



# Power Over Ethernet Mid-Span Power Supply

*AT-PS-POE*  
User Manual



Please check <http://www.atlona.com/products/AT-PS-POE>  
for the most recent **manual**

## Table of Contents

1. Introduction	3
2. Package Contents	3
3. Features	3
4. Panel Descriptions	
a. Front Panel	4
b. Rear Panel	4
5. Captive Screw Connection	5
6. Connection and Installation	6
7. Specifications	7
8. Safety Information	8
9. Warranty	9-10
10. Atlona Product Registration	10

## Introduction

The Atlona AT-PS-POE is a 48 VDC mid-span power injector designed to send remote power to HDBaseT™ products that operate on IEEE 802.3af Power over Ethernet. When placed within an HDBaseT transmission line, it allows two PoE-powered products to work together. The power supply features two power switches to selectively send power up- or down-stream. Both power streams can operate simultaneously. With a bandwidth of 10.2 Gbps, the power supply supports 4K/UHD resolutions, multi-channel audio formats, and offers full 3-D pass-through and passes all HDCP signals. The AT-PS-POE is housed in a compact enclosure and can be conveniently placed anywhere between the transmitter and receiver to provide power for PoE powered devices.

Power Source Equipment (PSE) devices have an internal power supply or plug into external power supply and provide power to the HDBaseT cable. Powered Devices (PD) receive their power from the HDBaseT cable. Atlona offers HDBaseT product series that route remote power in two directions: The HDVS Series powers from the receiving end while the UHD-EX Series powers from the transmitting end.

## Package Contents

- 1 x AT-PS-POE
- 1 x 48V/0.83A DC Power Supply
- 1 x Female Captive Screw Connector
- 1 x User Manual

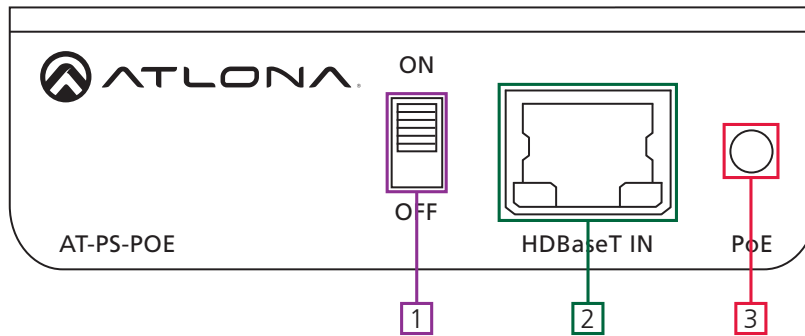
## Features

- Supports distances up to 330ft (100m) \*see specifications on page 8 for full length breakdown\*
- Supports pass through of resolutions up to 4K (UHD)
- Power switches to enable and disable PoE for easy power routing
- Captive screw power for a secure and reliable power connection
- Lossy, and lossless multi-channel audio formats pass through (including Dolby TrueHD and DTS-HD Master Audio)
- Full 3D pass through
- HDCP compliant

**\*Note:** Do not use this product to power PoCC or PoH devices. This is meant to power Atlona PoE solutions only.

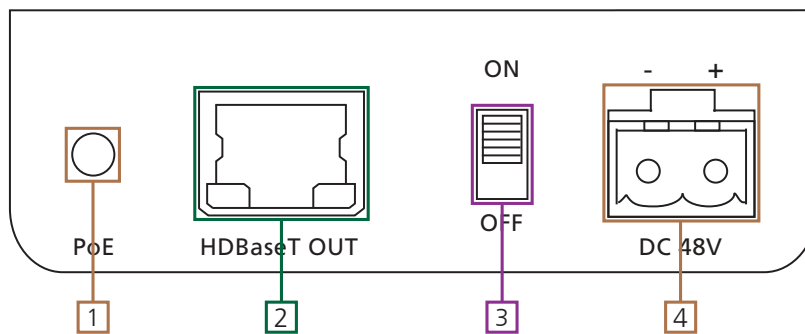
## Panel Description

### Front Panel



1. **TX power switch:** Toggles power transmission to the transmitter on and off  
**Note:** If the transmitter has power the switch should be toggled off
2. **HDBaseT IN** (blue): Connect transmitter here - power is sent down this line to the transmitter
3. **PoE LED:** Indicates whether the power switch is on (illuminated) or off (dark)

### Back Panel



1. **PoE LED:** Indicates whether the power switch is on (illuminated) or off (dark)
2. **RX power switch:** Toggles power transmission to the receiver on and off  
**Note:** If the receiver has power the switch should be toggled off
3. **HDBaseT OUT** (blue): Connect receiver here  
Power is sent down this line to the receiver
4. **DC 48V:** Connect included 48V power supply here

## Captive Screw

A captive screw connector for power is an added feature on the AT-PS-POE. The Captive screw connectors allow you to cut cables down to a suitable length, reducing cable clutter, and provides a more reliable connection.

### Connecting

When connecting the cables to the female captive screw connector it is important that the wires be terminated correctly. The female captive screw connector (see picture A) has a contact plate at the top and must have the wires touching it for signal to pass. When wired correctly (see picture B) the signal will pass, incorrectly (see picture C) no signal will pass.

The captive screw connectors have a contact bar that is moved to compress the wire to the top contact plate. Use the screws at the top of the connector to compress the wire against the contact plate.



Clockwise

Turn the screws clockwise to raise the contact bar to the upper contact plate and hold the wires in place.

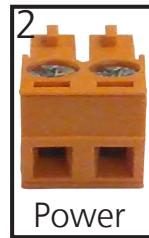


Counter Clockwise

Turn the screws counter clockwise to lower the contact bar to release the wires.



For your convenience the cables do not come pre-terminated. The power cable (picture 1), will have wires exposed. Each wire is encased in a different colored cover. A female captive screw connector for power is included (see picture 2).



To ensure the power cable isn't too long, a captive screw connector has been included. The pin out (see picture 3) and the wire configuration (see picture 4 and 5) are shown below.

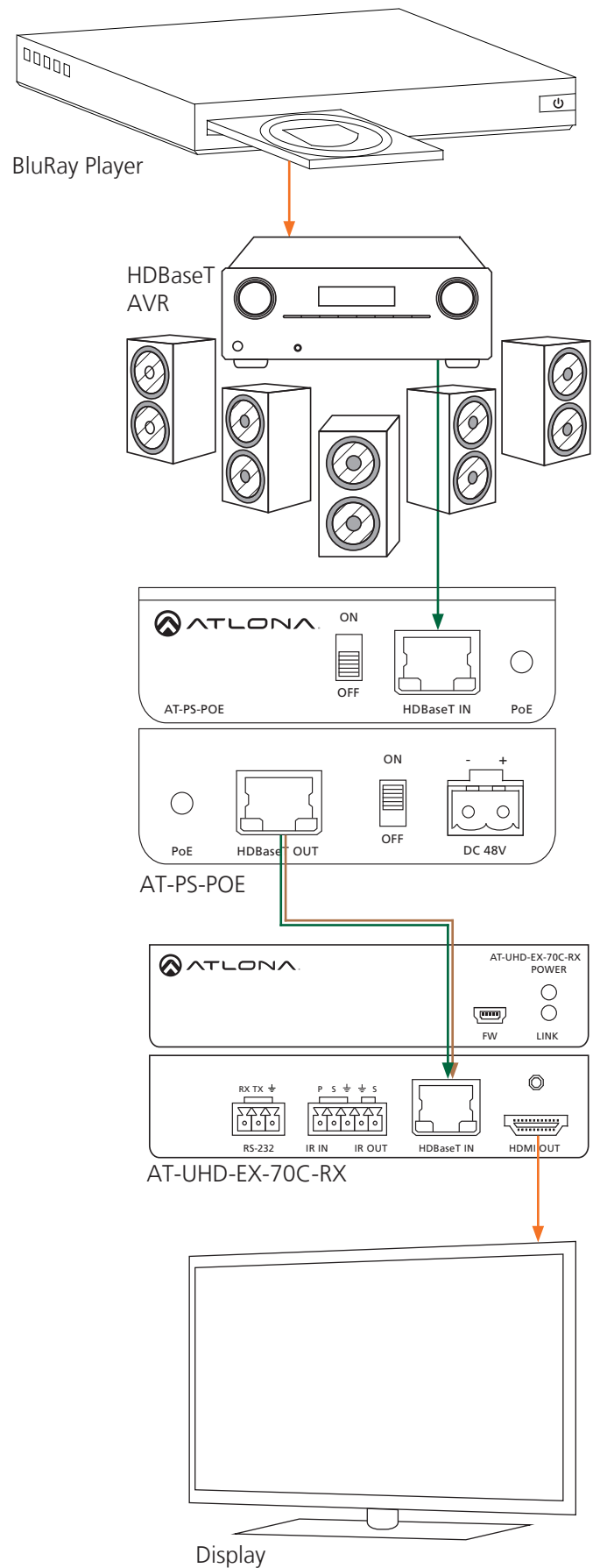
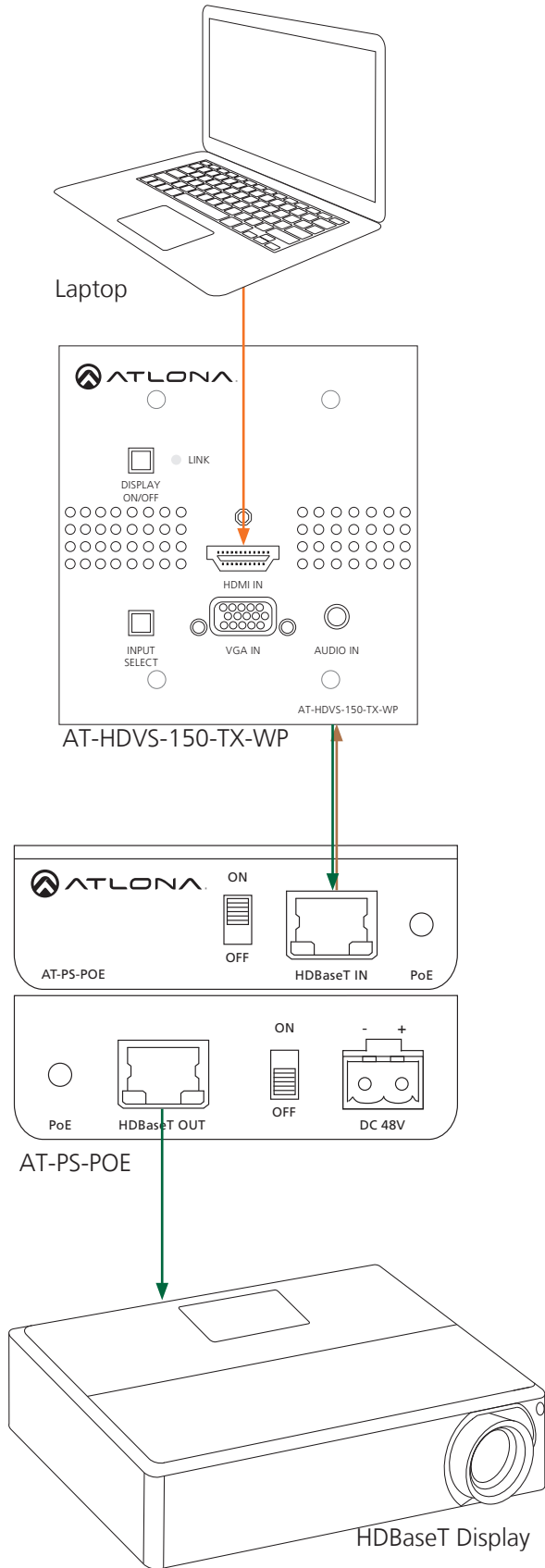


Black: - White: +



## Connection Diagram

— Video  
— HDBaseT  
— Power



## Specifications

### Video Resolutions

Video	4096x2160@24/25/30/50*/60Hz*, 3840x2160@24/25/30/50*/60Hz* (UHD), 2048x1080p, 1080p@23.98/24/25/29.97/30/50/59.94/60Hz, 1080i@50/59.94/60Hz, 720p@50/59.94/60Hz, 576p, 576i, 480p, 480i	
VESA	2560x2048, 2560x1600, 2048x1536, 1920x1200, 1680x1050, 1600x1200, 1600x900, 1440x900, 1400x1050, 1366x768, 1360x768, 1280x1024, 1280x800, 1280x768, 1152x864, 1024x768, 800x600, 640x480	
Color Space	YUV, RGB	
Chroma Subsampling	4:4:4, 4:2:2, 4:2:0*	
Color Depth	8-bit, 10-bit, 12-bit	

### Audio

HDBaseT	PCM 2Ch, LPCM 5.1, LPCM 7.1, Dolby Digital, DTS 5.1, Dolby Digital Plus, Dolby TrueHD, DTS-HD Master Audio, Dolby Atmos	
Sample Rate	32kHz, 44.1kHz, 48kHz, 88.2kHz, 96kHz, 176.4kHz, 192kHz	
Bit Rate	up to 24-bit	

### Distance

Per Product	Reduces HDBaseT cable distance by 10%	
-------------	---------------------------------------	--

### Signal

Bandwidth	10.2 Gbps	
CEC	Yes	
HDCP	2.2	

### Temperature

Operating	0°C to 50°C	32°F to 122°F
Storage	-20°C to 60°C	-4°F to 140°F
Humidity	20 to 90% non-condensing	

### Power

Consumption	15.2W	
Supply	Input: AC100-240V ~ 50/60Hz Output: DC 48V/0.83A	

### Dimension

H x W x D	24.4 x 73.37 x 70.47 mm	0.96 x 2.89 x 2.77 inch
-----------	-------------------------	-------------------------

### Weight

Device	0.19 kg	0.09 lbs
--------	---------	----------

### Certification

Unit	CE, FCC	
Power Supply	CE, FCC, Level VI, RoHS, cULus, RCM, CCC	

\*4096x2160@50/60Hz & 3840x2160@50/60Hz supported @ chroma subsampling 4:2:0 8-bit only

## 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 product. 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.



## Atlona, Inc. ("Atlona") Limited Product Warranty Policy

### Coverage

Atlona warrants its products will substantially perform to their published specifications and will be free from defects in materials and workmanship under normal use, conditions and service.

Under its Limited Product Warranty, Atlona, at its sole discretion, will either:

- A) repair or facilitate the repair of defective products within a reasonable period of time, restore products to their proper operating condition and return defective products free of any charge for necessary parts, labor and shipping
- OR
- B) replace and return, free of charge, any defective products with direct replacement or with similar products deemed by Atlona to perform substantially the same function as the original products
- OR
- C) refund the pro-rated value based on the remaining term of the warranty period, not to exceed MSRP, in cases where products are beyond repair and/or no direct or substantially similar replacement products exist.

Repair, replacement or refund of Atlona's products is the purchaser's exclusive remedy and Atlona's liability does not extend to any other damages, incidental, consequential or otherwise.

This Limited Product Warranty extends to the original end-user purchaser of Atlona's products and is non-transferrable to any subsequent purchaser(s) or owner(s) of these products.

### Coverage Periods

Atlona's Limited Product Warranty Period begins on the date of purchase by the end-purchaser. The date contained on the end-purchaser's sales or delivery receipt is the proof purchase date.

Limited Product Warranty Terms – New Products

- 10 years from proof of purchase date for hardware/electronics products purchased on or after June 1, 2013
- 3 years from proof of purchase date for hardware/electronics products purchased before June 1, 2013
- Lifetime Limited Product Warranty for all cable products

Limited Product Warranty Terms – Refurbished (B-Stock) Products

- 3 years from proof of purchase date for all Refurbished (B-Stock) hardware and electronic products purchased on or after June 1, 2013

### Remedy

Atlona recommends that end-purchasers contact their authorized Atlona dealer or reseller from whom they purchased their products. Atlona can also be contacted directly. Visit [www.atlona.com](http://www.atlona.com) for Atlona's contact information and hours of operation. Atlona requires that a dated sales or delivery receipt from an authorized dealer, reseller or end-purchaser is provided before Atlona extends its warranty services. Additionally, a return merchandise authorization (RMA) and/or case number, is required to be obtained from Atlona in advance of returns.

Atlona requires that products returned are properly packed, preferably in the original carton, for shipping. Cartons not bearing a return authorization or case number will be refused. Atlona, at its sole discretion, reserves the right to reject any products received without advanced authorization. Authorizations can be requested by calling 1-877-536-3976 (US toll free) or 1-408-962-0515 (US/international) or via Atlona's website at [www.atlona.com](http://www.atlona.com).

### Exclusions

This Limited Product Warranty excludes:

- Damage, deterioration or malfunction caused by any alteration, modification, improper use, neglect, improper packing or shipping (such claims must be presented to the carrier), lightning, power surges, or other acts of nature.
- Damage, deterioration or malfunction resulting from the installation or removal of this product from any installation, any unauthorized tampering with this product, any repairs attempted by anyone unauthorized by Atlona to make such repairs, or any other cause which does not relate directly to a defect in materials and/or workmanship of this product.
- Equipment enclosures, cables, power supplies, batteries, LCD displays, and any accessories used in conjunction with the product(s).
- Products purchased from unauthorized distributors, dealers, resellers, auction websites and similar unauthorized channels of distribution.

### Disclaimers

This Limited Product Warranty does not imply that the electronic components contained within Atlona's products will not become obsolete nor does it imply Atlona products or their electronic components will remain compatible with any other current product, technology or any future products or technologies in which Atlona's products may be used in conjunction with. Atlona, at its sole discretion, reserves the right not to extend its warranty offering in instances arising outside its normal course of business including, but not limited to, damage inflicted to its products from acts of god.

### Limitation on Liability

The maximum liability of Atlona under this limited product warranty shall not exceed the original Atlona MSRP for its products. To the maximum extent permitted by law, Atlona is not responsible for the direct, special, incidental or consequential damages resulting from any breach of warranty or condition, or under any other legal theory. Some countries, districts or states do not allow the exclusion or limitation of relief, special, incidental, consequential or indirect damages, or the limitation of liability to specified amounts, so the above limitations or exclusions may not apply to you.

### Exclusive Remedy

To the maximum extent permitted by law, this limited product warranty and the remedies set forth above are exclusive and in lieu of all other warranties, remedies and conditions, whether oral or written, express or implied. To the maximum extent permitted by law, Atlona specifically disclaims all implied warranties, including, without limitation, warranties of merchantability and fitness for a particular purpose. If Atlona cannot lawfully disclaim or exclude implied warranties under applicable law, then all implied warranties covering its products including warranties of merchantability and fitness for a particular purpose, shall provide to its products under applicable law. If any product to which this limited warranty applies is a "Consumer Product" under the Magnuson-Moss Warranty Act (15 U.S.C.A. §2301, ET SEQ.) or other applicable law, the foregoing disclaimer of implied warranties shall not apply, and all implied warranties on its products, including warranties of merchantability and fitness for the particular purpose, shall apply as provided under applicable law.

### Other Conditions

Atlona's Limited Product Warranty offering gives legal rights, and other rights may apply and vary from country to country or state to state. This limited warranty is void if (i) the label bearing the serial number of products have been removed or defaced, (ii) products are not purchased from an authorized Atlona dealer or reseller. A comprehensive list of Atlona's authorized distributors, dealers and resellers can be found at [www.atlona.com](http://www.atlona.com).

## **Atlona, Inc 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>