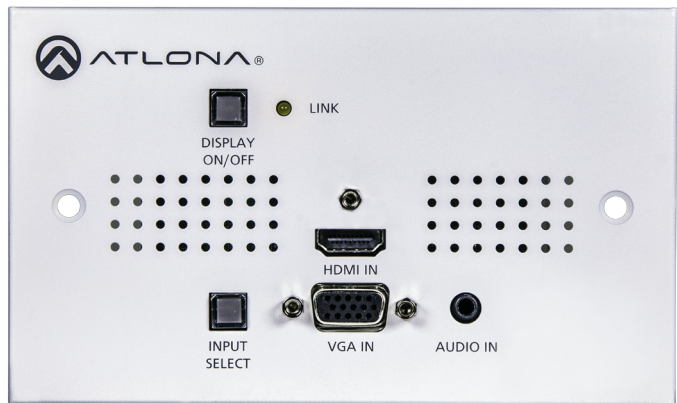


Two-Input Wall Plate Switcher for HDMI and VGA with HDBaseT™ Output



AT-HDVS-150-TX-WP
AT-HDVS-150-TX-WP-UK

Atlona Manuals
Extenders

Version Information

Version	Release Date	Notes
2	05/17	Updated to new manual format

Welcome to Atlona!

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 only takes a few minutes and protects this product against theft or loss. In addition, you will receive notifications of product updates and firmware. Atlona product registration is voluntary and failure to register will not affect the product warranty.

To register your product, go to <http://www.atlona.com/registration>

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Operating Notes

As of this writing, there are no firmware updates for this product. When new firmware is released, update instructions will be included with the firmware and will be appended to this manual.



IMPORTANT: Visit <http://www.atlona.com/product/AT-HDVS-150-TX-WP> for the latest firmware updates and User Manual.

Atlona, Inc. (“Atlona”) Limited Product Warranty

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:

- 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

- 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

- 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 products is the purchaser’s exclusive remedy and Atlona 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 products and is non-transferrable to any subsequent purchaser(s) or owner(s) of these products.

Coverage Periods

Atlona 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 and Discontinued Products

- 3 years from proof of purchase date for all Refurbished (B-Stock) and Discontinued 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 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 atlona.com.

Exclusions

This Limited Product Warranty excludes:

- Damage, deterioration or malfunction caused by any alteration, modification, improper use, neglect, improper packaging or shipping (such claims must be presented to the carrier), lightning, power surges, or other acts of nature.

Atlona, Inc. (“Atlona”) Limited Product Warranty

- 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.

Important Safety Information



CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK DO NOT OPEN ENCLOSURE OR EXPOSE TO RAIN OR MOISTURE. NO USER-SERVICEABLE PARTS INSIDE REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance instructions in the literature accompanying the product.

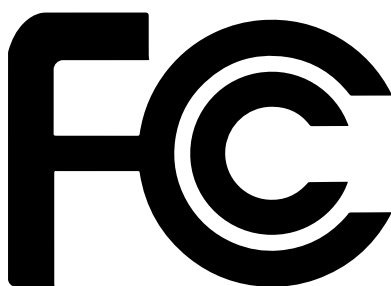


The information bubble is intended to alert the user to helpful or optional operational instructions in the literature accompanying the product.

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this product near water.
6. Clean only with a dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install or place this product near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of a polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the product.
11. Only use attachments/accessories specified by Atlona.
12. To reduce the risk of electric shock and/or damage to this product, never handle or touch this unit or power cord if your hands are wet or damp. Do not expose this product to rain or moisture.
13. Unplug this product during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified service personnel. Servicing is required when the product has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the product, the product has been exposed to rain or moisture, does not operate normally, or has been dropped.



FCC Statement



FCC Compliance and Advisory Statement: This hardware 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. This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a commercial installation.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed or 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: 1) reorient or relocate the receiving antenna; 2) increase the separation between the equipment and the receiver; 3) connect the equipment to an outlet on a circuit different from that to which the receiver is connected; 4) consult the dealer or an experienced radio/TV technician for help. Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. Where shielded interface cables have been provided with the product or specified additional components or accessories elsewhere defined to be used with the installation of the product, they must be used in order to ensure compliance with FCC regulations.

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Introduction

The Atlona AT-HDVS-150-TX-WP is a 2x1 switcher and HDBaseT transmitter with an HDMI input plus a VGA input with audio. The HDVS-150-TX-WP features a US two-gang wall plate form factor. Video signals up to 1080p, plus embedded audio can be transmitted up to 230 feet (70 meters). The HDVS-150-TX-WP is designed for use with the AT-HDVS-150-RX receiver and HD scaler, and can serve as the central component of a compact, automated AV system with the convenience of automatic input selection and display control. The switcher is remotely powered by the HDVS-150-RX through Power over Ethernet (PoE).

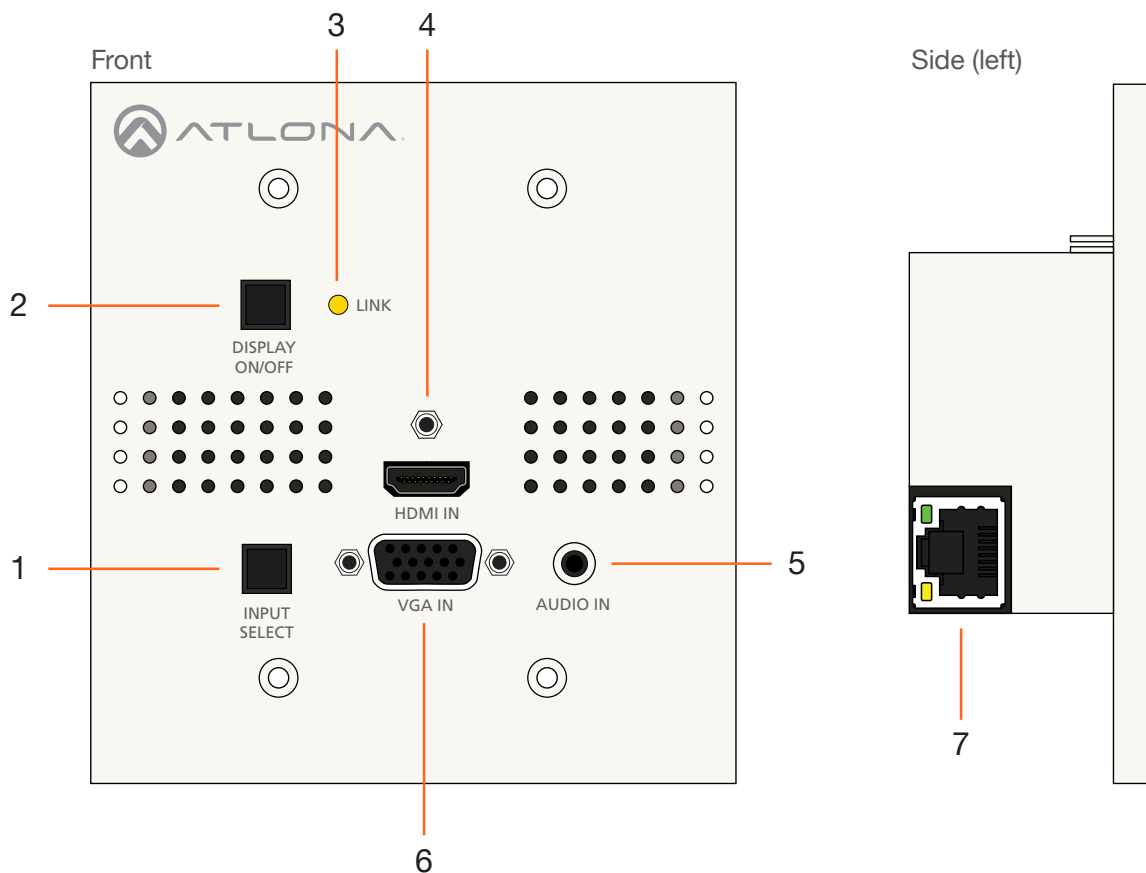
Features

- Extends AV up to 230 feet (70 meters) @ 1080p or 1920x1200.
- Transmits AV up to 230 feet (70 meters) @ 1080p or 130 feet (40 meters) @ 4K/UHD* using CAT6a/7 cable.
- HDMI input plus a VGA input with audio.
- Allows advanced HDMI display devices to be used with legacy VGA sources
- Power for transmitter is supplied by AT-HDVS-150-RX over HDBaseT.
- Shallow, 1.5 inch (40 mm) deep enclosure and recessed RJ-45 connector simplify integration.
- Selects active input when sources are connected or if there is a change in source power status.
- LED indicators provide power and input selection status information
- USB port provides an easy means for device updates.

Package Contents

1 x AT-HDVS-150-TX-WP
1 x Wall plate covers (US)
4 x US wall plate screws
2 x UK wall plate screws
1 x Installation guide

Panel Description



1 INPUT SELECT

Press this button to switch between **HDMI IN** and **VGA IN** port. By default, **HDMI IN** is selected port. This button will glow bright blue when the wall plate is powered.

2 DISPLAY ON/OFF

Press this button to power-on the display (connected to the receiver), place it in standby mode, or control a connected display using the HDBaseT output.

3 LINK

This LED indicator will glow bright amber when a powered link exists between the AT-HDVS-150-TX-WP and a compatible receiver, such as the AT-HDVS-150-RX.

4 HDMI IN

Connect an HDMI cable from this port to an HD source.

5 AUDIO IN

Connect a 3.5mm mini-stereo audio cable, from an analog audio source, to this port. See [Passing Analog Audio \(page 13\)](#) for more information.

6 VGA IN


Connect a VGA cable from this port to a VGA source.

7 HDBaseT OUT

Connect an Ethernet cable from this port to a compatible HDBaseT receiver, such as an AT-HDVS-150-RX.

Installation

Connection Instructions

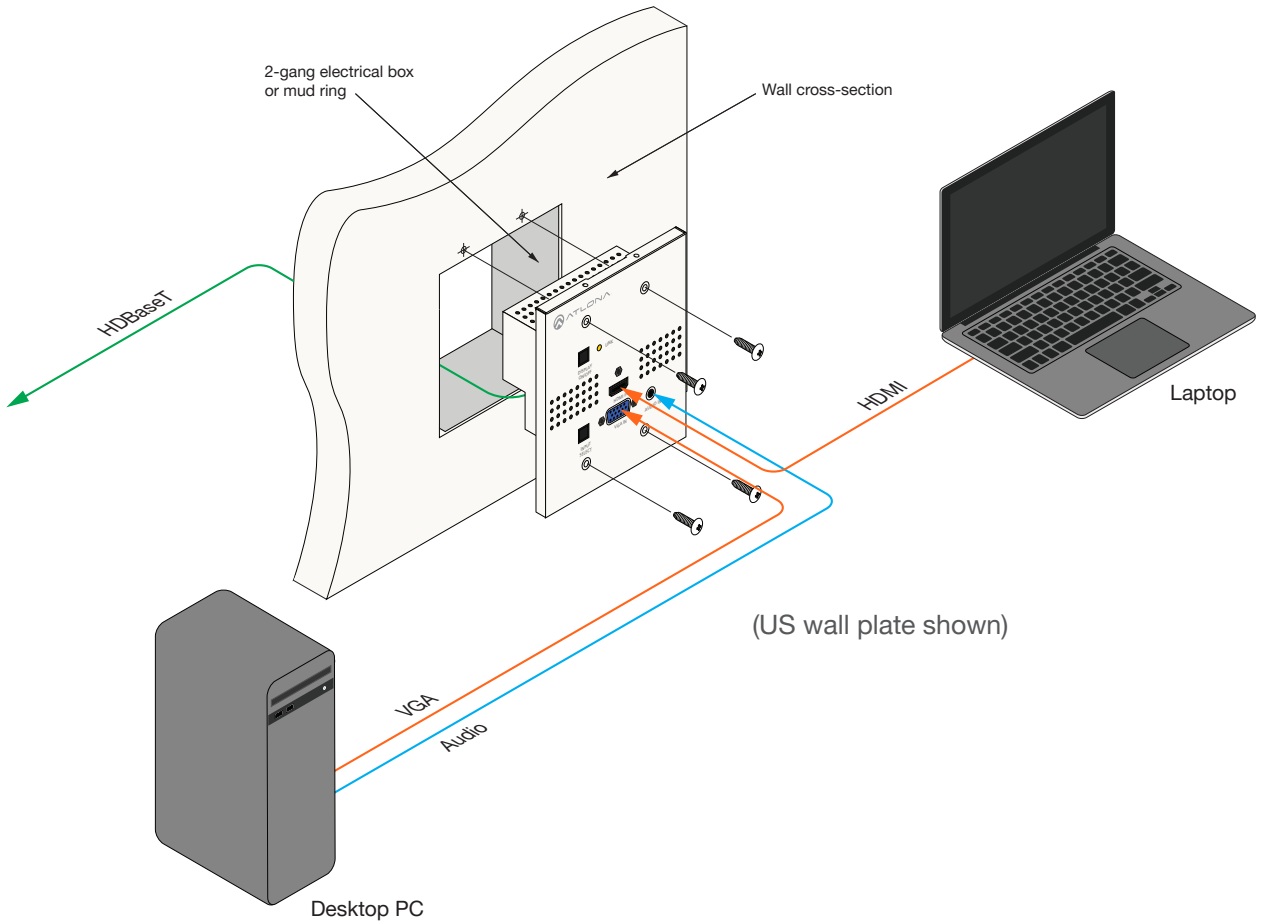
 **NOTE:** Although the wall installation of the US and UK version will differ, the following connection instructions apply to both the AT-HDVS-150-TX-WP and AT-HDVS-150-TX-WP-UK.

1. Connect an Ethernet cable, up to 230 feet (70 meters), from the **HDBaseT OUT** port, on the back of the wall plate, to an HDBaseT-compatible receiver (not included). Ethernet cables should use EIA/TIA-568B termination.
2. Assemble the AT-HDVS-150-TX-WP to the 2-gang electrical box or mud ring using the included screws. When installing into an electrical box, the depth of the box must provide at least 40 millimeters of clearance.
 - **US version**
Secure the wall plate with the four (included) shorter screws.
 - **UK version**
Secure the wall plate with the two (included) longer screws.
3. Connect an HDMI cable from the HD source to the **HDMI IN** port on the wall plate.
4. Connect a VGA cable from a VGA source to the **VGA IN** port on the wall plate.
5. Connect a 3.5 mm mini-stereo cable from the **AUDIO IN** port on the switcher to the analog audio source. This port allows two-channel analog audio to be included when the VGA IN port is selected. Refer to [Passing Analog Audio \(page 13\)](#) for more information.

No power supply is required for the AT-HDVS-150-TX-WP. This unit will be powered over the Ethernet cable, from an HDBaseT receiver.

Connection Diagram

NOTE: Although the wall installation of the US and UK version will differ, the following connection diagram applies to both the AT-HDVS-150-TX-WP and AT-HDVS-150-TX-WP-UK.



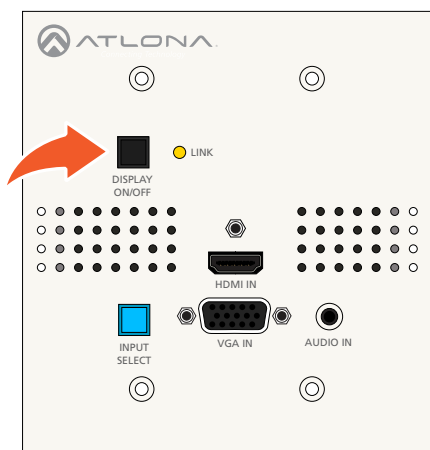
Basic Operation

Powering the Display

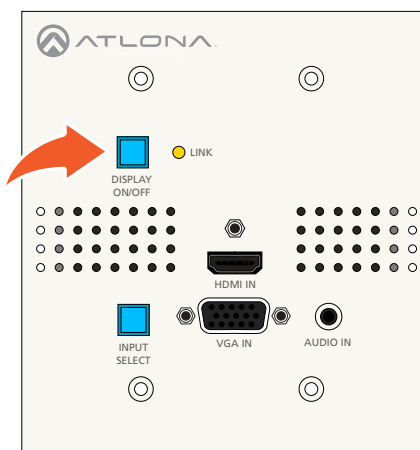
NOTE: The following functionality and operation applies to both the AT-HDVS-150-TX-WP and AT-HDVS-150-TX-WP-UK.

When the AT-HDVS-150-TX-WP is connected to a compatible receiver and display, press the **DISPLAY ON/OFF** button to toggle the display's power state. When connected to a compatible Atlona receiver, the functionality of this button can be customized. Refer to the receiver's User Manual for more information.

Display powered on



Display powered off



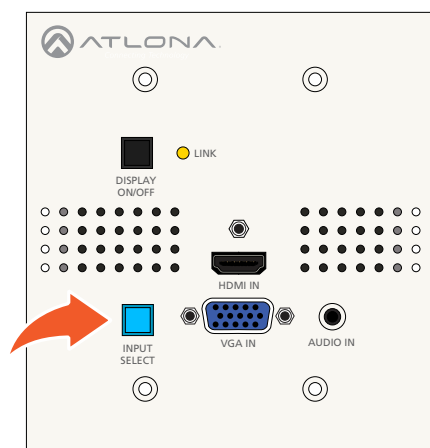
NOTE: When the display is in the “off” state, the **DISPLAY ON/OFF** button will glow bright blue. This functionality is added to assist in locating the wall plate in a darkened room.

Selecting the Input

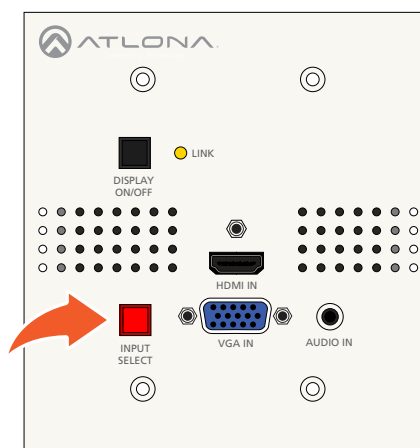
The **INPUT SELECT** button uses a bi-color LED to indicate the currently selected input. If power is interrupted to the wall plate, for any reason, the wall plate will always retain the last selected input. **HDMI IN** is the default input.

Press the **INPUT SELECT** button to toggle between **HDMI IN** and **VGA IN**. The color of the **INPUT SELECT** button will indicate which input is selected.

HDMI IN = blue



VGA IN = red



Auto Switching

The AT-HDVS-150-TX-WP will automatically switch to the most recently-connected or powered source. For example, if both an HDMI and VGA source are connected and then the HDMI source is disconnected, the wall plate will automatically switch to the **VGA IN** port. The default setting is OFF and can be set using a compatible receiver.

NOTE: Auto-switching is triggered by a Hot-Plug Detect (HPD) event. If HPD is not detected, then AT-HDVS-150-TX-WP will not switch inputs. VGA does not support HPD.

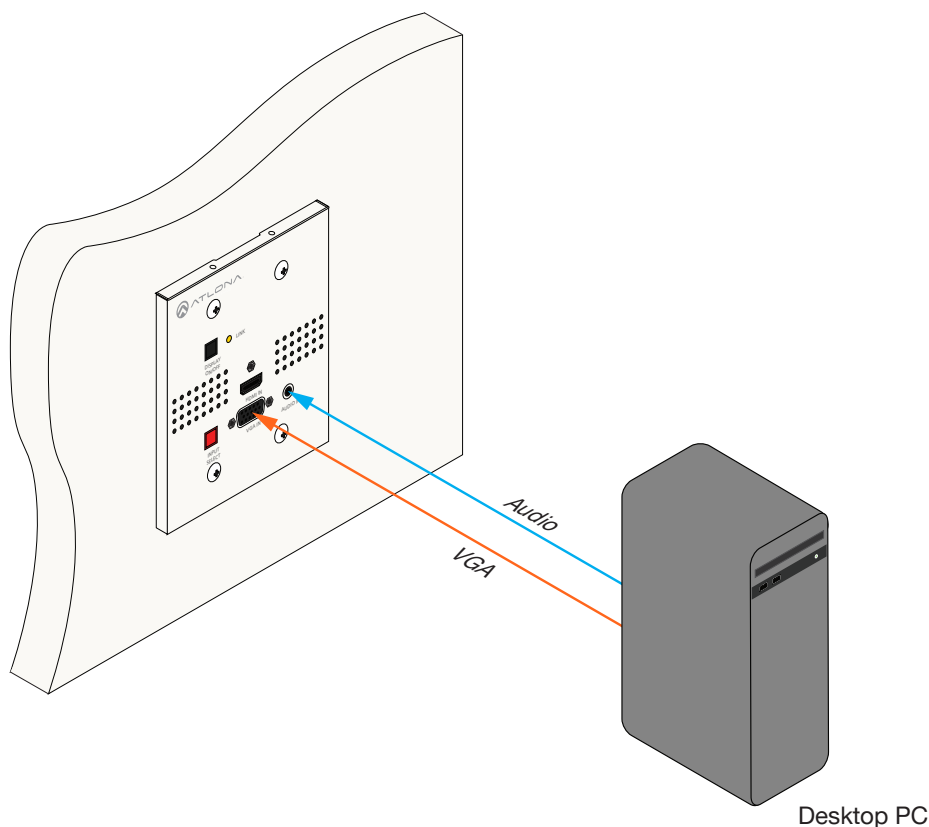
Passing Analog Audio

Two-channel analog audio can be added to the VGA signal. In order for the audio to be passed to the receiver, an active VGA source must be connected to the **VGA IN** port and the port must be selected. Analog audio *cannot* be embedded on an HDMI signal or passed without a video signal on the **VGA IN** port.

1. Connect a VGA source to the **VGA IN** port on the wall plate.
2. Connect a 3.5 mm mini-stereo cable from the **AUDIO IN** port to the analog audio source.
3. Make sure the **VGA IN** port is selected. When the **VGA IN** port is the active, the **INPUT SELECT** button will turn bright red.

The illustration below shows a desktop PC providing both the audio and video source. However, these signals may be connected to separate sources.

IMPORTANT: The **AUDIO IN** port will pass audio only when both the **VGA IN** port is selected *and* when the **VGA IN** port is connected to an active VGA source. Audio cannot be passed without video.



Appendix

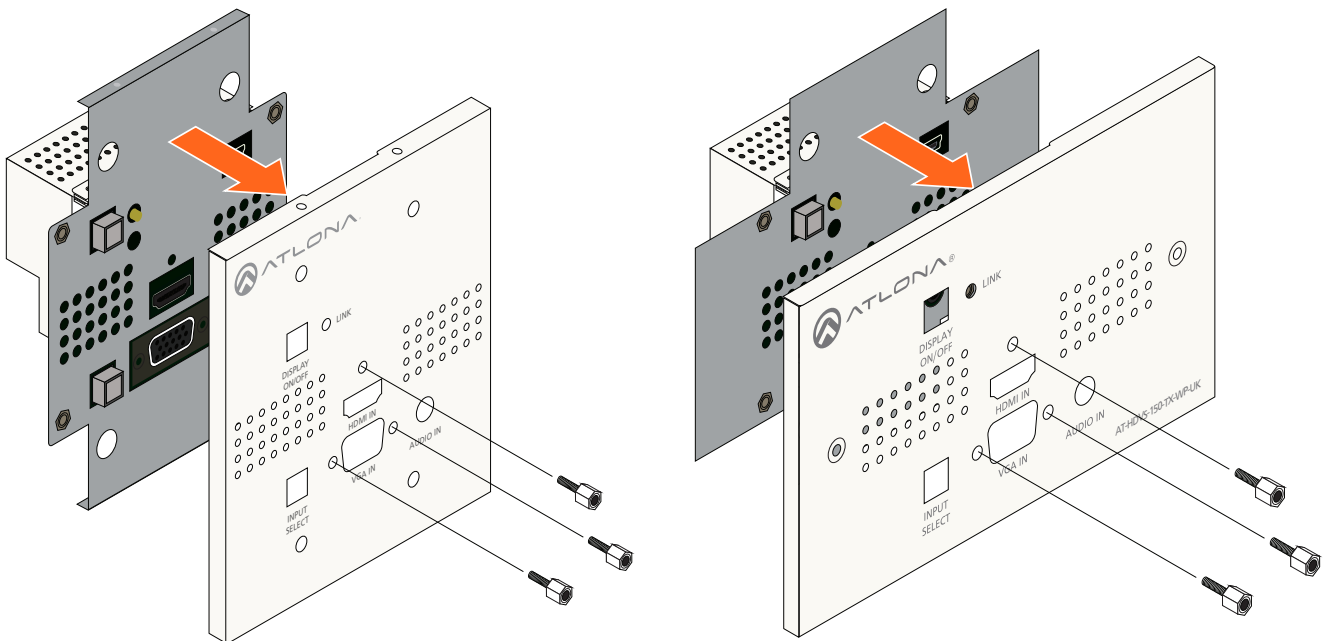
Updating the Firmware

NOTE: The following firmware update procedure applies to both the AT-HDVS-150-TX-WP and AT-HDVS-150-TX-WP-UK.

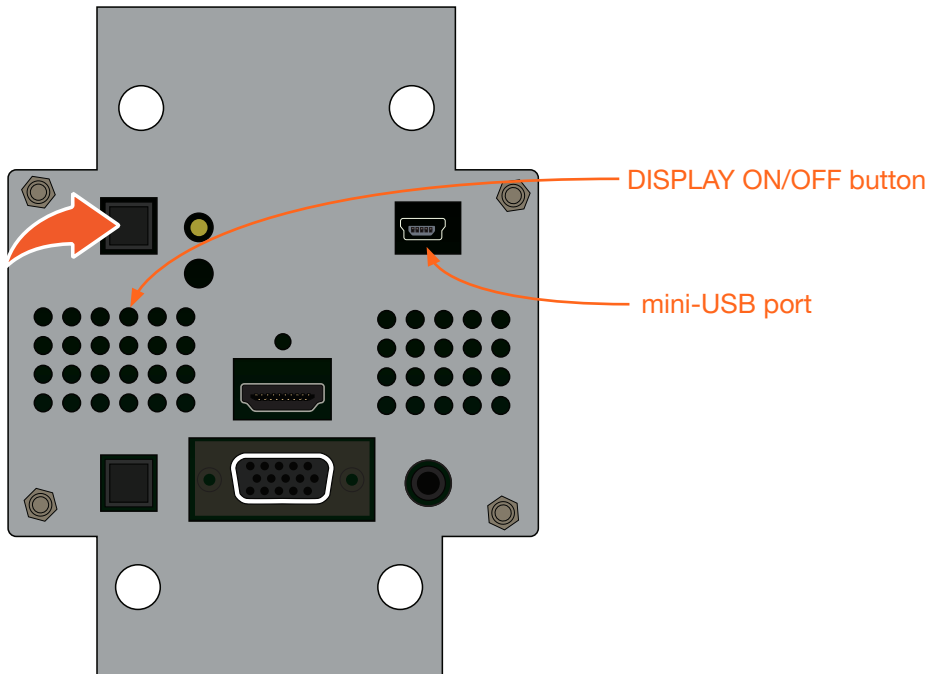
Requirements

- AT-HDVS-150-TX-WP-US or AT-HDVS-150-TX-WP-UK
- Firmware file: AT-HDVS-150-TX_[version].bin
- USB Type A to Mini-USB Type B cable
- Computer with USB port

1. Download the latest firmware from the Atlona web site.
2. Remove the AT-HDVS-150-TX-WP from the wall, or other surface, by removing the four screws from the front of the wall plate.
3. Disconnect the power to the AT-HDVS-150-TX-WP by disconnecting the Ethernet cable from the **HDBaseT OUT** port on the AT-HDVS-150-TX-WP.
4. Remove the faceplate from the front of the AT-HDVS-150-TX-WP, by unscrewing the two locking connectors for the **VGA IN** port and the locking connector for the **HDMI IN** port, using a small hex driver or pliers.

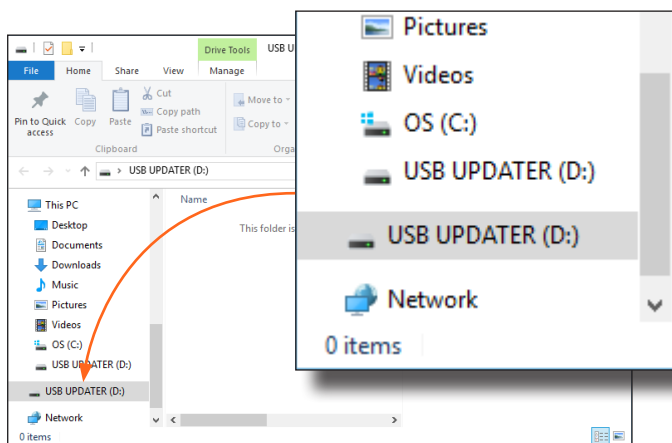


- Press and hold the **DISPLAY ON/OFF** button, while connecting the USB cable from the computer to the mini-USB port on the AT-HDVS-150-TX-WP.



- After a few seconds, a folder with the name USB UPDATER, will be displayed. Release the **DISPLAY ON/OFF** button.

If the folder is not displayed, open Windows Explorer and locate the drive named USB UPDATER.



- Delete all files from the USB drive, if any are present.
- Drag-and-drop the AT-HDVS-150-TX_[version].bin firmware file to the drive.
- After the file has been copied, disconnect the USB cable from both the computer and the AT-HDVS-150-TX-WP.
- Reconnect the Ethernet cable to the HDBaseT OUT port on the AT-HDVS-150-TX-WP.
- The firmware update process is complete.
- Attach the faceplate then reinstall the AT-HDVS-150-TX-WP.

Specifications

Video	
HD/SD	4096×2160@24/25/30/50*/60Hz*, 3840×2160@24/25/30/50*/60Hz*, 2048×1080p, 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	2560×2048, 2560×1600, 2048×1536, 1920×1200, 1680×1050, 1600×1200, 1600×900, 1440×900, 1400×1050, 1366×768, 1360×768, 1280×1024, 1280×800, 1280×768, 1152×768, 1024×768, 800×600, 640×480
Color Space	YUV, RGB
Chroma Subsampling	4:4:4, 4:2:2, 4:2:0*
Color Depth	8-bit, 10-bit, 12-bit

Audio	
Analog In	PCM 2Ch
HDMI In / HDBaseT Out	PCM 2Ch
Sample Rate	32 kHz, 44.1 kHz, 48 kHz, 88.2 kHz, 96 kHz, 176.4 kHz, 192 kHz
Bit Rate	24-bit (max.)

Resolution / Distance	4K/UHD - Feet / Meters		1080p - Feet / Meters	
HDMI	15	5	30	10
CAT-5e / CAT-6	115	35	197	60
CAT-6a / CAT-7	130	40	230	70

Signal	
Bandwidth	10.2 Gbps
HDCP	1.4

Temperature	Fahrenheit	Celsius
Operating	32 to 122	0 to 50
Storage	-4 to 140	-20 to 60
Humidity (RH)	20% to 90%, non-condensing	

Power	
Consumption	18.7 W (when paired)

Dimensions	Inches	Millimeters
Wall, 2-gang	1.5	40

Weight	Pounds	Kilograms
Device	0.82	0.37

Certification	
Unit	CE, FCC

*4096x2160 @ 50/60 Hz and 3840x2160 @ 50/60 Hz supports 8-bit 4:2:0 chroma subsampling, only.

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Warranty 4

