

# HDBaseT™ Scaler

## with HDMI and Analog Audio Outputs



## Version Information

---

Version	Release Date	Notes
2	04/17	New format

## Welcome to Atlona!

---

Thank you for purchasing this Atlona product. We hope you enjoy it and will take a 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>

## Sales, Marketing, and Customer Support

---

### Main Office

Atlona Incorporated  
70 Daggett Drive  
San Jose, CA 95134  
United States

Office: +1.877.536.3976 (US Toll-free)  
Office: +1.408.962.0515 (US/International)

Sales and Customer Service Hours  
Monday - Friday: 6:00 a.m. - 4:30 p.m. (PST)

<http://www.atlona.com/>

### International Headquarters

Atlona International AG  
Ringstrasse 15a  
8600 Dübendorf  
Switzerland

Office: +41 43 508 4321

Sales and Customer Service Hours  
Monday - Friday: 09:00 - 17:00 (UTC +1)

## Operating Notes

---



**IMPORTANT:** Visit <http://www.atlona.com/product/AT-HDVS-150-RX> 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

- 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 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](http://www.atlona.com).

## Important Safety Information



CAUTION: TO REDUCT 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.

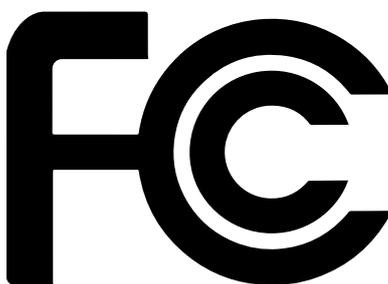


The information bubble is intended to alert the user to helpful or optional operational instructions in the literature accompanying the product.

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.

# Table of Contents

---

<b>Introduction</b>	<b>8</b>
<b>Features</b>	<b>8</b>
<b>Package Contents</b>	<b>8</b>
<b>Panel Description</b>	<b>9</b>
<b>Installation</b>	<b>10</b>
RS-232 Connector	10
Audio Connector	10
Power Connector	11
Connection Instructions	12
Connection Diagram	12
<b>Menu System</b>	<b>13</b>
Accessing the On-Screen Display	13
Input Select	14
Input Resolution	14
Output Resolution	15
VGA Adjust	15
Picture Adjust	16
Aspect	17
Overscan	17
Audio	18
OSD	19
Others	20
Information	22
System Reset	23
<b>Control Software</b>	<b>24</b>
Installing the Software	24
HDVS Receiver	26
HDVS Receiver Controls	26
Picture Controls	29
Projector	30
Projector Command Settings	30
Projector Controls	31
<b>Commands</b>	<b>32</b>
<b>Appendix</b>	<b>48</b>
Default Settings	48
Specifications	49
<b>Index</b>	<b>51</b>

## Introduction

---

The Atlona **AT-HDVS-150-RX** is an HDBaseT™ scaler receiver for HDMI transmission over category cable. It receives AV signals up to 1080p/60Hz or 1920×1200 video with embedded audio and control signals at distances up to 230 feet (70 meters). Features include balanced analog audio de-embedding, RS-232 control, and Power over Ethernet for compatible transmitting devices. The receiver offers advanced scaling capabilities including image adjustment capability and an Auto-set feature for matching incoming signals to the display's native resolution. Designed for use with the AT-HDVS-150-TX transmitter, the transmitter/receiver pair enables auto display on/off, auto-switching, third-party control, and other features. The built-in HD video scaler works with matrix switchers to optimize source signals with different resolutions to a display's native resolution. The AT-HDVS-RX is ideal for long distance transmission and display control in corporate or educational settings using analog and digital sources.

The HDVS-150 maintains all capabilities the HDVS series is known for and adds industry-standard Power over Ethernet for full HDBaseT certification. The HDVS-150 Series is a simple audio visual system with auto-switching for HDMI and VGA inputs, projector on/off control, analog audio de-embedding, volume control, and a scaler. Much more than an extender system, it provides a complete system for small spaces like huddle rooms and teaching spaces with 2 or 3 sources.

## Features

---

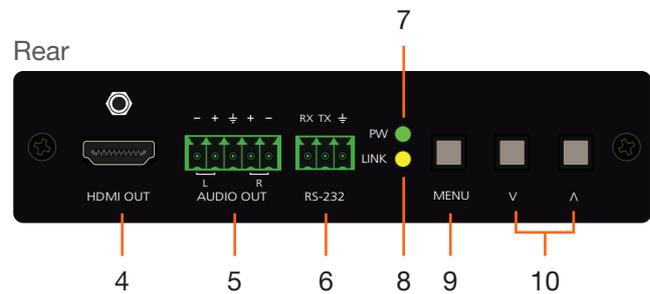
- Receives HDMI and VGA/Audio signals up to 230 ft (70m) @ 1080p over CAT6a/7 and 197 feet (60 m) @ 1080p over CAT5e/6
- Scales output video signals up to 1080p/60Hz and 1920x1200
- Uses Power-over-Ethernet (PoE) to transmitter, saving time and integration cost
- Two-channel audio de-embedding
- RS-232 scaler / display control
- Field-updateable firmware

## Package Contents

---

- 1 x AT-HDVS-150-RX
- 1 x Phoenix terminal block, 2-pin
- 1 x Phoenix terminal block, 3-pin
- 1 x Phoenix terminal block, 5-pin
- 1 x 48V DC power supply
- 1 x Installation Guide

## Panel Description



### 1 HDBaseT IN

Use an Ethernet cable to connect an HDBaseT PoE transmitter to this port.

### 2 FW

Connect a mini USB type-B cable to this port to update the firmware.

### 3 DC 48V

Connect the included 48V DC power supply to this power receptacle.

### 4 HDMI OUT

Connect an HDMI cable from this port to a display or other sink device.

### 5 AUDIO OUT

Connect the included 5-pin Phoenix block from this connector to an audio amplifier.

### 6 RS-232

Connect the included 3-pin Phoenix block from this connector to an RS-232 device.

### 7 PW

This LED indicator will glow bright green when the scaler is powered.

### 8 LINK

This LED indicator will glow bright amber when a link is established between the transmitter and receiver.

### 9 MENU

Press this button to display the built-in On-Screen Display (OSD).

### 10 Cursor buttons

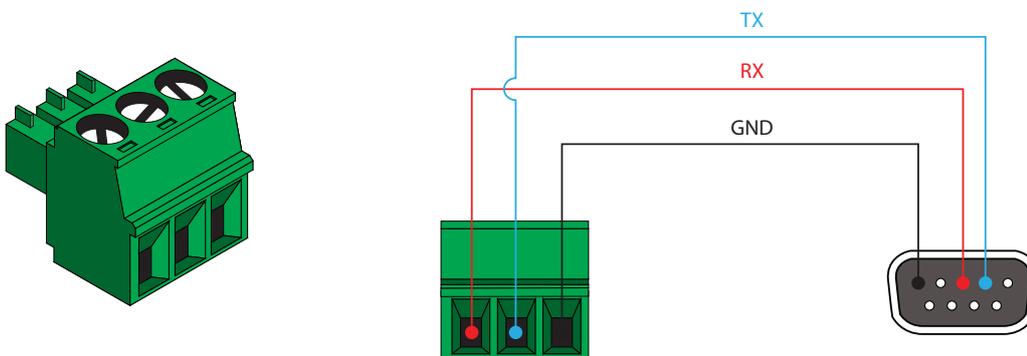
Press these buttons to select items within the OSD.

# Installation

## RS-232 Connector

The AT-HDVS-150-RX provides RS-232 control between an automation system and an RS-232 device. This step is optional and is used when connecting a computer that is running the control software. Refer to [Control Software \(page 24\)](#) for more information.

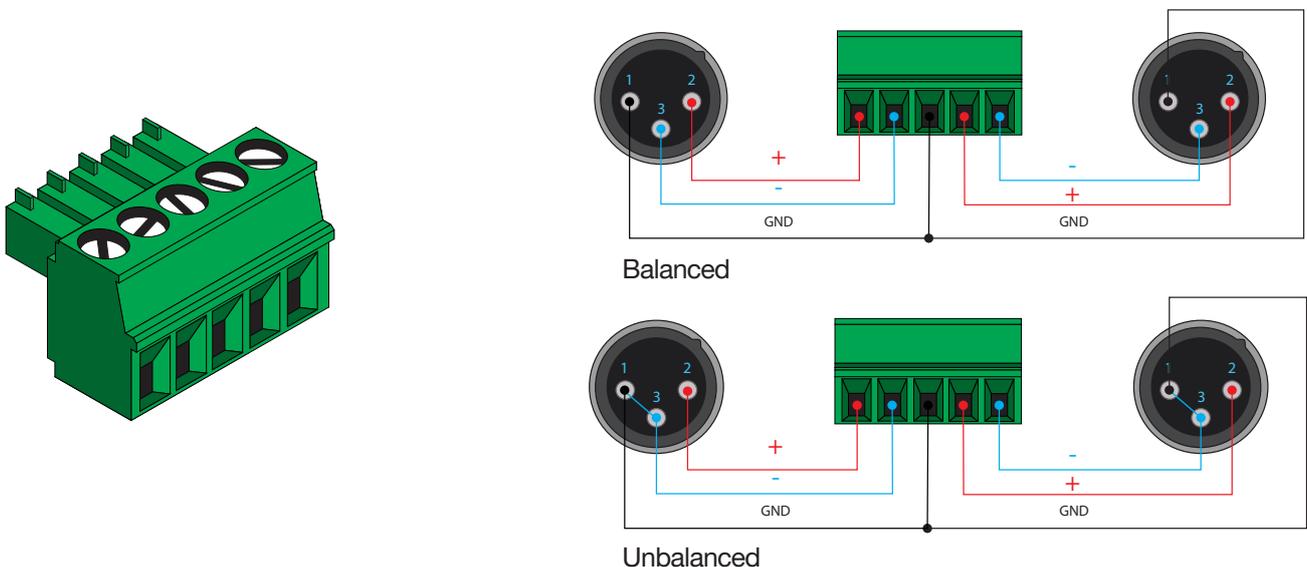
1. Use wire strippers to remove a portion of the cable jacket.
2. Remove at least 3/16" (5 mm) from the insulation of the RX, TX, and GND wires.
3. Insert the TX, RX, and GND wires into correct terminal on the included Phoenix block. If using non-tinned stranded wire, press the orange tab, above the terminal, while inserting the exposed wire. Repeat this step for the TX, RX, and GND connections.



## Audio Connector

The **AUDIO OUT** connector on the AT-HDVS-150-RX provides the connection of either balanced or unbalanced audio outputs using XLR connectors. Use the included 5-pin Phoenix terminal block.

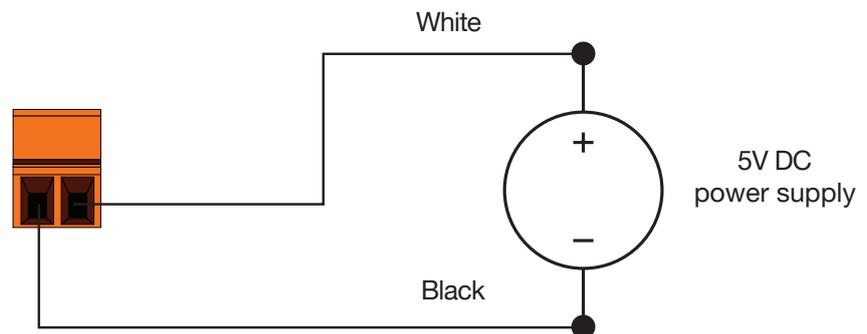
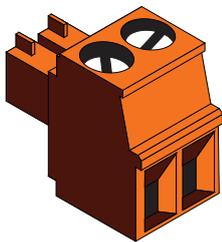
Balanced audio connections use two signal wires and a ground to minimize interference in audio signals. Unbalanced audio connections use one signal wire and a ground and are used if system components don't support balanced signals.



## Power Connector

Locate the included orange Phoenix terminal block and wire the included power supply to the block, as shown below. Do not use high-torque devices, when securing the wires to the Phoenix terminal block, as this may damage the screws and/or block.

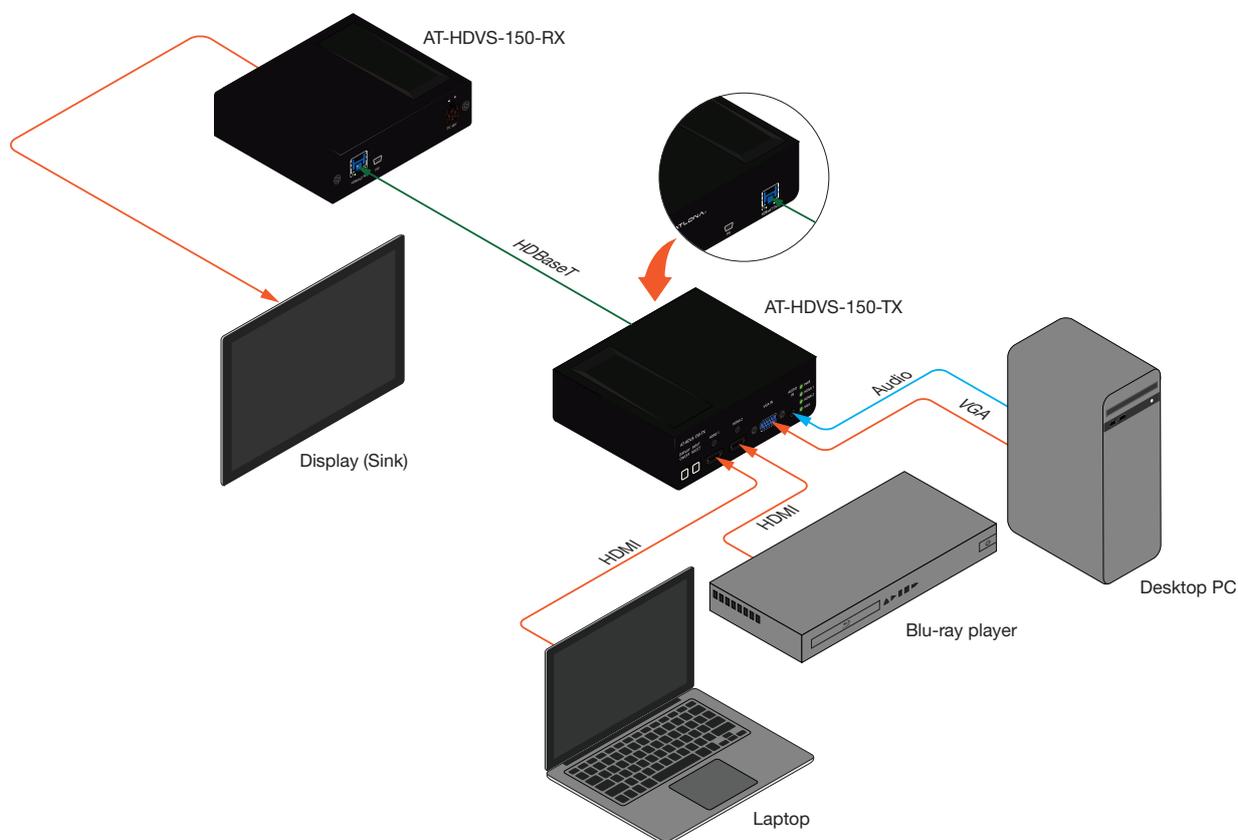
1. Insert the wires into the correct terminal on the included Phoenix block, as shown below.
2. Tighten the screws to secure the wires. Do not use high-torque devices as this may damage the screws and/or connector block.



## Connection Instructions

1. Use an HDMI cable to connect an HDMI display to the **HDMI OUT** port on the unit.
2. Connect an Ethernet cable, up to 230 feet (70 meters), from the **HDBaseT IN** port on the unit to a PoE-compatible transmitter (not included). Ethernet cables should use EIA/TIA-568B termination.
3. Connect the included power supply to the **DC 48V** port.

## Connection Diagram



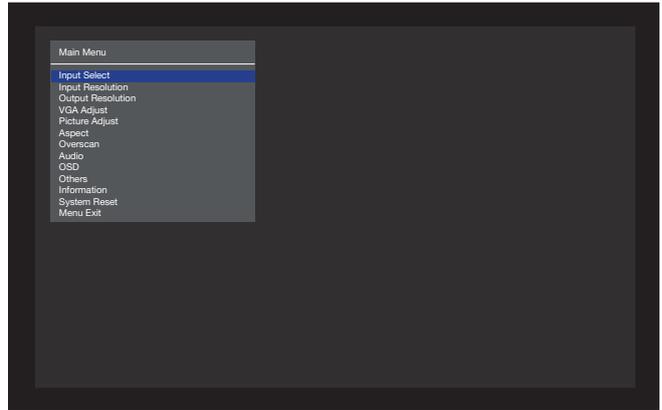
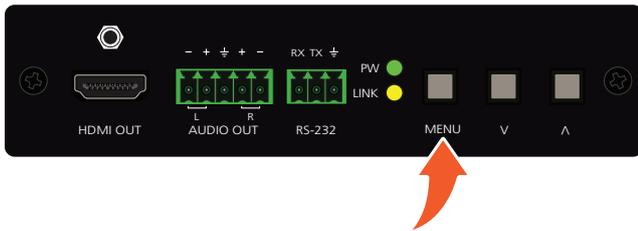
**NOTE:** The AT-HDVS-150-RX is designed to be used with the AT-HDVS-150-TX.

# Menu System

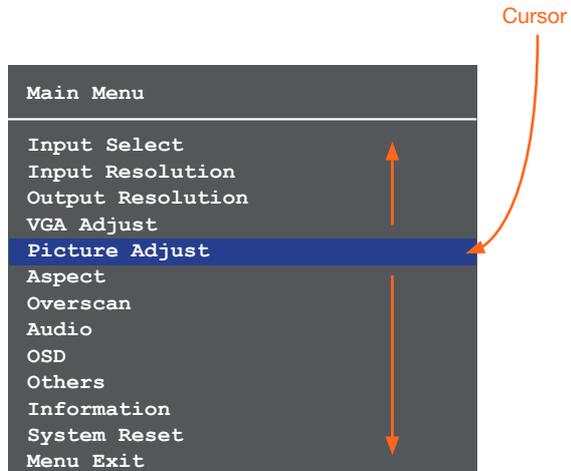
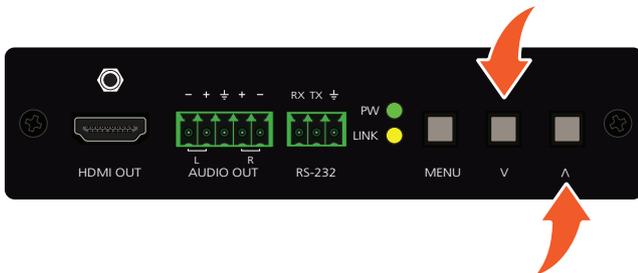
## Accessing the On-Screen Display

The AT-HDVS-150-RX includes a built-in On-Screen Display (OSD) menu system to manage and control all video features.

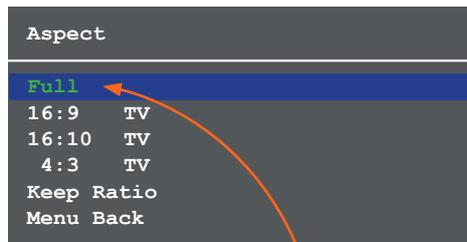
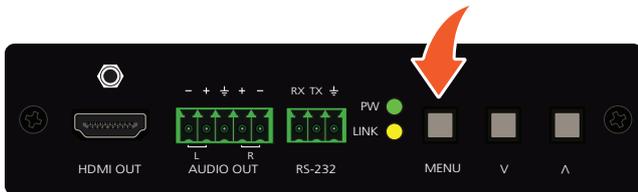
1. Press and release the **MENU** button to display the OSD.



2. Press the **UP/DN** buttons to highlight the various menu options. The currently selected menu item will be highlighted with a blue cursor bar. Press the **UP** button to move the cursor up through the menu system and press the **DN** button to move down.



3. Once the desired menu item is highlighted, press the **MENU** button to access its settings.



Within the menu item, the current setting will always be highlighted in green.

In this illustration, the **Aspect** menu item indicates that **Full** is the currently selected aspect ratio setting. Refer to [Aspect \(page 17\)](#) for more information.

Current setting

### Input Select

Selects the desired input.

1. Under the **Main Menu**, highlight the **Input Select** menu item using the **UP/DN** buttons on the front panel.
2. Press the **MENU** button.
3. The **Input Select** menu will be displayed.
4. Press the **UP/DN** buttons to highlight the desired input.

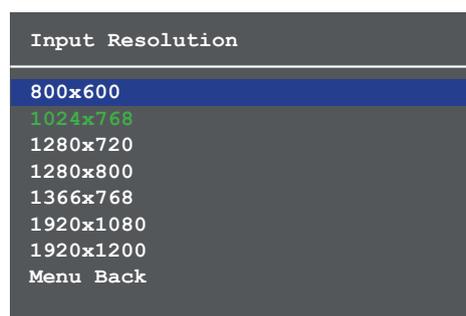
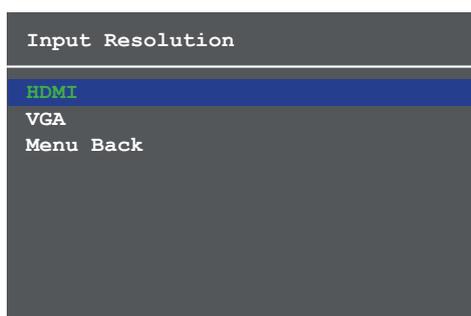


5. Press the **MENU** button to confirm the selection.
6. Press the **Menu Back** option to return to the **Main Menu**.

### Input Resolution

Selects the desired input resolution.

1. Under the Main Menu, highlight the **Input Select** menu item using the **UP/DN** buttons on the front panel.
2. Press the **MENU** button.
3. The **Input Resolution** menu will be displayed.
4. Press the **UP/DN** buttons to highlight the desired input.
5. Press the **MENU** button to confirm the selection and display the list of available input resolutions.

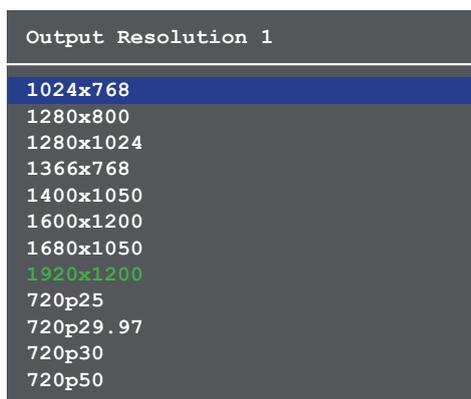


6. Press the **UP/DN** buttons to select the desired resolution.
7. Press the **MENU** button to confirm the selection.
8. Press the **Menu Back** option to return to the **Main Menu**.

### Output Resolution

Selects the desired output resolution. The default output resolution is 720p (1280x720). The **Output Resolution** menu consists of three pages.

1. Under the **Main Menu**, highlight the **Output Resolution** menu item using the **UP/DN** buttons on the front panel.
2. Press the **MENU** button.
3. The **Output Resolution** menu will be displayed.
4. Press the **UP/DN** buttons to highlight the desired resolution.

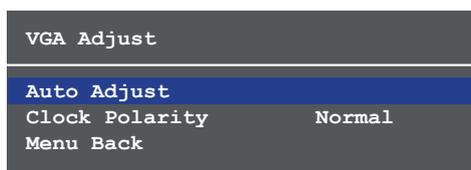


5. Press the **MENU** button to confirm the selection.
6. Scroll down and select the **Menu Back** option, under **Output Resolution 3**, then press the **MENU** button to return to the **Main Menu**.

### VGA Adjust

Provides adjustment of the VGA signal. This menu option is only available if using the VGA input on the transmitter.

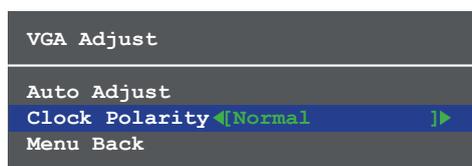
1. Under the **Main Menu**, highlight the **VGA Adjust** menu item using the **UP/DN** buttons on the front panel.
2. Press the **MENU** button.
3. The **VGA Adjust** menu will be displayed.
4. Press the **UP/DN** buttons to highlight the desired option.



5. Press the **MENU** button to confirm the selection.

Setting	Description
Auto Adjust	Automatically tunes the phase and clock of the VGA signal.
Clock Polarity	Sets the VGA clock polarity. <ul style="list-style-type: none"> <li>• <b>Normal</b> - The default setting. Unless it is required, the clock polarity should be set to <b>Normal</b>.</li> <li>• <b>Inverse</b> - Inverts the clock polarity, shifting it by 180°.</li> </ul>

- When selecting the **Clock Polarity** option, the current value will be highlighted in green and surrounded by brackets and two arrowheads.

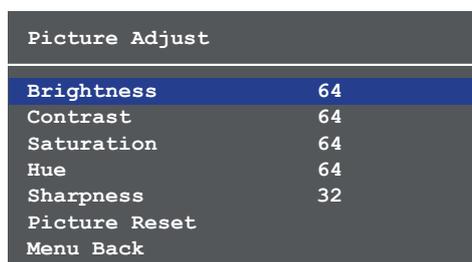


- Press the **UP/DN** buttons to select the desired value.
- Press the **MENU** button to confirm the value.
- Highlight the **Menu Back** option, then press the **MENU** button to return to the **Main Menu**.

### Picture Adjust

Provides custom adjustment of picture brightness, contrast, saturation, hue, sharpness, and color space.

- Under the **Main Menu**, highlight the **Output Resolution** menu item using the **UP/DN** buttons on the front panel.
- Press the **MENU** button.
- The **Picture Adjust** menu will be displayed.
- Press the **UP/DN** buttons to highlight the desired option.

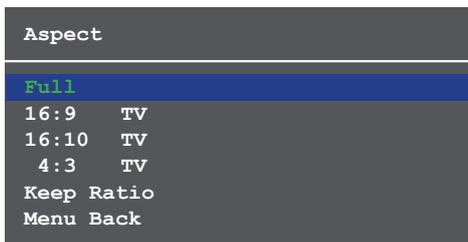


- Press the **MENU** button to confirm the selection.
- The current value will be highlighted in green and surrounded by brackets and two arrowheads.

## Aspect

Allows the aspect ratio of the output image to be changed.

1. Under the **Main Menu**, highlight the **Output Resolution** menu item using the **UP/DN** buttons on the front panel.
2. Press the **MENU** button.
3. The **Aspect** menu will be displayed.
4. Press the **UP/DN** buttons to highlight the desired aspect ratio.
5. Press the **MENU** button to confirm the selection.



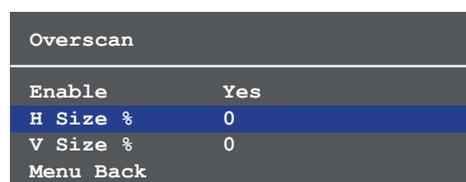
Setting	Description
Full	The output signal will be scaled to fill the screen.
16:9 TV	The output signal will be scaled to fit as 16:9.
16:10 TV	The output signal will be scaled to fit as 16:10.
4:3 TV	Output signal will be set to 4:3. If the input is HD, approximately 35% of the total horizontal resolution will be lost.
Keep Ratio	The input aspect ratio is preserved on the output.

6. Select the **Menu Back** option, then press the **MENU** button, to return to the **Main Menu**.

## Overscan

Adjusts the overscan setting of the output video signal. By default, overscan is *disabled*.

1. Under the **Main Menu**, highlight the **Overscan** menu item using the **UP/DN** buttons on the front panel.
2. Press the **MENU** button.
3. The **Overscan** menu will be displayed.
4. Press the **UP/DN** buttons to highlight the **Enable** option.
5. Press the **MENU** button to change the **Enable** value



6. When overscan is *enabled*, the **H Size %** and **V Size %** fields can be adjusted. Press the **UP/DN** buttons to highlight the desired field.
7. Press the **MENU** button to select the field.
8. Press the **UP/DN** buttons to change the value. Press the **UP** button to *increase* the value; press the **DN** button to *decrease* the value.
9. Press the **MENU** button to confirm the change.
10. Highlight the **Menu Back** option, then press the **MENU** button to return to the **Main Menu**.

### Audio

The Audio menu allows adjustment of all audio settings.

1. Under the **Main Menu**, highlight the **Audio** menu item using the **UP/DN** buttons on the front panel.
2. Press the **MENU** button.
3. The **Audio** menu will be displayed.

Audio	
Audio On/Off	On
HDMI Audio	On
L/R Audio	On
Menu Back	

Setting	Description
Audio On Off	Provides muting of both HDMI and analog audio outputs. Set this value to Off to mute all audio.
HDMI Audio	Controls the HDMI audio, only. Set to Off to mute the HDMI audio.
L R Audio	Toggles the analog audio output On or Off. Set to Off to mute the analog audio output.

4. Press the **UP/DN** buttons to highlight the desired option.
5. Press the **MENU** button to confirm the selection.
6. The current value will be highlighted in green and surrounded by brackets and two arrowheads.
7. Press the **UP/DN** buttons to select the desired value. Press the **UP** button to increase the value; press **DN** to decrease the value.
8. Press the **MENU** button to confirm the value.
9. Highlight the **Menu Back** option, then press the **MENU** button to return to the **Main Menu**.

### OSD

Adjusts the appearance and position of the On-Screen Display (OSD) on the screen.

1. Under the **Main Menu**, highlight the **Audio** menu item using the **UP/DN** buttons on the front panel.
2. Press the **MENU** button.
3. The **OSD** menu will be displayed.
4. Press the **UP/DN** buttons to highlight the desired option.

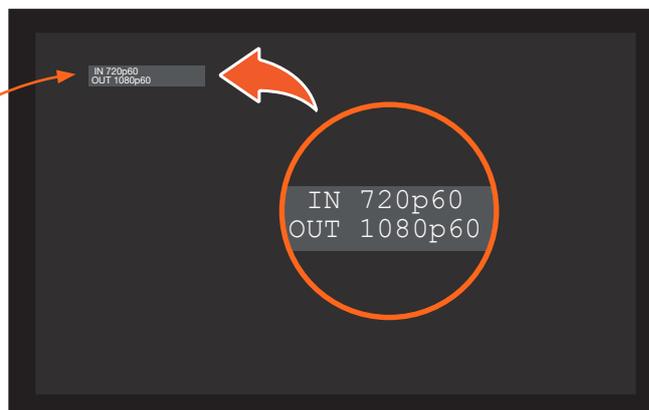
OSD	
Position	Left Top
Transparency	12
Info. Timer	10
Menu Timer	20
Info. Display	Auto
Background	Grey
Menu Back	

Setting	Description
Position	Sets the position of the OSD on the display. The following options are available: <ul style="list-style-type: none"> <li>• <b>Left Top</b></li> <li>• <b>Right Top</b></li> <li>• <b>Right Bottom</b></li> <li>• <b>Left Bottom</b></li> <li>• <b>Center</b></li> </ul>
Transparency	Adjusts the transparency setting of the OSD. <ul style="list-style-type: none"> <li>• <b>Range:</b> 5 to 100</li> </ul>
Info. Timer	The duration, in seconds, of how long the <b>Info Display</b> screen is displayed. <ul style="list-style-type: none"> <li>• <b>Range:</b> 5 to 100</li> </ul>
Menu Timer	The duration, in seconds, of how long the OSD remains on the screen, after no activity. <ul style="list-style-type: none"> <li>• <b>Range:</b> 5 to 100</li> </ul>
Info. Display	Adjusts the display settings of the Info Display screen, which indicates the input and output resolution. Refer to the illustration below for an example of the <b>Info Display</b> screen. The following options are available: <ul style="list-style-type: none"> <li>• <b>Auto</b> - Automatically displays the <b>Info Display</b> screen when a change is made to the input or output signal. The screen will automatically be hidden after approximately five seconds.</li> <li>• <b>Off</b> - Prevents the <b>Info Display</b> screen from being displayed.</li> <li>• <b>On</b> - The <b>Info Display</b> screen is always displayed.</li> </ul>
Background	Sets the background color of the OSD. The following options are available: <ul style="list-style-type: none"> <li>• <b>Grey</b></li> <li>• <b>Cyan</b></li> <li>• <b>Magenta</b></li> <li>• <b>Yellow</b></li> </ul>

5. Press the **MENU** button to confirm the selection.
6. The current value will be highlighted in green and surrounded by brackets and two arrowheads.
7. Press the **UP/DN** buttons to change the value. For settings that contain a value, press the **UP** button to *increase* the value; press the **DN** button to *decrease* the value.

OSD	
Position	Left Top
Transparency	◀[12]▶
Info. Timer	10
Menu Timer	20
Info. Display	Auto
Background	Grey
Menu Back	

Info Display screen



8. Press the **MENU** button to confirm the change.
9. Highlight the **Menu Back** option, then press the **MENU** button to return to the **Main Menu**.

## Others

This menu provides control for various other settings, such as auto-switching, HDCP, and vertical mirroring.

1. Under the **Main Menu**, highlight the **Others** menu item using the **UP/DN** buttons on the front panel.
2. Press the **MENU** button.
3. The **Others** menu will be displayed.
4. Press the **UP/DN** buttons to highlight the desired option.

Others	
In Auto Switch	On
Display HDCP	Auto
Mirror-V	Off
ASP Background	Grey
Display Mode	DispSW AVSW
Disp. Key Lock	0 sec
Auto Disp. On	On
Auto Disp. Off	On
ProjSW Mode	0 sec
Auto Off(sec.)	15
Menu Back	

Setting	Description
In Auto Switch	Enables or disables auto-switching. The following options are available: <ul style="list-style-type: none"> <li>• <b>On</b> - Enables auto-switching.</li> <li>• <b>Off</b> - Disables auto-switching.</li> </ul>

Setting	Description
Display HDCP	<p>Provides control over the transmission of HDCP content for the HDMI IN port on the transmitter (TX). The following options are available:</p> <ul style="list-style-type: none"> <li>• <b>Compliant</b> - Forces detection of HDCP-compliant sink devices. If the sink device is not HDCP-compliant, then no content will be transmitted.</li> <li>• <b>Noncompliant</b> - Suppresses detection of HDCP-compliant sink devices, allowing non-HDCP content to be transmitted.</li> <li>• <b>Auto</b> - Automatically detects the presence of HDCP-compliant sink devices. If an HDCP-compliant display is detected, then HDCP content will be sent. Otherwise, non-HDCP content will be sent.</li> </ul> <p><b>NOTE:</b> Some source devices will enable HDCP if an HDCP-compliant display (sink) is detected. However, there may be applications where sending HDCP content is not desired. This feature does <b>not</b> provide decryption of HDCP content to non-HDCP sink devices</p>
Mirror-V	<p>Vertically flips the output signal. The default setting is Off. The following options are available:</p> <ul style="list-style-type: none"> <li>• <b>On</b> - Vertically flips the output image.</li> <li>• <b>Off</b> - The output image is unaltered.</li> </ul>
ASP Background	<p>Changes the color of background bars when changing the aspect ratio of the output image. The default color is Black. The following options are available:</p> <ul style="list-style-type: none"> <li>• <b>Black</b></li> <li>• <b>Grey</b></li> </ul>
Display Mode	<p>Controls how the display behaves when connected to a source device.</p> <ul style="list-style-type: none"> <li>• <b>DispSW AVSW</b> - Display switches on/off, source audio/video signal switches on/off.</li> <li>• <b>DispSW AVon</b> - Display switches on/off, source audio/video signal always on.</li> <li>• <b>Always ON</b> - Display is always on, source audio/video signal always on.</li> <li>• <b>AV SW</b> - Display is always on, source audio/video signal switches on/off.</li> </ul>
Disp. Key Lock	<p>Allows the <b>MENU</b> button to be locked, preventing accidental operation when the product is in use. Define the time interval using the Warm Up Timer option, below. The following options are available:</p> <ul style="list-style-type: none"> <li>• <b>On</b> - Enables the feature.</li> <li>• <b>Off</b> - Disables the feature.</li> </ul>
Auto Disp. On	<p>Sends the command to power-on the display when an A/V signal is detected. The following options are available:</p> <ul style="list-style-type: none"> <li>• <b>On</b> - Enables the feature.</li> <li>• <b>Off</b> - Disables the feature.</li> </ul>
Auto Disp. Off	<p>Sends the command to power-off the display when an A/V signal is no longer present. The following options are available:</p> <ul style="list-style-type: none"> <li>• <b>On</b> - Enables the feature.</li> <li>• <b>Off</b> - Disables the feature.</li> </ul>

Setting	Description
ProjSW Mode	Used with a projector whose lamp cannot be turned on for up to 5 minutes after being shut off. Keeps control in same state as projector. Match settings with lamp delay on projector in 5 to 300 seconds. The LED will blink for the full amount of the delay time (ex. 40 seconds).
Auto Off(sec.)	Adjusts period of time before scaler goes into standby following loss of signal. The default is 0 minutes (standby off).

### Information

The **Information** menu displays current information about the AT-HDVS-150-RX. The **Information** menu consists of two pages. None of the fields within this menu can be edited.

1. Under the **Main Menu**, highlight the **Information** menu item using the **UP/DN** buttons on the front panel.
2. Press the **MENU** button.
3. The **Information** menu will be displayed.
4. Press the **MENU** button to view the next page.
5. Press the **MENU** button again to return to the **Main Menu**.

Information	
Source	HDMI
Name	Intel
Product	9xxxx
Sink	HDMI VSC
Model	VA2465 SERIES
Native1	1920x1200
Native2	None
F/W TX:	v1.0.2 RX: v1.0.2
Next Page	

Information	
Source Detection	
HV Total	1344x806
HV Display	1024x768
HV Polarity	Neg / Neg
Scan Mode	Progressive
Type	HDMI -Audio-
HDCP	No Type LPCM
Clock	On SR 48K
Sync	On FIFO OK
Identity	1024x768p60
Menu Back	

Setting	Description
Source	The current input source that is displayed. The source will be displayed as HDMI or VGA.
Name	The name of the source, if available.
Product	The product name, if available.
Sink	Contains the manufacturer's abbreviation of the sink.
Model	Displays the model of the display.
Native1	The native (preferred) timing for the display.
Native2	Displays any detailed (alternate) timing information for the display.

Setting	Description
F/W	Indicates the firmware version of both the transmitter (TX) and receiver (RX). If the TX is not connected, then "Unknown" will be listed next to the TX field.
HV Total	The total number of horizontal and vertical pixels.
HV Display	The display resolution.
HV Polarity	Polarity of both the horizontal and vertical sync pulse.
Scan Mode	The scan mode - either progressive or interlaced.
Type	The type of video signal.
HDCP	Indicates whether or not if HDCP content is present.
Clock	Indicates whether the source status of the TMDS clock is detected (On) or has been lost (Off).
Sync	Indicates whether the source status of the TMDS sync is detected (On) or has been lost (Off).
Identity	Displays the detected resolution of the source.
Type (Audio)	Displays the audio format.
SR (Audio)	Displays the sampling rate of the audio signal.
FIFO (Audio)	Displays the status of the FIFO audio buffer.

### System Reset

The **System Reset** menu provides the ability to reset the AT-HDVS-150-RX to factory-default settings.

1. Under the **Main Menu**, highlight the **System Reset** menu item using the **UP/DN** buttons on the front panel.
2. Press the **MENU** button.
3. The **System Reset** menu will be displayed.



4. Press the **UP/DN** buttons to highlight the desired option.
5. Press the **MENU** button to confirm the selection.
6. Highlight the **Menu Back** option, then press the **MENU** button to return to the **Main Menu**.

# Control Software

The AT-HDVS-150-RX features a control interface which can be used to program connected transmitters, allowing them to power-on/off displays as well as adjust the appearance of the output image.

The control software is available for download, under the AT-HDVS-150-RX page on the Atlona web site, and supports programming of the following transmitters, as well as output control for the AT-HDVS-150-RX.

Supported Transmitters		
AT-HDVS-150-TX	AT-HDVS-150-TX-WP	AT-HDVS-150-TX-WP-UK

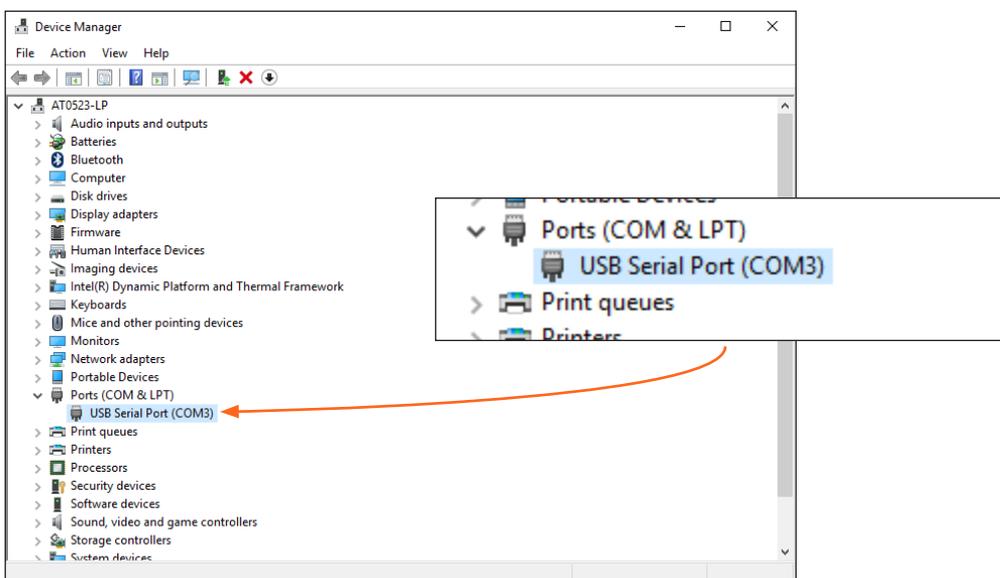
## Installing the Software

1. Download the control software from the Atlona web site.
  - a. Go to <http://atlona.com/product/at-hdvs-150-rx/>.
  - b. Scroll down the page and locate the **Software** section.
  - c. Click on the **Control Software Version** hyperlink to begin downloading the software.
2. Extract the files from the .zip file.
3. Double-click the setup.exe to run the installation wizard. Follow the directions on each screen to install the software.

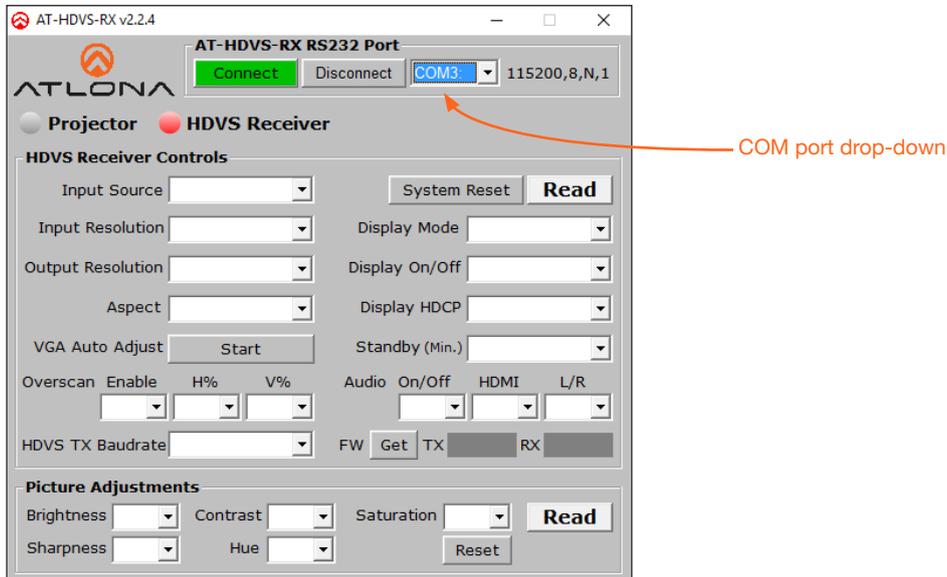


**IMPORTANT:** Note the folder/directory where the control software is being installed on the computer. This information will be necessary, later. The default installation directory is \Program Files (x86)\AT\_HDVS\_RX.

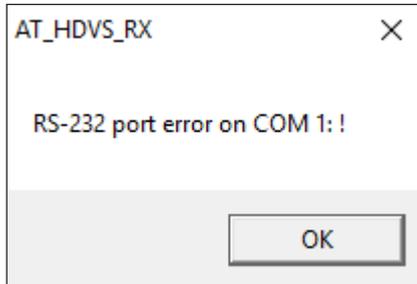
4. After the installation wizard has completed the installation, disconnect the AT-HDVS-150-RX from the display.
5. Connect the AT-HDVS-150-RX to a computer using the included 3-pin Phoenix terminal block and a DB-9 connector. If a DB-9 port is not available on the computer, a DB-9 to USB cable may be used.
6. Go to the Windows Device Manager and verify the installed COM port, under Ports (COM & LPT).



7. Open Windows Explorer and locate the folder/directory where the AT-HDVS-150-RX Control Software is installed. The default installation directory is \Program Files (x86)\AT\_HDVS\_RX.
8. Double-click the AT\_HDVS\_RX\_AP.exe file to launch the control software.

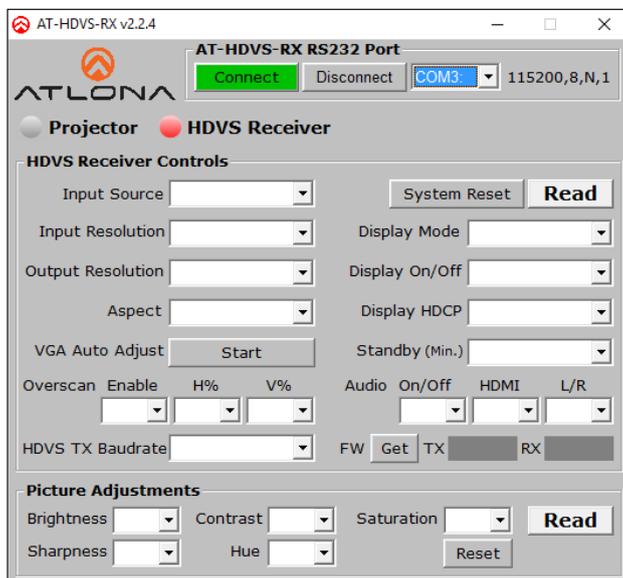


If a message box, similar to the following, is displayed, then click the **OK** button and check the following:



- The incorrect COM port is selected in the control software. Select another COM port from the drop-down list, next to the Connect and Disconnect buttons.
- Windows was unable to install the COM port. Check the connection between the computer and the AT-HDVS-150-RX. In addition, verify that the Phoenix terminal block is wired correctly to the DB-9 interface. After verifying the connection, check that the COM port is available under the Device Manager. If the problem persists, contact an Atlona Technical Support Engineer for assistance.

## HDVS Receiver



### Connect

Click this button to attempt to connect to the select COM port in the drop-down list. When successfully connected, this button will be highlighted in green.

### Disconnect

Click this button to disconnect from the COM port. When successfully disconnected, this button will be highlighted in red. This button will also be highlighted in red if the control software is unable to connect to the selected COM port.

### COM port selection

Click this drop-down list to select the correct COM port.

## HDVS Receiver Controls

### Input Source

Click this drop-down list to select the desired input source.

Setting	Description
Hdmi	Receiver will use the HDMI IN input on the transmitter as the source.
Vga	Receiver will use the VGA IN input on the transmitter as the source.

### Input Resolution

Click this drop-down list to select the desired input resolution.

Input Resolutions			
800x600	1280x720	1366x768	1920x1200
1024x768	1280x800	1920x1080	

### Output Resolution

Click this button to select the output resolution on the AT-HDVS-150-RX.

Output Resolutions			
1024x768	720p25	1080i59.94	1080p50
1280x800	720p29.97	1080i60	1080p59.94
1280x1024	720p30	1080p23.98	1080p60
1366x768	720p50	1080p24	Native
1400x1050	720p59.94	1080p25	
1600x1200	720p60	1080p29.97	
1680x1050	1080i50	1080p30	

### Aspect

Click the **Aspect** drop-down list and select the desired output aspect ratio.

Aspect	Description
Full	The input signal is adjusted to fill the screen.
16:9 TV	Set the aspect ratio to 16:9; common aspect ratio for HD and widescreen formats; also notated as 1:77.1
16:10 TV	Set the aspect ratio to 16:10; typical aspect ratio for computer and tablet displays.
4:3 TV	Sets the aspect ratio to 4:3; if the input signal is 16:9 or 16:10, up to 30% of the vertical resolution is lost.
Keep Ratio	The output aspect ratio is the same as the input.

### VGA Auto Adjust

In most situations, adjustment of the VGA signal should not necessary. However, if the VGA signal does not appear correctly, click the **Start** button to automatically correct the clock and phase. This feature only applies to VGA input signals.

### Enable (Overscan)

Click this drop-down list to enable or disable overscan.

Setting	Description
Yes	Enables overscan.
No	Disables overscan.

### H% (Overscan)

Click this drop-down list to select the percentage of horizontal overscan to be applied to the output image. The **Enable** drop-down list (above) must be set to **Yes**, in order to apply this feature.

### V% (Overscan)

Click this drop-down list to select the percentage of vertical overscan to be applied to the output image. The **Enable** drop-down list (above) must be set to **Yes**, in order to apply this feature.

### HDVS TX Baudrate

Click this drop-down list to select the required baud rate: 9600 or 115200.

### System Reset

Click this button to reset the AT-HDVS-150-RX to factory-default settings.

### Read

Click this button to populate all fields with the current settings of the AT-HDVS-150-RX.

### Display Mode

Click this drop-down list to select how the DISPLAY button functions on the transmitter.

Setting	Description
DispSW AVon	Turns the display on or off; the source is unaffected.
DispSW AVSW	Turns the display on/off and blocks/unblocks the AV source.
AV SW	Blocks/unblocks the source; display control is unaffected.
Always ON	Pressing the DISPLAY button will have no affect on the display or the source.

### Display On/Off

Click this drop-down list to block or unblock the video signal on the connected display.

Setting	Description
On	Video signal is displayed
Off	Video signal is blocked

### Display HDCP

Click this drop-down list to control how HDCP content is handled.

Setting	Description
Compliant	Forces detection of HDCP-compliant sink devices. If the sink device is not HDCP-compliant, then no content will be transmitted.
Non-compliant	Suppresses detection of HDCP-compliant sink devices, allowing non-HDCP content to be transmitted.
Auto	Automatically detects the presence of HDCP-compliant sink devices. If an HDCP-compliant display is detected, then HDCP content will be sent. Otherwise, non-HDCP content will be sent.

### Standby (Min.)

Click this drop-down list to select the time interval, in minutes, before the receiver is placed in standby mode. The available range is 1 to 30. This feature must be set to a value greater than zero, when specifying the **Display Power Off** option. Refer to the [Projector Controls \(page 31\)](#) section for more information.

### Audio On/Off

Click this drop-down list to block the audio signal. This applies to both HDMI and analog audio.

Setting	Description
On	Allows the audio signal on both HDMI and analog to pass.
Off	Blocks both HDMI and analog audio signals.

### HDMI

Click this drop-down list to block the audio signal on the HDMI output. The analog audio signal is unaffected.

Setting	Description
On	Allows the audio signal to pass.
Off	Blocks the audio on the HDMI signal.

### L/R

Click this drop-down list to block the analog output audio signal. The HDMI audio is unaffected.

Setting	Description
On	Allows the analog audio signal to pass.
Off	Blocks the analog audio output signal.

### Get

Click this button to retrieve the firmware versions for both the transmitter and receiver. Note that if the transmitter is not connected to the AT-HDVS-150-RX, then only the firmware for the receiver will be displayed.

## Picture Controls

### Brightness

Click this drop-down list to select the desired brightness applied to the output image. Range: 0 to 100. The default setting is 64.

### Sharpness

Click this drop-down list to select the desired picture sharpness. Range: 0 to 100. The default setting is 32.

### Contrast

Click this drop-down list to select the desired contrast applied to the output image. Range: 0 to 100. The default setting is 64.

### Hue

Click this drop-down list to select the desired picture hue applied to the output image. Range: 0 to 100. The default setting is 64.

### Saturation

Click this drop-down list to select the desired picture saturation applied to the output image. Range: 0 to 100. The default setting is 64.

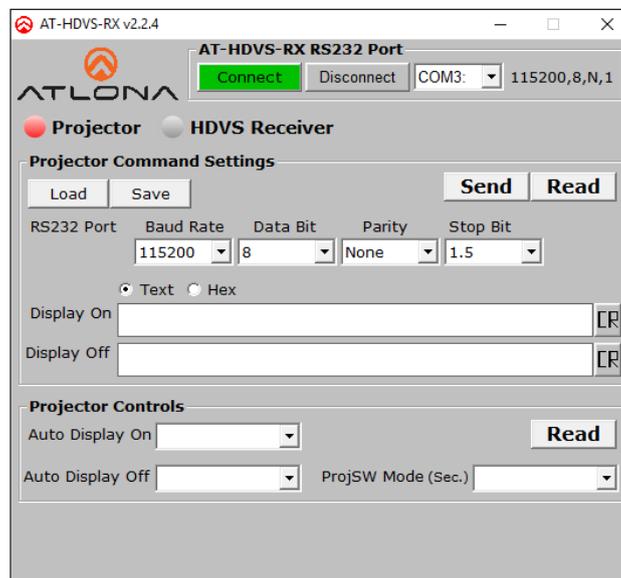
### Reset

Click this button to reset the picture settings to their default settings. This function does not reset the AT-HDVS-150-RX to factory-default settings.

### Read

Click this button to populate the Picture Controls fields with the current settings.

## Projector



### Projector Command Settings

#### Load

Click this button to load a saved projector settings file. The settings file is in .ini format and is created using the **Save** button.

#### Save

Click this button to save the current projector settings to a file.

#### Send

Click this button to send the current projector settings to the projector.

#### Read

Click this button to populate all fields under the **Projector Command Settings** group with the current settings.

#### Baud Rate

Click this drop-down list to select the required baud rate: 2400, 9600, 19200, 38400, 56000, 57600, or 115200.

#### Data Bit

Click this drop-down list to select the number of data bits: 5, 6, 7, or 8.

#### Parity

Click this drop-down list to select the parity bit: None, Odd, Even, Mark, or Space.

#### Stop Bit

Click this drop-down list to select the number of stop bits: 1, 1.5, or 2.

#### Display On

Enter the “Display On” command in this field. When entering the command, specify the format by clicking the **Text** or **Hex** radio button. If a carriage-return is required, click the **CR** button at the end of the field. Each click of the **CR** button will add a single carriage-return character to the end of the command string.

#### Display Off

Enter the “Display On” command in this field. When entering the command, specify the format by clicking the **Text** or **Hex** radio button. If a carriage-return is required, click the **CR** button at the end of the field. Each click of the **CR** button will add a single carriage-return character to the end of the command string.

## Projector Controls

### Auto Display On

Click this drop-down list to select when the display will be powered-on, based on the detection of a source.

Setting	Description
On	Powers-on the display when a source is detected.
Off	Display is not powered-on when a signal is detected.

### Auto Display Off

Click this drop-down list to select when the display will be powered-off, based on the detection of a source.

Setting	Description
On	Power-off the display when no signal is detected for the time interval specified in the <b>Standby (Min.)</b> drop down list.
Off	Display is not powered-off when no signal is detected.

### Read

Click this button to populate all fields under the **Projector Controls** group with the current settings.

### ProjSW Mode (Sec.)

Sets the time interval, in seconds, before the front panel buttons are locked, after a power-off command is sent to the projector. Range: 0 to 300.

## Commands

The following tables provide an alphabetical list of commands available on the AT-HDVS-150-RX. All commands are case-sensitive and must be entered as documented. If the command fails or is entered incorrectly, then the feedback is “Command FAILED”.



**IMPORTANT:** Each command is terminated with a carriage-return (0x0d) and the feedback is terminated with a carriage-return and line-feed (0x0a).

Command	Description
]	Aborts the last command
WP_Aspect	Sets the aspect ratio
WP_AudioEn	Enables / disables all audio on the output
WP_AudioHdmi	Enables / disables the HDMI audio output
WP_AudioLR	Enables / disables the analog audio output
WP_AutoDispOff	Sends the power-off command when an AV signal is no longer present
WP_AutoDispOn	Sends the power-on command when an AV signal is detected
WP_AutoSwitch	Enables / disables auto-switching on the transmitter
WP_Display	Power-on / power-off the display
WP_DisplayMode	Controls how the DISPLAY button on the transmitter is defined
WP_DisplayOff	Sets the Off command for the projector
WP_DisplayOn	Sets the On command for the projector
WP_DisplaySet	Sets the baud rate, data bits, parity bit, and stop bits for the display device
WP_HdcpInput	Sets the HDCP reporting mode on the transmitter
WP_IdentifyTx	Displays model information about the transmitter
WP_Info	Displays the current firmware version for the AT-HDVS-150-RX
WP_InfoTx	Displays the current firmware version for the transmitter
WP_Input	Selects the active input on the transmitter
WP_InputPrefer	Sets the preferred input timing
WP_Output	Sets the output resolution
WP_OverscanEn	Enables / disables overscan
WP_OverscanH	Sets the horizontal overscan
WP_OverscanV	Sets the vertical overscan
WP_PictureBri	Sets the picture brightness
WP_PictureCon	Sets the picture contrast
WP_PictureHue	Sets the picture hue

Command	Description
WP_PictureRst	Resets the picture settings to factory-default settings
WP_PictureSat	Sets the picture saturation
WP_PictureSha	Sets the picture sharpness
WP_ProjSW	Sets the time interval for locking the front-panel buttons after a power-off command
WP_Standby	Sets the time interval before the AT-HDVS-150-RX is placed in standby mode
WP_SystemRst	Resets the AT-HDVS-150-RX to factory-default settings
WP_VgaAuto	Auto-adjusts the clock and phase of the VGA input signal
WP_VgaClock	Sets the VGA clock polarity

## ]

Aborts the last command. When executed, the feedback is COMMAND FAIL.

### Syntax

```
]
```

**This command does not require any parameters**

### Examples

```
]
```

### Feedback

```
COMMAND FAIL
```

## WP\_Aspect

Sets the aspect ratio of the output signal. Use the ? argument to display the current aspect ratio setting. The default setting is **Full**. Full = the input signal is adjusted to fill the screen; 16:9 = sets the aspect ratio to 16:9; 16:10 = set the aspect ratio to 16:10, 4:3 = Sets the aspect ratio to 4:3 (pan-and-scan); Keep = the output aspect ratio is the same as the input.

### Syntax

```
WP_Aspect[X]
```

Parameter	Description	Range
X	Aspect ratio	Full, 16:9, 16:10, 4:3, Keep

### Example

```
WP_Aspect[16:9]
```

### Feedback

```
WP_Aspect[16:9]
```

## WP\_AudioEn

Enabled / disables the audio output. This affects both the HDMI and analog audio outputs. On = enables audio output; Off = disables audio output; ? = displays the current **AP\_AudioEn** setting.

### Syntax

```
WP_AudioEn[X]
```

Parameter	Description	Range
X	Value	On, Off, ?

### Example

```
WP_AudioEn[Off]
```

### Feedback

```
WP_AudioEn[Off]
```

### WP\_AudioHdmi

Enabled / disables the audio on the HDMI output. Analog audio output is unaffected. On = enables audio output; Off = disables audio output; ? = displays the current **AP\_AudioHdmi** setting.

#### Syntax

```
WP_AudioHdmi[X]
```

Parameter	Description	Range
X	Value	On, Off, ?

#### Example

```
WP_AudioHdmi[Off]
```

#### Feedback

```
WP_AudioHdmi[Off]
```

### WP\_AudioLR

Enabled / disables the analog audio output. HDMI audio is unaffected. On = enables audio output; Off = disables audio output; ? = displays the current **AP\_AudioLR** setting.

#### Syntax

```
WP_AudioLR[X]
```

Parameter	Description	Range
X	Value	On, Off, ?

#### Example

```
WP_AudioLR[Off]
```

#### Feedback

```
WP_AudioLR[Off]
```

### WP\_AutoDispOff

Sends the command to power-off the display when an A/V signal is no longer present. Use the **On** argument to enable this feature. Use the **?** argument to return the current **WP\_AutoDispOff** setting.

#### Syntax

```
AutoDispOff[X]
```

Parameter	Description	Range
X	Value	On, Off, ?

#### Example

```
WP_AutoDispOff[On]
```

#### Feedback

```
WP_AutoDispOff[On]
```

### WP\_AutoDispOn

Sends the command to power-on the display when an A/V signal is detected. Use the **On** argument to enable this feature. Use the **?** argument to return the current **WP\_AutoDispOn** setting.

#### Syntax

```
AutoDispOff[X]
```

Parameter	Description	Range
X	Value	On, Off, ?

#### Example

```
WP_AutoDispOn[On]
```

#### Feedback

```
WP_AutoDispOn[On]
```

### WP\_AutoSwitch

Enables / disables auto switching on the AT-HDVS-150-TX. On = enables auto-switching; Off = disables auto-switching; ? = displays the current **WP\_AutoSwitch** setting.

#### Syntax

```
WP_AutoSwitch[X]
```

Parameter	Description	Range
X	Value	On, Off, ?

#### Example

```
WP_AutoSwitch[On]
```

#### Feedback

```
WP_AutoSwitch[On]
```

### WP\_Display

Power-on or power-off the display connected to the receiver. On = power-on the display; Off = power-off the display; ? = displays the current **WP\_Display** setting.

#### Syntax

```
WP_Display[X]
```

Parameter	Description	Range
X	Value	On, Off, ?

#### Example

```
WP_Display[On]
```

#### Feedback

```
WP_Display[On]
```

## WP\_DisplayMode

Controls how the **DISPLAY** button functions on the transmitter.

### Syntax

```
WP_DisplayMode[X]
```

Parameter	Description	Range
X	Value	DispSWAVOn, DispSWAVSW, AVSW, AlwaysOn

### Display Modes Description

DispSWAVOn = Turns the display on or off; the source is unaffected.

DispSWAVSW = Turns the display on/off and blocks/unblocks the AV source.

AVSW = Blocks/unblocks the source; display control is unaffected.

AlwaysOn = Pressing the DISPLAY button will have no affect on the display or the source.

### Example

```
WP_DisplayMode[AVSW]
```

### Feedback

```
WP_DisplayMode[AVSW]
```

## WP\_DisplayOff

Sets the Off command for the projector. When specifying the command string, the carriage-return is calculated in the total length of the string, if appended. Multiple commands can be specified. Use the comma delimiter to add a 5-second delay between each command.

### Syntax

```
WP_DisplayOff[X,Y]
```

Parameter	Description	Range
X	Command length	1 ... 50
Y	Commands string	50 characters (max.)

### Example

```
WP_DisplayOff[8,command]
```

### Feedback

```
WP_DisplayOff[8,command]
```

### WP\_DisplayOn

Sets the On command for the projector. When specifying the command string, the carriage-return is calculated in the total length of the string, if appended. Multiple commands can be specified. Use the comma delimiter to add a 5-second delay between each command.

#### Syntax

```
WP_DisplayOn[X,Y]
```

Parameter	Description	Range
X	Command length	1 ... 50
Y	Commands string	50 characters (max.)

#### Example

```
WP_DisplayOn[8,command]
```

#### Feedback

```
WP_DisplayOn[8,command]
```

### WP\_DisplaySet

Sets the baud rate, data bits, parity bit, and stop bits for the display device. Each argument must be separated by a comma; no spaces are permitted.

#### Syntax

```
WP_DisplaySet[W,X,Y,Z]
```

Parameter	Description	Range
W	Baud rate	2400, 9600, 19200, 38400, 57600, 57600, 115200
X	Data bits	5, 6, 7, 8
Y	Parity bit	N (none), O (odd), E (even), M (mark), S (space)
Z	Stop bits	1, 1.5, 2

#### Example

```
WP_DisplaySet[115200,8,N,1]
```

#### Feedback

```
WP_DisplaySet[115200,8,N,1]
```

### WP\_HdcpInput

Set the HDCP reporting mode of the **HDMI IN** port on the transmitter. Some sources will send HDCP-encrypted content (even if the actual content is not HDCP). This can cause problems with displays that are not HDCP-compliant. Setting this value to off, will force the source to ignore detection of HDCP-compliant displays. Disabling this feature will *not* decrypt HDCP content. On = enables HDCP detection; Off = disables HDCP detection; ? = displays the current WP\_HdcpInput setting.

#### Syntax

```
WP_HdcpInput[X]
```

Parameter	Description	Range
X	Value	On, Off, ?

#### Example

```
WP_HdcpInput[On]
```

#### Feedback

```
WP_HdcpInput[On]
```

### WP\_IdentifyTx

Displays model information about the transmitter.

#### Syntax

```
WP_IdentifyTx
```

Parameter	Description	Range
X	Query	?

#### Example

```
WP_IdentifyTx[?]
```

#### Feedback

```
TX=AT-HDVS-150-TX
```

### WP\_Info

Displays the current firmware version for the AT-HDVS-150-RX.

#### Syntax

```
WP_Info[?]
```

Parameter	Description	Range
X	Query	?

#### Example

```
WP_Info[?]
```

#### Feedback

```
1.0.1
```

## WP\_InfoTx

Displays the current firmware version of the AT-HDVS-150-TX or AT-HDVS-150-TX-WP. The transmitter must be connected to the AT-HDVS-150-RX.

### Syntax

```
WP_InfoTx[X]
```

Parameter	Description	Range
X	Value	?

### Example

```
WP_InfoTx[?]
```

### Feedback

```
1.0.0
```

## WP\_Input

Selects the input source on the transmitter. Hdmi1 = sets the active input to **HDMI 1**, Hdmi2 = sets the active input to **HDMI 2**, Vga = sets the active input to **VGA IN**, ? = displays the current WP\_Input setting.

### Syntax

```
WP_Input[X]
```

Parameter	Description	Range
X	Input	Hdmi1, Hdmi2, Vga, ?

### Example

```
WP_Input[Hdmi2]
```

### Feedback

```
WP_Input[Hdmi2]
```

## WP\_InputPrefer

Sets the preferred input timing. This setting is applied to both **HDMI 1**, **HDMI 2**, and **VGA IN** ports. Use the ? argument to display the current WP\_InputPrefer setting.

### Syntax

```
PicReset
```

Parameter	Description	Range
X	Value	0 ... 7, ?

### Preferred Timing List

```
0 = 800 x 600
```

```
1 = 1024 x 768
```

```
2 = 1280 x 720
```

```
3 = 1280 x 800
```

```
4 = 1366 x 768
```

```
5 = 1680 x 1050
```

```
6 = 1920 x 1080
```

```
7 = 1920 x 1200
```

## WP\_Output

Sets the video output resolution. Use the ? argument to display the current video output resolution.

### Syntax

```
WP_Output[X]
```

Parameter	Description	Range
X	Value	0 ... 24, ?

### Output Resolution List

0 = 1024x768	12 = 720p60
1 = 1280x800	13 = 1080i50
2 = 1280x1024	14 = 1080i59.94
3 = 1366x768	15 = 1080i60
4 = 1400x1050	16 = 1080p23.98
5 = 1600x1200	17 = 1080p24
6 = 1680x1050	18 = 1080p25
7 = 720p25	19 = 1080p29.97
8 = 720p29.97	20 = 1080p30
9 = 720p30	21 = 1080p50
10 = 720p50	22 = 1080p59.94
11 = 720p59.94	23 = 1080p60
	24 = Native

### Example

```
WP_Output[12]
```

### Feedback

```
WP_Output[12]
```

## WP\_OverscanEn

Enables / disables overscan. on = enables overscan; off = disables overscan; ? = displays the current WP\_OverscanEn setting.

### Syntax

```
WP_OverscanEn[X]
```

Parameter	Description	Range
X	Value	On, Off, ?

### Example

```
WP_OverscanEn[On]
```

### Feedback

```
WP_OverscanEn[On]
```

### WP\_OverscanH

Sets the horizontal overscan for the output image. Use the ? argument to display the current **WP\_OverscanH** value.

#### Syntax

```
WP_OverscanH[X]
```

Parameter	Description	Range
X	Value	0 ... 50, ?

#### Example

```
WP_OverscanH[10]
```

#### Feedback

```
WP_OverscanH[10]
```

### WP\_OverscanV

Sets the vertical overscan for the output image. Use the ? argument to display the current **WP\_OverscanV** value.

#### Syntax

```
WP_OverscanV[X]
```

Parameter	Description	Range
X	Value	0 ... 50, ?

#### Example

```
WP_OverscanV[10]
```

#### Feedback

```
WP_OverscanV[10]
```

### WP\_PictureBri

Sets the picture brightness. In addition to specifying an integer value, the + and - arguments can be used, by themselves, to increase or decrease the picture brightness by 1 value, respectively. Use the ? argument to display the current **WP\_PictureBri** value.

#### Syntax

```
WP_PictureBri[X]
```

Parameter	Description	Range
X	Value	0 ... 100, +, -, ?

#### Example

```
WP_PictureBri[65]
```

#### Feedback

```
WP_PictureBri[65]
```

### WP\_PictureCon

Sets the picture contrast. In addition to specifying an integer value, the + and - arguments can be used, by themselves, to increase or decrease the picture contrast by 1 value, respectively. Use the ? argument to display the current **WP\_PictureCon** value.

#### Syntax

```
WP_PictureCon[X]
```

Parameter	Description	Range
X	Value	0 ... 100, +, -, ?

#### Example

```
WP_PictureCon[50]
```

#### Feedback

```
WP_PictureCon[50]
```

### WP\_PictureHue

Sets the picture hue. In addition to specifying an integer value, the + and - arguments can be used, by themselves, to increase or decrease the picture hue by 1 value, respectively. Use the ? argument to display the current **WP\_PictureHue** value.

#### Syntax

```
WP_PictureHue[X]
```

Parameter	Description	Range
X	Value	0 ... 100, +, -, ?

#### Example

```
WP_PictureHue[30]
```

#### Feedback

```
WP_PictureHue[30]
```

### WP\_PictureRst

Resets the picture settings to factory-default settings. This command does not reset the unit to factory-default settings. Refer to the **WP\_SystemRst** (page 45) command for more information.

#### Syntax

```
WP_PictureRst[X]
```

Parameter	Description	Range
X	Value	Go

#### Example

```
WP_PictureRst[Go]
```

#### Feedback

```
WP_PictureRst[Go]
```

### WP\_PictureSat

Sets the picture saturation. In addition to specifying an integer value, the + and - arguments can be used, by themselves, to increase or decrease the picture saturation by 1 value, respectively. Use the ? argument to display the current **WP\_PictureSat** value.

#### Syntax

```
WP_PictureSat[X]
```

Parameter	Description	Range
X	Value	0 ... 100, +, -, ?

#### Example

```
WP_PictureSat[60]
```

#### Feedback

```
WP_PictureSat[60]
```

### WP\_PictureSha

Sets the picture sharpness. In addition to specifying an integer value, the + and - arguments can be used, by themselves, to increase or decrease the picture sharpness by 1 value, respectively. Use the ? argument to display the current **WP\_PictureSha** value.

#### Syntax

```
WP_PictureSha[X]
```

Parameter	Description	Range
X	Value	0 ... 100, +, -, ?

#### Example

```
WP_PictureSha[50]
```

#### Feedback

```
WP_PictureSha[50]
```

### WP\_ProjSW

Sets the time interval, in seconds, before the front panel buttons are locked, after a power-off command is sent to the projector. Use the ? argument to display the current **WP\_ProjSW** value.

#### Syntax

```
WP_ProjSW[X]
```

Parameter	Description	Range
X	Time (in seconds)	0 ... 300

#### Example

```
WP_ProjSW[120]
```

#### Feedback

```
WP_ProjSW[120]
```

### WP\_Standby

Sets the time interval, in minutes, before the AT-HDVS-150-RX is placed in standby mode, following a loss of signal. The default is 0 minutes (standby off).

#### Syntax

```
WP_Standby[X]
```

Parameter	Description	Range
X	Time (in minutes)	0 ... 10

#### Example

```
WP_Standby[1]
```

#### Feedback

```
WP_Standby[1]
```

### WP\_SystemRst

Reset the AT-HDVS-150-RX to factory-default settings.

#### Syntax

```
WP_SystemRst[X]
```

Parameter	Description	Range
X	Value	Go

#### Example

```
WP_SystemRst[Go]
```

#### Feedback

```
WP_SystemRst[Go]
```

### WP\_VgaAuto

Executes a VGA auto-adjust, automatically adjusting the clock and phase. This command only applies to VGA input signals.

#### Syntax

```
WP_VgaAuto[X]
```

Parameter	Description	Range
X	Value	Go

#### Example

```
WP_VgaAuto[Go]
```

#### Feedback

```
WP_VgaAuto[Go]
```

## WP\_VgaClock

Sets the HDVS-RX analog-to-digital sampling clock polarity (rising edge or falling edge). Normal = sets the VGA clock to normal polarity; Inverse = inverts the clock signal, shifting it by 180°; ? = displays the current **WP\_VgaClock** setting. Inverting the clock may be used to “clean up” a noisy output image when using the VGA input.

### Syntax

```
WP_VgaClock[X]
```

Parameter	Description	Range
X	Value	Normal, Invert, ?

### Example

```
WP_VgaClock[Invert]
```

### Feedback

```
WP_VgaClock[Invert]
```

# Appendix

## Default Settings

The following tables list the factory-default settings for the AT-HDVS-150-RX.

Feature	Settings	
Input Select	HDMI	
Input Resolution	1280x800	
Output Res	720p60	
VGA Clock Polarity	Normal	
Picture Adjust	Brightness	64
	Contrast	64
	Saturation	64
	Hue	64
	Sharpness	32
Aspect	Full	
Overscan	Disabled	
Audio	Audio On / Off	On
	HDMI Audio	On
	L / R Audio	On
OSD	Position	Left Top
	Transparency	12
	Info Timer	10
	Menu Timer	20
	Info Display	Auto
	Background	Grey
Others	In Auto Switch	On
	Display HDCP	Compliant
	Mirror-V	Off
	ASP Background	Grey
	Display Mode	DispSW AVon
	Disp. Key Lock	0 sec.
	Auto Disp. On	On
	Auto Disp. Off	On
	ProjSW Mode	0 sec.
	Auto Off (sec)	Always On

## Specifications

Video	
HD/SD	1080p@23.98/24/25/29.97/30/50/59.94/60Hz, 1080i@50/59.94/60Hz, 720p@25/29/30/50/59.94/60Hz, 576p, 576i, 480p, 480i, 1920×1200RB, 1680×1050, 1600×1200, 1600×900, 1440×900, 1400×1050, 1366×768, 1280×1024, 1280×960, 1280×800, 1280×768, 1152×854, 1024×768, 800×600, 720×400, 640×480
VESA	1080p@23.98/24/25/29.97/30/50/59.94/60Hz, 1080i@50/59.94/60Hz, 720p@25/29/30/50/59.94/60Hz, 1920×1200, 1680×1050, 1680×1200, 1400×1050, 1366×768, 1280×1024, 1280×800, 1024×768
Color Space	YUV, RGB
Chroma Subsampling	4:4:4, 4:2:2
Color Depth	8-bit, 10-bit, 12-bit

Audio	
Analog	PCM 2Ch (de-embedded)
HDMI OUT & HDBaseT IN	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.)

Cable	Feet	Meters
CAT5e/6	200	60
CAT6a/7	230	70
HDMI IN / OUT	30	10

Signal	
Bandwidth	6.75 Gbps
CEC	No
HDCP	Compliant - 1.4

Temperature	Fahrenheit	Celsius
Operating	32 to 104	0 to 40
Storage	-4 to 140	-20 to 60
Humidity (RH)	20% to 90%, non-condensing	

Power	
Consumption	15 W (varies per paired transmitter)
Supply	Input: 100 - 240 V AC, 50/60 Hz Output: 48 V DC, 0.83 A

Dimensions	Inches	Millimeters
H x W x D	1.18 x 4.8 x 4.92	30 x 122 x 125

Weight	Pounds	Kilograms
Device	0.67	0.31

Certification	
Unit	CE, FCC
Power Supply	CE, FCC, cULus, RoHS, CCC, RCM

# Index

---

- A**
  - Aspect ratio**
    - setting 17, 27, 34
  - Audio**
    - analog 18
    - connector 10
    - enabling / disabling 18, 34
    - HDMI 18
  - Auto-adjust**
    - VGA signal 15, 27
  - Auto-switching** 20, 36
- B**
  - Background color**
    - setting 21
  - Brightness**
    - adjusting 16, 29, 42
- C**
  - Connection**
    - diagram 10, 11
    - instructions 10, 11
  - Contents**
    - package 8
  - Contrast**
    - adjusting 16, 29, 43
  - Control software**
    - installation 24
  - Customer support** 3
- D**
  - Default settings** 48
  - Description**
    - front / rear panel 9
  - Display mode**
    - setting 21
  - Display power-off**
    - enabling / disabling 21
  - Display power-on**
    - enabling / disabling 21
  - Down**
    - button 13
- F**
  - FCC statement** 6
  - Features** 8
- H**
  - HDCP** 21, 39
  - Hue**
    - adjusting 16, 29, 43
- I**
  - Information**
    - displaying 22
  - Info screen**
    - settings 19
  - Input**
    - selecting 14, 26, 40
  - Installation** 10, 11
- M**
  - Menu**
    - button 13
    - locking 21
    - main 13
- N**
  - Noisy image**
    - using VGA 47
- O**
  - Operating notes** 3
  - OSD**
    - background color 19
    - position 19
    - timer 19
    - transparency 19
  - Output**
    - vertically mirroring 21
  - Overscan**
    - enabling / disabling 17, 27, 41
    - horizontal 17, 42
    - vertical 17, 42
- P**
  - Panel descriptions** 9
  - Picture**
    - reset 16
  - Power**
    - connector 11
  - Projector lamp**
    - timer 22
- R**
  - Reset**
    - to factory-default 23, 28
  - Resolution**
    - input 14, 26, 40
    - output 15, 27, 41
- RS-232**
  - connector 10
- S**
  - Safety information** 6
  - Saturation**
    - adjusting 16, 29, 44
  - Sharpness**
    - adjusting 16, 29, 44
  - Source**
    - input 14, 26, 40
  - Specifications** 49
  - Standby mode**
    - setting 22
- T**
  - TMDS**
    - clock 23
    - sync 23
  - Transmitters**
    - supported 24
- U**
  - Up**
    - button 13
- W**
  - Warranty** 4

