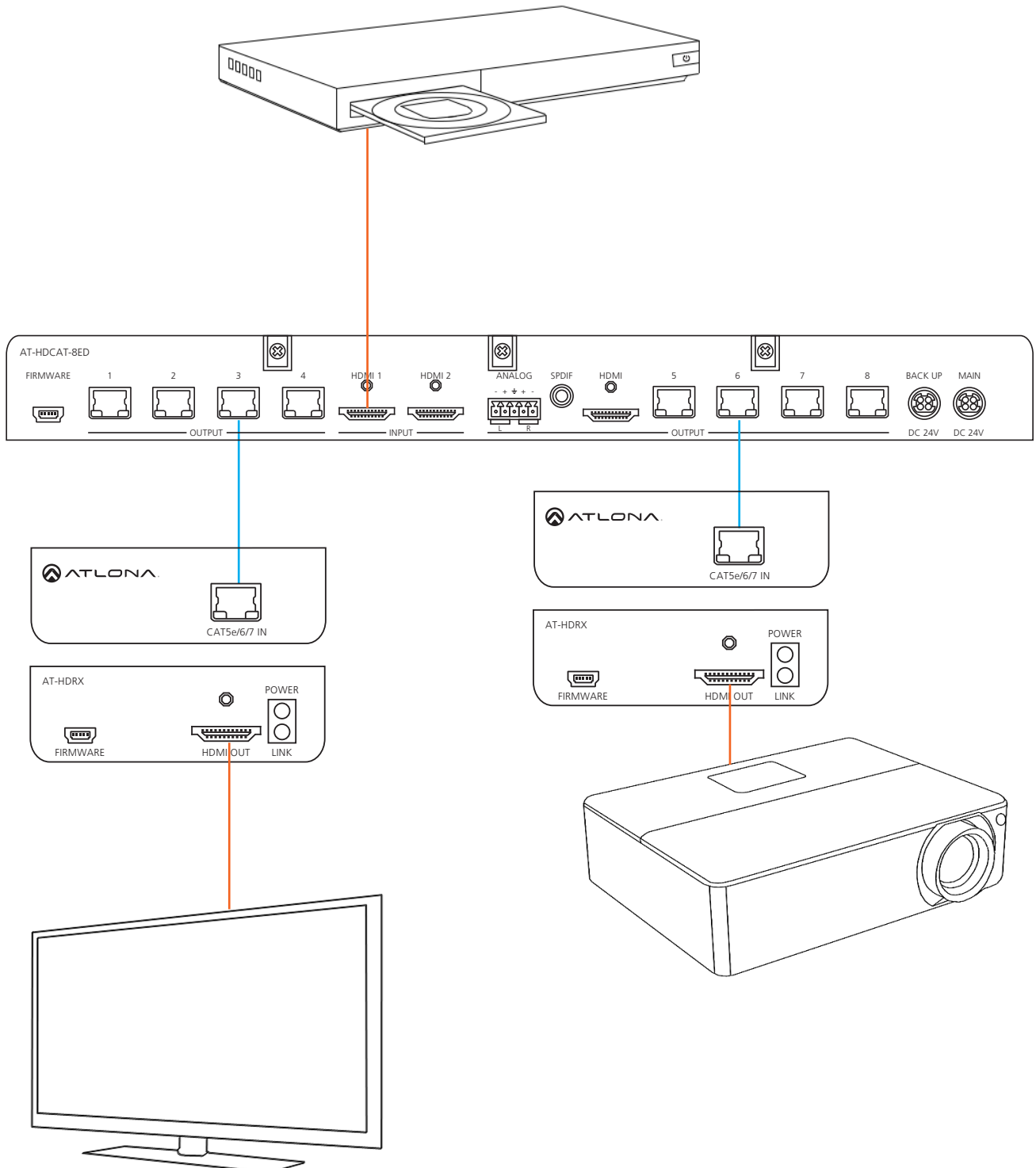
To install the HDCAT into a rack, use the front screws on the side of the case (A - pictured below)

A

B

To install the HDCAT onto a wall, use the bottom screws on the side of the case (B - pictured above)

Connection and Installation

Note: Use optional receiver AT-HDRX for a distance of 230ft with all HDCAT products. For extended distance with the AT-HDCAT-8ED use AT-HDRX-RSNET (328ft).

Safety Information

Safeguards

To reduce the risk of electric shock, do not expose this product to rain or moisture

Do not modify the wall plug. Doing so will void the warranty and safety features.

If the wall plug does not fit into your local power socket, hire an electrician to replace your obsolete socket.

This equipment should be installed near the socket outlet and the device should be easily accessible in the case it requires disconnection.

Precautions

FCC regulations state that any unauthorized changes or modifications to this equipment, not expressly approved by the manufacturer, could void the user's authority to operate this equipment.

Operate this product using only the included external power supply. Use of other power supplies could impair performance, damage the product, or cause fires.

In the event of an electrostatic discharge this device may automatically turn off. If this occurs, unplug the device and plug it back in.

Protect and route power cords so they will not be stepped on or pinched by anything placed on or against them. Be especially careful of plug-ins or cord exit points from this product.

Avoid excessive humidity, sudden temperature changes or temperature extremes.

Keep this product away from wet locations such as bathtubs, sinks, laundries, wet basements, fish tanks, and swimming pools.

Use only accessories recommended by Atlona to avoid fire, shock, or other hazards.

Unplug the product before cleaning. Use a damp cloth for cleaning and not cleaning fluid or aerosols. Such products could enter the unit and cause damage, fire, or electric shock. Some substances may also mar the finish of the product.

Never open, remove unit panels, or make any adjustments not described in this manual. Attempting to do so could expose you to dangerous electrical shock or other hazards. It may also cause damage to your AT-HDCAT-4, 8, & 8ED. Opening the product will void the warranty.

Do not attempt to service the unit. Disconnect the product and contact your authorized Atlona reseller or contact Atlona directly.

Warranty

Limited Warranty

Atlona Technologies warrants that (a) its products (AT-HDCAT-4, 8, & 8ED) will perform substantially in accordance with the accompanying written materials for a period of 3 years from the date of receipt and (b) that the product will be free from defects in materials and workmanship under normal use and service for a period of 3 years. In the event applicable law imposes any implied warranties, the implied warranty period is limited to 3 years from the date of receipt. Some jurisdictions do not allow such limitations on duration of an implied warranty, so the above limitation may not apply to customers that fall within those areas.

Customer Remedies

Atlona Technologies' and its suppliers' entire liability and Customer's exclusive remedy shall be, at Atlona Technologies' decision, either return of the price paid for the product, repair, or replacement of the product that does not meet this Limited Warranty and which is returned to Atlona Technologies with a copy of the Customer's receipt. This Limited Warranty is void if failure of the product has resulted from accident, abuse, misapplication, or natural occurrence. In example but not limited to: power surges (electrical storms, local power outage), dropping the product (or items on the product), contact with fluids, and physical misconduct (i.e. kicking or punching). Any replacement product will be warranted for the remainder of the original warranty period.

No other warranties

To the maximum extent permitted by applicable law, Atlona Technologies and its suppliers disclaim all other warranties, either expressed or implied, including, but not limited to, implied warranties of merchantability and fitness for a particular purpose, with regard to the product and any related written materials. This Limited Warranty gives customer specific legal rights. Customers may have other rights depending on the jurisdiction.

No liability for damages

To the maximum extent permitted by applicable law, in no event shall Atlona Technologies or its suppliers be liable for any damages arising out of the use of or inability to use this product, even if Atlona Technologies has been advised of the possibility of such damages. Such damages include but are not limited to: special, incidental, consequential, or indirect damages for personal injury, loss of business profits, business interruption, loss of business information, or any other pecuniary loss. Atlona Technologies' and its suppliers' entire liability under any provision of this agreement shall be limited to the amount actually paid by you for the product. Some Jurisdictions do not allow the exclusion or limitation of liability for consequential or incidental damage. The above limitations may not apply to you in such jurisdictional cases.

Atlona Product Registration

Thank you for purchasing this Atlona product. - We hope you enjoy it and will take an extra few moments to register your new purchase.

Registration creates an ownership record if your product is lost or stolen and helps ensure you'll receive notification of performance issues and firmware updates.

At Atlona we respect and protect your privacy, assuring you that your registration information is completely secure. Atlona product registration is completely voluntary and failure to register will not diminish your limited warranty rights.

To register go to: http://www.atlona.com/registration