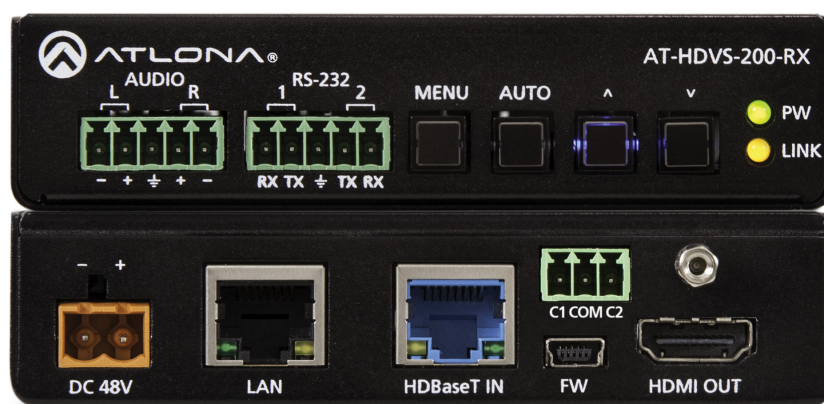


Ethernet-Enabled HDBaseT™ Scaler with HDMI and Analog Audio Outputs



Version Information

Version	Release Date	Notes
4	Jan 2024	Updated warranty information

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Operating Notes



IMPORTANT: Visit <http://www.atlona.com/product/AT-HDVS-200-RX> for the latest firmware updates and User Manual.

- Consumer Electronics Control (CEC): Atlona has confirmed proper CEC functionality with several current models of Samsung, Panasonic, and Sony displays. However, it is not guaranteed that CEC will work with all displays. Many manufacturers do not support the CEC “off” command, and older displays use proprietary commands. Atlona only supports displays that use the CEC command structure defined in HDMI 1.2a. It is recommended that dealers request an evaluation product from Atlona, before designing a system using the CEC protocol. If this is not possible, then other control methods will need to be considered, in order to control displays using Atlona products.

Warranty



To view the product warranty, use the following link or QR code:

<https://atlona.com/warranty/>.

Safety and Certification



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 Compliance

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-200-RX** is an HDBaseT receiver and HD scaler for video signals up to 1080p, plus embedded audio, control, and Ethernet over distances up to 330 feet (100 meters). The HDVS-200-RX is designed for use with the HDVS-200-TX switching transmitters, but can also be used with Atlona switchers, matrix switchers, and distribution amplifiers with HDBaseT outputs. The HDVS-200-TX and HDVS-200-RX together serve as a compact, automated AV system with the convenience of automatic input selection, display control, and HD scaling. The HDVS-200-RX remotely powers the HDVS-200-TX through Power over Ethernet (PoE).

The HDVS-200-RX offers advanced scaling capabilities including image adjustment capability, and a feature for automatically matching incoming signals to the display's native resolution. Integrated scaling and video processing help optimize image quality and switching performance. This receiver also features audio de-embedding, and third-party TCP/IP and RS-232 control of the scaler and display. Additionally, the HDVS-200-RX includes contact closure ports for controlling a motorized screen or display lift.

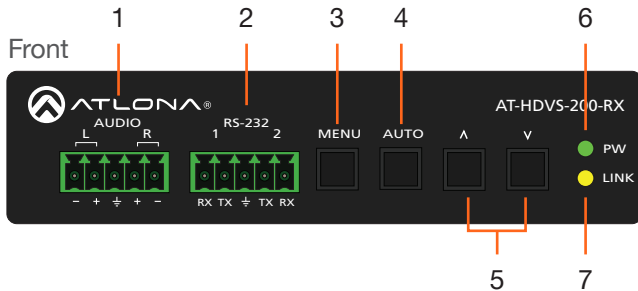
Features

- HD video scaler with HDMI® output and input resolution control
- Ideal for an HDVS-200-TX switching transmitter and Atlona HDBaseT-equipped switchers
- HDBaseT™ receiver for AV, Ethernet, power, and control up to 330 feet (100 meters)
- Automatic display control (when used with the HDVS-200-TX or compatible Atlona switcher)
- TCP/IP and RS-232 scaler and display control
- Contact closure for screen or display lift control
- Audio de-embedding
- Local AC powering – PoE (Power over Ethernet) source for HDVS-200-TX
- On-screen display with front panel menu controls

Package Contents

1 x AT-HDVS-200-RX
2 x Captive screw connectors, 5-pin
1 x Captive screw connectors, 3-pin
1 x Captive screw connectors, 2-pin
1 x Mounting brackets
1 x 48V DC power supply
1 x Installation Guide

Panel Description



1 AUDIO

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

2 RS-232

Use the included 5-pin captive screw connector to connect up to two RS-232 controllers or automation systems. Port 1 is used for controlling a display or other sink device. Port 2 is used for controlling the AT-HDVS-200-RX.

3 MENU

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

4 AUTO

Press this button to perform an auto-adjust on VGA signals, connected to the transmitter. This feature automatically corrects the clock and phase of the VGA source.

5 Cursor buttons

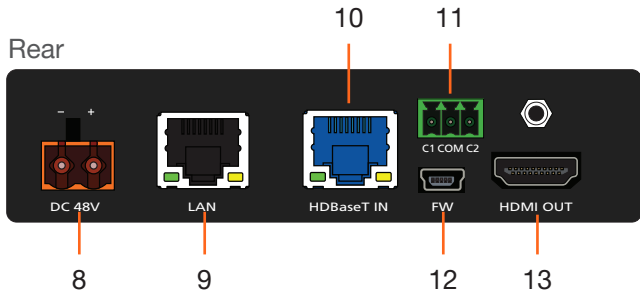
Press these buttons to select items within the OSD.

6 PW

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

7 LINK

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



8 DC 48V

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

9 LAN

Connect an Ethernet cable from this port to the network.

10 HDBaseT IN

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

11 RELAY

Connect the included 3-pin captive screw connector to this port to control screens, drapes, lights, or other devices.

12 FW

Connect a mini USB type-B cable to this port to update the firmware. Refer to [Updating the Firmware \(page 33\)](#) for more information.

13 HDMI OUT

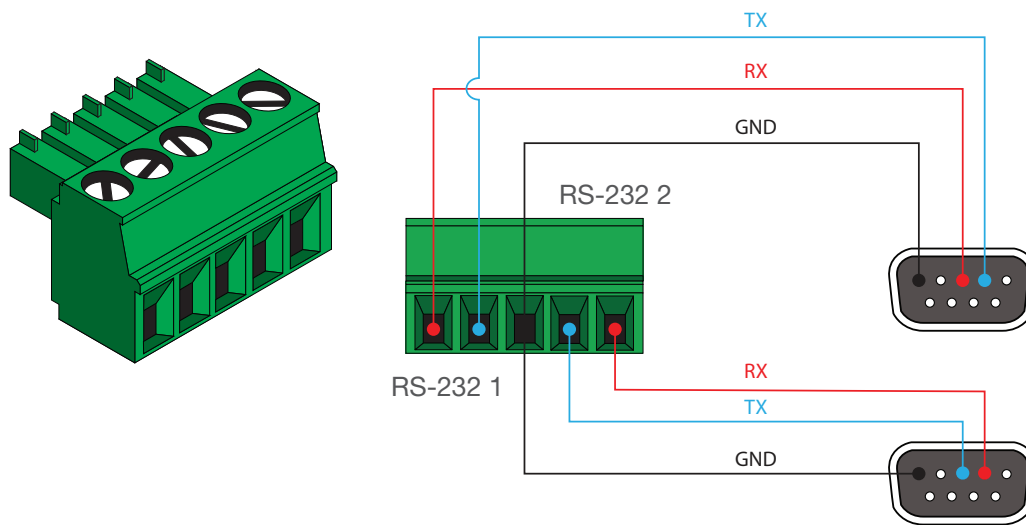
Connect an HDMI cable from this port to a display or other sink device.

Installation

RS-232 Connector

The AT-HDVS-200-RX provides two RS-232 ports. Port 1 is used for controlling a display or other sink device. Port 2 is used to control the AT-HDVS-200-RX. This step is optional.

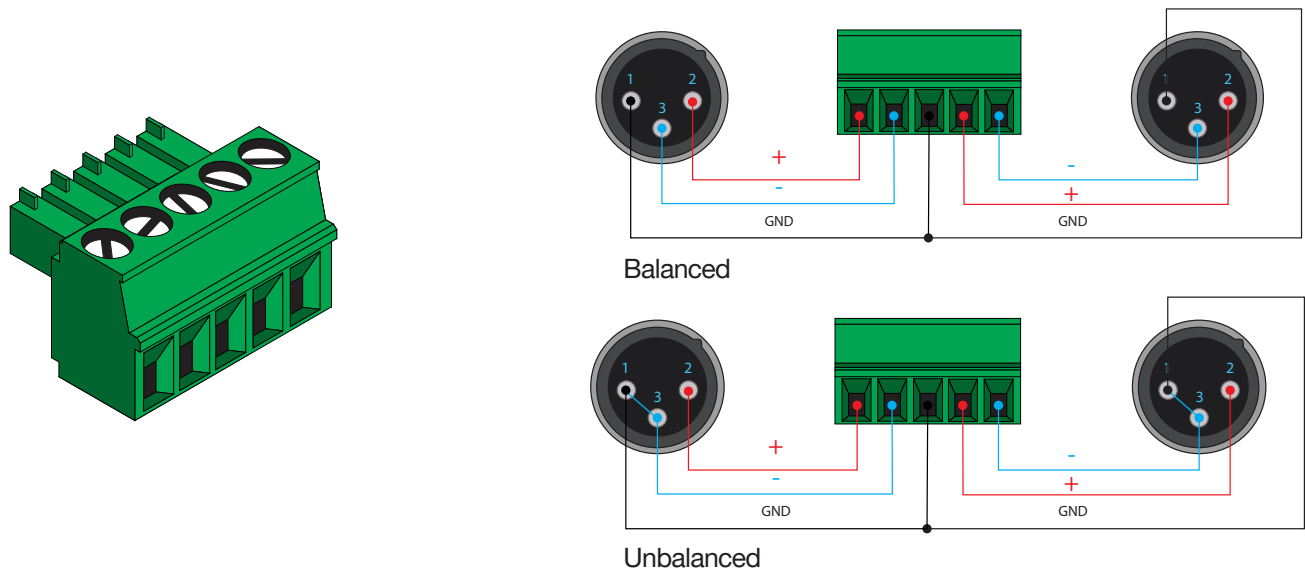
1. Use wire strippers to remove a portion of the cable jacket.
2. Remove at least 3/16" (5 mm) from the insulation of the RX, TX, and GND wires.
3. Insert the TX, RX, and GND wires into correct terminal on the included Phoenix block. If using non-tinned stranded wire, press the orange tab, above the terminal, while inserting the exposed wire. Repeat this step for the TX, RX, and GND connections. The illustration below, shows how to connect both RS-232 cables.



Audio Connector

The **AUDIO OUT** connector on the AT-HDVS-200-RX provides the connection of either balanced or unbalanced audio outputs using XLR connectors. Use the included 5-pin Phoenix terminal block.

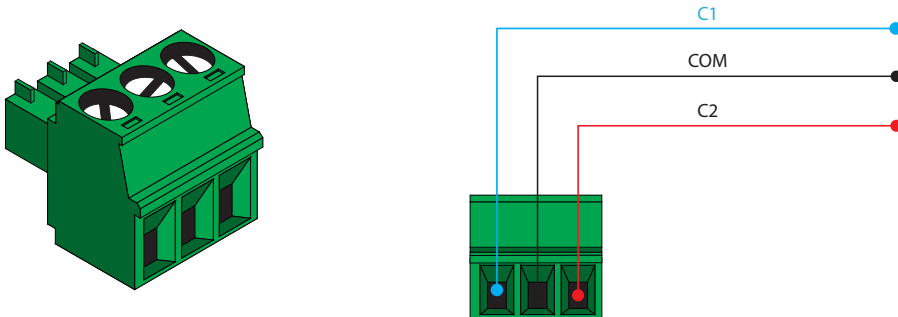
Balanced audio connections use two signal wires and a ground to minimize interference in audio signals. Unbalanced audio connections use one signal wire and a ground and are used if system components don't support balanced signals.



Relay Connector

The AT-HDVS-200-RX provides a **RELAY** port, allowing the control of screens, curtains, and other devices. Use a 48 V DC relay with no more than 1 A current draw.

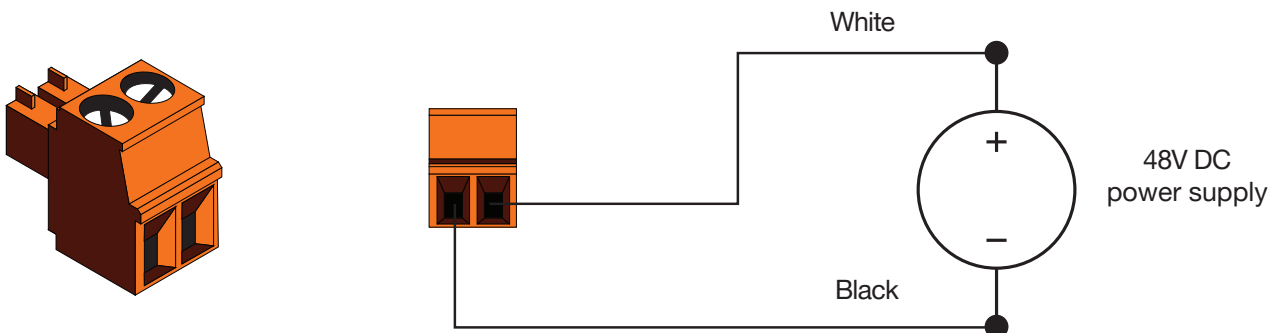
When the AT-HDVS-200-RX is powered-on or rebooted, **C1** and **C2** are set to the Normally Open (NO) state.



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.



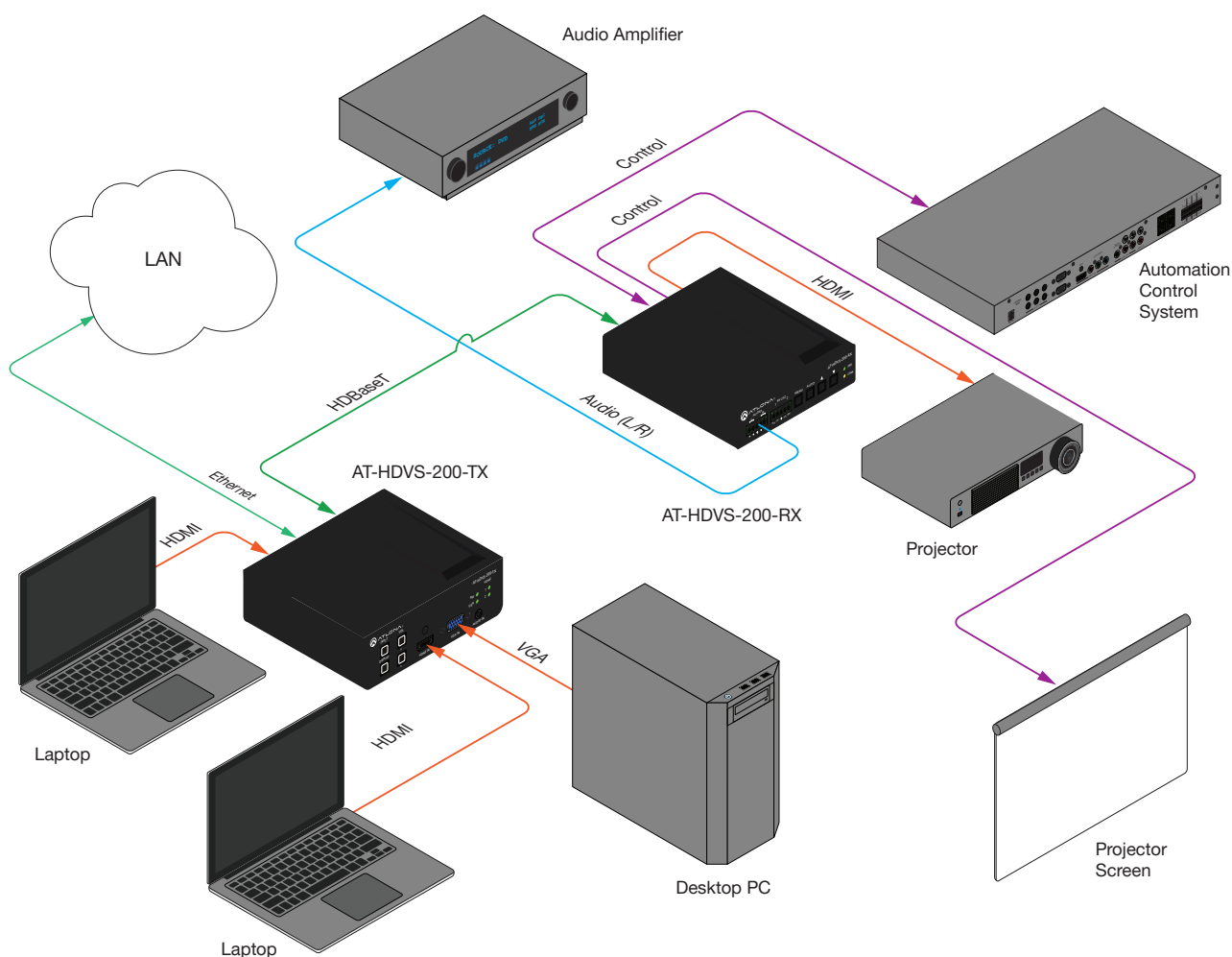
Connection Instructions

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 an Ethernet cable, up to 330 feet (100 meters), from the **LAN** port to the network.
4. Optionally connect the **RS-232 1** port to a display or other sink device. Connect the **RS-232 2** port to an automation control system.
5. Connect the included power supply to the **DC 48V** port.



IMPORTANT: The included 48 V DC power supply should always be connected to the AT-HDVS-150-RX, for proper operation.

Connection Diagram



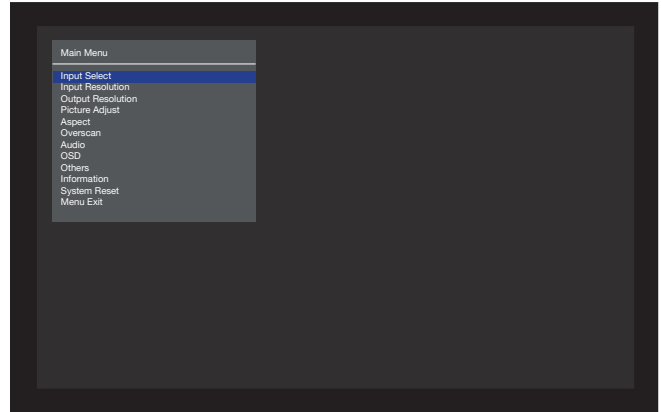
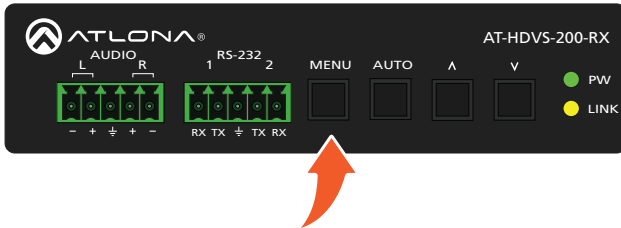
NOTE: The AT-HDVS-200-RX is designed to be used with the AT-HDVS-200-TX.

Menu System

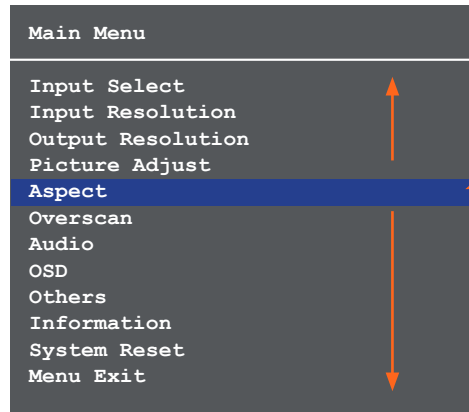
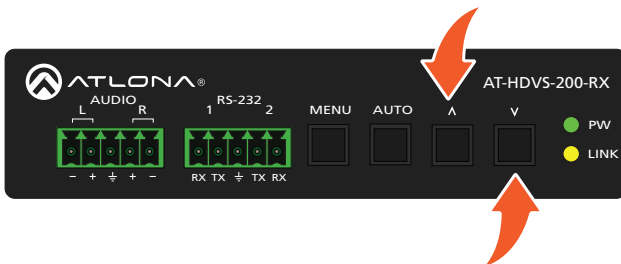
Accessing the On-Screen Display

The AT-HDVS-200-RX includes a built-in On-Screen Display (OSD) menu system to manage and control all video features.

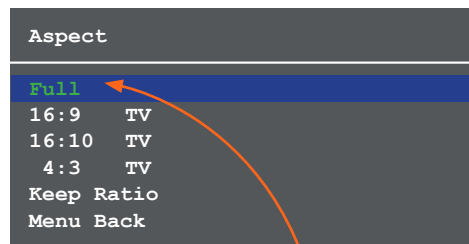
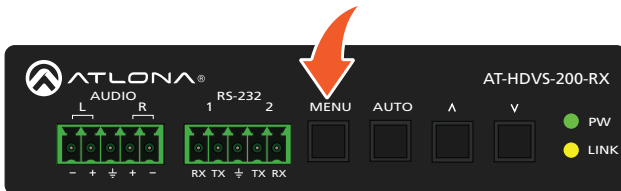
1. Press and release the **MENU** button to display the OSD.



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.



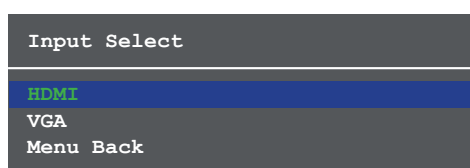
Within the menu item, the current setting will always be highlighted in green.

In this illustration, the **Aspect** menu item indicates that **Full** is the currently selected aspect ratio setting. Refer to [Aspect \(page 14\)](#) for more information.

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.

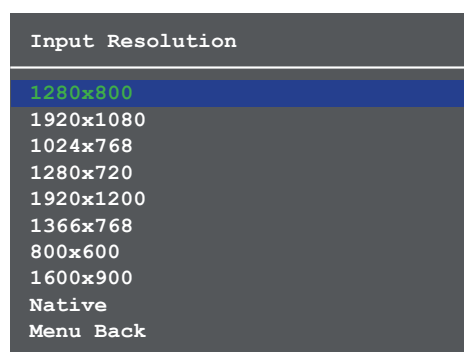
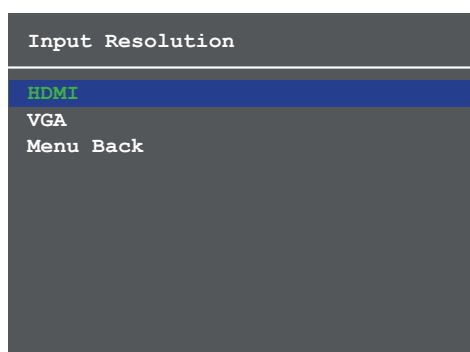


5. Press the **MENU** button to confirm the selection.
6. Press the **Menu Back** option to return to the **Main Menu**.

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 set to Native, and is the native resolution of the display. 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.

Output Resolution 1	
720p30	
720p50	
720p59.94	
720p60	
1080i50	
1080i59.94	
1080i60	
1080p23.98	
1080p24	
1080p25	
1080p29.97	
1080p30	

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**.

Picture Adjust

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

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 **Picture Adjust** menu will be displayed.
4. Press the **UP/DN** buttons to highlight the desired option.

Picture Adjust	
Brightness	64
Contrast	64
Saturation	64
Hue	64
Sharpness	32
Picture Reset	
Menu Back	

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.

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.

Aspect	
Full	
16:9	TV
16:10	TV
4:3	TV
Keep Ratio	
Menu Back	

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

Overscan	
Enable	◀[No]▶
H Size %	0
V Size %	0
Menu Back	

Overscan	
Enable	Yes
H Size %	0
V Size %	0
Menu Back	

- When overscan is *enabled*, the **H Size %** and **V Size %** fields can be adjusted. Press the **UP/DN** buttons to highlight the desired field.
- Press the **MENU** button to select the field.
- 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.
- Press the **MENU** button to confirm the change.
- 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.

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

Audio	
HDMI Audio	Enable
L/R Audio	Enable
Mute	Off
Volume	0dB
Treble	0
Bass	0
Menu Back	

Setting	Description
HDMI Audio	Controls the HDMI audio, only. Set to Disable to mute the HDMI audio.
L/R Audio	Toggles the analog audio output Enable or Disable. Set to Disable to mute the analog audio output.
Mute	Provides muting of both HDMI and analog audio outputs. Set this value to Disable to mute all audio.
Volume	Controls the output volume. This value can be set from -80 dB to 0dB.
Treble	Set the amount of treble applied to the output. Both HDMI and analog audio are affected. This value can be set from -12 to +15.
Treble	Set the amount of bass applied to the output. Both HDMI and analog audio are affected. This value can be set from -12 to +15.

- 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.
- Press the **UP/DN** buttons to select the desired value. Press the **UP** button to increase the value; press **DN** to decrease the 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**.

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. The **OSD** menu will be displayed.
3. 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
Menu Display	Auto
Background	Grey
Menu Back	

Setting	Description
Position	<p>Sets the position of the OSD on the display. The following options are available:</p> <ul style="list-style-type: none"> • Left Top • Right Top • Right Bottom • Left Bottom • Center
Transparency	<p>Adjusts the transparency setting of the OSD.</p> <ul style="list-style-type: none"> • Range: 5 to 100
Info. Timer	<p>The duration, in seconds, of how long the Info Display screen is displayed.</p> <ul style="list-style-type: none"> • Range: 5 to 100
Menu Timer	<p>The duration, in seconds, of how long the OSD remains on the screen, after no activity.</p> <ul style="list-style-type: none"> • Range: 5 to 100
Info. Display	<p>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 Info Display screen. The following options are available:</p> <ul style="list-style-type: none"> • Auto - Automatically displays the Info Display screen when a change is made to the input or output signal. The screen will automatically be hidden after approximately five seconds. • Off - Prevents the Info Display screen from being displayed. • On - The Info Display screen is always displayed.
Menu Display	<p>Controls the behavior of the main menu after the MENU button is pressed.</p> <ul style="list-style-type: none"> • Auto - After the MENU button is pressed, the Main Menu will be displayed for the length of time, specified in the Menu Timer field. • On - Overrides the Menu Timer value. To exit the Main Menu, the Menu Exit option must be selected, within the Main Menu.

Setting	Description
Background	Sets the background color of the OSD. The following options are available: <ul style="list-style-type: none"> • Grey • Cyan • Magenta • Yellow

4. Press the **MENU** button to confirm the selection.
5. The current value will be highlighted in green and surrounded by brackets and two arrowheads.
6. 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.
7. Press the **MENU** button to confirm the change.
8. 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. The **Others** menu will be displayed.
3. Press the **UP/DN** buttons to highlight the desired option.

Others
Display HDCP Compliant
In Auto Switch On
VGA Auto Adjust
Mirror-V Off
ASP Background Grey
Menu Back

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

Setting	Description
Display HDCP	Provides control over the transmission of HDCP content for the HDMI IN port on the transmitter (TX). The following options are available: <ul style="list-style-type: none"> • Compliant - Reports to the source that the AT-HDVS-200-RX is an HDCP-compliant sink device. • Noncompliant - Reports to the source that the AT-HDVS-200-RX is an HDCP-compliant sink device. • 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. <p>NOTE: 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 not provide decryption of HDCP content to non-HDCP sink devices</p>

Setting	Description
In Auto Switch	Enables or disables auto-switching. The following options are available: <ul style="list-style-type: none"> • On - Enables auto-switching. • Off - Disables auto-switching.
VGA Auto Adjust	Automatically tunes the phase and clock of the VGA signal.
Mirror-V	Vertically flips the output signal. The default setting is Off. The following options are available: <ul style="list-style-type: none"> • On - Vertically flips the output image. • Off - The output image is unaltered.
ASP Background	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: <ul style="list-style-type: none"> • Black • Grey

Information

The **Information** menu displays current information about the AT-HDVS-200-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 and release the **MENU** button to view the next two pages.
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 Ver	
MCU TX:v1.1.17	RX:v1.1.17
HDBT 1.30.92.1	1.31.31.5
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
Next Page	

Information	
IP Address	
TX: 192.168.1.117	
RX: 192.168.1.123	
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.
MCU TX / RX	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.
HDBT	Displays the version of HDBaseT on the transmitter and the receiver.
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.
TX	The IP address of the transmitter.
RX	The IP address of the receiver.

System Setup

The **System Reset** menu provides the ability to reset the AT-HDVS-200-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 Setup** menu will be displayed.

System Setup	
Factory Reset	No
MCU F/W Update	No
HDBT F/W Update	No
Menu Back	

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**.

Setting	Description
Factory Reset	Resets the AT-HDVS-200-RX to factory-default settings. The following options are available: <ul style="list-style-type: none"> • No - Cancels the factory-reset procedure. • Yes - Proceeds with the factory-reset procedure.
MCU F/W Update	This options allows the firmware to be updated. After selecting this item, use one of the following options: <ul style="list-style-type: none"> • No - Cancels the update procedure. • Yes - Proceeds with the update procedure.
HDBT F/W Update	This options allows the HDBaseT firmware to be updated. After selecting this item, use one of the following options: <ul style="list-style-type: none"> • No - Cancels the update procedure. • Yes - Proceeds with the update procedure.

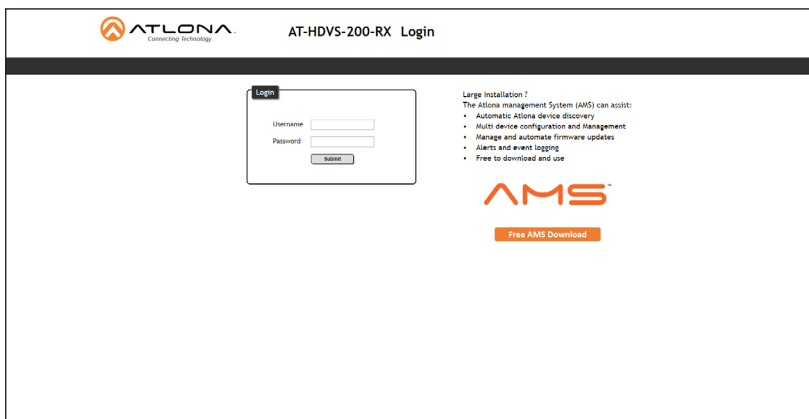
The Web GUI

Introduction to the Web GUI

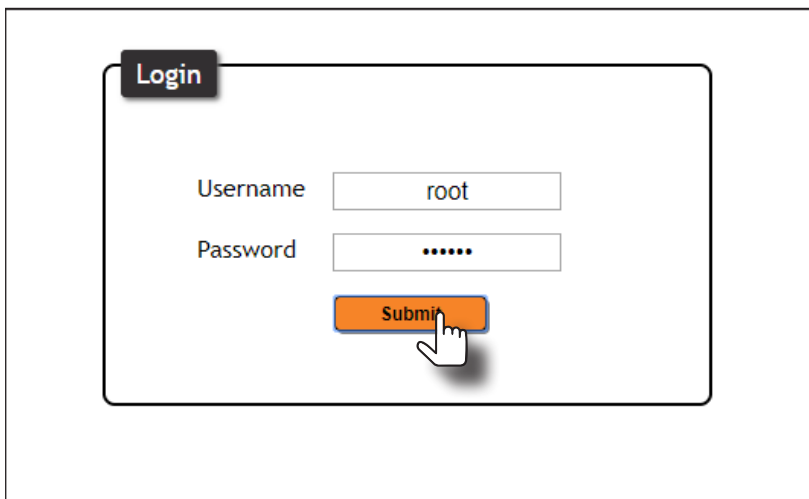
The AT-HDVS-200-RX includes a built-in web GUI. Atlona recommends that the web GUI be used to set up the AT-HDVS-200-RX, as it provides intuitive management of all features.

The AT-HDVS-200-RX is shipped with DHCP enabled. Once connected to a network, the DHCP server will automatically assign an IP address to the unit. Use an IP scanner to determine the IP address of the AT-HDVS-200-RX. If a DHCP server is not available or if a static IP address is desired, it can be assigned using the IPStatic command or through the [System page \(page 31\)](#) of the web GUI. The default static IP address of the AT-HDVS-200-RX is 192.168.1.254.

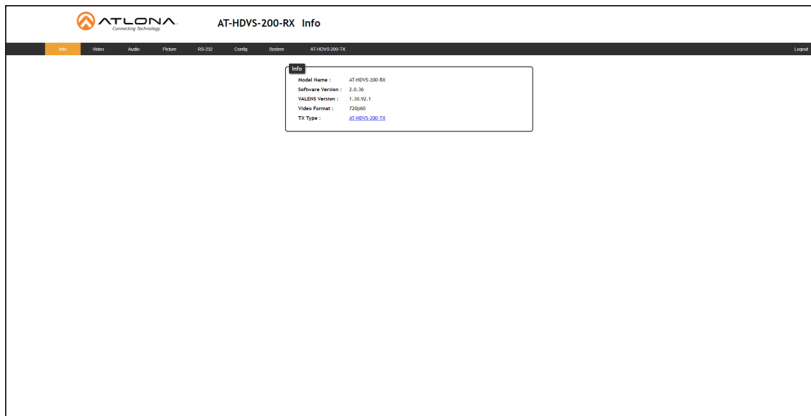
1. Launch a web browser.
2. In the address bar, type the IP address of the AT-HDVS-200-RX.
3. The **Login** page will be displayed.



4. Type root, using lower-case characters, in the **Username** field.
5. Type Atlona in the **Password** field. The password field is case-sensitive. When the password is entered, it will be masked. The password can be changed, if desired. Refer to the [Config page \(page 30\)](#) for more information.
6. Click the **Submit** button or press the ENTER key on the keyboard.

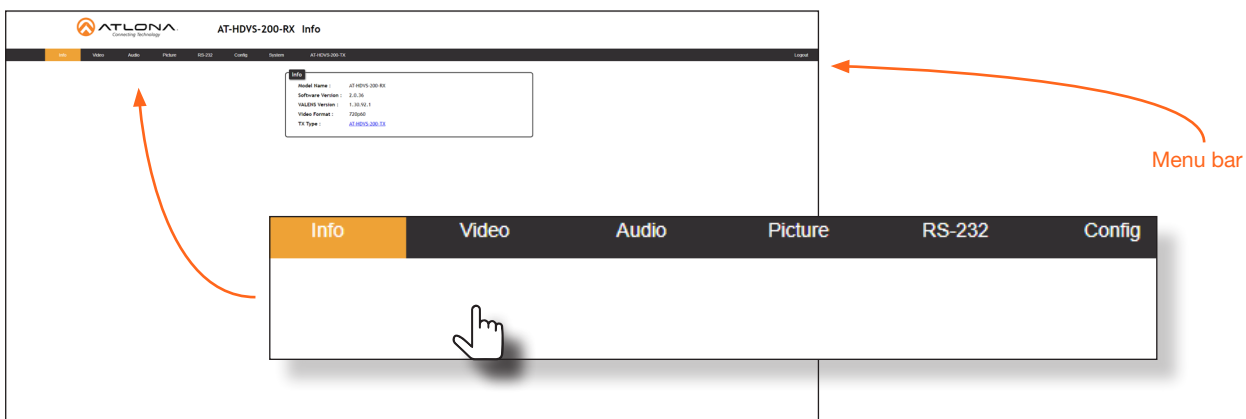


7. The **Info** page will be displayed.

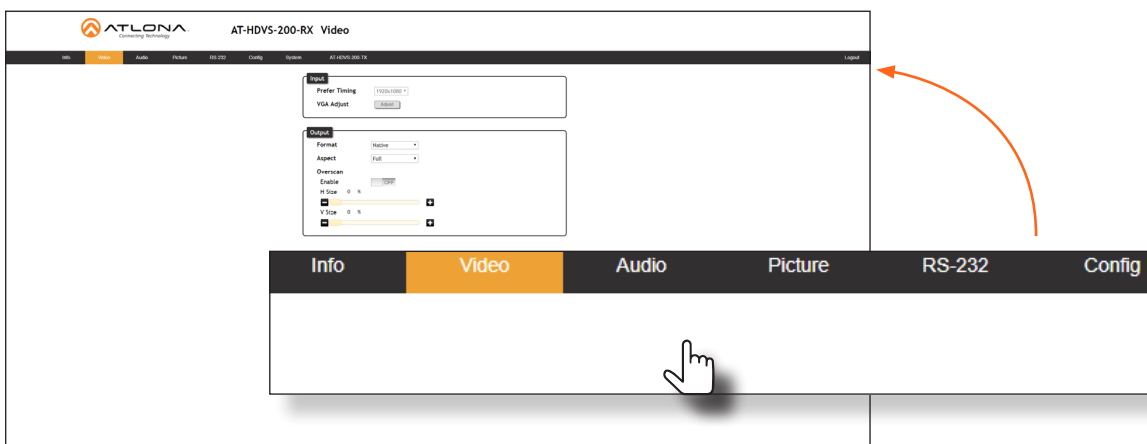


Menu Bar

The dark-colored bar, near the top of the screen, is the menu bar. When the mouse is moved over each menu element, it will be highlighted in light orange. Once the desired menu element is highlighted, click the left mouse button to access the settings within the menu.

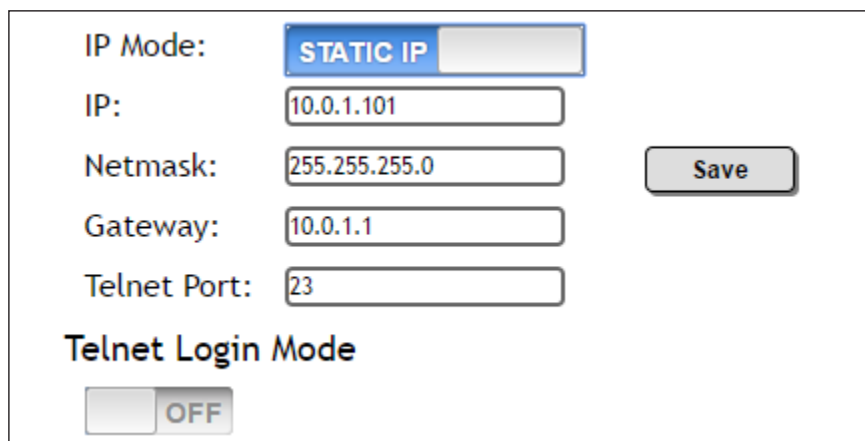


In this example, clicking **Video**, in the menu bar, will display the **Video** page.



Toggles

Several settings within the Web GUI use *toggles*, which enable, disable, or assign one of two settings. Generally, when the *toggle* is blue, it means that the feature is *enabled* or ON. If a feature is *disabled*, then the *toggle* will appear gray and be labeled as OFF. Toggle buttons may also indicate its current setting and, when enabled or set to a particular state, may also provide access to another set of controls or text fields within the Web GUI, as shown with the **IP Mode** toggle.



IP Mode: **STATIC IP**

IP: 10.0.1.101

Netmask: 255.255.255.0

Gateway: 10.0.1.1

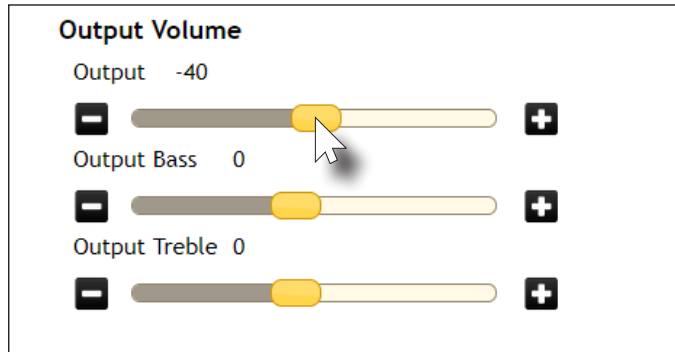
Telnet Port: 23

Telnet Login Mode

OFF

Sliders

Click and drag slider controls to change their value.



Output Volume

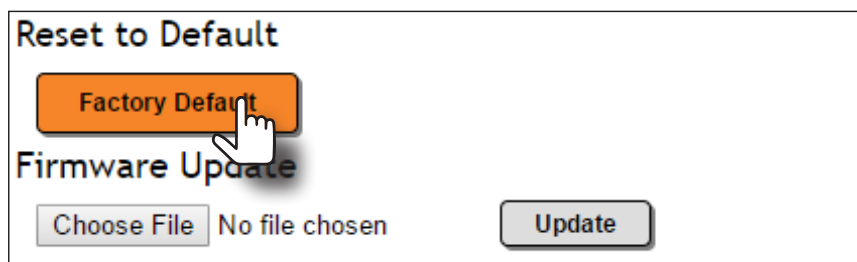
Output -40

Output Bass 0

Output Treble 0

Buttons

Buttons are used to execute an action or setting. Several pages within the Web GUI include a **Save** button. Clicking the **Save** button will apply and save all settings in the current page. Other buttons, such as the **Factory Defaults** button, under the System page, will reset the AT-HDVS-200-RX to factory-default settings.



Reset to Default

Factory Default

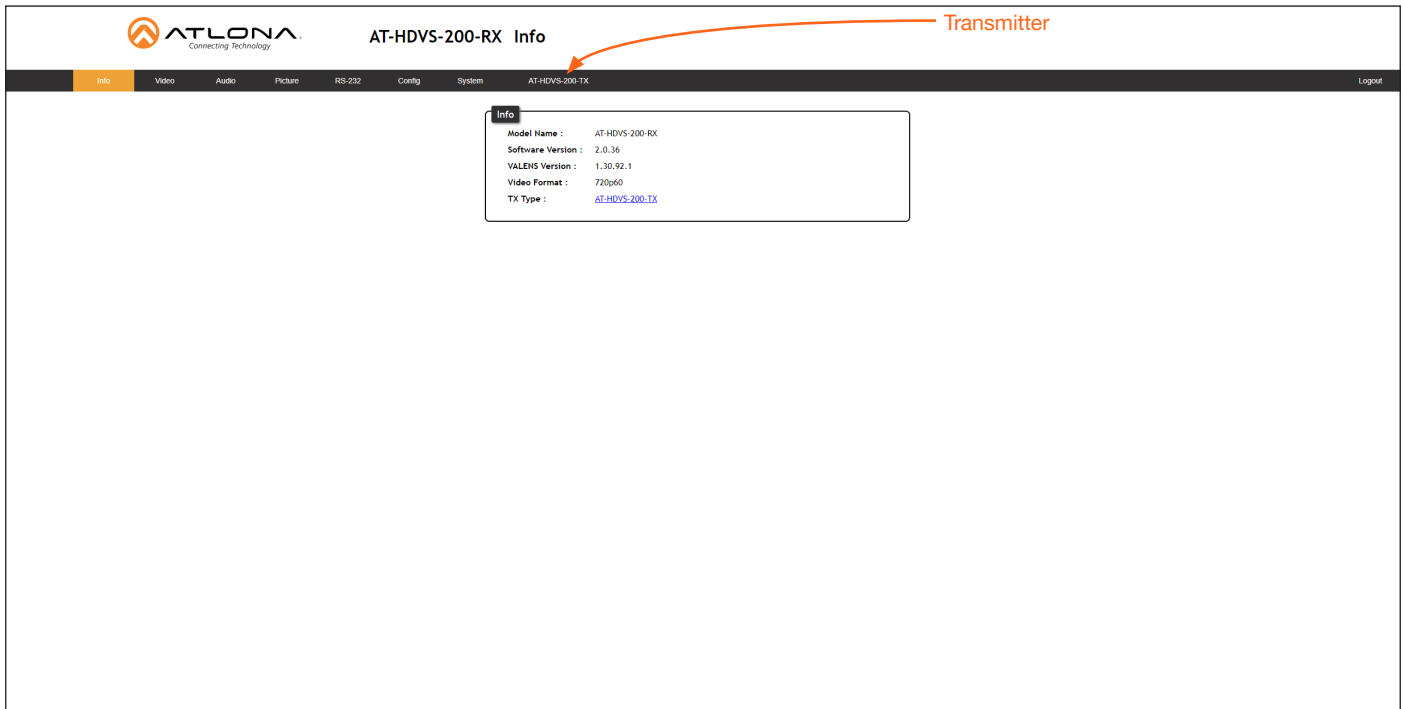
Firmware Update

Choose File No file chosen

Update

Info page

After logging in, the Info page will be displayed. The **Info** page provides basic information about the receiver, including the model name, software version, input video timing, and the device being using as the transmitter.



Model Name

The model SKU of this product.

Software Version

The version of firmware that the AT-HDVS-200-RX is running. Always make sure to check the AT-HDVS-200-RX product page, on the Atlona web site, for the latest version of firmware.

VALENS Version

The version of firmware used by the Valens chipset.

Video Format

Displays the input resolution of the source device.

TX Type

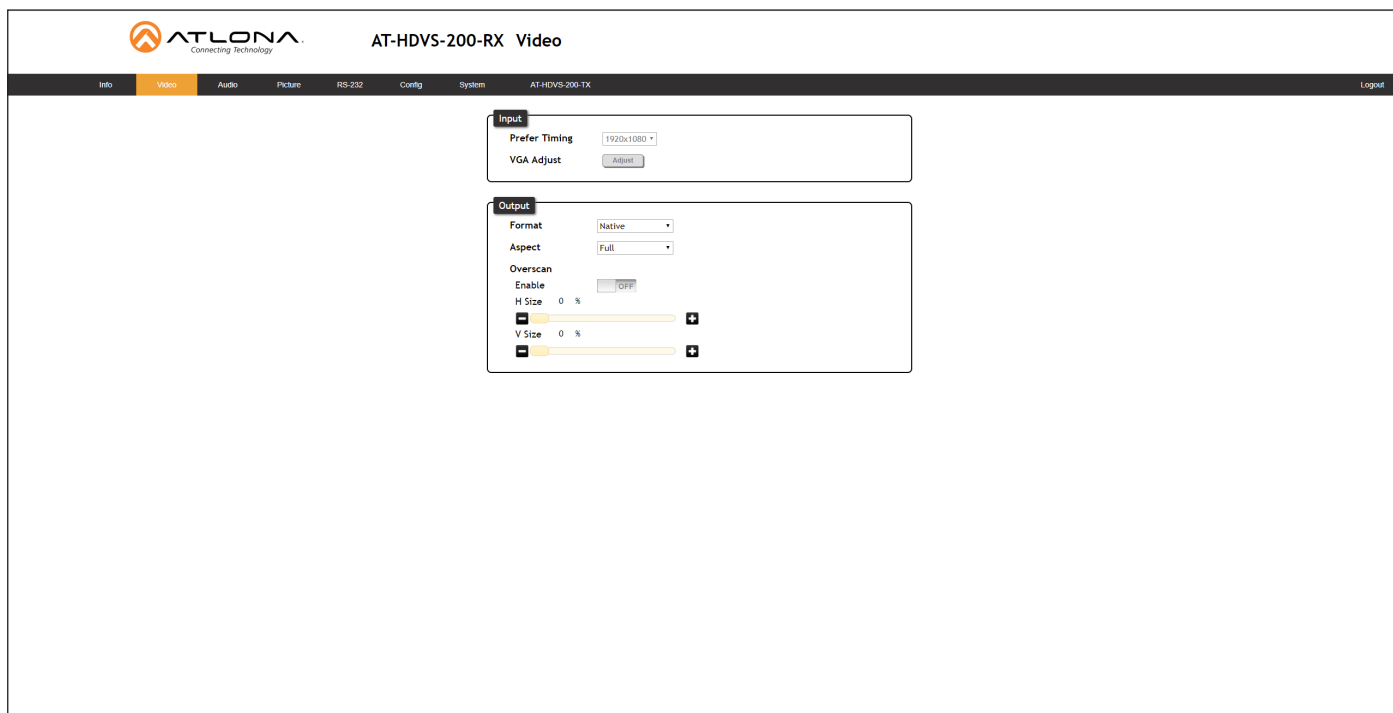
The version of the boot loader.

Transmitter

If the web GUI is accessed without a transmitter attached, this tab will be labeled as “GENERAL”. However, if another device is connected to the AT-HDVS-200-RX, such as the AT-HDVS-200-TX (using the **HDBaseT** port), this tab will change to the name of that device and act as a hyperlink to open that web GUI.

Video page

The **Video** page is divided into two sections: **Input** and **Output**. The **Input** section allows the preferred input timing to be selected as well as a button to perform an auto-adjust of the VGA signal at the transmitter. The **Output** section provides options to control the output resolution, aspect ratio, and overscan.



Input

Prefer Timing

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

Available Input Timings

800x600	1024x768	1280x720
1280x800	1366x768	1600x900
1920x1080	1920x1200	Native

VGA Adjust

In most situations, adjustment of the VGA signal should not necessary. However, if the VGA signal does not appear correctly, click the **Adjust** button to automatically correct the clock and phase.

Output

Format

Click this drop-down list to select the desired output timing. Native is the default setting.

Output Resolutions

800x600	1024x768	1280x800	1280x1024
1366x768	1400x1050	1600x900	1600x1200

Output Resolutions			
1680x1050	1920x1200	720p25	720p29.97
720p30	720p50	720p59.94	720p60
1080i50	1080i59.94	1080i60	1080p23.98
1080p24	1080p25	1080p29.97	1080p30
1080p50	1080p59.94	1080p60	Input
Native			

Aspect

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

Output Resolutions	
Full	The input signal is adjusted to fill the screen.
16:9	Sets the aspect ratio to 16:9; common aspect ratio for HD and widescreen formats; also notated as 1:77.1
16:10	Set the aspect ratio to 16:10; typical aspect ratio for computer and tablet displays.
4:3	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.
Letterbox Top	This is similar to the Letterbox format, except that the image begins at the top of the screen instead of the center.

Overscan

In most situations, adjusting overscan will not be necessary. To adjust the overscan, click the **Enable** toggle to the ON setting. Click and drag the *slider* controls to adjust the horizontal and vertical size. The **Enable** toggle must remain in the ON position, in order for the overscan to be applied. To disable overscan, click the **Enable** toggle to the OFF position.

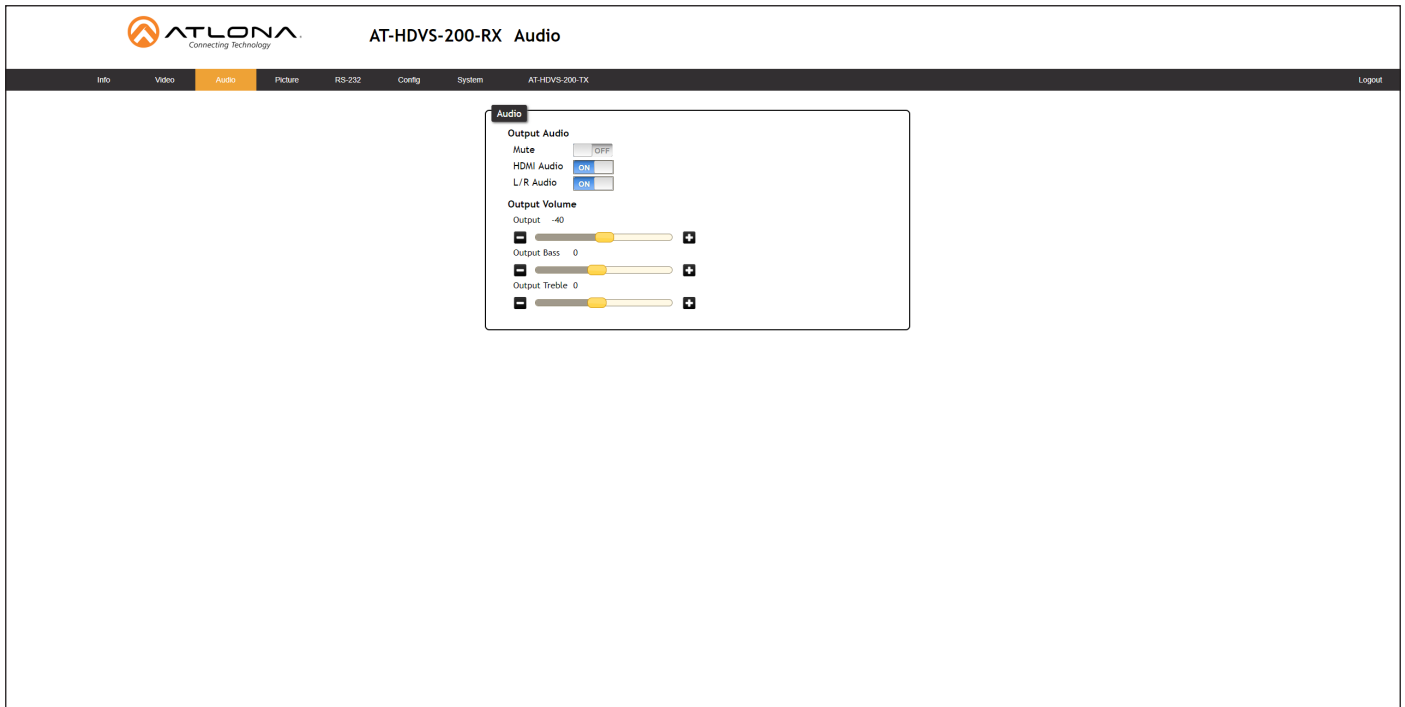
H Size

Adjust the horizontal scaling of the output image.

V Size

Adjust the vertical scaling of the output image.

Audio page



Mute

Click this toggle button to the ON setting to mute audio on both the HDMI and analog audio outputs.

HDMI Audio

Click this toggle button to the ON setting to mute *only* the HDMI audio on the output. Analog audio is preserved.

L/R Audio

Click this toggle button to the ON setting to mute *only* the analog audio on the output. HDMI audio is preserved.

Output Volume

Click and drag the Output slider control to adjust the output volume. Range: -80 to 0.

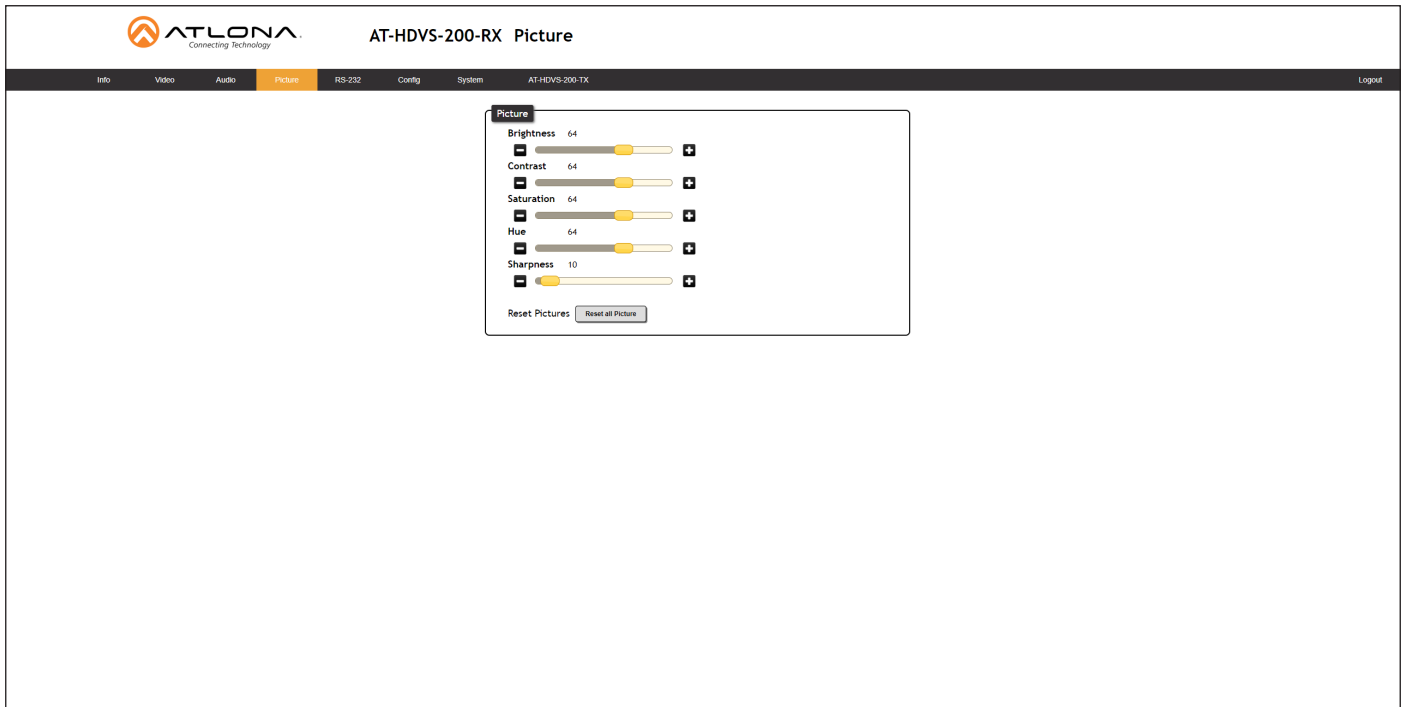
Output Bass

Click and drag the Output Bass slider control to adjust the amount of bass applied to the audio output. Range: -12 to 15.

Output Treble

Click and drag this slider control to adjust the amount of treble applied to the audio output. Range: -12 to 15.

Picture page

**Brightness**

Adjusts the brightness setting of the output signal. Range: 0 to 100

Contrast

Adjusts the contrast setting of the output signal. Contrast is the difference between the lightest and darkest area of an image. Range: 0 to 100

Saturation

Adjusts the color saturation of the output signal. Range: 0 to 100

Hue

Adjusts the hue of the output signal. Range: 0 to 100

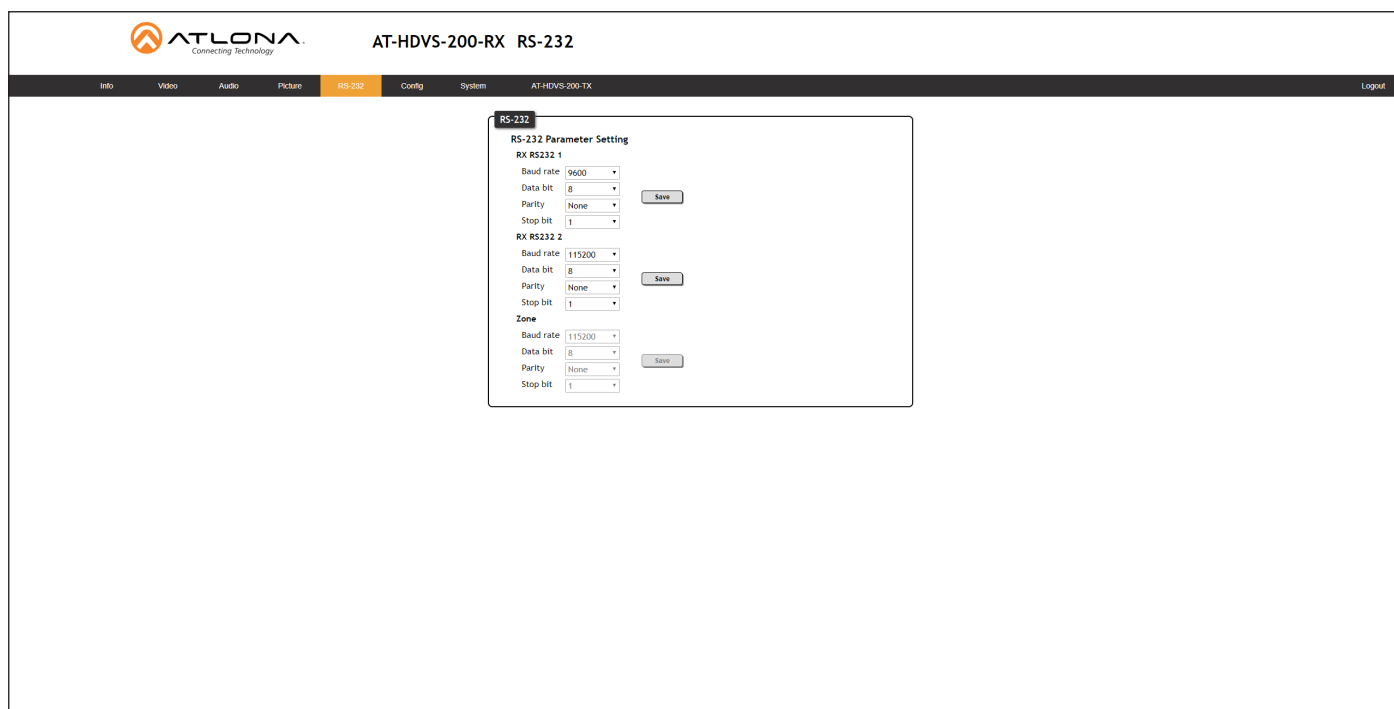
Sharpness

Adjusts the sharpness of the output signal. Range: 0 to 100

Reset Pictures

Click this button to reset the above picture settings to their factory-default settings.

RS-232 page



The screenshot shows the AT-HDVS-200-RX RS-232 web GUI. The page has a header with the ATLONA logo and navigation tabs: Info, Video, Audio, Picture, RS-232 (selected), Config, System, and AT-HDVS-200-TX. A Logout link is in the top right. The main content area displays the 'RS-232 Parameter Setting' window. This window is divided into three sections: 'RX RS232 1', 'RX RS232 2', and 'Zone'. Each section contains four dropdown menus: Baud rate, Data bit, Parity, and Stop bit, followed by a 'Save' button. The 'RX RS232 1' section has Baud rate set to 9600, Data bit to 8, Parity to None, and Stop bit to 1. The 'RX RS232 2' section has Baud rate set to 115200, Data bit to 8, Parity to None, and Stop bit to 1. The 'Zone' section has Baud rate set to 115200, Data bit to 8, Parity to None, and Stop bit to 1.

RX RS232 1 / 2

The AT-HDVS-200-RX provides two RS-232 ports. Each port can be configured separately using the appropriate drop-down list. The available values/settings for each drop-down list are the same for both ports. Click the **Save** button, next to each set of drop-down lists, to save the settings.

Setting	Description
Baud rate	Sets the baud rate. The following options are available: 2400, 9600, 19200, 38400, 56000, 57600, 115200.
Data bit	Sets the number of data bits used to represent each character of data. The following options are available: 7 or 8.
Parity	Sets the parity bit, which can be included with each character to detect errors during the transmission of data. The following options are available: None, Odd, or Even.
Stop bit	Sets the stop bit. Stop bits are sent at the end of each character, allowing the client to detect the end of a character stream. The following options are available: 1 or 2.

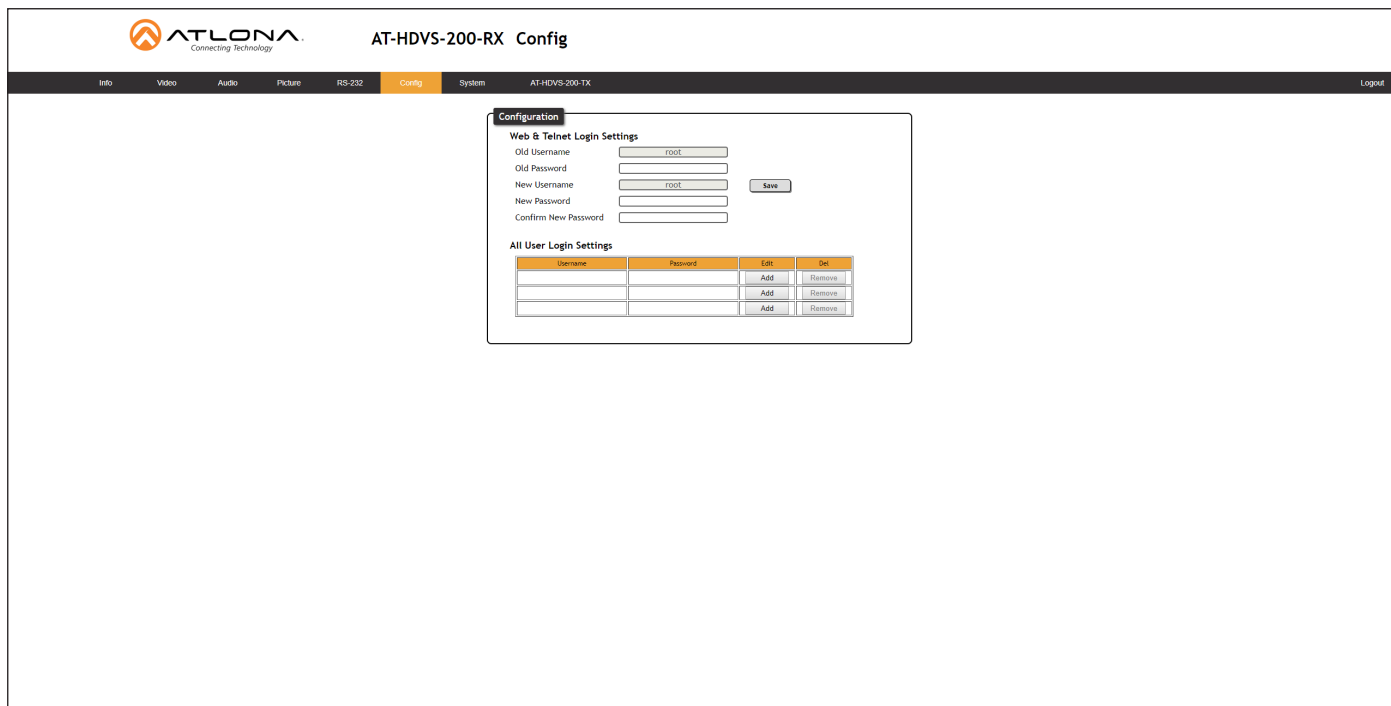
Zone

When the AT-HDVS-200-RX is connected to the AT-HDVS-200-TX, they are placed in “kit mode”. In this mode, these drop-down list boxes will be disabled and the HDBaseT baud rate will be locked at 115200.

If the AT-HDVS-200-RX is connected to another HDBaseT device, such as the AT-UHD-CLSO-824, each of these drop-down list boxes can be set to the baud rate of the HDBaseT port on the corresponding device.

The available settings for each drop-down list can be found in the table, above. Click the **Save** button, next to the **Zone** settings, to save the settings.

Config page



The screenshot shows the AT-HDVS-200-RX Config page. The configuration window is titled 'Configuration' and contains two main sections:

- Web & Telnet Login Settings:** This section includes four input fields: 'Old Username' (pre-filled with 'root'), 'Old Password', 'New Username' (pre-filled with 'root'), and 'New Password'. A 'Save' button is located to the right of the 'New Password' field.
- All User Login Settings:** This section contains a table with columns for 'Username', 'Password', 'Edit', and 'Del'. The table has three rows, each with an 'Add' button in the 'Edit' column and a 'Remove' button in the 'Del' column.

Old Username

This field cannot be changed. “root” is the administrator user.

Old Password

Enter the current password for the “root” username in this field. The default password is “Atlona”.

New Username

This field cannot be changed.

Save

Click this button to save all changes.

New Password

Enter the new password for the “root” username in this field.

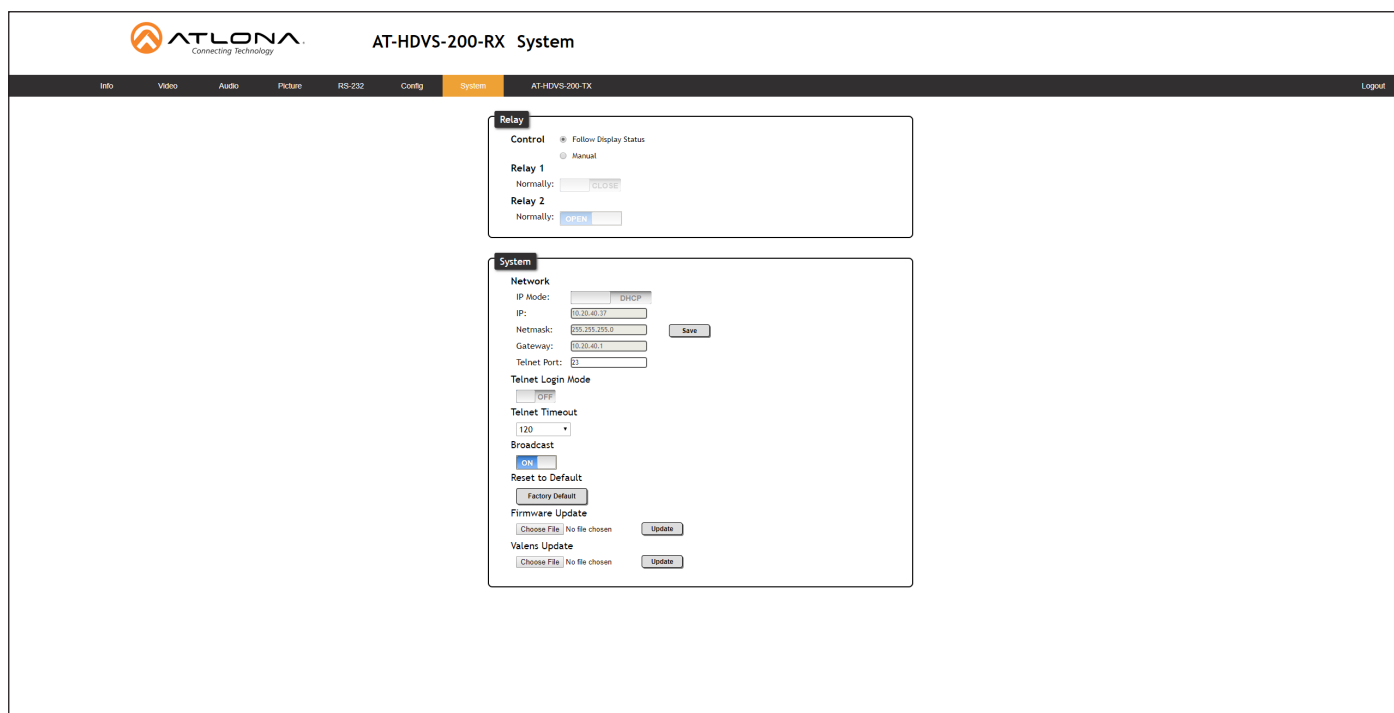
Confirm New Password

Verify the new password by retyping it in this field.

All User Login Settings

- **Username**
Displays the username.
- **Password**
Displays the password for the associated username.
- **Edit**
Click the **Add** button, in this column, to edit the username and password in the row.
- **Del**
Click the **Remove** button to delete the user in the row. This button will only be available if a username and password have been created.

System page



Relay

Control

Click this radio button to select the behavior of the relays. Each relay has two states: normally open (NO) and normally closed (NC).

- **Follow Display Status**

The relays will toggle, based on the state of the HDVS-200-TX. For example, when the system is powered on, the relay will turn the display. If the system is powered off, then the display will be powered off.

- **Manual**

Relays can be triggered manually using the web GUI or using the RelayAct and RelayAuto commands.

Relay 1

Click this toggle button to set Relay 1 to OPEN (NO) or CLOSE (NC).

Relay 2

Click this toggle button to set Relay 2 to OPEN (NO) or CLOSE (NC).

System

IP Mode

Click this toggle to set the IP mode of the AT-HDVS-200-RX. By default, the AT-HDVS-200-RX is set to DHCP mode.

IP

Enter the IP address of the AT-HDVS-200-RX in this field. This field will only be available if **IP Mode** is set to STATIC IP.

Netmask

Enter the subnet mask in this field. This field will only be available if **IP Mode** is set to STATIC IP.

Gateway

Enter the gateway (router) address in this field. This field will only be available if **IP Mode** is set to STATIC IP.

Telnet Port

Enter the Telnet port in this field.

Telnet Login Mode

Click this toggle to set the login mode to ON or OFF. If this feature is set to on, then the AT-HDVS-200-RX will prompt for both the username and password. Use the same credentials as the web GUI.

Telnet Timeout

Click this drop-down list to select the timeout interval, in seconds, before the Telnet connection is automatically closed after no activity.

Broadcast

By default, broadcast mode is set to off. When set to ON, changes in the web GUI will also be affected on the control system (if connected), via TCP/IP. To separate control between web GUI and Telnet, set this feature OFF.

Reset to Default

Click the **Factory Default** button to set the AT-HDVS-200-RX to factory-default settings.

Firmware Update

Click the **Choose File** button to select the firmware file, when upgrading the firmware on the AT-HDVS-200-RX. Once the firmware file is selected, click the **Update** button. Refer to [Updating the Firmware \(page 33\)](#) for more information.

Valens Update

Click the **Choose File** button to select the Valens firmware file, when upgrading the Valens chip on the AT-HDVS-200-RX. Once the firmware file is selected, click the **Update** button.

Appendix

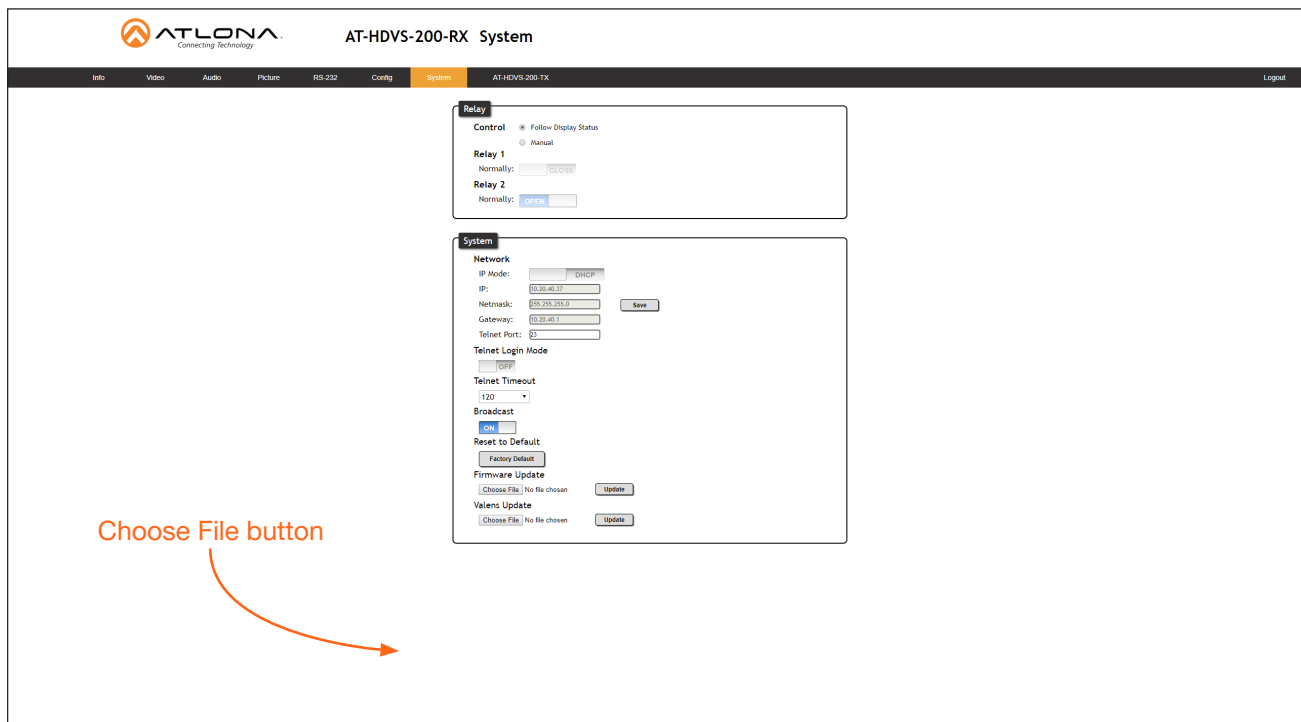
Updating the Firmware

Updating the firmware can be completed using either the USB interface or the web GUI. Atlona recommends using the web GUI for updating the firmware. However, if a network connection is not available, the AT-HDVS-200-RX firmware can be updated using a USB-A to USB mini-B cable

Using the Web GUI

Requirements

- AT-HDVS-200-RX
 - Firmware file
 - Computer
1. Connect an Ethernet cable from the computer, containing the firmware, to the same network where the AT-HDVS-200-RX is connected.
 2. Go to the **System** page (page 31) in the web GUI.



Choose File button

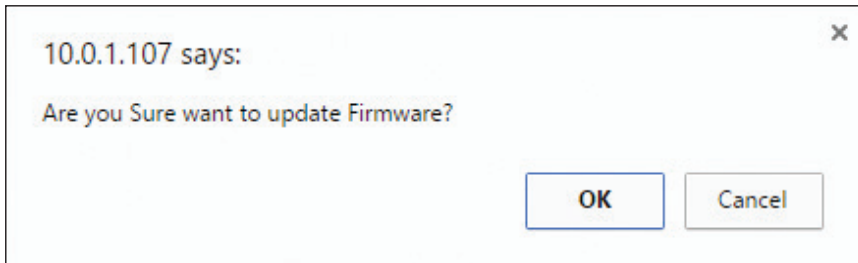
3. Click the **Choose File** button, under the **Firmware Update** section.



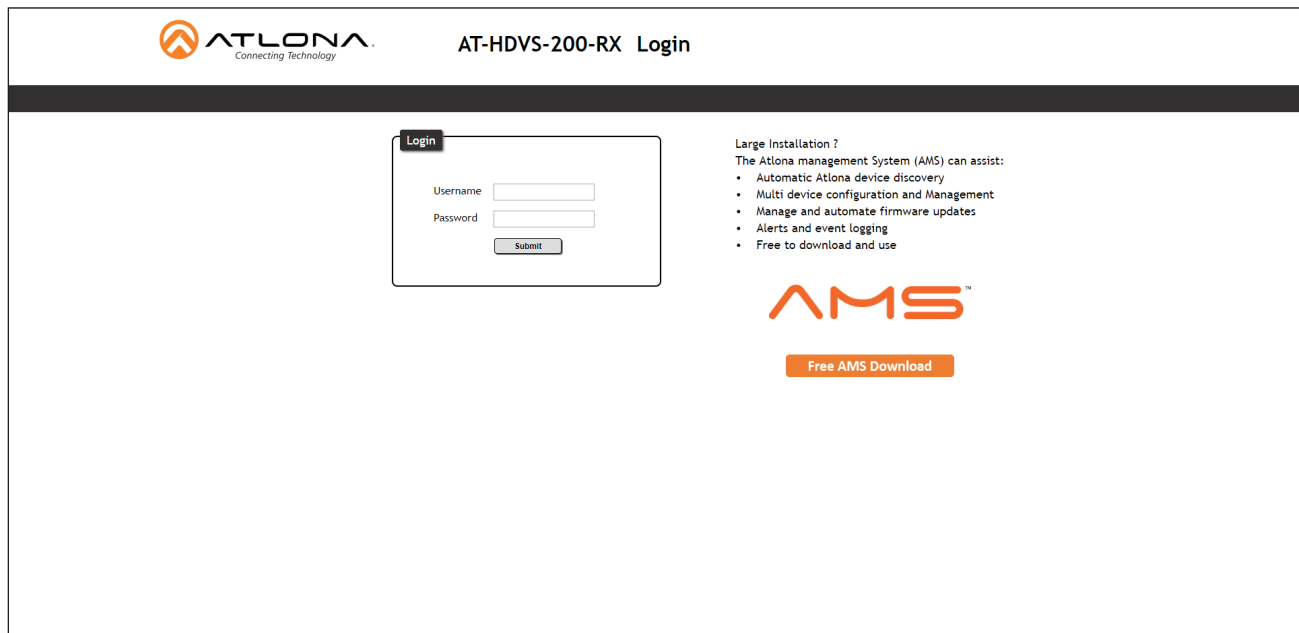
IMPORTANT: When updating the firmware, make sure to select the **Choose File** button under **Firmware Update**. The **Valens Update** section does not apply to this procedure.

4. Browse to the location of the firmware file, select it, and click the **Open** button.
5. Click the **Update** button, under the **Firmware Update** section.

6. The following message box will be displayed.



7. Click the **OK** button to begin the firmware update process. Click the **Cancel** button to cancel the process.
8. After the firmware update process is complete, the **Login** screen will be displayed.



Using USB

Requirements

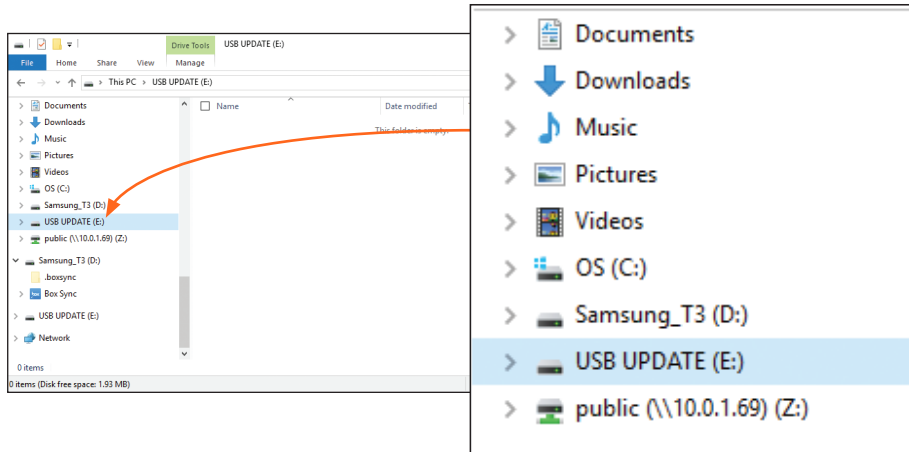
- AT-HDVS-200-RX
- Firmware file
- Computer
- USB-A to USB mini-B cable

1. Disconnect power from the AT-HDVS-200-RX.
2. Connect the USB-A to USB mini-B cable from the computer to the **FW** port on the AT-HDVS-200-RX.



3. Press and hold the **MENU** key, on the front panel, while connecting power to the AT-HDVS-200-RX.
4. The USB UPDATE folder will be displayed.

If this folder is not displayed, automatically, select the USB UPDATE drive from Windows Explorer.



7. Delete all files from the USB UPDATE drive, if any are present.
8. Drag-and-drop the firmware file to the drive.
9. After the file has been copied, disconnect the USB cable from both the computer and the AT-HDVS-200-RX.
10. Power-cycle the AT-HDVS-200-RX by disconnecting then reconnecting the power supply.
11. The firmware update process is complete.

Default Settings

The following tables list the factory-default settings for the AT-HDVS-200-RX.

Feature	Settings	
Resolution	Preferred Input Timing	1920x1080
	Output Format	Native
Aspect ratio	Full	
Overscan	Disabled	
Audio	Mute	Off
	HDMI Audio	On
	L/R Audio	On
	Bass	0
	Treble	0
Picture	Brightness	64
	Contrast	64
	Saturation	64
	Hue	64
	Sharpness	10
RS-232 port 1	Baud Rate	9600
	Data Bits	8
	Parity	None
	Stop Bits	1
RS-232 port 2	Baud Rate	115200
	Data Bits	8
	Parity	None
	Stop Bits	1
Zone	Baud Rate	115200
	Data Bits	8
	Parity	None
	Stop Bits	1
Login	Username (default)	root
	Password (default)	Atlona
Relay	Control	Follow Display Status
	Relay 1	Normally Closed (NC)
	Relay 2	Normally Open (NO)
Other	Display HDCP	Compliant
	In Auto Switch	On
	Mirror-V	Off
	ASP Background	Grey

Feature	Settings	
OSD	Position	Left Top
	Transparency	12
	Info Timer	10 (seconds)
	Menu Timer	20 (seconds)
	Info Display	Auto
	Menu Display	Auto
	Background	Grey
System	IP Mode	DHCP
	Static IP Address (default)	192.168.1.254
	Netmask	255.255.255.0
	Gateway	192.168.1.1
	Telnet Port	23
	Telnet Login Mode	Off
	Telnet Timeout	120 (seconds)
	Broadcast	On

Specifications

Video	
Video	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	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	PCM 2Ch (de-embedded)
HDMI OUT & HDBaseT IN	PCM 2Ch, LPCM 5.1, LPCM 7.1, Dolby® Digital, DTS® 5.1, Dolby Digital Plus, Dolby TrueHD, DTS-HD Master Audio™
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 @ 1080p	330	100
HDMI IN / OUT @ 1080p	30	10

Signal	
Bandwidth	6.75 Gbps
CEC	Yes
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	12 W 30 W (when paired)
Supply	Input: 100 - 240 V AC, 50/60 Hz Output: 48 V DC, 0.83 A

Dimensions	Inches	Millimeters
H x W x D	1.5 x 5 x 4.02	38 x 127 x 102

Weight	Pounds	Kilograms
Device	1.00	0.45

Certification	
Unit	CE, FCC

Warranty	
Unit	To view the product warranty, use the following link: https://atlona.com/warranty

