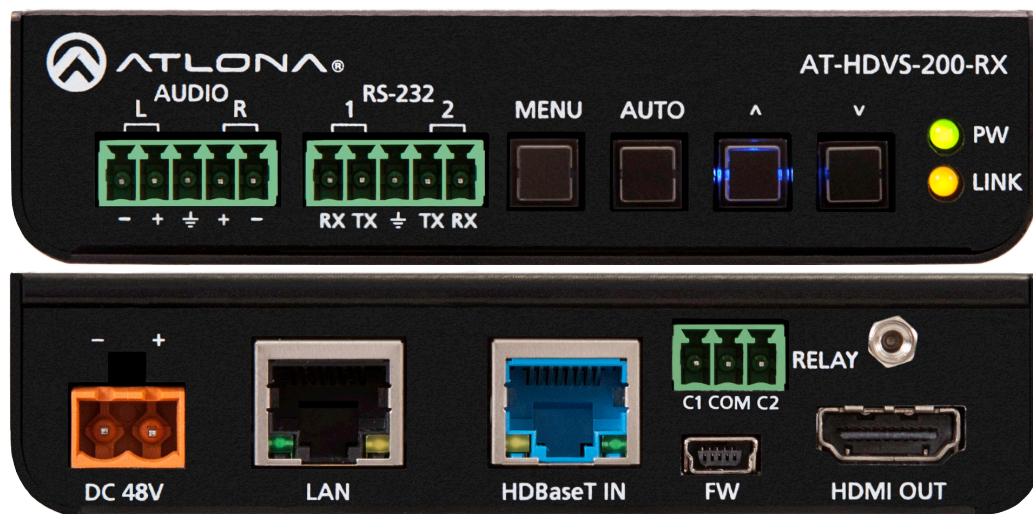


Ethernet-enabled HDBaseT Scaler with HDMI and Analog Audio Outputs

AT-HDVS-200-RX Installation Guide



Please check <http://www.atlona.com/product/AT-HDVS-200-RX> for the most recent **firmware update** or **manual**.

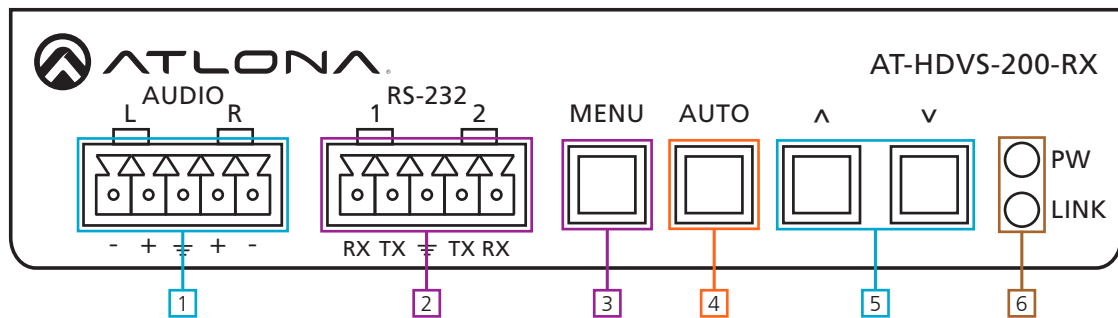
The AT-HDVS-200-RX is an HDBaseT scaler with HDMI and analog audio outputs. It features an HDMI output with balanced analog audio de-embedding and display control using CEC, IP, or RS-232. The AT-HDVS-200-RX combines the benefits of an extended-distance HDBaseT receiver with built-in scaling and the capabilities of a control processor for simplified A/V system installation and operation. When used with the AT-HDVS-200-TX switcher, it receives HDMI signals with embedded audio and control signals at distances up to 328 feet (100 meters). The switcher/scaler pair enables automatic display control, automatic input selection, volume adjustment, or optional third-party control. The AT-HDVS-200-RX supplies power to the AT-HDVS-200-TX switcher via Power over Ethernet and together they create a standalone A/V switching and control system with scaling for classrooms and huddle rooms.

Package Contents

- 1 x AT-HDVS-200-RX
- 4 x Captive screw female connector (5 pin: audio, 5 pin: RS-232, 3 pin: relay, 2 pin: power)
- 1 x 48V DC captive screw power adapter
- 1 x pair of mounting brackets
- 1 x Installation Guide

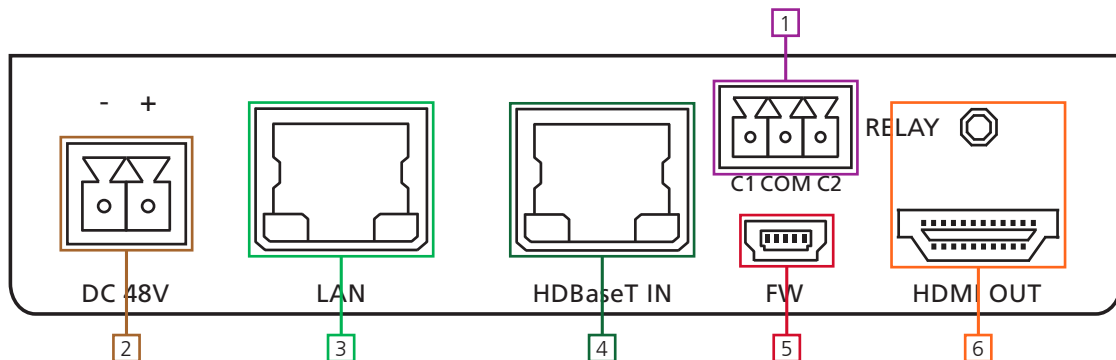
Panel Description

Front Panel



1. **AUDIO** output: Connect to an amplifier (e.g. AT-PA100-G2)
2. **RS-232** dual port: Connect to a display (port 1) and a control system (port 2)
3. **MENU** button: Use to enter, exit, and select within the on-screen display menu
4. **AUTO** button: When using compatible transmitters (e.g. AT-HDVS-200-TX) will auto adjust VGA signals
5. **^** and **v** buttons: Use to navigate the OSD menu
6. **PW** LED: Will illuminate when receiving power
LINK LED: Illuminates when the HDBaseT connection is functioning properly

Back Panel

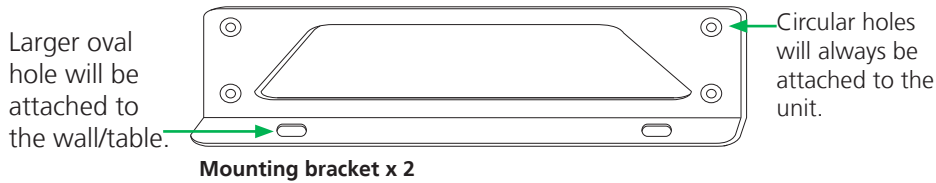


1. **RELAY** dual signal port: Creates a closed/open circuit for device control
2. **DC 48V** port: Connect included 48V DC adapter here to power RX and compatible transmitters
3. **LAN** (black) port: Connect network switch or router to this port for Ethernet, TCP/IP, or webGUI control
4. **HDBaseT OUT** (blue) port: Connect to an HDBaseT PoE transmitter
 e.g. AT-HDVS-200-TX, AT-UHD-SW-52ED, or UHD-CLSO series switchers (e.g. AT-UHD-CLSO-824)
Note: Switchers with internal scalars are not recommended for use with HDVS-200-RX, as it may cause artifacts due to double scaling of the signal (e.g. AT-UHD-CLSO-601)
5. **FW** port: Firmware update port, connect a mini USB to USB A cable to a computer
Note: Firmware is downloadable through <http://www.atlona.com/products/AT-HDVS-200-RX/>
6. **HDMI OUT** port: Connect to a display

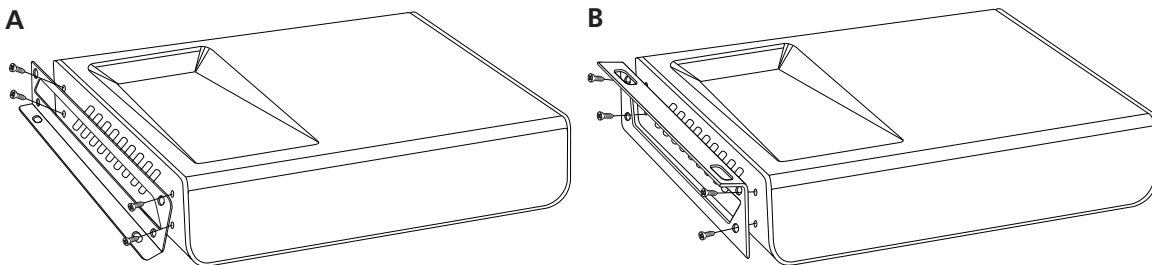
Note: To ensure compatibility, please be certain both transmitter and receiver have blue HDBaseT ports. This ensures both products are PoE (48V) compliant. The HDVS-200-TX is not compatible with PoCC (black RJ45, 24V) devices

Mounting

The HDVS-200-RX comes with mounting brackets that can be used to affix the unit to a table, desk, etc.



To affix the mounting brackets to the unit, use the four included screws. The bracket can be affixed with the oval holes pointing to the bottom (for against the wall - picture A) or the oval holes facing the top (for under tables - picture B).

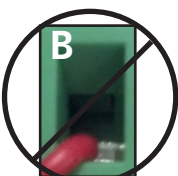


Captive Screw

The captive screw connectors allow you to cut cables to a suitable length, reducing cable clutter while providing a more reliable connection.

Connecting

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



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



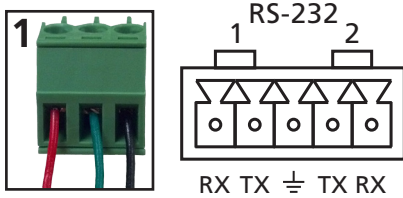
Turn the screws clockwise to raise the contact bar to the upper contact plate and hold the wires in place.



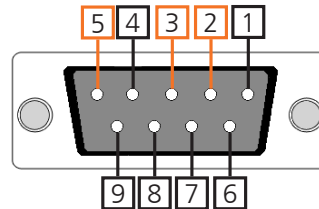
Turn the screws counter clockwise to lower the contact bar to release the wires.

RS-232

RS-232 captive screw connector is included. RS-232 pin out will be determined by the RS-232 cable and will connect as Rx (receiver), Tx (transmitter), and \perp (ground). (See picture 1)



Pin out color will differ per RS-232 cable.



Typical pin out:
2 - TX - Transmitter
3 - RX - Receiver
5 - GND - Ground

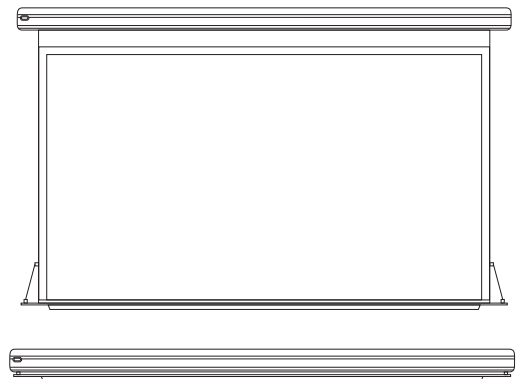
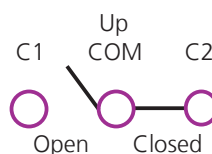
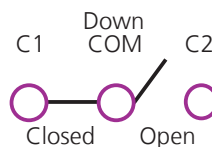
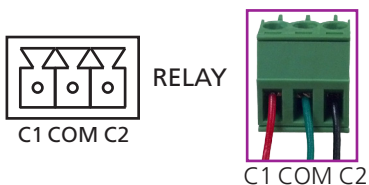
Note: To control the unit you will need to connect to the right three ports of the captive screw connector.

Relay

A dual low-voltage signal relay is built into the HDVS-200-RX for control of devices such as electric screens and display lifts.

There are 3 connections for the relay: C1, COM, and C2 (Circuit 1, Common, and Circuit 2 - pictured below). Connect wires from the device to the three pin captive screw connector (see picture below) and then plug the connector into the relay port.

Note: This relay is designed to be used with low voltage/current circuits



When using a dual signal relay with an electric projection screen, it allows for two different circuits to be controlled: up and down. Examples of what that would look like are pictured to the right.

When "Follow Display" is selected, the relay will trigger automatically based on the power/status of the display/projector. If the HDVS-200-RX stops receiving a signal it will trigger one circuit (e.g. up in the above example) and if the HDVS-200-RX starts receiving signal from the display it will trigger the opposite circuit (e.g. down in above example). This provides a simple automatic solution for device control.

Relay command parameters

RelayAuto Y, where Y = on/off/sta

e.g. To trigger the relay when power state of the display changes, use **RelayAuto on** (this is the default setting). Use the **RelayAuto off** command to prevent the relay from triggering.

RelayActX Y, where X = 1 - 2 and Y = open/close/sta.

e.g. To manually configure relay 2 (c2) to the "open" state, use **RelayAct2 open**.

Ethernet

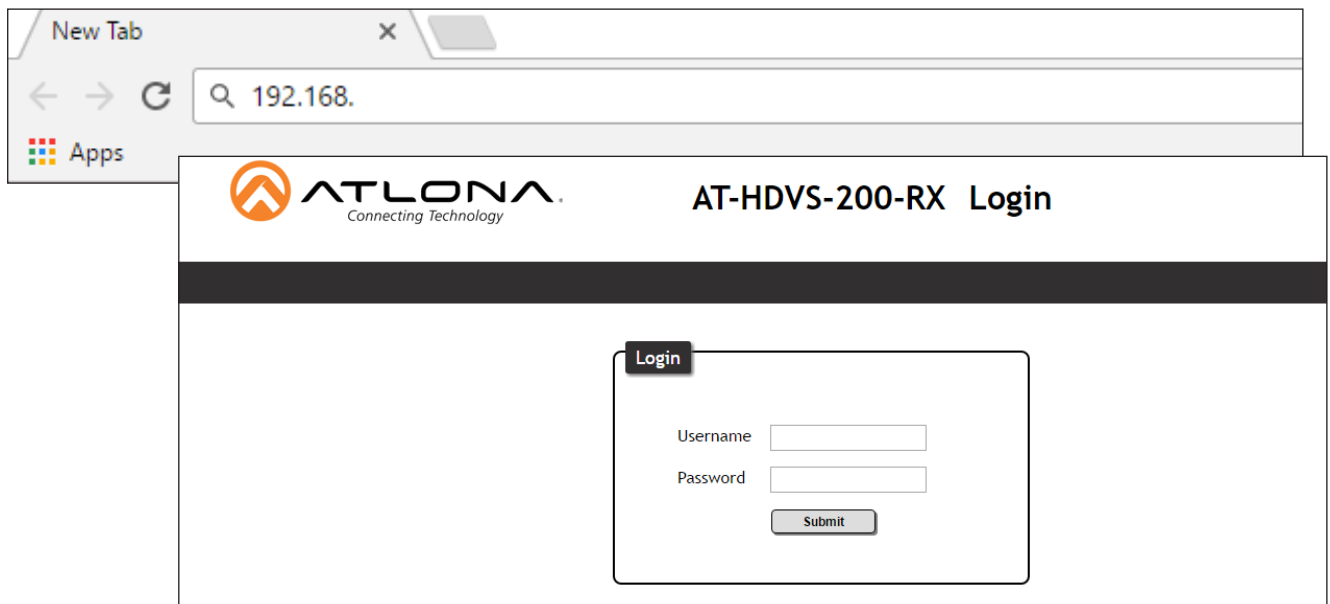
For convenience, the HDVS-200-RX comes with DHCP on. This enables the scaler to be connected to a network without knowing available IP addresses. If your network does not allow dynamic IP addresses or if you are using the switcher with a TCP/IP control system, this feature may be turned off and the IP address set using RS-232 commands or the webGUI.

To disable DHCP, use the following command: IPDHCP off. Once disabled, set the IP address using the IPStatic command (e.g. IPStatic 192.168.1.56).

webGUI

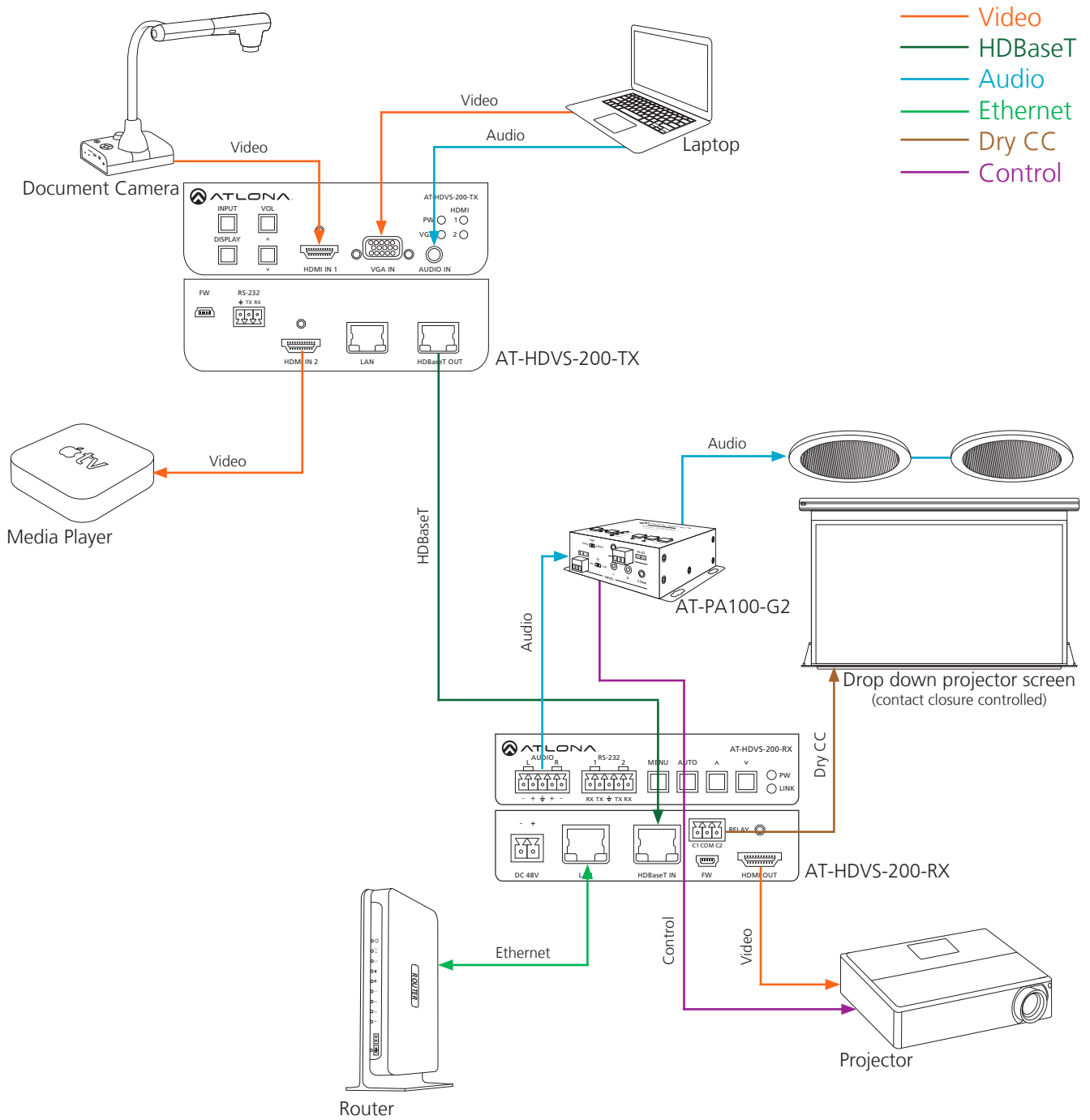
The HDVS-200-RX provides a built-in webGUI for easy setup and control.

To find the IP address of the HDVS-200-RX, connect the HDVS-200-RX to a terminal using an RS-232 cable, and use the following settings: baud rate: 115200, data bits: 8, flow control: None, stop bits: 1. Use the IPCFG command to display the IP address. Launch a web browser and enter the IP address of the switcher.

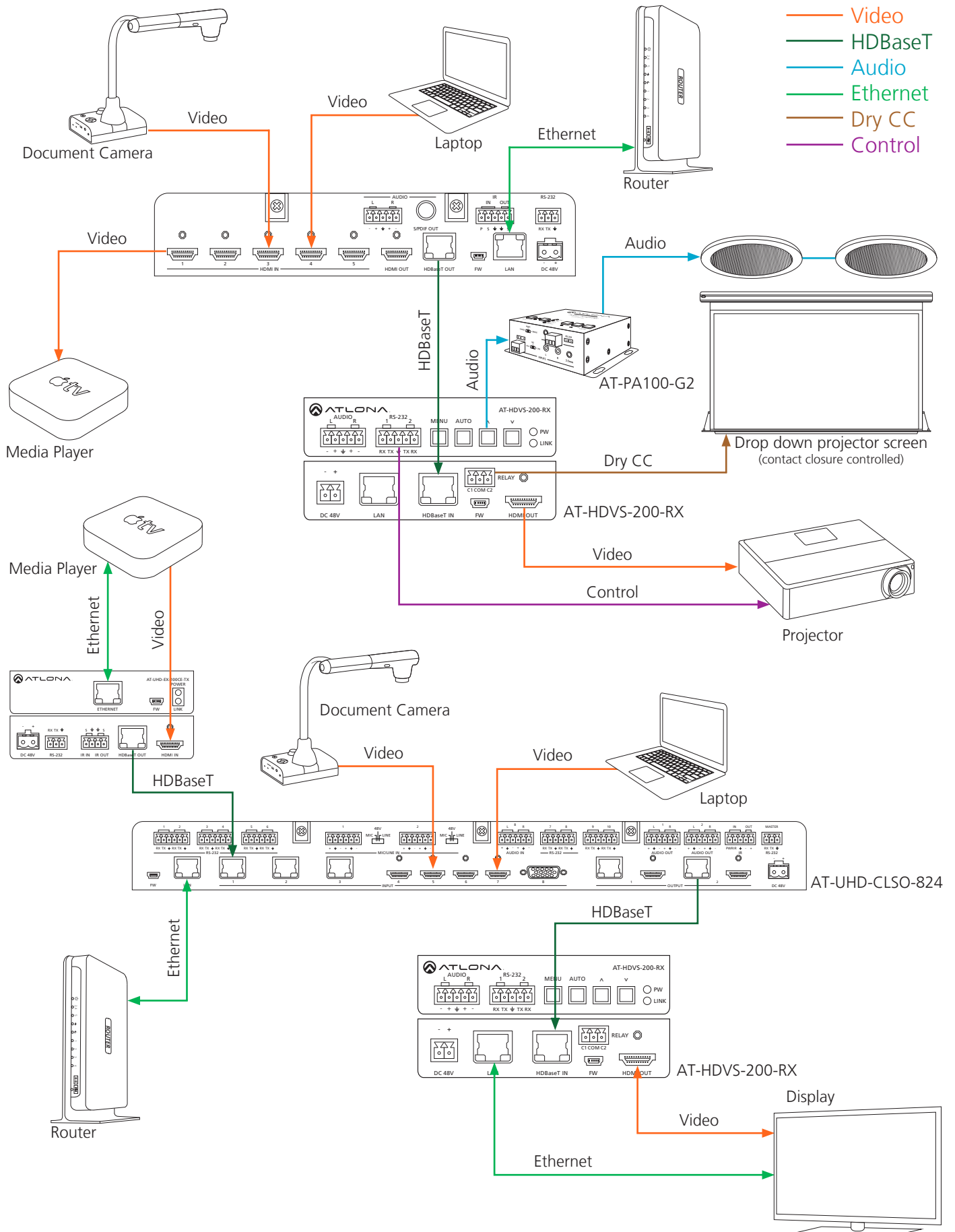


A login screen will appear (this is the same log in for admin and general users). The login for the webGUI will be username "root" and password "Atlona".

Connection Diagram (with HDVS-200-TX)



Connection Diagram (with Switchers)



Troubleshooting

1. The Auto-Switch feature isn't working. How do I enable it?

You can enable Auto-switching by using the AutoSW command, via TCP/IP or RS-232. Auto-switching can also be enabled through the On-Screen Display (OSD) or the webGUI.

2. I want to pass only analog audio without video. How do I do this?

Place the unit in "standalone" mode. This mode can be enabled using the FreeRun on command via TCP/IP or RS-232, or through the webGUI.

3. How do I update the firmware?

The firmware can be updated using the USB port or through the webGUI.

4. How do I find the IP address?

Run the IPCFG command using either RS-232 or TCP/IP. You can also get the IP address through the webGUI and AMS.

5. How do I switch between DHCP and Static IP modes?

For the AT-HDVS-200-TX, DHCP can be turned on/off by pressing the INPUT button for 15 seconds. For the AT-HDVS-200-RX, DHCP can be turned on/off by pressing the AUTO button for 15 seconds. You can also toggle between DHCP and Static IP modes using the IPDHCP command via TCP/IP or RS-232, or by using the webGUI or AMS.

6. What is the default IP address?

The default static IP address is 192.168.1.254. Please note that the default static IP for both the transmitter (HDVS-200-TX) and the receiver (HDVS-200-RX) are the same.

7. I can't control my display. What's wrong?

First, check that the desired control method is selected (TCP/IP, RS-232, or CEC). If you are using RS-232, make sure that the baud rate for RXZone 1 (found under the webGUI) matches your display settings. The baud rate can be set through the webGUI or by using the RxRSparaZ1 command via TCP/IP or RS-232. When using the RxRSparaZ1 command, use the following syntax: RxRSparaZ1[baudrate,data-bits,parity,stop-bits].

Example: RxRSparaZ1[115200,8,0,1]