AT-OME-RX31

Omega™ 3x1 AV Switcher and Dual HDBaseT Receiver

Instructions for Use

Version 1.0

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Version Information

This section lists document revisions.

Version	Date	Notes
1.0	October 16, 2026	Initial release.

Sales & Customer Support

Main Office (US)	Hall Research, 1234 Lakeshore Dr Suite #150, Coppell, TX 75019
Support Hours	Monday – Friday, 8:00 a.m. – 6:00 p.m. (CST)
Website	https://www.hallresearch.com
Product Page	https://www.hallresearch.com/product/AT-OME-RX31

IMPORTANT: Visit https://www.hallresearch.com/product/AT-OME-RX31 for the latest firmware updates and Instructions for Use.

Warranty

To view the product warranty, use the following link: https://hallresearch.com/warranty

Important Safety Information

CAUTION: Risk of electric shock. Do not open the enclosure or expose it to rain or moisture. No user-serviceable parts inside. Refer servicing to qualified service personnel.

- Do not expose this apparatus to rain, moisture, dripping, or splashing, and do not place objects filled with liquids, such as vases, on the apparatus.
- Do not install or place this unit in a bookcase, built-in cabinet, or other confined space. Ensure the unit is well ventilated.
- To prevent the risk of electric shock or fire from overheating, do not obstruct the ventilation openings with newspapers, tablecloths, curtains, or similar items.
- Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- Do not place sources of naked flames, such as lighted candles, on the unit.
- Clean this apparatus only with a dry cloth.
- Unplug this apparatus during lightning storms or when unused for long periods of time.
- Protect the power cord from being walked on or pinched, particularly at plugs.
- Only use attachments and accessories specified by the manufacturer.
- Refer all servicing to qualified service personnel.

FCC Compliance

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.

Introduction

The Atlona AT-OME-RX31 is an HDBaseT receiver, three-input switcher, and 4K/UHD scaler with a local HDMI input. Part of the Omega™ Series of integration products for modern AV communications and collaboration, the AT-OME-RX31 features two HDBaseT inputs for receiving video up to 4K/60 4:2:0, plus embedded audio, control, and Ethernet over distances up to 330 feet (100 meters). The HDMI input supports video up to UHD/60 4:4:4. The AT-OME-RX31 is HDCP 2.2 compliant and features 4K/60 upscaling and downscaling with frame rate conversion. Additionally, it provides integrated control for displays and room functions such as motorized screens, and can be externally triggered with the addition of an occupancy sensor. The AT-OME-RX31 is ideal for 4K presentation applications with Omega or UHD- EX Series transmitters, as well as Atlona AV presentation switchers with HDBaseT outputs, local HDMI sources, and the Gain™ Series amplifiers.

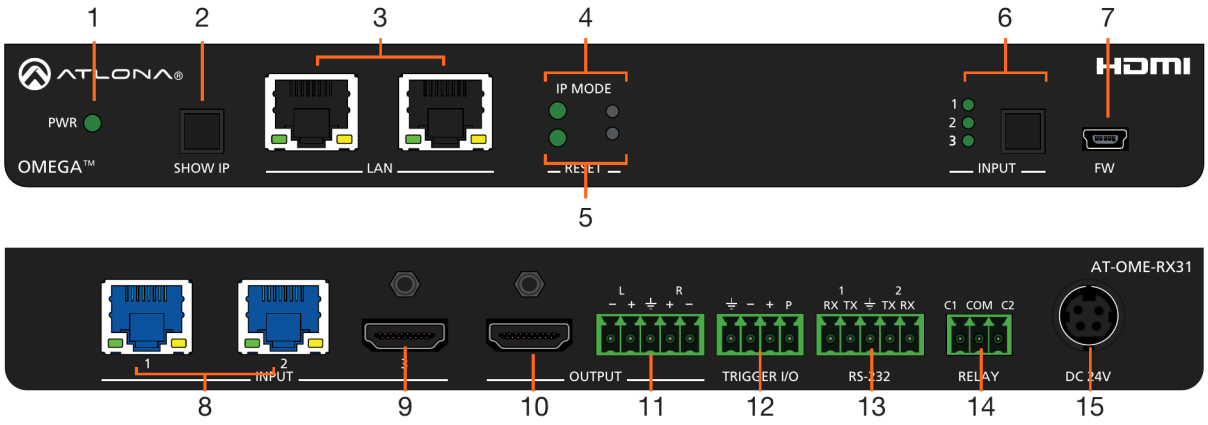
Features

- Dual HDBaseT receiver with local HDMI input
- Video, audio, power, and control over category cable utilizing HDBaseT technology
- 4K/UHD downscaling and upscaling
- Automatic input selection and automatic display control
- Audio de-embedding
- Dual Ethernet ports
- Contact closure for screen or display lift control
- Trigger I/O ports for occupancy sensing

Package Contents

- 1 x AT-OME-RX31
- 2 x Mounting brackets
- 4 x Mounting screws
- 2 x 5-pin captive screw connector
- 1 x 4-pin captive screw connector
- 1 x 3-pin captive screw connector
- 1 x 24 V DC power supply
- 1 x Installation Guide

Panel Description



#	Name	Description
1	PWR LED	Illuminates green when receiving power.
2	SHOW IP button	Press and release this button to display the IP address of the AT-OME-RX31 on the connected display.
3	LAN	Connect Ethernet cables to these ports to control the unit and/or to pass Ethernet to a local device.
4	IP MODE button and LED	Press and hold the button for 5 seconds until the LED blinks to switch the IP mode between DHCP and Static IP modes. The LED will blink 2 times for DHCP and 3 times for static IP.
5	RESET button and LED	Press and hold the button for 5 seconds until the unit resets. The LED will blink as the unit resets to factory default settings.
6	INPUT button and LEDs	Press and release this button to cycle through each of the three inputs. A solid green LED indicator will display the currently active input. Each LED indicator corresponds to a numbered input on the rear panel of the unit.
7	FW	Connect to a computer using a mini USB to USB A cable (not included).
8	HDBaseT IN	Connect up to two category cables (CAT-5e or better) from each of these ports to compatible HDBaseT transmitters.
9	HDMI IN	Connect an HDMI cable from an HDMI source to this port.
10	HDMI OUT	Connect an HDMI cable from here to an HDMI display.
11	AUDIO OUT	Connect to an audio DSP, amplifier, or other audio distribution devices.
12	TRIGGER I/O	Connect a voltage-controlled device to this port.
13	RS-232	Connect the included 5-pin captive screw to this port to provide RS-232 control for the AT-OME-RX31 and the connected display.

#	Name	Description
14	RELAY	Connect the included 3-pin captive screw block to this port. This port provides a port, which allows the control of screens, curtains, and other devices. Use a 48 V DC relay with no more than 1 A current draw.
15	DC 24V	Connect the included DC 24V power supply to this port.

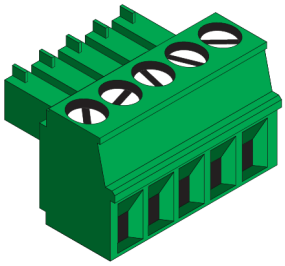
Installation

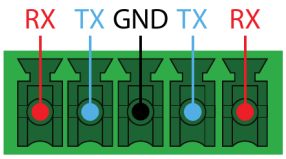
Captive Screw Connections

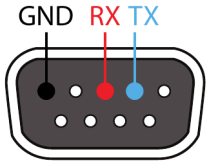
RS-232

A 5-pin captive screw connector has been included for RS-232. The ground pin is shared between port 1 and port 2.

NOTE: Port 1 will control the display and port 2 is for unit control.



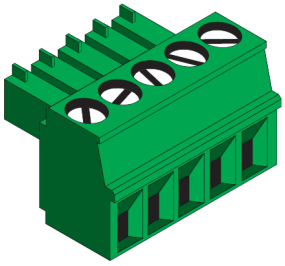


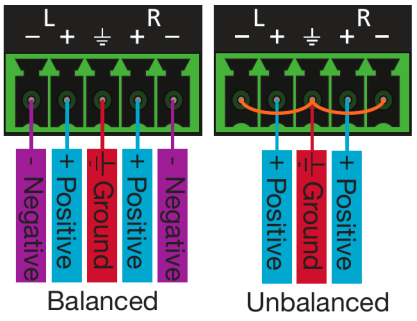


Pin out will be determined by the RS-232 cable and connect as RX (receive), TX (transmit) and (Ground). Ground will be shared between port 1 and port 2.

Audio

Connect to an audio DSP, amplifier, or other audio distribution devices.

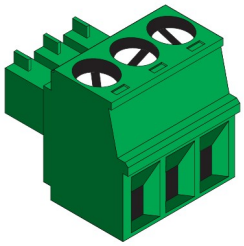


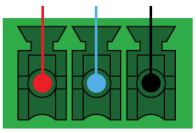


Use a jumper between the negative and ground pins when using an unbalanced connection.

Relay

A dual low-voltage signal relay is built into the AT-OME-RX31 for control of devices such as electric screens and display lifts. A 3-pin captive screw connector has been included for connection.

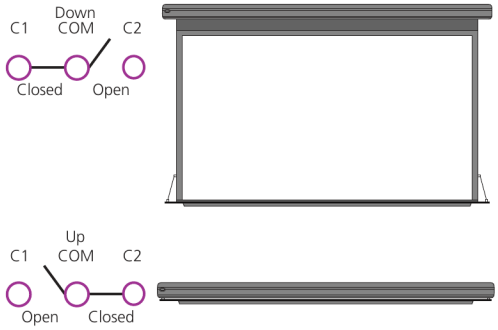




C1 COM C2

There are 3 connections for the relay: C1, COM, and C2 (Circuit 1, Common, and Circuit 2.)

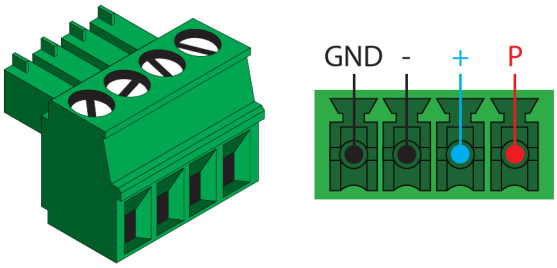
When using a dual signal relay with an electric projection screen, it allows for two different circuits to be controlled: up and down (pictured to the right).

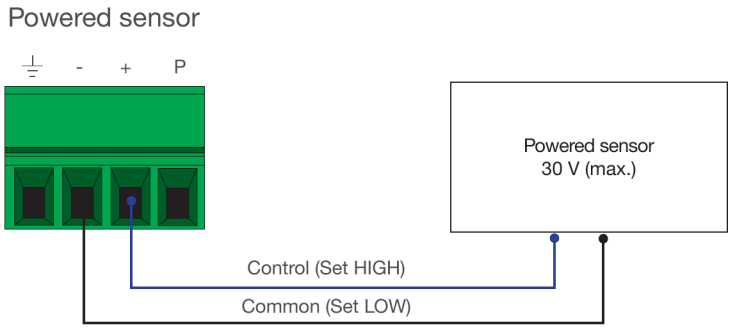


The relay will default to follow the display. When the unit turns on the relay will close C1 and open C2. When the display is turned off and signal is no longer being received C1 will open and C2 will close.

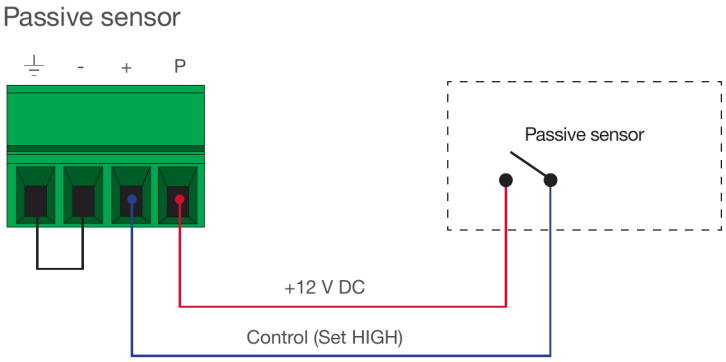
Trigger I/O

The **TRIGGER I/O** port allows voltage-controlled devices, such as an occupancy sensor, to be connected to the AT- AT-OME-RX31. Use the included 4-pin captive screw connector to connect the device. Voltage range is 3 to 30 V DC.





There are 4 connections for the trigger: GND, -, +, and P (Ground, Negative, Positive, and Power).



Mounting Instructions

The AT-OME-RX31 includes two mounting brackets and four mounting screws, which can be used to attach the units to any flat surface.

1. Remove the top 2 case screws on the side of the unit.
2. Align the mounting brackets to the side of the units.
3. Use the previously removed case screws to secure the mounting bracket to the enclosure.

4. Repeat the steps for the other side of the unit.



5. Mount the unit using the oval-shaped holes, on each mounting bracket. If using a drywall surface, a #6 drywall screw is recommended.

NOTE: Mounting brackets can also be inverted to mount the unit under a table or other flat surface.

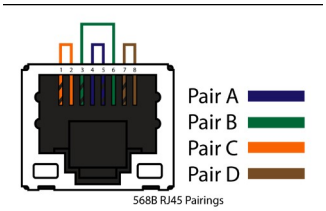


Cable Recommendation Guidelines Refer to the tables below for recommended cabling when using Atlona products with HDBaseT. The green bars indicate the signal quality when using each type of cable. Higher-quality signals are represented by more bars.

Core	Shielding	CAT5e	CAT6	CAT6a	CAT7
Solid	UTP (unshielded)				N/A
	STP (shielded)				
Performance Rating (MHz)		350	500	600	800

IMPORTANT: Stranded or patch cables are not recommended due to performance issues.

Cable	Max. Distance @ 4K	Max. Distance @ 1080p
CAT5e	295 feet (90 meters)	330 feet (100 meters)
CAT6 / CAT6a / CAT7	330 feet (100 meters)	330 feet (100 meters)



Use of a TIA/EIA 568B termination is recommended for optimal performance.

Connection Instructions

1. Connect an Ethernet cable from one of the **LAN** ports to the Local Area Network. Connect another Ethernet cable from one of the **LAN** ports to a display device, allowing IP control.
2. Connect two category cables (CAT-5e or better) from compatible HDBaseT transmitters to the **INPUT 1** and **INPUT 2** ports.
3. Connect an HDMI cable from **INPUT 3** to a UHD/HD source device.
4. Connect an HDMI cable from the HDMI **OUTPUT** port to a display device.
5. OPTIONAL: Connect an audio output device to this port using the included captive screw block.
6. OPTIONAL: Connect a voltage-controlled device, such as an occupancy sensor, to the **TRIGGER I/O** port.
7. OPTIONAL: Connect a serial cable from **RS-232 1** port to a display device.
8. OPTIONAL: Connect a serial cable from **RS-232 2** port to a control system, to control the AT-OME-RX31 remotely.
9. OPTIONAL: Connect an the **RELAY** port to the motor control for screens, curtains, and other devices. Use a 48 V DC relay with no more than 1 A current draw.
10. Connect the included 24 V DC power supply from this receptacle to an available AC outlet.

IP Modes

DHCP

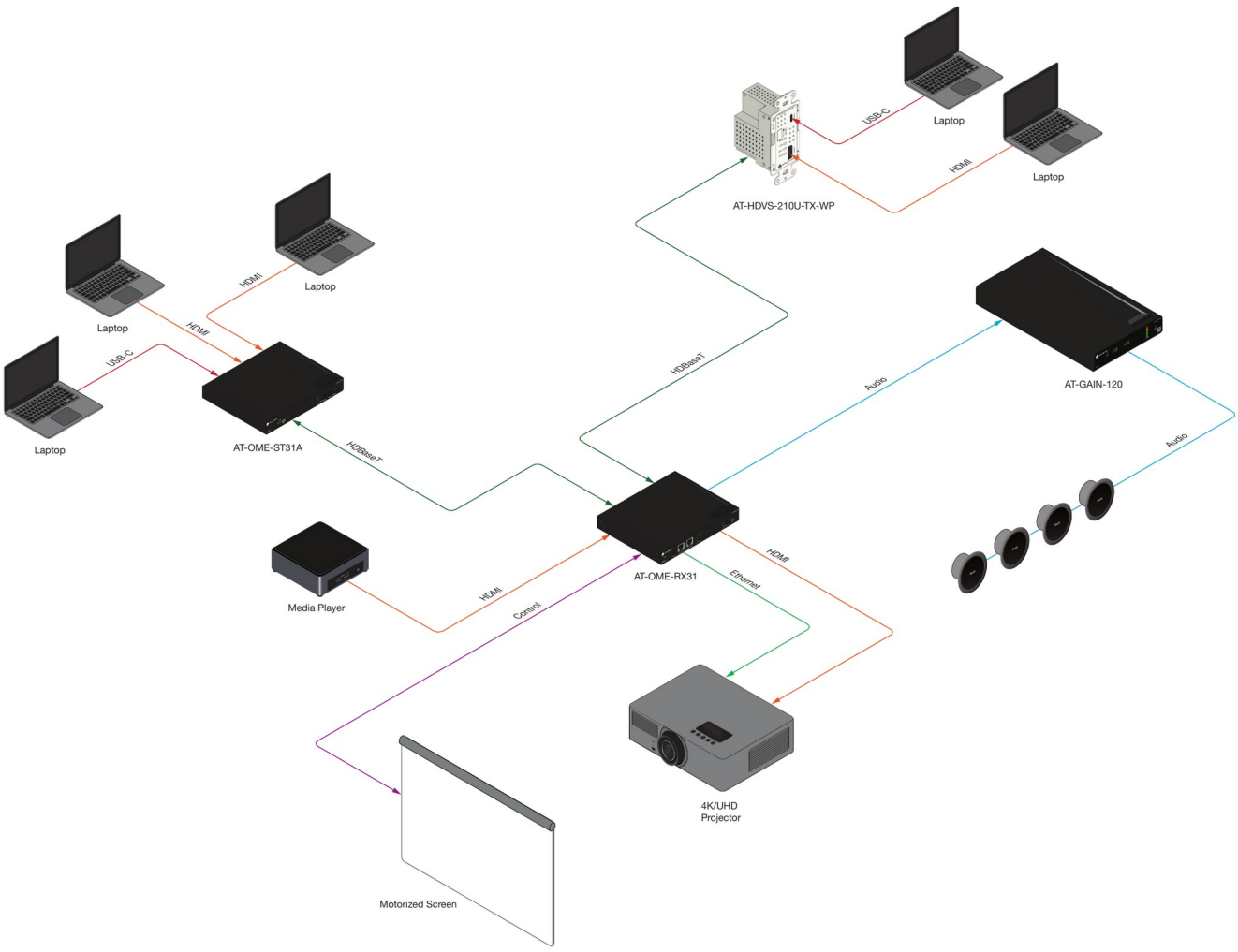
By default, the AT-OME-RX31 is set to DHCP mode. In this mode, when the AT-OME-RX31 is connected to the Local Area Network (LAN), it will automatically be assigned an IP address by the DHCP server (if available). Press the DEVICE IP button to show the IP address in the top left corner of the display.

Static

If no DHCP server is available, or a static IP is required, the AT-OME-RX31 can be set to static IP mode using the IP mode button.

- Press and hold the **IP MODE** button for 5 seconds to switch to static IP mode, the LED will blink 2 times when it goes into Static IP mode. In this mode, the AT-OME-RX31 will be set to the following: IP address: 192.168.1.254 Subnet mask: 255.255.0.0 Gateway: 192.168.1.1
- To switch back to DHCP, press and hold the IP mode button for 5 seconds. The LED will blink 4 times when successfully put into DHCP mode.

Connection Diagram

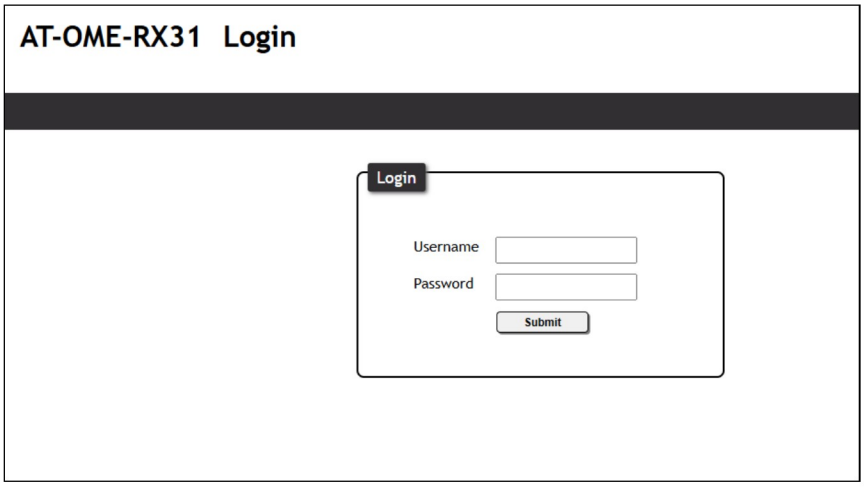


WebGUI

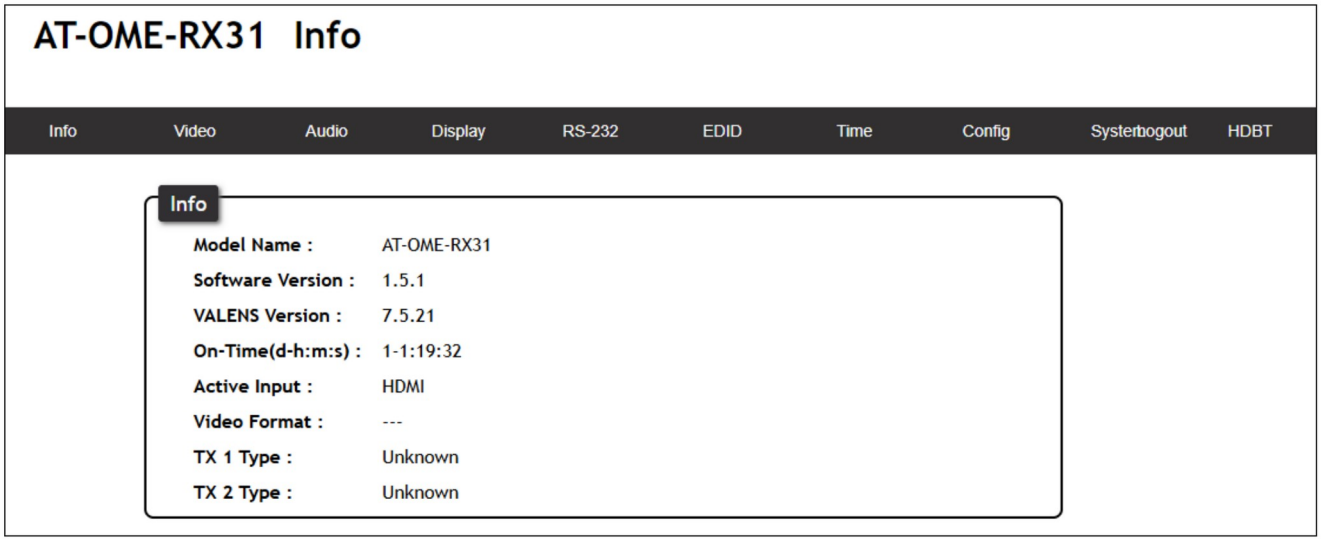
The AT-OME-RX31 includes a built-in webGUI, which allows easy remote management and control of all features. Follow the instructions below to access the webGUI.

1. Make sure that an Ethernet cable is connected between the **LAN** port on the AT-OME-RX31 and the network.
2. Press the **DEVICE IP** button on the front panel to display the IP address of the unit in the top left corner of the connected display.
3. Launch a web browser and enter the IP address in the address bar.
4. The AT-OME-RX31 **Submit** page will be displayed.
5. Enter the following information on the **Login** page. Login: admin

   Password: Atlona

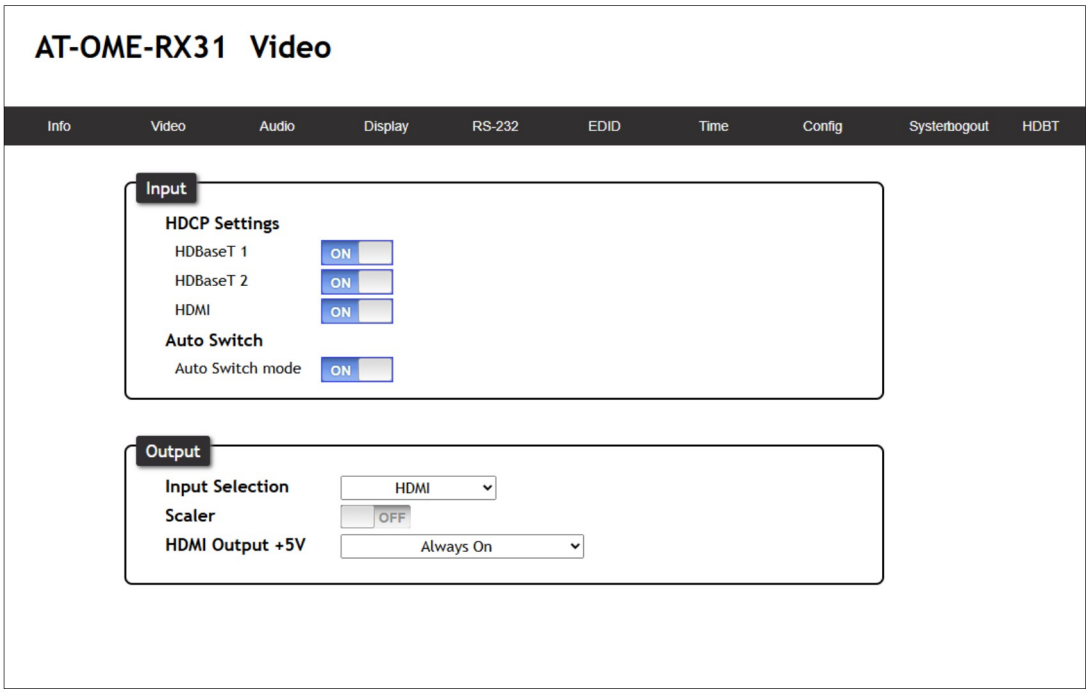


6. Click the Login button. The info page will display, giving all the general information of the AT-OME-RX31.



Video Settings

Select Video from the top navigation to adjust routing and video settings.



HDCP Settings

On - Sets the HDCP of the HDMI or HDBaseT ports to auto, allowing HDCP to switch between compliant and non-compliant according to the source and display HDCP handshake status. Off - Sets the HDBaseT or HDMI port to HDCP non-compliant. No HDCP compliant source signals will pass in this mode.

> **NOTE:** Some sources flag all content as protected, by selecting HDCP off the source device may send only user created content. In some cases, the source must be configured to send content to non-HDCP devices (e.g. HDCP must be turned off within a PS4's settings to pass unprotected content).

Auto Switch

Auto Switch mode - Set switching to auto (on) to have the source change when detecting new signal or the currently selected source is no longer sending signal.

HDMI Output +5V Sets the +5V pin on the HDMI connector to the desired setting.

Always on - Forces the +5V pin on the HDMI output to "high" (always on).

On When Signal Present - Allows the +5V pin on the HDMI output to toggle, based on the presence of an input video signal.



Output

Input Selection - Use the drop down menu to switch between A/V Mute (no signal), HDMI, HDBaseT 1, HDBaseT 2, Internal Pattern 1, Internal Pattern 2, and Internal Pattern 3 source signals. Scaler - When enabled, will display extra options. Output Resolution - Select the output resolution the source signal will be scaled to from the drop down menu.

Scaling options: 1024x768, 1280x768, 1280x800, 1360x768, 1600x1200, 1920x1200, 2048x1080,

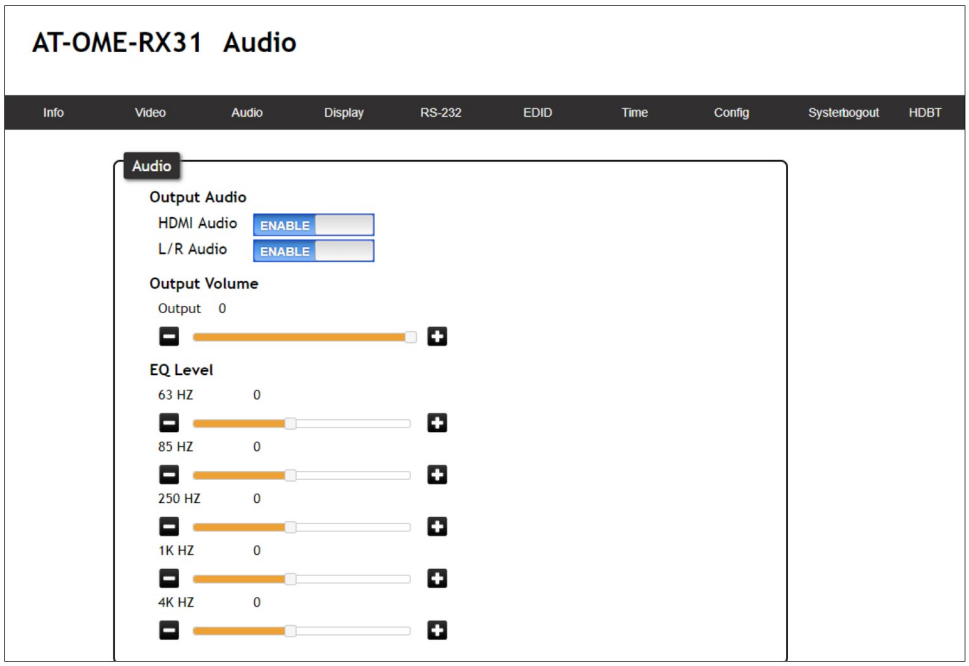
1280x720p50, 1280x720p60, 1920x1080p24, 1920x1080p25, 1920x1080p50, 1920x1080p60 (default), 3840x2160p24, 3840x2160p25, 3840x2160p30, 3840x2160p50, 3840x2160p60, 4096x2160p24, 4096x2160p25, 4096x2160p30, 4096x2160p50, 4096x2160p60

> **NOTE:** Based on the selection from the drop down menu, the scaler will adjust not only resolution but frame rate as well. All VESA resolutions will output at 60Hz when using the scaler.

Aspect Ratio - Select between Keep (which will keep the aspect ration of the source device) and Fill (which will adjust the picture to fill the display). Overscan - Enable to be able to manually adjust the horizontal and vertical size of the source image. Default is 0 and can be adjust from 0% to 50%. Brightness, Contrast, Saturation, Sharpness, Hue - Adjust the output's brightness, contrast, saturation, sharpness, and hue manually. Default is 0% and can be adjusted from 0% to 60%. Reset all Picture - Press the Reset button to set all the video options back to factory defaults.

Audio

Select Audio from the top navigation to adjust volume, mute status, and EQ levels.



Output Audio

HDMI / L/R Enable - Unmutes the audio output signal, allowing audio to pass through the outputs. HDMI / L/R Disable - Mutes the audio output signal of the ports. No audio will pass when selected.

> **NOTE:** HDMI muting will mute the audio embedded on the HDMI output and L/R muting will mute the audio on the analog audio output.

Output Volume

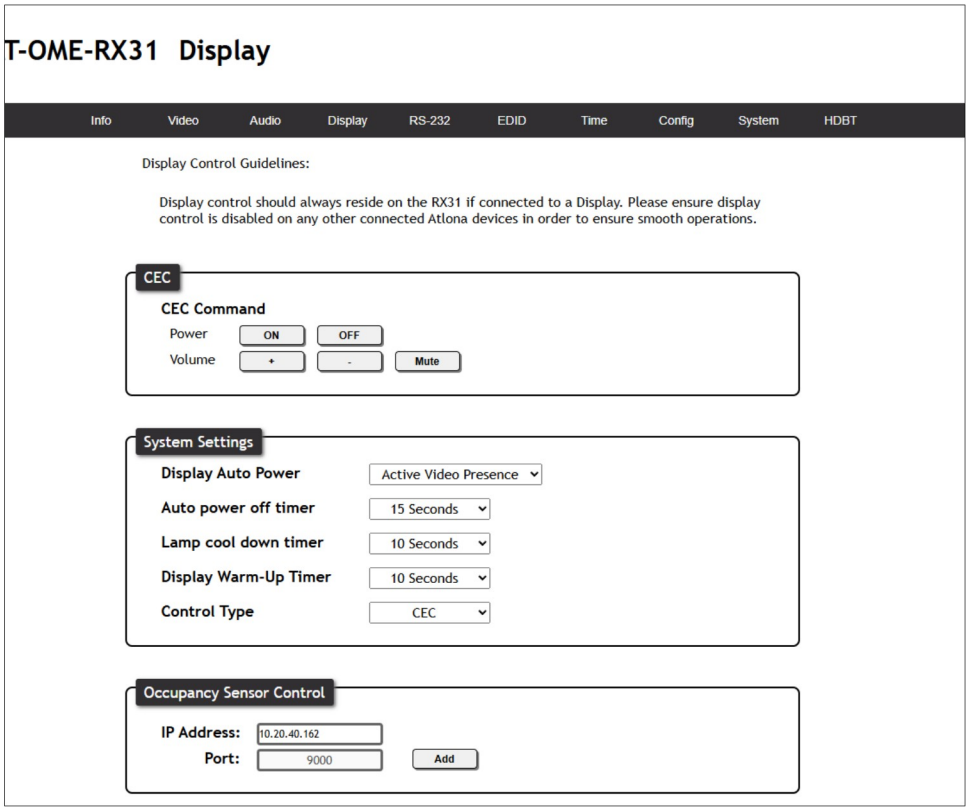
Volume bar - Adjusts the master volume output of the unit from -80 to 0. Default is 0.

EQ Level

Level Sliders - Use the slider to adjust between level -12 and 15 on each band. Default is 0.

Display

Select Display from the top navigation to adjust display control settings.



CEC

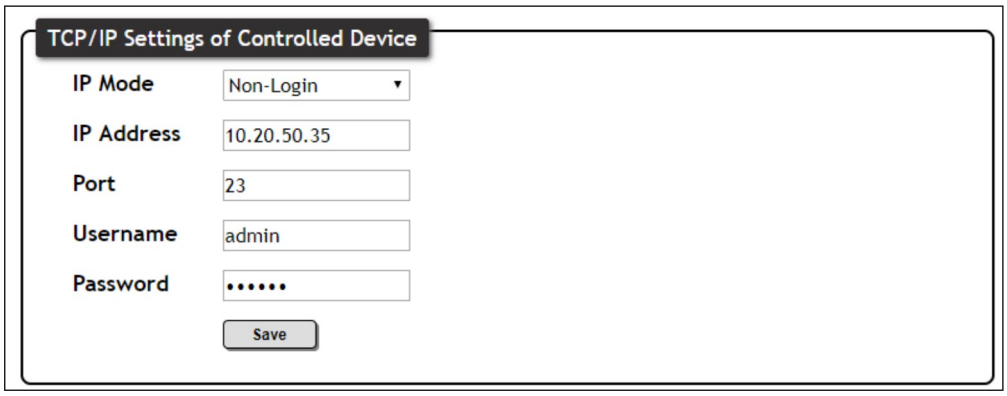
Command: Power - Press to send the CEC power on or off command out through the HDMI port. Command: Volume - Press to send the CEC Volume up, down, or mute commands through the HDMI port.

System Settings

Display Auto Power - Set this toggle to ENABLED to allow the AT-OME-RX31 to send the power-on command to the display when an A/V signal is detected. When the AV signal is no longer present, the AT-OME-RX31 will send the power-off command to the display. If this functionality is not desired, then set to DISABLED. This feature is set to DISABLED by default. Auto Power Off Timer - Sets the time interval before the command to power-off the display is sent, when an A/V signal is no longer present. Lamp cool down timer - Sets the time between when the display is turned off and when the next command can be sent to the display. Display Warm-Up Timer - Sets the amount of time between when the display is turned on to when the unit sends any commands to the display. Control Type - Sets the control protocol for the connected display. Click this drop-down to select the control type. Available settings are CEC, IP, and RS-232. By default, CEC is selected for control of the display. IP and RS-232 can also be selected. When IP or RS-232 are selected, more fields are available.

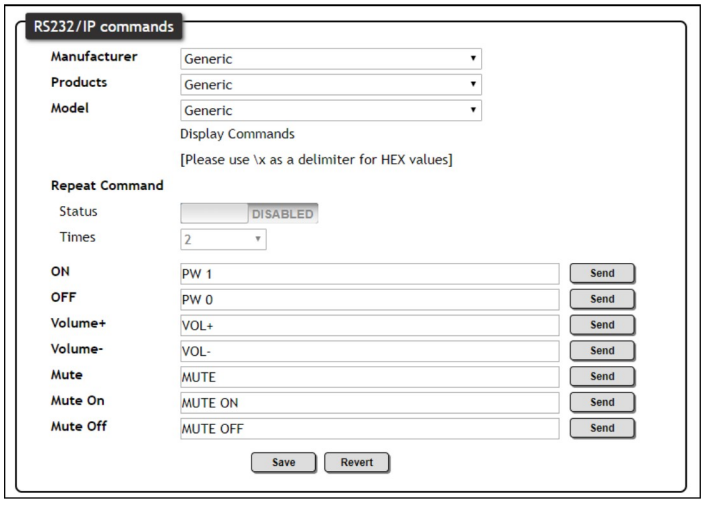
Occupancy Sensor Control

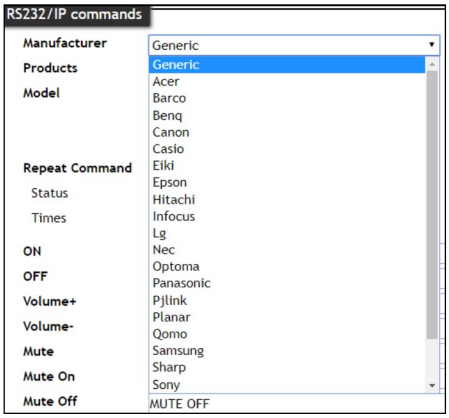
IP Address - Enter the IP address of the JAV-OCS-900N in this field. Port - The port number used to communicate with the JAV-OCS-900N. Add - Click this button to add the JAV-OCS-900N to the AT-OME-RX31. Up to three occupancy sensors are supported.

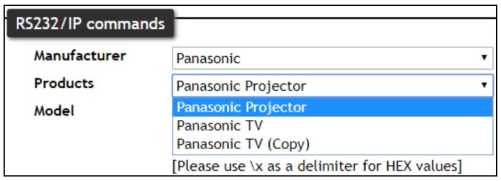


TCP/IP Settings of Controlled Device (only available when IP is selected)

IP Mode - Toggle telnet login mode between Non-Login and Login. If set to Login, a username and password will be required to control the controlled device via TCP/IP. IP Address - Sets to the IP of the controlled device/display. Port - Set the port of the controlled device for control. Default is 23. Username & Password - Sets the username and password that is required when login mode is enabled.







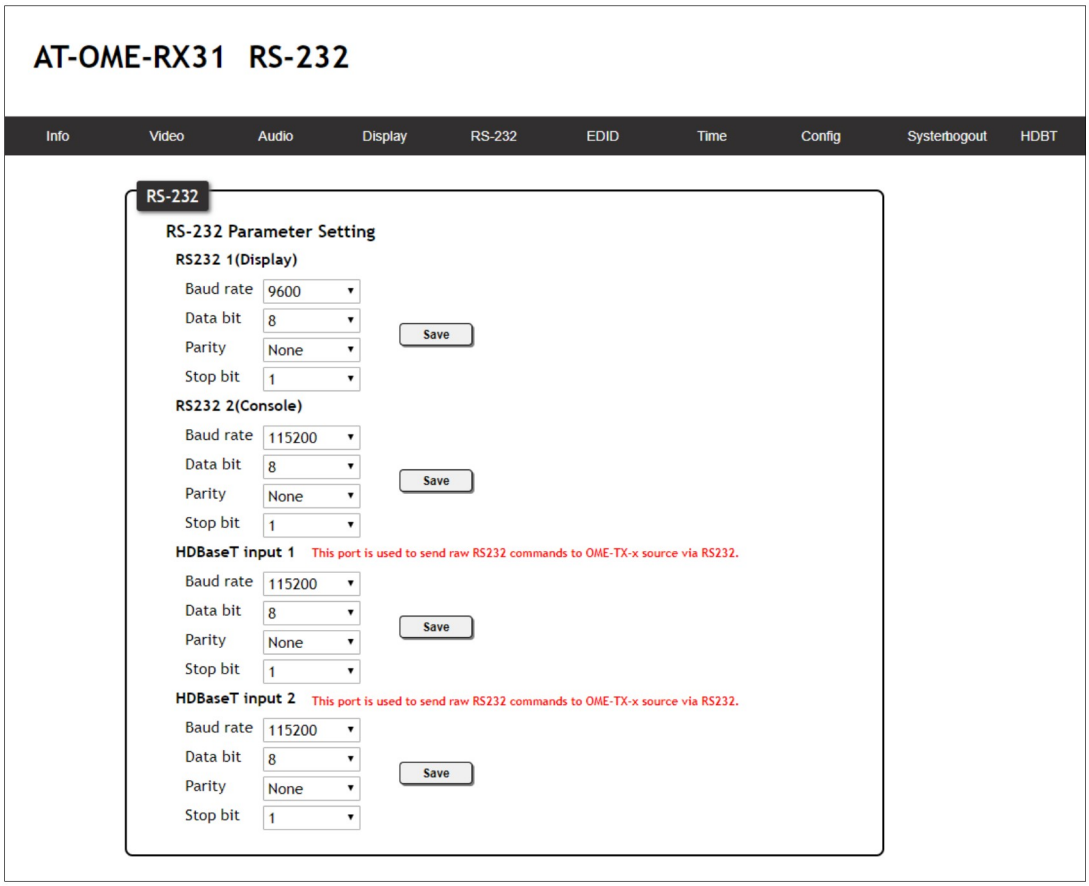
RS-232 / IP Commands

Manufacturer, Products, Models - Select the make and model of the display for control. Commands have been programmed into the unit for a wide range of products. If the current display is not found within the database, use generic and manually adjust the command fields. Repeat Command - Enable Status to repeat the commands. Default repeat number is 2 and can be adjusted from 2 to 4 times. Commands: On/Off/Volume/Mute - These fields will automatically be filled with the correct command when selecting a

manufacturer and product from the drop down menus. If manually entering the commands, type them into the fields next to the command name. Send - Use this button to send the command to the display, this can be used while manually typing the commands to ensure the commands are correct. Save - Save the commands to the webGUI. Manufacturer, products, and Model will revert to Generic but the commands will be saved from the previously selected and saved Manufacturer, products, and model selection. Revert - Sets the commands back to the previously saved settings.

RS-232

Select RS-232 from the top navigation to adjust the zone control parameters for the RS-232 port.

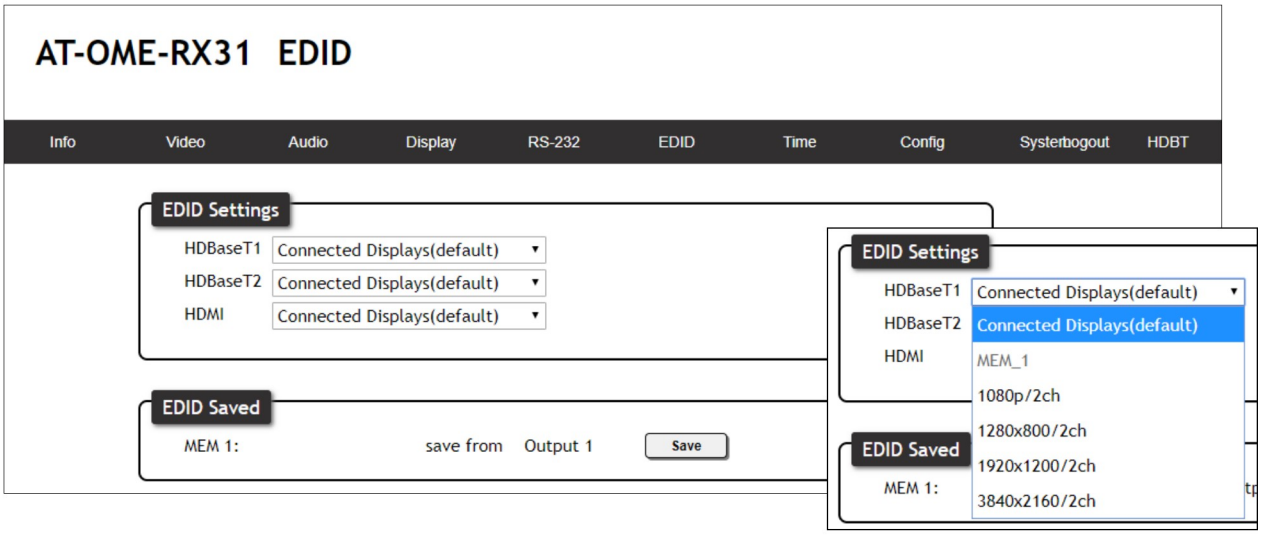


RS-232 Parameter Setting

RX RS232 1 (Display) - These port settings are for controlling the display. Defaults are 9600, 8, None, and 1. RX RS232 2 (Console) - These port settings are for local control by a third-party control system. Defaults are 115200, 8, None, and 1. HDBaseT input 1 - Select the baud rate, data bit, parity, and stop bit to match the transmitter's parameters. Defaults are 115200, 8, None, and 1. These settings will be disabled if connected to an Atlona transmitter. HDBaseT input 2 - Select the baud rate, data bit, parity, and stop bit to match the transmitter's parameters. Defaults are 115200, 8, None, and 1. These settings will be disabled if connected to an Atlona transmitter.

EDID

Select EDID from the top navigation to save/load EDIDs.

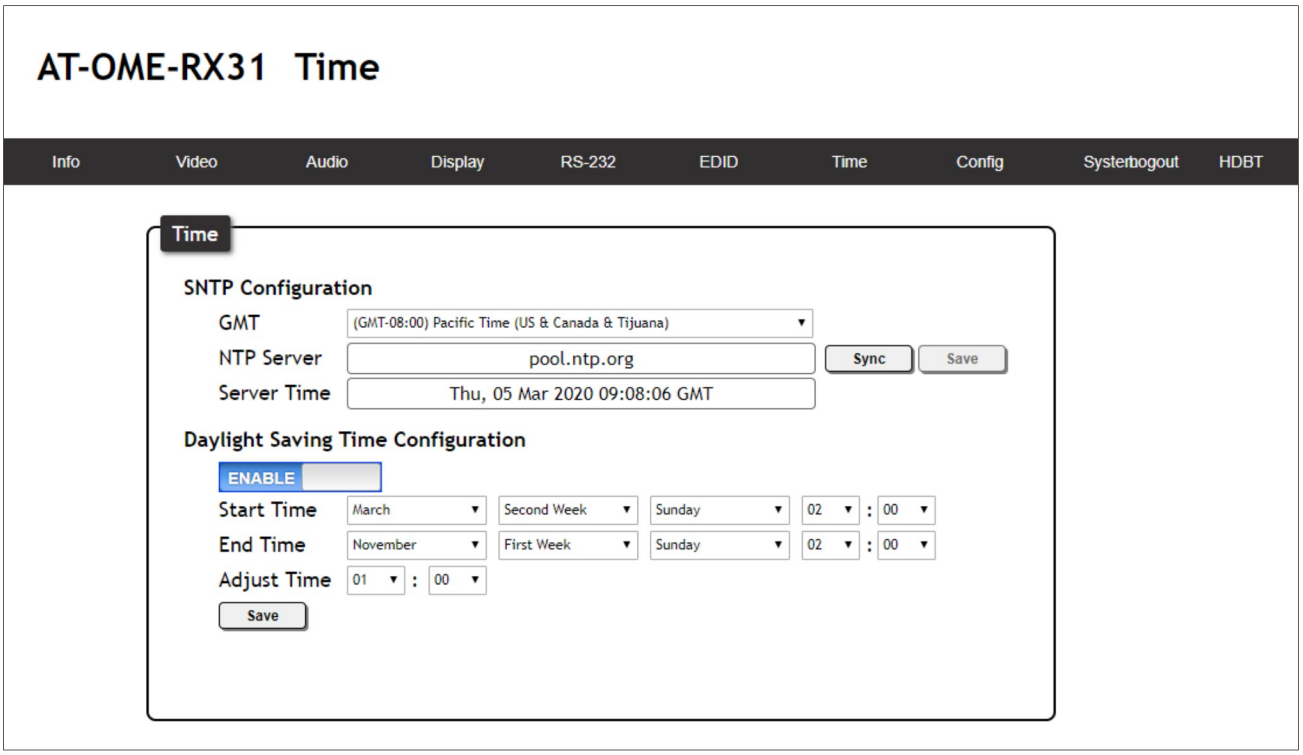


EDID

EDID Settings - Use the drop down menu to select from default (highest common resolution between source and display), 4 internal EDIDs, and 1 previously saved EDID. EDID Saved - The ID field will display the memory # and currently saved EDID name, select output 1 from the drop down menu. Once output 1 is selected, press the save button to make it available in the EDID settings drop down menus.

Time

Select Time from the top navigation to select the time server for the unit to sync to.



SNTP Configuration

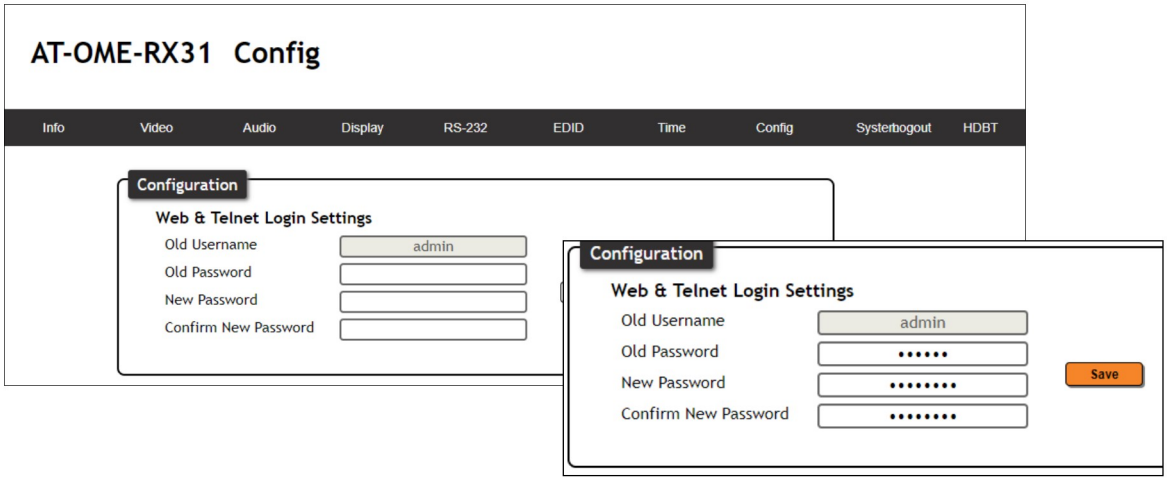
Server info - Select the time zone the unit will run in. If the unit has internet access, it can be set to sync to a server as well. Press the Sync button if using a server time or press the Save button if setting by timezone.

Daylight Savings Time Configuration

Enable/Disable slider - Default is disabled. Enable to have the unit automatically update with Daylight savings time. Daylight Savings settings - Set the date and time to have the unit start and end Daylight Savings time and how much time the unit will adjust by.

Config

Select Config from the top navigation to update the admin password.



Users

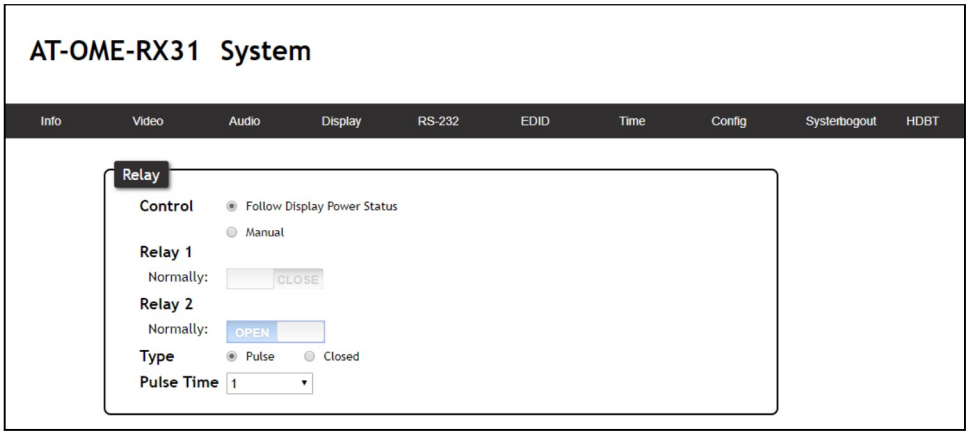
Admin Password - Update the admin password for the switcher. Only the admin password may be changed, the username will remain admin.

NOTE: The passwords cannot contain any special characters. e.g. !@#$%/^&*\?+-;’”.

Once the new password has been entered, press the Save button to make the password live. The user will be logged out and must log back in with the new password.

System

Select System from the top navigation to adjust relay, network, or system options.



Relay

Control - Set the relay to either follow the display’s status or be manually set using the selectors in the WebGUI. When the unit is set to pulse, the relay will latch for the designated pulse time before opening again. The relay that opens and closes will be determined by the power state:

Power On

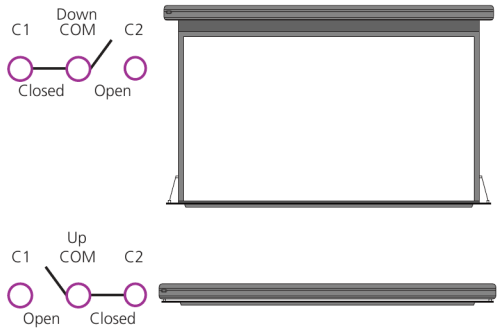
Relay 1: Latch will close for designated pulse time then open. Relay 2: Relay will remain open.

Power Off

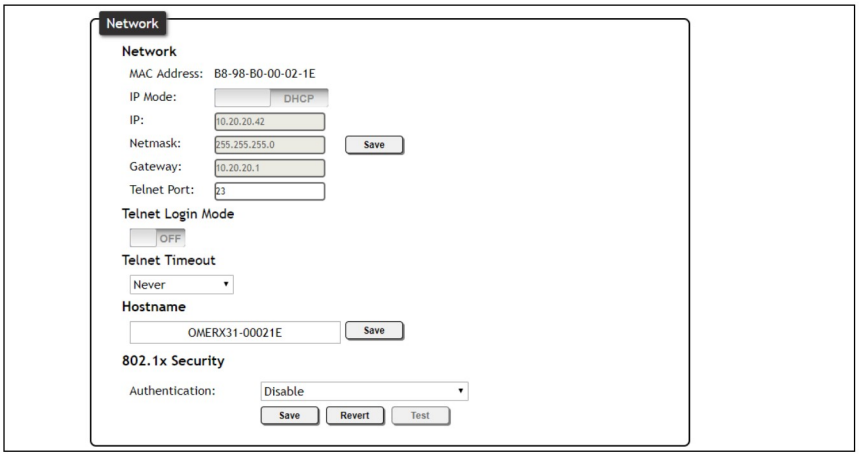
Relay 1: Relay will remain open. Relay 2: Latch will close for designated pulse time then open.

Relay - When the relay is set to manual, select the sliders to open and close the com ports. Type - Switch between pulse and closed relay type. Pulse Time - Sets the time between each pulse in seconds. Range is 1 to 30. Default is 1.

When using a dual signal relay with an electric projection screen, it allows for two different circuits to be controlled: up and down (pictured to the right).

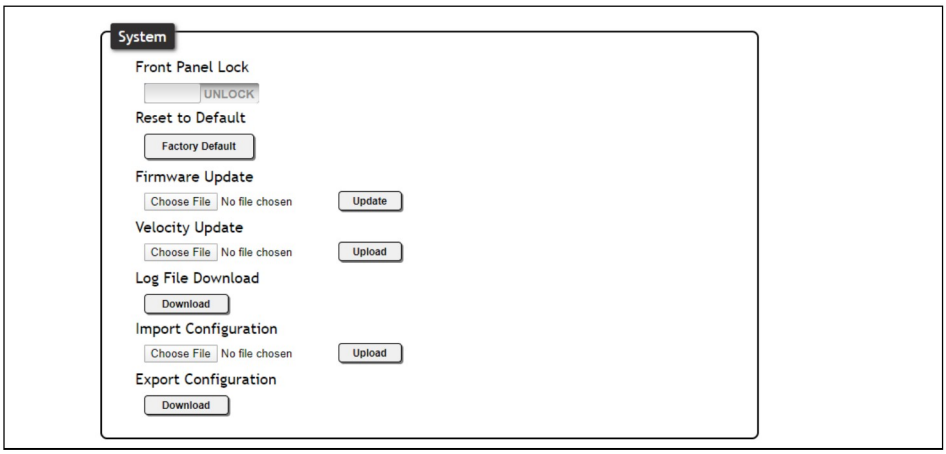


The relay will default to follow the display. When the unit turns on the relay will close C1 and open C2. When the display is turned off and signal is no longer being received C1 will open and C2 will close.



Network

MAC Address - Displays the MAC address of the unit. IP Mode - Switch between static and DHCP IP modes. IP, Netmask, Gateway - T his will display the unit's current DHCP IP settings. When set to static, fill in the IP address, netmask, and gateway. Telnet Port - Set the telnet port if needed for control. Default port is 23. Telnet Login Mode - Toggle telnet login mode on and off. If on, a username and password will be required to control the unit via telnet. Telnet Timeout - Set the amount of time between actions before the current user is logged out. Default is 10000 seconds. Hostname - Set the name for the unit, this will show up in network discovery.



System

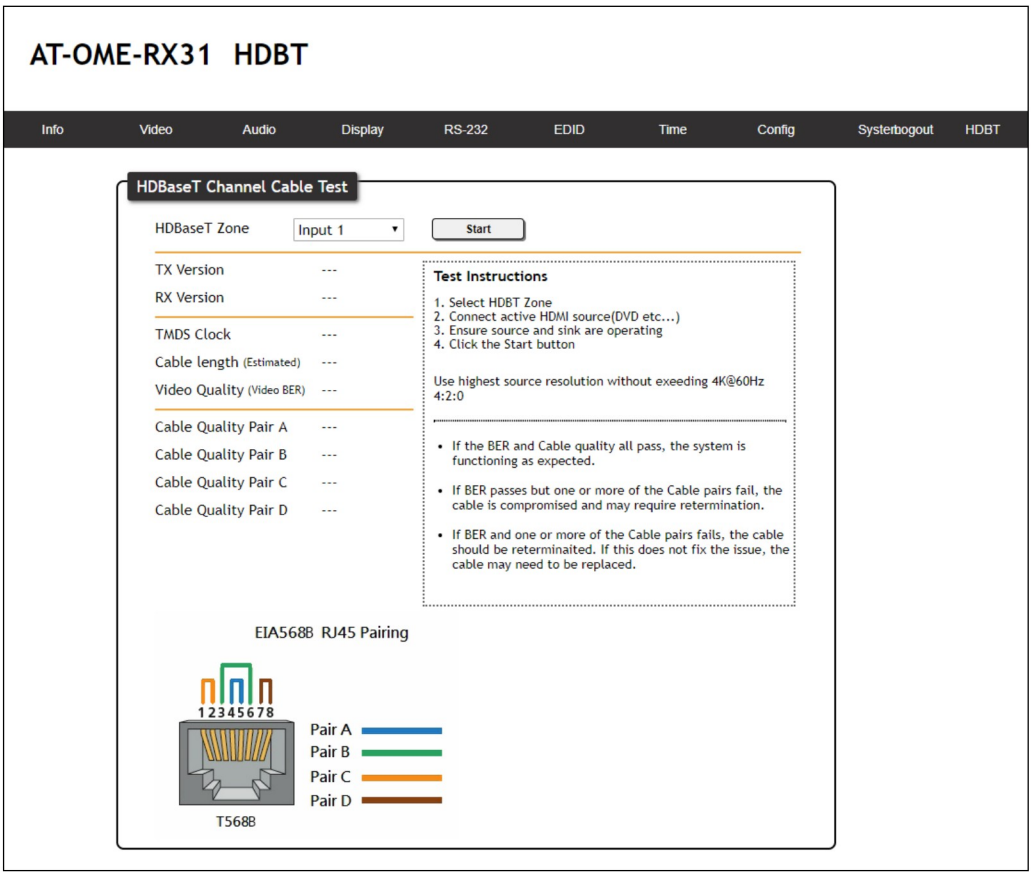
Front Panel Lock - Lock or unlock the front panel buttons. Reset to Default- Press the Factory Default button to set the unit back to all factory settings, including IP mode. Firmware update - Use the choose file button to search the local PC for the firmware file. Once selected, press the update button to start the firmware update.

NOTE: Firmware updates and release notes can be found at https://www.hallresearch.com/product/AT-OME-RX31.

Log File Download - Use the Download button to download the system log to a file. This file is used for trou - bleshooting purposes. Import Configuration - Use the choose file button to upload a system configuration file to the unit. Export Configuration - Use the download button to save the current system configuration to a file.

HDBT

Select HDBT to open the HDBaseT cable test page. This page will check extender versions, cable status and length, and Video Quality.



HDBT Test

HDBaseT Zone - Use the drop down menu to select which HDBaseT input is being tested. Only active connections can be tested. Start/Stop - Use the start/stop button to run or cancel the HDBaseT signal testing. The webGUI will remain active until the testing stops. TX / RX Version - When the test starts, the chipset version will display. AT-OME-RX31 will be VS2310. TMDS Clock - After the test has been initiated, it will display the TMDS clock frequenzy in Mhz. Cable Length - An approximate HDBaseT cable length will be displayed here after the test has been started. Video Quality (Video BER) - Will display pass or fail depending on if the cable video signal quality. Cable Quality - Each pair will be tested and return a pass or fail status.

Failure: One or more Pairs - Reterminate the cable. Of BER and any pairs - Replace the cable. Of one or more pairs after retermination - Replace the cable.

Appendix

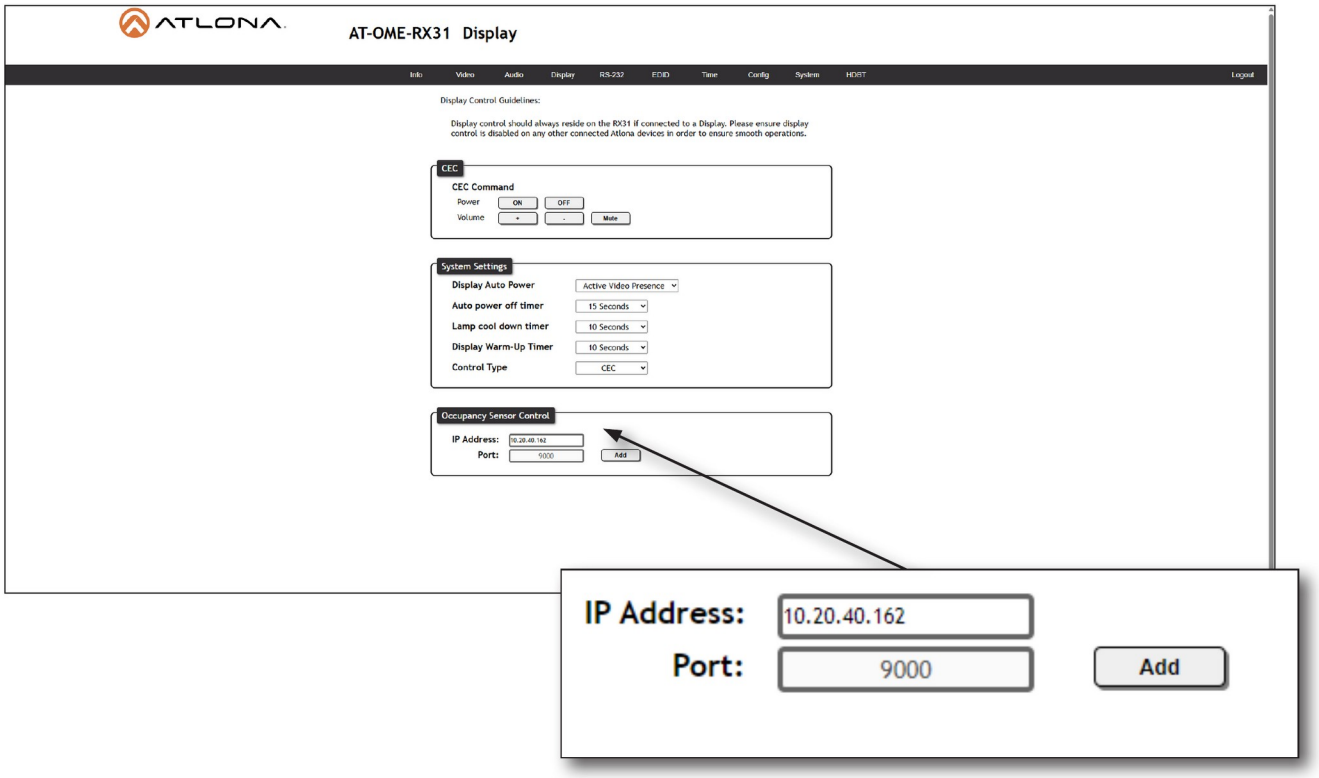
Integration with the JAV-OCS-900N

NOTE: The AT-OME-RX31 supports a maximum of three JAV-OCS-900N devices.

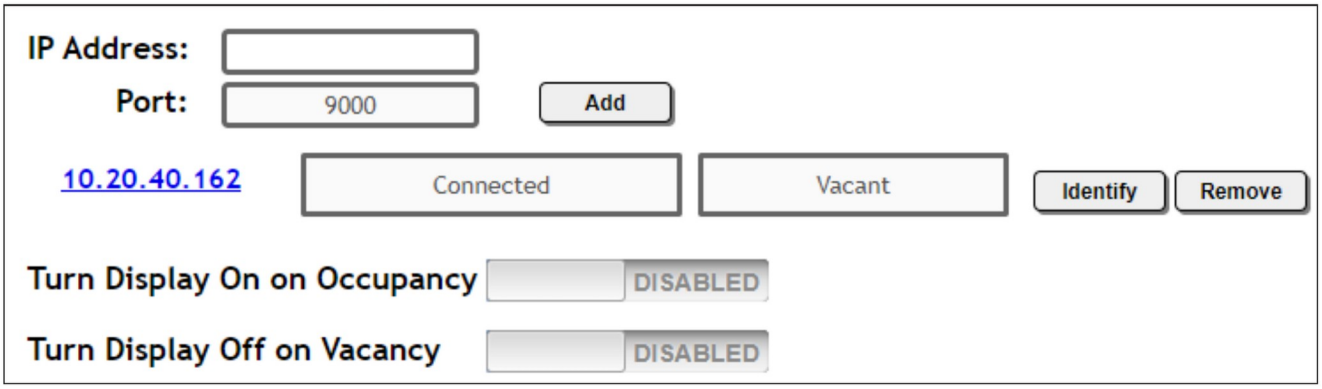
The following provides instructions on adding the JAV-OCS-900N occupancy sensor as a device. The **Auto Switchmode** on the AT-OME-RX31 does not need to be enabled for this to work.

IMPORTANT: A username and password must be configured on the JAV-OCS-900N before using the device with the AT-OME-RX31.

1. Connect the JAV-OCS-900N to the same network as the AT-OME-RX31. Refer to the JAV-OCS-900N Instructions for Use for more information.
2. Login to the web server of the AT-OME-RX31.
3. Click **Display** in the top menu bar.
4. Under the **Occupancy Sensor Control** section, enter the IP address of the JAV-OCS-900N in the **IP Address** field.



5. Click the **Add** button. If the correct IP address was entered and the JAV-OCS-900N is found, additional information will be displayed under the Occupancy Sensor Control section, as shown on the next page.



6. Click the **Turn Display On on Occupancy** toggle to enable or disable this feature. When enabled, the toggle switch will display as **ENABLED** and the occupancy sensor will power-on the display when the room is occupied.
7. Click the **Turn Display Off on Vacancy** toggle to enable or disable this feature. When enabled, the toggle will display as **ENABLED** and the occupancy sensor will power-off the display when the room is no longer occupied.
8. Click the **Identify** button to identify the occupancy sensor. This feature is useful when multiple sensors are connected.

> **IMPORTANT:** When adding an occupancy sensor, it is recommended that a static IP address is assigned to the occupancy sensor. DHCP is not recommended.

9. Click the **Remove** button to delete a sensor from the **Sensors** list.
10. Setup is complete.

Specifications

Video	
HDMI	2.0
HDCP	2.2
UHD / HD / SD	4096 × 2160 @ 24, 25, 30, 50, 60 Hz 3840 × 2160 @ 24, 25, 30, 50, 60 Hz 1920 × 1080p @ 23.98, 24, 25, 29.97, 30, 50, 59.94, 60 Hz 1920 × 1080i @ 25, 29.97, 30 Hz 1280 × 720p @ 50, 59.94, 60 Hz 720 × 576p @ 50 Hz; 720 × 576i @ 50 Hz 640 × 480p @ 59.94, 60 Hz; 640 × 480i @ 30 Hz 4K/UHD @ 60 Hz: 4:4:4 on HDMI input/output; 4:2:0 on HDBaseT
VESA	2560 × 1600, 2048 × 1536, 1920 × 1200, 1680 × 1050, 1600 × 1200, 1440 × 900, 1400 × 1050, 1366 × 768, 1360 × 768, 1280 × 1024, 1280 × 800, 1152 × 864, 1024 × 768, 800 × 600, 640 × 480 — all @ 60 Hz
VESA 21:9	2560 × 1080 @ 30 Hz 4:4:4 2560 × 1080 @ 60 Hz 4:4:4 3440 × 1440 @ 30 Hz 4:4:4 3440 × 1440 @ 50 Hz 4:4:4 3840 × 1600 @ 30 Hz 4:4:4
Scaler Output	1024 × 768 @ 60 Hz 1280 × 720 @ 50, 60 Hz 1280 × 768 @ 60 Hz 1280 × 800 @ 60 Hz 1360 × 768 @ 60 Hz 1600 × 1200 @ 60 Hz 1920 × 1080 @ 24, 25, 50, 60 Hz 1920 × 1200 @ 60 Hz 2048 × 1080 @ 60 Hz 3840 × 2160 (UHD) @ 24, 25, 30, 50, 60 Hz 4096 × 2160 (DCI) @ 24, 25, 30, 50, 60 Hz
Color Space	YUV, RGB
Chroma Subsampling	4:4:4, 4:2:2, 4:2:0
Color Depth	8-bit, 10-bit, 12-bit
HDR	HDR10, Hybrid Log-Gamma (HLG), and Dolby® Vision™ @ 60 Hz (HDMI only)
Audio	
HDMI Pass-Through Formats	LPCM 2.0, LPCM 5.1, LPCM 7.1, Dolby® Digital, Dolby Digital Plus™, Dolby TrueHD, Dolby Atmos®, DTS® Digital Surround™, DTS-HD Master Audio™, DTS:X®
Bit Rate	24 Mbps maximum

Sample Rate	32, 44.1, 48, 88.2, 96, 176.4, 192 kHz
Analog Audio Output	
Format	2-channel stereo
Balanced Output	+4 dBu nominal; +20 dBu headroom
Frequency Response	20 Hz to 20 kHz, ±0.5 dB
THD+N	< 0.004% at 20 Hz to 20 kHz
SNR	> 104 dB at 1 kHz, zero clipping at 0 dBFS, unweighted
Control	
RS-232	Device control and configuration Baud rates: 2400, 4800, 9600, 19200, 38400, 57600, 115200
Trigger	Occupancy sensor triggering; wake from standby and/or display power-up when the room becomes occupied. Electrical rating: 30 V @ 1 A (maximum)
Relay	Contact closure for room functions such as motorized screens and display lifts. Normally open (NO), Toggle or Pulse mode. Electrical rating: 48 V @ 1 A
IP	Protocols: HTTPS, Telnet, mDNS Modes: DHCP or static — selectable from the front panel and the built-in web server
CEC	Yes
Distance	
HDMI IN / OUT	15 ft (5 m) 30 ft (10 m)
Cat 5e	295 ft (90 m) 330 ft (100 m)
Cat 6 / 6a / 7	330 ft (100 m) 330 ft (100 m)
Connectors	
HDMI IN	1× HDMI Type A, 19-pin female
HDMI OUT	1× HDMI Type A, 19-pin female
AUDIO OUT	1× 5-pin captive screw, balanced / unbalanced 2-channel
TRIGGER I/O	1× 4-pin captive screw
RS-232	1× 5-pin captive screw
RELAY	1× 3-pin captive screw
LAN	2× RJ45
HDBaseT	2× RJ45

PWR	1× 4-pin DIN
Buttons and Indicators	
SHOW IP, INPUT	2× momentary, tact-type buttons
IP MODE, RESET	2× momentary, tact-type buttons
PWR, INPUT	3× LED, green
IP MODE, RESET	2× LED, green
Environmental	
Operating Temperature	+32 to +122 °F 0 to +50 °C
Storage Temperature	-4 to +140 °F -20 to +60 °C
Operating Humidity (RH)	20% to 90%, non-condensing
Power	
Consumption	8.1 W
BTU/h	27.6
External Power Supply	Input: 100–240 V AC, 50/60 Hz Output: 24 V DC, 2.7 A
Dimensions (H × W × D)	
Device	1.02 × 8.62 × 5.98 in 26 × 219 × 152 mm
Power Supply (AT-PS-2427-D4)	1.26 × 1.93 × 4.69 in 32 × 49 × 119 mm
Weight	
Device	2.15 lb 0.975 kg
Certifications	
Device	FCC, CE
Power Supply	FCC, CE, UL
Compliance	
TAA	Yes
Warranty	
Device	To view the product warranty, visit: hallresearch.com/warranty

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