

# Atlona VGA/Audio & 2 HDMI to HDBaseT Extender Switcher w/Display Control

*AT-HDVS-TX*



## User Manual

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## Introduction

Atlona HDVS transmitter was designed to smooth the transition from analog to digital displays in schools and businesses, allowing advanced HDMI display devices to be used with the many VGA computers still in use. HDBaseT and power over category cable (PoC<sup>c</sup><sup>™</sup>) allow signal and power over a single category cable, with RS-232 control capability.

## Package Contents

- 1 x AT-HDVS-TX
- 1 x 24V/2.7A DC Power Supply
- 1 x Captive Screw Connector (Power)
- 1 x Pair of undertable mount ears
- 1 x User Manual

## Features

- 2 HDMI and 1 VGA/analog audio inputs
- Auto switching for easy input management
- Extends resolutions of 1080p or 1920x1200 up to 230ft\*
- 3-Way power
  - Power the transmitter with included power supply
  - Power the transmitter with compatible receivers
  - Power a receiver with PoC<sup>c</sup> when connected to included power supply
- Embeds analog audio with VGA onto HDBaseT output
- Firmware upgrade via USB for easy field service
- Undertable mounting ears

## Features when used with HDVS-RX

- PoC<sup>c</sup> (Power over Category cable), receive power from the receiver
- RS-232 display control and input selection
- De-embedded balanced 2Ch audio on output to send to an amplifier (Ex. AT-PA100-G2)

## Compatibility

This product is compatible with all of Atlona's HDBaseT receivers. These include AT-HDRX, AT-HDRX-IR, AT-HDRX-RSNET, AT-PRO3HDREC and associated wall plates. It may also be used with displays with HDBaseT inputs.

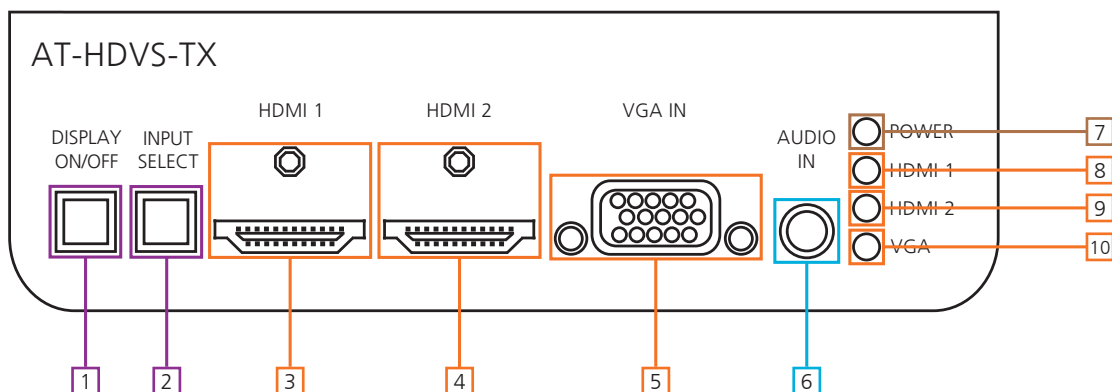
**Note:** It is possible that some displays may have issues with VGA sources that don't have the same timings as HDMI sources used with the same displays.

## Auto Switching

Built in auto-switching for easier selection. Power on and off sources to switch inputs.

Note: A 5V hot plug event is used to trigger input selection. If a 5V signal is not detected the source will not change. Many VGA sources do not include the 5V hot plug.

## Panel Description



1. DISPLAY ON/OFF button: Controls display through RS-232 when used with compatible receivers (ex. AT-HDVS-RX)

**Note: If DISPLAY ON/OFF button is held for 3 seconds the signal will reset**

2. INPUT SELECT button: Use to switch between VGA and HDMI source

3. HDMI 1: Connect first HDMI source here

4. HDMI 2: Connect second HDMI source here

5. VGA IN: Connect VGA source here

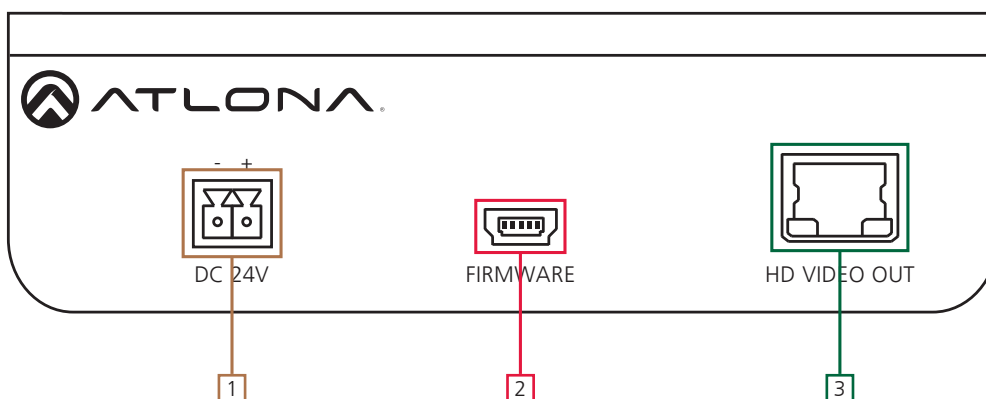
6. AUDIO IN: Connect analog audio here, only available with a VGA input

7. POWER LED: Will illuminate when receiving power

8. HDMI 1 LED: Lights up when HDMI input 1 is selected

9. HDMI 2 LED: Turns on when second HDMI input is selected

10. VGA LED: Illuminates when VGA input selected



1. DC 24V: Connect included 24V2.7A power supply, with captive screw connector, here.

2. FIRMWARE: To update firmware connect mini USB to USB A cable from this port to a Windows computer.

Note: Update instructions will be included with firmware download found on [atlon.com](http://atlon.com)

3. HD VIDEO OUT: Connect category cable from there to a compatible receiver. (ex. AT-HDVS-RX)

## Captive Screw

Captive screw connectors are an added feature on the HD Extenders. The captive screw connectors allow you to cut cables to a suitable length, reducing cable clutter while providing a more reliable connection.

### Connecting

When connecting the cables to the captive screw connector it is important that the wires be terminated correctly. The 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 adjusted to compress the wire against the top contact plate. Use the screws at the top of the connector to compress the wire against the contact plate.



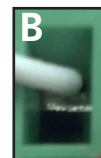
Clockwise

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



Counter  
Clockwise

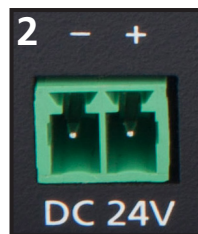
Turn the screws counter clockwise to lower the contact bar to release the wires.



The power pin out (see picture 1) and wire configuration (see picture 2 and 3) are shown below.



Black: - White: +

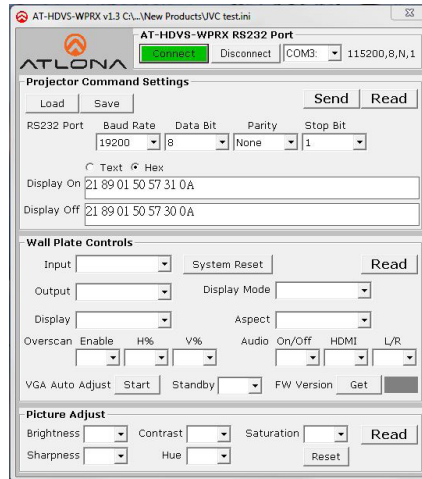


**Note:** When using the HDVS-RX do not connect a power supply to the HDVS-TX

## Control Software

Control software and instructions for use can be found on the AT-HDVS-TX webpage on atlona.com (can only be used with compatible receivers - AT-HDVS-RX)

URL: <http://www.atlona.com/HDVS-TX.html> (instructions/software found under the “Downloads” tab)



## Set Up

RS-232 control is easiest when used with the HDVS-RX receiver.

However when used with appropriate power supply and HDBaseT receiver with RS-232 capabilities, the display power button can be used to transmit the following commands:

Projector On/Off

WP\_Display[a]\$ [a] ? , On , Off Display On/Off control

To change inputs, the HDVS-TX-WP should receive these commands:

WP\_Input[a]\$ [a] ? , Hdmi , Vga Select input source (HDVS-TX-WP)

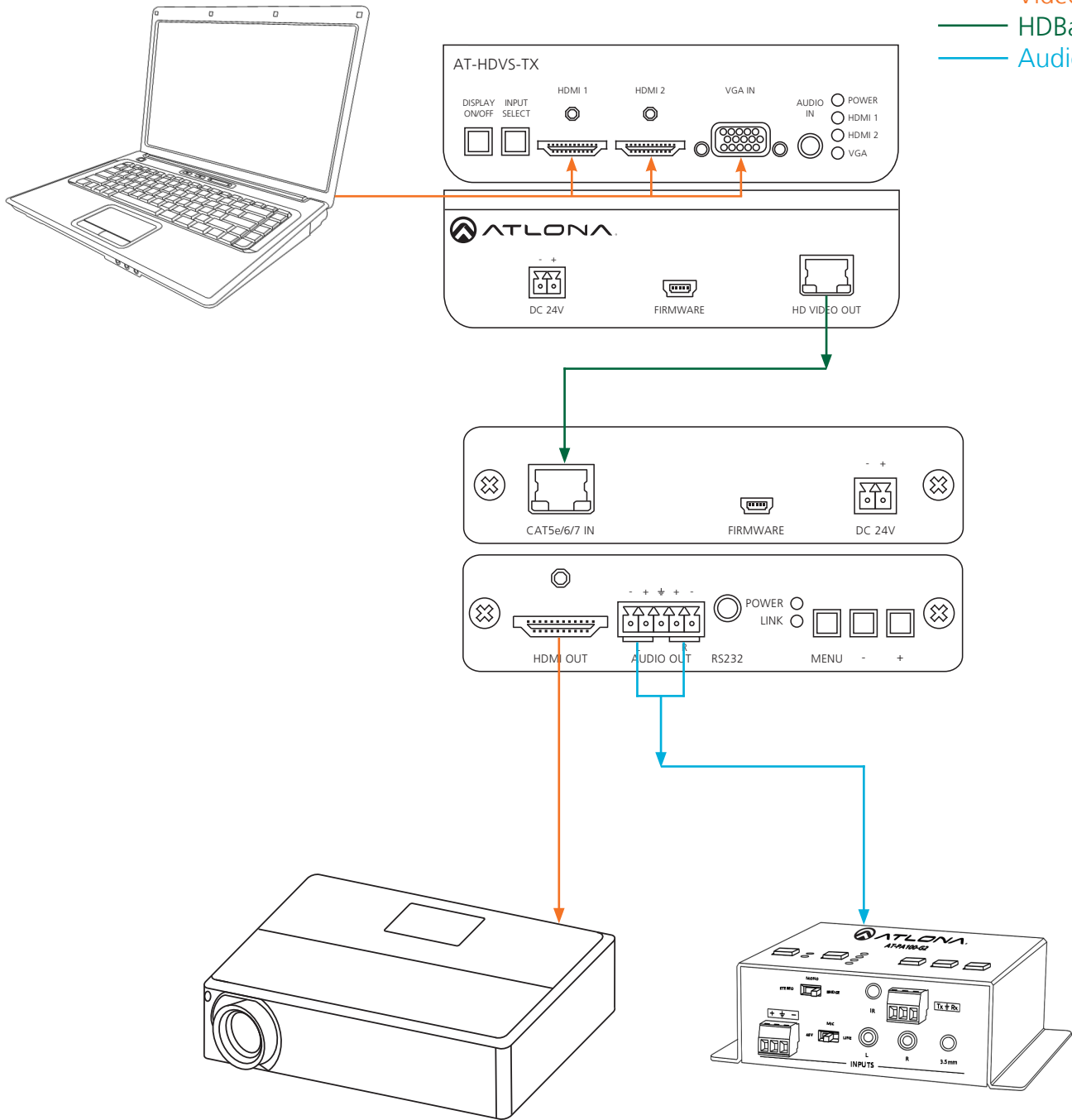
The port settings for the control device are:

115200 bps, 8 bit data length, No parity bit, 1 bit stop-bit, No flow control.

**Note:** Each command is terminated with a carriage return

## Connection and Installation

— Video  
— HDBaseT  
— Audio



## Specifications

<b>Bandwidth</b>	4.95Gbps	
<b>Ports</b> Video input Video output Audio input Firmware update Power	1 x VGA, 2 x HDMI 1 x RJ45 1 x 3.5mm analog audio (VGA only) 1 x Mini USB 1 x Captive Screw	
<b>Power Consumption</b>	6W -- 15W when paired with HDVS-RX	
<b>Audio</b>	Passes 2Ch PCM	
<b>Resolution</b>	Video: up to 1080p VESA: up to 1920x1200	
<b>Distance</b>	230ft @ 1080p over CAT6a/7 197ft @ 1080p over CAT5e/6	
<b>Dimensions</b>	1.46 x 5.08 x 3.94 (inch) 38 x 127 x102 (mm)	
<b>Weight</b>	0.44 lbs 0.2 kg	
<b>Temperature</b>	<b>Operating</b> 32°F to 104°F 0°C to 40°C	<b>Storage</b> -4°F to 140°F 20°C to 60°C
<b>Certifications</b>	CE, FCC, RoHS, cULus for power supplies	



## 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>