

4K HDR HDMI Matrix Switcher with SDVoE Extension Outputs



AT-PRO5-MX810

Atlona Manuals
Switchers

Version Information

Version	Release Date	Notes
2	Jul 2025	<p>Updates for firmware v1.0.2.</p> <ul style="list-style-type: none">• Introduced support for configuring the local RS-232 port using the web server.• Introduced the ability to mute EXT outputs, analog outputs, and VideoWall outputs. <p><i>Refer to the Release Notes for a complete list of bug fixes and known issues.</i></p>

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Operating Notes



IMPORTANT: Visit <https://www.atlona.com/product/AT-PRO5-MX810> for the latest firmware updates and User Manual.

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-PRO5-MX810** is an 8x10 matrix switcher with eight HDMI® inputs, two HDMI outputs, and eight AV extension outputs with SDVoE® 10GbE connectivity for ultra-high definition video and audio delivery to an Atlona AT-PRO5-101-SC-RX or AT-PRO5-101-RX receiver. Part of the PRO5 Series, this matrix switcher is HDCP 2.3 compliant, and supports 4K/60 4:4:4 and HDR at HDMI data rates up to 18 Gbps. Each SDVoE extension output includes an RJ45 port, and an SFP+ cage for copper or fiber optic connectivity to transmit video, embedded audio, Gigabit Ethernet, and RS-232 and IR control signals to the receiver. The RJ45 port allows extension up to 330 feet (100 meters) over CAT6a UTP cable, along with PoE for powering the receiver, while the SFP+ cage can be used with a compatible fiber optic module to extend from 38 meters up to 10 kilometers over fiber optic cable. Video processing is available in the PRO5-101-SC-RX scaling receivers, including 4K video upscaling and downscaling with frame rate conversion, and video wall processing. This HDMI to SDVoE matrix switcher is equipped with a comprehensive host of audio and control system integration features, making it ideal for a wide range of commercial applications requiring multi-zone AV distribution with long-distance signal extension.

Features

- 8x10 HDMI matrix switcher with HDMI and SDVoE® extension outputs.
- High-performance, SDVoE-based, point-to-point AV transmission.
- Eight SDVoE extension outputs, each with copper or fiber optic connectivity.⁽¹⁾
- 4K/UHD capability @ 60 Hz with 4:4:4 chroma sampling, plus support for HDR formats.
- HDCP 2.3 compliant.
- Power over Ethernet (PoE) for remotely powering AT-PRO5-101-SC-RX and AT-PRO5-101-RX receivers.
- High-performance video processing available with AT-PRO5-101-SC-RX scaling receivers.
- Video wall processing available with AT-PRO5-101-SC-RX scaling receivers.
- Flexible, independent audio matrix switcher.
- Multi-channel audio compliant.
- EDID management.
- HDCP 2.3 management.
- Provides HDMI signal regeneration for source devices.
- Intuitive GUI-based configuration using integrated web server.
- TCP/IP and RS-232 control.
- TCP proxy streamlines control system integration.
- Independent CEC display control to each output.
- Comprehensive IR control management for sources and displays.
- Easy to configure and manage with Velocity Device Manager.
- Rack mountable 2U, full-rack width enclosure.

Package Contents

1 x AT-PRO5-MX810
1 x 3-pin captive screw connector
8 x 5-pin captive screw connectors
1 x AC power cord
1 x Insert w/ QR code

(1) The RJ45 and SFP+ connectors on a single EXT port cannot be used simultaneously for AV extension.

Panel Description

Front Panel



1 PWR

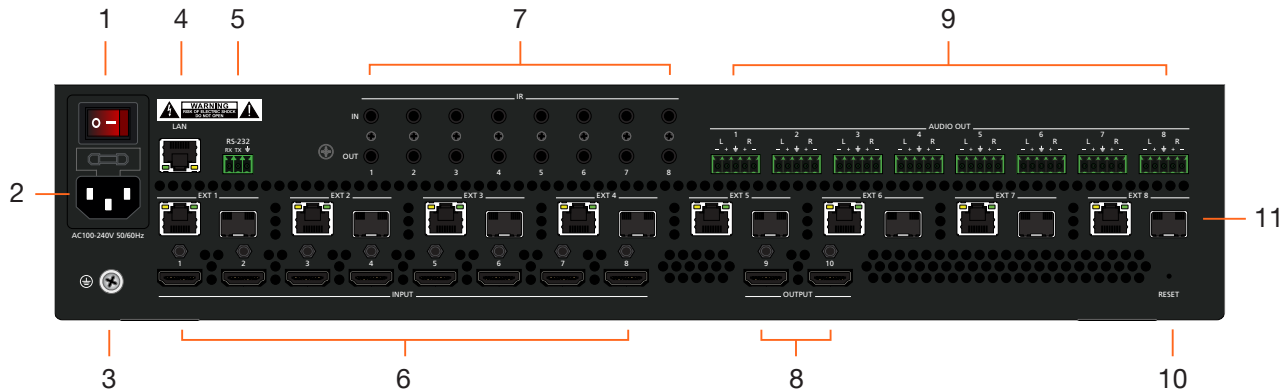
LED will be red while the unit is booting and blue when operating normally. Refer to [LED Indicators \(page 12\)](#) for more information.

2 STATUS

LED will be blue when the unit is operating normally. Refer to [LED Indicators \(page 12\)](#) for more information.

Panel Description

Rear Panel



1 Power Switch

Turns the AT-PRO5-MX810 on or off. Press the side of the switch labeled “I” to power-on the unit. Press the side of the switch labeled “O” to power-off the unit.

2 IEC Connector

Connect the included power cord from this power receptacle to an available grounded wall outlet.

3 Chassis Ground

Provides a common return path for electric current and a safety feature to prevent electric shock.

4 LAN

Connect an Ethernet cable from this port to the network.

5 RS-232

Connect the included 3-pin captive screw connector to this port.

6 INPUT

Connect an HDMI cable from each of these ports to an AV source.

7 IR

This bank of ports provide both IR inputs and outputs. Connect 3.5 mm jacks to these ports.

8 OUTPUT

Connect an HDMI cable from each of these ports to a local display.

9 AUDIO OUT

Connect the included 5-pin captive screw connectors from these ports to an amplifier or DSP.

10 RESET

Press this button to perform a factory-reset of the AT-PRO5-MX810. Refer to [Performing a Factory Reset \(page 20\)](#) for more information.

11 EXT 1 - EXT 8

Connect these outputs to the AT-PRO5-101-SC-RX scaling receiver or AT-PRO5-101-RX receiver. RJ45 ports provide extension up to 330 feet (100 meters) over CAT6A/7 cable along with Power over Ethernet (PoE). SFP+ cage can be used with compatible fiber optic transceiver modules to extend from 38 meters up to 10 kilometers over fiber optic cable.

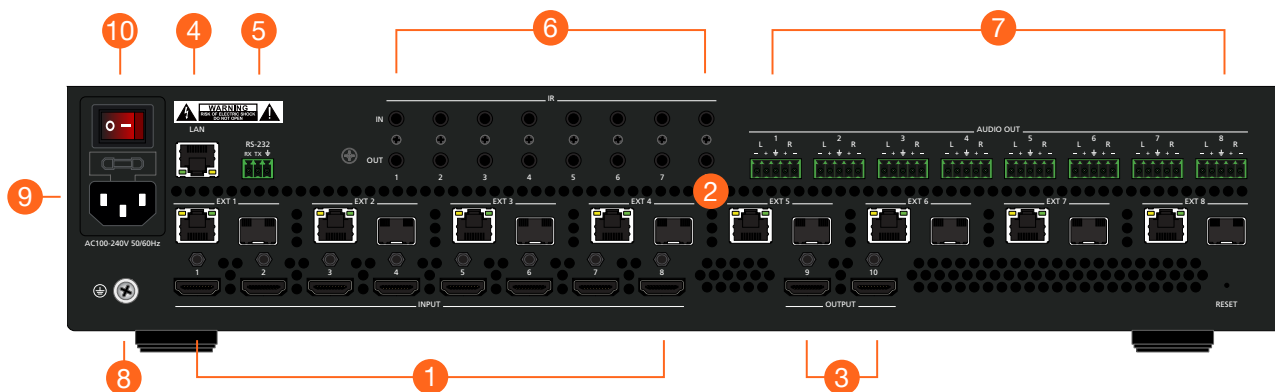
Installation

Connection Instructions

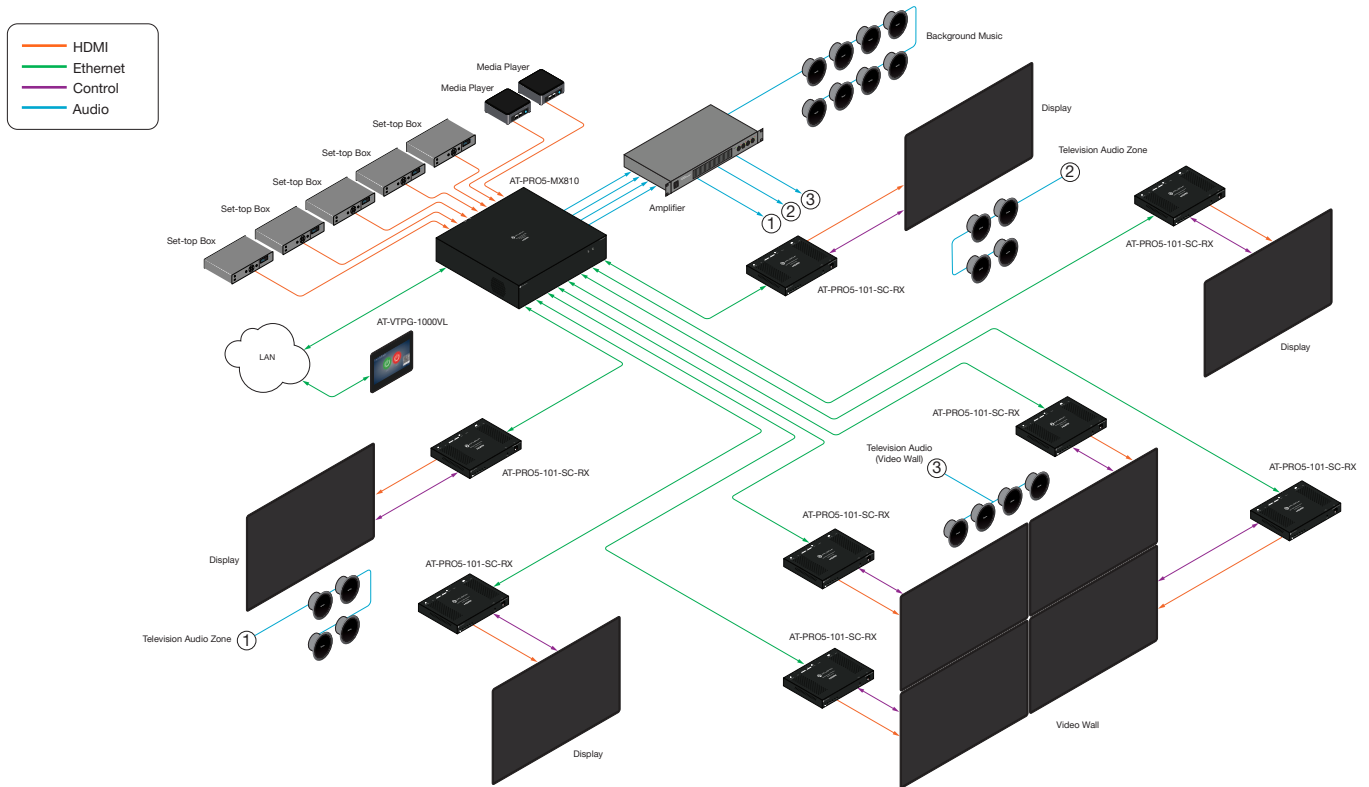
1. Connect an HDMI cable from each source to these **INPUT** ports.
2. Connect an **AT-PRO5-101-RX** or **AT-PRO5-101-SC-RX** receiver to the **EXT 1 - EXT 8** ports. *NOTE: The RJ45 and SFP+ connectors on a single EXT port cannot be used simultaneously for AV extension.*
 - RJ45 ports: connect CAT6a/7 cabling up to 330 feet (100 meters) to AT-PRO5-101-SC-RX scaling receivers or AT-PRO5-101-RX receivers.
 - SFP+ cage: connect compatible fiber optic transceiver modules to extend from 38 meters (125 feet) up to 10 kilometers (6.2 miles) over fiber optic cable. Refer to Table 1.1 for a listing of compatible transceivers.
3. Connect an HDMI cable from the **OUTPUT** ports to locals displays.
4. Connect an Ethernet cable from the **LAN** port to the Local Area Network (LAN). This step will be required in order to access the built-in web server.
5. Connect the included 3-pin captive screw connector from the **RS-232** port to a control system.
6. Connect a 3.5 mm jack from a control system to the **IR IN** ports. Connect IR emitters, such as the AT-VCC-IR-EMT, from the **IR OUT** ports to controlled devices.
7. Connect the included 5-pin captive screw connectors from these **AUDIO OUT** ports to an amplifier or DSP.
8. Connect the chassis ground to a stable and reliable grounding point that safely conducts stray or fault currents away from the device.
9. Connect the included AC power cord from the **AC100-240V 50/60 Hz** power receptacle to an available AC electrical outlet.
10. Press the side of the switch labeled "I" to power-on the AT-PRO5-MX810.

Table 1.1 - Compatible transceivers

Manufacturer	Product
Atlona	AT-SFP-PLUS-10GE-SR
FS	FS SFP+ 10GB 850nm LC
Ubiquiti	UACC-OM-MM-10G-D-2
Proline	EW3D0000710-PRO
StarTech	455883B21ST









Connection Diagram



Device Operation

LED Indicators

The front panel LED indicators display key information about the current status of the AT-PRO5-MX810.

LED	State		Description
PWR	Solid blue		Matrix is powered and in normal operating mode.
	Solid red		The matrix is in <i>standby mode</i> . Note that when the AT-PRO5-MX810 is placed in <i>standby mode</i> , the PWR LED indicator will be red.
	Off		Matrix is not powered. <ul style="list-style-type: none">Make sure that the power supply is connected to an available electrical outlet and that the outlet is “live” (some outlets are controlled by a wall switch).
STATUS	Solid red		The matrix is booting or is in the process of rebooting.
	Blinking blue		The matrix is in the process of resetting to factory defaults.
	Blinking red		The matrix is updating the firmware.

IP Configuration

The AT-PRO5-MX810 is shipped with DHCP enabled by default. When connected to a network, it will request an IP address from the DHCP server. If a DHCP server is available, an IP address will be assigned automatically.

Automatic Private IP Addressing (APIPA)

If the AT-PRO5-MX810 does not receive an IP address from a DHCP server within 15 seconds, it will automatically assign itself a link-local (APIPA) address in the 169.254.xxx.xxx/16 range. If a DHCP server becomes available while the unit is in APIPA mode, it will automatically obtain a new IP address from the DHCP pool.

To manually set the IP address, connect the AT-PRO5-MX810 directly to a computer using an Ethernet cable and follow these steps:

1. Change the IP address of the computer to an unused IP address within the range 169.254.xxx.xxx/16. *The computer must not be assigned the same address as the AT-PRO5-MX810.*
2. Click **Start > Settings > Control Panel > Network and Sharing Center**.
3. Click **Change adapter settings**.
4. Right-click on the adapter that is used to establish a wired connection to the network, and select **Properties** from the context menu.
5. Under the **Ethernet Properties** dialog box, select **Internet Protocol Version 4** and then click the **Properties** button. Click the **Use the following IP address** radio button.



IMPORTANT: Before continuing, write down the current IP settings in order to restore them, later. If **Obtain an IP address automatically** and **Obtain DNS server automatically** are selected, then this step is not required.

6. Enter the desired static IP address or the IP address provided by the network administrator. If the computer does not require Internet access or if a statically-assigned IP address is being used, then an address within the IPv4 address block 169.254.xxx.xxx/16 can be entered.
7. Set the subnet mask to 255.255.0.0.
8. Click the **OK** button then close all **Control Panel** windows.
9. Log in to the built-in web server to set a static IP address that can be used with the network. Contact a system administrator, if necessary.

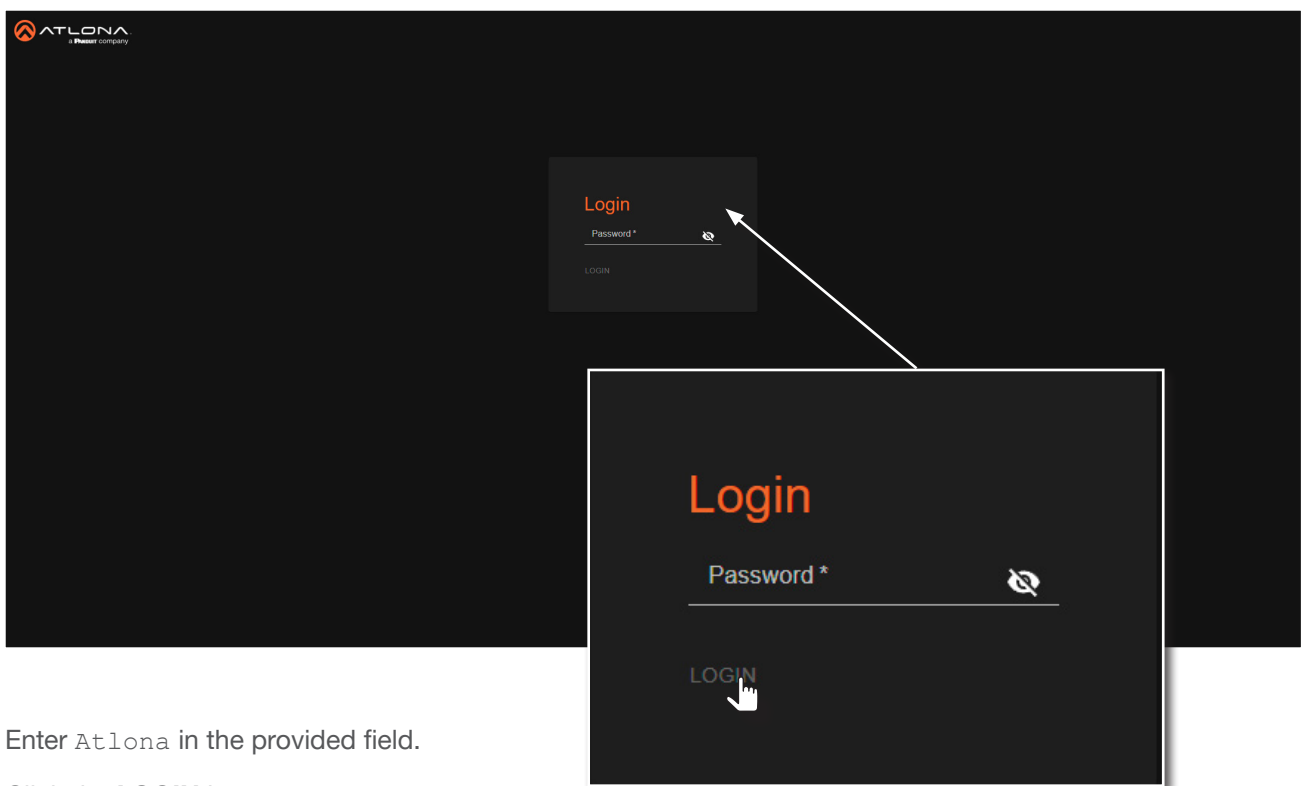
Logging in to the Web Server

Most of the AT-PRO5-MX810 operation is handled through the built-in web server. In order to access the web server, the IP address of the unit must be known.

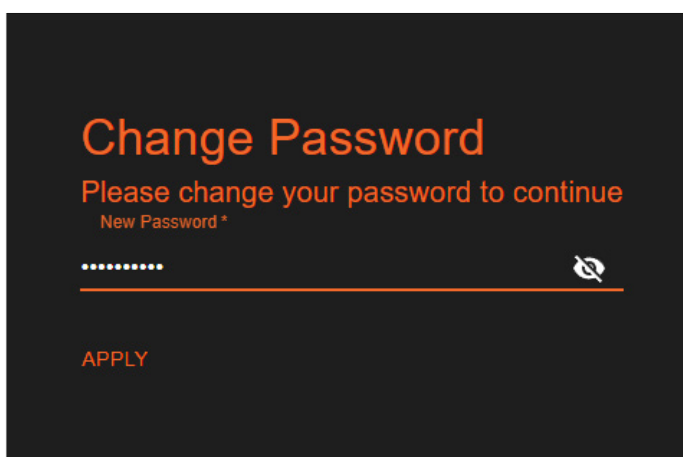
Login Registration

Before the built-in web server can be accessed, a password must be created.


1. Launch the desired web browser and enter the IP address of the AT-PRO5-MX810 in the address bar.
2. The **Login** page will be displayed.



3. Enter `Atlona` in the provided field.
4. Click the **LOGIN** button.
5. The **Change Password** screen will be displayed.



Device Operation

6. Enter the desired password in the **Password** field. By default, the password will be masked. To toggle between password masking and unmasking, click the  icon.

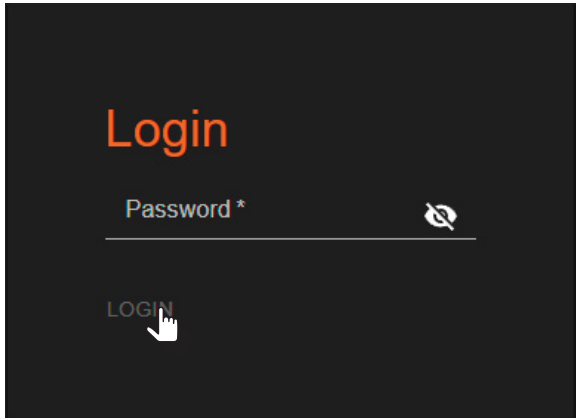


NOTE: Passwords can be 5 to 32 characters in length and can only contain letters, numbers, dashes, underscores, and periods. The password that is created is referred to as the *Admin* password. Additional users cannot be created or assigned. This password can be changed, if desired, from within the web server. Refer to [Changing the Administrator Password \(page 17\)](#) for more information.

7. Click the **Apply** button to commit changes.
8. The **System > System** page will be displayed.

Logging in after Registration

1. Launch the desired web browser and enter the IP address of the AT-PRO5-MX810 in the address bar.
2. Enter the correct password in the provided field.
3. Click the **LOGIN** button.



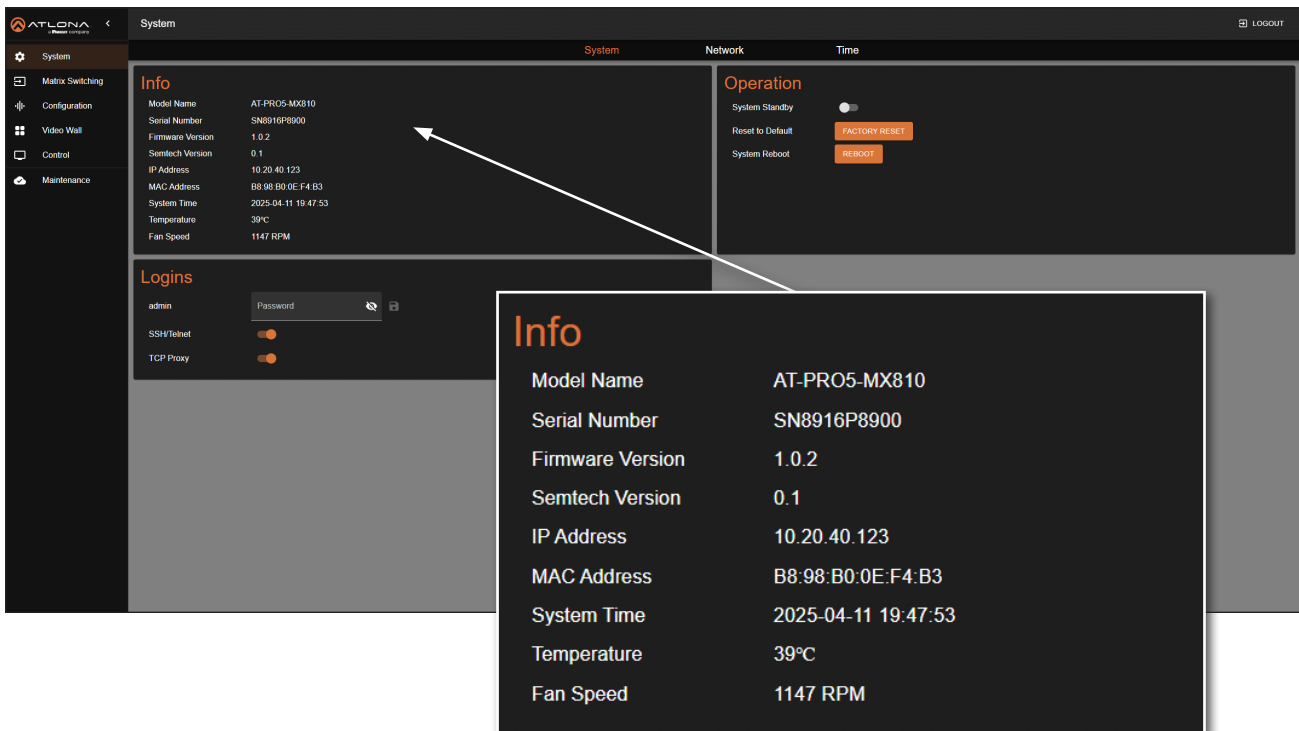
4. The **System > System** page will be displayed.

System Settings

The AT-PRO5-MX810 provides easy access to system configuration through the built-in web server, and is the recommended method to adjust network settings.

Obtaining System Information

1. Log in to the web server.
2. Click **System** in the side menu bar.
3. Click **System** in the top menu bar.
4. Locate the **Info** window group to obtain the IP address, MAC address, System Time, Temperature, and various other details about the AT-PRO5-MX810.

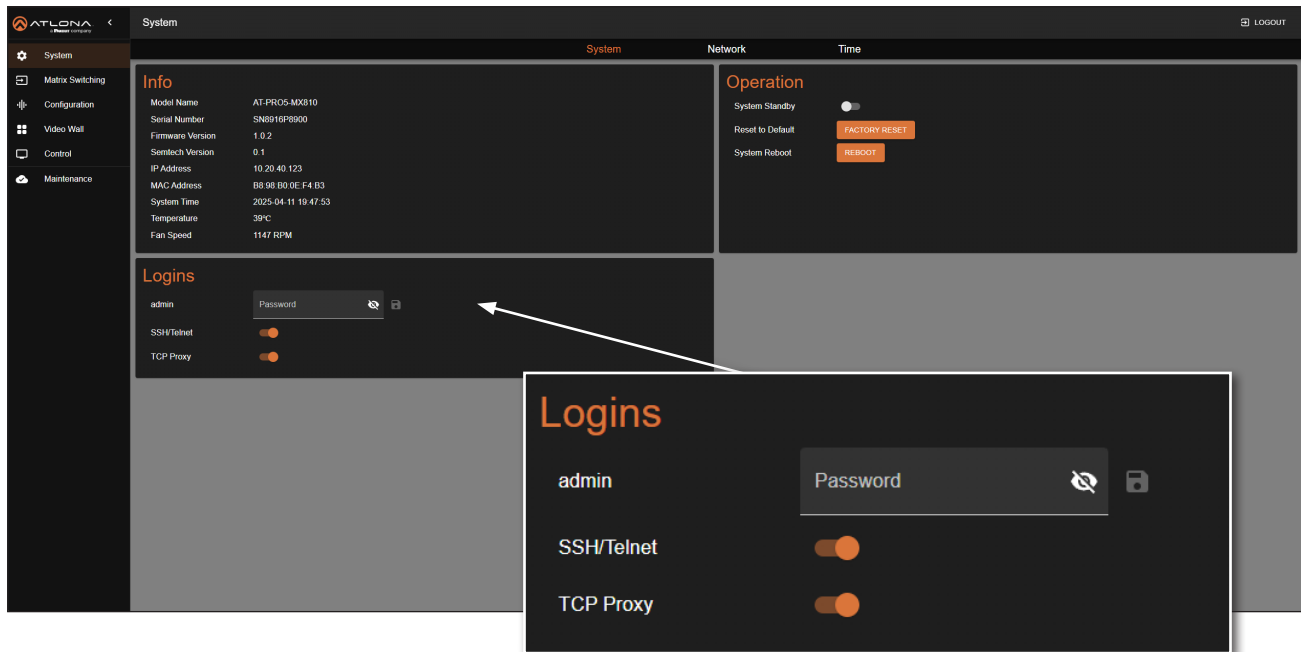



The screenshot shows the AT-PRO5-MX810 web interface. The left sidebar contains a menu with options: System, Matrix Switching, Configuration, Video Wall, Control, and Maintenance. The top navigation bar has tabs for System, Network, and Time. The main content area is divided into three sections: Info, Logins, and Operation. The 'Info' section is highlighted with a callout box.

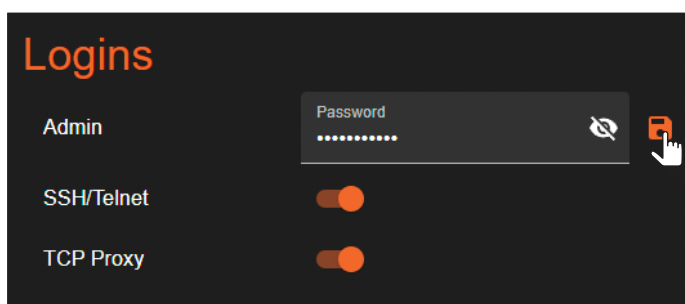
Info	
Model Name	AT-PRO5-MX810
Serial Number	SN8916P8900
Firmware Version	1.0.2
Semtech Version	0.1
IP Address	10.20.40.123
MAC Address	B8:98:B0:0E:F4:B3
System Time	2025-04-11 19:47:53
Temperature	39°C
Fan Speed	1147 RPM

Changing the Administrator Password

1. Log in to the web server.
2. Click **System** in the side menu bar.
3. Click **System** in the top menu bar.
4. Locate the **Logins** window group.



5. Enter the new password in the **Admin** field. By default, the password will be masked. To toggle between password masking and unmasking, click the  icon.

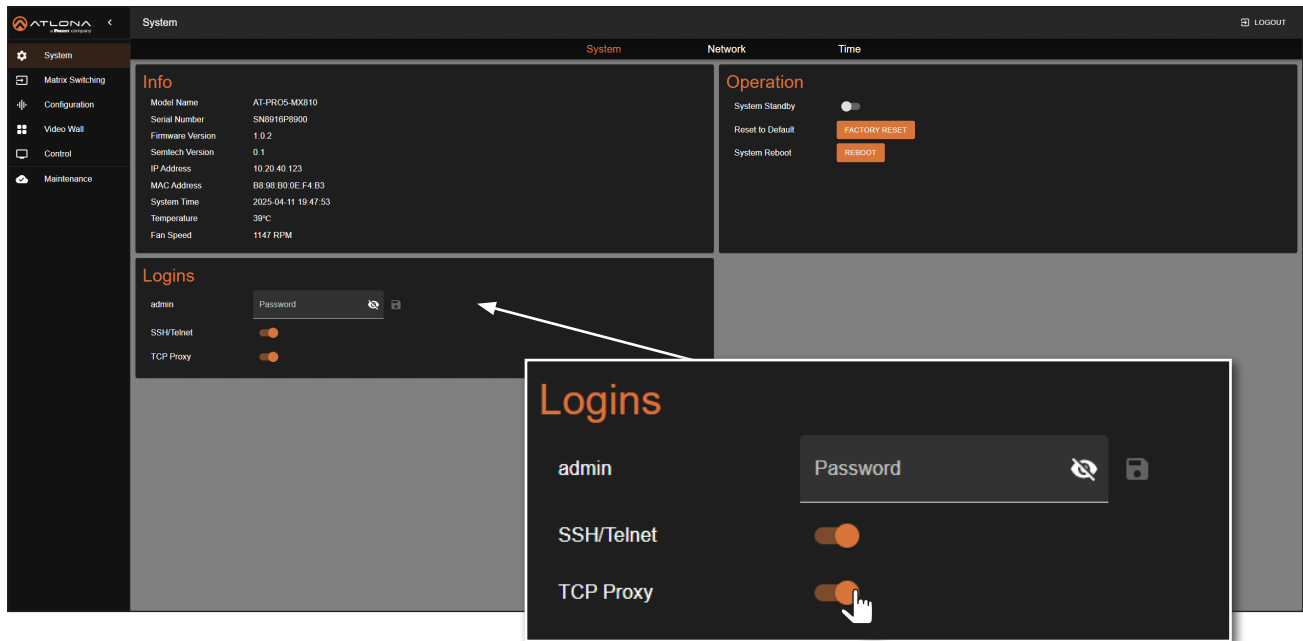


6. Click the  icon to commit changes.

Device Operation

Enabling / Disabling SSH and Telnet Proxy

1. Log in to the web server.
2. Click **System** in the side menu bar.
3. Click **System** in the top menu bar.
4. Locate the **Logins** window group.

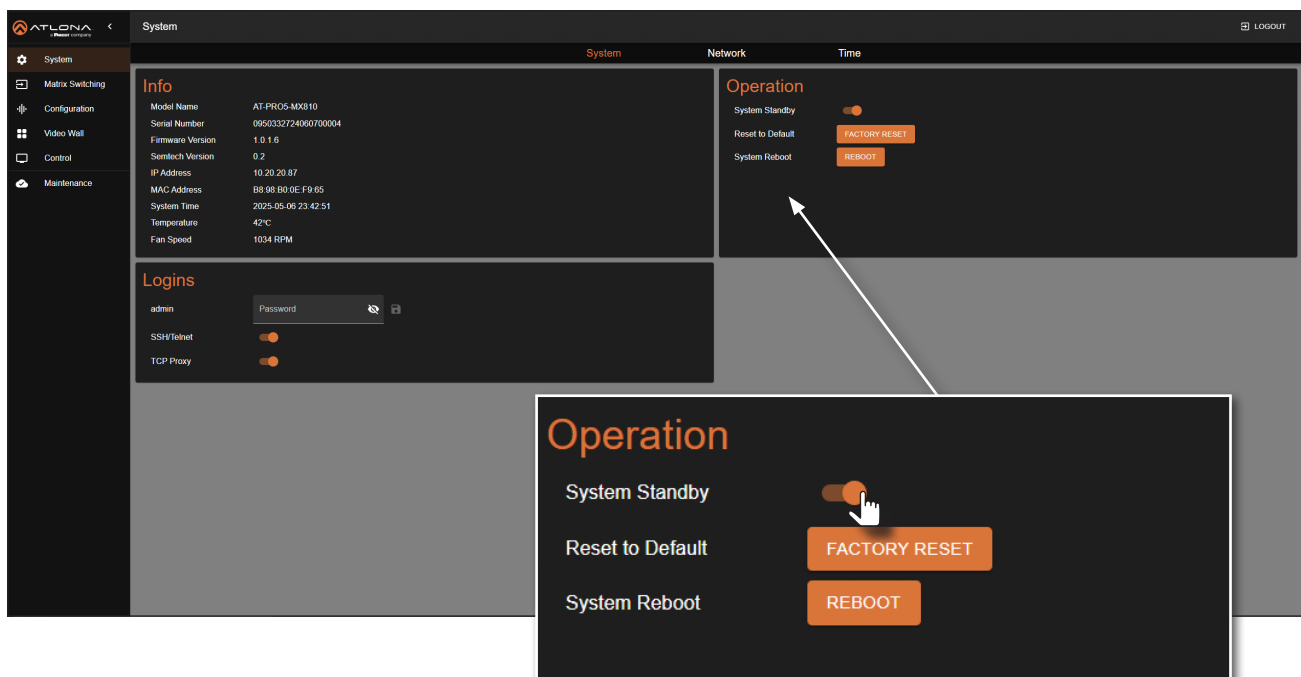


5. Click the **SSH/Telnet** and/or **TCP Proxy** toggle switches to enable or disable each feature. When enabled, the toggle switches will be orange.

Enabling / Disabling System Standby Mode

When System Standby is enabled, the AT-PRO5-MX810 will disable AV extension and other components to reduce the power consumption of the device.

1. Log in to the web server.
2. Click **System** in the side menu bar.
3. Click **System** in the top menu bar.
4. Locate the **Operation** window group.



5. Click the **System Standby** toggle switch to enable or disable this feature. When enabled, the toggle switch will be orange and the **PWR** LED indicator, on the front panel, will be red.

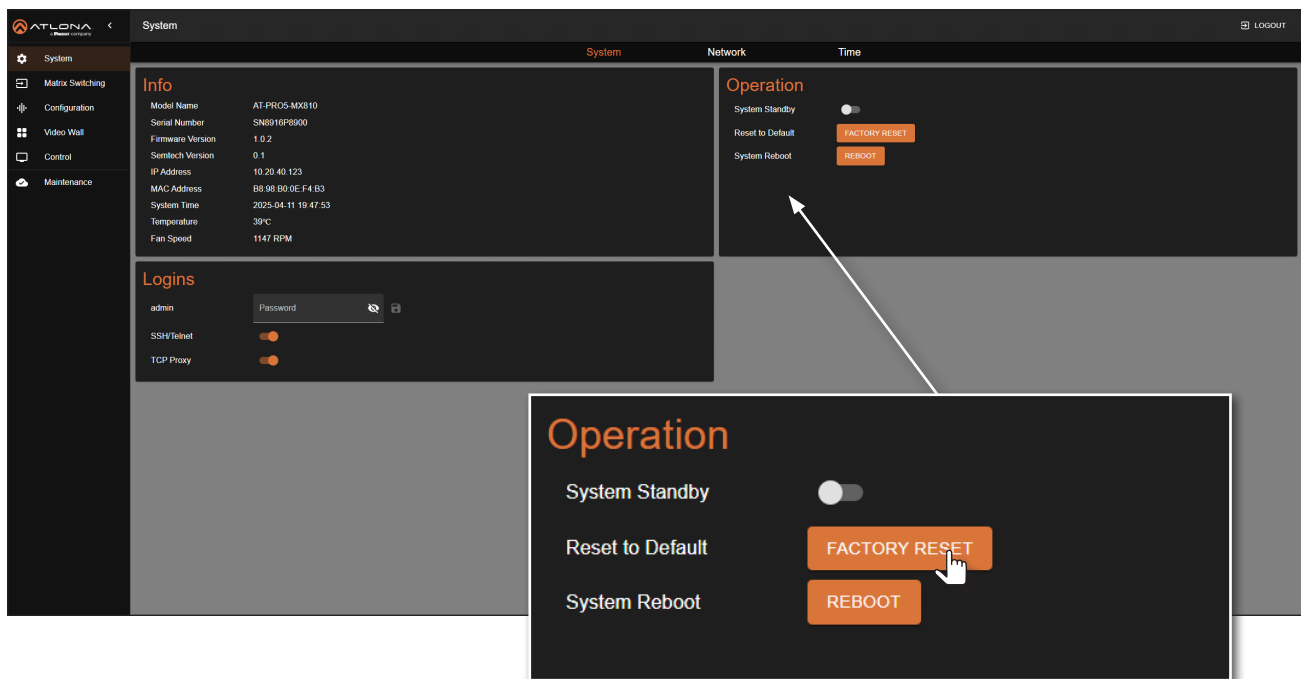


Performing a Factory Reset

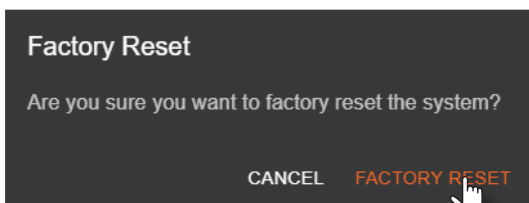
The AT-PRO5-MX810 can be restored to factory-default settings through the built-in web server or by pressing the **RESET** button on the rear panel. After performing a factory reset, the network IP mode will be set to DHCP mode and the login credentials will be reset. A new password will need to be created.

Using the Web Server

1. Log in to the web server.
2. Click **System** in the side menu bar.
3. Click **System** in the top menu bar.
4. Locate the **Operation** window group.



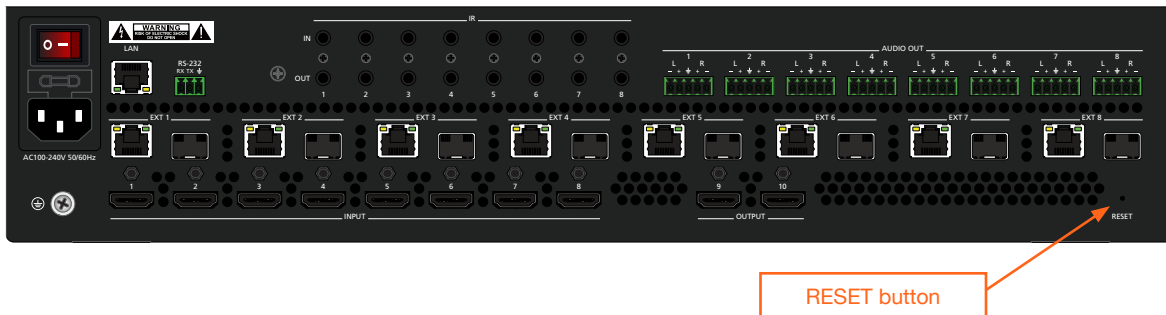
5. Click the **FACTORY RESET** button.
6. The following message will be displayed.



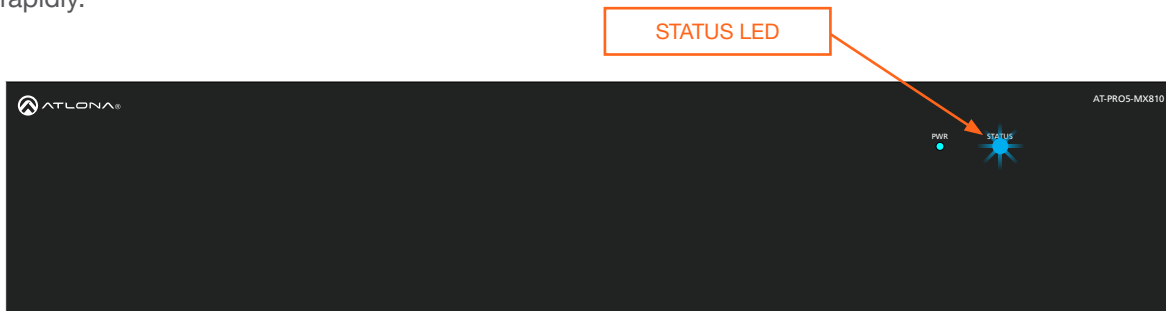
7. Click **FACTORY RESET** to continue with the process or click **CANCEL** to abort.
8. Once the unit has finished rebooting, repeat the procedure for creating a password. Refer to [Login Registration \(page 14\)](#) for more information.

Using the Rear Panel

1. Locate the recessed **RESET** button on the rear panel.



2. Press and hold the **RESET** button for approximately 10 seconds, using the end of a paper clip or other small object.
3. Release the **RESET** button.
4. While the AT-PRO5-MX810 is rebooting, the **STATUS** LED indicator, on the front panel, will be blue and blink rapidly.

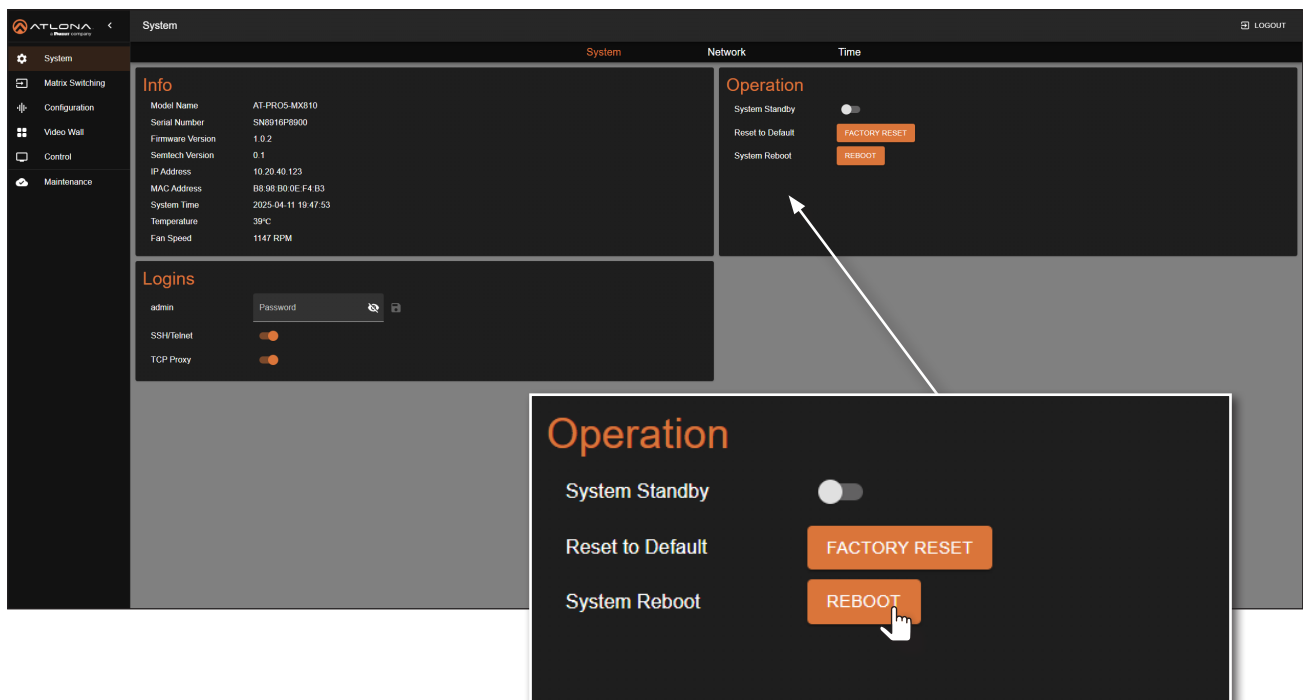


5. Once the unit has finished rebooting, repeat the procedure for creating a password. Refer to [Login Registration \(page 14\)](#) for more information.

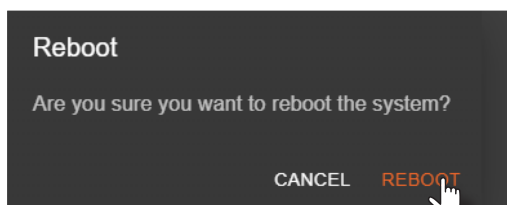
Rebooting the System

The following procedure will reboot the AT-PRO5-MX810. All network and routing settings are preserved.

1. Log in to the web server.
2. Click **System** in the side menu bar.
3. Click **System** in the top menu bar.
4. Locate the **Operation** window group.



5. Click the **REBOOT** button.
6. The following message will be displayed.



7. Click **REBOOT** to continue with the process or click **CANCEL** to abort.
8. Once the unit has finished rebooting, the **Login** screen will be displayed.

Network Configuration

Setting the IP Mode

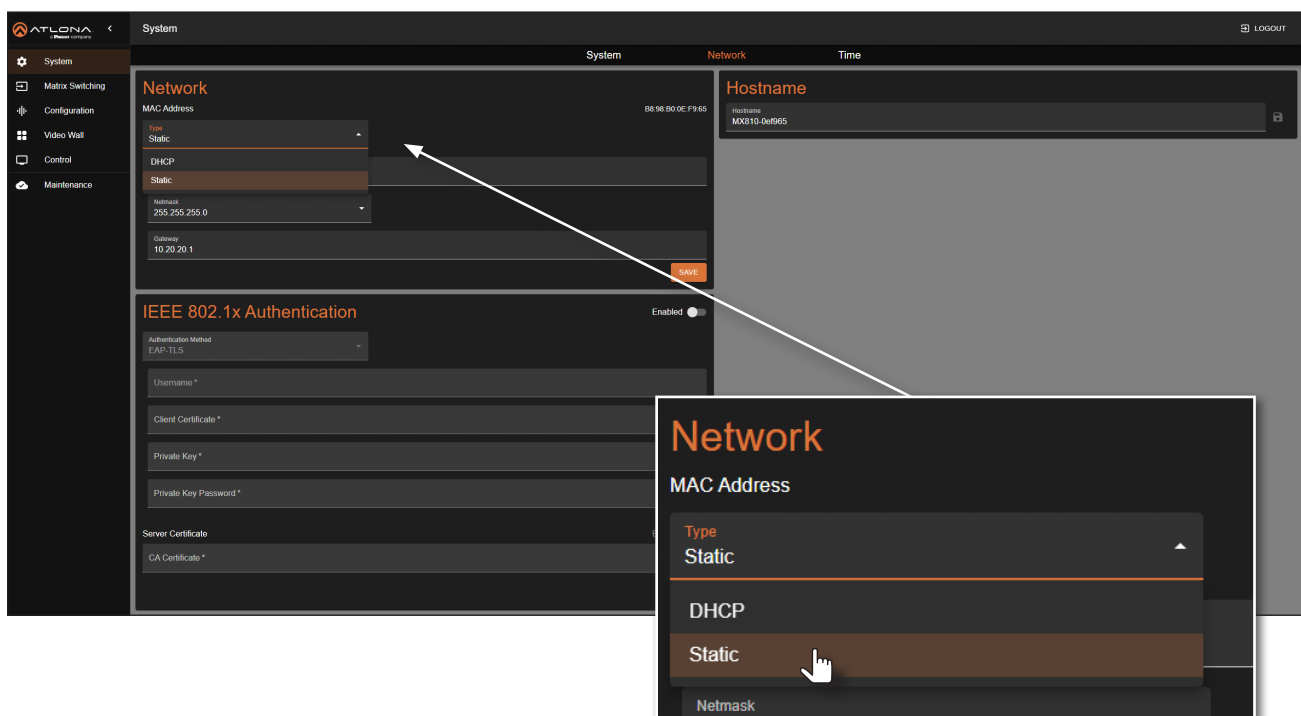
The AT-PRO5-MX810 is set to DHCP by default and will receive an IP address from the network's DHCP pool if a DHCP server is available. If no DHCP server is detected, the AT-PRO5-MX810 will automatically assign itself an APIPA address in the range 169.254.0.1 to 169.254.255.254, with a subnet mask of 255.255.0.0. A static IP address can also be specified.



IMPORTANT: Before assigning a static IP address to the AT-PRO5-MX810, it is recommended to consult with the network or system administrator and obtain a available IP address. Assigning the AT-PRO5-MX810 to an IP address that is already in use can result in network issues or difficulty in accessing the AT-PRO5-MX810.

Static IP Mode

1. Log in to the web server.
2. Click **System** in the side menu bar.
3. Click **Network** in the top menu bar.
4. Locate the **Network** window group.
5. Click the **Type** drop-down list and select *Static*.

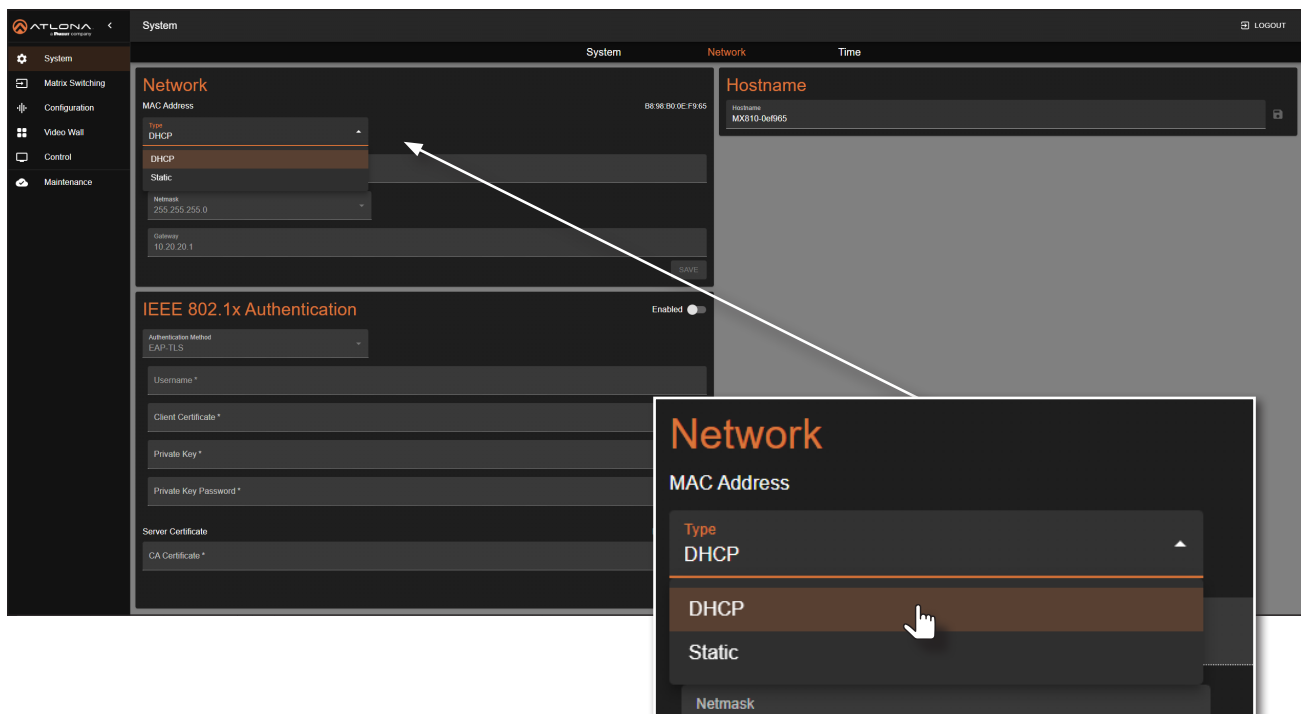


6. Enter IP address, network mask, and gateway (router) address in the **Address**, **Netmask**, and **Gateway** fields, respectively.
7. Click the **SAVE** button to commit changes.

DHCP Mode

The AT-PRO5-MX810 is set to DHCP by default and will receive an IP address from the network's DHCP pool if a DHCP server is available. If no DHCP server is detected, the AT-PRO5-MX810 will automatically assign itself an APIPA address in the range 169.254.0.1 to 169.254.255.254, with a subnet mask of 255.255.0.0.

1. Log in to the web server.
2. Click **System** in the side menu bar.
3. Click **Network** in the top menu bar.
4. Locate the **Network** window group.
5. Click the **Type** drop-down list and select **DHCP**.



6. Click the **SAVE** button to commit changes.

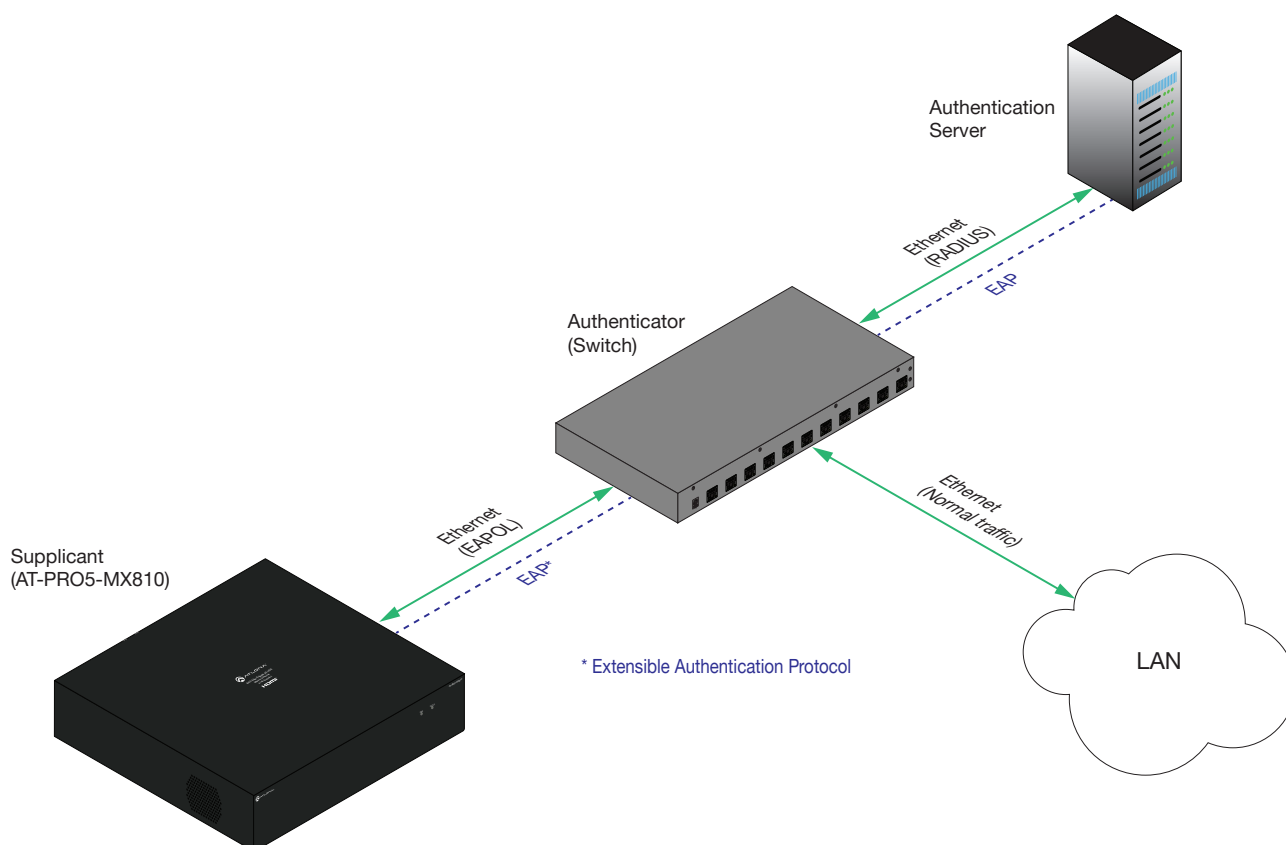
Device Operation

IEEE 802.1x Authentication

802.1x is a server-based port authentication which restricts unauthorized (rogue) clients from connecting to a Local Area Network. In its simplest form, 802.1X usually involves three parties: supplicant (client device), authenticator (Ethernet switch or WAP), and an authentication server. Before the device is permitted on the network, port communication is restricted to Extensible Authentication Protocol over LAN (EAPOL) traffic. If the device passes the authentication process, the authentication server notifies the switch, allowing the client to access the LAN. The illustration below shows the basic architecture.



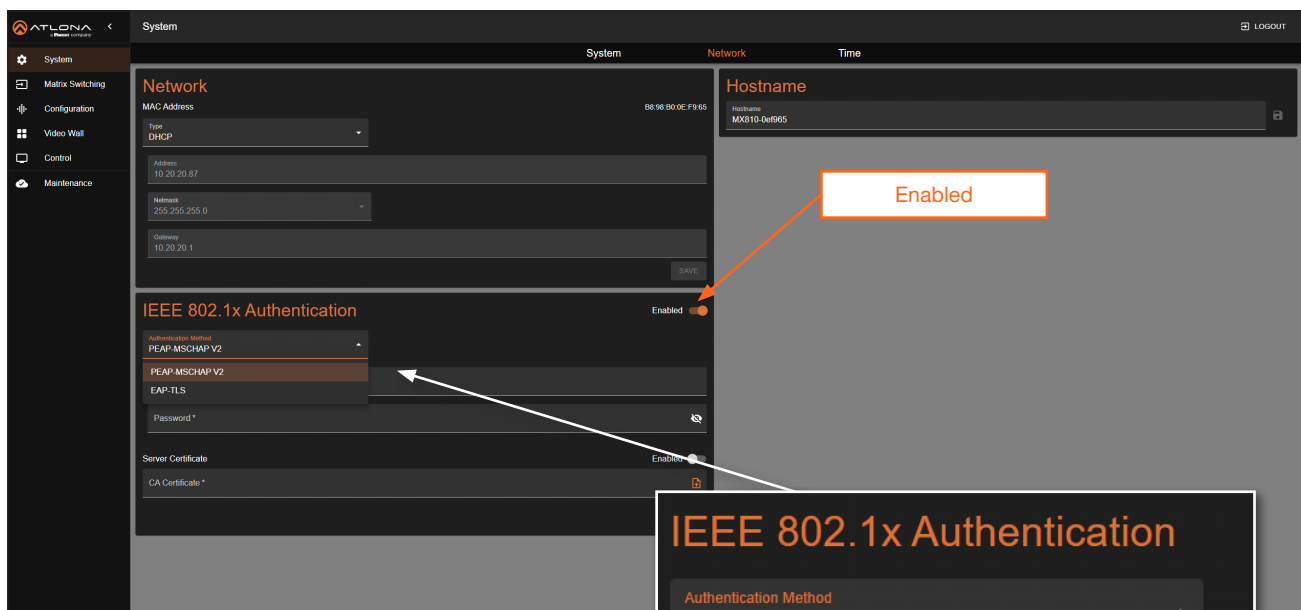
IMPORTANT: If an 802.1x-enabled AT-PRO5-MX810 is connected to a network without an active or operational authentication server, then the matrix will not function correctly until the expected message is returned from a RADIUS server. If it is unclear as to whether the network uses 802.1x authentication, consult the IT administrator for assistance.



The following options are available:



Protocol	Description
PEAP/MSCHAPv2	Protected EAP; uses basic credentials in addition to a CA (certificate authority) certificate.
EAP-TLS	EAP Transport Layer Security; uses a client certificate, private key, private key password, and CA (certificate authority) certificate.

1. Log in to the web server.
2. Click **System** in the side menu bar.
3. Click **Network** in the top menu bar.
4. Locate the **IEEE 802.1x Authentication** window group.
5. Click the **Enabled** toggle button.
6. Click the **Authentication Method** drop-down list and select the desired authentication method. In the example below, **PEAP/MSCHAPv2** is selected. Once a method is selected, the required fields for that method will be displayed. Enter the required information in each field.




7. Click the **SAVE** button to commit changes.

Depending upon the authentication method, each field is described as follows:


- **Username**
The identifier for the user or device that is attempting to connect to the network.
- **Password**
Enter the password in this field.
- **CA certificate**
A digital certificate issued by a Certificate Authority (CA) serves as the foundation of trust for verifying other certificates, such as client and server certificates. Only certificates in the .PEM format are supported. To upload a certificate, click the **Enabled** button above the **Server Certificate** field, then click the  to browse and select the certificate file.
- **Client Certificate**
A digital certificate used to authenticate a device or user attempting to connect to the network. This is typically used in enterprise environments or when added security is desired. Only certificates in the .PEM format are supported. To upload the certificate, click the **Enabled** button, above the **Server Certificate** field, then click the  icon to select the certificate.

Device Operation

- **Private Key**

Part of the Public Key Infrastructure (PKI)—a framework that enables secure encrypted communication—a private key is associated with the digital certificate. This key is securely stored and used to prove identity and establish secure connections. Click the  to select the private key.

- **Private Key Password**

This password adds a layer of security to protect the private key associated with a digital certificate. It is masked by default; click the  icon to show or hide the password.

The table below provides a field summary. An orange dot indicates that this field will be displayed as part of the authentication method.

Authentication Method	Username	Password	CA Certificate	Client Certificate	Private Key	Private Key Password
PEAP/MSCHAPv2	●	●	●			
EAP-TLS	●		●	●	●	●

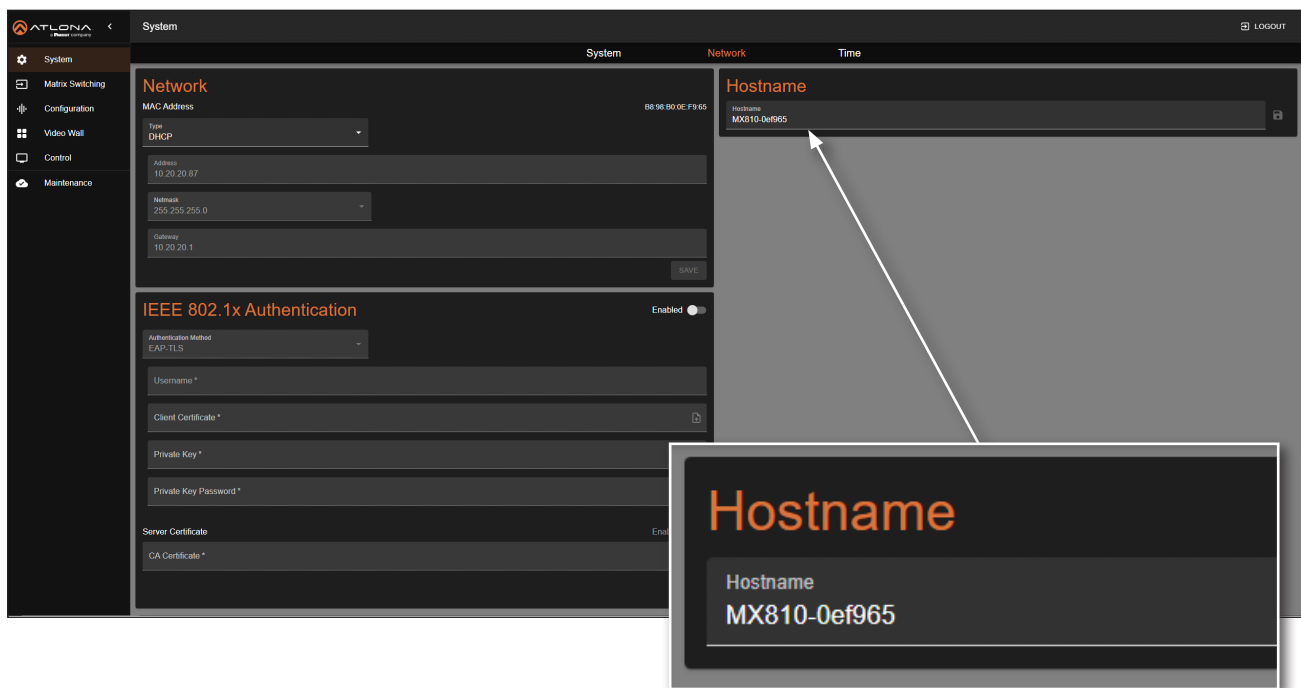
Setting the Host Name

By default, the AT-PRO5-MX810 is assigned a hostname, which is constructed as follows:

MX810-[last six digits of MAC address]

For example, a default hostname might look like this: MX810-0ef965. This value can be changed to easily identify the AT-PRO5-MX810 within Velocity Device Manager or on a network. The hostname cannot exceed 15 characters in length.

1. Log in to the web server.
2. Click **System** in the side menu bar.
3. Click **Network** in the top menu bar.
4. Locate the **Hostname** window group.
5. Click the **Hostname** field and enter the desired name.




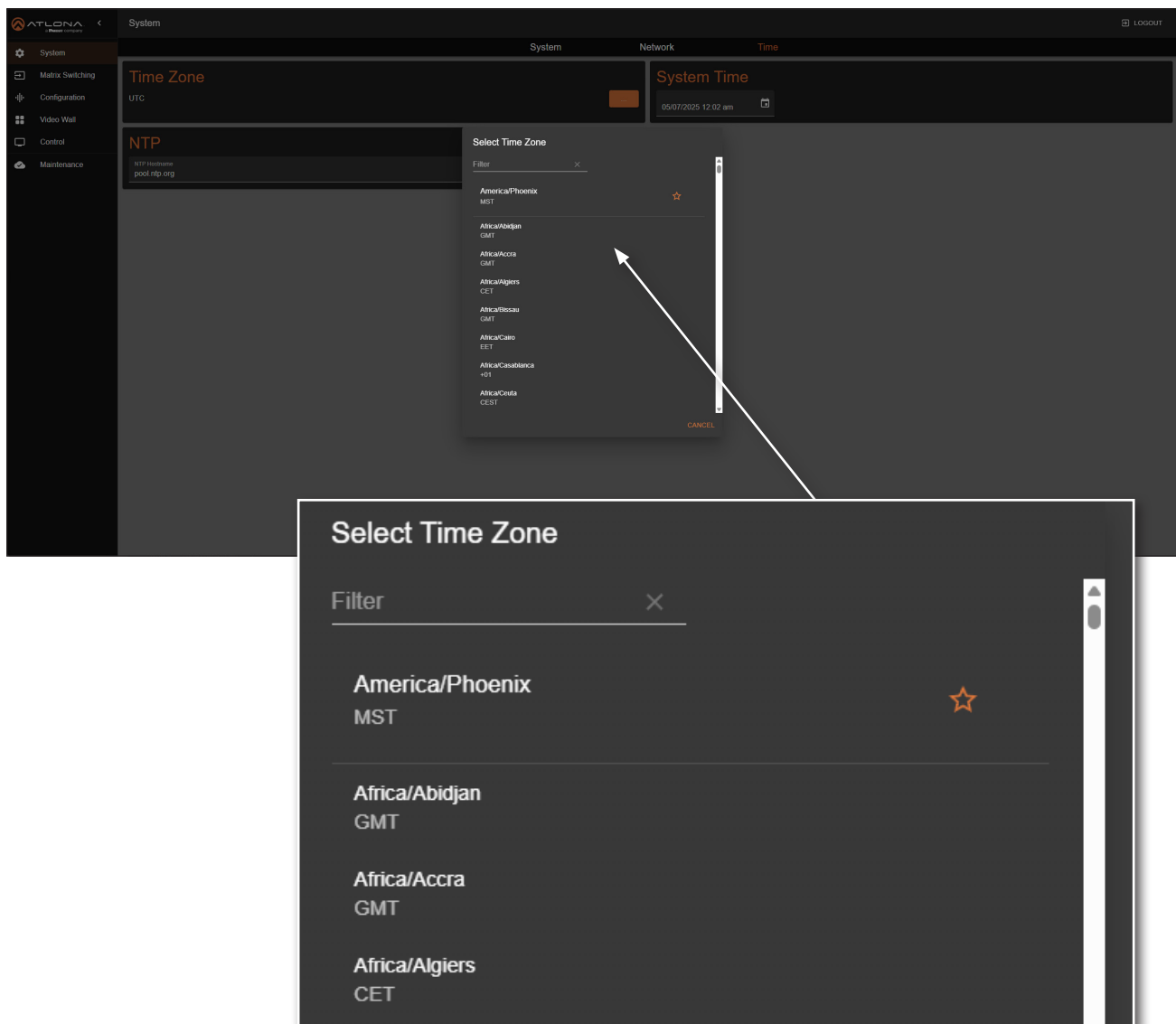
6. Click the  icon to commit changes.

System Time

The AT-PRO5-MX810 uses an internal clock to store the current date and time.


Setting the Time Zone

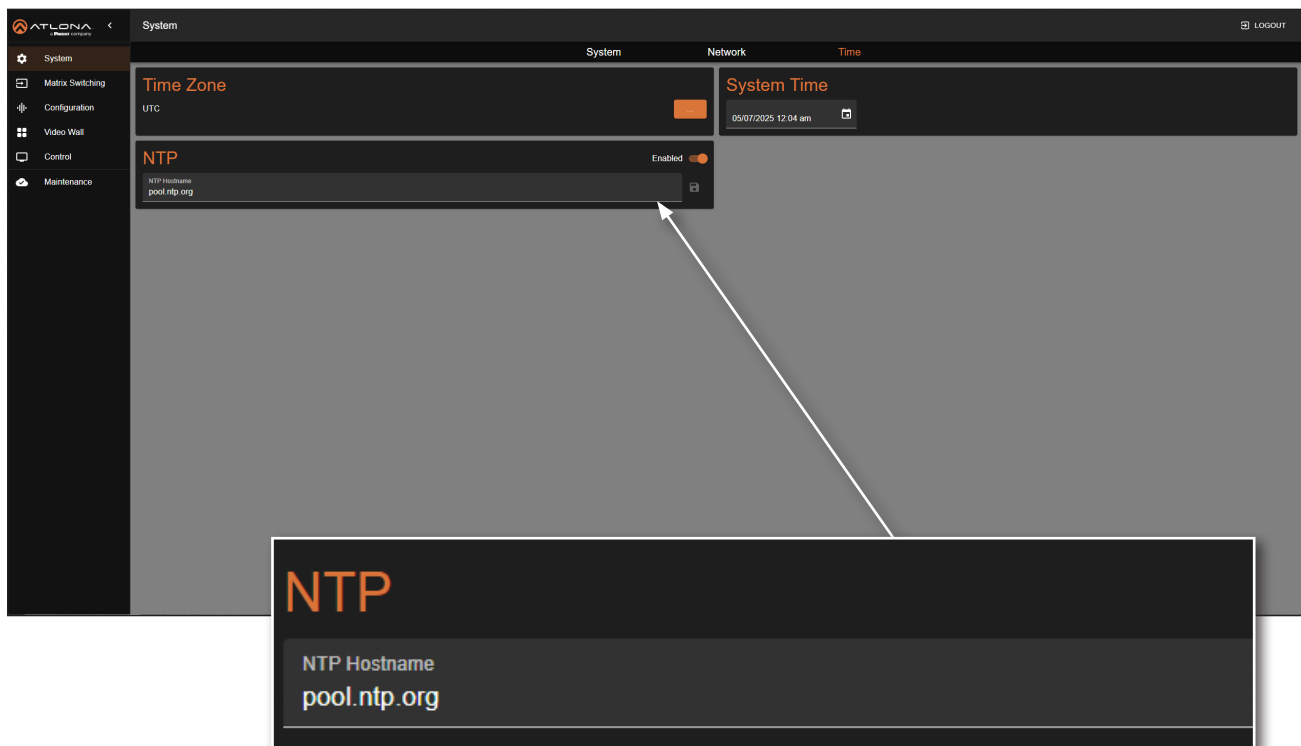
1. Log in to the web server.
2. Click **System** in the side menu bar.
3. Click **Time** in the top menu bar.
4. Locate the **Time Zone** window group.
5. Click the  icon to display the list of time zones. Set the desired time zone by clicking it. Alternatively, the **Filter** field, within the drop-down list, can be used to filter various time zones from the list.




Assigning an NTP Server

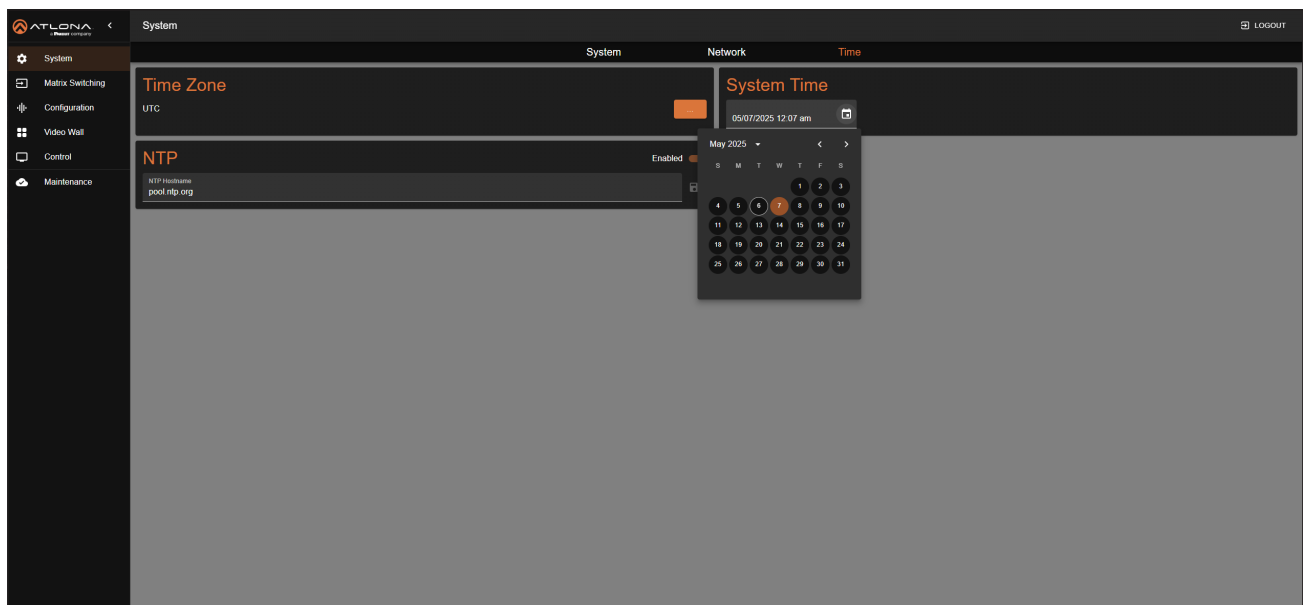
Configuring an NTP (Network Time Protocol) server allows the unit to automatically synchronize its date and time with an accurate external time source. While NTP handles the actual time and date, the local time zone must still be set manually to ensure correct local time display.

1. Log in to the web server.
2. Click **System** in the side menu bar.
3. Click **Time** in the top menu bar.
4. Locate the **NTP** window group.
5. Click the **Enabled** toggle switch to enable NTP. When enabled, the toggle switch will be orange.
6. Enter the NTP server name. The default server is `pool.ntp.org`.
7. Click the  icon to commit changes.

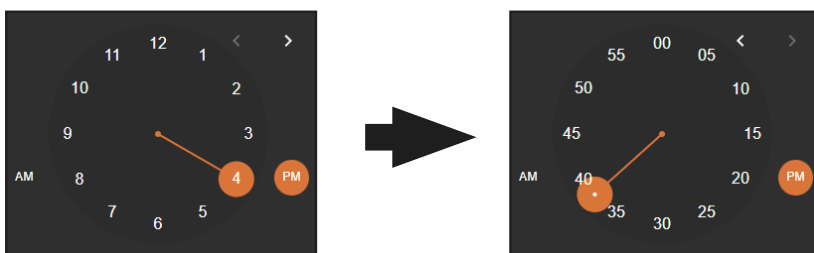


Setting the System Time

1. Log in to the web server.
2. Click **System** in the side menu bar.
3. Click **Time** in the top menu bar.
4. Locate the **System Time** window group.
5. Click the  icon open up the time settings.



6. Click the correct date from the calendar widget. The currently set date will be highlighted in orange.
7. Click on **AM** or **PM** and then select the correct hour from the clock widget, then click the correct minute from the next widget that is displayed.



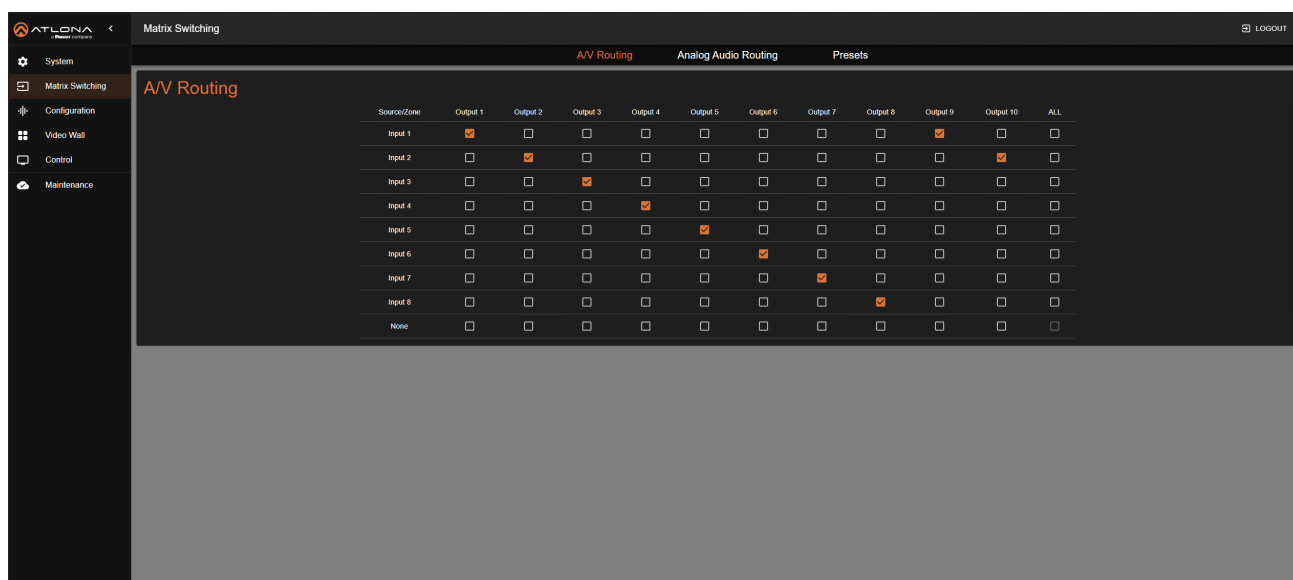
Alternatively, the time and date can also be entered using the keyboard, within the **System Time** field.

Matrix Switching

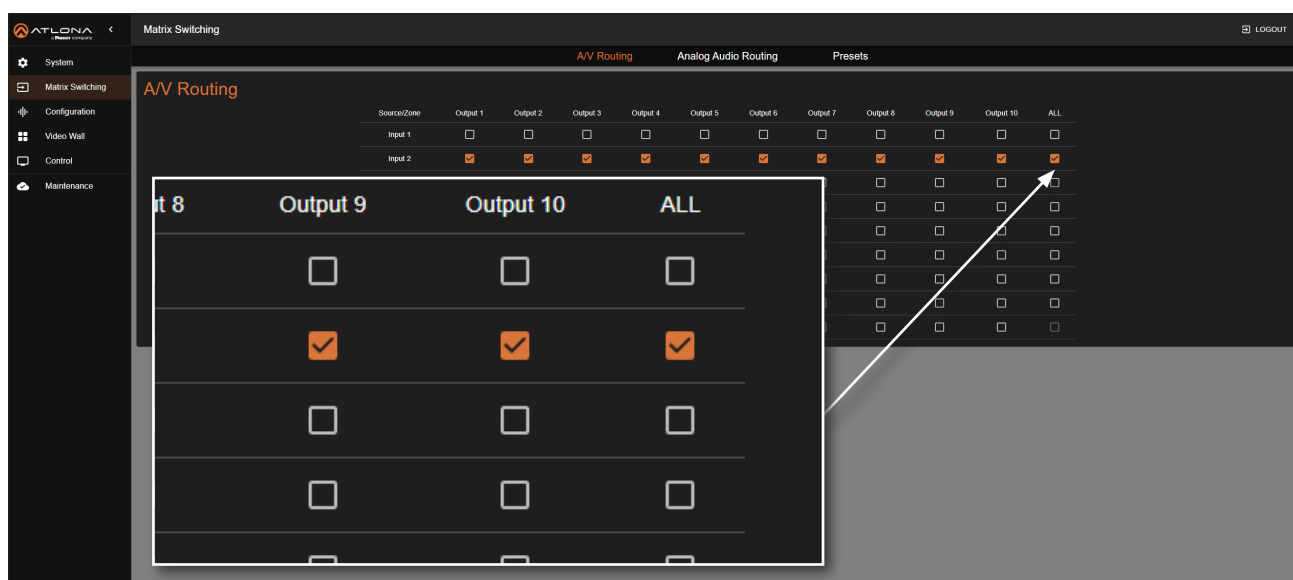
The **A/V Routing** page manages the assignment of input video sources to outputs. By default, the AT-PRO5-MX810 is configured for *1-to-1* routing, where **Input 1** is assigned to **Output 1**, **Input 2** to **Output 2**, and so forth. Additionally, **Input 1** is routed to **Output 9**, and **Input 2** is routed to **Output 10**.

Video Routing

1. Log in to the web server.
2. Click **Matrix Switching** in the side menu bar.
3. Click **A/V Routing** in the top menu bar.
4. Click the checkboxes in the table to assign an input to an output. The checkbox will be orange once the selection is complete.



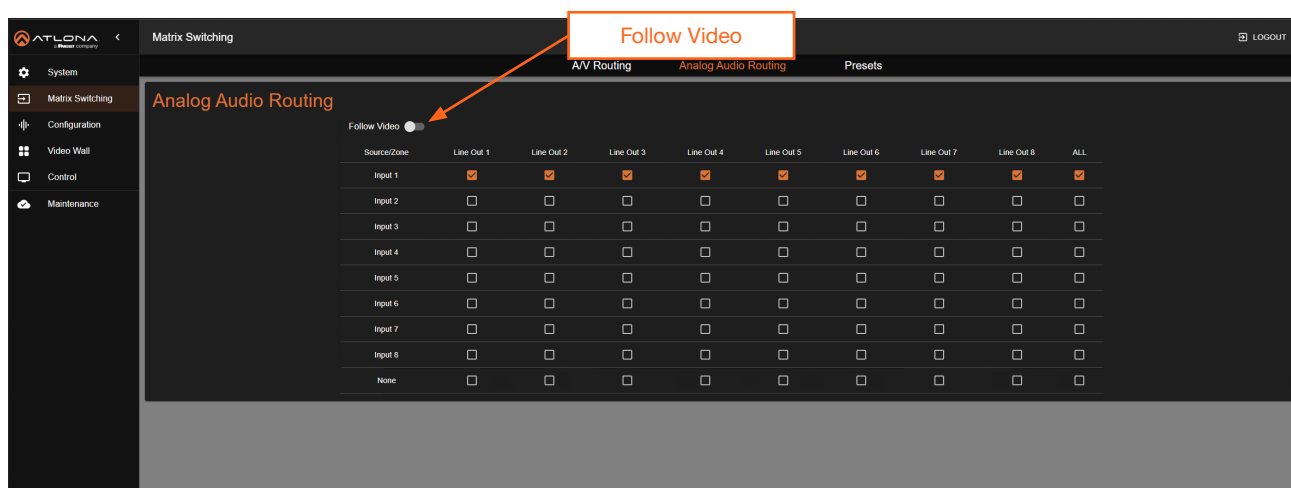
5. To route a single input to all outputs, click the **ALL** check box in the row of the specified Input. In this example, **Input 2** is routed to all outputs (**Output 1 - Output 10**).



Manual Audio Routing

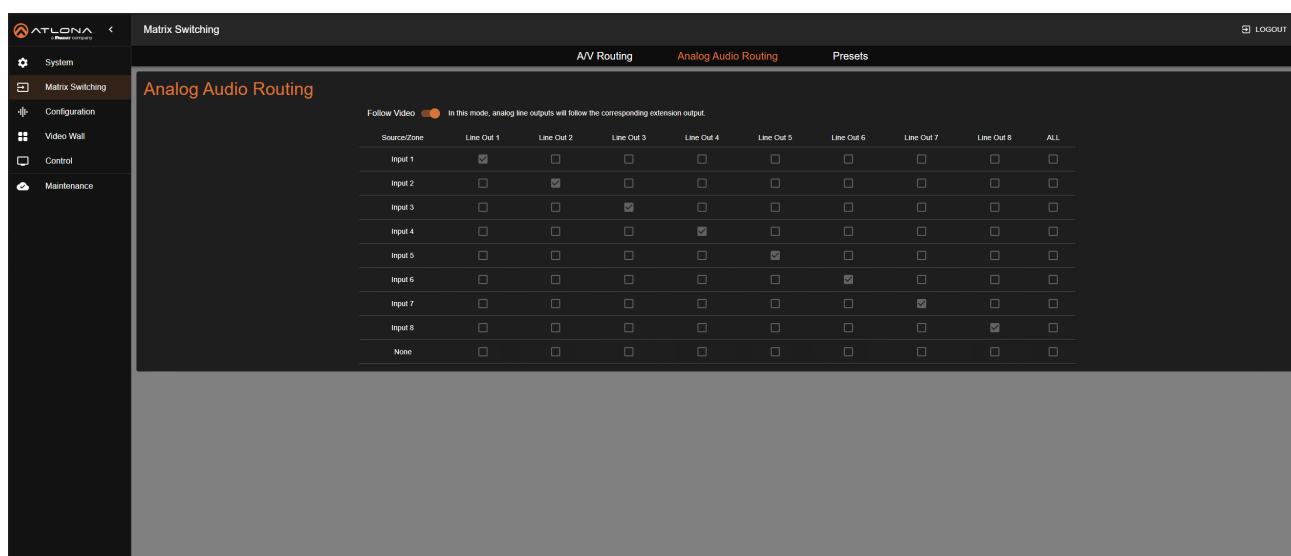
The **Analog Audio Routing** page controls the distribution of de-embedded input audio to analog audio outputs. By default, the AT-PRO5-MX810 routes the audio from **Input 1** to all audio outputs (**Output 1 - Output 10**) configured.

1. Log in to the web server.
2. Click **Matrix Switching** in the side menu bar.
3. Click **Analog Audio Routing** in the top menu bar.
4. Make sure that the **Follow Video** toggle switch is disabled. When disabled, the toggle switch will be gray.
5. Click the check boxes in the table to assign an input to an output. The check box will be orange once the selection is complete.
6. To route a single input to all outputs, click the **ALL** check box. To mute an output click the **None** check box.



Follow Video


This feature is enabled by default. When **Follow Video** toggle switch is enabled, the toggle switch will be orange and manual audio routing is disabled. In this mode, each audio output automatically de-embeds audio from its corresponding video output. For instance, **Audio Output 1** will de-embed audio from **EXT1**.

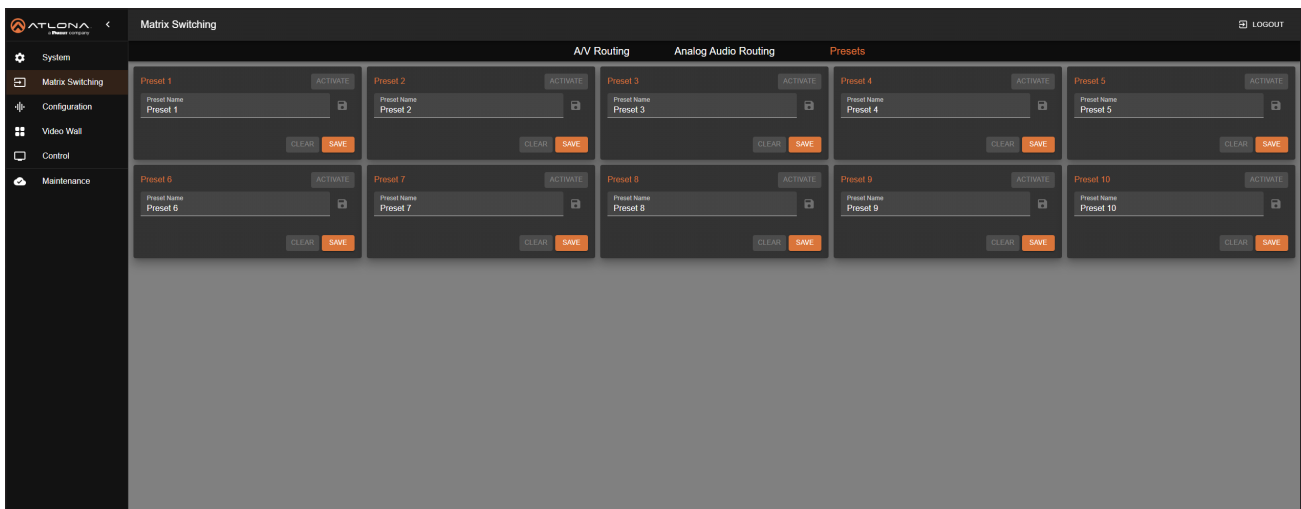


Routing Presets

Saving / Loading Switching Presets

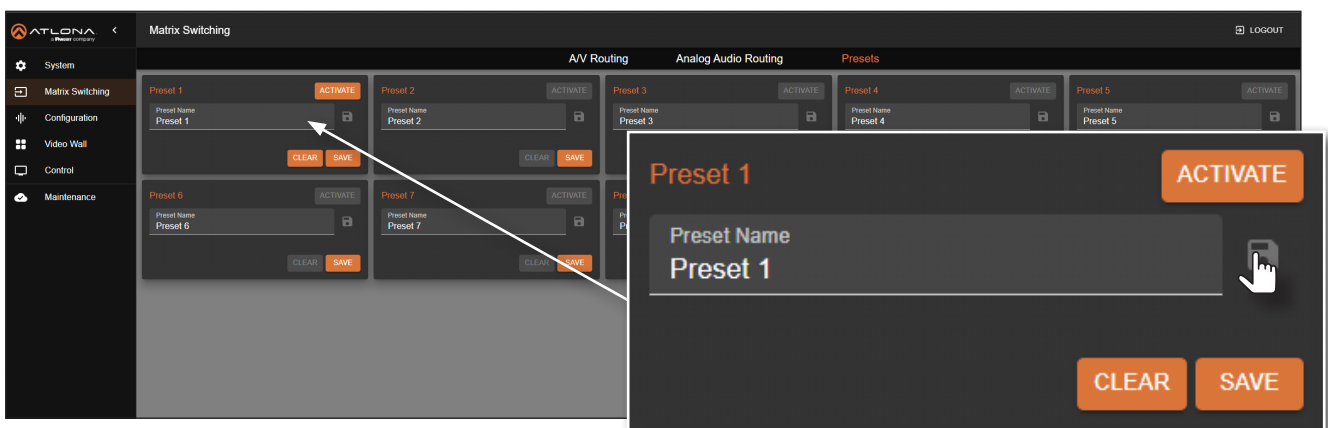
The **Presets** page allows saving and loading of input/output switch configurations to and from the matrix. Up to ten switching presets can be stored.

1. Log in to the web server.
2. Click **Matrix Switching** in the side menu bar.
3. Click **Presets** in the top menu bar.
4. Enter the name of the preset in the desired **Preset** field, then click the  icon to save the name of the preset.
5. Click the **Save** button to assign the currently configured configuration to the preset. To remove the configuration from the preset, click the **Clear** button.



Activating a Preset

1. Log in to the web server.
2. Click **Matrix Switching** in the side menu bar.
3. Click **Presets** in the top menu bar.
4. Select the desired preset and click **ACTIVATE** to load the saved routing state.



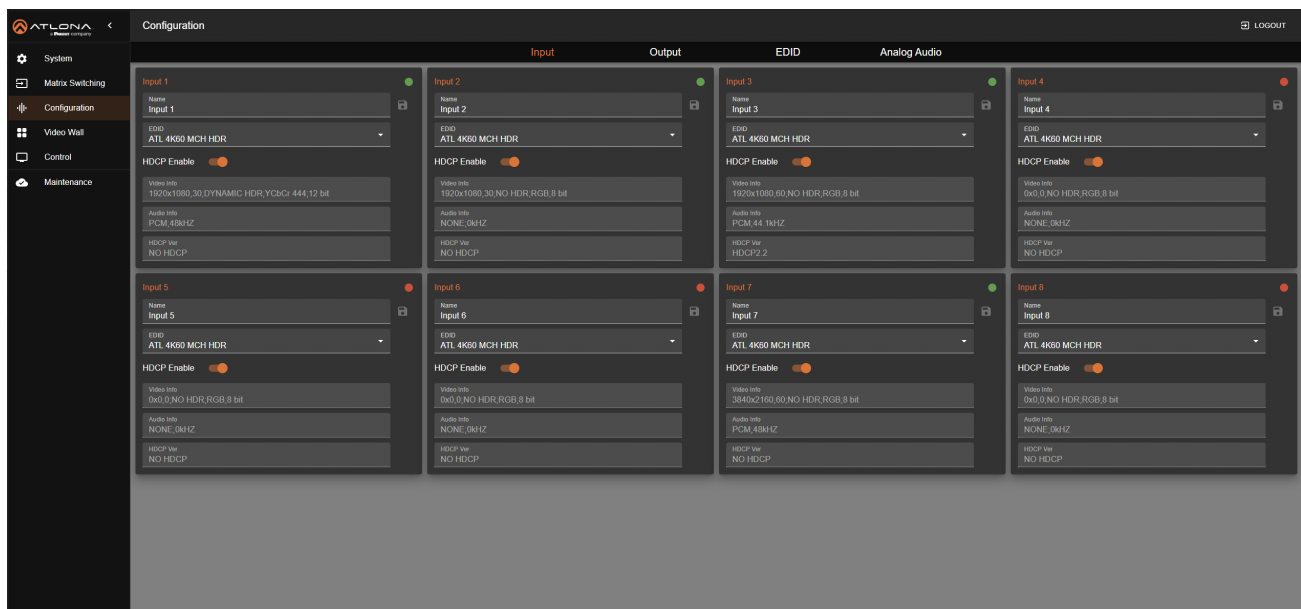
Input Configuration


This section covers modification of input/output names, EDID management, and HDCP capabilities for each input, while also displaying video and audio information for each input.

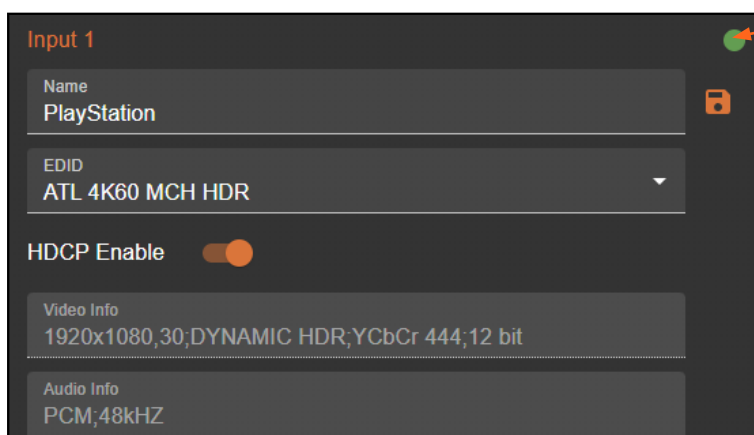
Changing the Input Name

By default, inputs are named **Input 1**, **Input 2**, **Input 3**, and so on. It is recommended to rename each input based on the connected source.

1. Log in to the web server.
2. Click **Configuration** in the side menu bar.
3. Click **Input** in the top menu bar.



4. Click the **Name** field of the desired input.
5. Enter the desired name for the input. In this example, *PlayStation* is used, identifying the source.
6. Click the  icon to apply the new input name. The original input name, shown in orange, remains unchanged. The custom name appears only on the **Matrix Switching > A/V Routing** and **Matrix Switching > Analog Audio Routing** pages.



Connection status

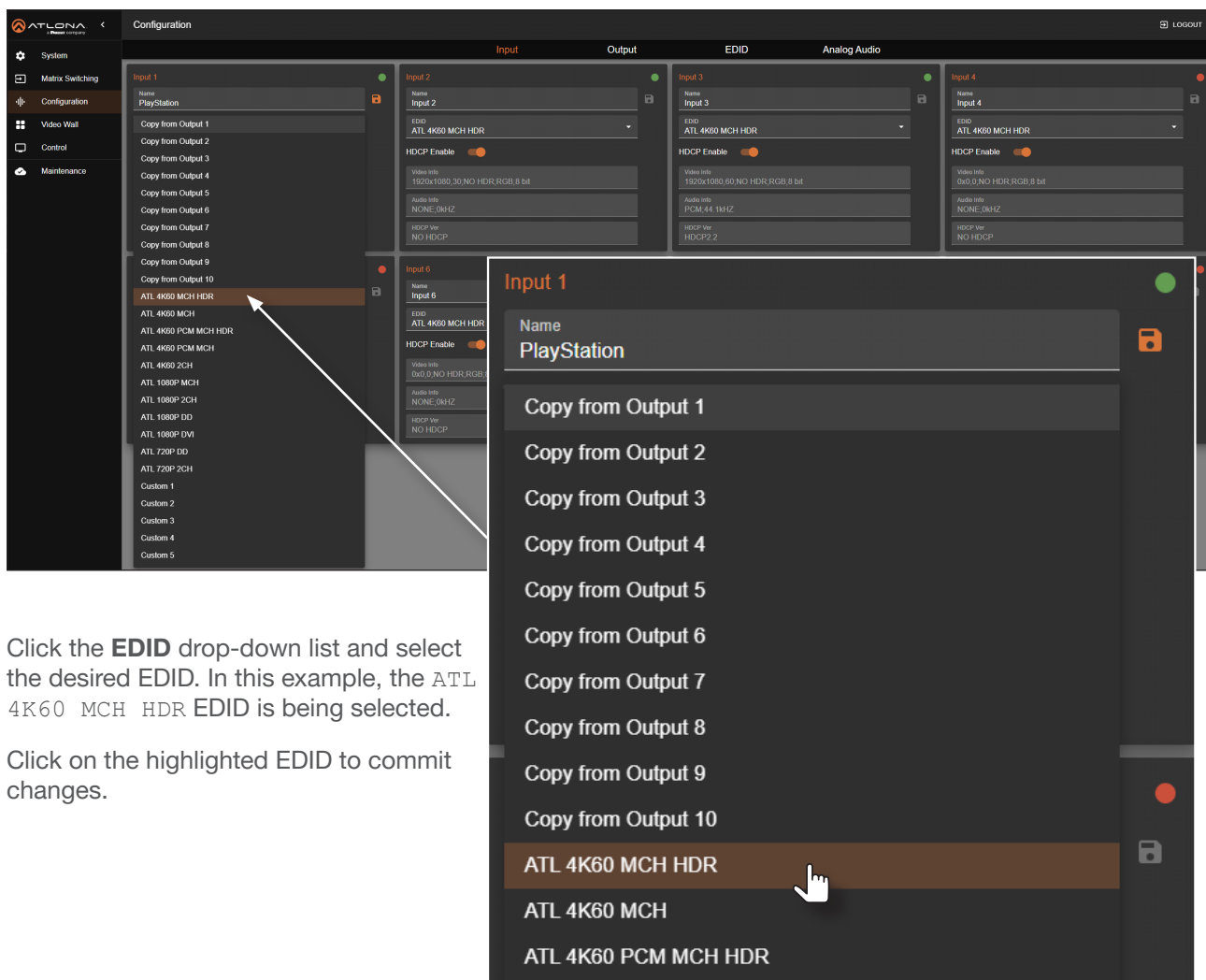
The dot in the top-right corner of each input box shows the connection status:

- **Green:** The input source is connected to the corresponding port and has an active signal.
- **Red:** The input source is not connected to the corresponding port.

Selecting an EDID

Before sending picture and sound to a display, a source device reads the EDID (Extended Display Identification Data) from the sink. This data specifies the video and audio formats the display supports. The AT-PRO5-MX810 includes several pre-programmed EDID options and also allows the storage of custom EDID data. Refer to [EDID Management \(page 41\)](#) for more information.

1. Log in to the web server.
2. Click **Configuration** in the side menu bar.
3. Click **Input** in the top menu bar.



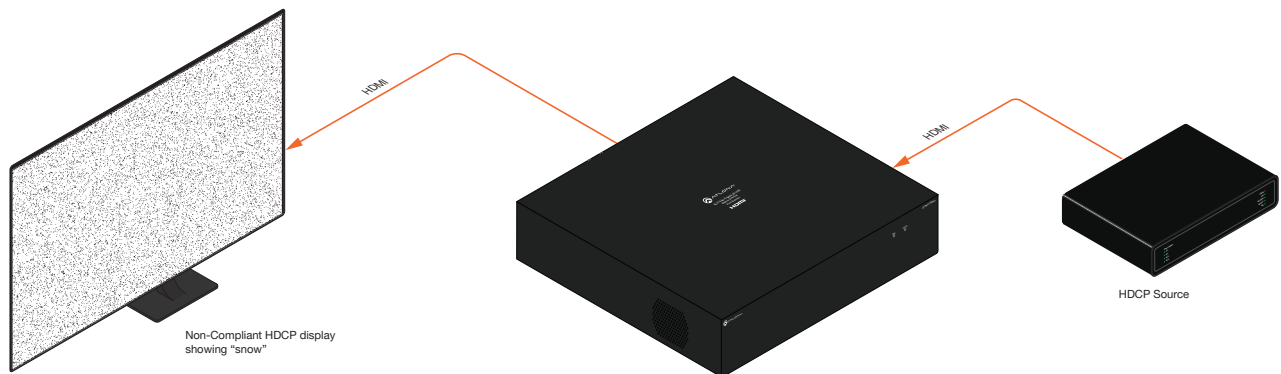
The screenshot displays the ATLONA web interface for configuration. The 'Input' tab is active in the top navigation bar. On the left sidebar, the 'Configuration' menu is expanded, and the 'Input' section is selected. A list of inputs is shown, with 'ATL 4K60 MCH HDR' highlighted. An arrow points from this list to a detailed view of 'Input 1' on the right. In this view, the 'EDID' dropdown is open, showing a list of options: 'Copy from Output 1', 'Copy from Output 2', 'Copy from Output 3', 'Copy from Output 4', 'Copy from Output 5', 'Copy from Output 6', 'Copy from Output 7', 'Copy from Output 8', 'Copy from Output 9', 'Copy from Output 10', 'ATL 4K60 MCH HDR' (highlighted), 'ATL 4K60 MCH', and 'ATL 4K60 PCM MCH HDR'. A hand cursor is pointing at the highlighted 'ATL 4K60 MCH HDR' option.

4. Click the **EDID** drop-down list and select the desired EDID. In this example, the ATL 4K60 MCH HDR EDID is being selected.
5. Click on the highlighted EDID to commit changes.

Device Operation

HDCP Content

When HDCP-protected content is sent to a display that does not support HDCP, the result can vary. Common symptoms include a blank screen, flickering, or visual noise (often referred to as “snow”). In the example below, an HDCP source is connected to the AT-PRO5-MX810, which is then connected to a non-compliant display—resulting in “snow.”

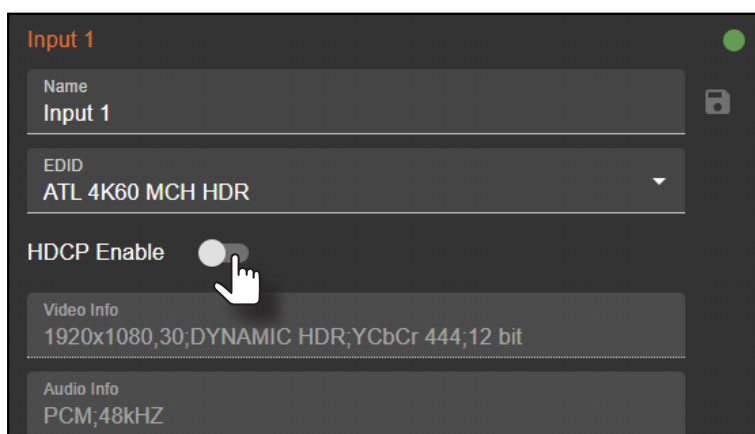


Some sources may automatically transmit HDCP-protected content by default. If the source device supports non-HDCP output, the **HDCP Enable** toggle must be disabled (set to gray) to allow playback on displays that do not support HDCP. Disabling this toggle instructs the source to send non-HDCP content.



IMPORTANT: Disabling the **HDCP Enable** toggle does not decrypt or bypass HDCP-protected content. It only instructs the source device to transmit non-HDCP content—if the source supports that capability. Encrypted HDCP content cannot be displayed on a non-compliant display, regardless of this setting.

1. Log in to the web server.
2. Click **Configuration** in the side menu bar.
3. Click **Input** in the top menu bar.
4. Click the toggle switch for the desired input. For example, toggling **HDCP Enable** under Input 1 to the Off position will prompt the source device to send non-HDCP content, if it is supported.

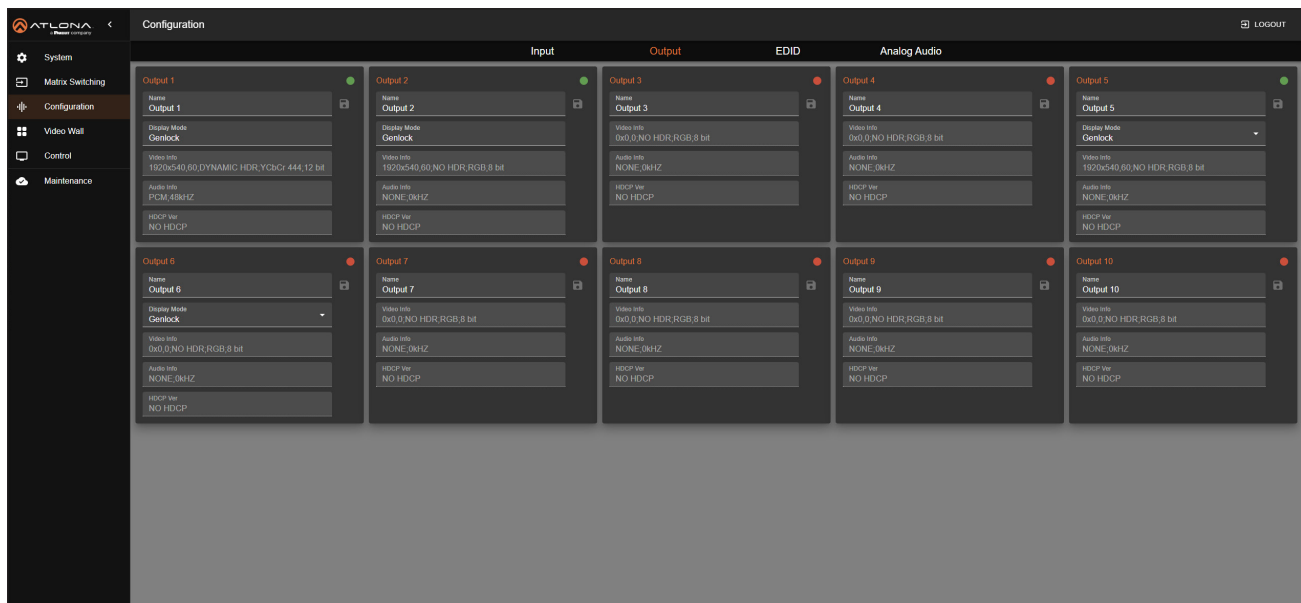



Output Configuration

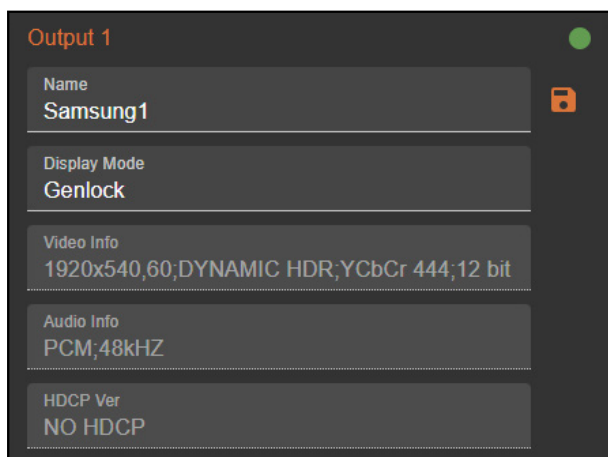
Changing the Output Name

By default, outputs are named **Output 1**, **Output 2**, **Output 3**, and so on. It is recommended to rename each output based on the connected output device.

1. Log in to the web server.
2. Click **Configuration** in the side menu bar.
3. Click **Output** in the top menu bar.



4. Click the **Name** field of the desired output.
5. Enter the desired name for the output. In this example, `Samsung1` is used, identifying the sink device.
6. Click the  icon to save the name of the output. Note that the name of the output, in orange, will not change. The new output name will appear under the **Matrix Switching > A/V Routing** and **Matrix Switching > Analog Audio Routing** pages.



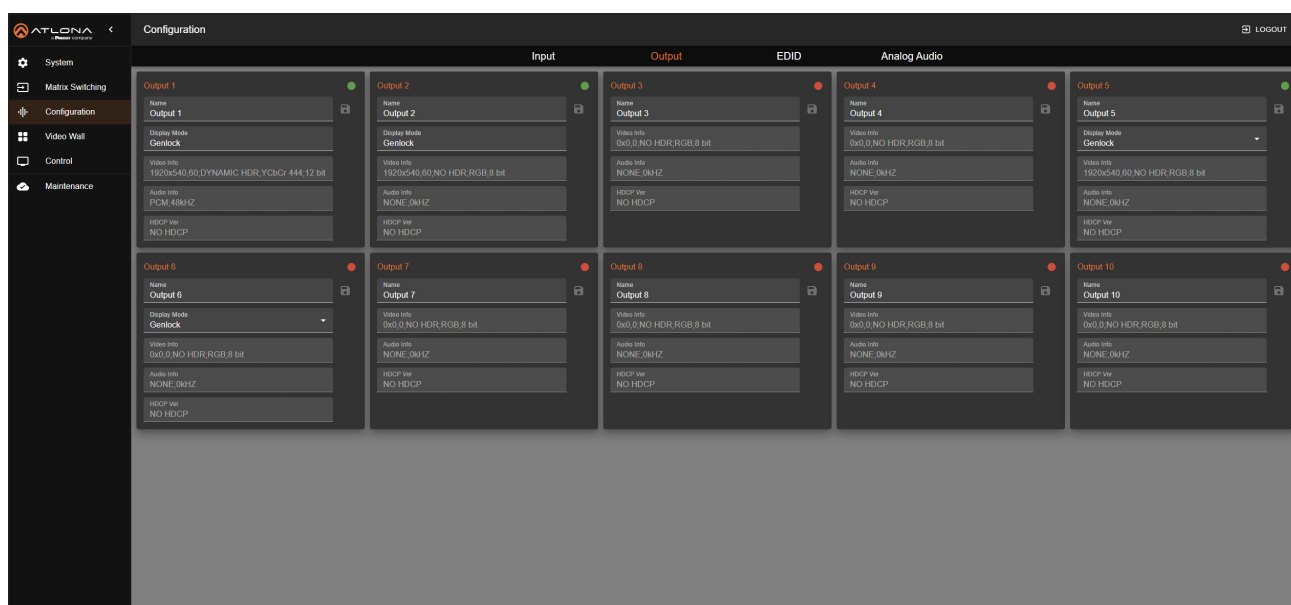
Changing the Display Mode

When the corresponding SDVoE output is connected to an AT-PRO5-101-SC-RX receiver, a display mode option becomes available, allowing selection between *Genlock* and *Scaler* modes.

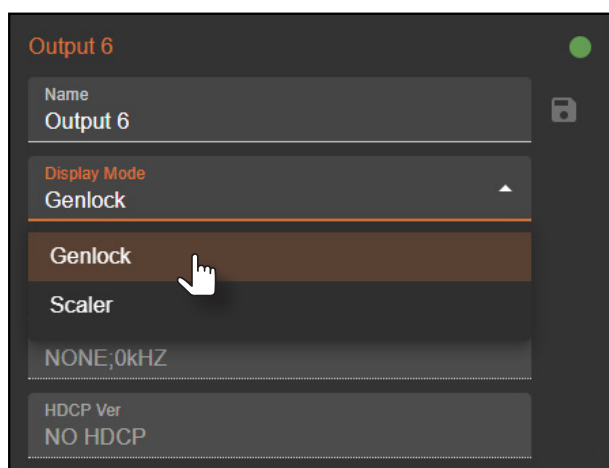


IMPORTANT: Display modes can only be selected when an AT-PRO5-101-SC-RX receiver is connected to an SDVoE output. If an AT-PRO5-101-RX receiver is used, this option will not appear.

1. Log in to the web server.
2. Click **Configuration** in the side menu bar.
3. Click **Output** in the top menu bar.




4. Click the **Display Mode** drop-down list and select the desired display mode.



Refer to *Table 1.1* on the next page for a description of display modes.

Table 1.1 - Display Modes

Mode	Description						
Genlock	<p>This is the default mode for the AT-PRO5-101-SC-RX. This mode mimics the behavior of a direct wired connection. The HDMI signal is mostly unchanged, with only light video compression applied to fit within the cable's 10Gbps network bandwidth. The display connected to the receiver is synchronized (genlocked) to the source connected to the matrix. When multiple receivers use the same input, all connected displays sync to that source, ensuring complete synchronization across all displays. Genlock mode provides the lowest possible latency.</p> <div>NOTE: Genlock is required to pass HDR signals.</div>						
Scaler	<p>This mode allows selection between Fast switch and Genlock scaler modes.</p> <table><tr><th>Mode</th><th>Description</th></tr><tr><td>Fast switch</td><td>This mode allows for quick source switching with resolution scaling or frame rate conversion, as needed. It keeps the output timing and format constant, so the display doesn't need to re-synchronize, resulting in smooth transitions. However, a frame buffer adds a latency of 1 to 2 frames.</td></tr><tr><td>Genlock scaler</td><td>This mode combines the low latency and source synchronization of Genlock mode with the scaling features of Fast Switch mode. When enabled, the output port can handle format conversions, like 1080p to 720p, but does not perform frame rate conversion, avoiding any frame buffer latency. By keeping the output synchronized (genlocked) to the source, this mode ensures the lowest possible latency for displays with resolutions different from the source.</td></tr></table>	Mode	Description	Fast switch	This mode allows for quick source switching with resolution scaling or frame rate conversion, as needed. It keeps the output timing and format constant, so the display doesn't need to re-synchronize, resulting in smooth transitions. However, a frame buffer adds a latency of 1 to 2 frames.	Genlock scaler	This mode combines the low latency and source synchronization of Genlock mode with the scaling features of Fast Switch mode. When enabled, the output port can handle format conversions, like 1080p to 720p, but does not perform frame rate conversion, avoiding any frame buffer latency. By keeping the output synchronized (genlocked) to the source, this mode ensures the lowest possible latency for displays with resolutions different from the source.
Mode	Description						
Fast switch	This mode allows for quick source switching with resolution scaling or frame rate conversion, as needed. It keeps the output timing and format constant, so the display doesn't need to re-synchronize, resulting in smooth transitions. However, a frame buffer adds a latency of 1 to 2 frames.						
Genlock scaler	This mode combines the low latency and source synchronization of Genlock mode with the scaling features of Fast Switch mode. When enabled, the output port can handle format conversions, like 1080p to 720p, but does not perform frame rate conversion, avoiding any frame buffer latency. By keeping the output synchronized (genlocked) to the source, this mode ensures the lowest possible latency for displays with resolutions different from the source.						

When set to Scaler mode, two additional drop-down lists will be available: **Scaler Mode** and **Output Resolution**. Refer to the table above for information on the Fast switch and Genlock scaler modes.

The **Output Resolution** drop-down list provides the following resolutions, listed in Table 1.2.

Table 1.2 - Available Output Resolutions in Scaler Mode.

Resolutions			
720P	1080P	2160P	4096x2160
1024x768	1280x768	1280x960	1280x1024
1360x768	1400x1050	1600x1200	1680x1050
1920x1200			

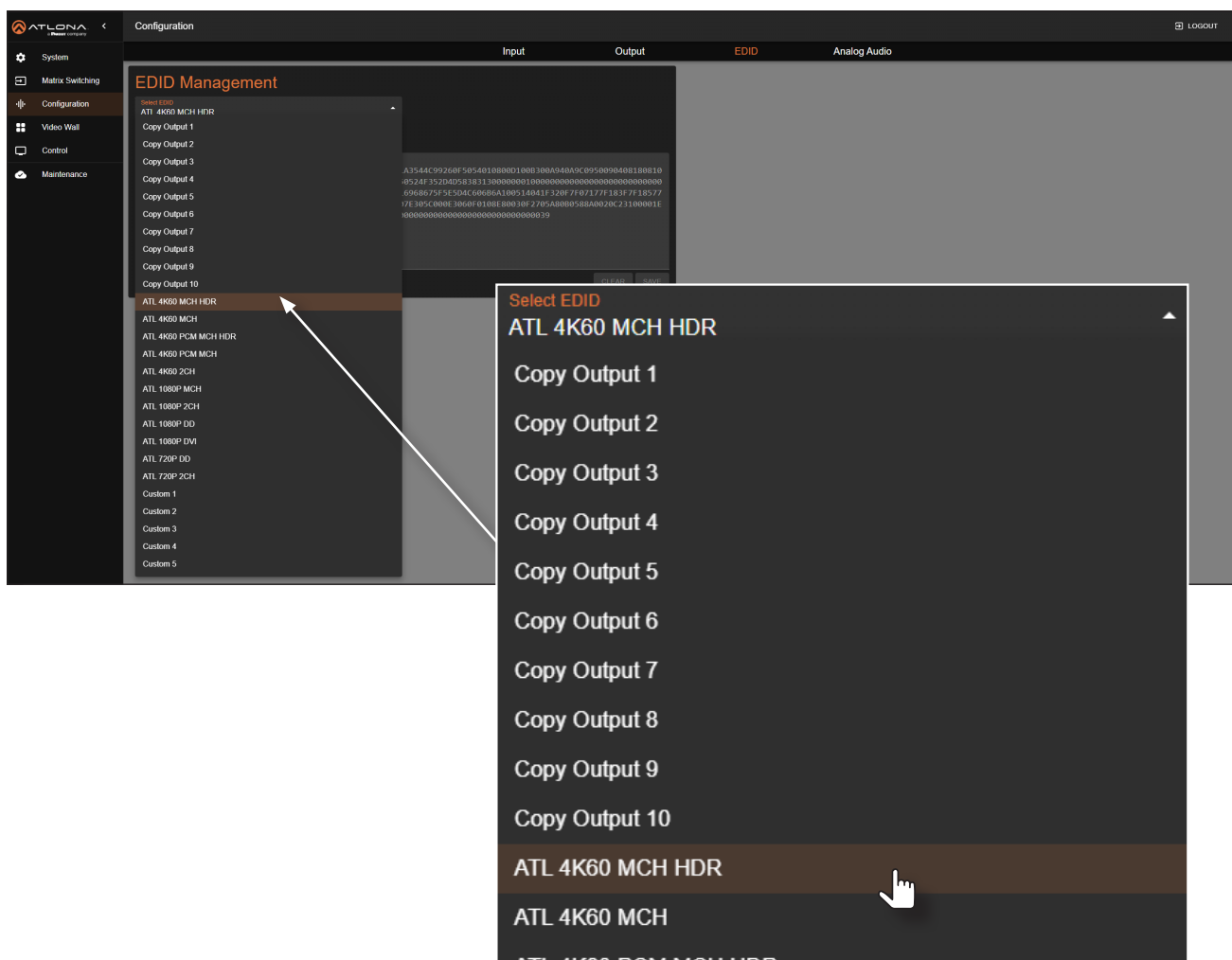
EDID Management

Selecting an EDID

Before a source can send picture and sound to a display device, the source reads the EDID (Extended Display Identification Data) stored in the sink. The EDID contains information about what type of video and audio formats are supported by the display. The AT-PRO5-MX810 can use a factory-programmed EDID, the downstream EDID (from the display/sink) or a custom EDID. The AT-PRO5-MX810 provides five blank memory locations that can be used to store EDID data.

By default, the AT-PRO5-MX810 will use the ATL 4K60 MCH HDR EDID for each input. However, this can be modified.

1. Log in to the web server.
2. Click **Configuration** in the side menu bar.
3. Click **EDID** in the top menu bar.
4. Click the **Select EDID** drop-down list to select the desired EDID.



Device Operation

5. The **EDID Name** field displays the EDID name and the raw EDID data will be displayed in the **EDID Data** window.

[illegible]

EDID Presets

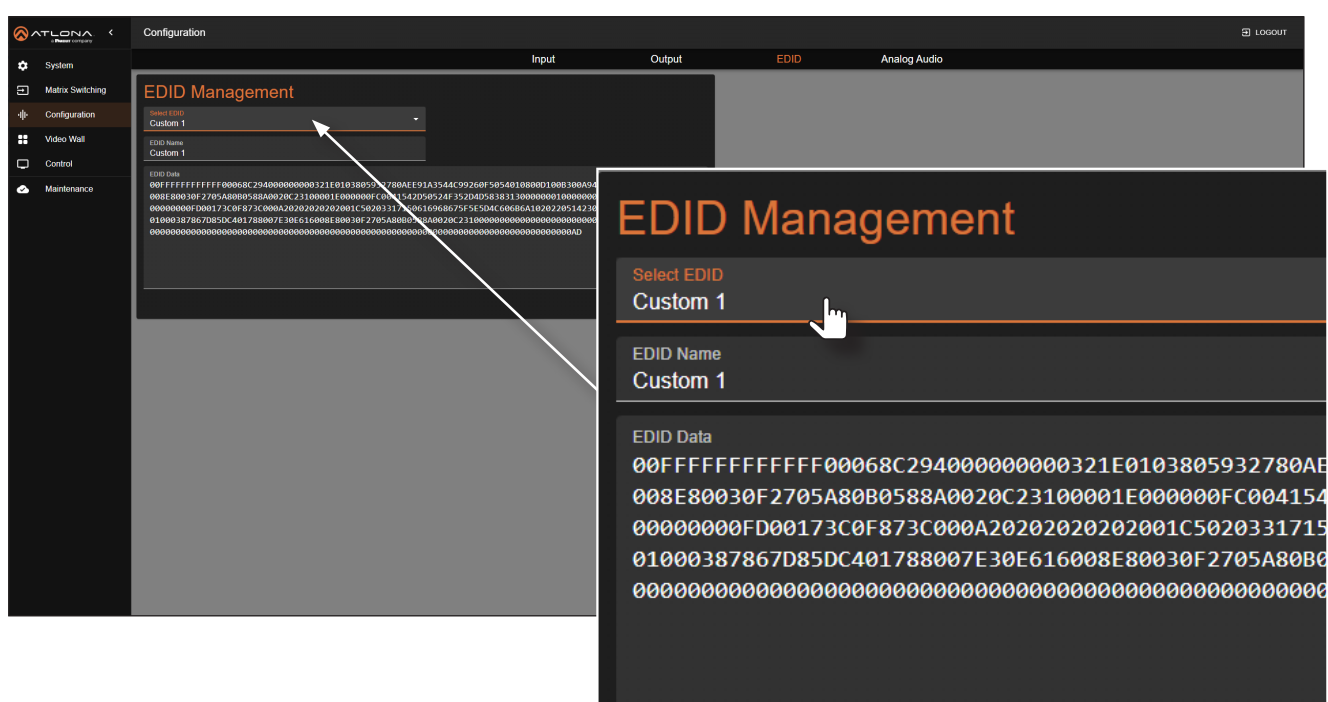
The AT-PRO5-MX810 provides the option of selecting an EDID. The following options are available from the **EDID** drop-down list, for each input.

EDID	Description
Copy Output 1... Copy Output 10	Uses the EDID from the sink device that is connected to the selected output.
ATL 4K60 MCH HDR	3840 x 2160 @ 60 Hz / multichannel audio / HDR
ATL 4K60 MCH	3840 x 2160 @ 60 Hz / multichannel audio
ATL 4K60 PCM MCH HDR	3840 x 2160 @ 60 Hz / multichannel LPCM audio / HDR
ATL 4K60 PCM MCH	3840 x 2160 @ 60 Hz / multichannel LPCM audio
ATL 4K60 2CH	3840 x 2160 @ 60 Hz / 2-channel audio
ATL 1080P MCH	1920 x 1080 / multichannel audio
ATL 1080P 2CH	1920 x 1080 / 2-channel audio
ATL 1080P DD	1920 x 1080 / Dolby® Digital
ATL 1080P DVI	1920 x 1080 / DVI
ATL 720P DD	1280 x 720 / Dolby® Digital
ATL 720P 2CH	1280 x 720 / 2-channel audio
Custom 1...Custom 5	Selects a custom EDID preset

Creating a Custom EDID

The AT-PRO5-MX810 provides five blank memory locations that can be used to store EDID data. These memory locations are non-volatile and the EDID data is retained after power is disconnected from the unit.

1. Log in to the web server.
2. Click **Configuration** in the side menu bar.
3. Click **EDID** in the top menu bar.
4. Click the **Select EDID** drop-down list to select one of the custom EDID memory locations. In this example, Custom 1 is selected.

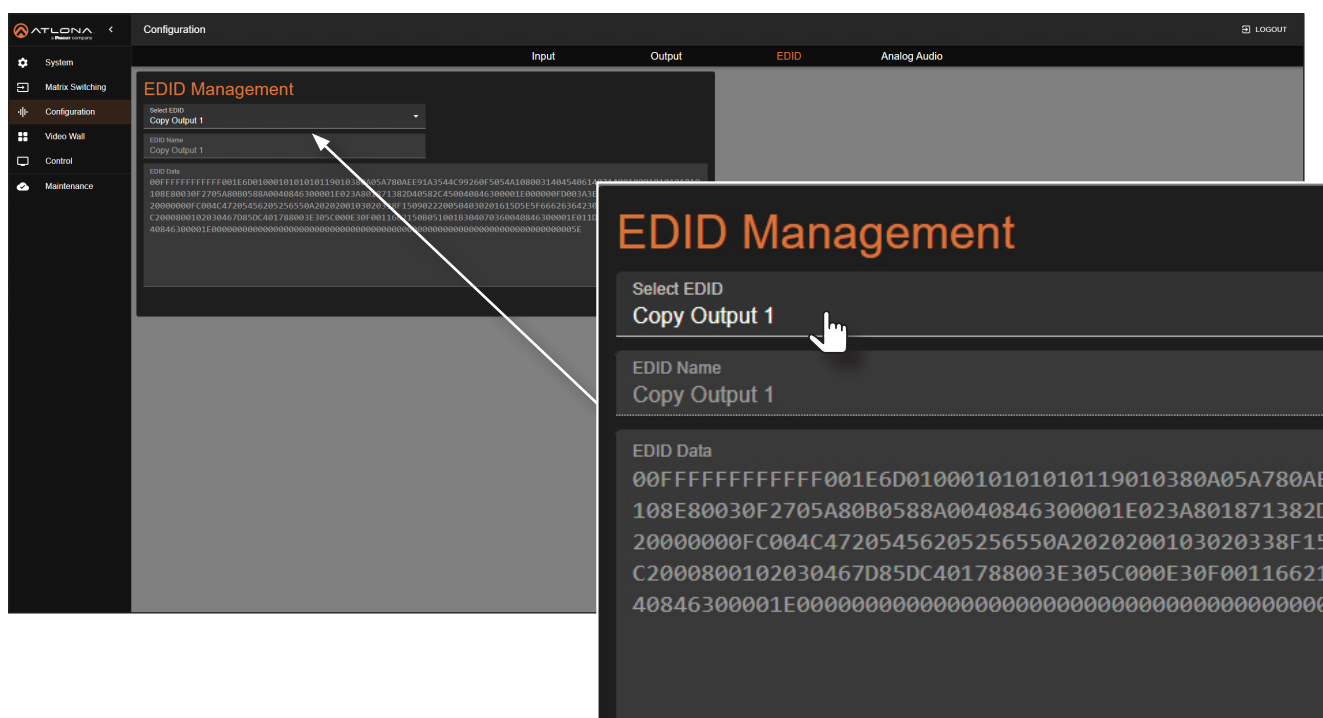


5. Type the name of the EDID in the **EDID Name** field.
6. Copy and paste the raw EDID data in the **EDID Data** field. Raw EDID data should not contain any spaces or delimiters.
7. Click the **SAVE** button.

Copying a Downstream EDID

The AT-PRO5-MX810 provides five blank memory locations that can be used to store EDID data. These memory locations are non-volatile and the EDID data is retained after power is disconnected from the unit.

1. Connect an HDMI cable from the HDMI output on the receiver (or one of the local HDMI OUT ports) to the HDMI input on the display, containing the EDID to be stored.
2. Log in to the web server.
3. Click **Configuration** in the side menu bar.
4. Click **EDID** in the top menu bar.
5. Click the **Select EDID** drop-down list to select one of the Copy Output selections. In this example, Copy Output 1 is selected.



NOTE: If the EDID cannot be retrieved, then **ERROR, UNCONNECT** will be displayed in the **EDID Data** field. Check the cable connections or try another cable.

6. Click the **SAVE** button.

Analog Audio Output

The **Analog Audio** page provides configuration options for analog audio outputs on both local matrix ports and remote receiver units. Each output can be labeled, muted, and adjusted for volume independently.

Matrix Local Analog Out

This section manages analog outputs from the matrix device. Eight outputs are available (**Line Out 1 – 8**).

1. Wire the included 5-pin captive screw connectors as shown:

Balanced Audio Output

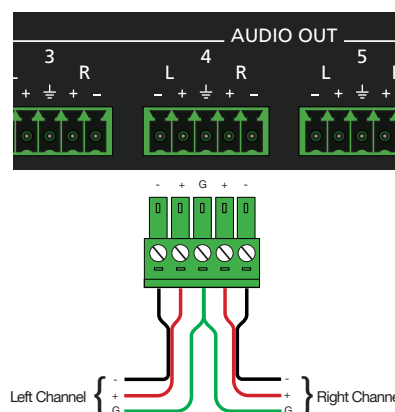
This configuration is recommended for long cable runs. Use a 3-conductor cable per channel (e.g., shielded twisted pair).

- Left Channel

Port	Connection
Left +	Signal positive (hot)
Left -	Signal negative (cold)
GND	Shared ground / shield

- Right Channel

Port	Connection
Right +	Signal positive (hot)
Right -	Signal negative (cold)
GND	Shared ground / shield



Unbalanced Audio Output

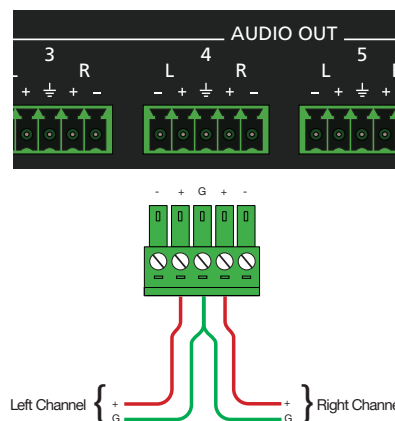
This configuration is recommended for short runs, only. Use a 2-conductor cable per channel (e.g., RCA-style wiring).

- Left Channel

Port	Connection
Left +	Signal (tip)
GND	Ground (sleeve)
Left -	Unconnected

- Right Channel

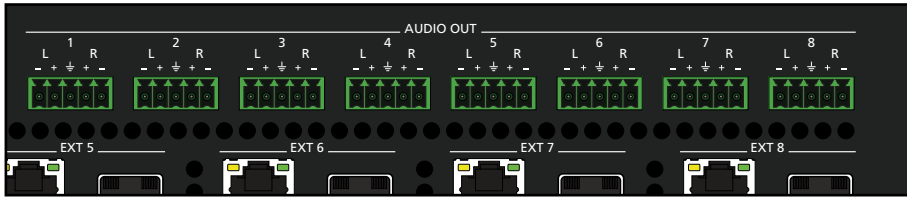
Port	Connection
Right +	Signal (tip)
GND	Ground (sleeve)
Right -	Unconnected



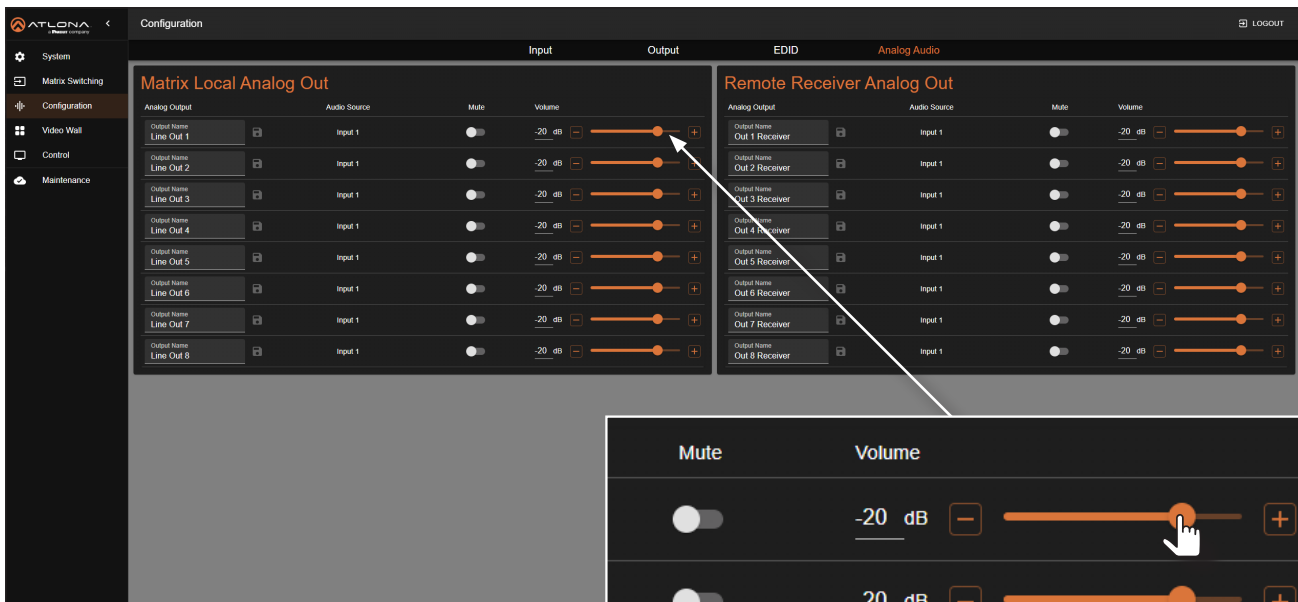
IMPORTANT: For unbalanced wiring, do not tie the negative (–) terminal to ground. Leave it floating.

Device Operation

- Connect the captive screw connectors from the **AUDIO OUT (1 - 8)** ports to output audio devices.



- Log in to the web server.
- Click **Configuration** in the side menu bar.
- Click **Analog Audio** in the top menu bar.
- Locate the **Matrix Local Analog Out** window group.



- Click and drag the **Volume** slider to adjust the volume level for each output. Slider range can be adjusted from -80 to 0 dB. Alternatively, the value can be typed in the **Volume** field, located to the left of the slider.
- Click the **Mute** toggle to temporarily mute the audio output on a specific output. When enabled, the **Mute** toggle switch will be orange.
- The **Output Name** field can be changed in order to easily identify the output's destination.

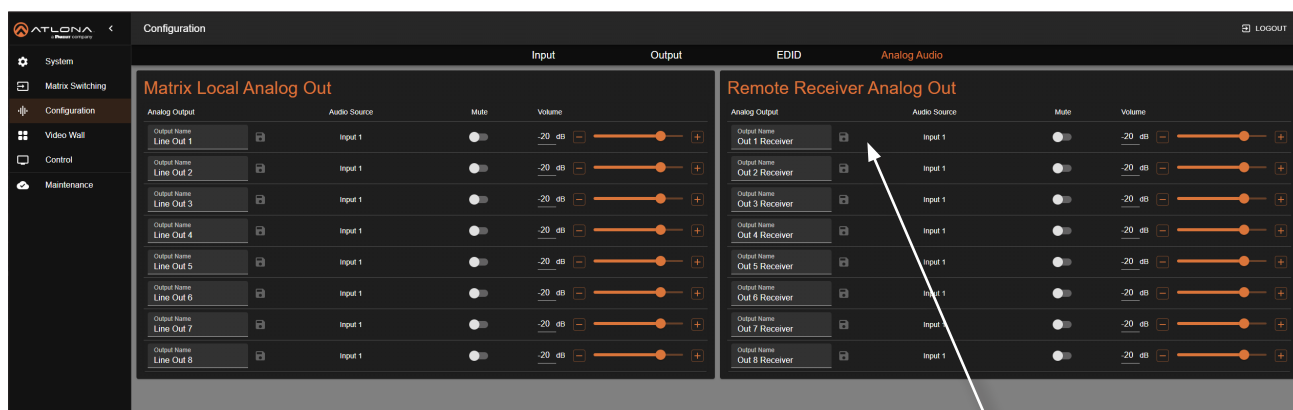
Remote Receiver Analog Out

This section controls analog audio outputs on receivers connected to the **EXT** ports. Eight outputs are listed (Out 1 Receiver – Out 8 Receiver), and correspond to ports **EXT 1 - EXT 8**.

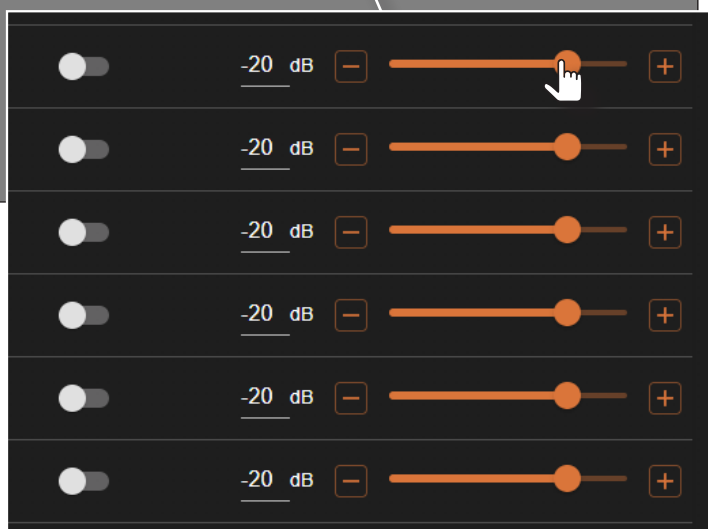
1. Wire the included 5-pin captive screw connectors. Refer to [Matrix Local Analog Out \(page 45\)](#) for wiring instructions.
2. Connect the captive screw connectors from the **AUDIO OUT** port on the AT-PRO5-101-RX or AT-PRO5-101-SC-RX to audio output devices.



3. Log in to the web server.
4. Click **Configuration** in the side menu bar.
5. Click **Analog Audio** in the top menu bar.
6. Locate the **Remote Receiver Analog Out** window group.



7. Click and drag the **Volume** slider to adjust the volume level for each output. Slider range can be adjusted from -80 to 0 dB. Alternatively, the value can be typed in the **Volume** field, located to the left of the slider.
8. Click the **Mute** toggle to temporarily mute the audio output on a specific output. When enabled, the **Mute** toggle switch will be orange.



9. The **Output Name** field can be changed in order to easily identify the output's destination.

IR Control

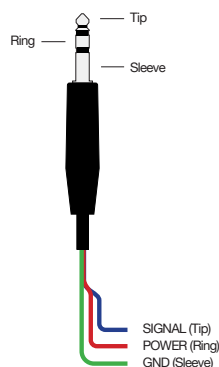
The AT-PRO5-MX810 supports both IR pass-through (default mode) and IR TCP proxy. Both methods will be covered in this section.

IR Pass-Through

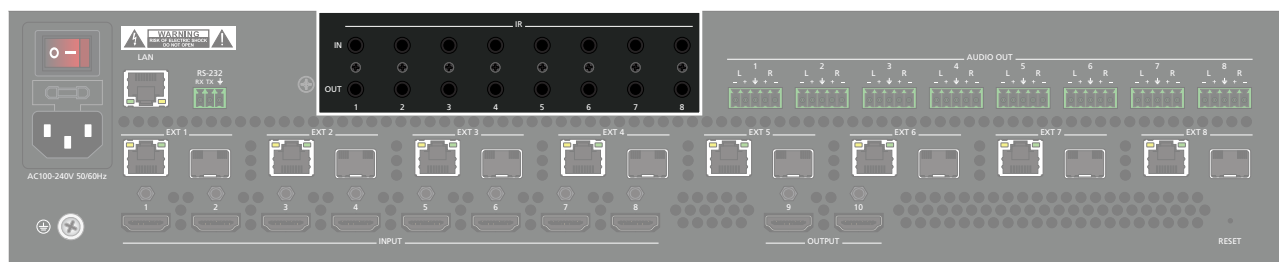
IR signals can be used to either control headend (source) devices and/or endpoint (display) devices. Each **IR IN** and **IR OUT** port is assigned to an **HDMI IN** and **EXT** port. This assignment is fixed and cannot be changed, as shown in the table below. IR is compatible with frequencies from 30 kHz to 60 kHz.

IR OUT	IR IN	HDMI IN	EXT port
IR OUT 1	IR IN 1	HDMI IN 1	EXT 1
IR OUT 2	IR IN 2	HDMI IN 2	EXT 2
IR OUT 3	IR IN 3	HDMI IN 3	EXT 3
IR OUT 4	IR IN 4	HDMI IN 4	EXT 4
IR OUT 5	IR IN 5	HDMI IN 5	EXT 5
IR OUT 6	IR IN 6	HDMI IN 6	EXT 6
IR OUT 7	IR IN 7	HDMI IN 7	EXT 7
IR OUT 8	IR IN 8	HDMI IN 8	EXT 8

1. If required, wire the IR receiver / emitter cable(s) as shown:



2. Connect up to eight IR receiver cables to the **IR IN** ports on the rear panel of the matrix.
3. Connect up to eight IR emitter cables to the **IR OUT** ports on the rear panel of the matrix.



Device Operation

4. Connect an IR emitter and/or IR receiver cable to the provided 5-pin captive screw connector, ensuring the wiring matches the diagram, below.
5. Attach the wired 5-pin captive screw connector into the **IR IN / IR OUT** port on the AT-PRO5-101-RX or AT-PRO-101-SC-RX, as shown below.

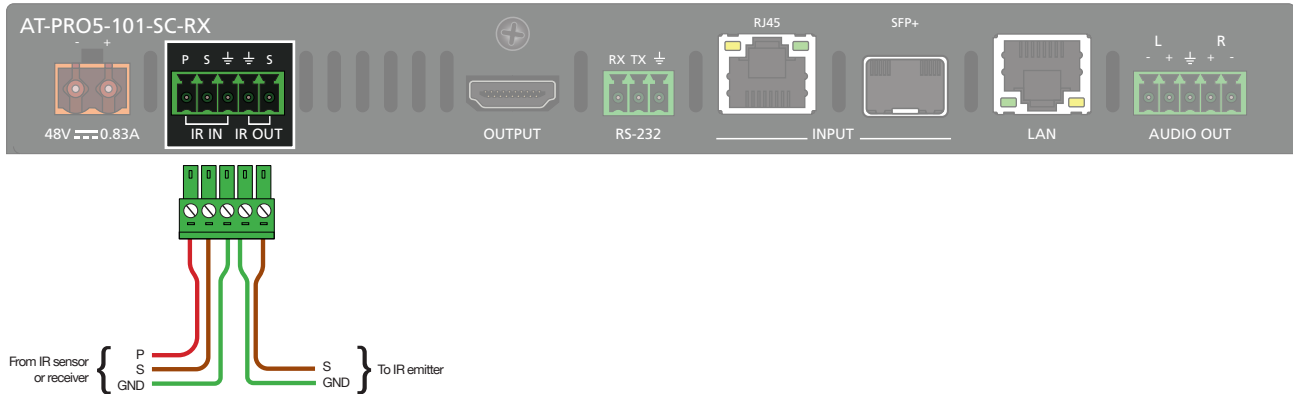
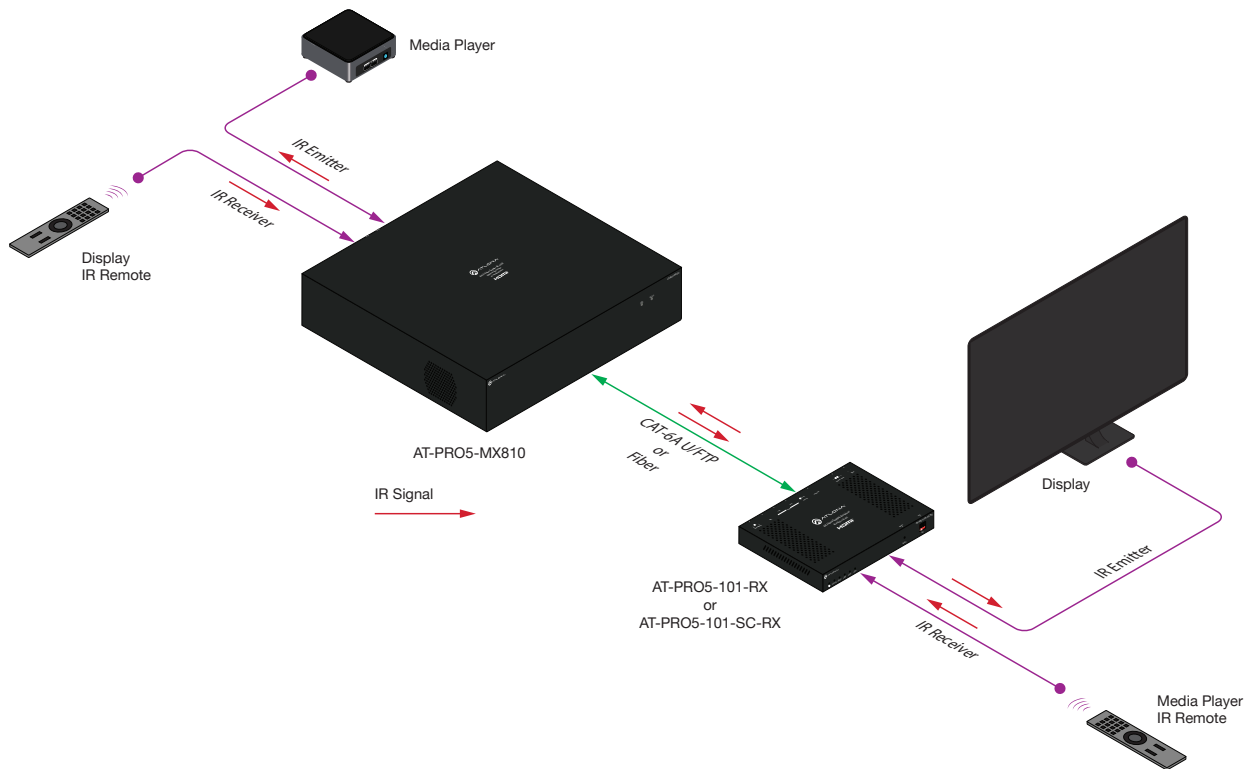


Diagram 1.1 - IR Pass-Through

The diagram below illustrates one remote controlling a display from the headend, while another remote operates a media player from a receiver endpoint.

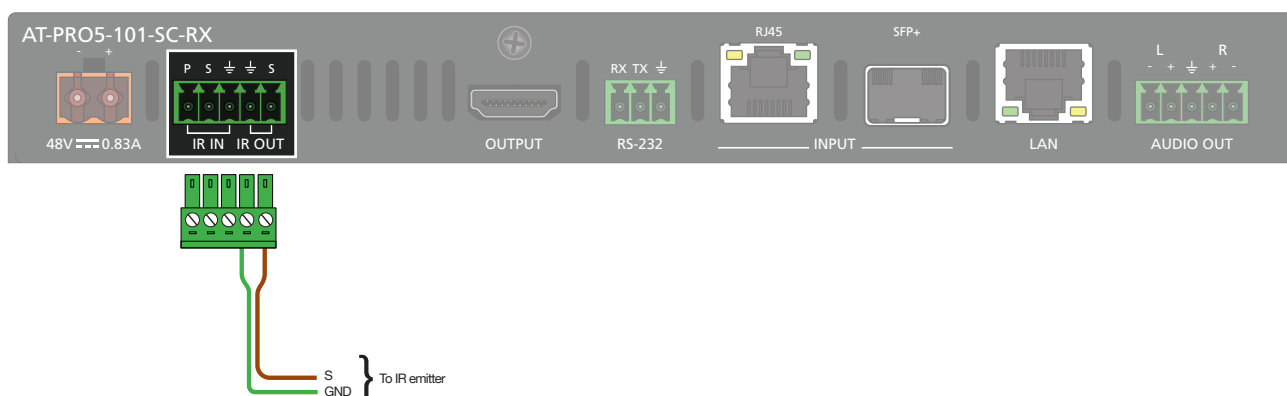


Device Operation

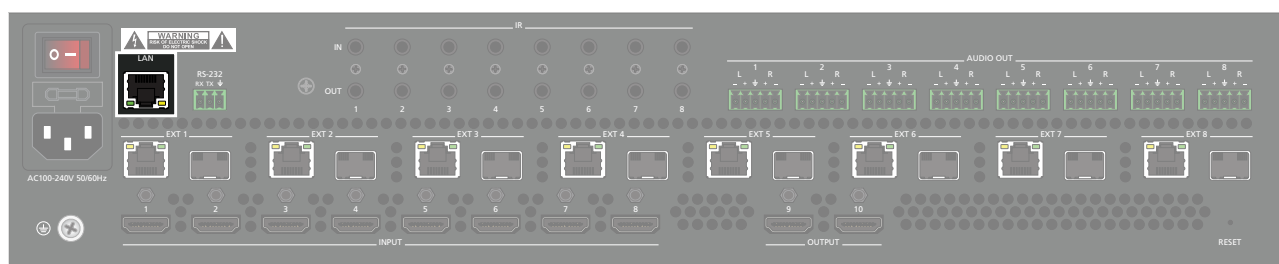
IR TCP Proxy

The AT-PRO5-MX810 transmits IR commands over the network using Pronto™ or Global Caché® formats. These commands are delivered to IR emitters connected to the **IR OUT** ports on the AT-PRO5-MX810, and the AT-PRO5-101-RX or AT-PRO5-101-SC-RX receivers. The IR TCP Proxy feature enables remote control of third-party devices via a TCP/IP connection with a control system, eliminating the need for direct line-of-sight or physical IR repeaters.

1. Connect up to eight IR emitter cables to the IR OUT ports on the AT-PRO5-101-RX or AT-PRO5-101-SC-RX receivers.



2. Connect an Ethernet cable from the LAN port on the AT-PRO5-MX810 to the Local Area Network (LAN). IR emitter cables may also be connected to the matrix switcher to control local HDMI sources, if needed.



3. Connect the AT-PRO5-MX810 to an external control system on the same network. A PC may be used for testing or setup purposes, if desired.



NOTE: If the PC is directly connected to the **LAN** port of the AT-PRO5-MX810, then the IP address of the PC must be configured within the same subnet as the AT-PRO5-MX810.

After installation, refer to the table on the next page to identify the corresponding TCP ports for the configured IR inputs and/or outputs.

Device Operation

TCP Port Number	Port on AT-PRO5-MX810	Port on AT-PRO5-101-RX / AT-PRO5-101-SC-RX
10001	IR OUT 1	N/A
10002	IR OUT 2	N/A
10003	IR OUT 3	N/A
10004	IR OUT 4	N/A
10005	IR OUT 5	N/A
10006	IR OUT 6	N/A
10007	IR OUT 7	N/A
10008	IR OUT 8	N/A
10009	N/A	IR OUT (connect to EXT 1 port on AT-PRO5-MX810)
10010	N/A	IR OUT (connect to EXT 2 port on AT-PRO5-MX810)
10011	N/A	IR OUT (connect to EXT 3 port on AT-PRO5-MX810)
10012	N/A	IR OUT (connect to EXT 4 port on AT-PRO5-MX810)
10013	N/A	IR OUT (connect to EXT 5 port on AT-PRO5-MX810)
10014	N/A	IR OUT (connect to EXT 6 port on AT-PRO5-MX810)
10015	N/A	IR OUT (connect to EXT 7 port on AT-PRO5-MX810)
10016	N/A	IR OUT (connect to EXT 8 port on AT-PRO5-MX810)

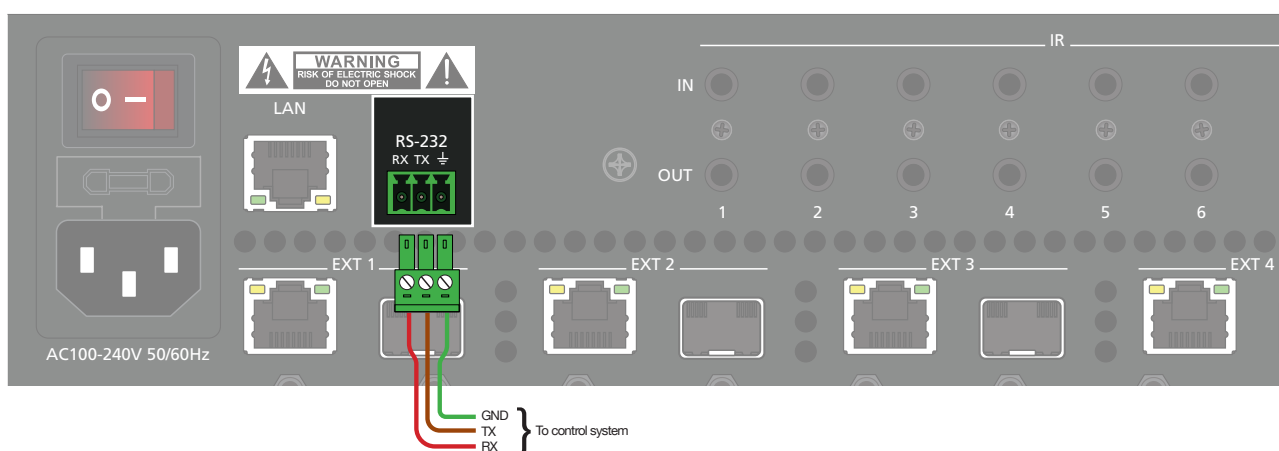
RS-232 Control

The AT-PRO5-MX810 provides both local RS-232 control and RS-232 over TCP Proxy. Both methods will be covered in this section.

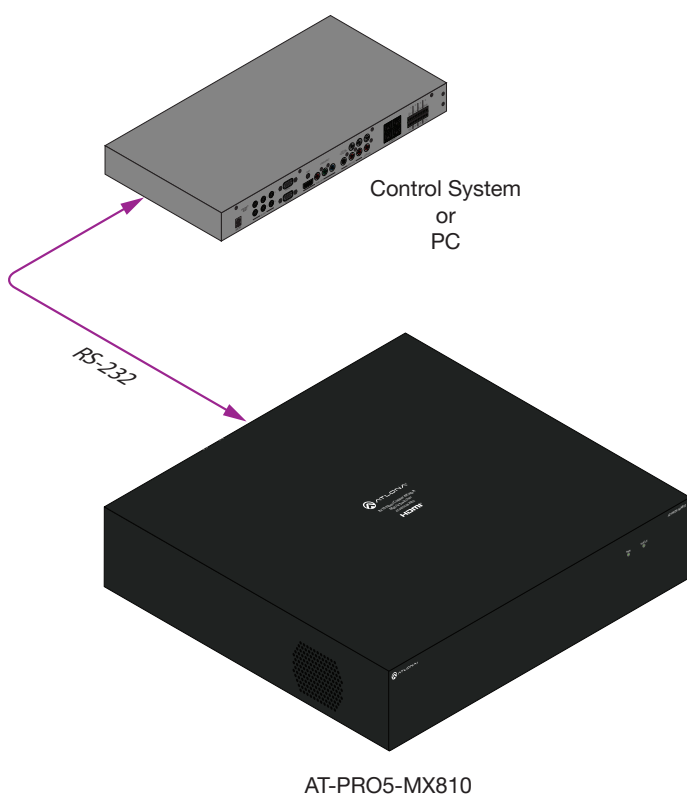
Local RS-232 Control

This method enables an external control system to operate the AT-PRO5-MX810. A PC can also be connected for testing purposes.

1. Attach the included 3-pin captive screw connector to the RS-232 port on the rear panel of the AT-PRO5-MX810 and wire it according to the diagram shown.

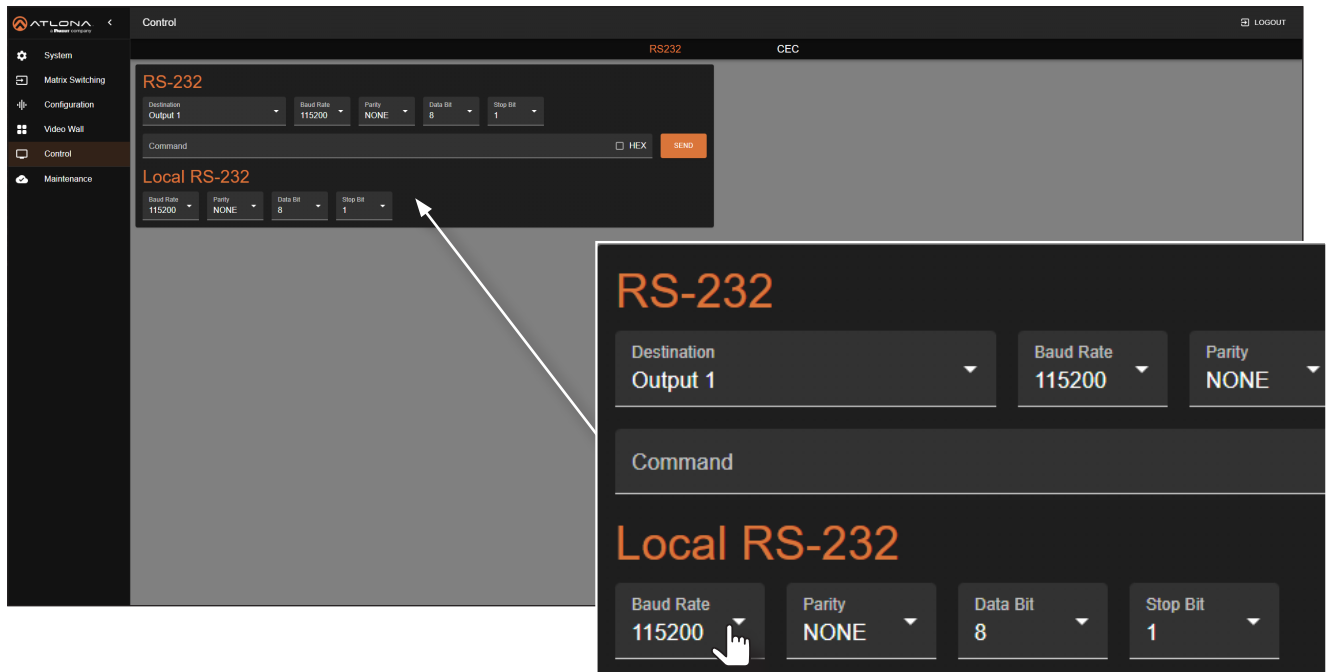


2. Connect the other end of the RS-232 cable to an external control system.



Device Operation

3. Log in to the web server.
4. Click **Control** in the side menu bar.
5. Click **RS232** in the top menu bar.



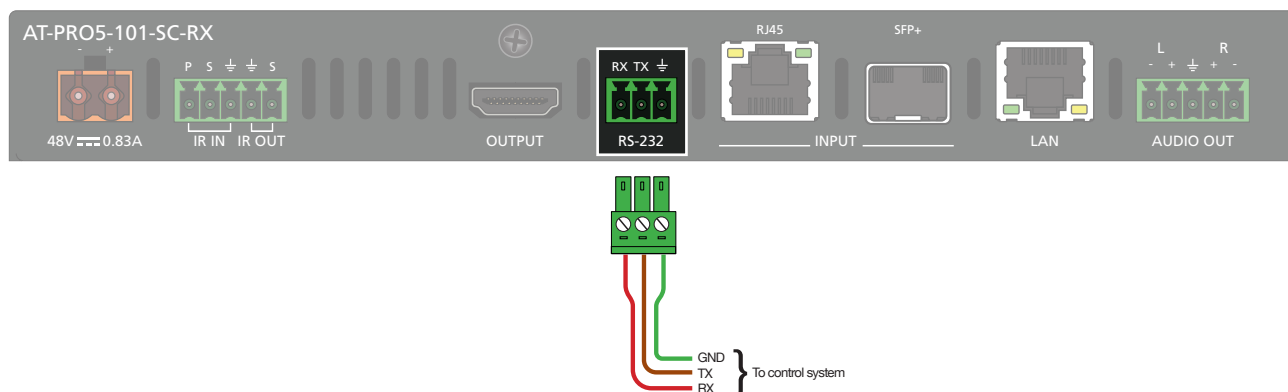
6. Locate the **Local RS-232** window group.
7. Click the drop-down menus for **Baud Rate**, **Parity**, **Data Bit**, and **Stop Bit** to configure the communication settings required by the third-party device to control the AT-PRO5-MX810.

Device Operation

RS-232 TCP Proxy

This method enables the AT-PRO5-MX810 to communicate with the RS-232 port on the AT-PRO5-101-RX or AT-PRO5-101-SC-RX receiver by encapsulating serial data over a TCP/IP network using a direct TCP socket connection.

1. Attach the provided 3-pin captive screw connector to the **RS-232** port on the rear panel of the AT-PRO5-101-RX or AT-PRO5-101-SC-RX receiver, wiring it as shown in the diagram.



2. Connect the RS-232 cable from the receiver to the third-party device to be controlled.
3. Refer to the table below for the fixed TCP port number associated with the EXT output port used on the AT-PRO5-MX810. Configure the control system to send RS-232 commands to that TCP port using the IP address of the AT-PRO5-MX810.

Port Number	EXT Port
9001	EXT 1
9002	EXT 2
9003	EXT 3
9004	EXT 4
9005	EXT 5
9006	EXT 6
9007	EXT 7
9008	EXT 8

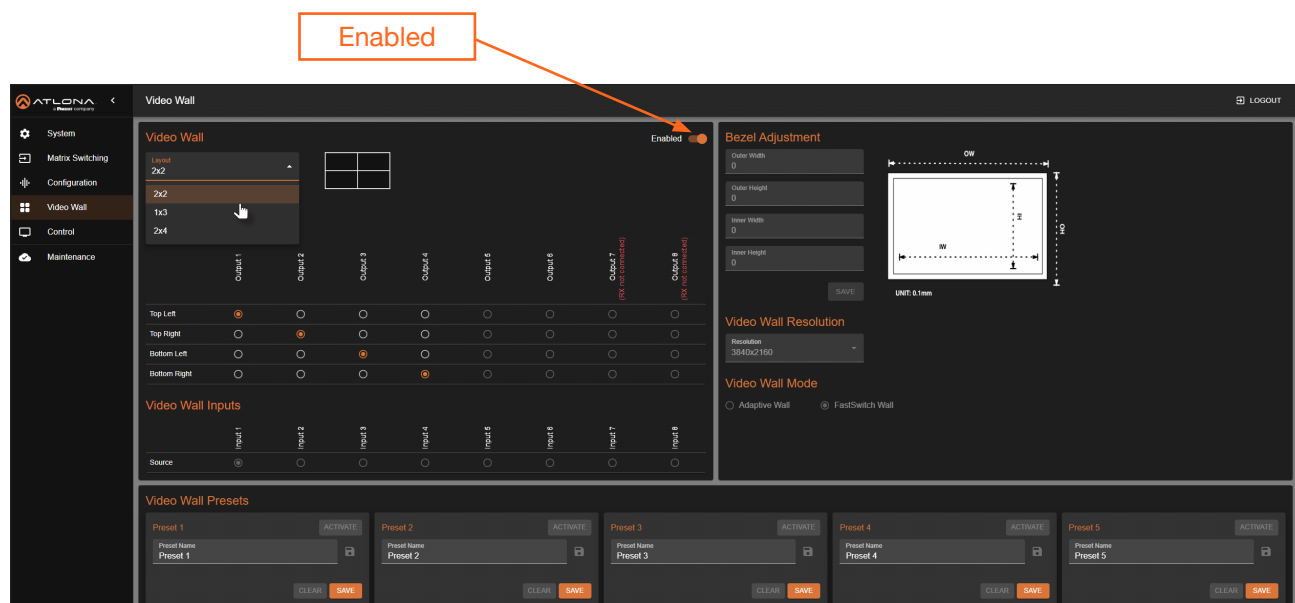
Video Walls



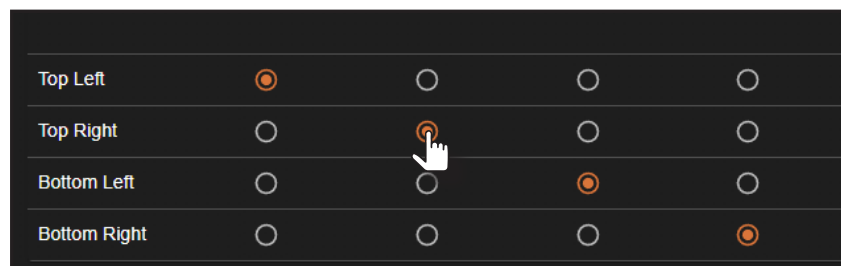
IMPORTANT: In order to use the video wall feature, AT-PRO5-101-SC-RX scaling receivers must be used.

Creating a Video Wall

1. Log in to the web server.
2. Click **Video Wall** in the side menu bar.
3. Click the **Enabled** toggle switch to enable the video wall feature. When enabled, the toggle switch will be orange.
4. Click the **Layout** drop-down list to select the desired video wall configuration. In this example, 2x2 has been selected.



5. Under the **Video Wall Outputs** section, click the radio button that corresponds with the desired output. In this example, **Output 1** has been assigned to the **Top Left** window, **Output 2** to the **Top Right** window, and so on. Refer to the illustration below.



Device Operation

- Under the **Video Wall Inputs** section, click the radio button for the desired input video source. In this example, **Input 1** is selected. Clicking the **None** radio button will mask the entire video wall.
- Click the **Resolution** drop-down list, located under the **Video Wall Resolution** section, and select the desired resolution. In this example, 3840x2160 is selected.

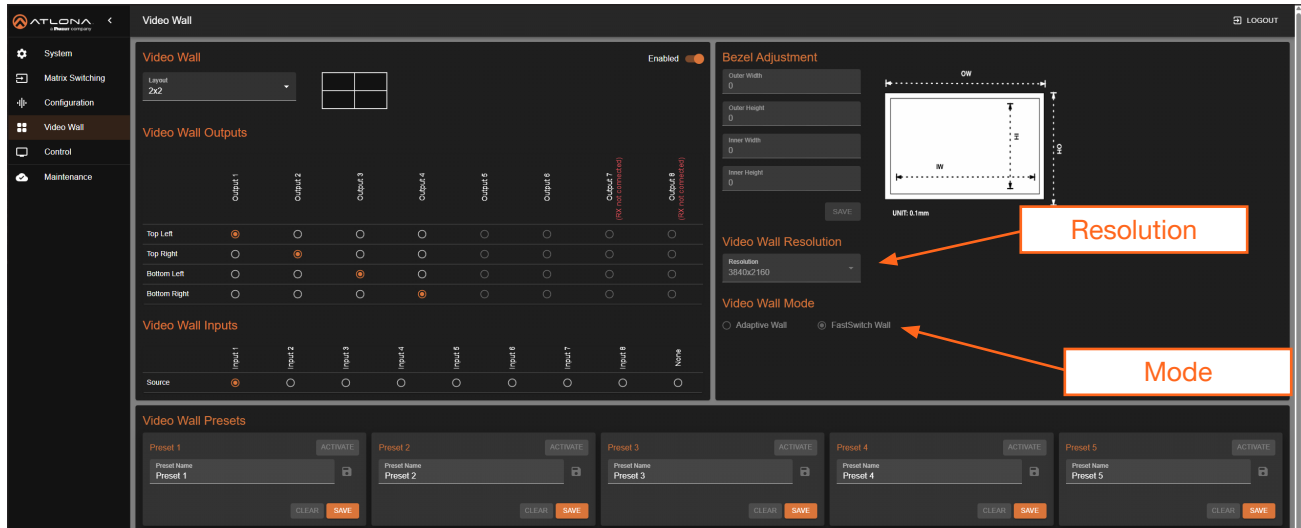
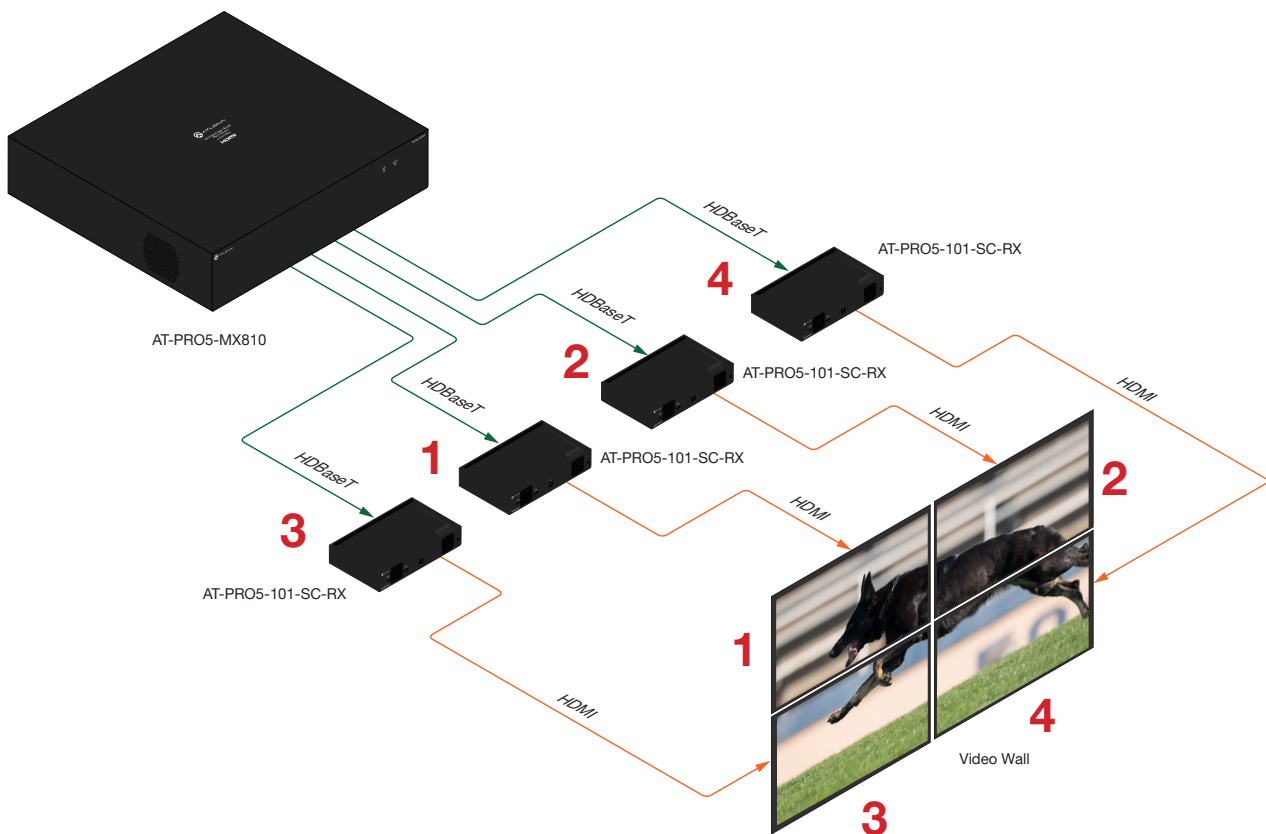
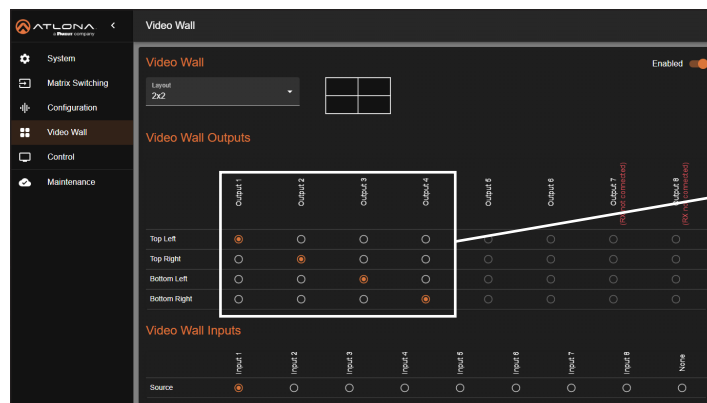


Figure 1.1 - Illustration of the AT-PRO5-MX810 and four AT-PRO5-SC-RX receivers.

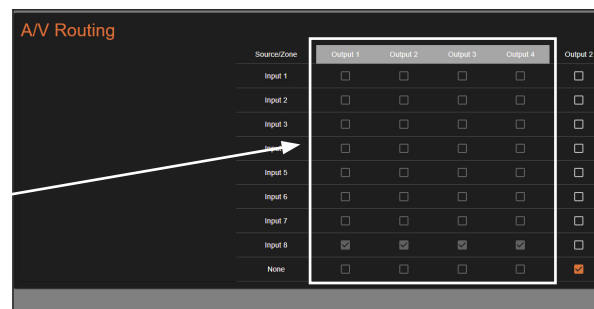


Note that in this example, when Output 1 - Output 4 are used in the video wall, these specific outputs will be disabled under the **Matrix Switching > A/V Routing** page, as shown. The disabled outputs will be highlighted with a gray bar and the routing check boxes will be disabled.

Video Wall page



Matrix Switching > A/V Routing page



- Locate the **Video Wall Mode** section and click the radio button for the desired mode. In this example, **FastSwitch Wall** is selected. Refer to Table 1.1 for a description of modes.

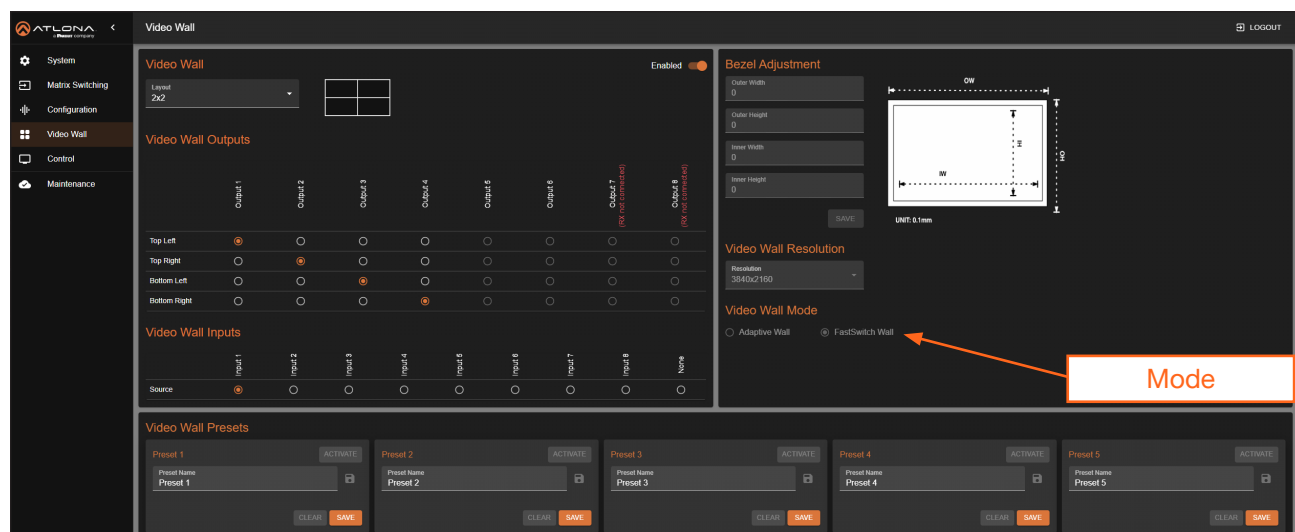


Table 1.1 - Video Wall Modes

Mode	Description
Adaptive Wall	This is the default mode. In this setting, receivers are synchronized to the source signal, ensuring all screens remain aligned for optimal performance without image tearing.
FastSwitch Wall	This mode offers faster source switching than Adaptive Wall mode. However, due to video processing latency, it may result in a slight timing difference of one to two frames between receivers.

- Check the image, on each display, and make sure they are aligned correctly with the other images on the video wall. Adjust the fields under the **Bezel Adjustment** section to adjust bezel compensation, if necessary.

Bezel Compensation

Displays have a region where video is not displayed, called the bezel. This can cause display issues when creating video walls. Bezel compensation takes this area into account when a single video source is mapped across multiple displays. Bezel compensation can be adjusted at any time.

The illustration on the left shows a simple 2x2 video wall without bezel compensation. Note how the Atlona logo appears stretched, horizontally. On the right, bezel compensation is used to correct the image.

Image without bezel compensation



Image with bezel compensation applied




Bezel

1. Locate the **Bezel Adjustment** section.
2. Enter the **Outer Width**, **Outer Height**, **Inner Width**, and **Inner Height** values, as desired. A value of 1 = 0.1 mm.
3. Click the **SAVE** button to commit changes.

Saving a Video Wall Preset

After creation, a video wall can be saved as a preset, with support for storing up to ten presets.

1. Create the desired video wall configuration.
2. Locate the **Video Wall Presets** section.
3. Enter the name of the preset in the desired **Preset** field, then click the  icon to save the name of the preset.
4. Click the **Save** button to assign the currently configured video wall to the preset. To remove the video wall configuration from the preset, click the **Clear** button.

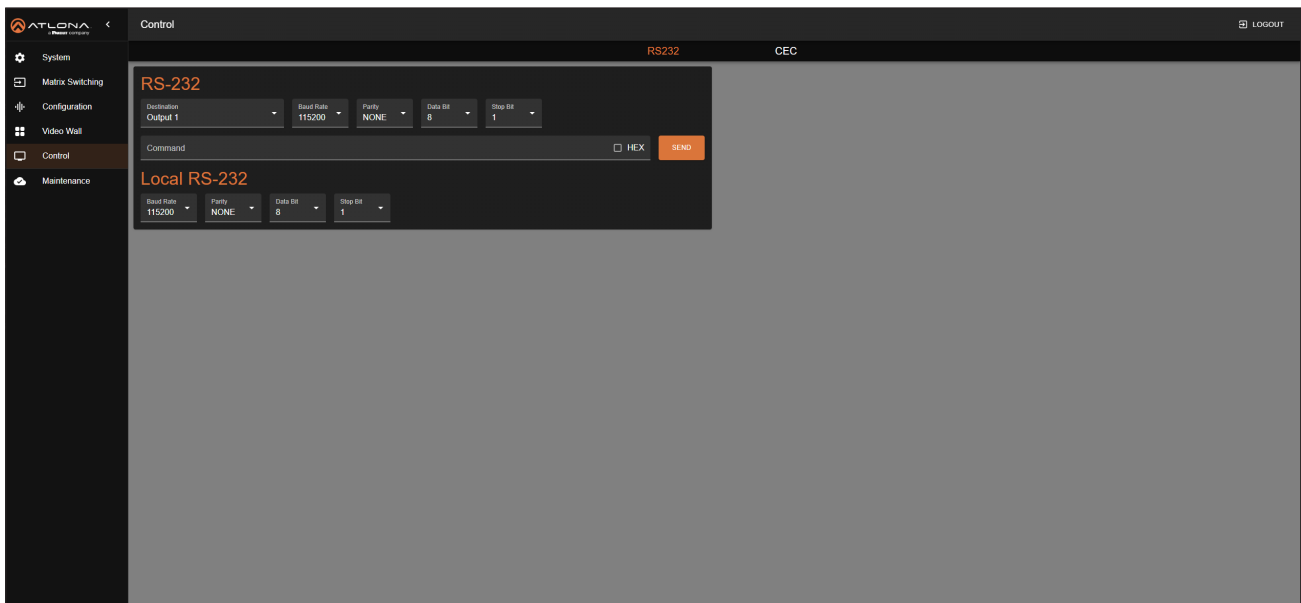
Device Control

These pages are designed for testing command transmission over RS-232 and CEC and should not be used as the primary control method for automation. Basic configuration options are available—such as auto standby settings on the CEC page and speed, parity, and other parameters on the RS-232 page.

RS-232 Control Settings

This section provides options to configure RS-232 parameters for each output gateway, enabling control of remote third-party devices through the SDVoE receiver's **RS-232** port.

1. Make sure that the third-party device is connected to the **RS-232** port on the AT-PRO5-101-RX or AT-PRO5-101-SC-RX receiver.
2. Log in to the web server.
3. Click **Control** in the side menu bar.
4. Click **RS232** in the top menu bar.
5. Click the **Destination** drop-down list to select the output port. Available options are Output 1...Output 8.
6. Click the **Baud Rate** drop down list to select the required baud rate. Available options are 9600, 19200, 38400, 57600, and 115200.



7. Click the **Parity**, **Data Bits**, and **Stop Bit** drop-down lists to set the required values. In most cases, these values will be NONE, 8, and 1, respectively.
8. Enter the command in the **Command** field. The command can be in either ASCII or hexadecimal format. If the command is entered in hexadecimal format, click the **HEX** checkbox.

An example of an ASCII string might be: PWON.

A command in hexadecimal format might be:

```
\xBE\xEF\x03\x06\x00\xBA\xD2\x01\x00\x00\x60\x01\x00\x0D
```

9. Click the **SEND** button to verify that the command works properly.

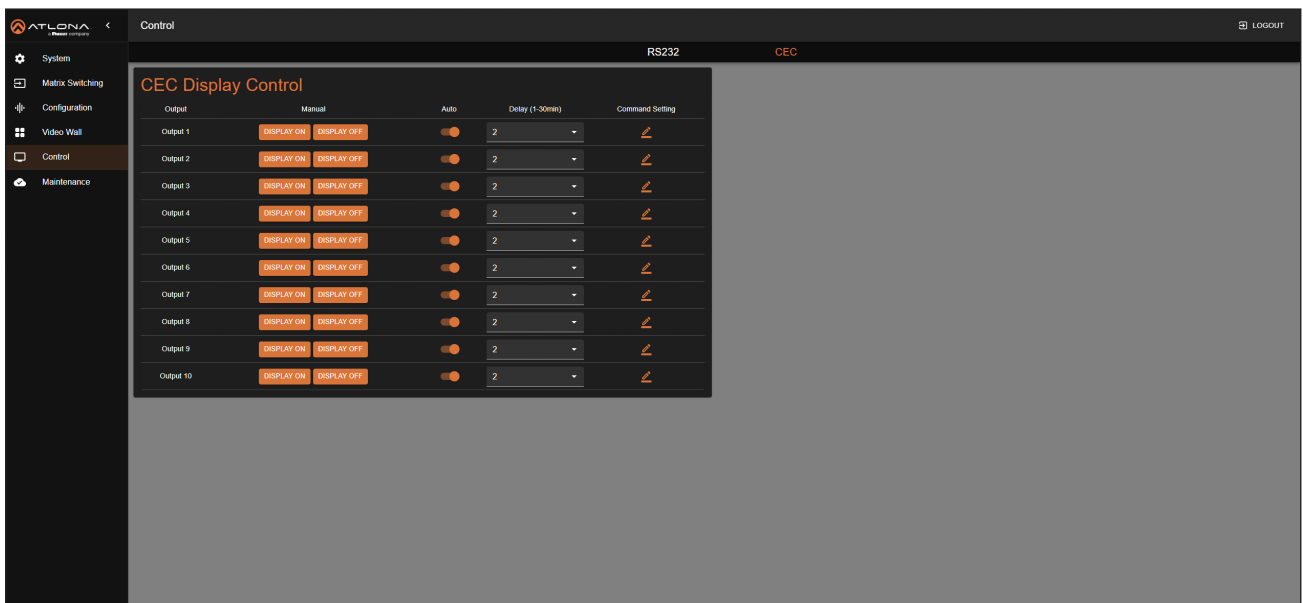
CEC Display Control

Consumer Electronics Control* (CEC) is the simplest method of control when working with a display. Note that the display must have CEC enabled to receive CEC messages. The HDMI output ports of the matrix switcher and SDVoE receivers are used for CEC control.

1. Enable CEC on the display device. Refer to the documentation for the display device. It should be noted that different manufacturers will identify CEC with their own brand name. Refer to the table below.


Manufacturer	CEC Designation
Hitachi	HDMI-CEC
LG	SIMPLINK
Philips	EasyLink
Samsung	AnyNet+
Sony	BRAVIA Sync
Toshiba	CE Link / REGZA Link
Visio	HDMI-CEC

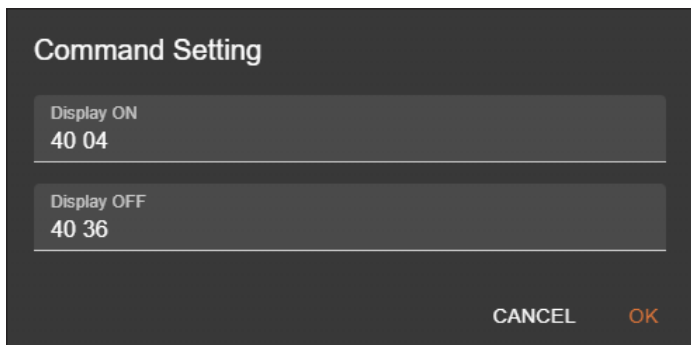
2. Log in to the web server.
3. Click **Control** in the side menu bar.
4. Click **CEC** in the top menu bar.
5. Click the **Auto** toggle switch to enable or disable CEC auto control. When enabled, the toggle switch will be orange.



**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.*

Device Operation

- Click the **Delay** drop-down list to select the delay interval. Values are from 1 . . . 30 minutes. This setting controls the display's power, toggling it on or off based on the presence of a video signal. For instance, if **Auto** control is enabled and the **Delay** is set to 2 minutes, the display will automatically power off if no signal is detected for 2 minutes.
- Click the  icon to display the **Command Setting** fields.



The image shows a 'Command Setting' dialog box with a dark background. It contains two input fields. The first field is labeled 'Display ON' and contains the text '40 04'. The second field is labeled 'Display OFF' and contains the text '40 36'. At the bottom right of the dialog, there are two buttons: 'CANCEL' and 'OK'.

- Enter the power-on and power-off commands in the **Display ON** and **Display OFF** fields, respectively. Consult the documentation for the display for the correct command strings.



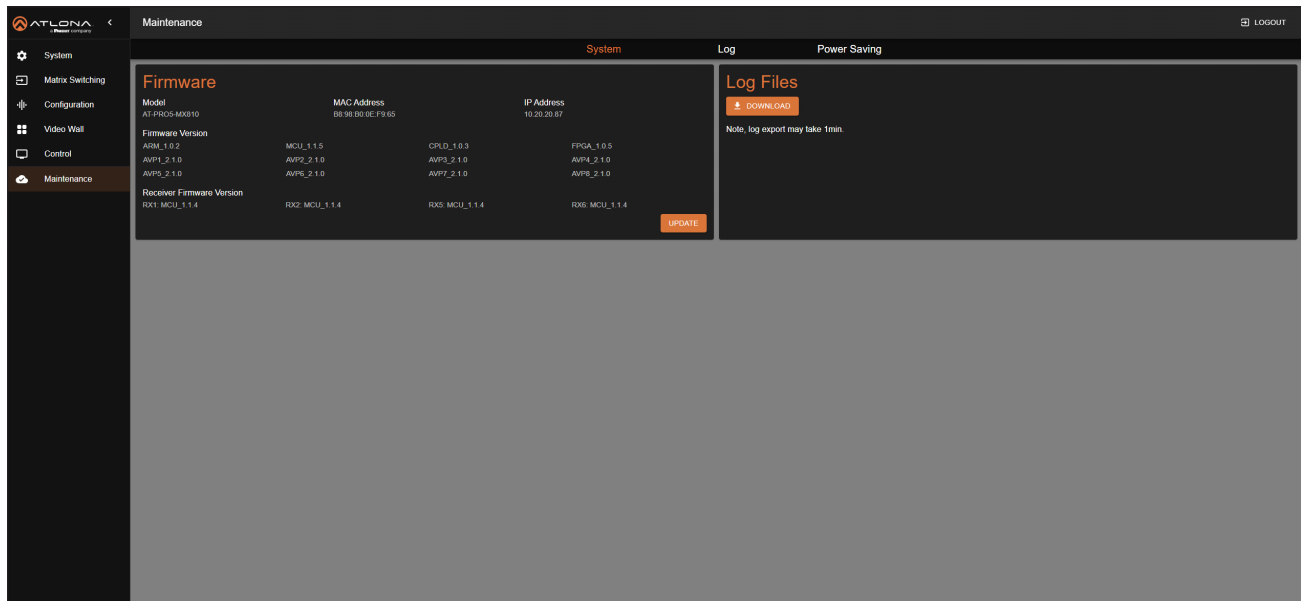
NOTE: The CEC commands currently set in the **Command Setting** fields should work with most display manufacturers.

- Click the **OK** button to save changes.
- Click the **DISPLAY ON** and **DISPLAY OFF** buttons to verify that each command works properly. If not, check the values entered for each command.

System Maintenance

Updating the Firmware

1. Log in to the web server.
2. Click **Maintenance** in the side menu bar.
3. Click **System** in the top menu bar.



4. Under the **Firmware** window group, all component-level firmware versions and other internal processor firmware will be listed. If AT-PRO5-101-RX and/or AT-PRO5-101-SC-RX receivers are connected to the AT-PRO5-MX810, their firmware versions will also appear here.
5. Click the **UPDATE** button.
6. The Open dialog will be displayed. Locate the firmware file and click the Open button.

Downloading Log Files

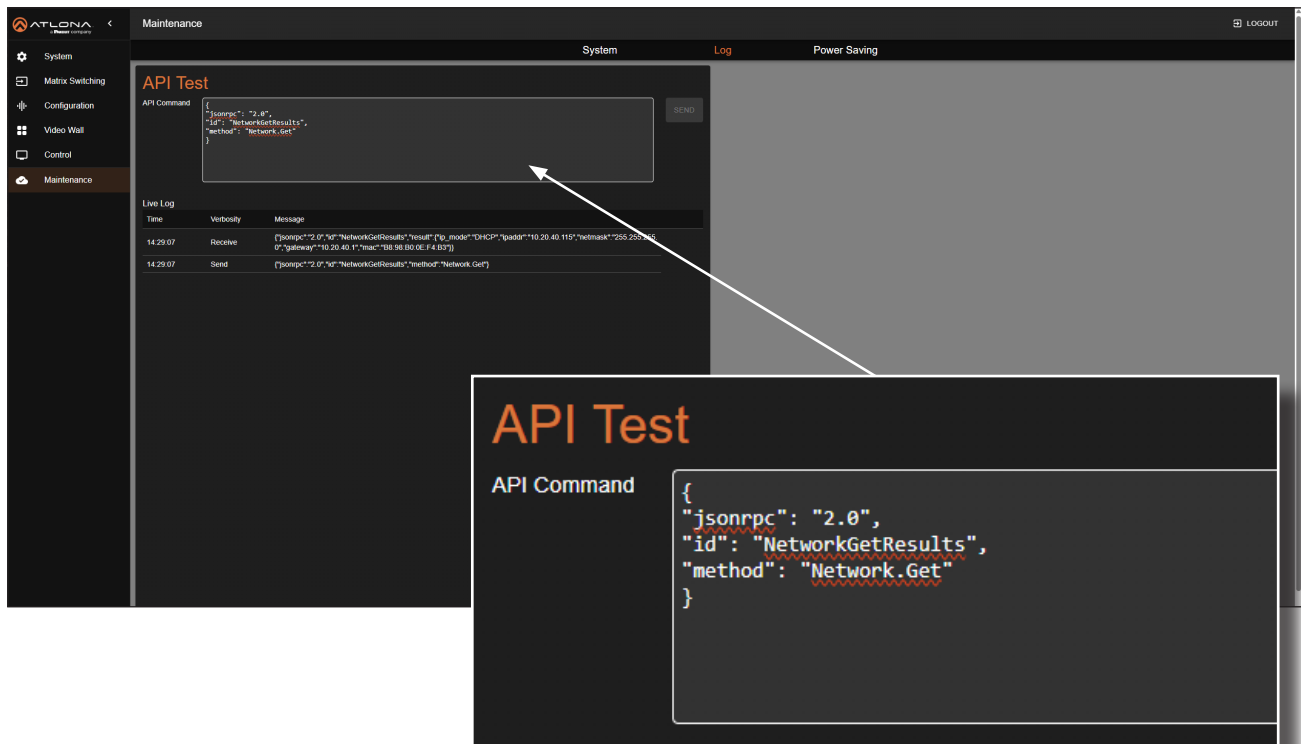
This feature allows log files to be downloaded to the local PC. Log files are used for troubleshooting purposes and may be requested by Atlona Technical Support Engineers.

1. Log in to the web server.
2. Click **Maintenance** in the side menu bar.
3. Click **System** in the top menu bar.
4. Under the Log Files window group, click the **DOWNLOAD** button. Log files are automatically downloaded to the C:\Users\[Username]\Downloads folder on the PC.

API Testing

This section is intended for use by Atlona Technical Support Engineers to execute JSON-RPC commands and record their responses in the log file prior to download.

1. Log in to the web server.
2. Click **Maintenance** in the side menu bar.
3. Click **Log** in the top menu bar.



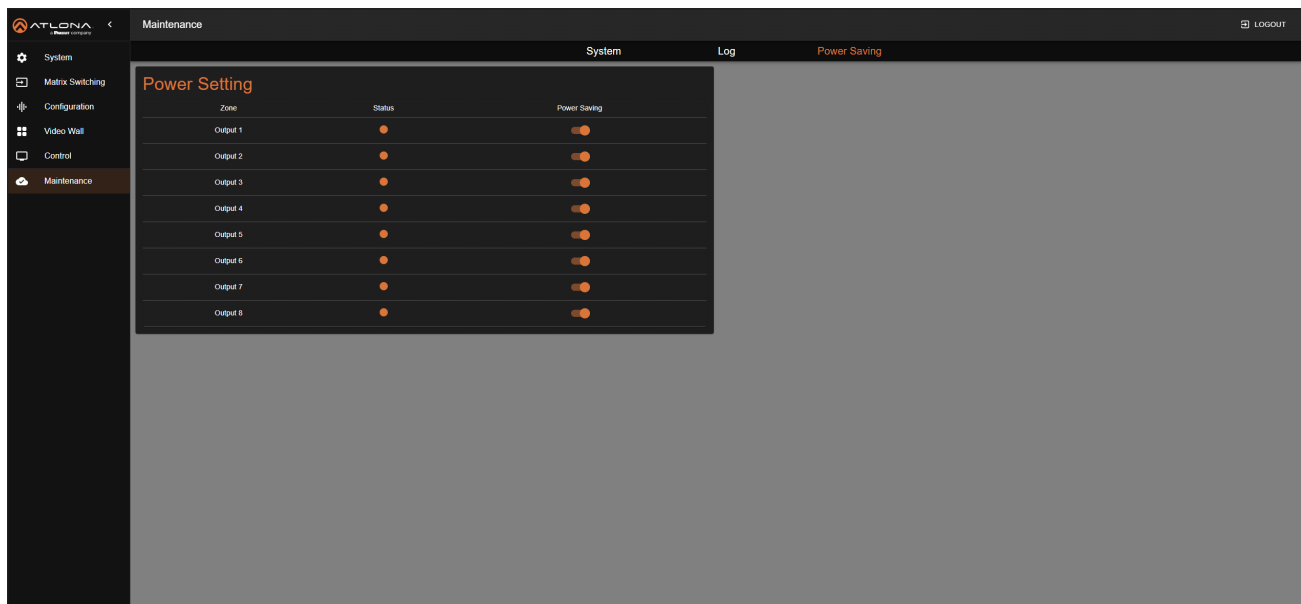
4. Enter a JSON string in the **API Command** field.
5. Click the **SEND** button. If the JSON-RPC 2.0 command is valid, feedback will be displayed under the **Live Log** section.

Device Operation

Power Saving

To conserve power, the AT-PRO5-MX810 provides the ability to disable the PoE function for ports **EXT 1 - EXT 8** (RJ45) when they are not in use. Additionally, it supports monitoring the operating status of remote SDVoE receivers.

1. Log in to the web server.
2. Click **Maintenance** in the side menu bar.
3. Click **Power Saving** in the top menu bar.



4. Click the **Power Saving** toggle switch for each output to enable or disable power saving. When enabled, the **Power Saving** toggle switch will be orange.

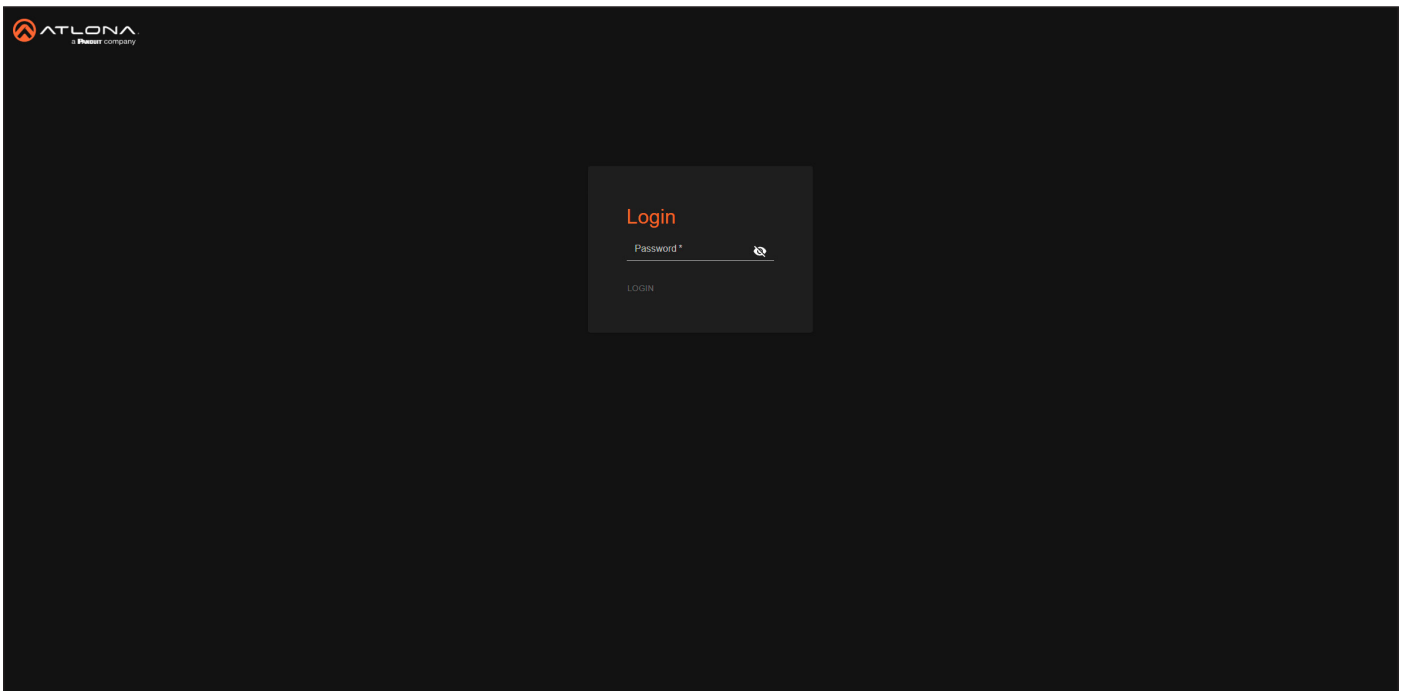
Configuration and Management Interfaces

Web Server


The AT-PRO5-MX810 includes a built-in web server. Atlona recommends that the web server be used to set up the AT-PRO5-MX810, as it provides intuitive management of all features. Refer to [Logging in after Registration \(page 15\)](#) for more information.

The AT-PRO5-MX810 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-PRO5-MX810. If the AT-PRO5-MX810 does not receive an IP address from a DHCP server within 15 seconds, it will automatically assign itself a link-local (APIPA) address in the 169.254.xxx.xxx/16 range. If a DHCP server becomes available while the unit is in APIPA mode, it will automatically obtain a new IP address from the DHCP pool. Refer to [Automatic Private IP Addressing \(APIPA\) \(page 13\)](#) for more information.

Login



Password

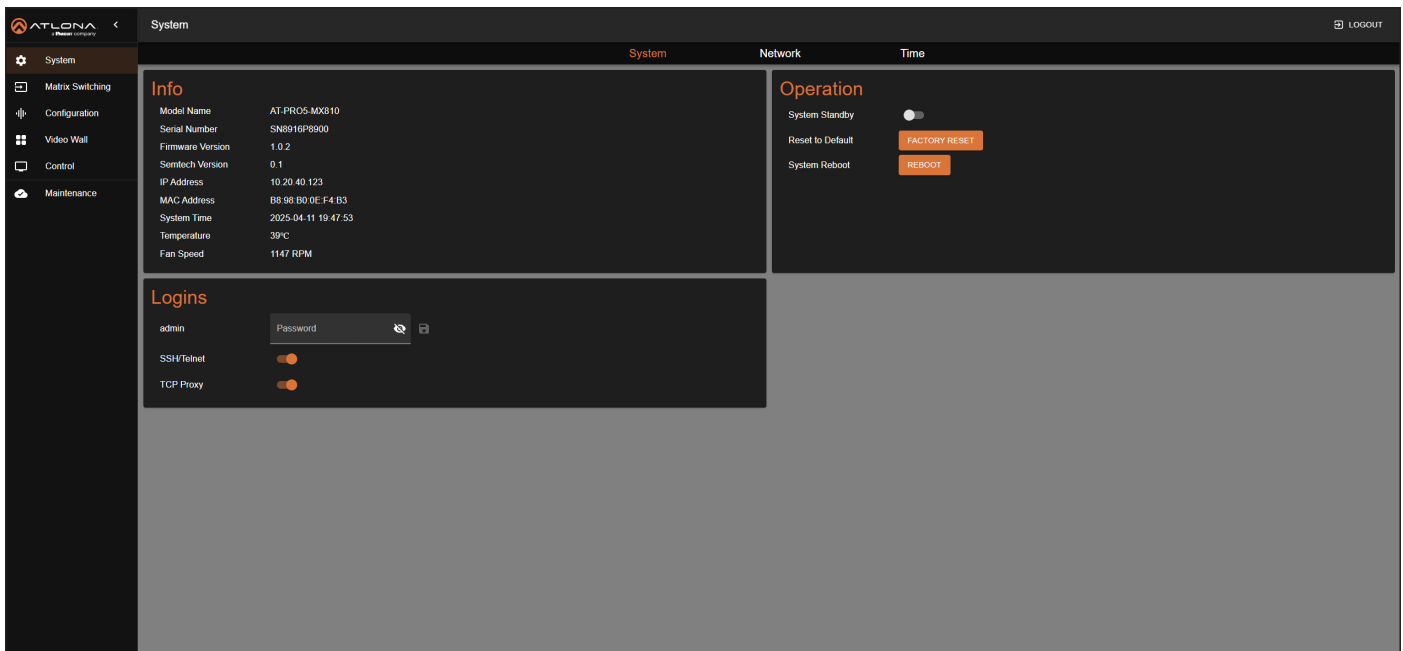
Enter the password in this field. The password will be masked when entering it in this field. To toggle between password masking and unmasking, click the  icon.

LOGIN

Click this button to log in.

Configuration and Management Interfaces

System > System



Info

Model Name

The model number of this product.

Serial Number

The serial number of the AT-PRO5-MX810.

Firmware Version

The version of firmware that the AT-PRO5-MX810 is running. Always make sure to check the AT-PRO5-MX810 product page, on the Atlona web site, for the latest version of firmware.

Semtech Version

The version of firmware that the Semtech chipset is running.

IP Address

The IP address of the AT-PRO5-MX810.

MAC Address

The MAC address of the AT-PRO5-MX810.

System Time

Displays the current system time.

Temperature

Displays the internal temperature, in Celsius, of the AT-PRO5-MX810.

Fan Speed

Displays the fan speed in rotations per minute (RPM).

Logins

Admin

If changing the login password, enter it in this field. Refer to [Changing the Administrator Password \(page 17\)](#) for more information.

SSH/Telnet (Port 22 / Port 23)

Click this toggle switch to enable or disable SSH/Telnet. When enabled, the toggle switch will be orange. If disabled, then traffic on port 22 and 23 is forbidden.

TCP Proxy (Port 9001)

Click this toggle switch to enable or disable TCP Proxy. When enabled, the toggle switch will be orange. If disabled, then traffic on port 9001 is forbidden.

Configuration and Management Interfaces

Operation

System Standby

Click this toggle switch to place the AT-PRO5-MX810 into standby mode.

FACTORY RESET

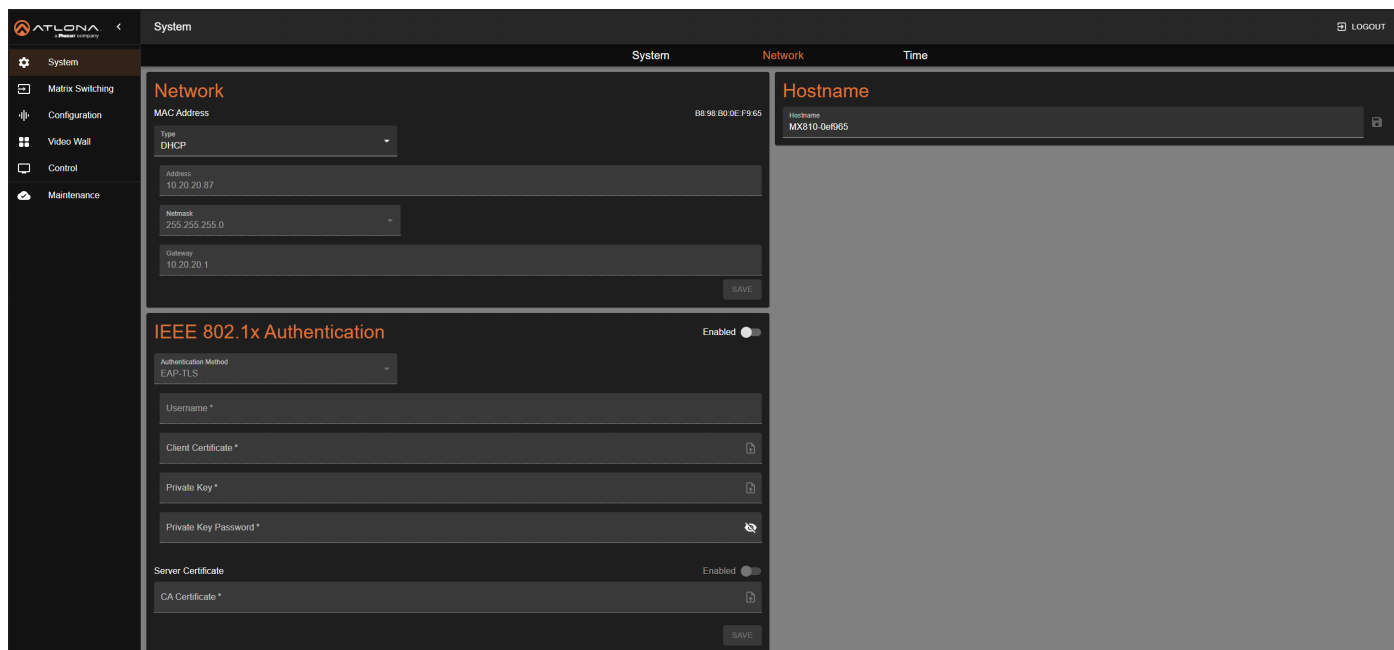
Click this button to reset the AT-PRO5-MX810 to factory-default settings.

REBOOT

Click this button to reboot the AT-PRO5-MX810. All routing and network settings will be preserved.

Configuration and Management Interfaces

System > Network



Network

MAC Address

The MAC address of the AT-PRO5-MX810.

Type

Click this drop-down list to select the IP mode of the AT-PRO5-MX810.

Setting	Description
DHCP	Uses an available DHCP server to assign an IP address.
Static	Allows the IP address, subnet mask, and gateway IP address to be entered manually.

IP

Enter the IP address of the AT-PRO5-MX810 in this field. This field will only be available if **Type** is set to **Static**.

Netmask

Enter the subnet mask in this field. This field will only be available if **Type** is set to **Static**.

Gateway

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

Hostname

Hostname

Enter the desired hostname in this field. Refer to [Setting the Host Name \(page 28\)](#) for more information.

Configuration and Management Interfaces

IEEE 802.1x Authentication

Refer to [IEEE 802.1x Authentication \(page 25\)](#) for more information.

Enabled

Click this toggle switch to enable or disable IEEE 802.1x authentication. When enabled, the toggle switch will be orange.

Authentication Method

Click this drop-down list to select the desired authentication method.

Protocol	Description
PEAP/MSCHAPv2	Protected EAP; uses basic credentials in addition to a CA (certificate authority) certificate.
EAP-TLS	EAP Transport Layer Security; uses a client certificate, private key, private key password, and CA (certificate authority) certificate.

The following fields are available, depending on the authentication method that is selected:


Username

The identifier for the user or device that is attempting to connect to the network.


Password

Enter the password in this field.


Client Certificate

A digital certificate used to authenticate a device or user attempting to connect to the network. This is typically used in enterprise environments or when added security is desired. Only certificates in the .PEM format are supported. To upload the certificate, click the **Enabled** button, above the **Server Certificate** field, then click the  icon to select the certificate.

Private Key

Part of the Public Key Infrastructure (PKI)—a framework that enables secure encrypted communication—a private key is associated with the digital certificate. This key is securely stored and used to prove identity and establish secure connections. Click the  to select the private key.


Private Key Password

This password adds a layer of security to protect the private key associated with a digital certificate. It is masked by default; click the  icon to show or hide the password.

Enabled (Server Certificate)

Click this toggle switch to enable or disable the Server Certificate feature. When enabled, the toggle switch will be orange.

CA Certificate

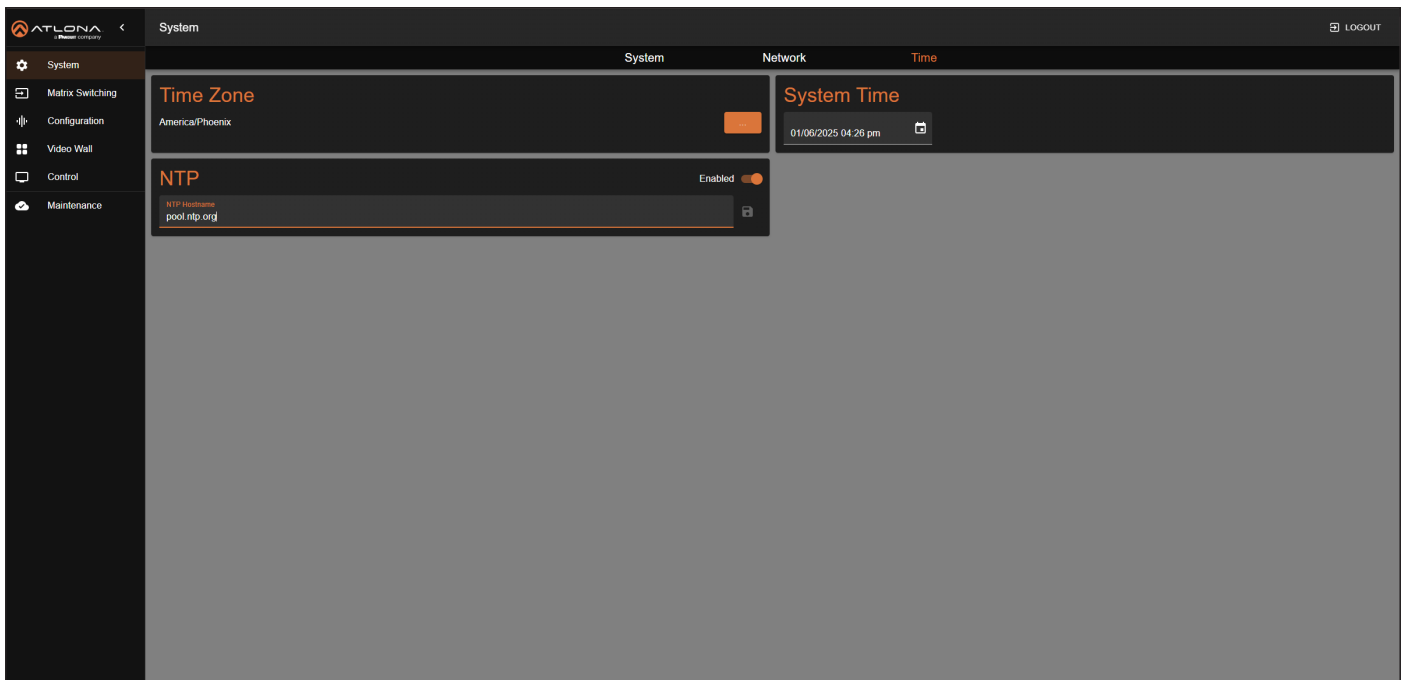
A digital certificate issued by a Certificate Authority (CA) serves as the foundation of trust for verifying other certificates, such as client and server certificates. Only certificates in the .PEM format are supported. To upload a certificate, click the **Enabled** button above the **Server Certificate** field, then click the  to browse and select the certificate file.

SAVE

Click this button to commit changes.

Configuration and Management Interfaces

System > Time



Time Zone


Click the  icon to set the time zone. Refer to [Setting the Time Zone \(page 29\)](#) for more information.

NTP

NTP Hostname

Enter the NTP server name in this field. The default server is `pool.ntp.org`.

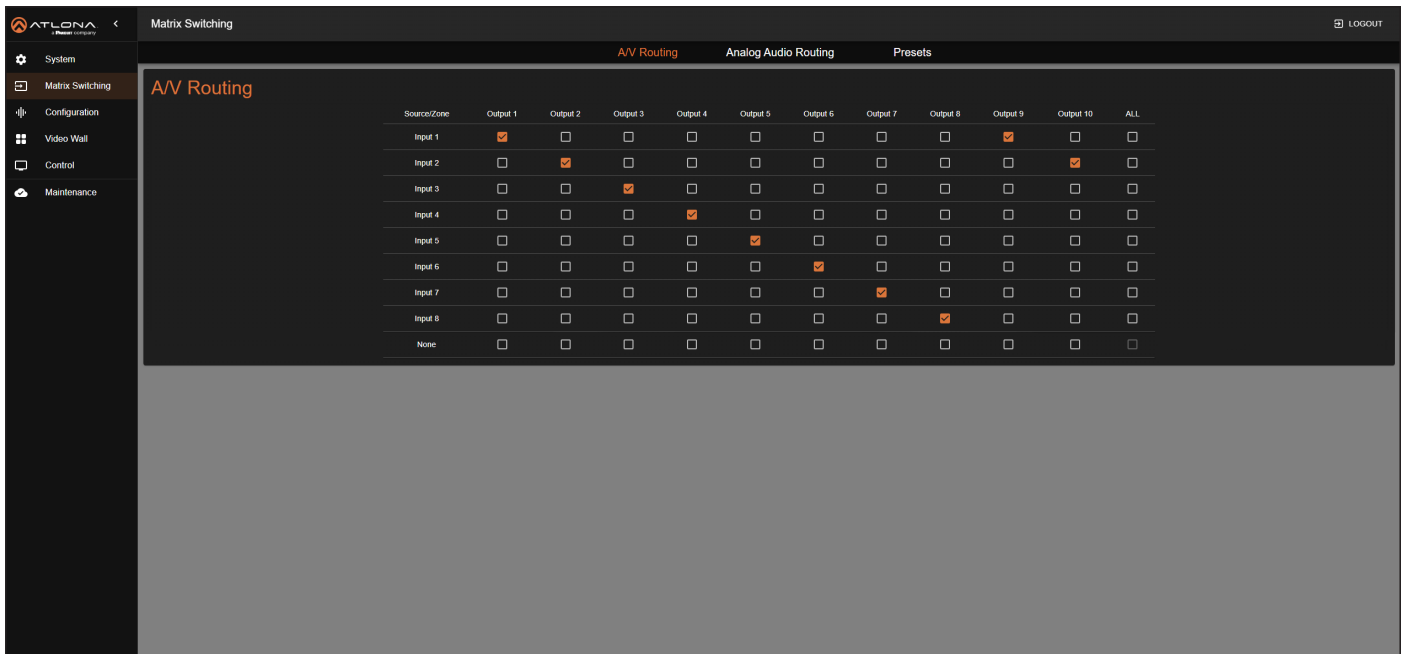
System Time

Click the  icon to set the system date and time. Refer to [Setting the System Time \(page 31\)](#) for more information.

Configuration and Management Interfaces

Matrix Switching > A/V Routing

Refer to [Video Routing \(page 32\)](#) for more information.



A/V Routing

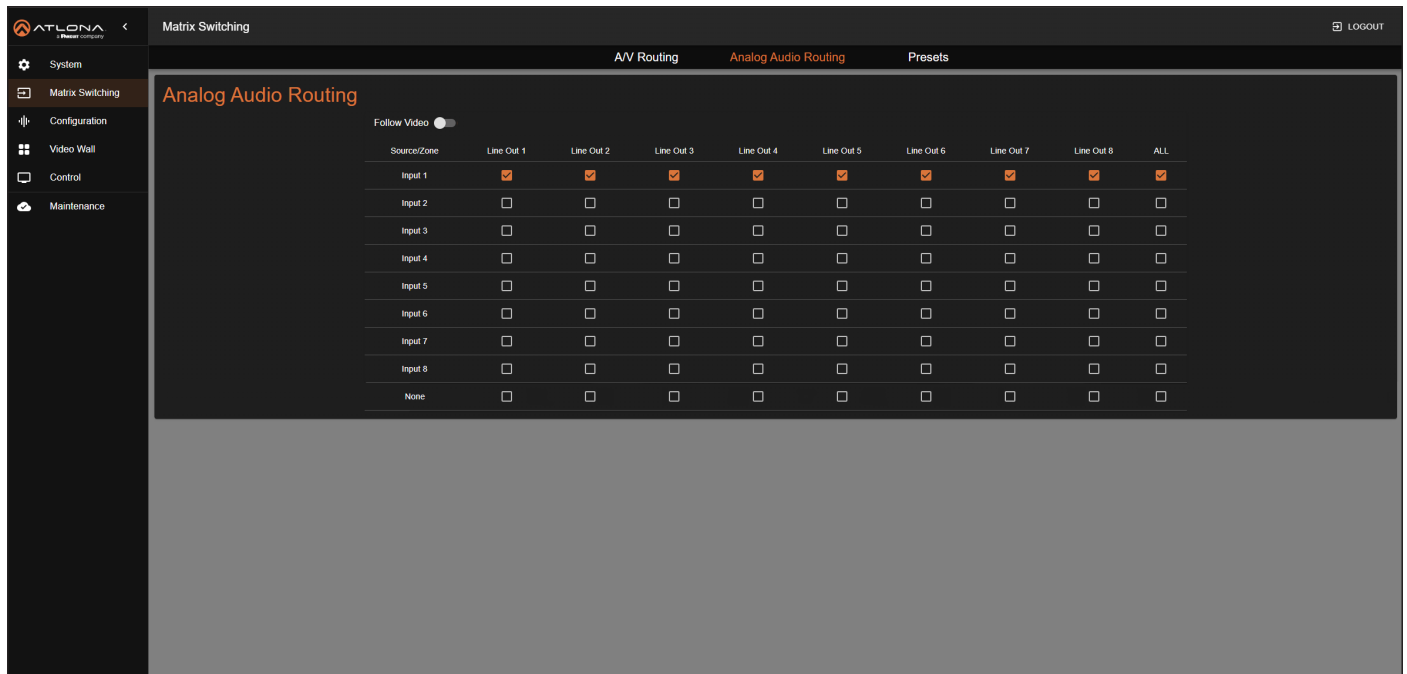
This page allows you to route video signals—along with their embedded digital audio (audio carried within the HDMI signal)—from any of the 8 input sources to any of the 10 output zones on the AT-PRO5-MX810.

- **Source/Zone (Rows):** Represents the 8 available input sources (Input 1 – Input 8).
- **Output 1 – Output 10 (Columns):** Represents the 10 output destinations or zones.
- **Routing Matrix**
 - » Checkboxes indicate active routing.
 - » A checked box indicates the selected input source is routed to the corresponding output.
 - » Multiple outputs can receive the same input simultaneously (1-to-many routing).
 - » Each output can only receive one input at a time (many-to-1 is not permitted).

Configuration and Management Interfaces

Matrix Switching > Analog Audio Routing

Refer to [Manual Audio Routing \(page 33\)](#) for more information.



Analog Audio Routing

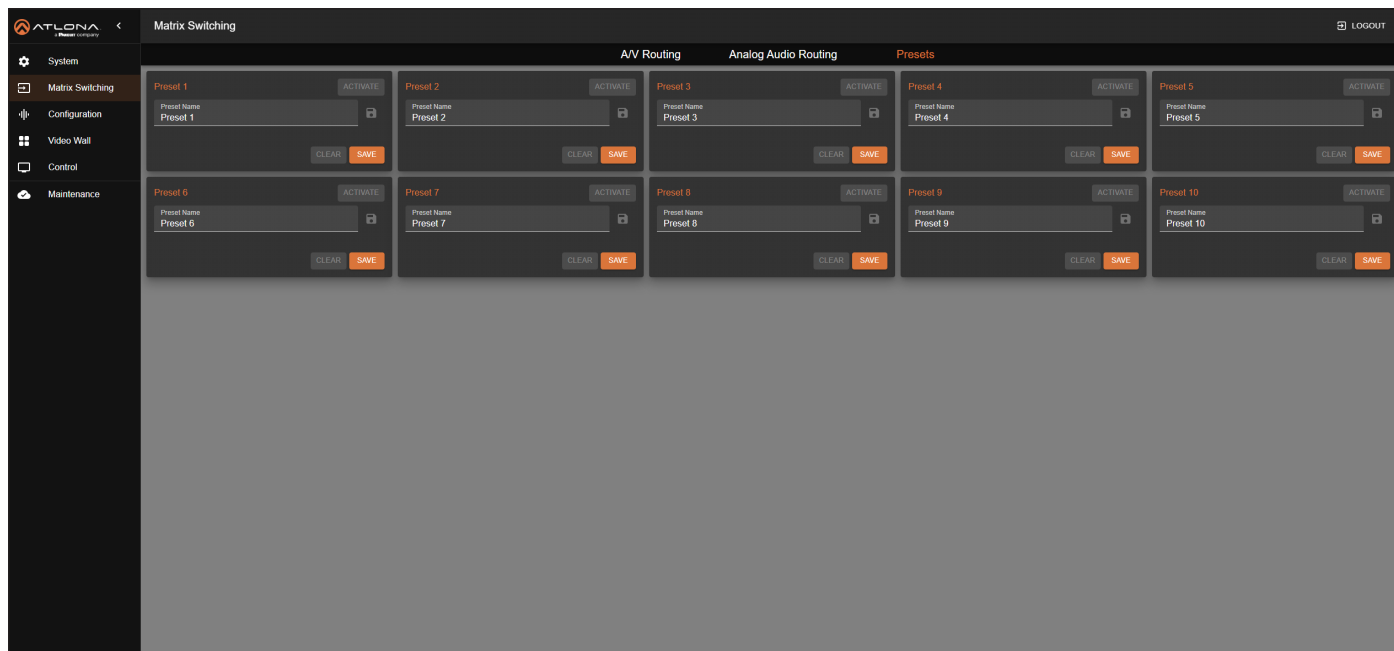
The Analog Audio Routing screen allows you to independently assign analog audio signals—such as de-embedded audio from HDMI sources (audio extracted from the HDMI signal)—to any of the eight analog audio output ports (Line Out 1 – Line Out 8). Each Line Out corresponds to one of the **AUDIO OUT 1 – AUDIO OUT 8** ports on the back of the AT-PRO5-MX810.

- **Input 1 - Input 8 (Rows):** Lists the eight input sources. Note that Input labels may appear differently if they have been renamed on the **Configuration > Inputs** page.
- **Line Out 1 – Line Out 8 (Columns):** Represents the analog output ports on the AT-PRO5-MX810.
- **Routing Matrix**
 - » A checked box indicates that the input in that row is routed to the corresponding Line Out port.
 - » Multiple outputs can receive the same input (1-to-many routing).
 - » Each output can only have one active input assignment at a time.
- **ALL Column**
 - » Selecting a checkbox in the **ALL** column routes the corresponding input to all analog outputs simultaneously (Line Out 1 – 8).
- **Follow Video**
 - » When enabled, analog audio routing automatically follows the video input assigned in the A/V Routing tab.
 - » When disabled (default), analog audio can be routed independently of video.

Configuration and Management Interfaces

Matrix Switching > Presets

Refer to [Routing Presets \(page 34\)](#) for more information.



Presets

Preset Name

Enter the name of the preset in this field.

ACTIVATE

Activates the selected preset.



Click this icon to save the name of the preset in the **Preset Name** field.

CLEAR

Erases the preset from this memory location. Note that pressing **CLEAR** will *not* delete the current routing state.

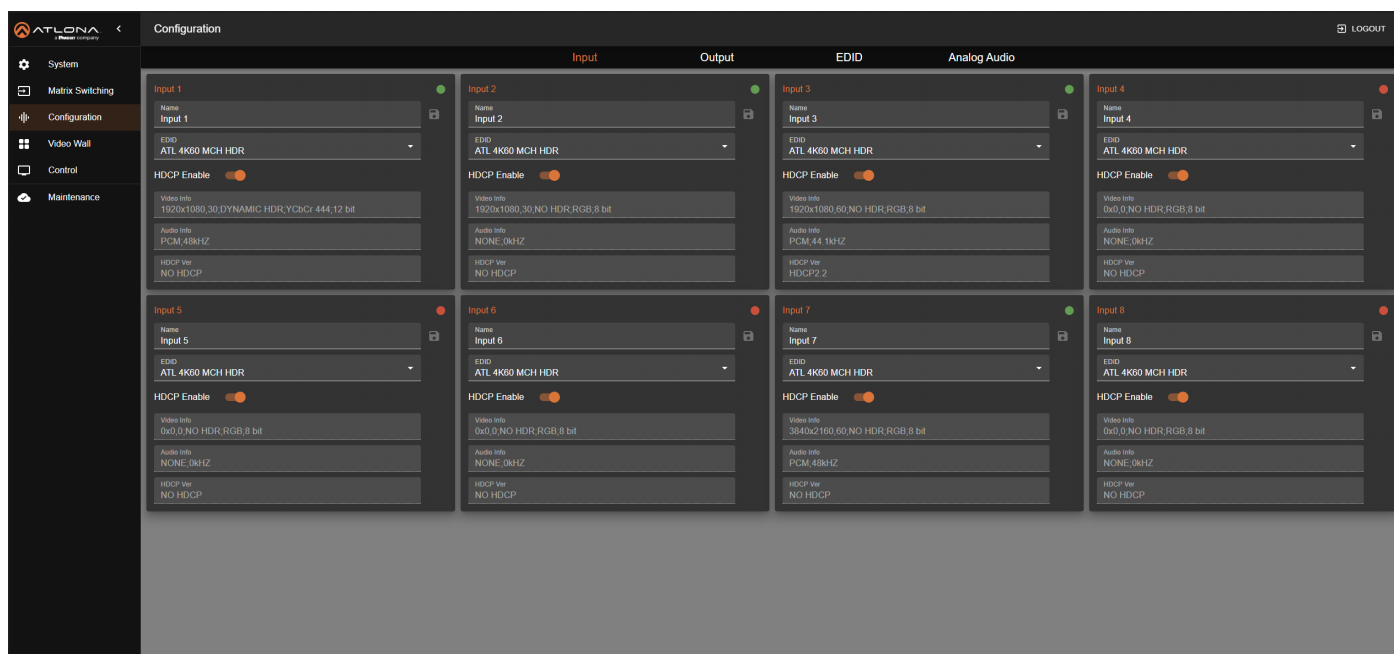
SAVE

Saves the current routing state to the preset.

Configuration and Management Interfaces

Configuration > Input

Refer to [Input Configuration \(page 35\)](#) for more information.



Input

Name

Enter the name of the input in this field.



Click this icon to save the name of the preset in the **Name** field.

EDID

Click this drop-down list to select the desired EDID.

HDCP Enable

Click this toggle switch to enable or disable passage of HDCP content.

Video Info

Displays information about the input video signal.

Audio Info

Displays information about the input audio signal.

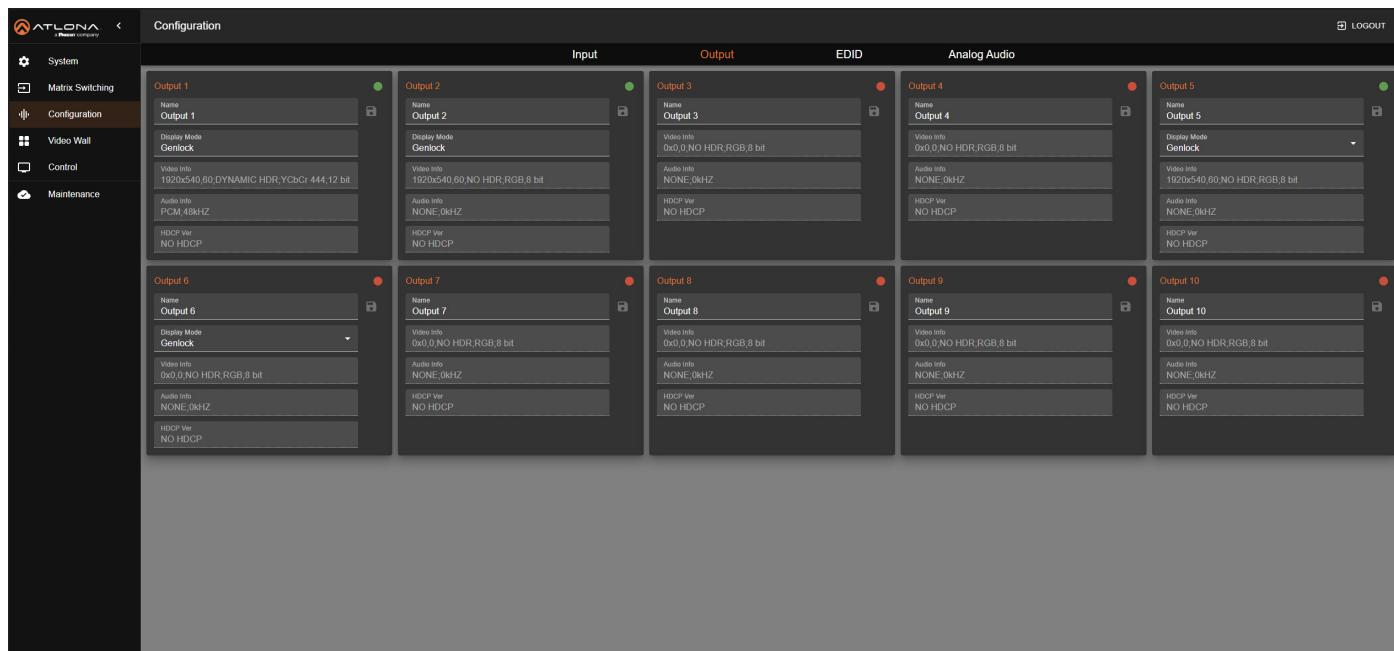
HDCP Ver

Displays the HDCP version in the video signal, if present.

Configuration and Management Interfaces

Configuration > Output

Refer to [Routing Presets \(page 34\)](#) for more information.



Output

Name

Enter the name of the input in this field.



Click this icon to save the name of the input in the **Name** field.

Display Mode

Selects the desired display mode. Refer to [Changing the Display Mode \(page 39\)](#) for more information.

Mode	Description	
Genlock	This default mode mimics a direct connection with minimal compression and low latency. All receivers sync to the source, ensuring full display synchronization (genlock).	
Scaler	This mode allows selection between <code>Fast switch</code> and <code>Genlock scaler</code> modes.	
	Mode	Description
	Fast switch	This mode enables fast source switching with scaling or frame rate conversion. Output timing stays constant for smooth transitions, with 1 – 2 frames of added latency.
	Genlock scaler	This mode offers low latency and source sync like Genlock, with resolution scaling from <code>Fast switch</code> . It avoids frame rate conversion to eliminate added latency.

Configuration and Management Interfaces

Video Info

Displays information about the input video signal.

Audio Info

Displays information about the input audio signal.

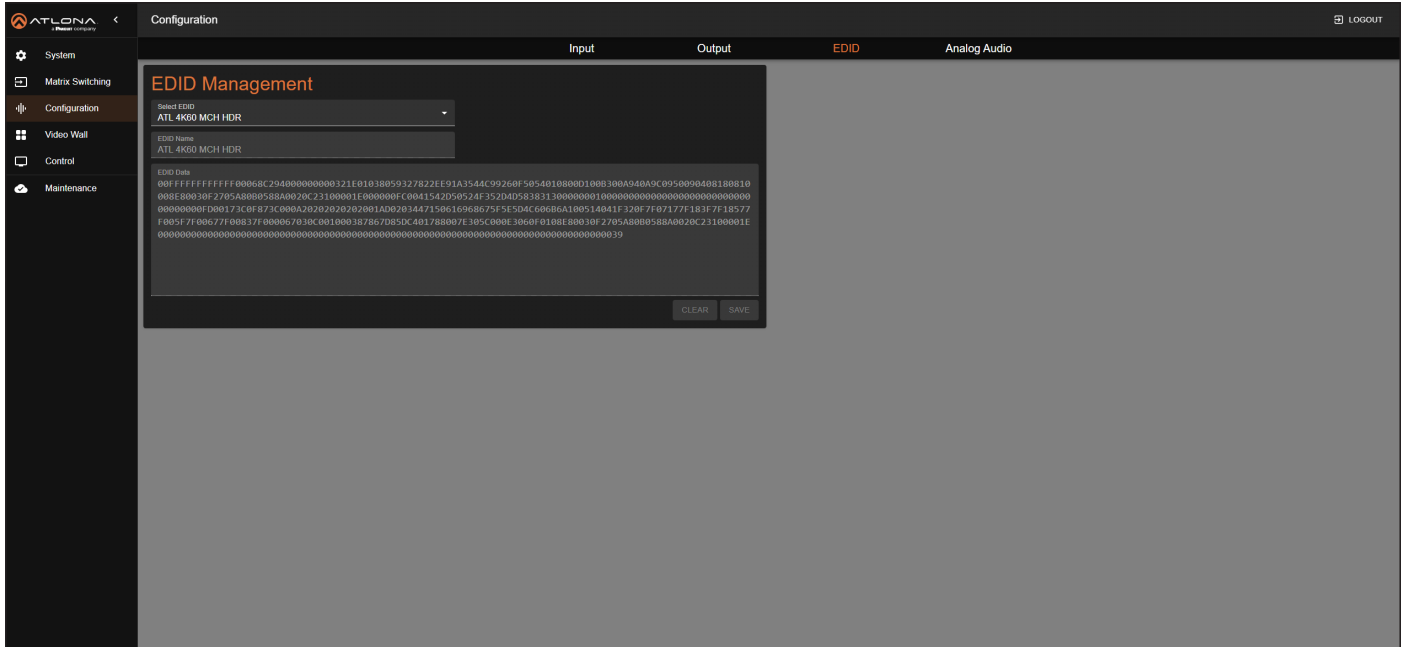
HDCP Ver

Displays the HDCP version in the video signal. If the video does not contain HDCP content, then NO HDCP will be displayed.

Configuration and Management Interfaces

Configuration > EDID

Refer to [EDID Management \(page 41\)](#) for more information.



EDID Management

Select EDID

Click this drop-down list to select the desired EDID.

EDID Name

This field displays the selected EDID.

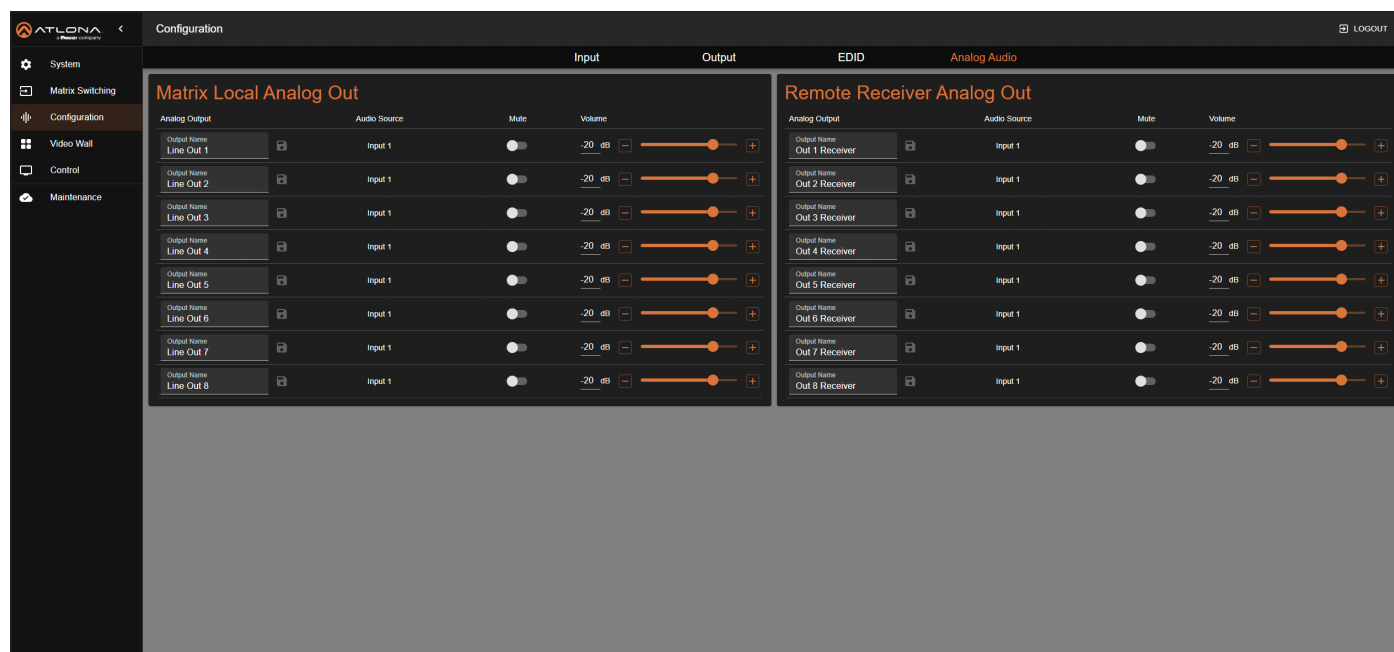
EDID Data

This field displays the raw data, in hexadecimal format, for the selected EDID.

Configuration and Management Interfaces

Configuration > Analog Audio

Refer to [Analog Audio Output \(page 45\)](#) for more information.



Matrix Local Analog Out / Remote Receiver Analog Out

The following controls perform the same function but apply to different output locations. **Matrix Local Analog Out** adjusts the audio from the **AUDIO OUT** (1 - 8) ports on the AT-PRO5-MX810, while **Remote Receiver Analog Out** controls the audio from the **AUDIO OUT** port on the AT-PRO5-101-RX or AT-PRO5-101-SC-RX receiver.

Output Name

Enter the name of the output in this field.

Audio Source

Displays the selected audio source of each analog output.



Click this icon to save the name in the **Output Name** field.

Mute

Click this toggle switch to enable or disable muting on the output.

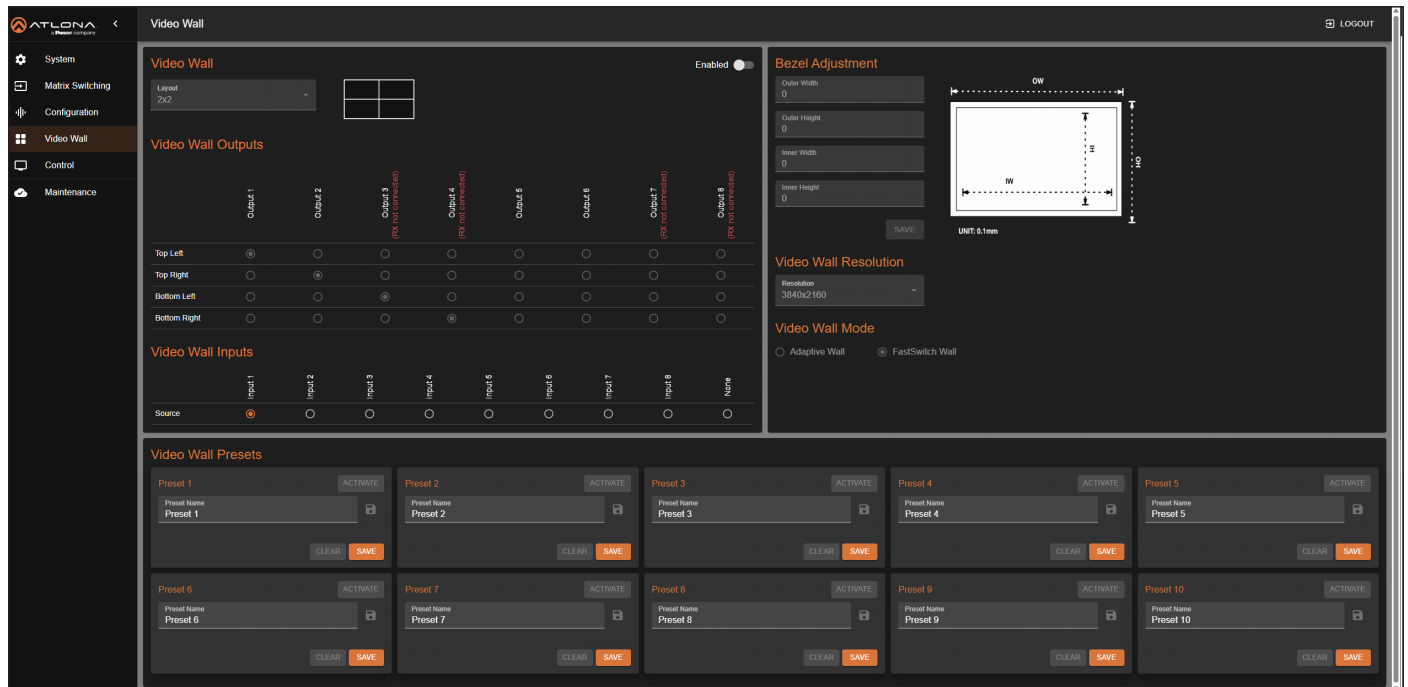
Volume

Adjust the output volume by dragging the volume slider or by entering a specific value in the **Volume** field.

Configuration and Management Interfaces

Video Wall

Refer to [Video Walls \(page 55\)](#) for more information.



Video Wall

Layout

Click this drop-down list to select the desired video wall layout: 2x2, 1x3, or 2x4.

Enabled

Click this toggle to enable or disable the video wall feature. When enabled, the toggle will be orange.

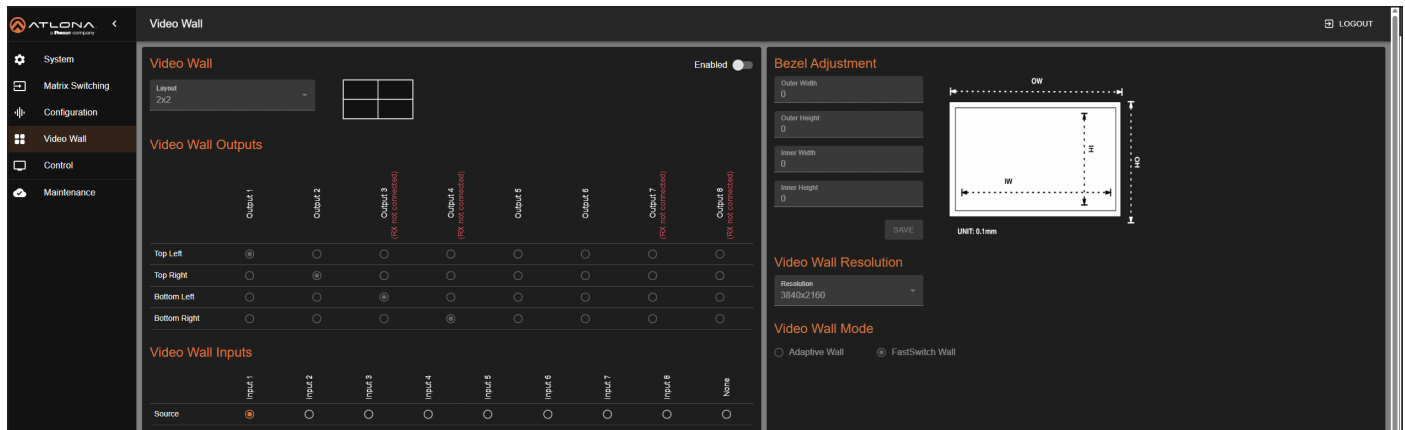
Video Wall Outputs

This section allows you to assign physical output ports on the AT-PRO5-MX810 to specific positions in the video wall layout (e.g., Top Left, Top Right, Bottom Left, Bottom Right in a 2x2 layout). Each output port (**Output 1 – Output 8**) is listed across the top of the matrix. Below, each video wall position is listed vertically. Note that depending on which layout is selected, the names for each row will change.

Video Wall Inputs

Video source for the wall can be selected from any available input in this section. Click the **None** radio button to mute the entire video wall.

Configuration and Management Interfaces



Bezel Adjustment

Enter integer values in these fields to adjust bezel compensation. A value of 1 = 0.1 mm (e.g. 25 = 2.5 mm).

Outer Width

The horizontal space between the visible areas of two side-by-side displays. This compensates for the combined left and right bezels between adjacent vertical panels.

Outer Height

The vertical space between the visible areas of two stacked displays. This compensates for the combined top and bottom bezels between adjacent horizontal panels.

Inner Width

The overlap or gap within a single screen area — used less frequently, this might be adjusted when a display has internal black borders or image offset. Often left at zero unless fine-tuning specific displays.

Inner Height

Similar to Inner Width, but vertical. Adjust only if the image appears shifted or scaled improperly inside an individual screen.

Video Wall Resolution

Resolution

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

Video Wall Mode

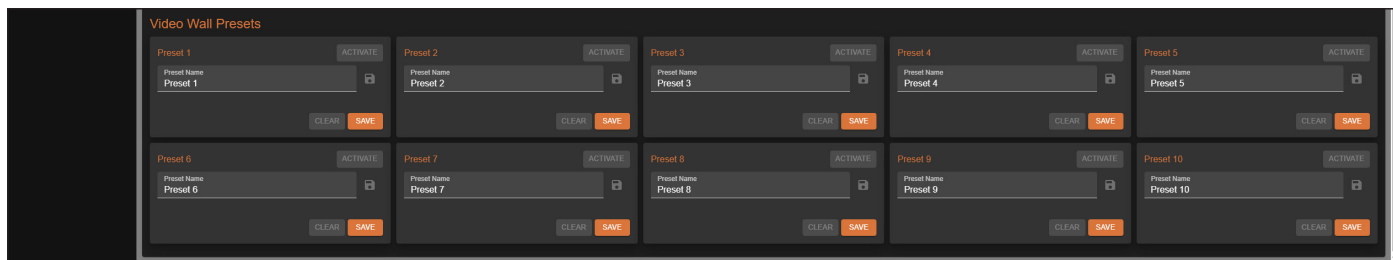
Adaptive Wall

This is the default mode. In **Adaptive Wall** mode, all displays remain synchronized with the video source, ensuring high-quality output with no image tearing. This mode is ideal for presentations, digital signage, or environments where visual integrity and image stability are a priority. *Note: Switching between video sources may take slightly longer due to synchronization requirements.*

FastSwitch Wall

This mode prioritizes rapid source switching, reducing transition time when changing inputs. While switching is faster, the trade-off is a slight timing variation of one to two frames between displays.

Configuration and Management Interfaces



The screenshot displays a 'Video Wall Presets' configuration window. It contains a grid of 10 preset slots, labeled 'Preset 1' through 'Preset 10'. Each slot includes a text input field for the 'Preset Name', an 'ACTIVATE' button, a 'CLEAR' button, and a 'SAVE' button. The 'Preset Name' fields are currently populated with 'Preset 1' through 'Preset 10' respectively.

Video Wall Presets

This section allows saving of up to 10 video wall presets. Each preset can be named, saved, and cleared as needed for quick recall.

Preset Name

Enter the name of the preset in this field.

ACTIVATE

Activates the selected preset. This button will only be available if a preset is stored.



Click this icon to save the name of the preset in the **Preset Name** field.

CLEAR

Erases the preset from this memory location. Note that pressing **CLEAR** will *not* delete the current video wall configuration.

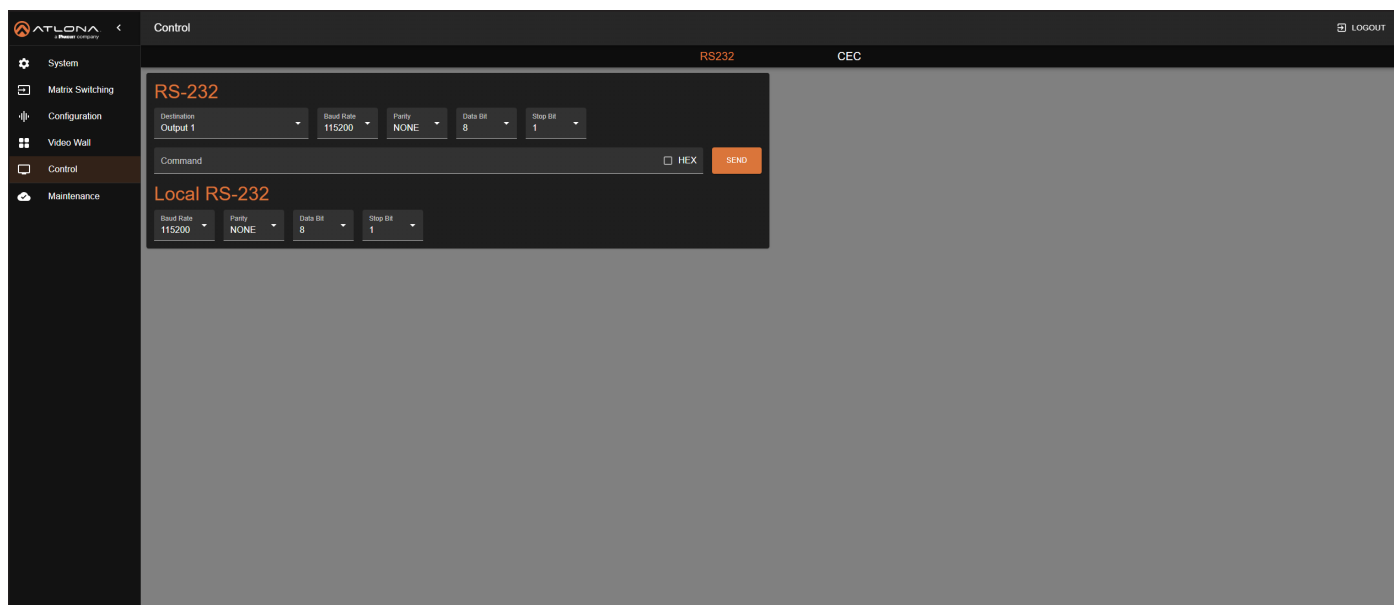
SAVE

Saves the current routing state to the preset.

Configuration and Management Interfaces

Control > RS232

This section provides options to configure the AT-PRO5-MX810 for controlling a display or other downstream device using RS-232. Refer to [Device Control \(page 59\)](#) for more information.



RS-232

Destination

The output associated with the receiver for configuring RS-232 control.

Baud Rate

Click this drop-down list to select the data transmission rate in bit-per-second (bps). Available options are 9600, 19200, 38400, 57600, or 115200.

Parity

Click this drop-down list to select the parity bit value. The parity bit helps detect single-bit errors in data transmission. The parity bit cannot correct errors. However, if an error does occur, the receiver can then request that the data be retransmitted.

Setting	Description
NONE	No parity (error checking) is applied.
ODD	The parity bit is set so that the total number of 1 bits in the data, including the parity bit, is <i>odd</i> . For example, 10110011 contains five 1 bits, which is an odd value. Applying ODD parity, the parity bit is set to 0 and the data becomes 101100110, maintaining an odd number of 1 bits in the data.
EVEN	The parity bit is set so that the total number of 1 bits in the data, including the parity bit, is <i>even</i> . For example, 10110011 contains five 1 bits, which is an odd value. Applying EVEN parity, the parity bit is set to 1 and the data becomes 101100111, maintaining an even value of 1 bits in the data.

Data Bit

Click this drop-down list to select the number of data bits in each packet. Typically, packets are sent in bytes (8 bits). However, some older systems may use 7-bit data. Available options are 7 or 8.

Stop Bit

Click this drop-down list to select the number of stop bits. Stop bits are used to signal the end of a data frame. A value of 1 is standard. Available options are 1 or 2.

Configuration and Management Interfaces

Command

Enter the command in the **Command** field. The command can be in either ASCII or hexadecimal format. If the command is entered in hexadecimal format, click the **HEX** checkbox.



NOTE: This field is intended primarily for testing and troubleshooting RS-232 functionality. It is not designed to serve as the primary control interface.

SEND

Click the **SEND** button to verify that the command works properly.

Local RS-232

This section provides RS-232 configuration settings for enabling third-party control of the AT-PRO5-MX810.

When using a third-party controller to operate the AT-PRO5-MX810 via RS-232, ensure that the RS-232 settings (baud rate, parity, data bit, and stop bit) on the AT-PRO5-MX810 match those of the controlling device.

The AT-PRO5-MX810 must conform to the controller's communication parameters to ensure proper operation.

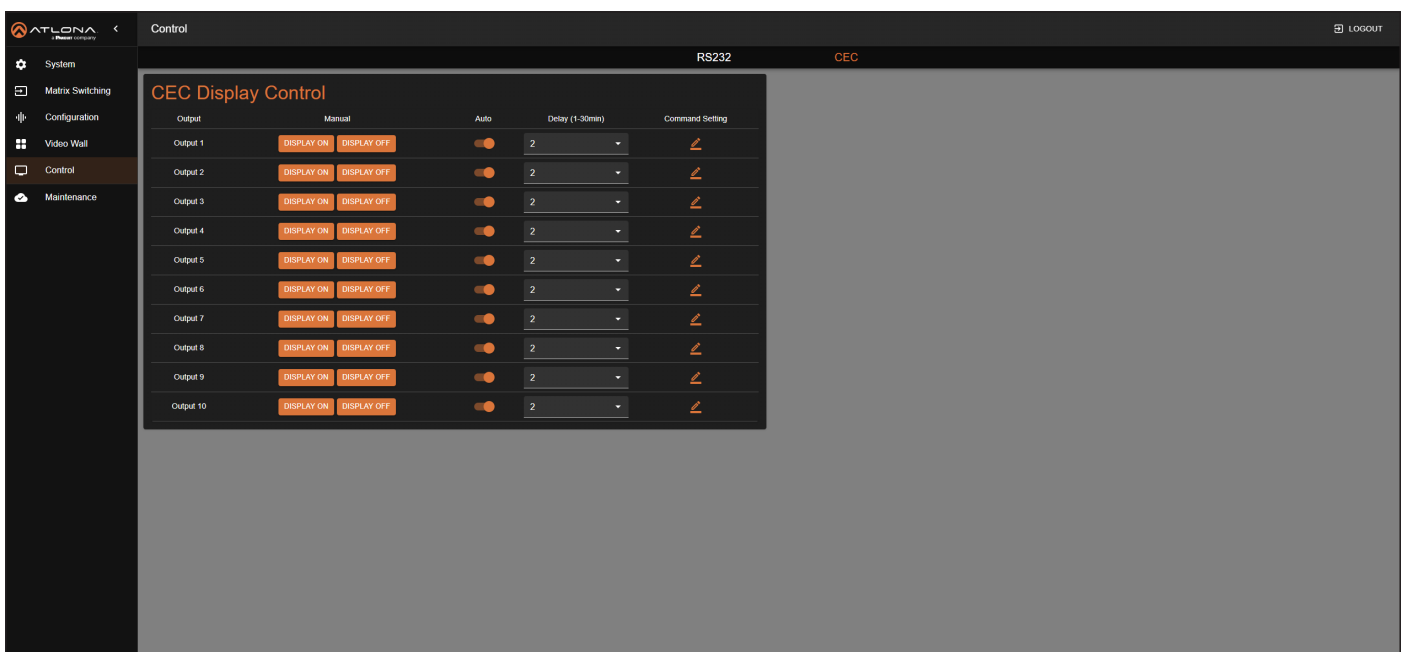
Configuration and Management Interfaces

Control > CEC

The **CEC Display Control** screen offers a simple interface for testing and verifying CEC (Consumer Electronics Control) commands sent from the AT-PRO5-MX810 to connected HDMI displays. It allows manual control of display power functions and supports basic automation tied to routing activity. Refer to [Device Control \(page 59\)](#) for more information.



NOTE: This screen is intended primarily for testing and troubleshooting CEC functionality. It is not designed to serve as the primary control interface for automated display management in a live environment. For full CEC automation, use a dedicated control system.



CEC Display Control

Output

Displays the name of the output.

Manual

Manually turn displays on (**DISPLAY ON**) or off (**DISPLAY OFF**) for each output (1–10) using predefined CEC commands.

Auto

Click this toggle to enable or disable automatic power control when an input is routed to or disconnected from a given output. When enabled, the toggle will be orange.

Delay (1–30 min)

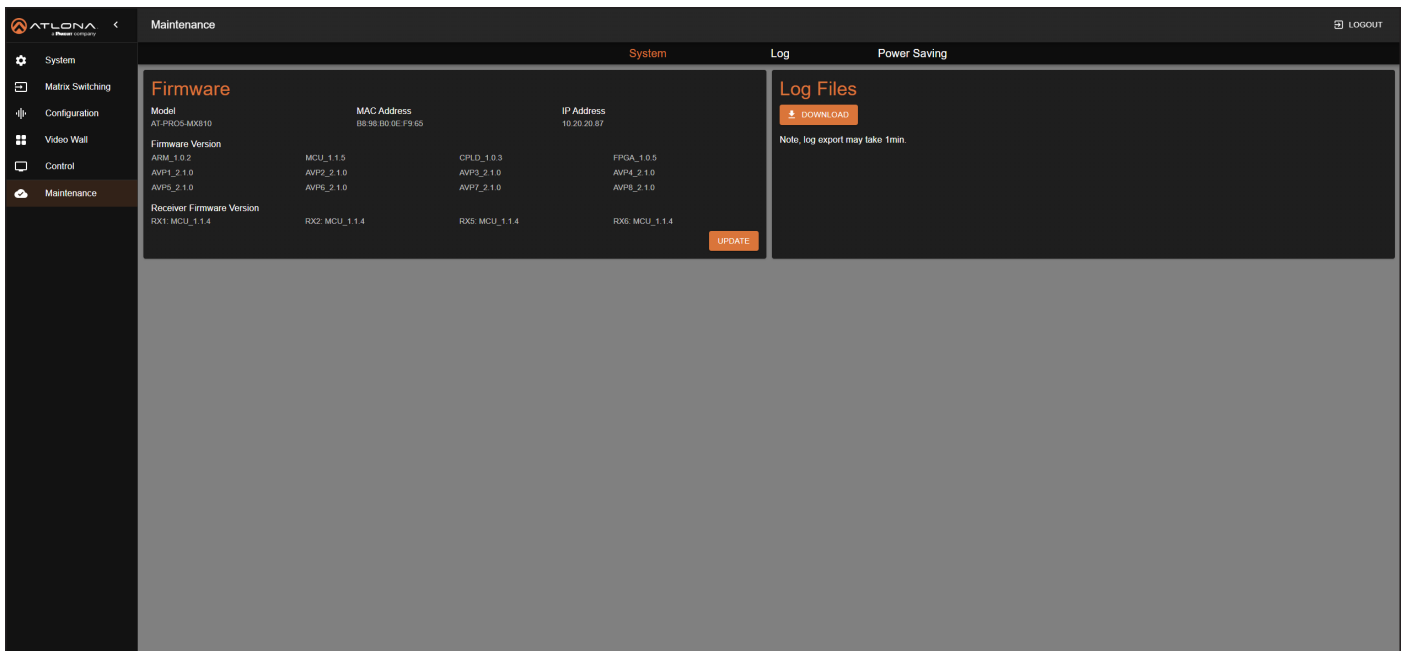
Click these drop-down lists to select the desired delay (in minutes) before automatic CEC commands are sent, to prevent unintended triggers during rapid source changes.

Command Setting

Customize CEC commands for each output to support displays that use non-standard CEC command formats or protocols.

Configuration and Management Interfaces

Maintenance > System



Firmware

Model

The model of this product.

Firmware Version

Displays the component-level and internal processor firmware versions currently running on the AT-PRO5-MX810. Always refer to the AT-PRO5-MX810 product page on the Atlona website for the latest firmware updates.

Receiver Firmware Version

Displays the component-level and internal processor firmware versions currently running on connected receivers (AT-PRO5-101-RX or AT-PRO5-101-SC-RX).

MAC Address

The Media Address Control address assigned to a AT-PRO5-MX810 interface card (NIC) by the manufacturer.

IP Address

The IP address of the AT-PRO5-MX810.

UPDATE

Click this button to update the firmware on the AT-PRO5-MX810. Refer to [Updating the Firmware \(page 62\)](#) for more information.

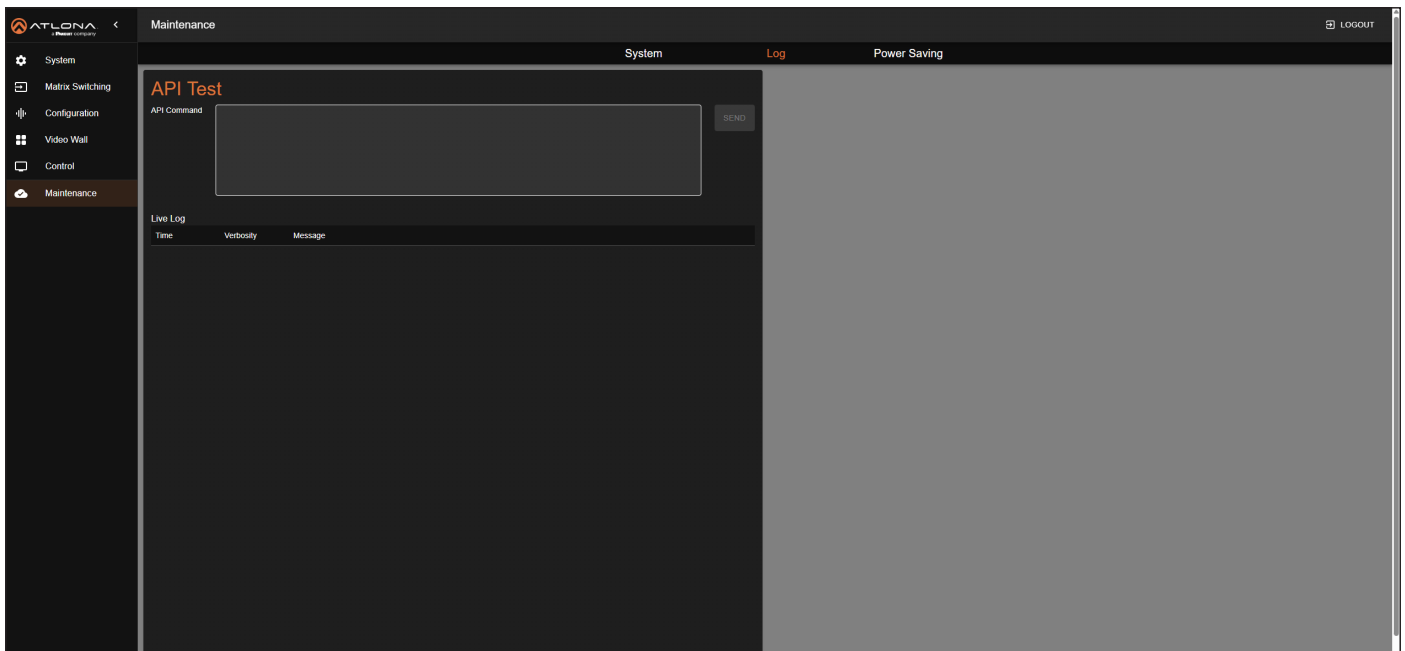
Log Files

DOWNLOAD

Click this button to download log files to the local PC. Log files are used for troubleshooting purposes and may be requested by Atlona Technical Support Engineers.

Configuration and Management Interfaces

Maintenance > Log



API Test

API Command

Enter the API command in this box to test JSON API commands. Responses to JSON API commands will be displayed in the **Live Log** portion of this screen.

Appendix

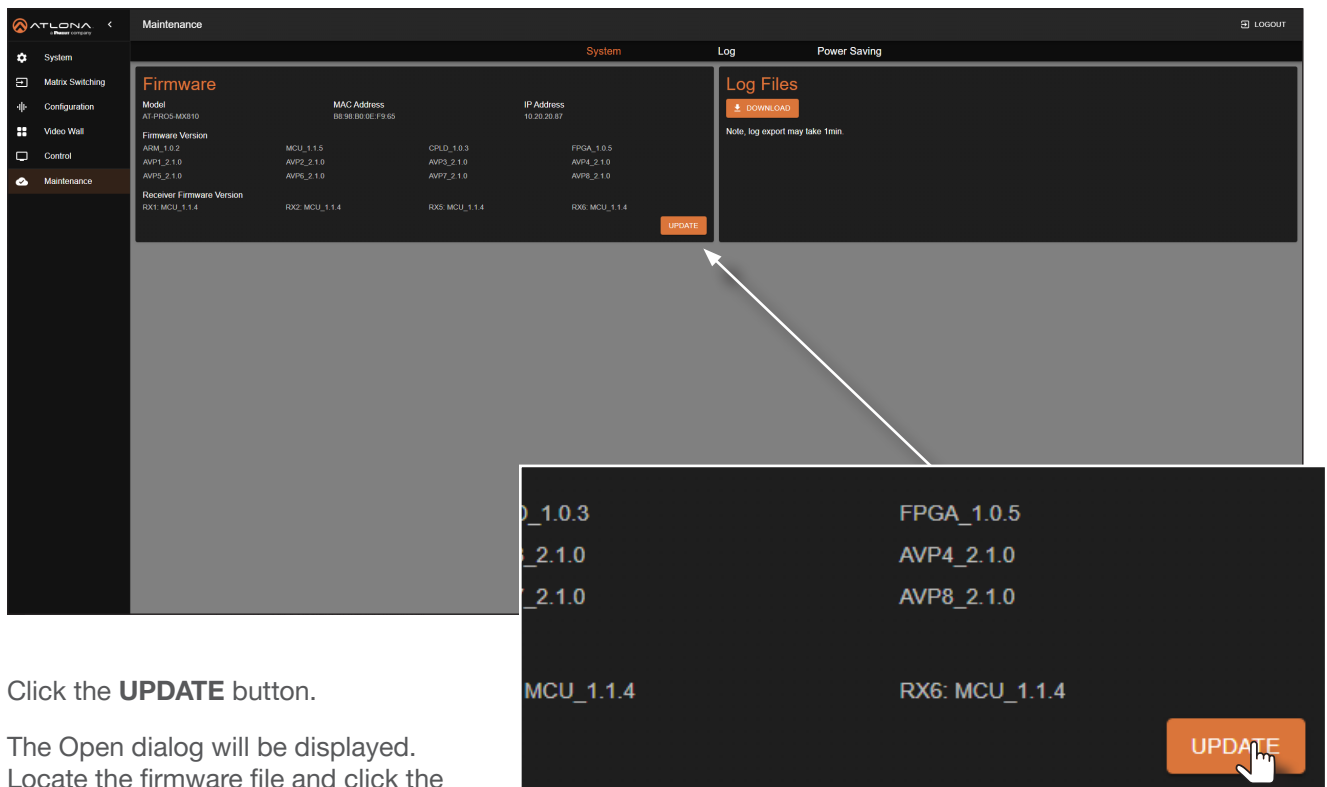
Updating the Firmware

Firmware updates are performed using the built-in web server.

Updating using the Web Server

Requirements:

- AT-PRO5-MX810
 - Firmware file
 - Computer on the same network as the AT-PRO5-MX810
1. Download the firmware file from the **Firmware** tab on the [AT-PRO5-MX810](#) product page. Then, extract the contents of the .zip file to a folder on the computer.
 2. Power on the unit and connect an Ethernet cable from the computer to the same network where the AT-PRO5-MX810 connected.
 3. Log in to the web server.
 4. Click **Maintenance** in the side menu bar.
 5. Click **System** in the top menu bar.



6. Click the **UPDATE** button.
7. The Open dialog will be displayed. Locate the firmware file and click the Open button.

Appendix

- After the firmware is uploaded to the AT-PRO5-MX810, the following screen will be displayed. Follow the instructions on the screen.



IMPORTANT: The firmware update process may take several minutes. Do not disconnect power from the AT-PRO5-MX810 during the update process.



Please do not power off the device during upgrade

0%

- Once the update process is complete, the AT-PRO5-MX810 will automatically reboot and the **Login** screen will be displayed.

Appendix

Specifications

Video		
Signal	Input – HDMI Output – SDVoE (RJ45, SFP+)	
Copy Protection	HDCP 1.4 / 2.2 / 2.3	
Pixel Clock	600 MHz	
UHD/HD/SD	4096x2160 @ 60/50/30/25/24 Hz 3840x2160 @ 60/50/30/25/24 Hz 1920x1080p @ 60/59.9/50/30/29.97/25/ 24/23.98 Hz 1920x1080i @ 30/29.97/25 Hz 1280x720p @ 60/59.94/50 Hz	720x576p @ 50 Hz 720x576i @ 25 Hz 640x480p @ 60/59.96 Hz 640x480i @ 30 Hz
VESA	2560x1600 2048x1536 1920x1200 1680x1050 1600x1200 1440x900 1400x1050 1366x768	1360x768 1280x1024 1280x800 1152x864 1024x768 800x600 640x480
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® @ up to 60 Hz	

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 Depth	Up to 24 bits		
Sample Rate	32 kHz, 44.1 kHz, 48 kHz, 88.2 kHz, 96 kHz, 176.4 kHz, 192 kHz		
Analog Audio			
Format	Stereo 2-Channel		
Type	Balanced Audio		

Ethernet	
Port	1 x RJ45
Standards and Protocols	HTTP, HTTPS, Telnet, SSH, mDNS
Speeds	10/100/1000 Mbps
Addressing	DHCP, Static, APIPA

RS-232	
Port	1 x 3-pin captive screw, TX, RX, GND
Use	Device control and configuration
Baud Rates	2400, 4800, 9600, 19200, 38400, 57600, 115200
Data Flow	Bidirectional

Appendix

CEC	
Ports	2 x HDMI OUT, Type A, 19-pin female
Triggering	IP, RS-232, and built-in web server

Resolution / Distance	4K/UHD - Feet / Meters		1080p - Feet / Meters	
HDMI IN/OUT	15	5	30	10
CAT6a	330	100	330	100

Buttons and Indicators	
Buttons: RESET	1 x momentary, recessed
Indicators: PWR STATUS	1 x LED, blue 1 x LED, blue/red/off

Connectors	
INPUT	8 x Type A, 19-pin female
OUTPUT	2 x Type A, 19-pin female
EXT 1 - 8 (SDVoE)	8 x RJ45, female 8 x SFP+ cage, female
RS-232	1 x 3-pin captive screw
LAN	1 x RJ45, 1000Base-T
IR IN	8 x 3.5 mm jack, female
IR OUT	8 x 3.5 mm jack, female
AUDIO OUT	8 x 5-pin captive screw, balanced / unbalanced, 2-channel
AC100-240V 50/60 Hz	IEC

Environmental	Fahrenheit	Celsius
Operating Temperature	+32 to +122	0 to +50
Storage Temperature	-4 to +140	-20 to +60
Operating Humidity (RH)	20% to 90%, non-condensing	
Maximum Operating Altitude	2000 meters	

Power	
Consumption (maximum)	156.5 W
Consumption (idle)	43.8 W
Consumption (operating)	59 W
BTU/h (maximum)	533.67
BTU/h (idle)	149.36
BTU/h (operating)	201.19

Dimensions (H x W x D)	Inches	Millimeters
Unit (2U)	3.46 x 17.32 x 14.18	88.00 x 440.00 x 360.20

Weight	Pounds	Kilograms
Device	16.09	7.3

Appendix

Certification	
Device	CE, FCC, RoHS
Power Supply	CE, FCC, RoHS, CCC, CB

Compliance	
NDAA-889	Yes
TAA	No

Warranty	
3 years	View the full warranty information here: https://atlona.com/warranty

