



# 4K/UHD Five-Input Universal Matrix Switcher with Wireless Presentation Link



AT-UHD-SW-510W

Atlona Manuals  
Switchers

## Version Information

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Version	Release Date	Notes
1	12/17	Initial release
2	2/18	Manual updated to reflect latest release of firmware 1.0.1
3	4/18	Manual updated to reflect firmware 1.0.3
4	5/18	Manual updated to reflect firmware 1.1.0
5	7/18	Manual updated to reflect firmware 1.1.1

## Welcome to Atlona!

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Thank you for purchasing this Atlona product. We hope you enjoy it and will take a extra few moments to register your new purchase.

Registration only takes a few minutes and protects this product against theft or loss. In addition, you will receive notifications of product updates and firmware. Atlona product registration is voluntary and failure to register will not affect the product warranty.

To register your product, go to <http://www.atlona.com/registration>

## Sales, Marketing, and Customer Support

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## Operating Notes

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- Android devices require the Google™ Home app for casting.
- Miracast P2P reliability is dependent on the capabilities of laptop wireless cards.
- This product does not support URL casting (VP8 / VP9 decoding) from apps such as YouTube®, Netflix®, Hulu®, or Amazon Prime®. However, videos can be played directly from the web browser.
- This product does not support wireless casting of HDCP content.
- This product supports Bluetooth® discovery using an optional Bluetooth adapter (Bluetooth adapter not included). Atlona recommends the use of Plugable or Kinivo™ Bluetooth 4.0 adapters.



**IMPORTANT:** Visit <http://www.atlona.com/product/AT-UHD-SW-510W> for the latest firmware updates and User Manual.

# Atlona, Inc. (“Atlona”) Limited Product Warranty

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## Coverage

Atlona warrants its products will substantially perform to their published specifications and will be free from defects in materials and workmanship under normal use, conditions and service.

Under its Limited Product Warranty, Atlona, at its sole discretion, will either:

- repair or facilitate the repair of defective products within a reasonable period of time, restore products to their proper operating condition and return defective products free of any charge for necessary parts, labor and shipping.

OR

- replace and return, free of charge, any defective products with direct replacement or with similar products deemed by Atlona to perform substantially the same function as the original products.

OR

- refund the pro-rated value based on the remaining term of the warranty period, not to exceed MSRP, in cases where products are beyond repair and/or no direct or substantially similar replacement products exist.

Repair, replacement or refund of Atlona products is the purchaser's exclusive remedy and Atlona liability does not extend to any other damages, incidental, consequential or otherwise.

This Limited Product Warranty extends to the original end-user purchaser of Atlona products and is non-transferrable to any subsequent purchaser(s) or owner(s) of these products.

## Coverage Periods

Atlona Limited Product Warranty Period begins on the date of purchase by the end-purchaser. The date contained on the end-purchaser's sales or delivery receipt is the proof purchase date.

### Limited Product Warranty Terms – New Products

- 10 years from proof of purchase date for hardware/electronics products purchased on or after June 1, 2013.
- 3 years from proof of purchase date for hardware/electronics products purchased before June 1, 2013.
- Lifetime Limited Product Warranty for all cable products.
- NOTE: Data cable (USB-C) and Wifi antenna covered by 1 year warranty.

### Limited Product Warranty Terms – Refurbished (B-Stock) Products

- 3 years from proof of purchase date for all Refurbished (B-Stock) hardware and electronic products purchased on or after June 1, 2013.

## Remedy

Atlona recommends that end-purchasers contact their authorized Atlona dealer or reseller from whom they purchased their products. Atlona can also be contacted directly. Visit [www.atlona.com](http://www.atlona.com) for Atlona's contact information and hours of operation. Atlona requires that a dated sales or delivery receipt from an authorized dealer, reseller or end-purchaser is provided before Atlona extends its warranty services. Additionally, a return merchandise authorization (RMA) and/or case number, is required to be obtained from Atlona in advance of returns.

Atlona requires that products returned are properly packed, preferably in the original carton, for shipping. Cartons not bearing a return authorization or case number will be refused. Atlona, at its sole discretion, reserves the right to reject any products received without advanced authorization. Authorizations can be requested by calling 1-877-536-3976 (US toll free) or 1-408- 962-0515 (US/international) or via Atlona's website at [www.atlona.com](http://www.atlona.com).

## Exclusions

This Limited Product Warranty excludes:

- Damage, deterioration or malfunction caused by any alteration, modification, improper use, neglect, improper packaging or shipping (such claims must be presented to the carrier), lightning, power surges, or other acts of nature.



## Atlona, Inc. (“Atlona”) Limited Product Warranty

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- Damage, deterioration or malfunction resulting from the installation or removal of this product from any installation, any unauthorized tampering with this product, any repairs attempted by anyone unauthorized by Atlona to make such repairs, or any other cause which does not relate directly to a defect in materials and/or workmanship of this product.
- Equipment enclosures, cables, power supplies, batteries, LCD displays, and any accessories used in conjunction with the product(s).
- Products purchased from unauthorized distributors, dealers, resellers, auction websites and similar unauthorized channels of distribution.

### Disclaimers

This Limited Product Warranty does not imply that the electronic components contained within Atlona’s products will not become obsolete nor does it imply Atlona products or their electronic components will remain compatible with any other current product, technology or any future products or technologies in which Atlona’s products may be used in conjunction with. Atlona, at its sole discretion, reserves the right not to extend its warranty offering in instances arising outside its normal course of business including, but not limited to, damage inflicted to its products from acts of god.

### Limitation on Liability

The maximum liability of Atlona under this limited product warranty shall not exceed the original Atlona MSRP for its products. To the maximum extent permitted by law, Atlona is not responsible for the direct, special, incidental or consequential damages resulting from any breach of warranty or condition, or under any other legal theory. Some countries, districts or states do not allow the exclusion or limitation of relief, special, incidental, consequential or indirect damages, or the limitation of liability to specified amounts, so the above limitations or exclusions may not apply to you.

### Exclusive Remedy

To the maximum extent permitted by law, this limited product warranty and the remedies set forth above are exclusive and in lieu of all other warranties, remedies and conditions, whether oral or written, express or implied. To the maximum extent permitted by law, Atlona specifically disclaims all implied warranties, including, without limitation, warranties of merchantability and fitness for a particular purpose. If Atlona cannot lawfully disclaim or exclude implied warranties under applicable law, then all implied warranties covering its products including warranties of merchantability and fitness for a particular purpose, shall provide to its products under applicable law. If any product to which this limited warranty applies is a “Consumer Product” under the Magnuson-Moss Warranty Act (15 U.S.C.A. §2301, ET SEQ.) or other applicable law, the foregoing disclaimer of implied warranties shall not apply, and all implied warranties on its products, including warranties of merchantability and fitness for the particular purpose, shall apply as provided under applicable law.

### Other Conditions

Atlona’s Limited Product Warranty offering gives legal rights, and other rights may apply and vary from country to country or state to state. This limited warranty is void if (i) the label bearing the serial number of products have been removed or defaced, (ii) products are not purchased from an authorized Atlona dealer or reseller. A comprehensive list of Atlona’s authorized distributors, dealers and resellers can be found at [www.atlona.com](http://www.atlona.com).

## Important Safety Information



CAUTION: TO 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.



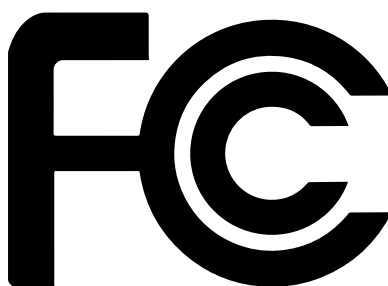
The information bubble is intended to alert the user to helpful or optional operational instructions in the literature accompanying the product.

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 Statement



FCC Compliance and Advisory Statement: This hardware device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions: 1) this device may not cause harmful interference, and 2) this device must accept any interference received including interference that may cause undesired operation. This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a commercial installation.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed or used in accordance with the instructions, may cause harmful interference to radio communications. However there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures: 1) reorient or relocate the receiving antenna; 2) increase the separation between the equipment and the receiver; 3) connect the equipment to an outlet on a circuit different from that to which the receiver is connected; 4) consult the dealer or an experienced radio/TV technician for help. Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. Where shielded interface cables have been provided with the product or specified additional components or accessories elsewhere defined to be used with the installation of the product, they must be used in order to ensure compliance with FCC regulations.

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## Introduction

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The Atlona **AT-UHD-SW-510W** is a 5x2, multi-format matrix switcher with wireless presentation capability. It provides universal BYOD (bring your own device) compatibility with HDMI, DisplayPort, and USB-C inputs, plus wireless connectivity for mobile devices. The SW-510W is HDCP 2.2 compliant, and features matrixed or mirrored HDMI and HDBaseT outputs. The HDBaseT output is ideal for use with the Atlona AT-UHD-EX-100CE-RX-PSE HDBaseT receiver, or the AT-HDVS-SC-RX scaling HDBaseT receiver. It also includes automatic input switching and automatic display control capability, both applicable to wired and wireless source connections. This unique multi-format matrix switcher and wireless gateway provides a universal connectivity solution for presentation devices in a wide range of professional AV applications.

The USB-C port on the SW-510W is ideal for newer Mac, Chromebook, and Windows PCs. All inputs and the local HDMI output are compatible with video signals up to 4K/UHD @ 60 Hz with 4:4:4 chroma sampling, as well as data rates up to 18 Gbps. For integration convenience and flexibility, simultaneous 18 Gbps HDMI and 10 Gbps HDBaseT outputs make the SW-510W ideal for various presentation scenarios such as primary and confidence displays in a corporate auditorium or lecture hall. The HDBaseT output extends video, audio, control, and Ethernet up to 100 meters. (For AV signals exceeding 10 Gbps, 4K/UHD video will be subsampled to 4:2:0, or HDR metadata removed for HDBaseT transmission.)

## Features

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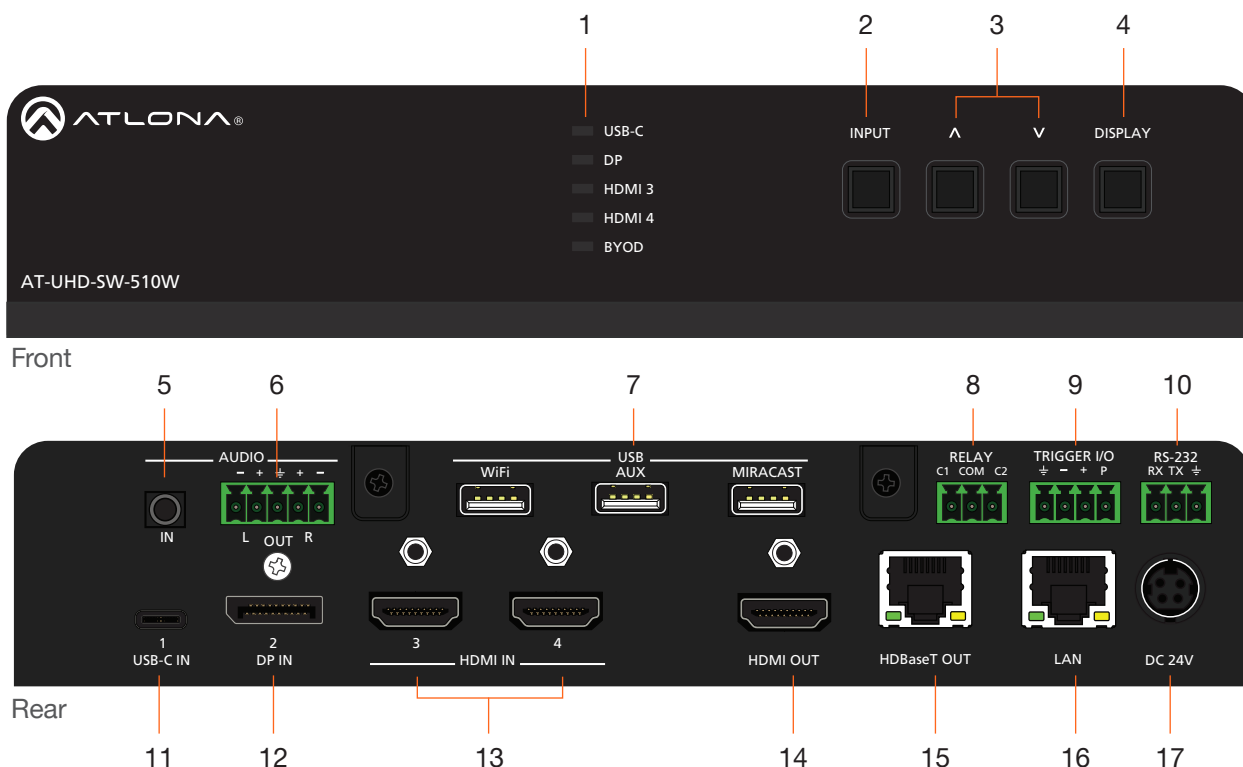
- Two HDMI®, one DisplayPort, and one USB-C input, plus an input for wireless AV.
- Matrixed or mirrored HDBaseT™ and HDMI outputs.
- Wireless AV gateway for iOS®, Android™, Mac®, Chromebook™, and Windows® devices.
- 4K/UHD capability @ 60 Hz with 4:2:0 chroma subsampling, plus support for 4K/60 4:4:4 and HDR formats on local ports (HDMI, USB-C, and DisplayPort).
- HDCP 2.2 compliant.
- Automatic input selection and automatic display control.
- USB-C port supports device charging for laptops, tablets, and smartphones.

## Package Contents

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1 x AT-UHD-SW-510W  
1 x Captive screw connector, 5-pin  
1 x Captive screw connector, 4-pin  
2 x Captive screw connector, 3-pin  
2 x Wi-Fi antenna modules  
1 x USB-C cable, 2 meters  
1 x 24V DC power supply  
2 x Mounting plates  
4 x Mounting screws  
1 x Installation Guide

## Panel Description

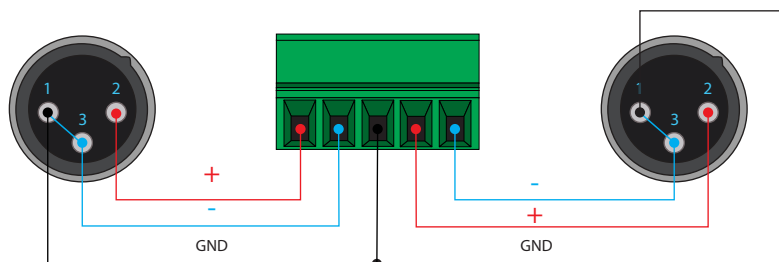
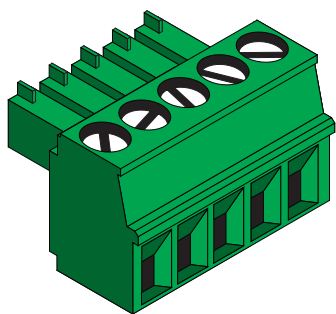


- 1 Input Indicators**  
Displays the currently selected input.
- 2 INPUT**  
Press this button to cycle through each input.
- 3 Cursor Buttons**  
Adjust the volume on the display.
- 4 DISPLAY**  
Press this button to toggle the power state of the desired display.
- 5 AUDIO IN**  
Connect a 3.5 mm mini-stereo cable from an analog audio source to this connector.
- 6 AUDIO OUT**  
Use the included captive screw connector to connect a balanced audio device.
- 7 USB**  
Connect the included Wi-Fi modules to the **WIFI** and **MIRACAST** ports. Refer to [Connection Instructions \(page 13\)](#) for more information.
- 8 RELAY**  
Connect one of the included 3-pin captive screw connectors to this port to control screens, drapes, lights, or other devices.
- 9 TRIGGER I/O**  
Connect voltage-controlled device to this port. A 4-pin captive screw connector is required.
- 10 RS-232**  
Use the included captive screw connector to connect the AT-UHD-SW-510W to an automation system or computer running a terminal emulator.
- 11 USB-C**  
Connect a USB-C cable from this port to a USB-C source.
- 12 DP IN**  
Connect a DisplayPort device to this port.
- 13 HDMI IN**  
Connect an HDMI cable from each of these ports to a UHD/HD source.
- 14 HDMI OUT**  
Connect an HDMI cable from this port to an HD/UHD display.
- 15 HDBaseT OUT**  
Connect to a locally powered HDBaseT receiver such as the AT-UHD-EX-100CE-RX-PSE.
- 16 LAN**  
Connect an Ethernet cable from this port to the network.
- 17 DC 24V**  
Connect the included 24 V DC power supply to this power receptacle.

## Installation

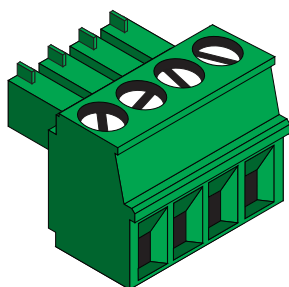
### Audio

The **AUDIO OUT** connector on the AT-UHD-SW-510W provides a separate output for balanced audio using XLR connectors. Use the included 5-pin captive-screw terminal block. Balanced audio connections use two signal wires and a ground to minimize interference in audio signals. Unbalanced output audio is not supported.

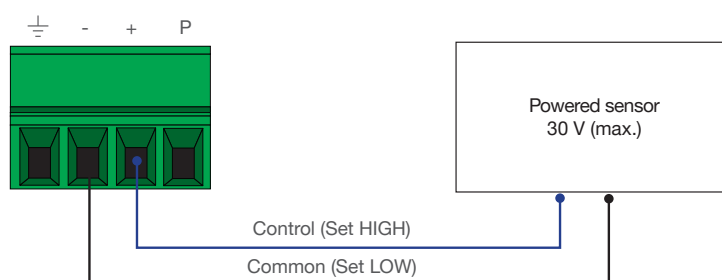


### Trigger

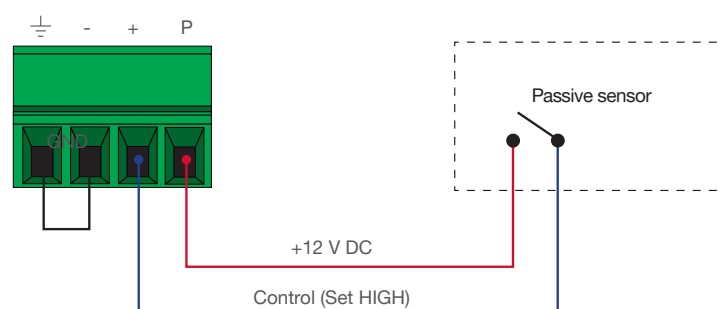
The **TRIGGER I/O** port allows voltage-controlled devices, such as an occupancy sensor, to be connected to the AT-UHD-SW-510W. Use the included 4-pin captive screw connector to connect the device. Voltage range is 3 to 30 V DC.



Passive sensor



Powered sensor



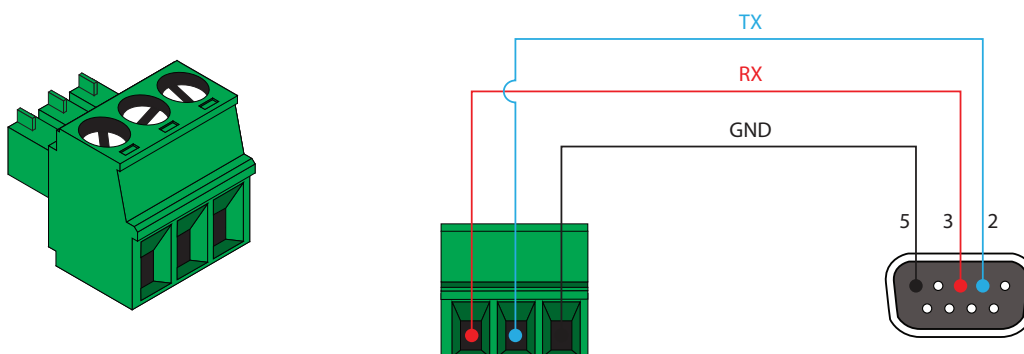
## RS-232

The RS-232 port allows an automation control system or terminal (e.g. Hercules, PuTTY) to control the AT-UHD-SW-510W. This step is optional. RS-232 cables can be purchased at most electronics / computer stores and are available in two styles: DB-9-to-DB-9 or DB-9-to-USB. Once a cable is obtained, it can be easily modified to connect to the captive screw port on the AT-UHD-SW-510W. Contact an Atlona Technical Support Engineer if wiring assistance is required.



**NOTE:** If the AT-UHD-SW-510W will be controlled from a computer running a terminal program, a DB-9-to-USB cable should be purchased/obtained.

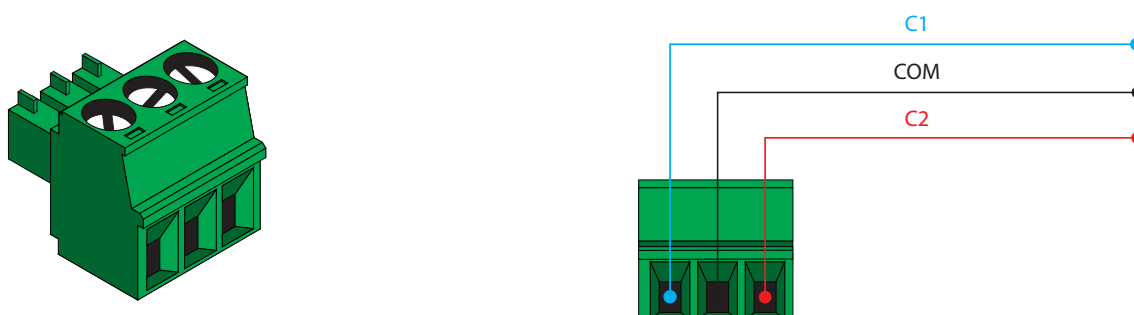
1. Remove one of the ends of the cable using wire cutters. If the cable is a DB-9-to-USB cable and will be used to connect the AT-UHD-SW-510W to a computer, then remove the DB-9 connector from the cable.
2. Use wire strippers to remove a portion of the cable jacket.
3. Remove at least 3/16" (5 mm) from the insulation of the RX, TX, and GND wires.
4. Insert the TX, RX, and GND wires into correct terminal on the included captive screw block.
5. Use a small regular screwdriver to secure the wires in place. Do no overtighten or use high-torque devices on the captive screw connector. Doing so may damage the captive screw connector.



## Relay

The AT-UHD-SW-510W provides a **RELAY** port, which allows the control of screens, curtains, and other devices. Use a 48 V DC relay with no more than 1 A current draw.

When the AT-UHD-SW-510W is powered-on or rebooted, **C1** and **C2** are set to the Normally Open (NO) state.



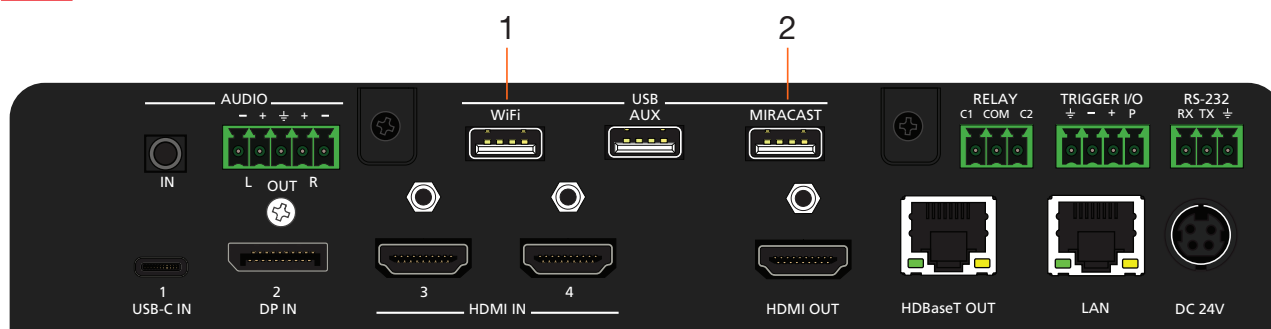


## Connection Instructions

1. Connect a USB-C cable from a source to the **USB-C (1)** port.
2. Connect a DisplayPort cable from a source to the **DP IN (2)** port.
3. Connect up to two UHD/HD sources, using HDMI cables, to the **HDMI IN (3)** and **HDMI IN (4)** ports.
4. Connect an HDMI cable from the **HDMI OUT** port to a UHD/HD display.
5. Connect up to two USB wireless antenna modules to the **USB** ports. Two USB wireless antennas are included. The **WiFi** port supports Google Cast™ and Apple AirPlay®. The **MIRACAST** port only supports Miracast™. The **AUX** port is reserved for obtaining the IP address of the unit. Refer to [Getting the IP Address \(page 15\)](#) for more information.

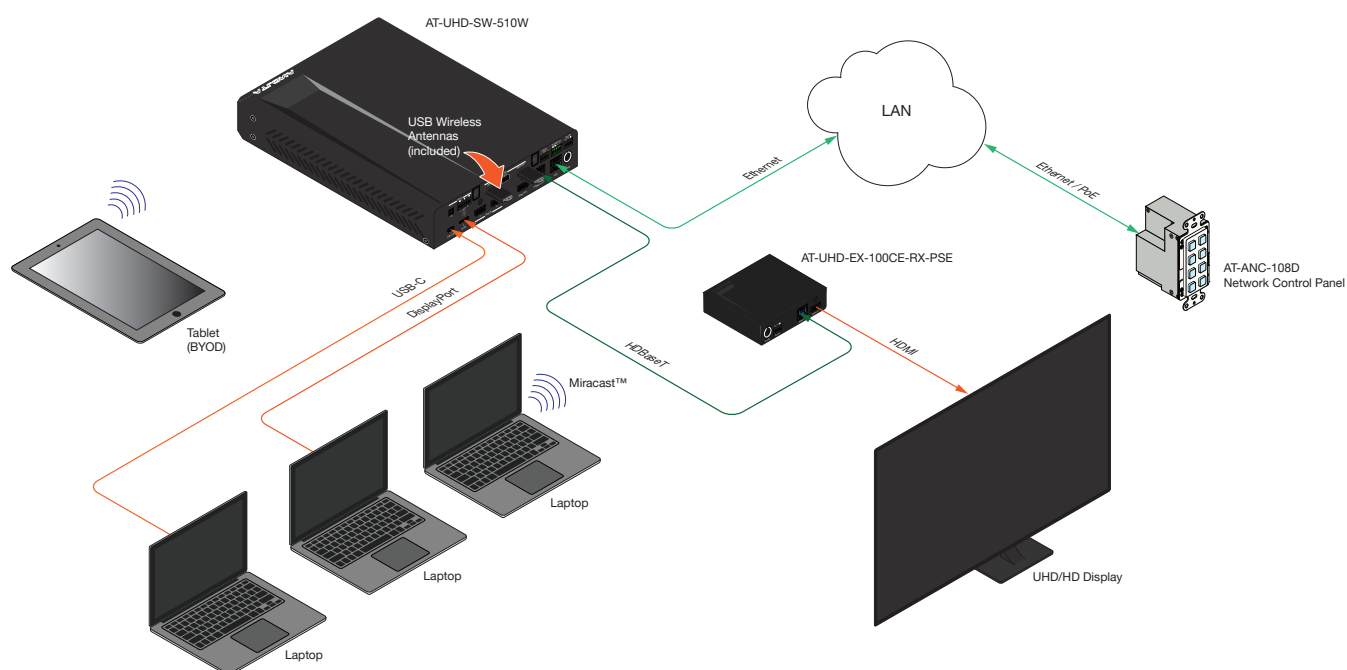


**IMPORTANT:** Only use Atlona Wi-Fi USB modules. Other Wi-Fi modules may not be supported by this product.



6. Connect the relay leads from the control motors of the projection screen, blinds, or curtains, to the relay outputs to the **RELAY** port, using the included 3-pin captive screw connector. Use a 48 V DC relay with no more than 1 A current draw.
7. Connect a trigger device, such as an occupancy sensor switch, to the **TRIGGER I/O** port. A 4-pin captive screw connector is required. Voltages from 3 to 30 V are supported.
8. Connect a 3.5 mm analog audio cable from an analog source to the **AUDIO IN** port. This audio source can be used to embed analog audio on any of the input sources.
9. Connect an Ethernet cable from the **LAN** port to the Local Area Network (LAN).
10. Connect an Ethernet cable from the **HDBaseT** port to an HDBaseT receiver unit, such as the AT-UHD-EX-100CE-RX-PSE.
11. Connect the included green 5-pin captive screw connector to the **AUDIO OUT** connector.
12. Connect the included power supply to the **DC 24V** connector and connect the power cord to an available electrical outlet.
13. Follow the on-screen instructions to complete the set-up procedure.

## Connection Diagram



## IP Configuration

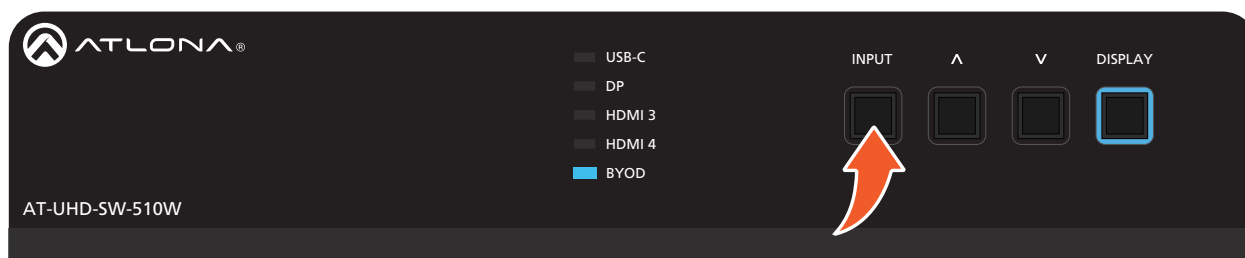
The AT-UHD-SW-510W is shipped with DHCP enabled. Once connected to a network, the DHCP server (if available), will automatically assign an IP address to the unit. Use an IP scanner, along with the MAC address on the bottom of the unit, to identify both the unit and its IP address on the network.

If the AT-UHD-SW-510W is unable to detect a DHCP server within 15 seconds, then the unit will use a self-assigned IP address within the range of 169.254.xxx.xxx. If this occurs, refer to [Auto IP Mode \(page 17\)](#).

If a static IP address is desired, the unit can be switched to static IP mode. Use one of the following procedures to switch between DHCP and static IP mode. The default static IP address of the AT-UHD-SW-510W is 192.168.1.254.

### Switching the IP Mode Using the Front Panel

1. Make sure the AT-UHD-SW-510W is powered.
2. Press and hold the **INPUT** button for approximately 15 seconds.



3. Release the **INPUT** button. All the front-panel LED indicators will begin to flash, then the unit will reboot. The number of flashes will indicate the currently selected IP mode:

PW LED flashes	Description
Two	DHCP mode
Four	Factory Static IP mode (IP address set to 192.168.1.254)

### Getting the IP Address

1. Make sure the unit is powered.
2. Insert a USB drive into the **AUX** port.
3. Wait approximately 10 seconds.
4. Remove the USB drive from the **AUX** port insert the drive into an available USB port on a computer.
5. Two files will be present on the USB drive. One file is formatted for Windows and the other is formatted for Linux.

Windows: AtlonaReport-Win-GWB-20170821200241.txt  
Linux: AtlonaReport-Unix-GWB-20170821200241.txt

- Double-click the desired file to open it. Information, similar to the following, will be displayed:

Ethernet #1

IP : 192.168.41.68

MAC : B8:98:B0:05:7E:73

Ethernet #2

IP : 169.254.7.58

MAC : B8:98:B0:05:7E:72

- The IP address of the AT-UHD-SW-510W is listed under Ethernet #1.

## Setting the IP Address using the Web GUI

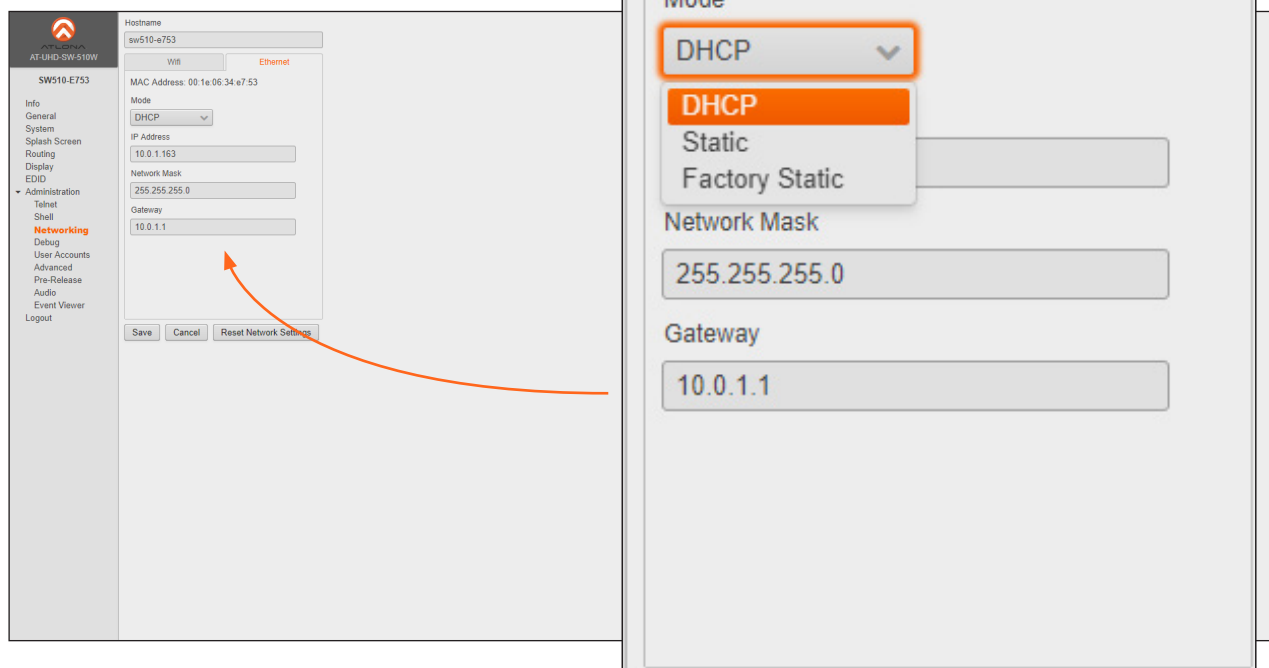
Use the [System page \(page 48\)](#) in the web GUI, to set the AT-UHD-SW-510W to either DHCP or static IP mode. In order to access the web GUI, the IP address of the AT-UHD-SW-510W must be known.

- Open the desired web browser and enter the IP address of the AT-UHD-SW-510W.
- Log in, using the required credentials. The factory-default username and password are listed below:

Username: admin

Password: Atlona

- Click **Administration > Networking > Ethernet**.



- Click the **Mode** drop-down list and select **DHCP**, **Static**, or **Factory Static**. Refer to the [Networking page \(page 61\)](#) for more information.

When set to **Static**, the **IP**, **Network Mask**, and **Gateway** fields can be modified.

- Click the **Save** button to save the changes.

### Auto IP Mode

If the AT-UHD-SW-510W is unable to detect a DHCP server within 15 seconds, then the unit will use a self-assigned IP address within the range of 169.254.xxx.xxx. If this occurs, connect the AT-UHD-SW-510W to a computer running Microsoft Windows® and follow the procedure below.

1. Click **Start > Settings > Control Panel > Network and Sharing Center**.
2. Click **Change adapter settings**.
3. Right-click on the adapter that is used to establish a wired connection to the network, and select **Properties** from the context menu.
4. Under the **Ethernet Properties** dialog box, select **Internet Protocol Version 4** and then click the **Properties** button.
5. 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 PC does not require Internet access or if a statically-assigned IP address is being used, then an IP address of 169.254.xxx.xxx can be entered.
7. Set the subnet mask to 255.255.0.0.
8. Click the **OK** button then close all **Control Panel** windows.

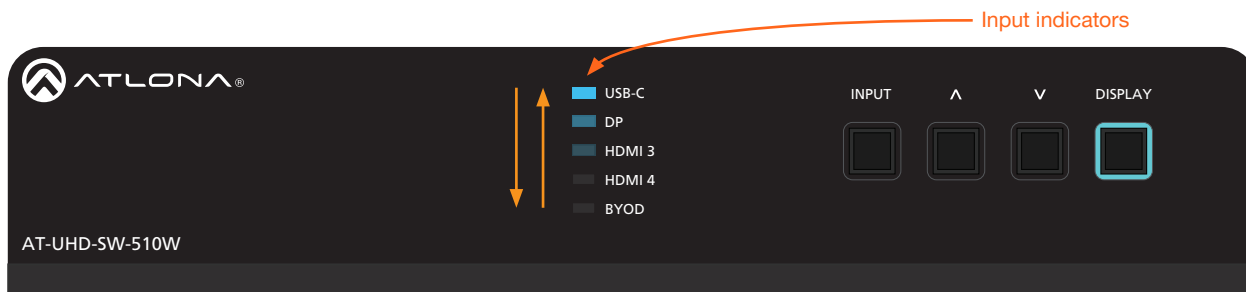
### Resetting to Factory-Default Settings

If necessary, the AT-UHD-SW-510W can be reset to factory-defaults from the front panel. Press and hold the **DISPLAY** button for 15 seconds to reset the AT-UHD-SW-510W to factory-default settings. Note that the AT-UHD-SW-510W will be placed in DHCP mode, as part of the reset procedure. The AT-UHD-SW-510W can also be reset through the web GUI. Refer to [System page \(page 48\)](#) for more information.

## Basic Operation

### Boot Sequence

1. After the power supply has been connected to the AT-UHD-SW-510W, the input indicators on the front panel will begin to flash, in an up-and-down pattern, as shown by the arrows.



2. After about 45 seconds, the standby screen will be displayed.
3. Once the boot sequence is complete, the splash screen will be displayed and the **BYOD** input indicator will be illuminated.



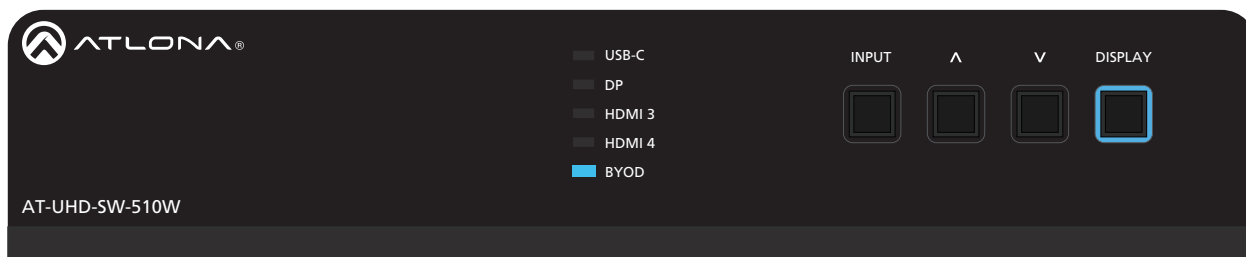
Standby Screen



Splash Screen

The splash screen will show the OSD (On-Screen Display). The splash screen will display instructions on connecting devices wirelessly or by connecting directly to the AT-UHD-SW-510W, using cables. The SSID or the AT-UHD-SW-510W will be displayed at the bottom of the screen.

4. The unit is now ready for use. The entire boot process takes approximately two minutes to complete.



Ready state

## The Splash Screen

The illustration below, identifies each portion of the Splash Screen. The vertical position of the Panel can be adjusted using the **Y Offset** feature. Displaying **Metadata** can be enabled or disabled. The background image for both the **Splash Screen** and the **Standby Screen** can also be changed. Refer to the [Splash Screen page \(page 50\)](#) for information.



- Panel**  
 Displays information on how to connect to the AT-UHD-SW-510W and the name of the unit (subtitle). Each text field is identified below, and can be changed in the [Splash Screen page \(page 50\)](#) of the Web GUI.



- **OSD**

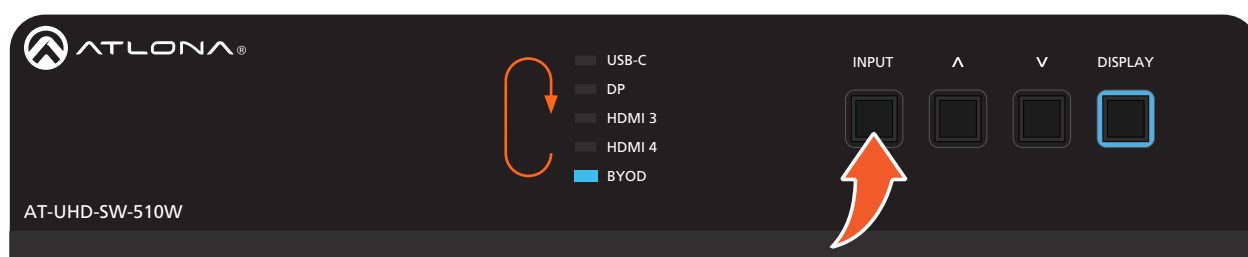
This text displays the name and wireless password of the AT-UHD-SW-510W. The Name field represents the SSID of the AT-UHD-SW-510W and is used to identify the unit when used as an **Access Point**. When configured as an **Access Point**, the SSID password will automatically be displayed. The password can be hidden (masked) if desired. Refer to the [Networking page \(page 61\)](#) for more information on these topics.

- **Metadata**

Displays the name, model, current date, wired IP address, and current firmware version. The name can be changed under the [General page \(page 47\)](#) of the Web GUI. The date (and time) can be set under the [System page \(page 48\)](#) of the Web GUI. Refer to [Networking page \(page 61\)](#) for information on changing the wired IP address of the AT-UHD-SW-510W.

### Selecting the Input

Press the **INPUT** button to cycle through each of the available inputs on the unit. If the unit is powered-off, then powered-on, the AT-UHD-SW-510W will set the default input to **BYOD**.





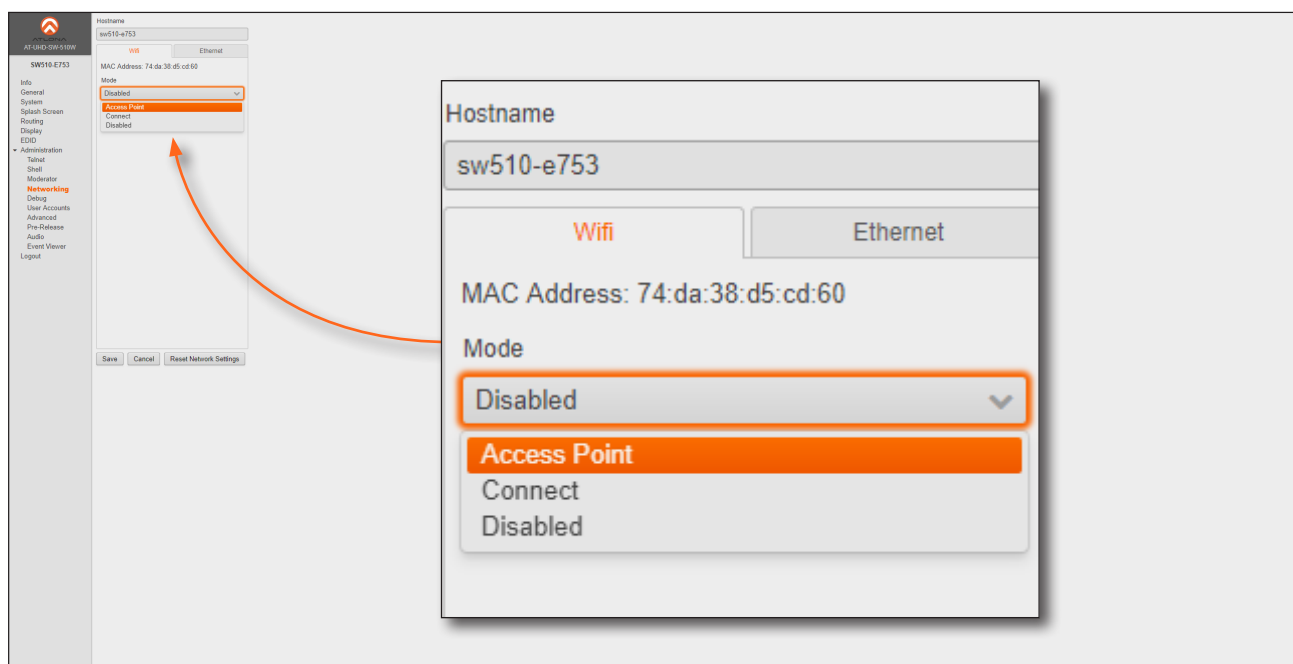
## Wireless Configuration

The AT-UHD-SW-510W features a wireless gateway, providing convenient Wi-Fi® connectivity for an iOS, Android, Mac, Chromebook, or Windows-based device, and a built-in web GUI. In addition, the AT-UHD-SW-510W can be configured as a wireless access point (AP). The addition of a built-in firewall provides control of incoming and outgoing network traffic.

### Access Point Mode

When configured as an Access Point (AP), users will be able to connect wireless devices to the AT-UHD-SW-510W.

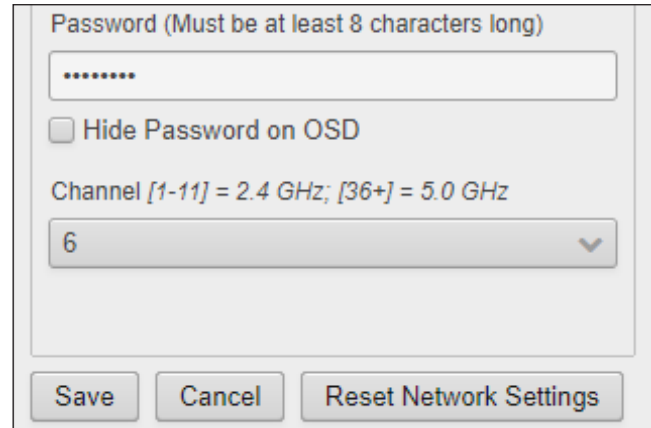
1. Make sure the AT-UHD-SW-510W is configured properly for use on a wired network. Refer to [IP Configuration \(page 15\)](#) for more information.
2. Launch a web browser and enter the IP address of the AT-UHD-SW-510W in the address bar.
3. Login to the web GUI. Refer to [Introduction to the Web GUI \(page 44\)](#) for more information.
4. Click **Administration > Networking** from the menu bar on the left.
5. Under the **Wifi** tab, select Access Point from the **Mode** drop-down list.



6. The name of the wireless network will appear in the **SSID** field. This name is identical to the text in the **Derived** field, under the [General page \(page 47\)](#). To change the SSID, go to the **General** page and modify the **Name** field.
7. The name of the wireless network will appear in the **SSID** field. This name is identical to the text in the **Derived** field, under the [General page \(page 47\)](#). To change the SSID, go to the **General** page and modify the **Name** field.

SSID
sw510-e753
Password (Must be at least 8 characters long)
.....

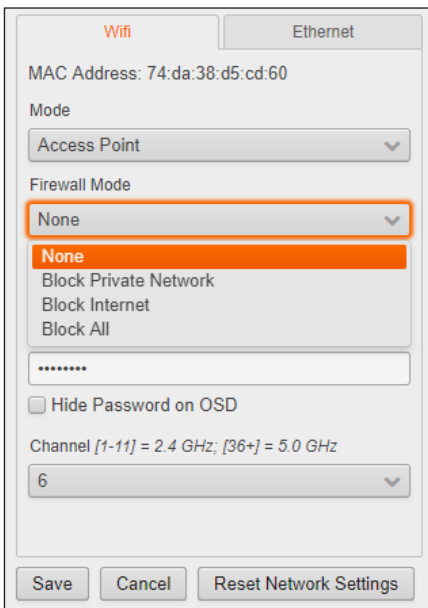
8. Enter the password in the **Password** field.  
This password will be required by clients connecting to the AT-UHD-SW-510W.
9. Click the **Hide Password** check box to mask the password. When the password is masked, the text in the Password field will appear as asterisks.
10. Enter the wireless channel number in the **Channel** field. Contact the network administrator if necessary.



### Firewall Mode (optional)

This feature allows control of incoming and outgoing network traffic. The AT-UHD-SW-510W provides the following firewall modes: Block Private Network, Block Internet, Block All, and None. If this feature is not desired, then skip to Step 12. The firewall can be configured or disabled at any time. The default setting is None.

11. Click **Firewall Mode** drop-down list and select the desired option.



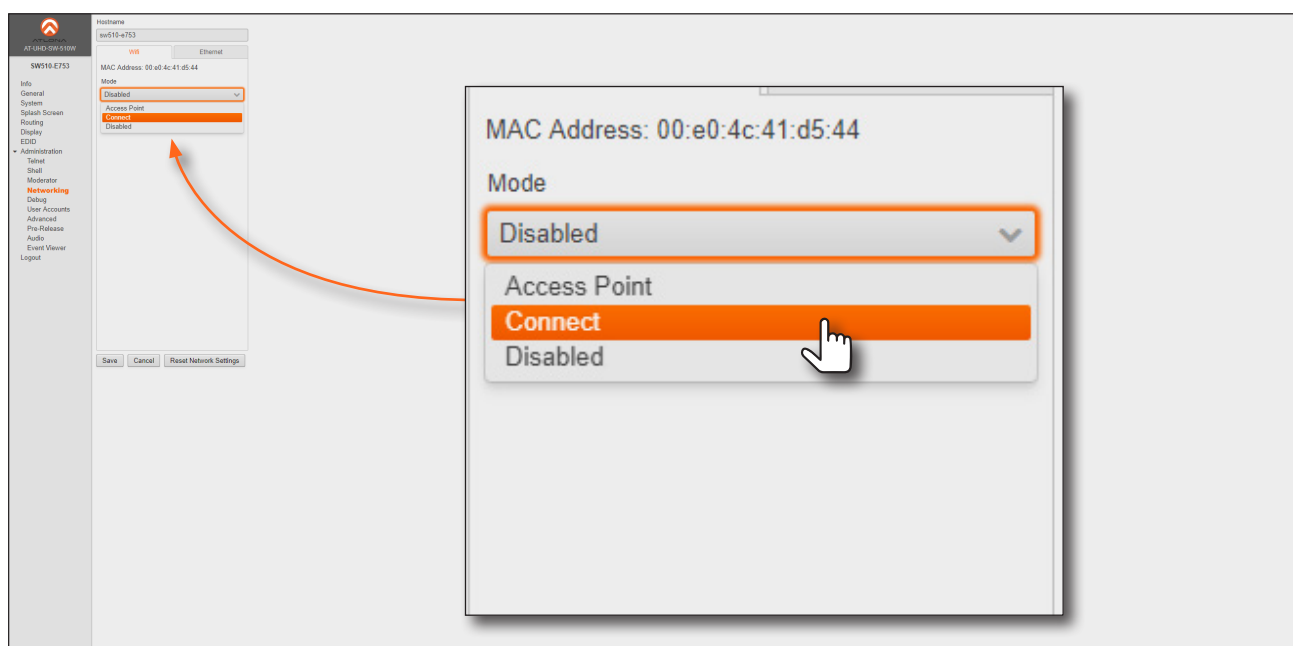
Setting	Description
None (default)	Select this option to disable the firewall on the AT-UHD-SW-510W and allow all incoming and outgoing network traffic.
Block Private Network	Select this option to prevent unauthorized clients from accessing the AT-UHD-SW-510W.
Block Internet	Allows wireless access to the AT-UHD-SW-510W but prevents Internet access (Google, YouTube, etc).
Block All	All outbound network traffic is blocked.

12. Click the **Save** button to accept and save all changes.

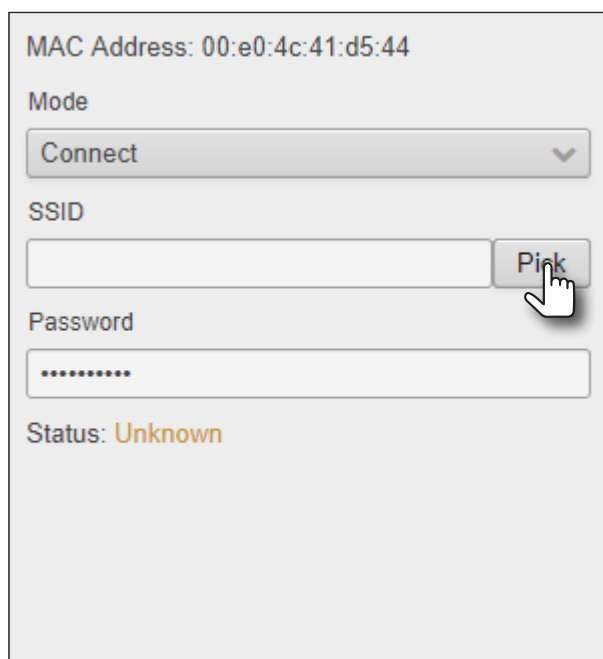
## Connect Mode

To connect the AT-UHD-SW-510W to another wireless network, select the **Connect** Mode.

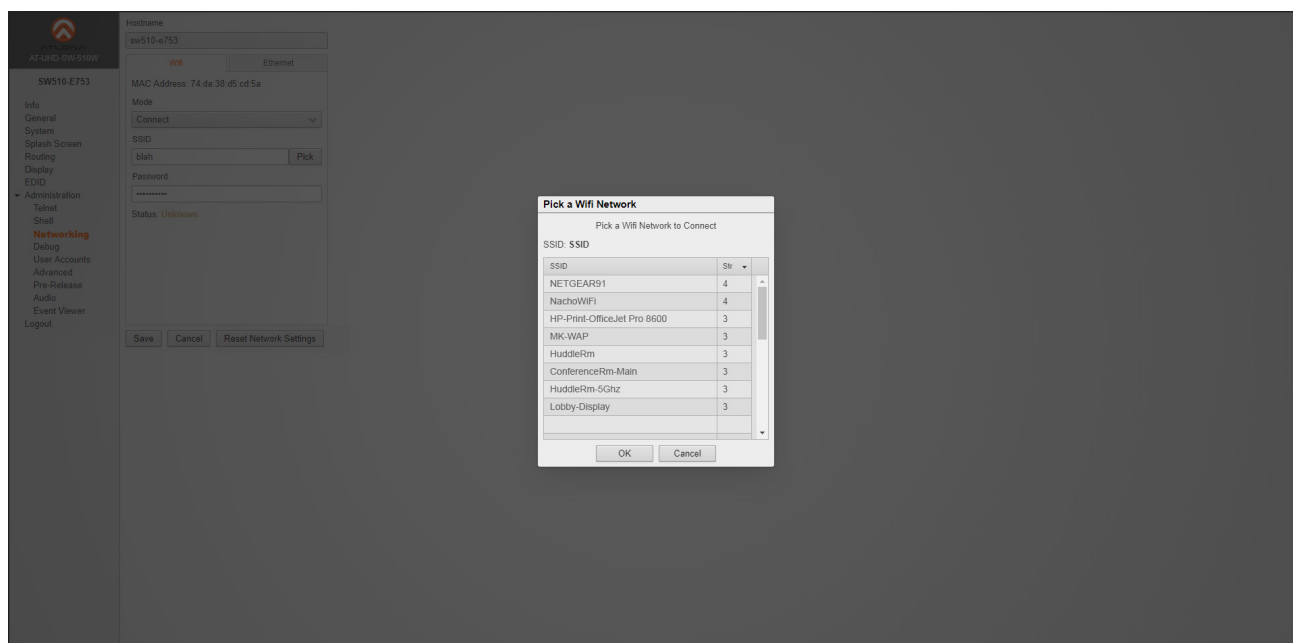
1. Launch a web browser and enter the IP address of the AT-UHD-SW-510W in the address bar.
2. Login to the web GUI. Refer to [Introduction to the Web GUI \(page 44\)](#) for more information.
3. Click **Administration > Networking** from the menu bar on the left.
4. Under the **Wifi** tab, select Connect from the **Mode** drop-down list.



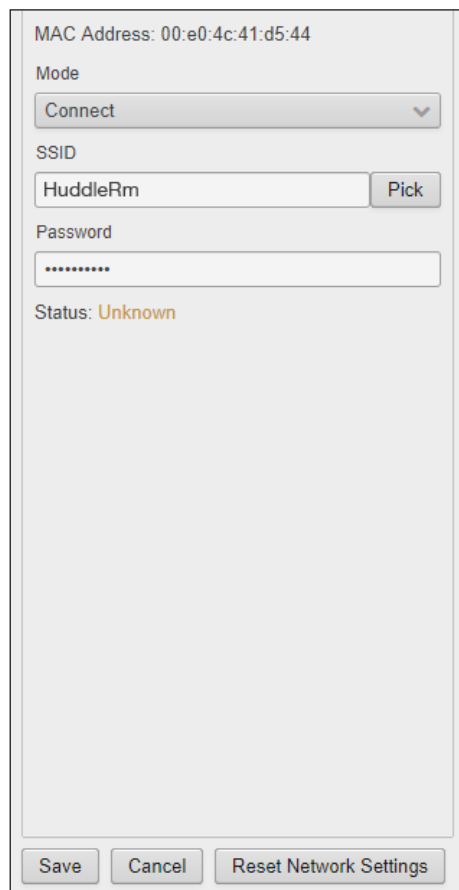
5. Click the **Pick** button.



6. Select the desired wireless network from the pop-up dialog box.



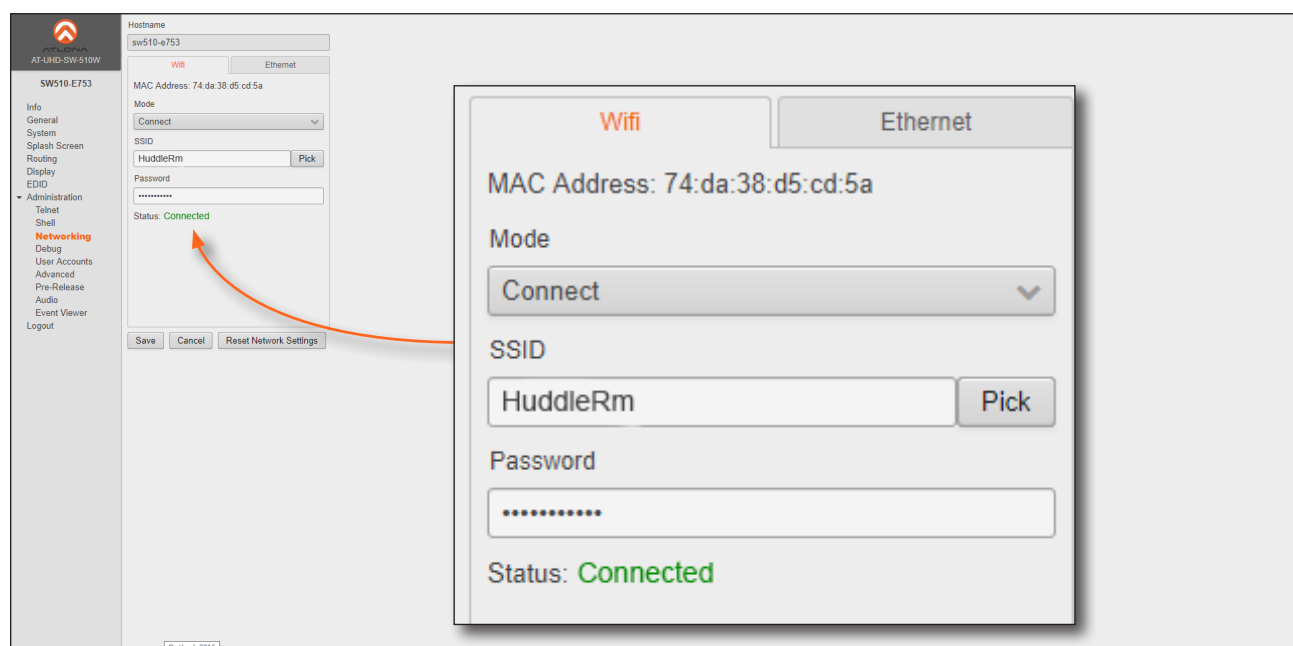
7. Click the **OK** button to accept the selection and dismiss the dialog box. Click the **Cancel** button to return to close the dialog and return the Wifi tab.
8. Enter the password for the wireless network in the **Password** field.



This is a close-up of the Networking configuration form. It shows the 'MAC Address' as '00:e0:4c:41:d5:44'. The 'Mode' is set to 'Connect'. The 'SSID' field contains 'HuddleRm' and has a 'Pick' button next to it. The 'Password' field is empty and masked with dots. The status is 'Unknown'. At the bottom are 'Save', 'Cancel', and 'Reset Network Settings' buttons.

9. Click the **Save** button to attempt to connect to the wireless network.

Once a successful connection has been established, the **Status** field will display Connected, as shown below.



The following table provides a list of possible status messages.


State	Description
Connected	The AT-UHD-SW-510W is connected to the wireless network.
Not Connected	Unsuccessful connection. Check to make sure the password was entered correctly. This state will also occur if the wireless network, to which the AT-UHD-SW-510W is connected, is taken offline.
Unknown	The network state is unknown. This message is displayed if the AT-UHD-SW-510W has not been configured to connect with a wireless network.

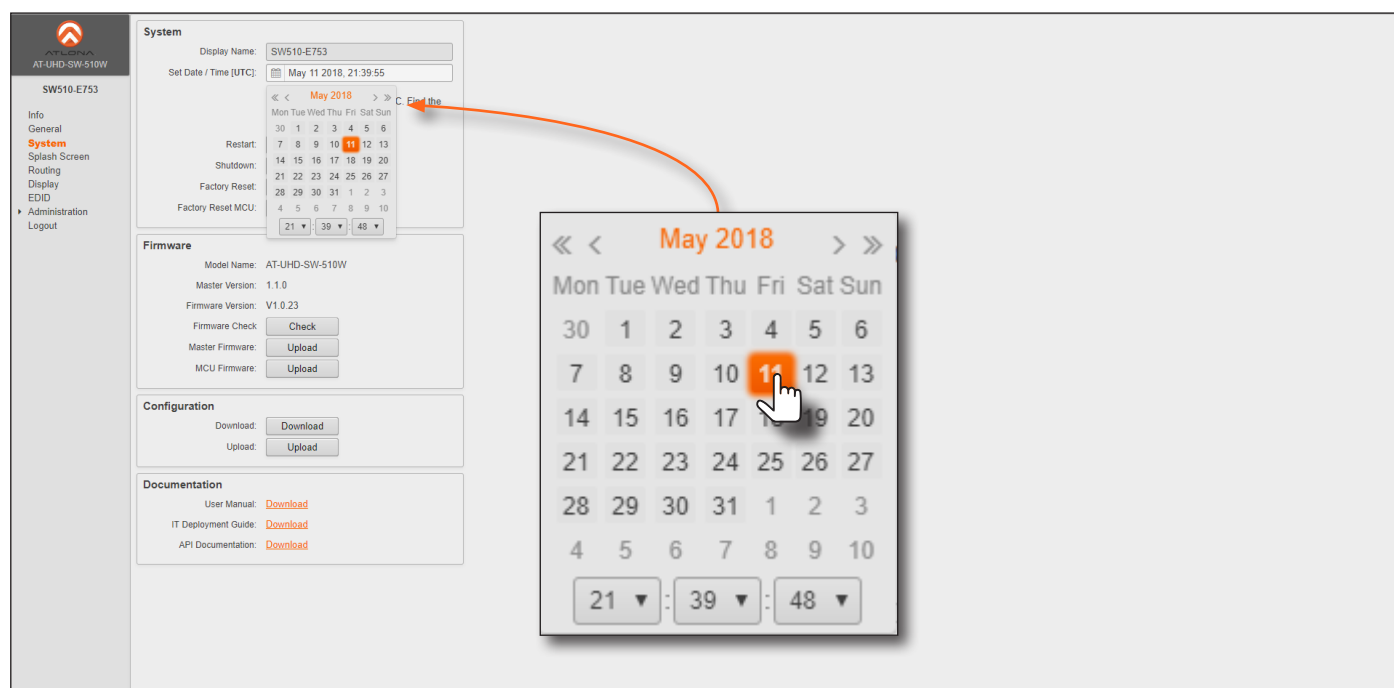
## Setting the System Date and Time

The AT-UHD-SW-510W uses the internal clock to store the current date and time. When setting the time and date, Universal Coordinated Time (UTC) must be used.

1. Login to the web GUI. Refer to [Introduction to the Web GUI \(page 44\)](#) for more information.
2. Convert the local time to 24-hour time.
3. Use the tables below, to convert 24-hour time to UTC. For US Daylight Savings Time, subtract one hour from each value, when converting to UTC. UTC for other specific regions can be obtained from <https://time.is/UTC>.

Region	Eastern Std Time	Central Std Time	Mountain Std Time	Pacific Std Time
United States	+ 5:00	+ 6:00	+ 7:00	+ 8:00

3. Click the  icon to display the calendar fly-out menu.
4. Select the desired year by clicking on the << or >> icons. To select the month, use the < or > icons.
5. Select the day.
6. Set the time by either clicking on the hour, minute, and second drop-down lists or by entering the time, directly into the **Set Date / Time [UTC]** field. Always use Universal Coordinated Time (UTC).



7. Exit the **Set Date / Time [UTC]** field by pressing the TAB key or clicking outside the text field. The time and date information will automatically be saved.



**NOTE:** When setting a time or date that is ahead of the current settings, the web session will automatically time out. This is normal behavior. Login to continue setting up the unit.

### Casting

The AT-UHD-SW-510W interface provides the ability to transmit (“cast”) the screen of any iOS®, Android™, macOS®, Chromebook, or Windows device over Wi-Fi, without having to install a separate application or driver. The AT-UHD-SW-510W can serve as an integrated, dual-band access point, or be networked into an existing Wi-Fi installation.

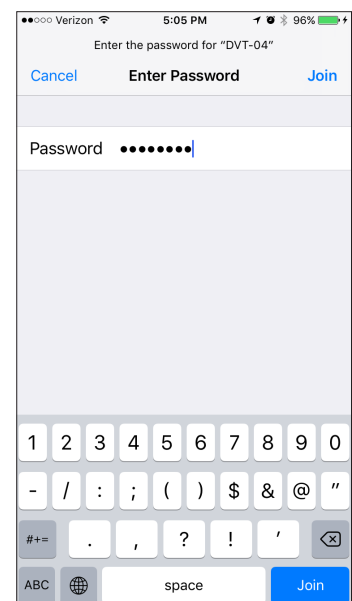
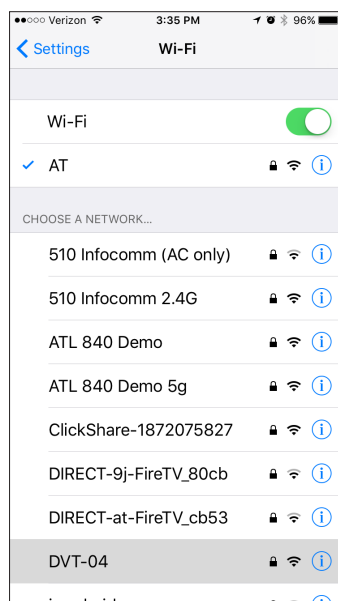


**NOTE:** The AT-UHD-SW-510W can support a maximum of 254 wireless connections. However, only one wireless device can display an image on the connected display, at a time.

### iOS Devices

AirPlay® is only supported on iOS 5 or higher.

1. Select the **BYOD** input on the AT-UHD-SW-510W.
2. On the iOS device, go to **Settings > Wi-Fi**.
3. Under **Wi-Fi**, select the SSID of the AT-UHD-SW-510W in the list of available devices. The SSID is displayed on the splash screen. See [Boot Sequence \(page 18\)](#) for more information on locating the SSID.



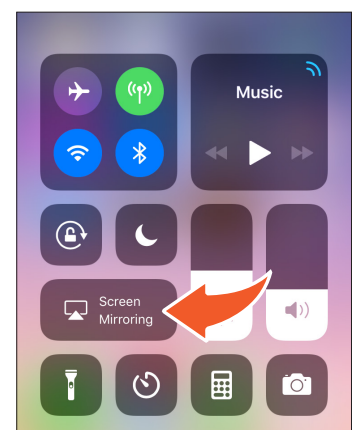
4. Enter the password for the device. The default password is **88888888**.
5. Once connected, swipe-up on the bottom of the iOS device to display the **Control Center**.
6. Tap the **AirPlay Mirroring** option to display a list of available AirPlay® devices.

Note that if the iOS device is running 11.0.3 or later, the **AirPlay** option has been changed to **Screen Mirroring**.

### iOS 10

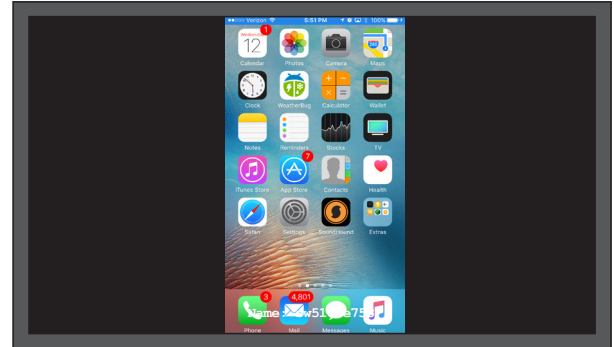


### iOS 11.0.3 or later



7. Tap the SSID from the list of devices.
8. Close the **Control Center** by either swiping down or pressing the **Home** button.
9. The image of the iOS device will now appear on the connected display.

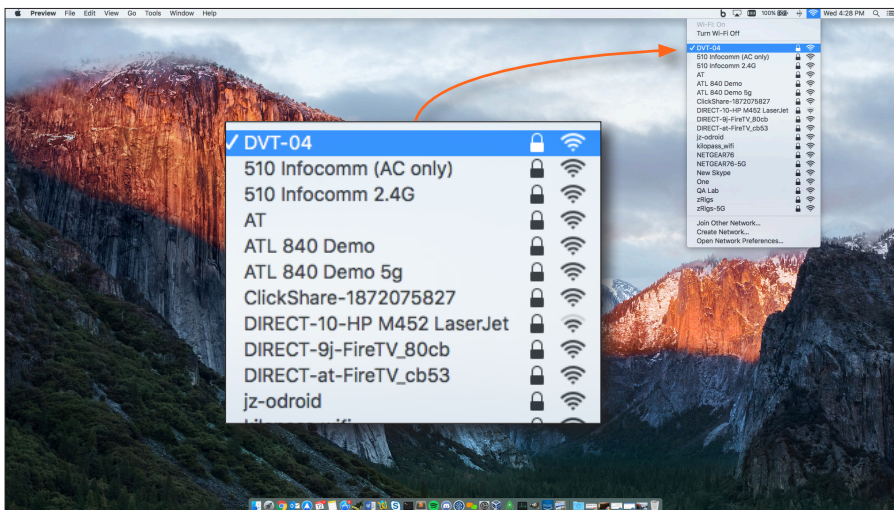
Note that depending upon the application, the image on the screen can be rotated. For example, when using the camera app, if the iOS device is rotated 90 degrees, then the image on the screen will also be rotate 90 degrees.



### OS X

AirPlay is only supported on Mountain Lion 10.8 or later. To determine if AirPlay is supported on the system being used, click **System Preferences > Displays**. If the “Show mirroring options in the menu bar when available” check box is not displayed, then AirPlay is not supported.

1. Click the **Wi-Fi** icon in the menu bar and select the SSID of the AT-UHD-SW-510W. If the **Wi-Fi** icon is not displayed, then refer to the Macintosh documentation for information on setting up a Wi-Fi connection.



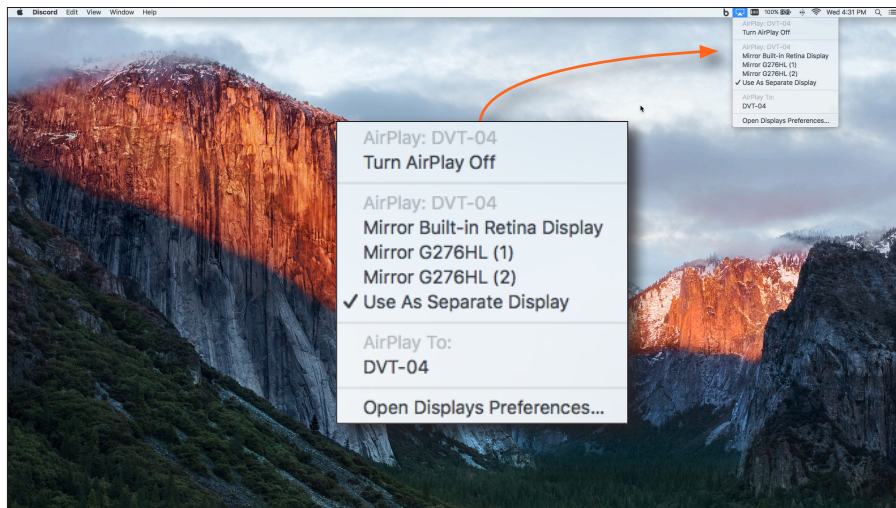
2. Enter the password for the Wi-Fi network, then click the **Join** button. The default password is **88888888**.





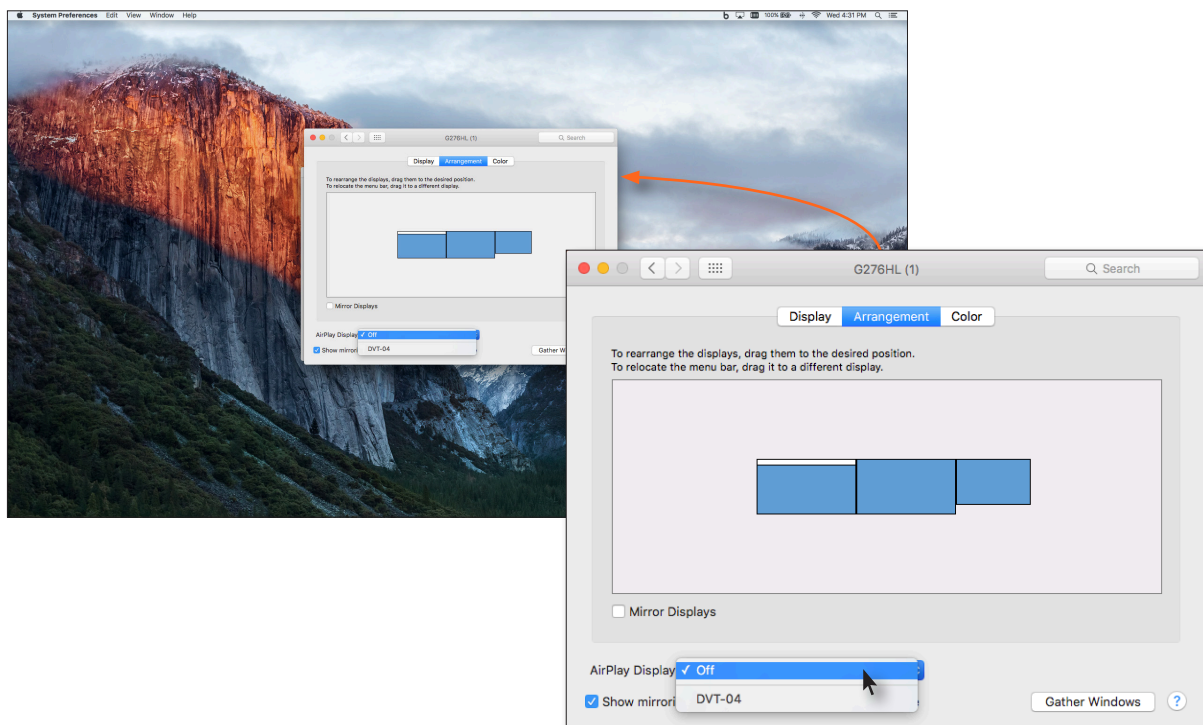
AirPlay can be used to either mirror or extend the Mac display.

- **Mirroring**  
Click the AirPlay icon in the menu bar and select the desired display to be mirrored.
- **Extending**  
Click the AirPlay icon and select “Use As Separate Display” from the list of displays, to extend the Desktop to another display.



- **Turning Off AirPlay**  
Click the AirPlay icon and select “Turn AirPlay Off”.

AirPlay can also be turned off by clicking **System Preferences > Displays**. Click the **AirPlay Display** drop-down list and select “Off”. To re-enable AirPlay, select the device from the drop-down list.



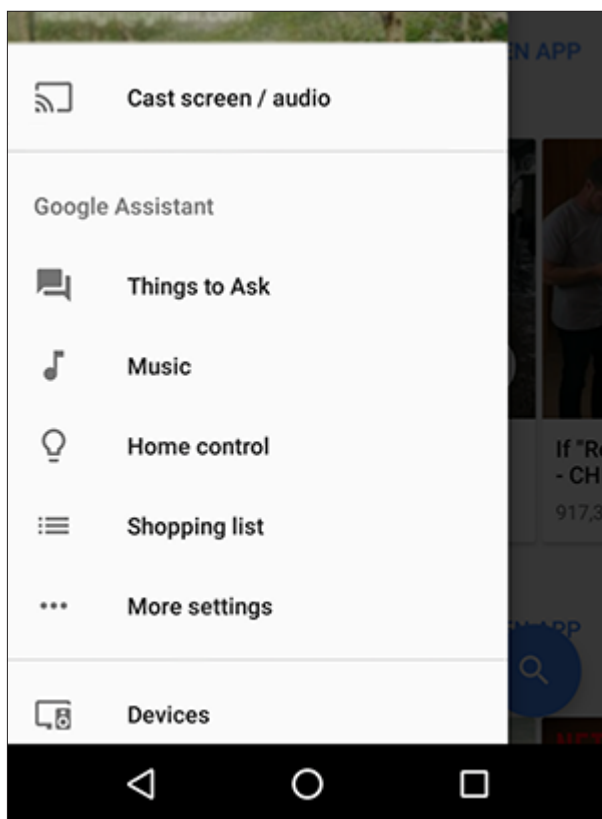
### Android

Casting on Android devices is only available on Android 4.4.2 or higher.



**NOTE:** Although there are different ways to cast from an Android device, the easiest method is through the Google Home App.

1. Select the **BYOD** input on the AT-UHD-SW-510W.
2. Connect the Android device to the SSID of the AT-UHD-SW-510W. See [Boot Sequence \(page 18\)](#) for more information on locating the SSID of the AT-UHD-SW-510W..
3. Download and open the **Google Home** app.
4. In the top-left corner, tap **Menu** ≡ > **Cast Screen / audio**.



- Select **Cast Screen** to mirror both screen and audio to the device.
- Select **Cast Audio** to mirror the audio, only.



### Microsoft Miracast

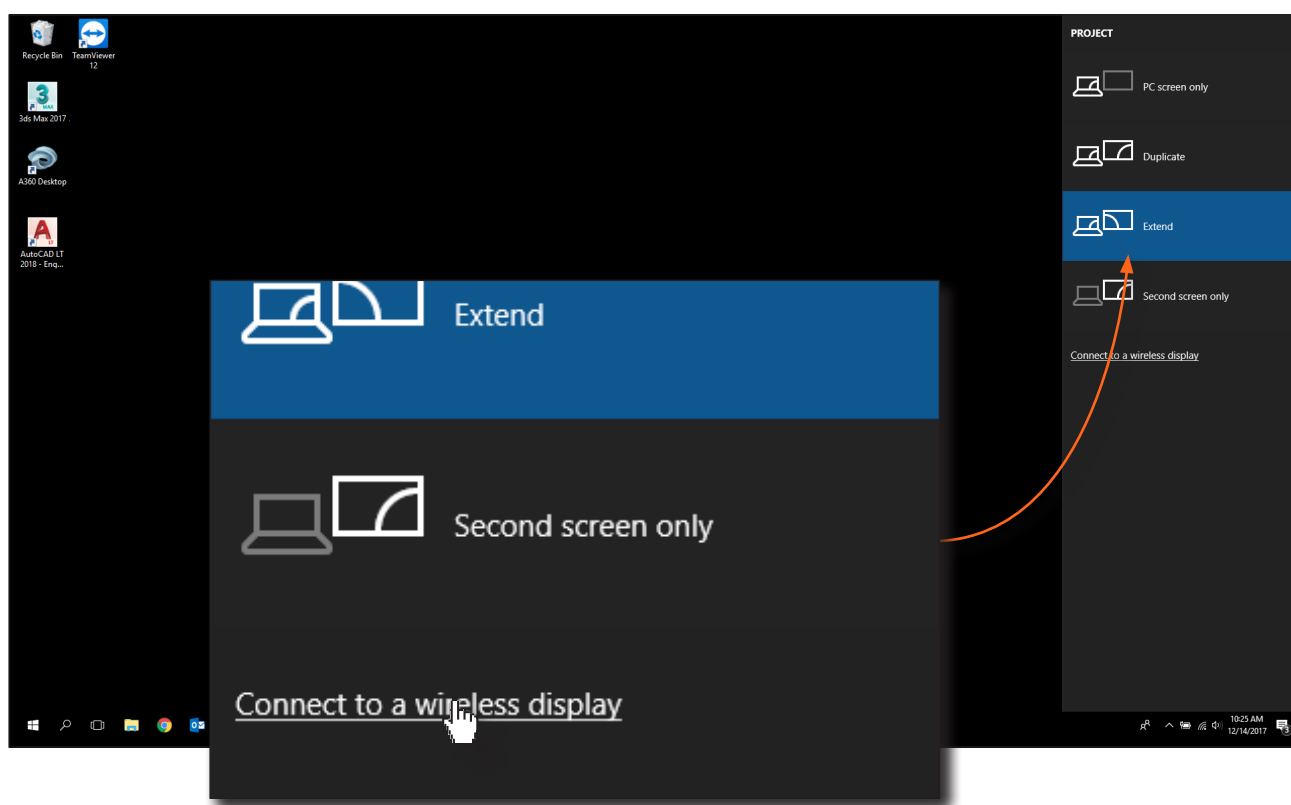
Miracast is a wireless protocol that allows content to be transmitted from laptops and other mobile devices to displays. The latest release of Microsoft Windows® 10 supports Miracast.

Displaying Miracast devices can be done in several ways. Two methods are presented below. The first method is recommended, as it is the most direct method.

#### Method 1

The following is the recommended (and quickest) way to configure Miracast on Microsoft Windows®.

1. Press the  and  keys, simultaneously.
2. Click the **Connect to a display device**, on the **PROJECT** menu.




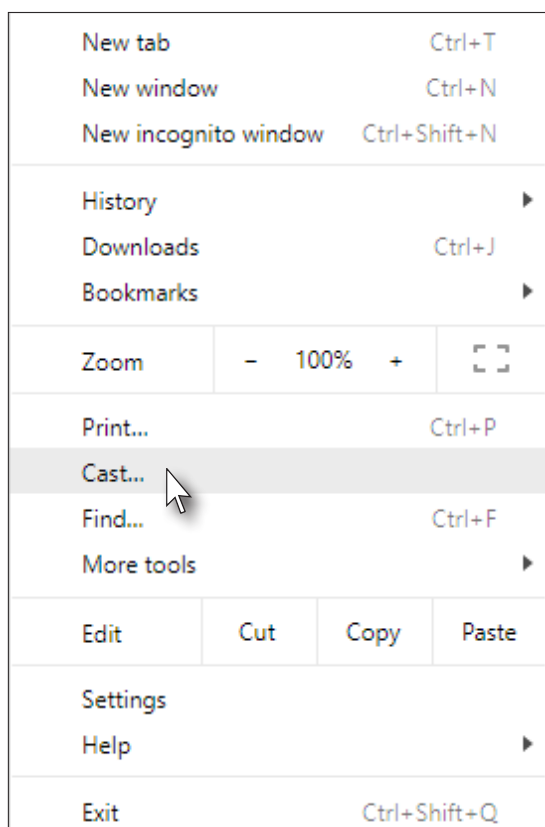
3. The **Connect** menu will be displayed, providing a list of Miracast-capable devices.
4. Select the AT-UHD-SW-510W hostname from the list.

#### Method 2

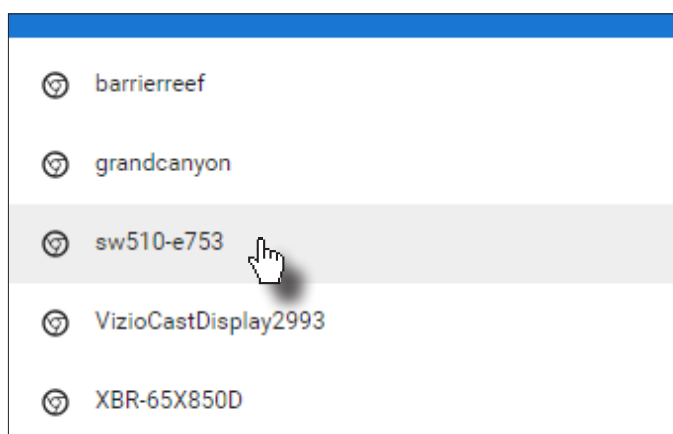
1. Right-click on the Windows Desktop and select **Display Settings** from the pop-up menu.
2. In the right-hand column, scroll down, then click **Connect to a wireless display**.

### Google Chromecast (VP8)

1. Launch Google Chrome.
2. Click the  icon, in the upper right corner of the Chrome browser.
3. Click the **Cast...** option from the drop-down menu.

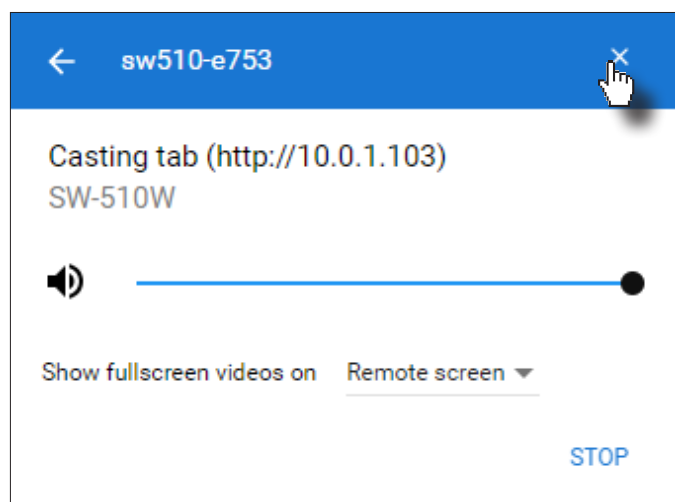



4. Select the hostname of the AT-UHD-SW-510W from the **Cast to** menu.



Chrome will immediately begin casting to the AT-UHD-SW-510W. Note that if Moderator mode is enabled, this cast will be placed in the **Users** table queue. Refer to [Using Moderator Mode \(page 41\)](#) for more information.

5. Adjust the volume (if audio is present), by clicking and dragging the slider control. In addition, either **Remote screen** or **Both screens** can be selected from the **Show fullscreen videos on** drop-down list.
6. Click the **x** in the upper-right corner of the Casting tab to dismiss this dialog.



When Chrome is casting, the  icon will appear in the upper-right portion of the menu bar. Clicking this icon will display the Casting tab dialog.

7. Click **STOP** to discontinue casting to the AT-UHD-SW-510W.

## Matrix Modes

The AT-UHD-SW-510W features two matrix modes: Matrix Mode and Matrix Mode with static route. Enabling matrix mode provides the ability to use AT-UHD-SW-510W in video codec / conference applications, using a dual-presentation mode.

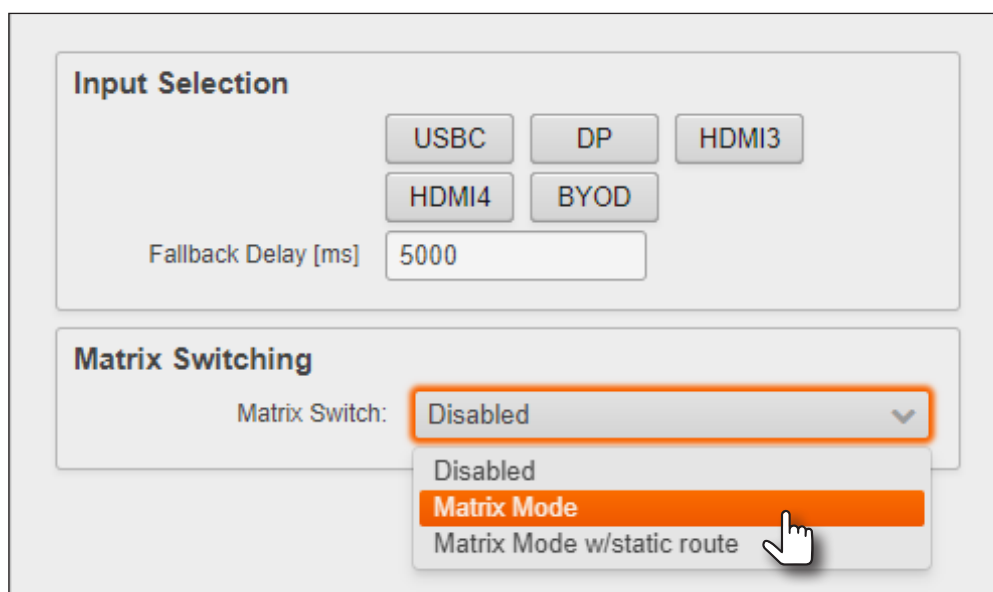
### Matrix Mode

This mode allows the AT-UHD-SW-510W to independently switch between any input or both outputs. Following the instructions below to configure Matrix Mode.

1. Login to the web GUI. Refer to [Introduction to the Web GUI \(page 44\)](#) for more information.
2. Click **Routing** from the menu bar on the left.
3. Click the **Matrix Switch** drop-down list and select **Matrix Mode**.

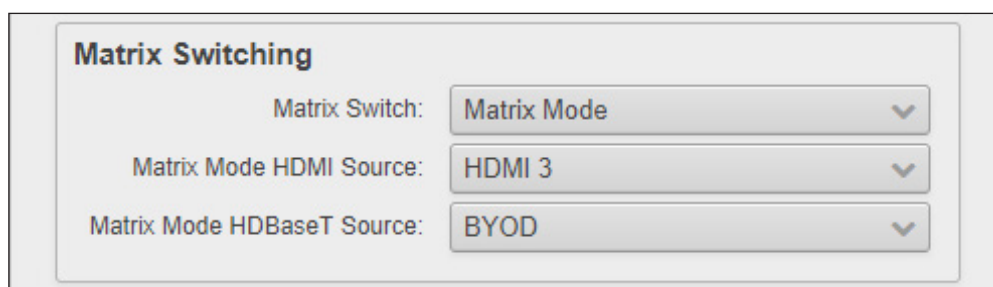


**NOTE:** When matrix mode is enabled, both auto-switching and display power control will be disabled.



The screenshot shows the 'Input Selection' section with buttons for USBC, DP, HDMI3, HDMI4, and BYOD. Below it is a 'Fallback Delay [ms]' field set to 5000. The 'Matrix Switching' section shows a 'Matrix Switch' dropdown menu currently set to 'Disabled'. The dropdown menu is open, showing three options: 'Disabled', 'Matrix Mode' (highlighted in orange), and 'Matrix Mode w/static route'. A mouse cursor is pointing at the 'Matrix Mode' option.

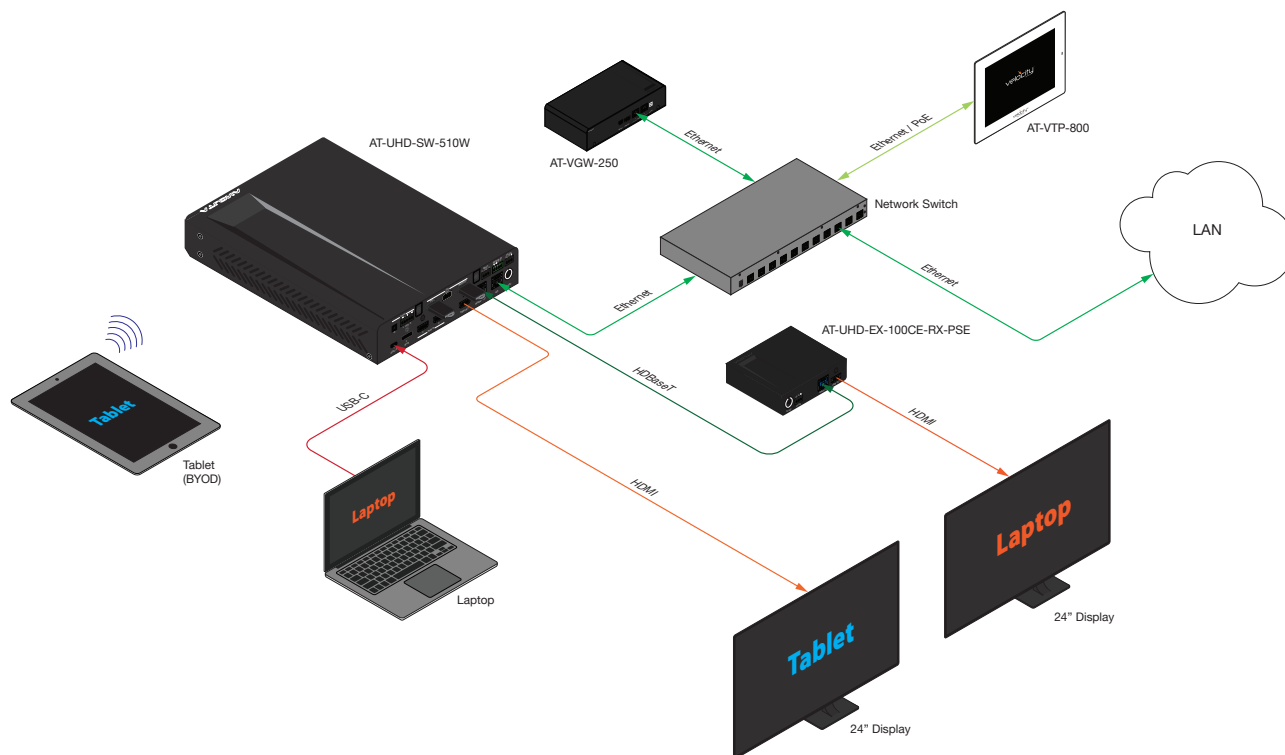
4. Click the **Matrix Mode HDMI Source** and **Matrix Mode HDBaseT Source** drop-down lists to select the source devices. Note that the values shown in the illustration below, are arbitrary. Routing is managed using API commands and a control system.



The screenshot shows the 'Matrix Switching' section. The 'Matrix Switch' dropdown menu is now set to 'Matrix Mode'. Below it are two more dropdown menus: 'Matrix Mode HDMI Source' set to 'HDMI 3' and 'Matrix Mode HDBaseT Source' set to 'BYOD'.

Refer to the illustration on the next page for an example diagram.

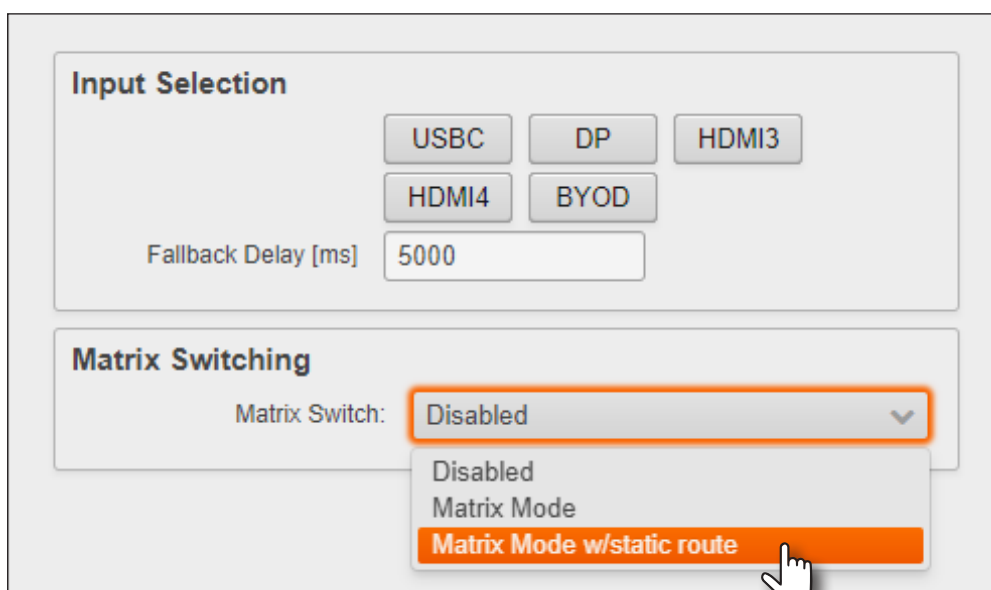
Example diagram illustrating a Matrix Mode application.



### Matrix Mode w/static route

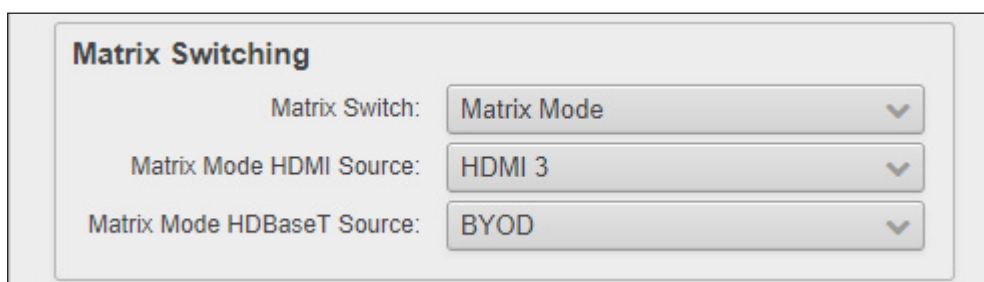
This mode allows the AT-UHD-SW-510W to be integrated with a video conference system. In this mode, both static input and output routing is specified. Auto switching will be enabled. However, the specified static input will be removed from the auto-switching pool. For example, if the **HDMI IN 3** port is specified as a static input, then auto-switching will “skip” this port when auto-switching. The instructions below, provide an example setup.

1. Login to the web GUI. Refer to [Introduction to the Web GUI \(page 44\)](#) for more information.
2. Click **Routing** from the menu bar on the left.
3. Click the **Matrix Switch** drop-down list and select **Matrix Mode w/static route**.



The screenshot shows the web GUI interface. In the 'Input Selection' section, there are buttons for USBC, DP, HDMI3, HDMI4, and BYOD. Below these is a 'Fallback Delay [ms]' field set to 5000. In the 'Matrix Switching' section, the 'Matrix Switch' dropdown menu is open, showing three options: 'Disabled', 'Matrix Mode', and 'Matrix Mode w/static route'. The 'Matrix Mode w/static route' option is highlighted in orange, and a mouse cursor is pointing at it.

4. Click the **Matrix Mode HDMI Source** and **Matrix Mode HDBaseT Source** drop-down lists to select the source devices. Note that the values shown in the illustration below, are arbitrary. Routing is managed using API commands and a control system.

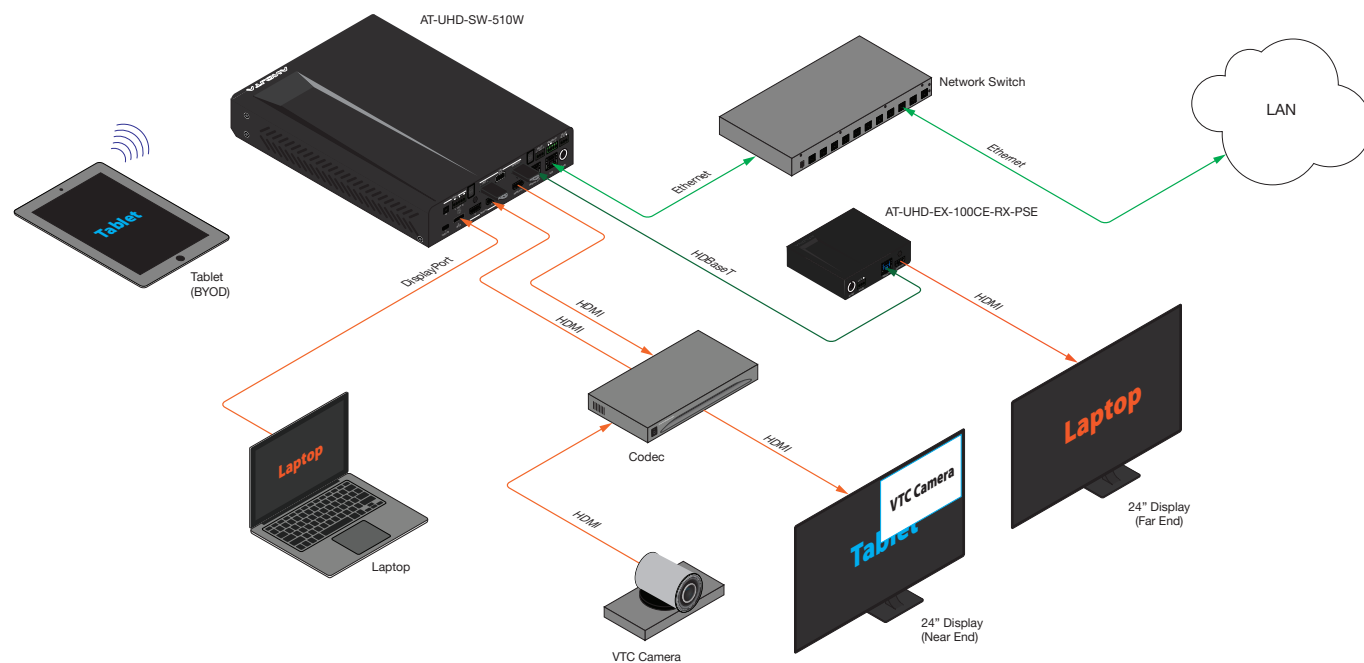


The screenshot shows the 'Matrix Switching' section of the web GUI. It contains three dropdown menus: 'Matrix Switch' is set to 'Matrix Mode', 'Matrix Mode HDMI Source' is set to 'HDMI 3', and 'Matrix Mode HDBaseT Source' is set to 'BYOD'.

Refer to the illustration on the next page for an example diagram.



Example diagram illustrating a Matrix Mode application.



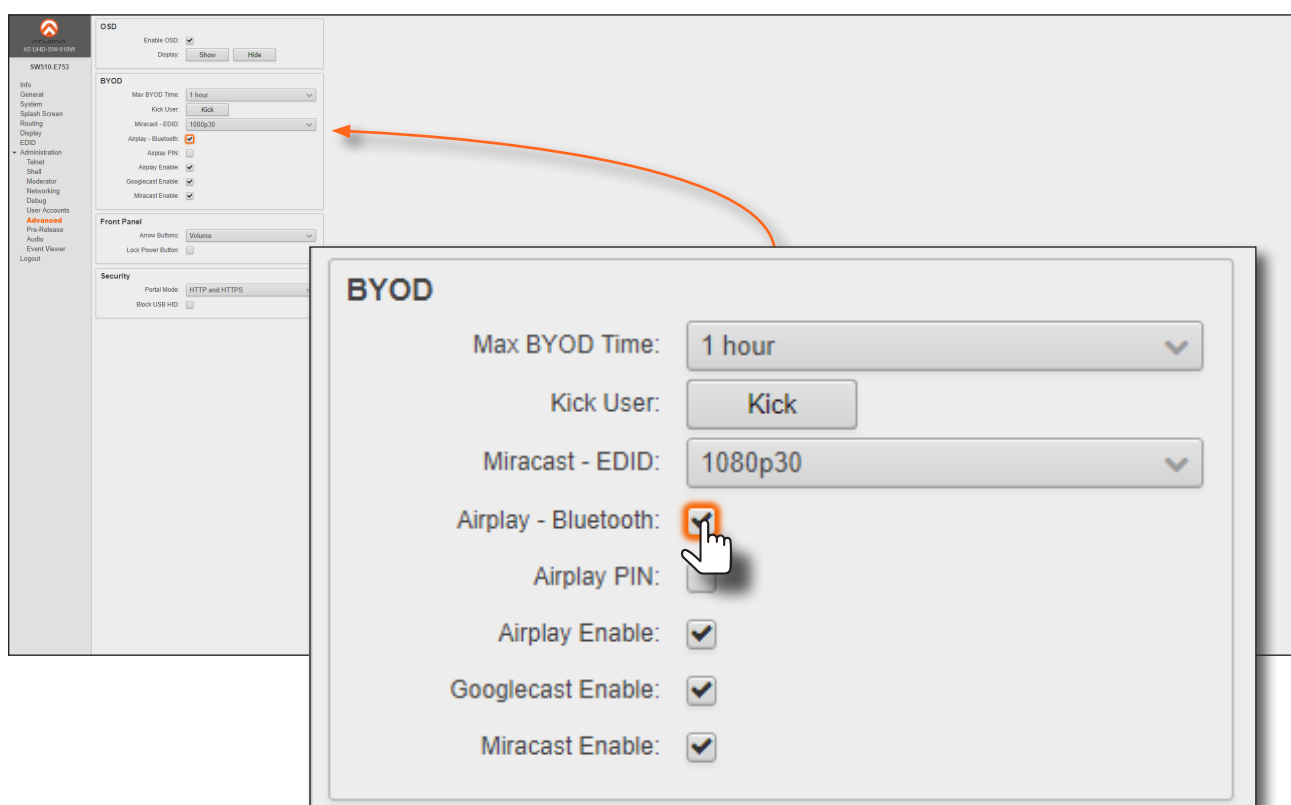
## Bluetooth Discovery

The AT-UHD-SW-510W supports Bluetooth®-assisted device discovery. An optional Bluetooth adapter is required, but not included. Atlona recommends Plugable and Kinivo Bluetooth 4.0 adapters.



**IMPORTANT:** Bluetooth discovery is designed to be used on networks, such as corporate networks, where mDNS is not permitted. Bluetooth discovery behaves as a type of “beacon”, indicating available AT-UHD-SW-510W units within the local vicinity of an AirPlay device.

1. Connect the Bluetooth adapter to the **AUX** port on the AT-UHD-SW-510W.
2. Login to the web GUI. Refer to [Introduction to the Web GUI \(page 44\)](#) for more information.
3. Click **Administration > Advanced** from the menu bar on the left.



5. Click the **Airplay - Bluetooth** check box under the **BYOD** section. If this check box has a check mark in it, then the feature is enabled. Also, make sure that Airplay Enable is checked.
6. Go to the AirPlay device and activate Screen Mirroring. The AT-UHD-SW-510W will now be displayed in the device list.

Note that if the AT-UHD-SW-510W, which is configured for Bluetooth discovery, is beyond the range defined by the Bluetooth specification, then the device will not be displayed in the Screen Mirroring list.

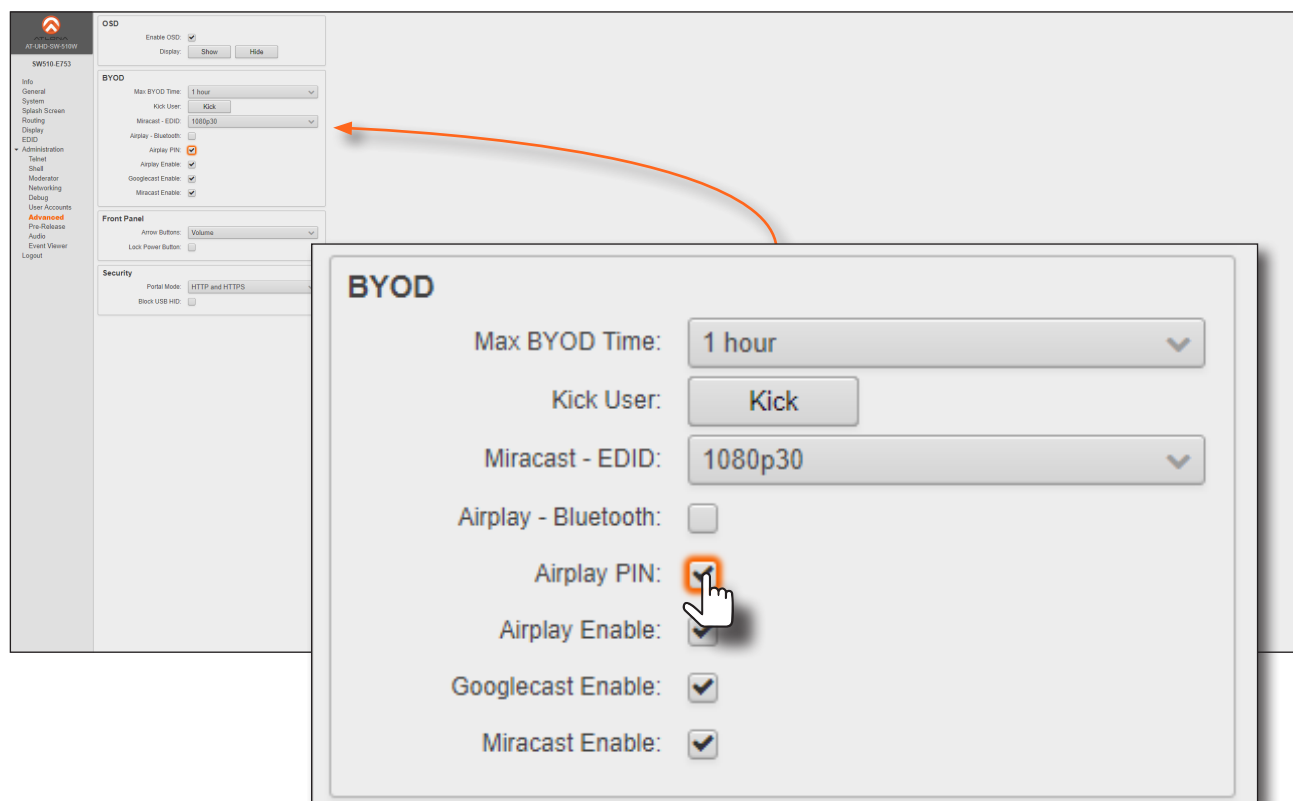
## AirPlay PIN Codes

The AT-UHD-SW-510W can be configured to prompt for a PIN code, before a BYOD device connects with AirPlay. When the AirPlay PIN option is enabled, a PIN code will be displayed on the screen when an AirPlay device attempts to connect to the AT-UHD-SW-510W.

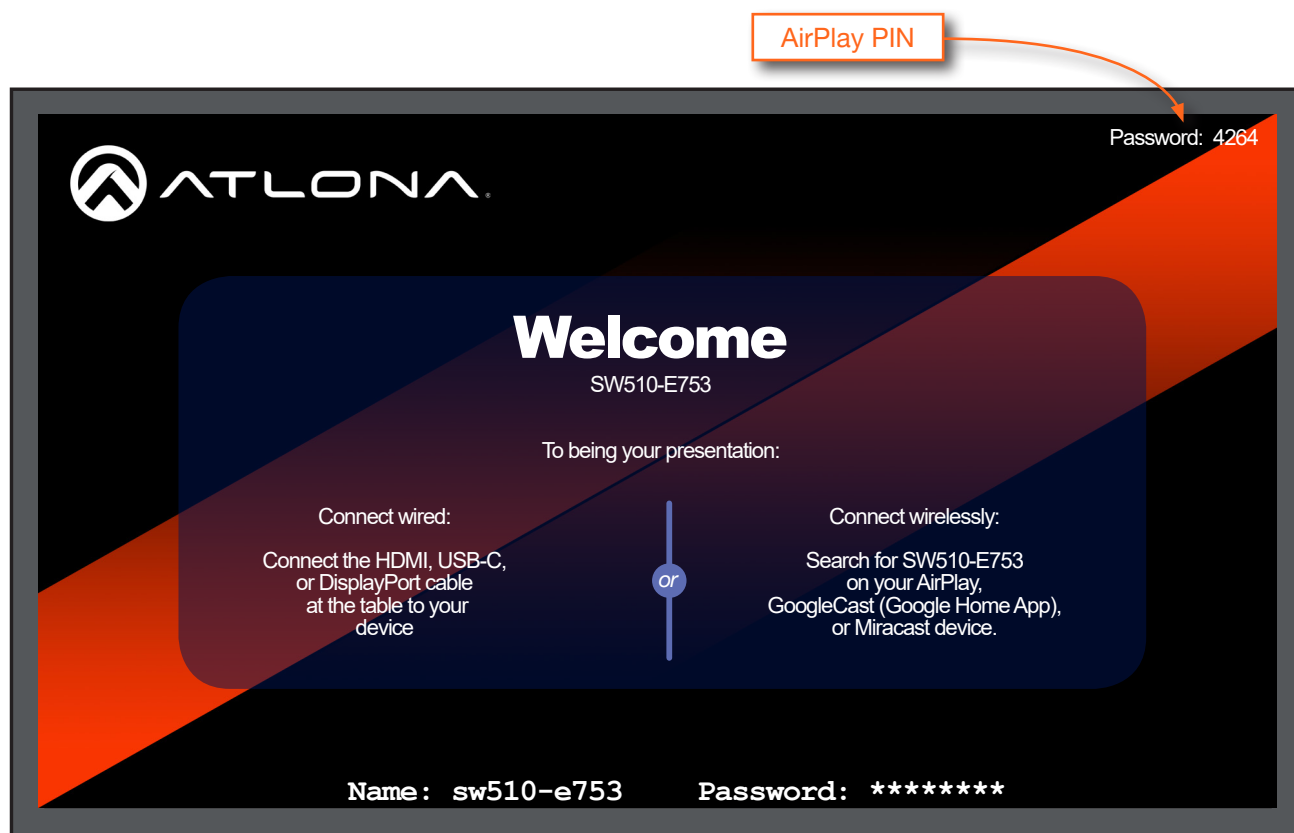


**NOTE:** The PIN code will randomly change every five minutes. This provides a level of security, preventing unauthorized users from accessing the AT-UHD-SW-510W.

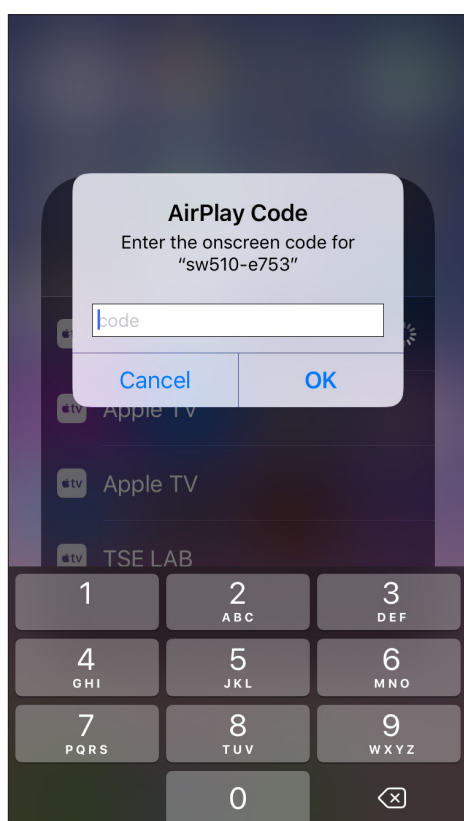
1. Login to the web GUI. Refer to [Introduction to the Web GUI \(page 44\)](#) for more information.
2. Click **Administration** > **Advanced** from the menu bar on the left.
3. Click the **AirPlay PIN** checkbox to enable or disable this option. If a check mark appears in this box, then the feature is enabled.



4. Connect the AirPlay device to the AT-UHD-SW-510W. Refer to [Wireless Configuration \(page 21\)](#) for more information.
5. Enable AirPlay on the device to begin casting to the AT-UHD-SW-510W. When the AirPlay device attempts to connect, a PIN code will be displayed on the screen that is connected to the device. Refer to the illustration on the next page, if necessary.



6. Enter the PIN code in the dialog box on the AirPlay device and press **OK**. The PIN code will be displayed only for about 10 seconds. If the PIN code is not entered within the time interval, then click **Cancel** in the AirPlay Code dialog box and reconnect the AirPlay device to the AT-UHD-SW-510W.

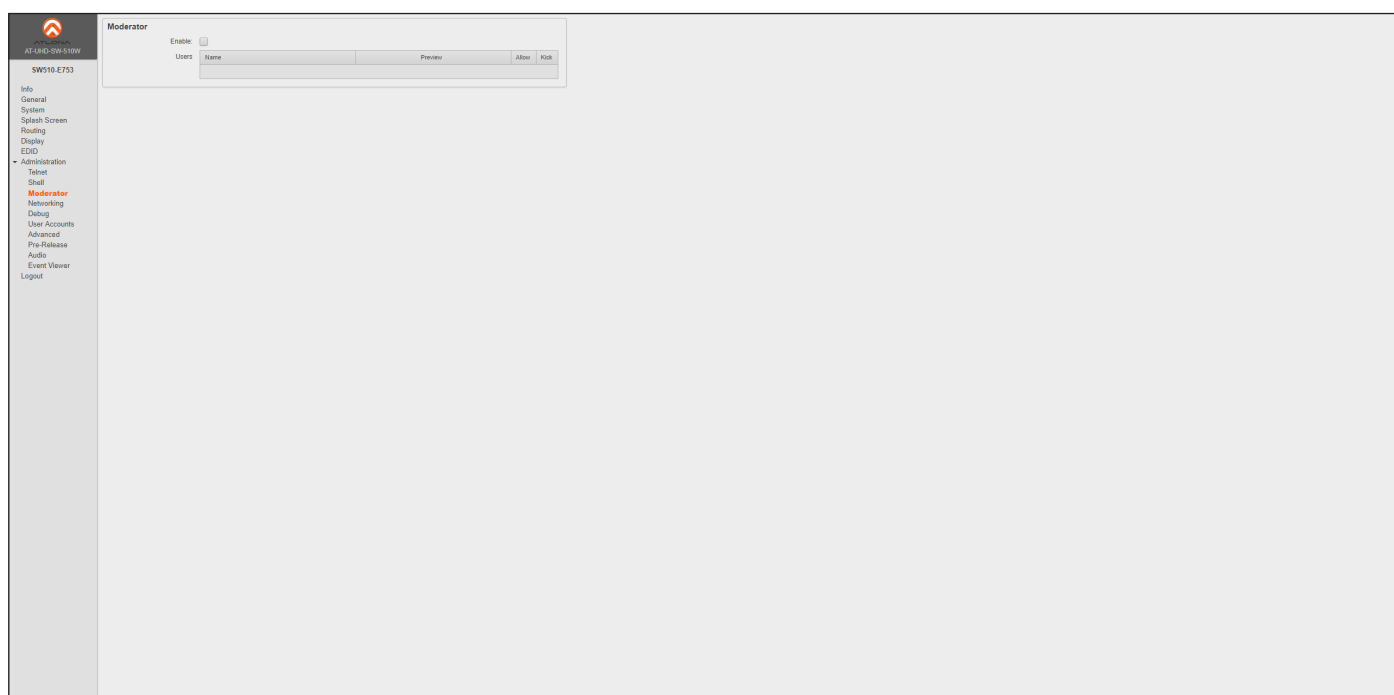


## Using Moderator Mode

Moderator mode provides a layer of control when multiple clients are casting through the AT-UHD-SW-510W. The “moderator” can either *allow* or *kick* (remove) a client from casting content. Up to four users can be hosted in the **Users** table. However, only one device may cast at a time.

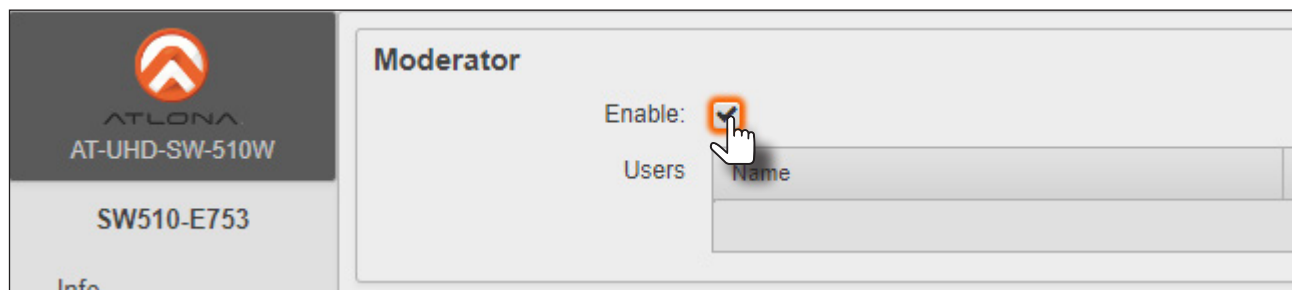


**NOTE:** In order to monitor which devices are allowed to display content, Moderator mode must be enabled before a device begins casting. If a device is already casting, without Moderator mode enabled, then enabling this feature will have no effect.



1. Login to the web GUI. Refer to [Introduction to the Web GUI \(page 44\)](#) for more information.
2. Set the WiFi mode to either **Access Point** or **Connect**. Refer to [Networking page \(page 61\)](#) for more information.
3. Click the **Enable** check box on the Moderator page.

In order to monitor which devices are allowed to display content, this box must be checked before a device begins casting. If a device is already casting, then enabling this feature will have no effect.



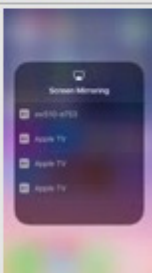
4. Connect the BYOD devices to the AT-UHD-SW-510W. Once connected, the device can begin casting. Refer to [Casting \(page 27\)](#) for more information on how to configure devices for casting.

## Basic Operation

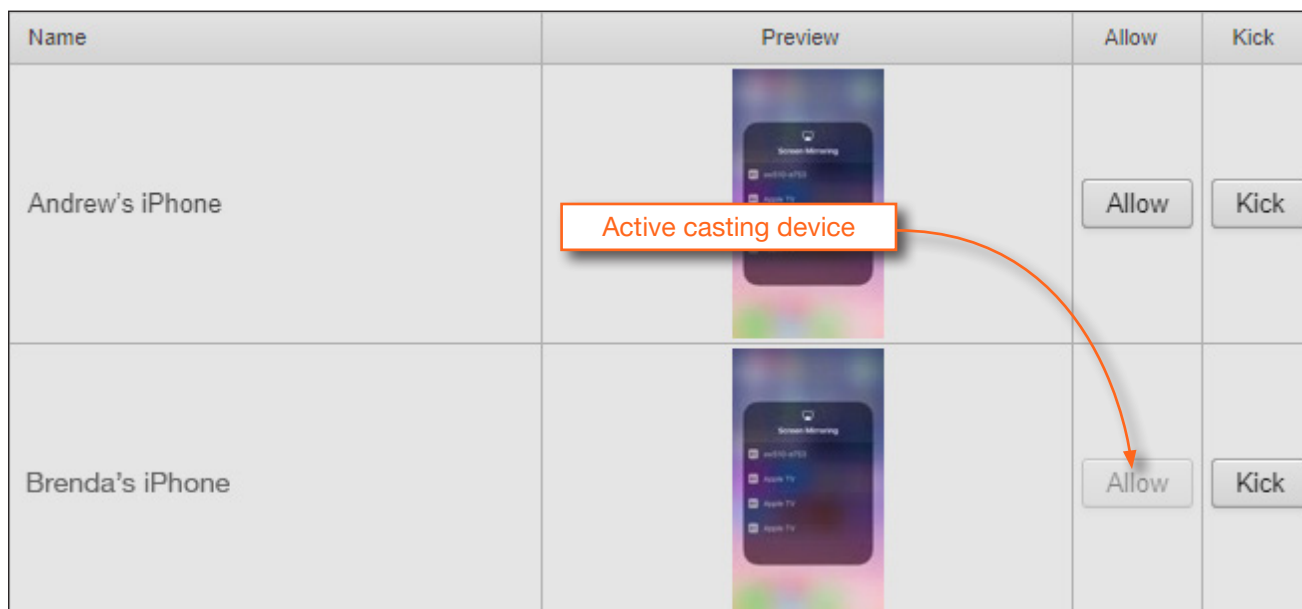
Once the devices have started casting, they will be displayed in the **Users** table, as shown in the example below. Devices will only appear in this table when they are casting. When devices are displayed in this table, an **Allow** and **Kick** button will also be available for each device.

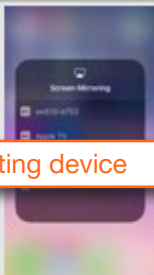
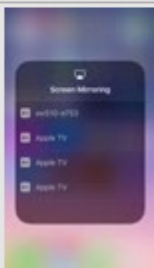
- Click the **Allow** button to permit a device to begin casting to the display device.



Name	Preview	Allow	Kick
Andrew's iPhone		<button>Allow</button>	<button>Kick</button>
Brenda's iPhone		<button>Allow</button>	<button>Kick</button>

Once the selected device is allowed to cast to the connected display device, the **Allow** button will be disabled. In the example below, *Brenda's iPhone* is now the active casting device and shown on the display device.



Name	Preview	Allow	Kick
Andrew's iPhone		<button>Allow</button>	<button>Kick</button>
Brenda's iPhone		<button>Allow</button>	<button>Kick</button>

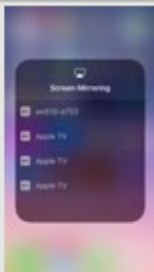
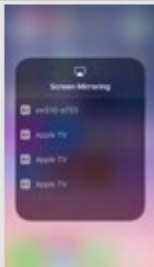
## Basic Operation

- Click the **Allow** button, on another connected device, to make that device the active casting device. It may take a few moments before the new casting device appears on the screen.



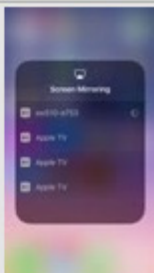
**NOTE:** When an alternate device is selected to cast, by clicking the **Allow** button, the currently active casting device will be removed (“kicked”) from the **Users** table.

- Click the **Kick** button to explicitly disconnect a casting device from the AT-UHD-SW-510W.

Name	Preview	Allow	Kick
Andrew's iPhone		<button>Allow</button>	<button>Kick</button>
Brenda's iPhone		<button>Allow</button>	<button>Kick</button>



Once a device has been “kicked”, it will no longer appear in the **Users** table. In the example below, *Brenda's iPhone* has been removed.

Name	Preview	Allow	Kick
Andrew's iPhone		<button>Allow</button>	<button>Kick</button>

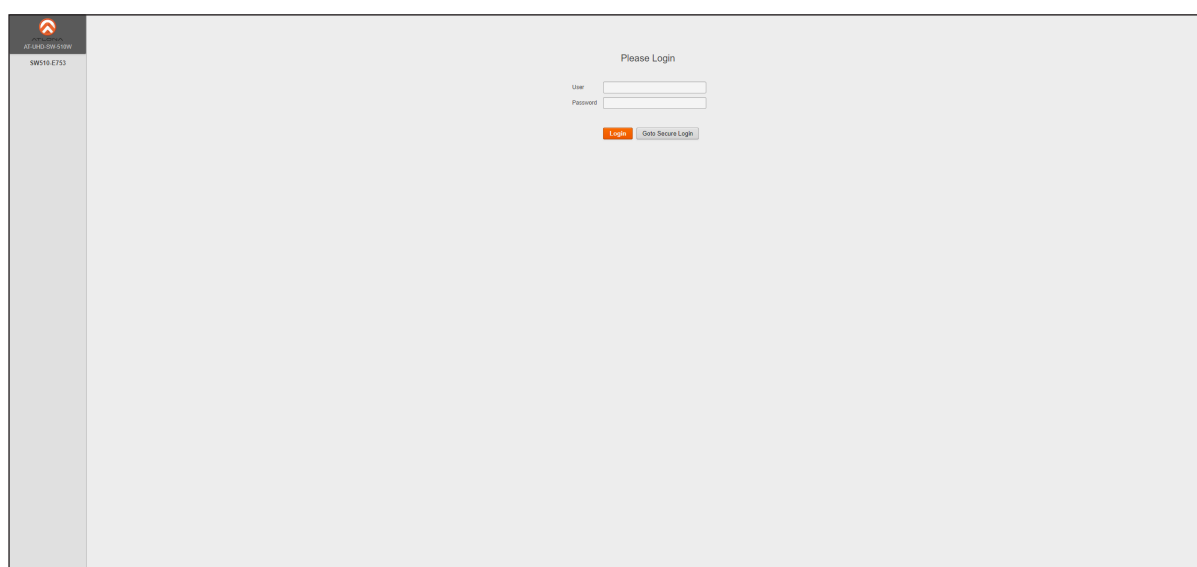
To reconnect a device that has been “kicked”, select the hostname of the AT-UHD-SW-510W from the cast menu of the BYOD device.

# The Web GUI

## Introduction to the Web GUI

The AT-UHD-SW-510W includes a built-in web GUI. Atlona recommends that the web GUI be used to set up the AT-UHD-SW-510W, as it provides intuitive management of all features. Follow the instructions below to access the webGUI.

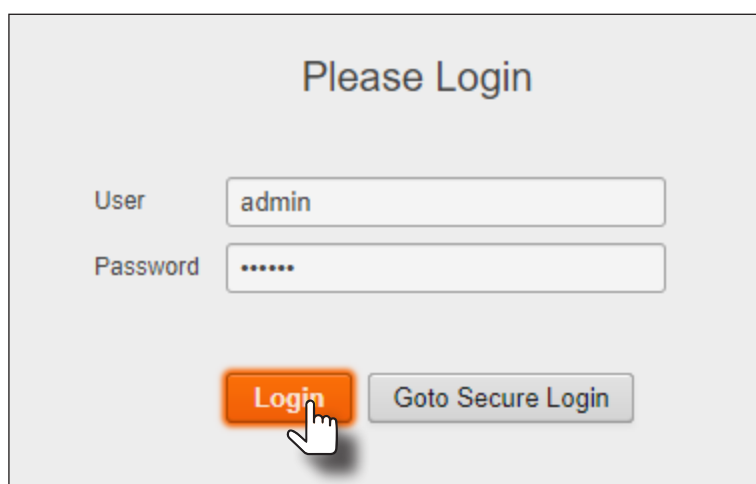
1. Make sure that an Ethernet cable is connected between the LAN port on the AT-UHD-SW-510W and the network.
2. Launch a web browser and enter the IP address of the unit. If the default static IP address is being used, enter 192.168.1.254.
3. The AT-UHD-SW-510W **Login** page will be displayed.



4. Type admin, using lower-case characters, in the **User** field.
5. Type Atlona in the **Password** field. This is the default password. The password field is case-sensitive. When the password is entered, it will be masked.
6. Click the **Login** button or press the ENTER key on the keyboard.

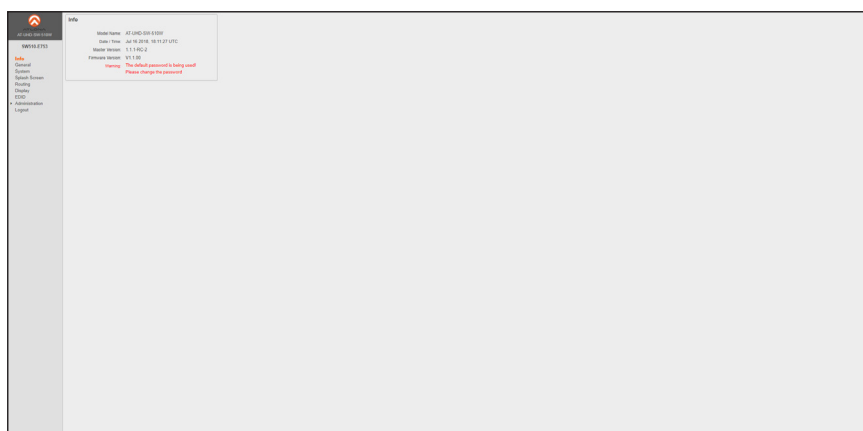


**NOTE:** If using a secure connection, click the **Goto Secure Login** button.



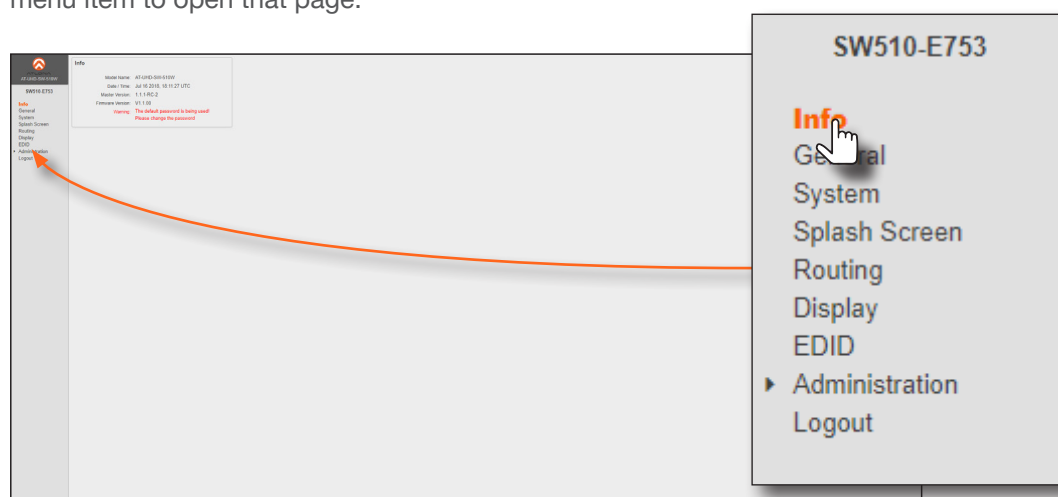


7. The **Info** page will be displayed.

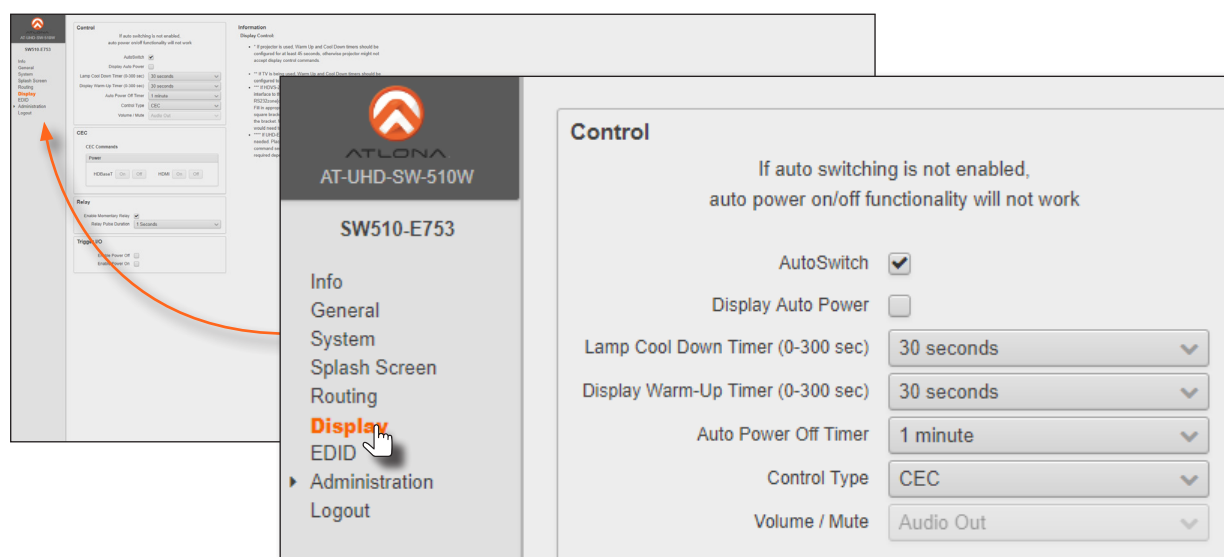


## Menu Bar

The window on the left side of the screen is the menu bar and lists all available menus. Click on the desired menu item to open that page.

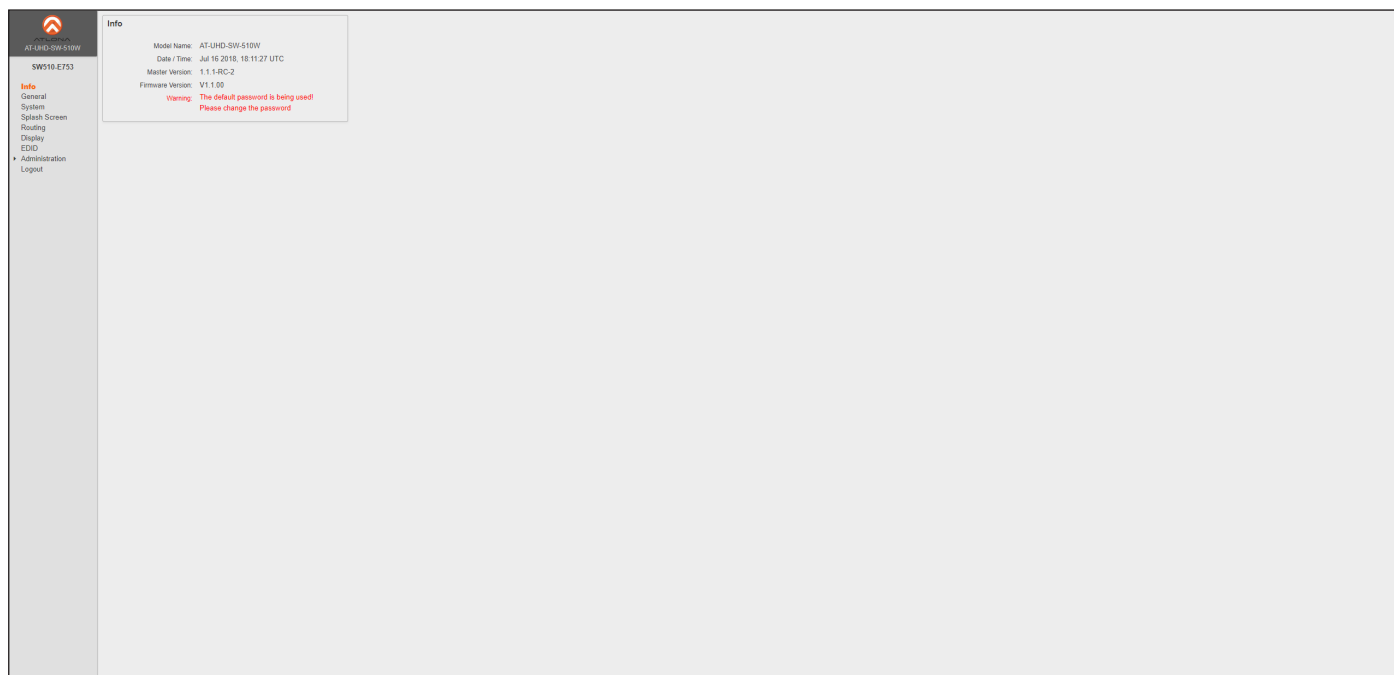


In this example, clicking **Display**, in the menu bar, will display the **Display** page.



## Info

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



### Model Name

The model SKU of this product.

### Date / Time

The current time and date, in Universal Coordinated Time (UTC).

### Master Version

The version of firmware.

### Firmware Version

The version of firmware that the AT-UHD-SW-510W is running. Always make sure to check the AT-UHD-SW-510W product page, on the Atlona web site, for the latest version of firmware.

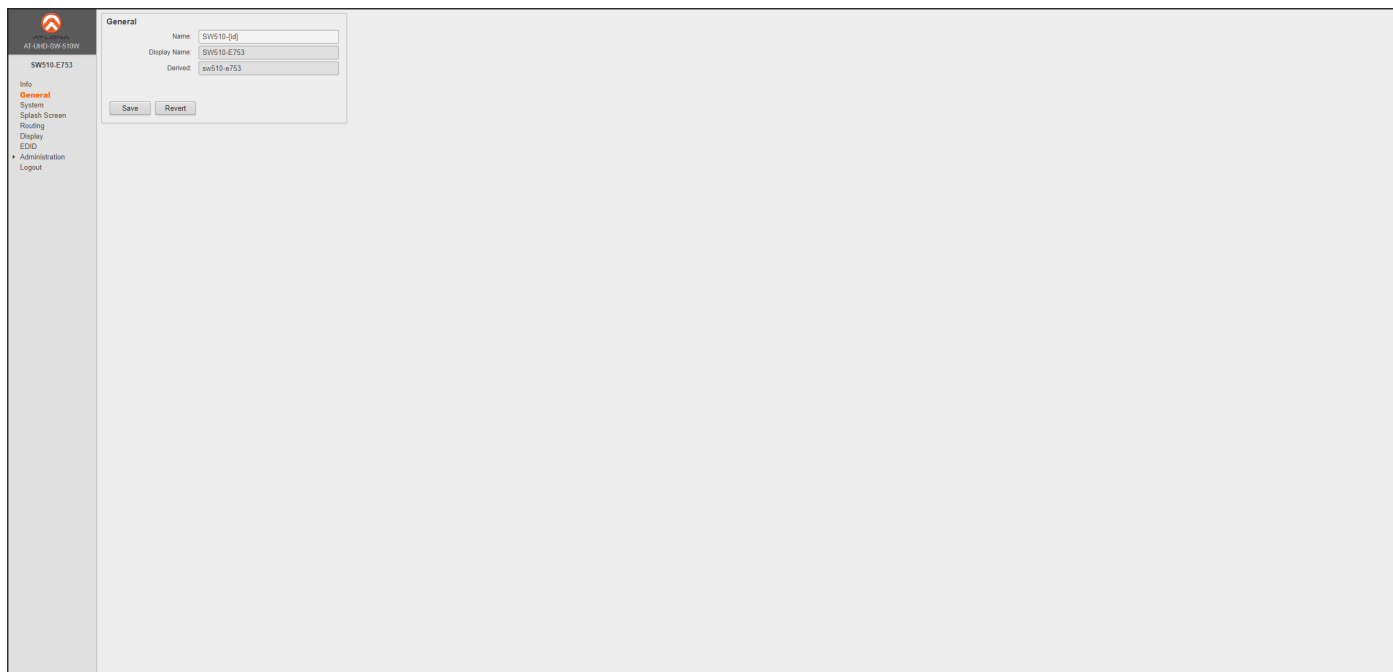


**NOTE:** When the default password is used as part of the login credentials, the following message will be displayed in the Info box:

The default password is being used!  
Please change the password.

To change the password, refer to the [User Accounts page \(page 67\)](#).

## General page



### Name

Enter the desired name of the AT-UHD-SW-510W in this text field. Include the {id} tag to use the last four digits of the hardware MAC address. The {id} tag is optional and can be placed anywhere within the **Name** field.



**NOTE:** The hardware MAC address differs from the MAC address of the unit, which is found on an adhesive label applied to the bottom of the unit.

### Display Name

The name based on the information provided in the **Name** field. This name is used by the AT-UHD-SW-510W to identify it within the OSD.

### Derived

This field will automatically be populated by the AT-UHD-SW-510W, based on the information provided in the **Name** field. This field provides a “computer-friendly” name used by the SSID. If special characters and/or spaces are included in the **Name** field, then these are removed when populating this field.

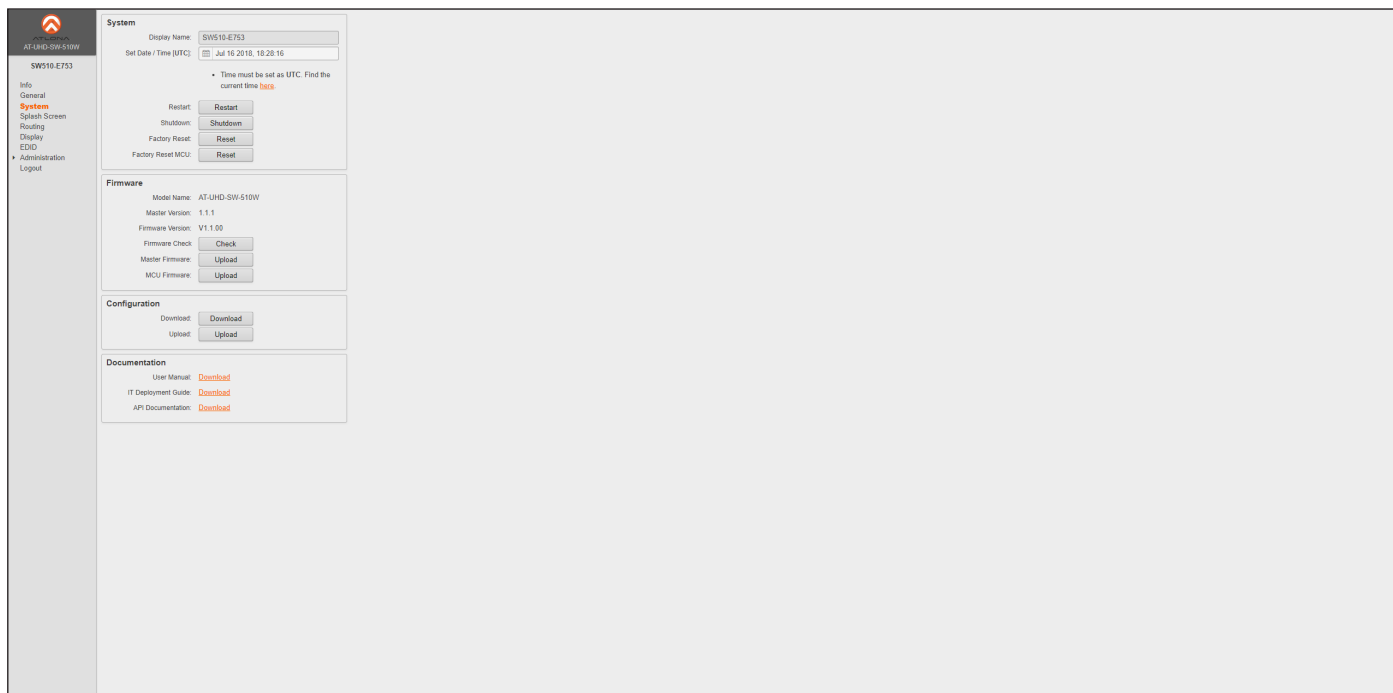
### Save

Click this button to accept all changes.

### Revert

Click this button to abort changes and reset the previous text in the **Name** field.

## System page



### Display name

The name of the display, provided in the **Name** field of the **General** tab. Refer to [General page \(page 47\)](#) for more information.

### Set Date / Time [UTC]

Displays the current time and date, in Universal Coordinated Time (UTC). UTC must be used when setting the date and time. Refer to [Setting the System Date and Time \(page 26\)](#) for more information.

### Restart

Click this button to restart the AT-UHD-SW-510W.

### Shutdown

Click this button to shut down the AT-UHD-SW-510W. This should always be performed before disconnecting power from the unit.

### Factory Reset

Click this button to reset the AT-UHD-SW-510W to factory-default settings. Resetting to factory-default setting may take up to five minutes to complete. Refer to [Default Settings \(page 78\)](#) for the list of default settings.

### Factory Reset MCU

Click this button to reset the MCU of the AT-UHD-SW-510W. This feature is used as part of [Updating the Firmware \(page 74\)](#).

### Model Name

The SKU of the product: AT-UHD-SW-510W.

### Master Version

The master version of firmware. Always make sure to check the AT-UHD-SW-510W product page, on the Atlona web site, for the latest version of firmware.

### Firmware Version

The version of (MCU) firmware that the AT-UHD-SW-510W is running. Always make sure to check the AT-UHD-SW-510W product page, on the Atlona web site, for the latest version of firmware.

### **Firmware Check**

Click the **Check** button to check for the latest version of firmware. Each time the unit is rebooted, this feature is performed, automatically. The AT-UHD-SW-510W must be connected to the Internet to use this feature.

### **Master Firmware**

Click the **Upload** button to select the master firmware file, when updating the unit.

### **MCU Firmware**

Click the **Upload** button to select the MCU firmware file, when updating the unit.

### **Download**

Click this button to save the current configuration to a file on the connected computer.

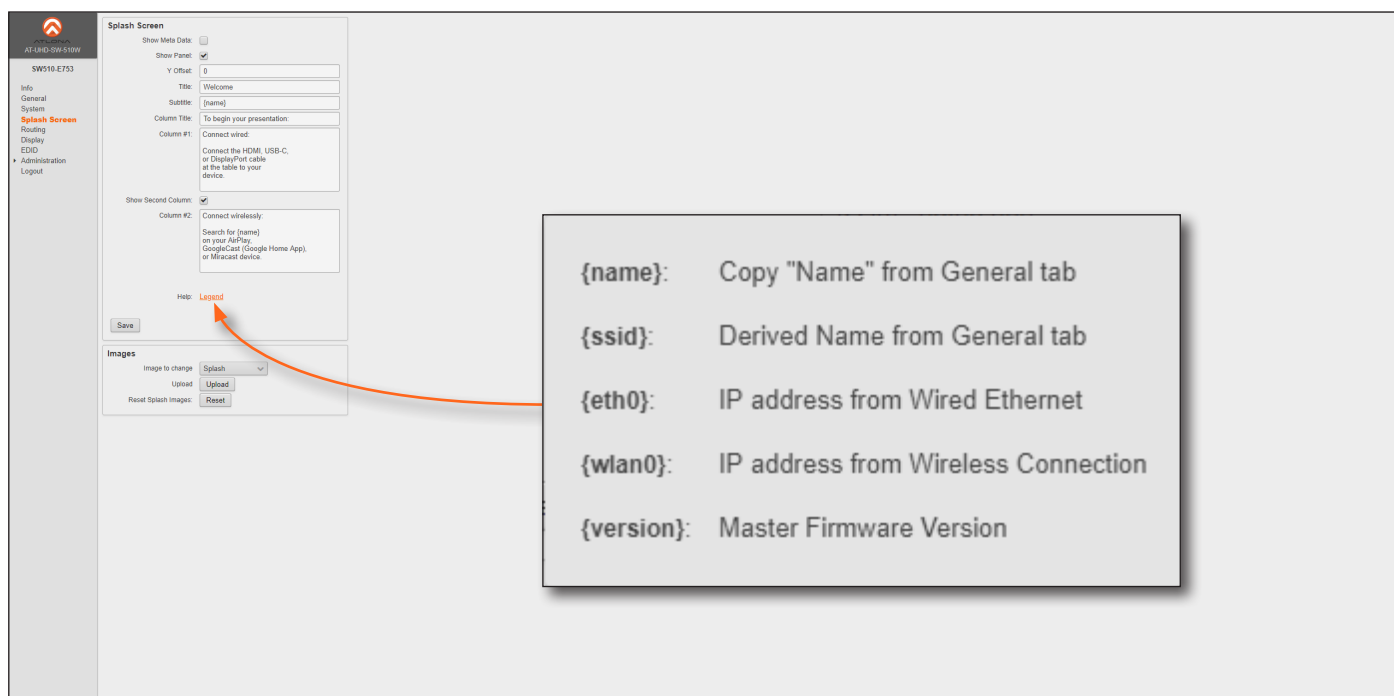
### **Upload**

Click this button to upload a configuration file to the AT-UHD-SW-510W. Uploading a new configuration file will overwrite the current configuration settings.

### **Documentation**

Click each of these links to access the latest version of the User Manual, IT Deployment Guide, or API Documentation.

## Splash Screen page



### Splash Screen

#### Show Meta Data

Click this check box to display metadata on the splash screen.

#### Show Panel

Check (enable) this box to display the panel, containing connection instructions and other information.

#### Y Offset

Sets the up-and-down position of the overlay panel, on the screen. A value of 0 vertically positions the panel in the center of the screen. Positive values move the panel down. Negative values move the panel up.

#### Title

The title of the overlay panel. The default value is "Welcome".

#### Subtitle

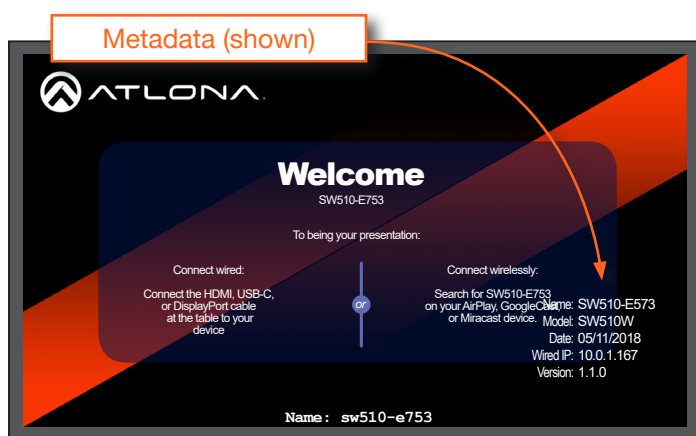
The text directly under the text in the **Title** field. The default text contains the name of the unit.

#### Column Title

The title text for the centered text, above both instruction columns. The default text is "To begin your presentation".

#### Column #1

The text positioned in the left column. The default text is "Connect wired: Connect the HDMI, USB-C, or DisplayPort cable at the table to your device".



### Metadata (shown)



#### Show Second Column

Check this box to display the second (right-hand) column. Uncheck this box to hide the text in this column.

#### Column #2

The text positioned in the right-hand column. The default text is "Connect wirelessly: Connect the Wi-Fi network", entercode, and enable AirPlay, GoogleCast, or Miracast".

#### Legend

Click this link to display a list of available tags that can be used in any of the text fields. Refer to the illustration above.

#### Save

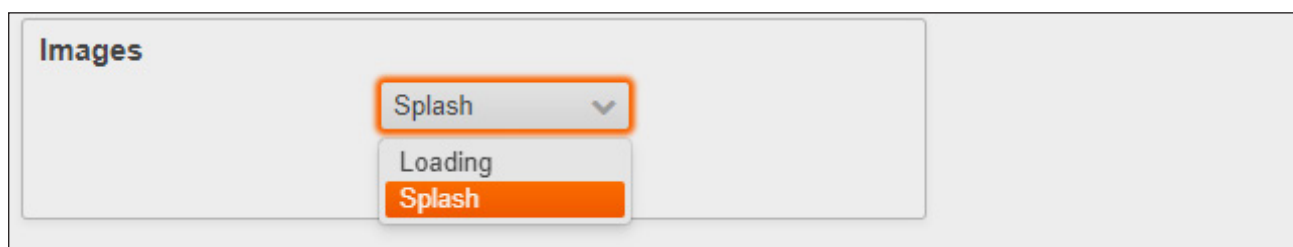
Click this button to commit all changes on this page.

## Images

The default loading and splash screen can be replaced with a custom image. Click the drop-down list and select the target image. Once the file is selected, it will automatically be pushed to the AT-UHD-SW-510W.

Preferred image size is either 1920x1080 or 3840x2160. All common image types, such as JPG, BMP, PNG, TIF, GIF, are supported.

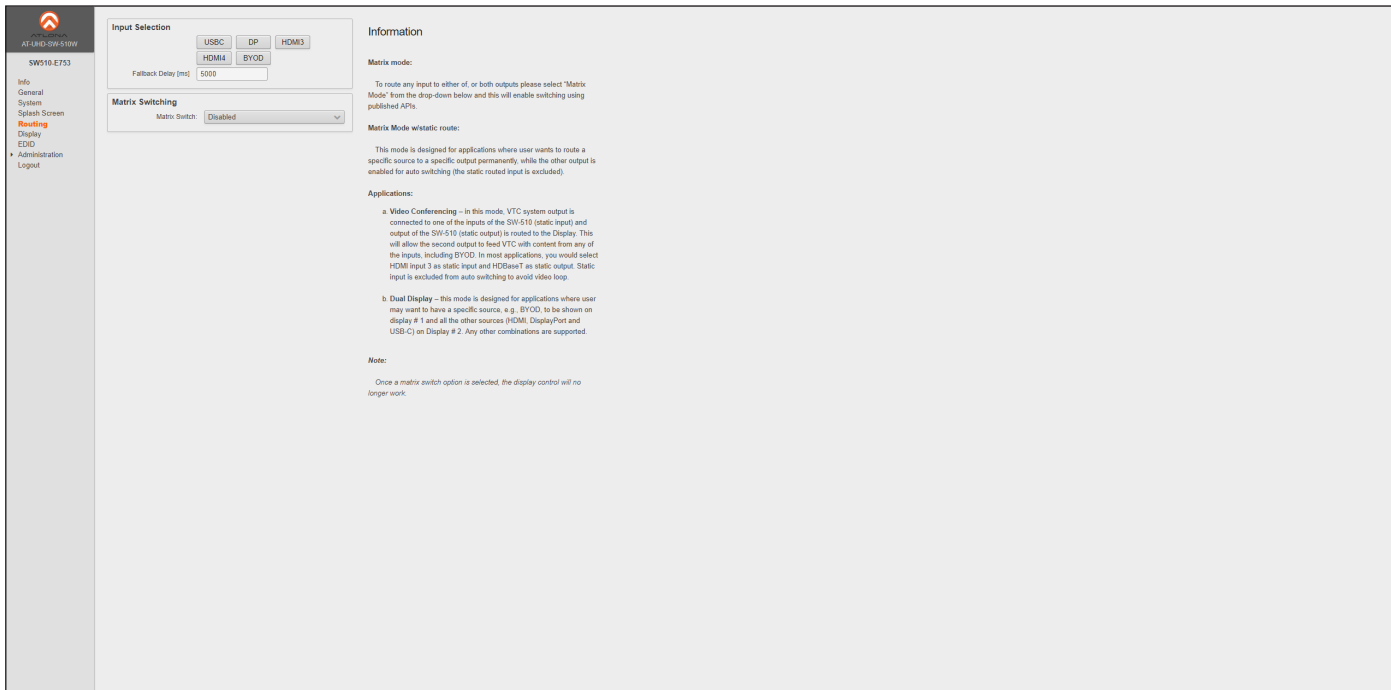
1. Click the drop-down list and select the type of image to upload.



Setting	Description
Loading	Changes background for the boot-up screen.
Splash	Changes the background for the Splash Screen, containing the Panel, OSD, and Metadata (if displayed).

2. Click the **Upload** button to select the desired image.
3. Click the **Open** button on the **Open** dialog box to upload the image.

## Routing page



**Input Selection**

USB-C DP HDMI3

HDMI1 BYOD

Fallback Delay (ms): 5000

**Matrix Switching**

Matrix Switch: Disabled

**Information**

**Matrix mode:**

To route any input to either of, or both outputs please select "Matrix Mode" from the drop-down below and this will enable switching using published APIs.

**Matrix Mode w/static route:**

This mode is designed for applications where user wants to route a specific source to a specific output permanently, while the other output is enabled for auto switching (the static routed input is excluded).

**Applications:**

a. **Video Conferencing** – In this mode, VTC system output is connected to one of the inputs of the SW-510 (static input) and output of the SW-510 (static output) is routed to the Display. This will allow the second output to feed VTC with content from any of the inputs, including BYOD. In most applications, you would select HDMI input 3 as static input and HDMIout1 as static output. Static input is excluded from auto switching to avoid video loop.

b. **Dual Display** – This mode is designed for applications where user may want to have a specific source, e.g., BYOD, to be shown on display # 1 and all the other sources (HDMI, DisplayPort and USB-C) on Display # 2. Any other combinations are supported.

**Note:**

Once a matrix switch option is selected, the display control will no longer work.

### Input Selection

#### USB-C, DP, HDMI3, HDMI1, BYOD

Click the desired button to set the auto-switch input.

#### Fallback Delay (ms)

Set the time interval, in seconds, before the AT-UHD-SW-510W auto-switches to the selected input, if no signal is present. The default value is 5000 milliseconds (5 seconds).

### Matrix Switching

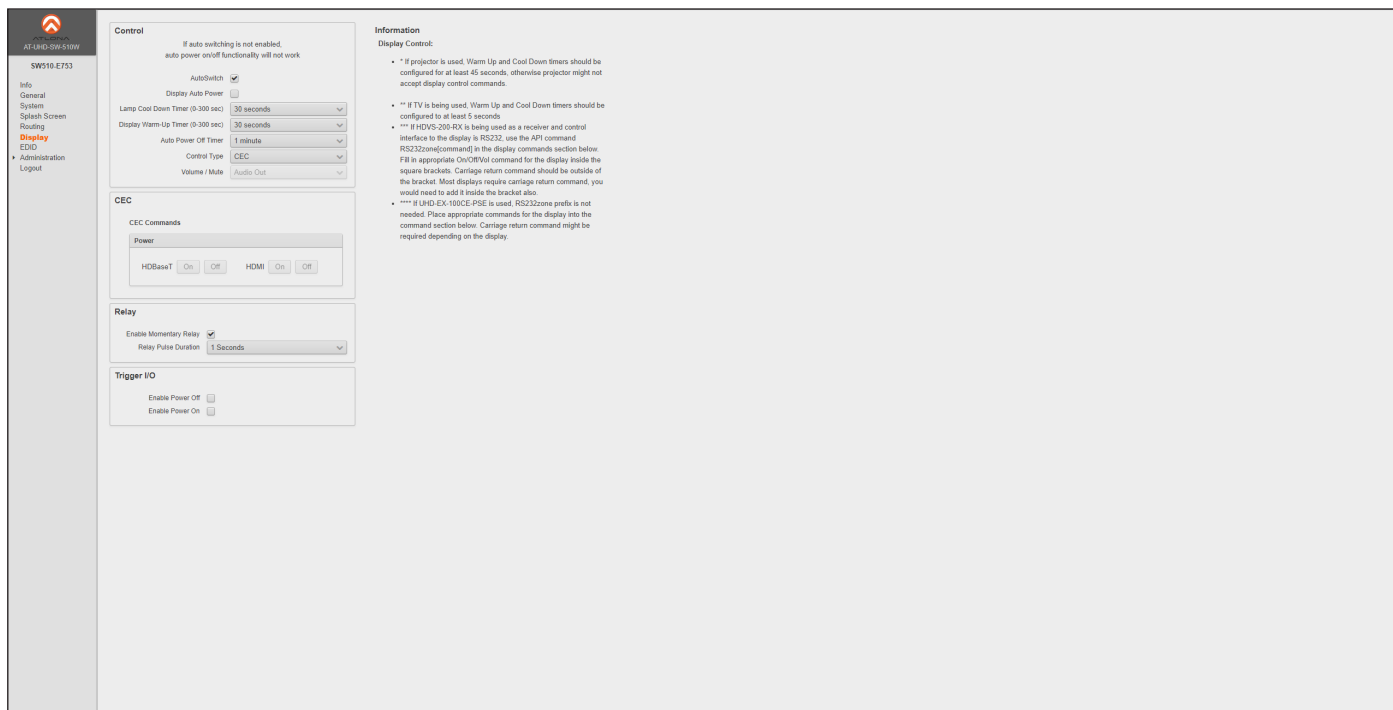
#### Matrix Switch

Click this drop-down list to select the desired matrix mode. Refer to [Matrix Modes \(page 34\)](#) for more information.

Modes	Description
Disabled	Matrix mode is disabled (default setting).
Matrix Mode	Allows the AT-UHD-SW-510W to independently switch between any input or both outputs.
Matrix Mode w/ Static Route	Use this mode when integrating the AT-UHD-SW-510W with a video conference system.



## Display page



**Control**

If auto switching is not enabled, auto power on/off functionality will not work.

AutoSwitch ☒

Display Auto Power ☐

Lamp Cool Down Timer (0-300 sec)

Display Warm-Up Timer (0-300 sec)

Auto Power Off Timer

Control Type

Volume / Mute

**CEC**

CEC Commands

Power

HDBaseT   HDMI

**Relay**

Enable Momentary Relay ☒

Relay Pulse Duration

**Trigger I/O**

Enable Power Off ☐

Enable Power On ☐

**Information**

Display Control:

- \* If projector is used, Warm Up and Cool Down timers should be configured for at least 45 seconds, otherwise projector might not accept display control commands.
- \*\* If TV is being used, Warm Up and Cool Down timers should be configured to at least 5 seconds.
- \*\*\* If HDBaseT-200-RX is being used as a receiver and control interface to the display is RS232, use the API command RS232zone(command) in the display commands section below. FR is appropriate On/Off command for the display inside the square brackets. Carriage return command should be outside of the bracket. Most displays require carriage return command, you would need to add it inside the bracket also.
- \*\*\*\* If UHD EX-100CE-PSE is used, RS232zone prefix is not needed. Place appropriate commands for the display into the command section below. Carriage return command might be required depending on the display.

## Control

### AutoSwitch

Click this box to enable or disable auto-switching. When this box is checked, the AT-UHD-SW-510W will automatically switch inputs when the new device is connected. To disable auto-switching, uncheck this box.

### Display Auto Power

Click this check box to allow the AT-UHD-SW-510W to send the power-on command to the display when an A/V signal is detected. When the AV signal is no longer present, then the AT-UHD-SW-510W will send the power-off command to the display. If this feature is not desired, then uncheck this box. This feature is disabled by default.

### Lamp Cool Down Timer (0 - 300 sec)

Click this drop-down list to select the lamp cool down timer interval. This value is the cool-down interval, in seconds, before the projector can be powered-off. During this time, the projector will not accept any “power on” or “power off” commands until the last “power off” command has been processed and the projector lamp has completed the cool-down cycle. Range: 0 to 300. The default value is 30 seconds.

### Display Warm-Up Timer (0 - 300 sec)

Click this drop-down list to select the display warm-up time interval. Range: 0 to 300. The default value is 30 seconds.

### Auto Power Off Timer

Click this drop-down list to set the time interval, in seconds, between when the loss of A/V signal is detected and when the “Display Off” command is sent to the display. Range: 0 to 300. The default value is 1 minute.

### Control Type

Click this drop-down list to set the time interval, in seconds, between when the loss of A/V signal is detected and when the “Display Off” command is sent to the display. Range: 0 to 300. The default value is 1 minute.

### Control Type

Click this drop-down list to select the control method for sending commands.

Setting	Description
RS-232	RS-232 is used to send commands.
IP	Commands are sent over IP.
CEC	Uses CEC to send commands.



**NOTE:** If **Control Type** is set to **CEC**, then the **Volume / Mute** drop-down list will be disabled. Refer to the [CEC \(page 46\)](#) section for more information.

### CEC

#### Power

When a display is connected to the AT-UHD-SW-510W, power-on and power-off control of the display using the CEC protocol. The power-on and power-off command can also be sent over HDBaseT or HDMI. These buttons will only be enabled if a device is connected to the AT-UHD-SW-510W, using the correct cable. For example, the HDMI ON / OFF buttons will only be enabled when an HDMI cable is connected from the AT-UHD-SW-510W to a display.

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

### Relay

#### Enable Momentary Relay

When enabled, the **RELAY** port can be used to control screens, curtains, and other devices. Use a 48 V DC relay with no more than 1 A current draw. This feature is enabled, by default. Refer to [Relay \(page 12\)](#) for wiring information.

#### Relay Pulse Duration

Click this drop-down list to select the desired pulse duration for the relay. Some devices may require different time intervals, to recognize a state change.

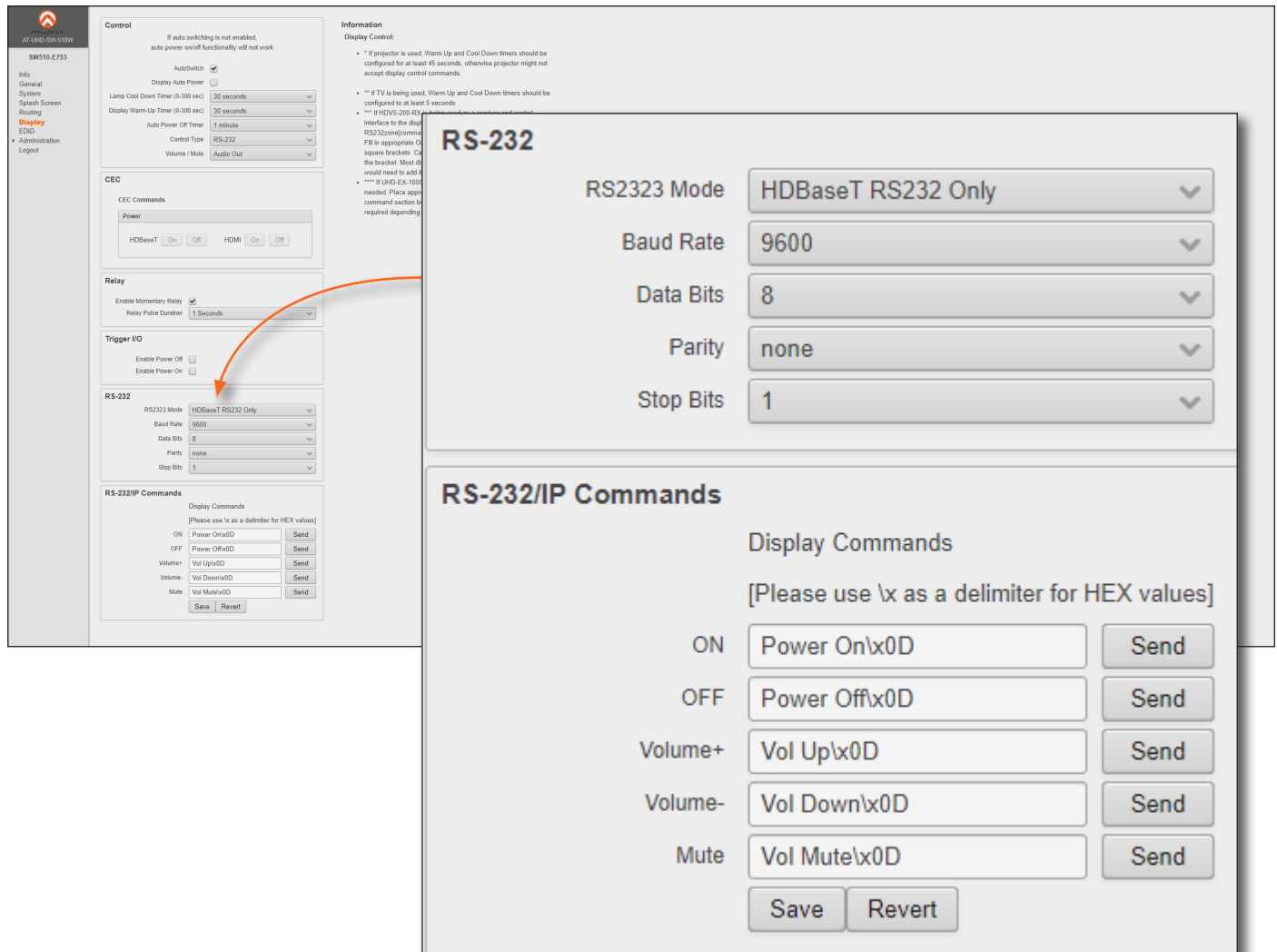
### Trigger I/O

This section defines how the **TRIGGER** port will respond to varying voltage levels. Either or both of the following conditions can be enabled or disabled.

- **Enable Power Off**  
Check this box to enable a power-off state when the trigger voltage is pulled from low to high. Uncheck this box to disable this function.
- **Enable Power On**  
Check this box to enable a power-on state when the trigger voltage is pulled from low to high. Uncheck this box to disable this function.

## Control Type : RS-232

When **RS-232** is selected from the **Control Type** drop-down, both the **HDBaseT RS-232** and **RS-232/IP Commands** section is displayed.



**Control**

If auto switching is not enabled, auto power on/off functionality will not work.

AutoSwitch ☒

Display Auto Power ☐

Lamp Cool Down Timer (0-300 sec) 30 seconds

Display Warm-Up Timer (0-300 sec) 30 seconds

Auto Power Off Timer 1 minute

Control Type RS-232

Volume / Mute Audio Out

**CEC**

CEC Commands

Power HDBaseT ☐ Off ☐ HDMI ☐ On ☐ Off ☐

**Relay**

Enable Momentary Relay ☒

Relay Pulse Duration 1 Seconds

**Trigger I/O**

Enable Power Off ☐

Enable Power On ☐

**RS-232**

RS2323 Mode HDBaseT RS232 Only

Baud Rate 9600

Data Bits 8

Parity none

Stop Bits 1

**RS-232/IP Commands**

Display Commands

[Please use \x as a delimiter for HEX values]

ON Power On\x0D Send

OFF Power Off\x0D Send

Volume+ Vol Up\x0D Send

Volume- Vol Down\x0D Send

Mute Vol Mute\x0D Send

Save Revert

**RS-232**

RS2323 Mode HDBaseT RS232 Only

Baud Rate 9600

Data Bits 8

Parity none

Stop Bits 1

**RS-232/IP Commands**

Display Commands

[Please use \x as a delimiter for HEX values]

ON Power On\x0D Send

OFF Power Off\x0D Send

Volume+ Vol Up\x0D Send

Volume- Vol Down\x0D Send

Mute Vol Mute\x0D Send

Save Revert

## HDBaseT RS-232

The RS-232 settings over the **HDBaseT** port.

Setting	Description
Baud rate	Sets the baud rate. The following options are available: 9600, 14400, 19200, 38400, 57600, 115200.
Data bit	Sets the number of data bits used to represent each character of data. The following options are available: 7 or 8.
Parity	Sets the parity bit, which can be included with each character to detect errors during the transmission of data. The following options are available: None, Odd, or Even.
Stop bit	Sets the stop bit. Stop bits are sent at the end of each character, allowing the client to detect the end of a character stream. The following options are available: 1 or 2.

### RS-232/IP Commands

The RS-232 settings over the **HDBaseT** port.

Enter the appropriate command for the display in each field. Command can be either ASCII or hex. If hex values are being used, then use the /x delimiter at the end of the string. ON, OFF, Volume+ (increase), Volume- (decrease), and Mute are supported.

**RS-232**

RS2323 Mode
HDBaseT RS232 Only
Baud Rate
9600
Data Bits
8
Parity
none
Stop Bits
1

**RS-232/IP Commands**

Display Commands  
[Please use \x as a delimiter for HEX values]

ON
Power On\x0D
Send
OFF
Power Off\x0D
Send
Volume+
Vol Up\x0D
Send
Volume-
Vol Down\x0D
Send
Mute
Vol Mute\x0D
Send

Save
Revert

#### Save

Click this button to commit all changes.

#### Revert

Click this button to undo all changes.

## Control Type : IP

When **IP** is selected from the **Control Type** drop-down, both the **IP** and **RS-232/IP Commands** section is displayed.

### IP Address

Enter the IP address of the remote device.

### Port [0 - 65535]

Enter the listening port for the remote device. Values from 0 through 65535 are valid.

IP address	<input type="text" value="10.20.50.58"/>
Port [0-65535]	<input type="text" value="23"/>

### RS-232/IP Commands

The IP settings over the **HDBaseT** port.

Enter the appropriate command for the display in each field. Command can be either ASCII or hex. If hex values are being used, then use the /x delimiter at the end of the string. ON, OFF, Volume+ (increase), Volume- (decrease), and Mute are supported.

**RS-232/IP Commands**

Display Commands  
[Please use \x as a delimiter for HEX values]

ON	<input type="text" value="Power On\x0D"/>	<input type="button" value="Send"/>
OFF	<input type="text" value="Power Off\x0D"/>	<input type="button" value="Send"/>
Volume+	<input type="text" value="Vol Up\x0D"/>	<input type="button" value="Send"/>
Volume-	<input type="text" value="Vol Down\x0D"/>	<input type="button" value="Send"/>
Mute	<input type="text" value="Vol Mute\x0D"/>	<input type="button" value="Send"/>

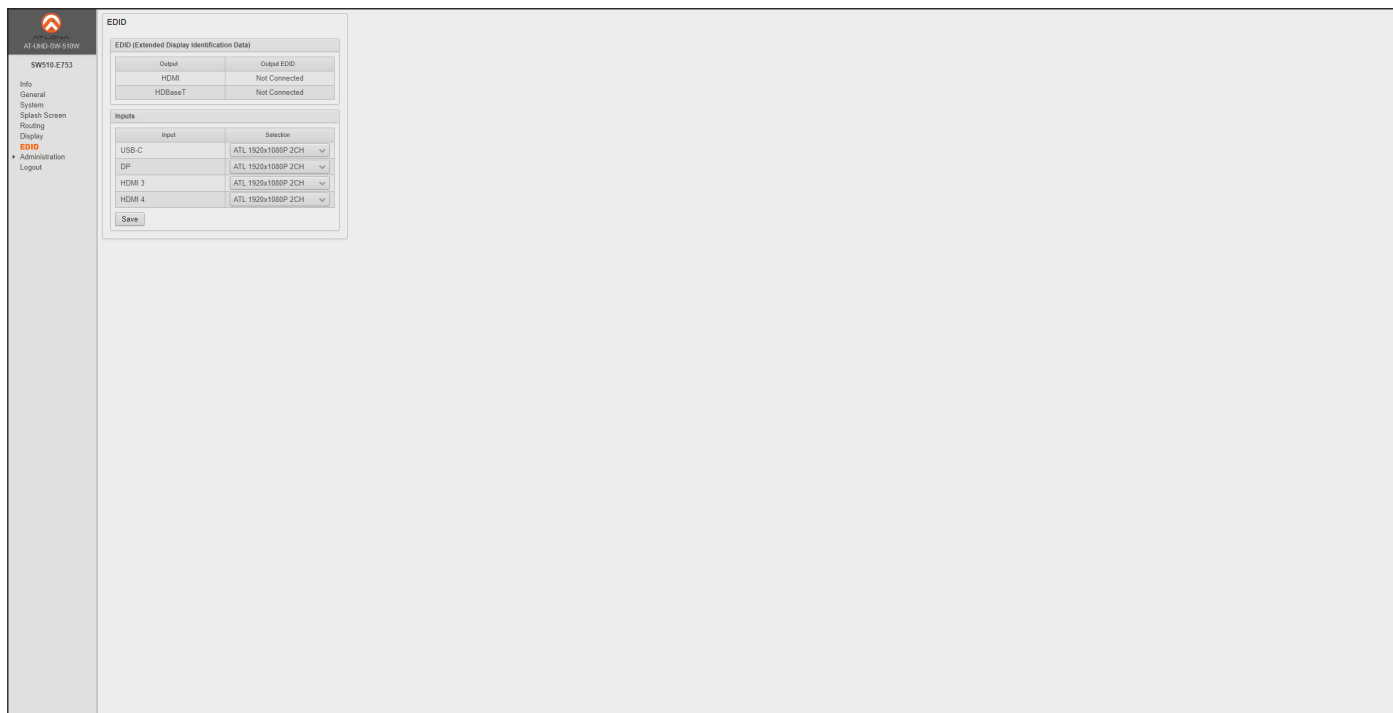
### Save

Click this button to commit all changes.

### Revert

Click this button to undo all changes.

## EDID page



### EDID (Extended Display Identification Data)

Displays the EDID assigned that is being used by each output. Press the **Save** button to save the EDID to a file.

### Inputs

The **Input** column displays each of the inputs on the AT-UHD-SW-510W. Click the drop-down list, under the **Selection** column, to select the desired EDID to be used. When selecting an EDID, make sure that the display/sink device is capable of supporting the resolution/timing. If the sink device is not able to support a feature, then the source will not be displayed. Selecting the Default EDID will send the EDID from the display/sink to the source. Click the **Save** button to accept the changes. The table below lists the available EDID presets. Each EDID is available for all inputs.

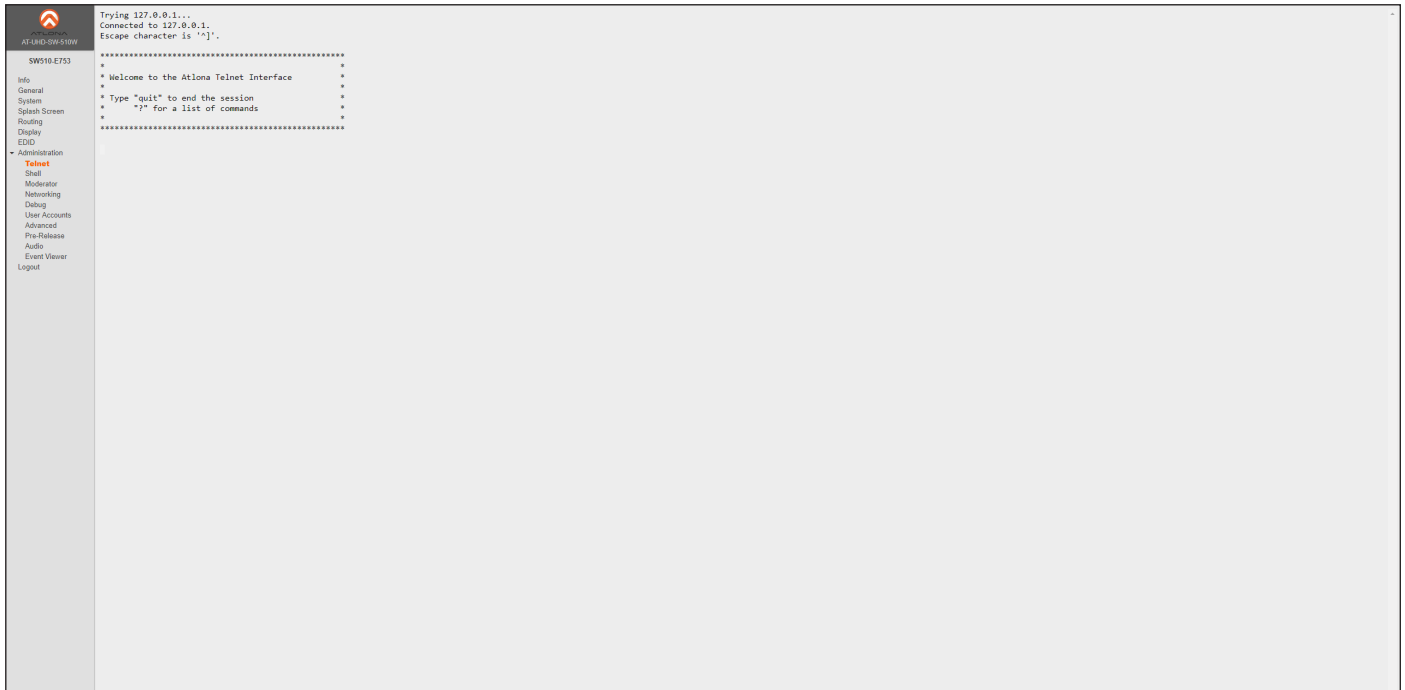
The table below provides a listing of available EDID presets.

EDID listing	
4K60 2CH	1366x768@60 2CH
4K30 2CH	1280x800p60 2CH
4K30 4:4:4 2CH	1280x720p60 2CH
1920x1200p60 2CH	1024x768p60 2CH
1920x1080P 2CH	800x600p60 2CH
1600x900p@60 2CH	

## Administration page

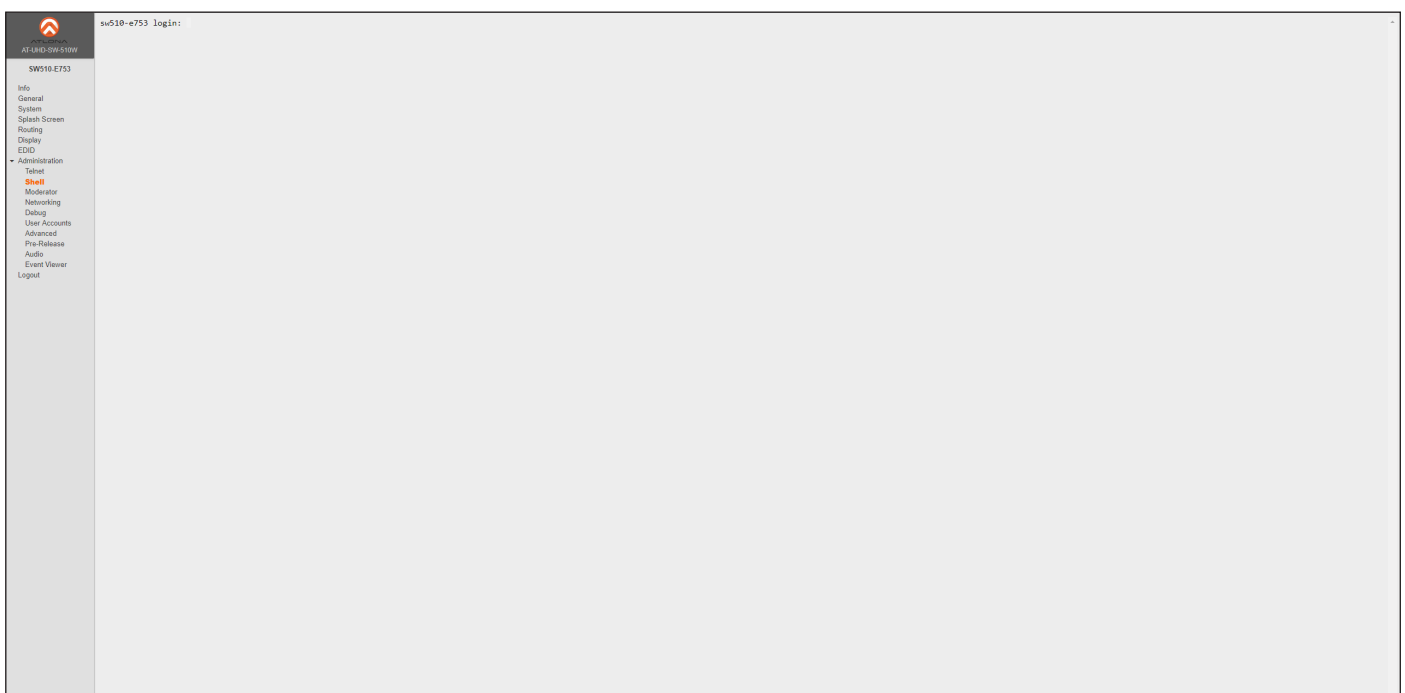
### Telnet page

The **Telnet** page provides an emulated terminal for entering commands.



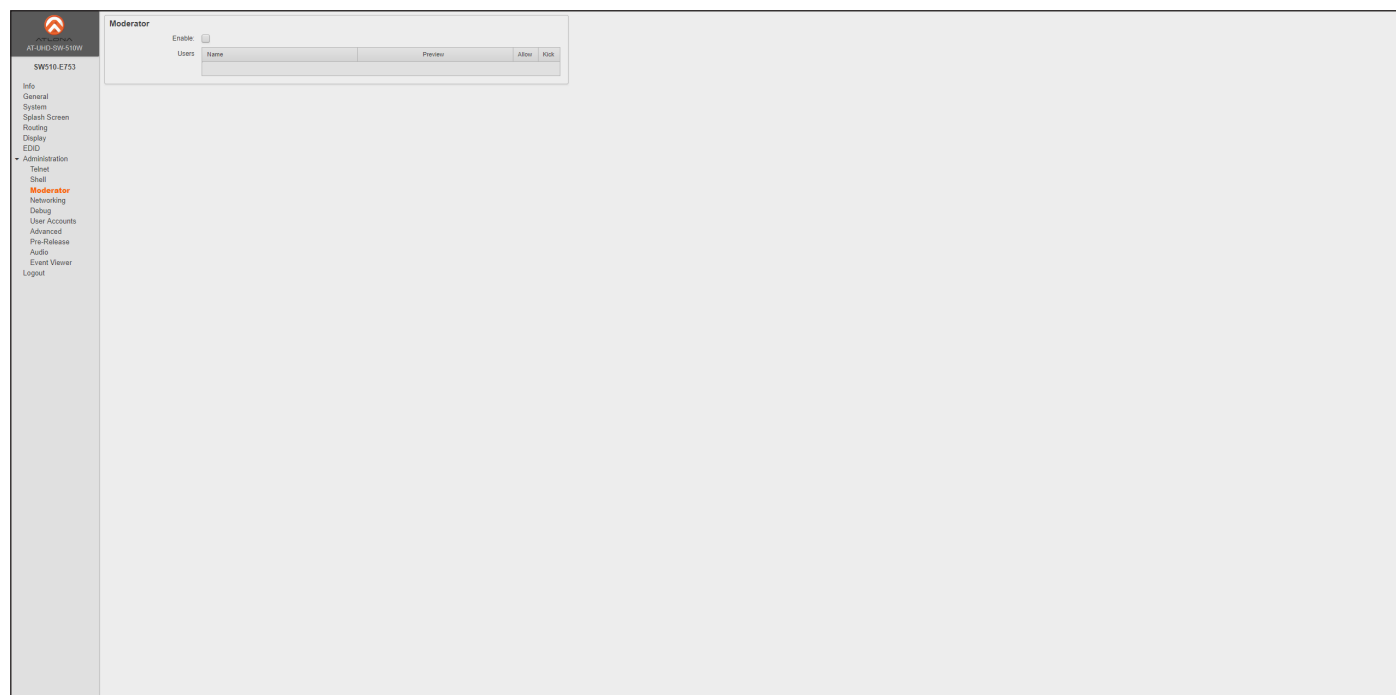
### Shell page

The **Shell** page is provided for use only by Atlona Technical Support Engineers.



## Moderator page

The **Moderator** page provides control of which device, that are casting, are permitted to display content. Refer to [Using Moderator Mode \(page 41\)](#) for more information.



### Enable

Click this check box to enable or disable Moderator mode. If this box is checked, then Moderator mode is enabled. In order to monitor which devices are allowed to display content, this box must be checked before a device begins casting. If a device is already casting, then enabling this feature will have no effect.

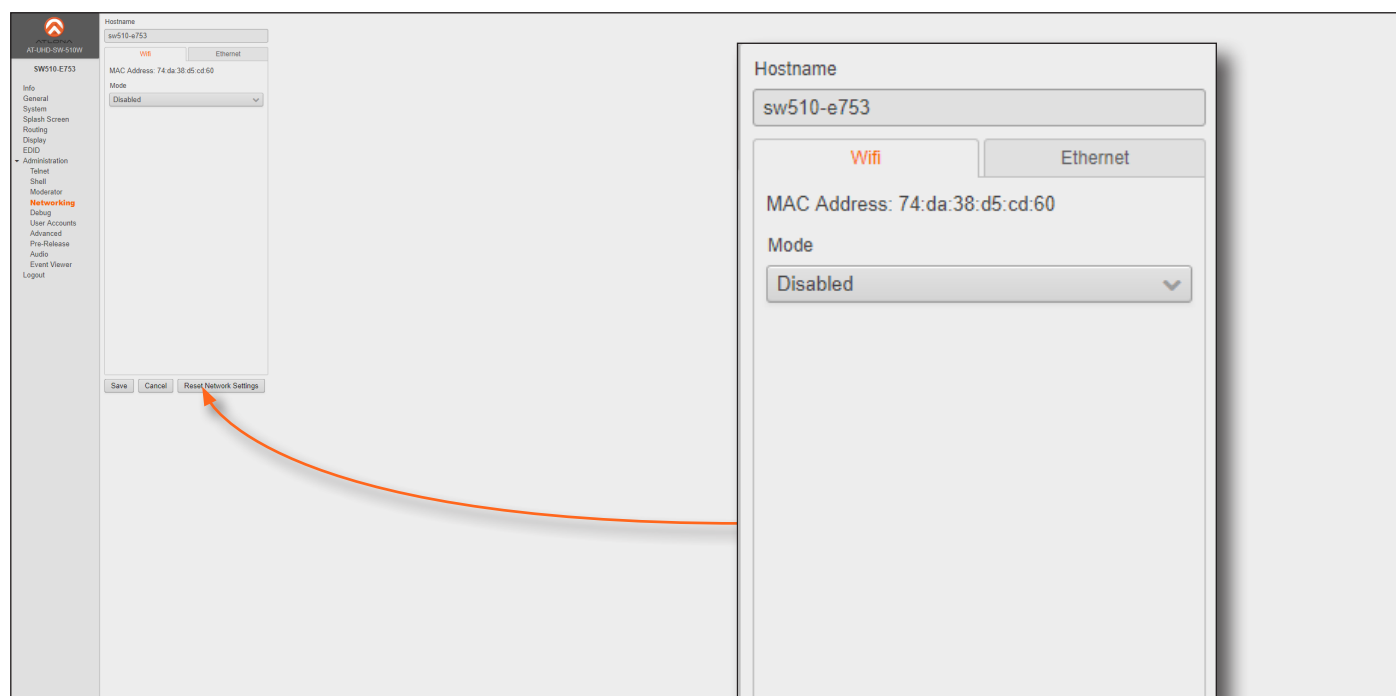
### Users

This table lists all users which are casting using the AT-UHD-SW-510W. Up to four users can be hosted at one time. Devices will only appear in this table when they are casting. Moderator mode must be enabled for devices to be displayed in this table. When casting devices are displays an **Allow** and **Kick** button will also be displayed.



## Networking page

This page contains a **Wifi** and **Ethernet** tab. Use the settings, under these tabs, to connect the AT-UHD-SW-510W to a network or Wireless Access Point (WAP). Refer to the IT Network Deployment Guide for detailed information on configuring the AT-UHD-SW-510W in various network environments.



### Hostname

The name assigned to the AT-UHD-SW-510W. This name can be changed, if desired. Refer to the [General page \(page 47\)](#).

### Mode (Wifi)

Select the Wi-Fi mode from this drop-down list. Refer to the next page for more information on configuration of Wi-Fi modes.

### Save

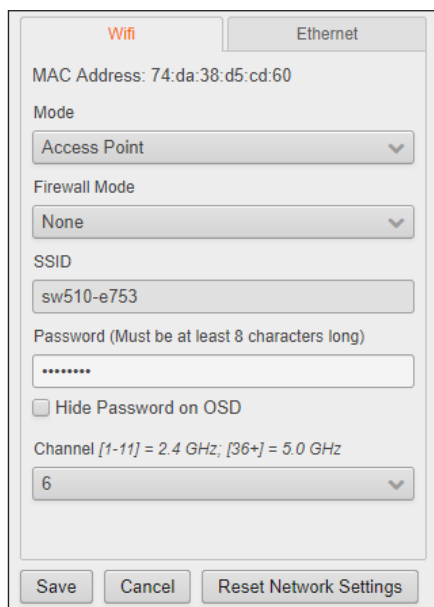
Click this button to accept all changes to the **Wifi** tab. When Connect mode is selected, click this button to connect the AT-UHD-SW-510W to the wireless network.

### Cancel

Resets the Wifi and Ethernet settings to factory-default settings, then displays the Wifi tab.

### Reset Network Settings

Click this button to reset the network settings to factory-default.



Wifi Ethernet

MAC Address: 74:da:38:d5:cd:60

Mode  
Access Point

Firewall Mode  
None

SSID  
sw510-e753

Password (Must be at least 8 characters long)  
\*\*\*\*\*

☐ Hide Password on OSD

Channel [1-11] = 2.4 GHz; [36+] = 5.0 GHz  
6

Save Cancel Reset Network Settings

## WiFi tab

### Mode

Select this mode to use the AT-UHD-SW-510W as a Wireless Access Point (WAP).

Setting	Description
Access Point	Select this option to configure the AT-UHD-SW-510W as a Wireless Access Point, allowing other wireless devices to connect to the same wired network as the AT-UHD-SW-510W.
Connect	Select this mode to connect the AT-UHD-SW-510W to the specified SSID of a wireless host.
Disabled	Select this mode to disable Wi-Fi on the AT-UHD-SW-510W.

### Firewall Mode

This option is unique to Access Point Mode. Refer to the Firewall Mode option, below, for more information.

### SSID

The SSID assigned to the AT-UHD-SW-510W. The SSID name can be changed under the [General page \(page 47\)](#).

### Password

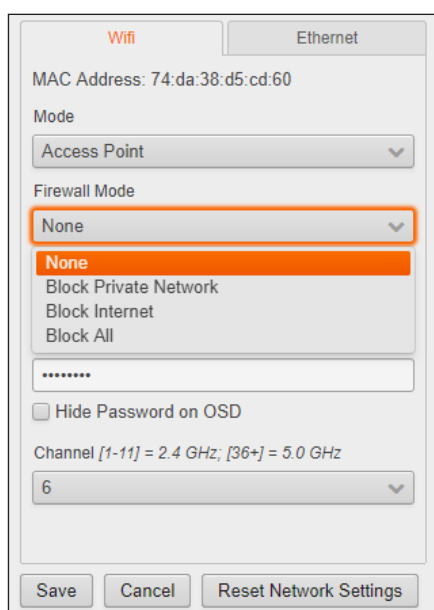
Enter the password, required to connect to the AT-UHD-SW-510W. The default password is 88888888.

### Hide Password on OSD

By default, the password will be displayed on the OSD. Check this box to mask the password.

### Channel

Click this drop-down list to select the desired wireless channel. Consult with a network administrator for assistance, if required. Channels 1 through 11 are 2.4 GHz. Channels 36 and greater use the 5 GHz band.



Wifi Ethernet

MAC Address: 74:da:38:d5:cd:60

Mode  
Access Point

Firewall Mode  
None

Block Private Network  
Block Internet  
Block All

\*\*\*\*\*

☐ Hide Password on OSD

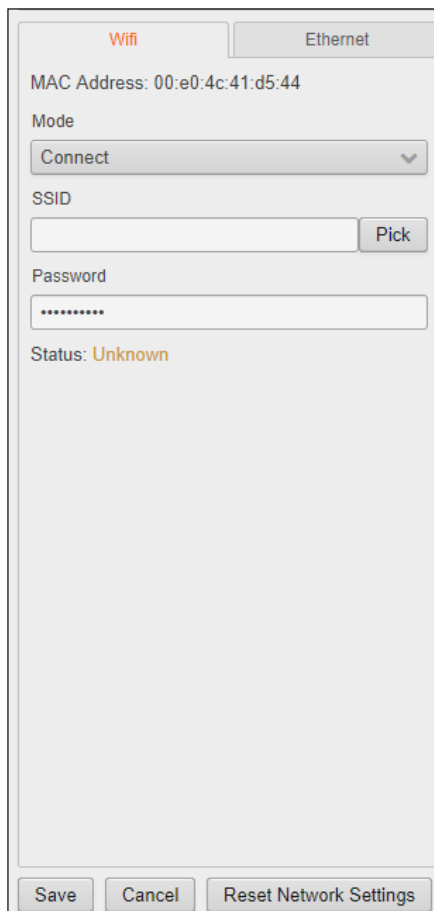
Channel [1-11] = 2.4 GHz; [36+] = 5.0 GHz  
6

Save Cancel Reset Network Settings

## Firewall Mode

This feature is only available when the Wifi mode is set to Access Point. Click the **Firewall Mode** drop-down list to select the desired mode. This feature allows control of incoming and outgoing network traffic. The AT-UHD-SW-510W provides the following firewall modes: Block Private Network, Block Internet, Block All, and None.

Setting	Description
None	Select this option to disable the firewall on the AT-UHD-SW-510W and allow all incoming and outgoing network traffic.
Block Private Network	Select this option to prevent unauthorized clients from accessing the AT-UHD-SW-510W.
Block Internet	Allows wireless access to the AT-UHD-SW-510W but prevent Internet access (Google, YouTube, etc).
Block All	All outbound network traffic is blocked.



The screenshot shows the 'Wifi' tab selected. The MAC Address is 00:e0:4c:41:d5:44. The Mode is set to 'Connect'. The SSID field is empty, and the Password field is masked with dots. The Status is 'Unknown'. At the bottom are 'Save', 'Cancel', and 'Reset Network Settings' buttons.

### Connect Mode

Select this option to allow the AT-UHD-SW-510W to connect to an available wireless network.

### SSID

The name of the wireless network to which the AT-UHD-SW-510W is connected. Click the **Pick** button to select the desired wireless network.

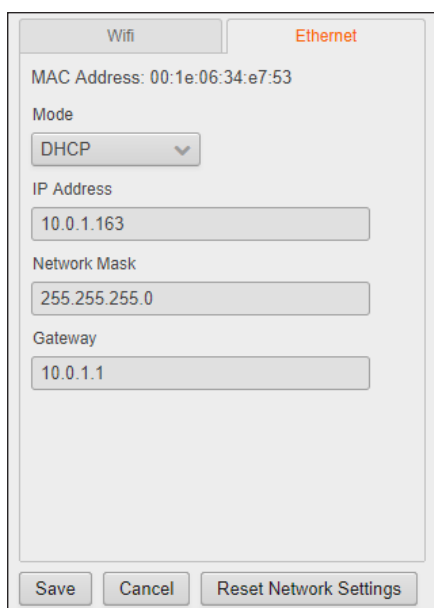
### Password

Enter the password, required to connect to the AT-UHD-SW-510W.

### Status

Displays the connection status.

State	Description
Connected	The AT-UHD-SW-510W is connected to the wireless network.
Not Connected	Unsuccessful connection. Check to make sure the password was entered correctly. This state will also occur if the wireless network, to which the AT-UHD-SW-510W is connected, is taken offline.
Unknown	The network state is unknown. This message is displayed if the AT-UHD-SW-510W has not been configured to connect with a wireless network.



The screenshot shows the 'Ethernet' tab selected. The MAC Address is 00:1e:06:34:e7:53. The Mode is set to 'DHCP'. The IP Address is 10.0.1.163, Network Mask is 255.255.255.0, and Gateway is 10.0.1.1. At the bottom are 'Save', 'Cancel', and 'Reset Network Settings' buttons.

### Ethernet tab

Click this tab to configure wired network settings on the AT-UHD-SW-510W. By default, the AT-UHD-SW-510W is set to DHCP mode, allowing a DHCP server (if present) to assign the unit an IP address.

If a DHCP server is not found within 15 seconds, then the unit will be placed in Auto IP mode and use a self-assigned IP address within the range of 169.254.xxx.xxx.

When **Mode** is set to DHCP, the **IP Address**, **Network Mask**, and **Gateway** fields will automatically be populated by the AT-UHD-SW-510W, using a DHCP server, and cannot be modified.

### Save

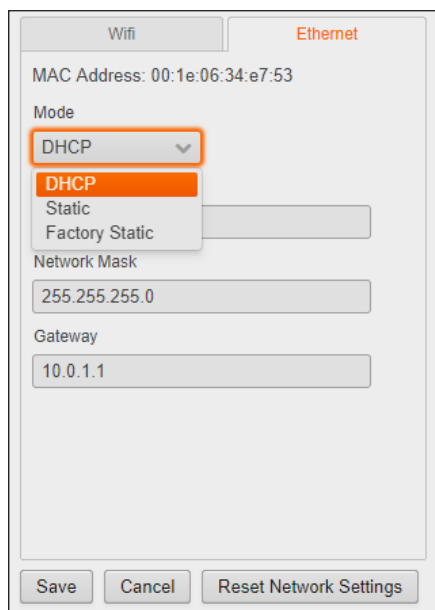
Click this button to connect to the specified wireless network (SSID).

### Cancel

Resets the Wifi and Ethernet settings to factory-default settings, then displays the Wifi tab.

### Reset to Network Settings

Resets the networking subsystem to factory-default settings.



Wifi Ethernet

MAC Address: 00:1e:06:34:e7:53

Mode

DHCP

Static

Factory Static

Network Mask

255.255.255.0

Gateway

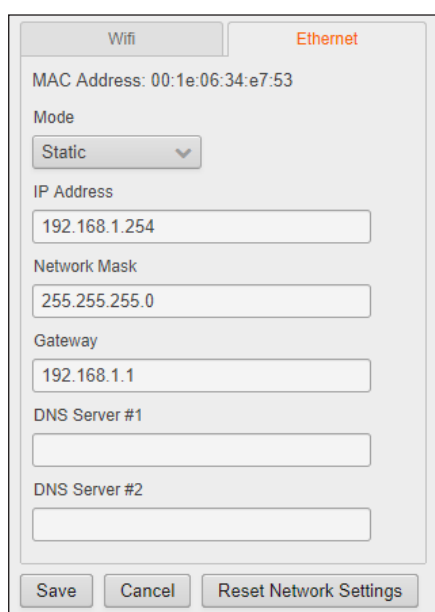
10.0.1.1

Save Cancel Reset Network Settings

### Mode

Click this drop-down to select the desired network mode: DHCP, Static, or Factory Static.

Setting	Description
DHCP	Select this option to have a DHCP server (if available) assign an IP address to the AT-UHD-SW-510W.
Static	Select this option to enter a specific IP address. When set to Static mode, the subnet mask, gateway, and DNS servers can be specified.
Factory Static	Select this option to use the factory-default wired network settings. In this mode, none of the fields can be modified and will be set to the following values: <ul style="list-style-type: none"> <li>IP address = 192.168.1.254</li> <li>Network mask = 255.255.0.0</li> <li>Gateway = 192.168.1.1</li> </ul>



Wifi Ethernet

MAC Address: 00:1e:06:34:e7:53

Mode

Static

IP Address

192.168.1.254

Network Mask

255.255.255.0

Gateway

192.168.1.1

DNS Server #1

DNS Server #2

Save Cancel Reset Network Settings

### Static Mode

Select this option to enter a specific IP address. When set to Static mode, the subnet mask, gateway, and DNS servers can be specified.

### IP Address

Enter the desired IP address for the AT-UHD-SW-510W in this field.

### Network Mask

Enter the subnet mask in this field.

### Gateway

Enter the gateway (router) address in this field.

### DNS Server

Enter the DNS server addresses in the DNS Server #1 and DNS Server #2 fields. If the AT-UHD-SW-510W will be used within an internal LAN, this information is not required.

### Save

Click this button to accept all changes to the **Ethernet** tab.

### Cancel

Resets the Wifi and Ethernet settings to factory-default settings, then displays the Wifi tab.

### Reset to Factory Default

Click this button to set the wired network settings of the AT-UHD-SW-510W to factory-default.


### Connecting to a Wifi Network

1. Select **Connect** from the **Mode** drop-down list.
2. Click the **Pick** button to open the **Pick a Wifi Network** dialog box.

**Pick a Wifi Network**

Pick a Wifi Network to Connect

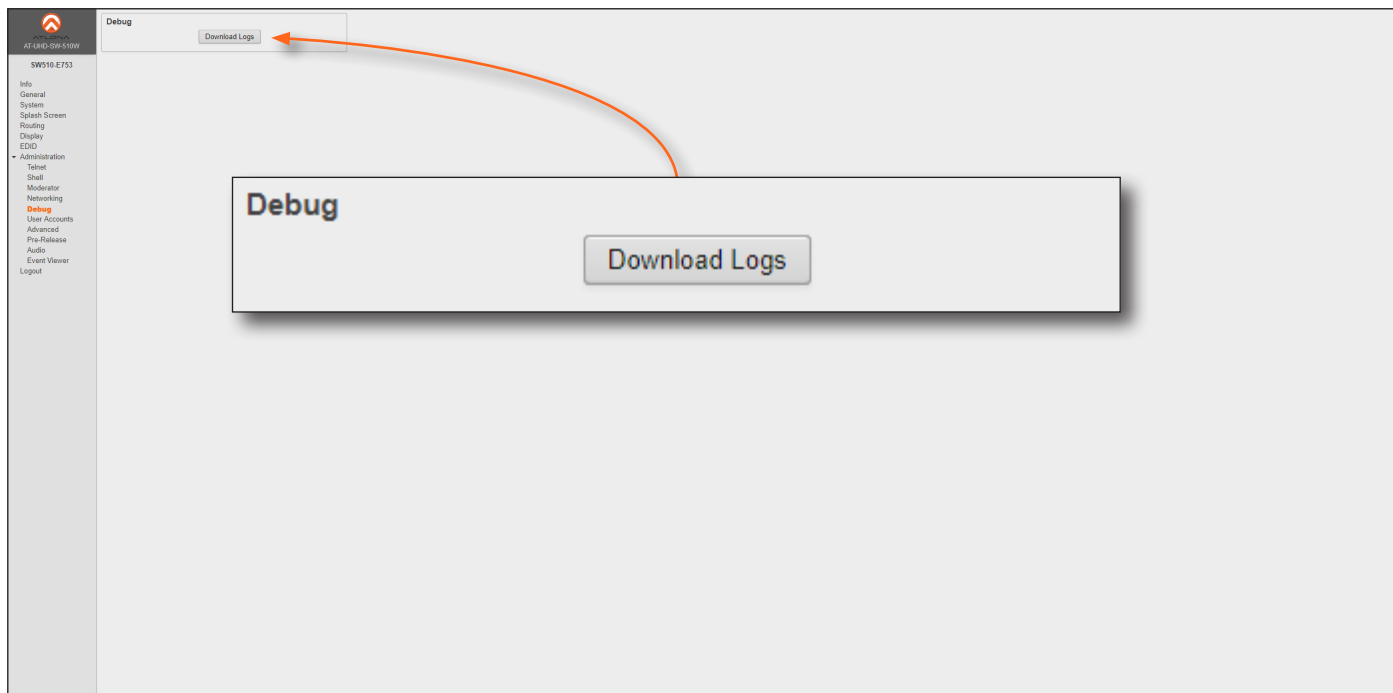
SSID: SSID

SSID	Str ▼	
NETGEAR91	4	
NachoWiFi	4	
HP-Print-OfficeJet Pro 8600	3	
MK-WAP	3	
HuddleRm	3	
ConferenceRm-Main	3	
HuddleRm-5Ghz	3	
Lobby-Display	3	

3. Click on the desired wireless network from the list.
4. Click the **OK** button.

### Debug page

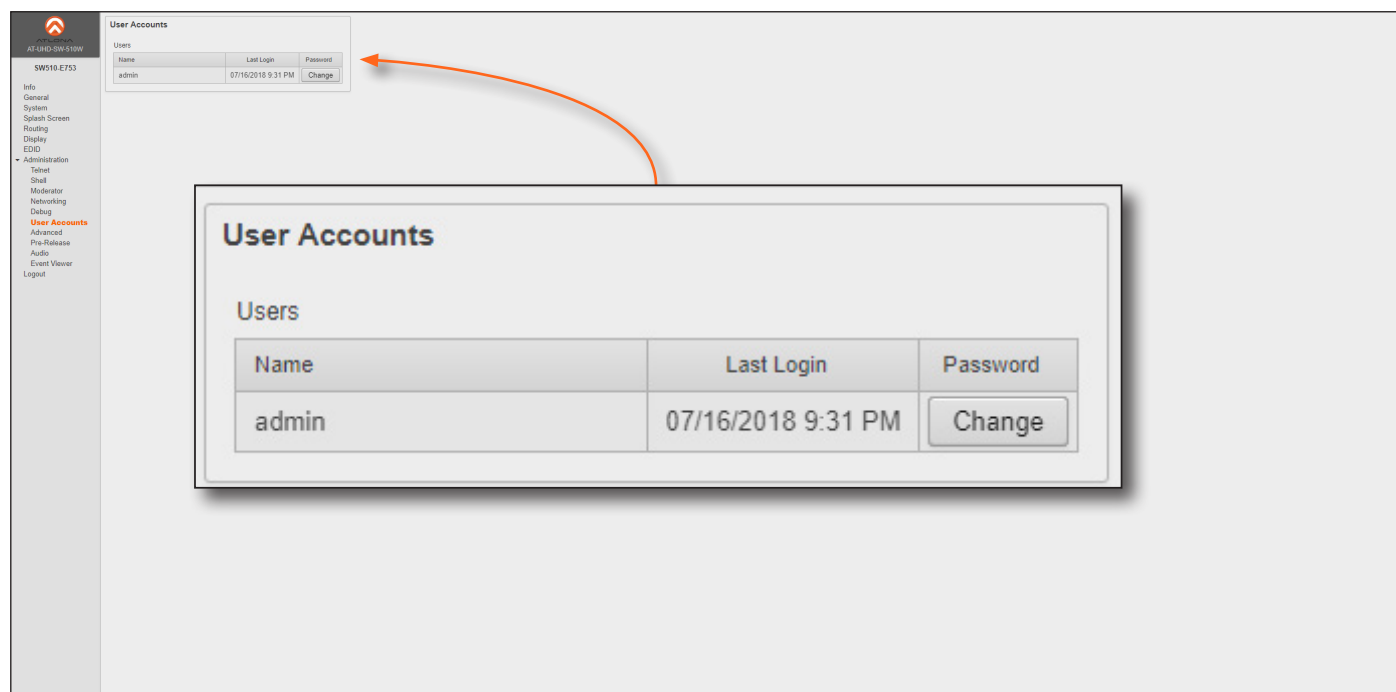
Click the **Download Logs** button to download the debug logs. Debug logs are downloaded in a .zip file. Debug logs are used by Atlona Technical Support Engineers to identify functionality issues.



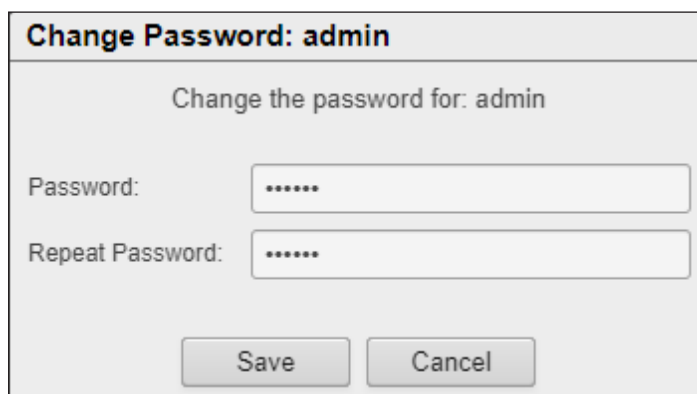
1. Click **Debug** on the side menu bar.
2. Click the **Download Logs** button to display the **Save As** dialog box.
3. Browse to the desired folder where the .zip file will be downloaded.
4. Click the **Save** button on the **Save As** dialog to save the debug log file.

## User Accounts page

This page allows the default password to be changed.



1. Click the **Change** button to display the **Change Password** dialog box.

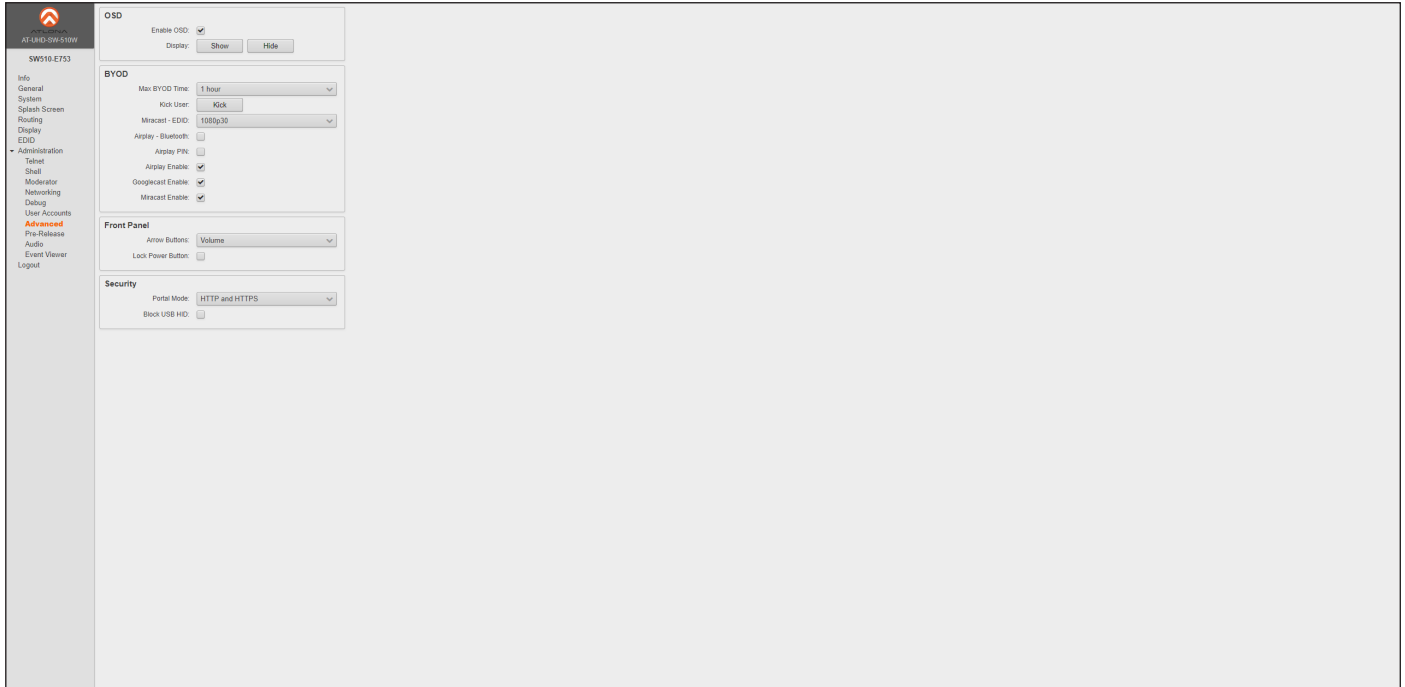


The screenshot shows the 'Change Password: admin' dialog box. The title bar reads 'Change Password: admin'. Inside the dialog, it says 'Change the password for: admin'. There are two input fields: 'Password:' and 'Repeat Password:', both containing masked characters (dots). At the bottom, there are two buttons: 'Save' and 'Cancel'.

2. Enter the new password in the **Password** field.
3. Re-enter the same password in the **Repeat Password** field.
4. Click the **Save** button to commit changes or click **Cancel** to abort the process.

## Advanced page

Provides options for advanced functionality.



## OSD

### Enable OSD

Click this check box to enable or disable OSD control. If this box is checked, then the **Show** and **Hide** buttons can be used to display or hide the OSD.

### Show

Click this button to display the On-Screen Display (OSD). The **Enable OSD** option must be checked before this control will affect changes.

### Hide

Click this button to hide the On-Screen Display (OSD). The **Enable OSD** option must be checked before this control will affect changes.

Note that the OSD does not include the Panel or the Metadata.





## BYOD

### Max BYOD Time

Click this drop-down list to select the desired time interval before the connected BYOD is automatically disconnected from the AT-UHD-SW-510W.

### Kick User

Click this button to disconnect the current BYOD.

### Miracast EDID

Click this drop-down list to select the EDID used by Miracast.

Setting	Description
none	Uses the downstream EDID
1080p60	1920x1080p @ 60 Hz
1080p30	1920x1080p @ 30 Hz

### Airplay - Bluetooth

Click this check box to enable Bluetooth discovery. Refer to [Bluetooth Discovery \(page 38\)](#) for more information.

### Airplay PIN

Click this check box to allow the ability to add randomized PIN codes when connecting using AirPlay.

### Airplay Enable

Click this check box to enable AirPlay. This option is enabled by default.

### Googlecast Enable

Click this check box to enable Googlecast. This option is enabled by default.

### Miracast Enable

Click this check box to enable Miracast. This option is enabled by default.

## Front Panel

### Arrow Buttons

Click this drop-down list to define the functionality of the front-panel arrow buttons. By default this option is set to Volume.

Setting	Description
Volume	Press the up and down arrow buttons to increase or decrease the output volume, respectively.
OSD	The up-arrow button displays the OSD. The down-arrow button hides the OSD.

### Lock Power Button

Click check box to enable or disable the locking of the **DISPLAY** button on the front panel. Locking this button will prevent accidental pressing of the **DISPLAY** button and powering-off the unit.

## Security

### Portal Mode

Click this drop-down list to select the desired HTTP protocol.

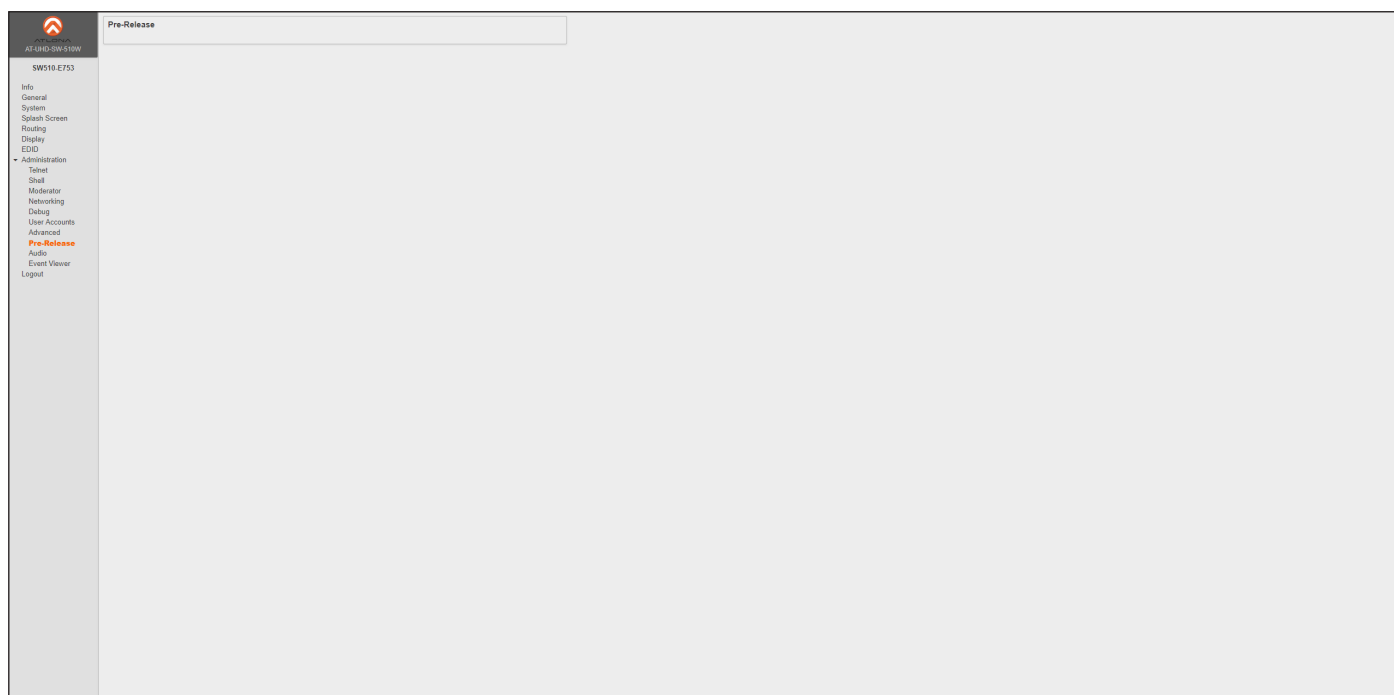
Setting	Description
HTTP and HTTPS	Provides either HTTP or HTTPS connections at the login screen.
HTTPS	Used for secure connections only.

### Block USB HID

Deactivates / disables keyboard and mouse communication with the CPU.

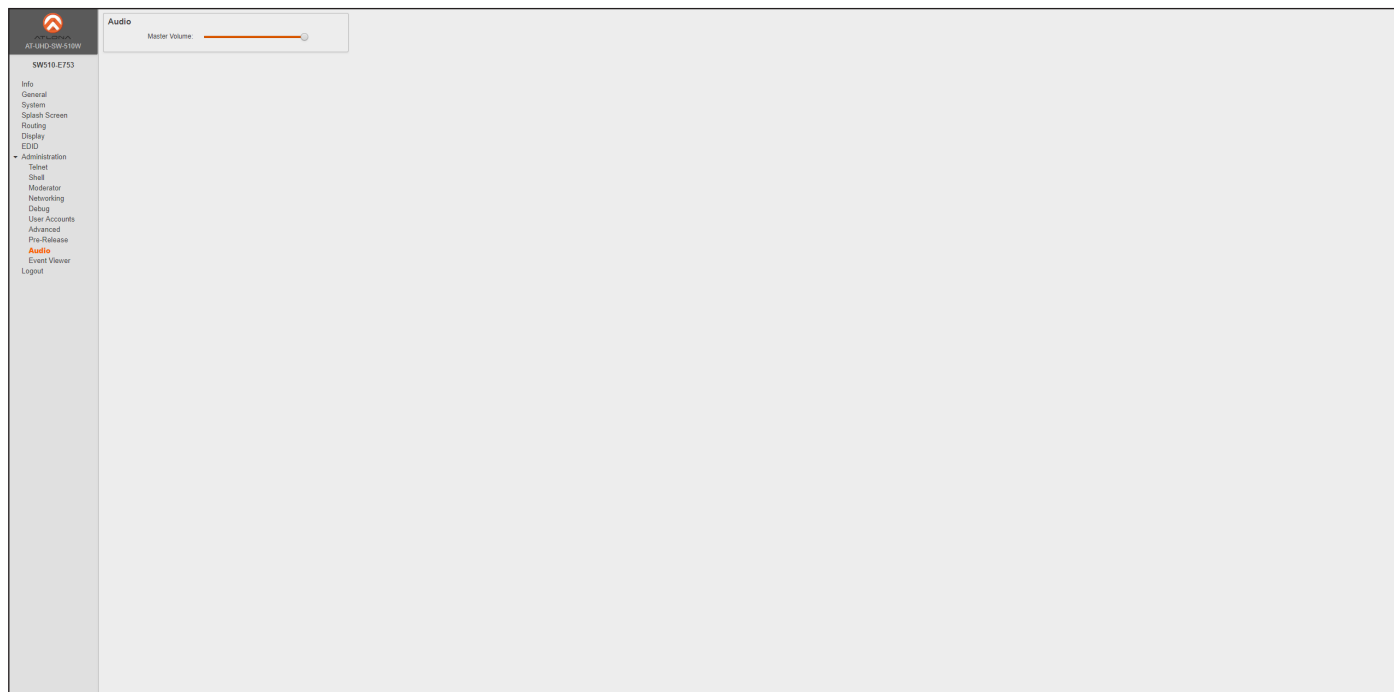
## Pre-Release page

This page is reserved for future features.



## Audio page

Adjusts the output volume.



### Audio

Click and drag this slider to adjust the output volume. Output is adjustable from -80 to 0 dB.

## Event Viewer page

Displays a dynamic list of events, returned in JSON format. The image below, shows a list of sample events.



AT UHD-SW-510W

SW510.E753

- Info
- General
- System
- Splash Screen
- Routing
- Display
- EDID
- Administration
- Telnet
- Shell
- Modem
- Networking
- Debug
- User Accounts
- Advanced
- Pre-Release
- Audio
- Event Viewer**
- Login

Events

55 - 1531780822033	[event {"button": "ui", "power": "state", "up"}]]
56 - 1531780822036	[event {"button": "synth", "action": "click", "id": "power"}]]
57 - 1531780822344	[event {"button": "ui", "power": "state", "down"}]]
58 - 1531780822565	[event {"button": "ui", "power": "state", "up"}]]
59 - 1531780822567	[event {"button": "synth", "action": "click", "id": "power"}]]
60 - 1531780823186	[event {"button": "ui", "power": "state", "down"}]]
61 - 1531780823349	[event {"button": "ui", "power": "state", "up"}]]
62 - 1531780823352	[event {"button": "synth", "action": "click", "id": "power"}]]
63 - 1531780823473	[event {"button": "ui", "power": "state", "down"}]]
64 - 1531780823725	[event {"button": "ui", "power": "state", "up"}]]
65 - 1531780823728	[event {"button": "synth", "action": "click", "id": "power"}]]
66 - 1531780823854	[event {"button": "ui", "power": "state", "down"}]]
67 - 1531780824074	[event {"button": "ui", "power": "state", "up"}]]
68 - 1531780824086	[event {"button": "synth", "action": "click", "id": "power"}]]
69 - 1531780824421	[event {"button": "ui", "power": "state", "down"}]]
70 - 1531780824672	[event {"button": "ui", "power": "state", "up"}]]
71 - 1531780824676	[event {"button": "synth", "action": "click", "id": "power"}]]
72 - 1531780824877	[event {"button": "ui", "power": "state", "down"}]]
73 - 1531780824926	[event {"button": "ui", "power": "state", "up"}]]
74 - 1531780824930	[event {"button": "synth", "action": "click", "id": "power"}]]
55 - 1531780822033	[event {"button": "ui", "power": "state", "up"}]]
56 - 1531780822036	[event {"button": "synth", "action": "click", "id": "power"}]]
57 - 1531780822344	[event {"button": "ui", "power": "state", "down"}]]
58 - 1531780822565	[event {"button": "ui", "power": "state", "up"}]]
59 - 1531780822567	[event {"button": "synth", "action": "click", "id": "power"}]]
60 - 1531780823186	[event {"button": "ui", "power": "state", "down"}]]
61 - 1531780823349	[event {"button": "ui", "power": "state", "up"}]]
62 - 1531780823352	[event {"button": "synth", "action": "click", "id": "power"}]]
63 - 1531780823473	[event {"button": "ui", "power": "state", "down"}]]
64 - 1531780823725	[event {"button": "ui", "power": "state", "up"}]]
65 - 1531780823728	[event {"button": "synth", "action": "click", "id": "power"}]]
66 - 1531780823854	[event {"button": "ui", "power": "state", "down"}]]
67 - 1531780824074	[event {"button": "ui", "power": "state", "up"}]]
68 - 1531780824086	[event {"button": "synth", "action": "click", "id": "power"}]]
69 - 1531780824421	[event {"button": "ui", "power": "state", "down"}]]
70 - 1531780824672	[event {"button": "ui", "power": "state", "up"}]]
71 - 1531780824676	[event {"button": "synth", "action": "click", "id": "power"}]]
72 - 1531780824877	[event {"button": "ui", "power": "state", "down"}]]
73 - 1531780824926	[event {"button": "ui", "power": "state", "up"}]]
74 - 1531780824930	[event {"button": "synth", "action": "click", "id": "power"}]]

# Appendix

## Updating the Firmware

The following procedure outlines the firmware update procedure for the AT-UHD-SW-510W. This product can only be updated through the web GUI.

### Requirements:

- AT-UHD-SW-510W
- MCU and Master firmware files
- Computer running Microsoft Windows

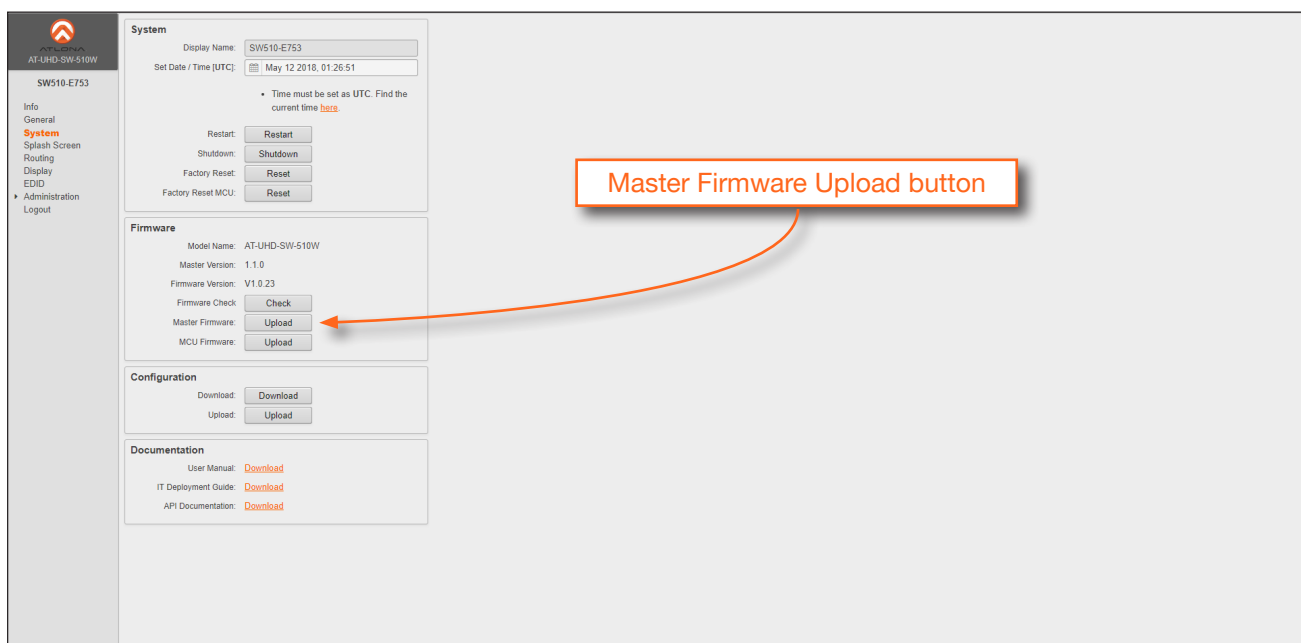
1. Download the firmware files from <https://atlona.com/product/at-uhd-sw-510w/>.
2. Connect the computer, containing the firmware files, to the same network as the AT-UHD-SW-510W.
3. Launch a web browser and enter the IP address of the AT-UHD-SW-510W in the address bar.
  - a. If the IP address is unknown, then insert a USB drive into the **AUX** port on the back of the unit. Wait approximately 10 seconds then remove the USB drive. Open the .txt file to obtain the IP address.
4. The **Login** screen will be displayed. Enter the login credentials. The default username and password are listed below:

<b>User</b>	admin
<b>Password</b>	Atlona

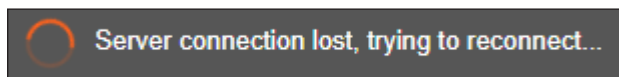
5. Click **System** on the side menu bar.



**IMPORTANT:** The MCU firmware must be updated before the Master firmware. If this order is not followed, system instability may result.

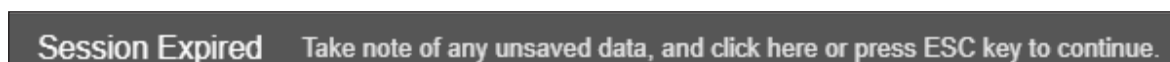


6. Click the **Upload** button, next to **MCU Firmware**.
7. Select the AT-UHD-SW-510W\_MCU\_[version].BIN file from the **Open** dialog box, then click **Open** to begin the update process.
8. During the update process, the following message will appear in the upper-right corner of the screen:



Wait approximately four minutes. After the firmware process has completed, the AT-UHD-SW-510W will automatically reboot, twice.

9. The following message will appear at the top of the screen:

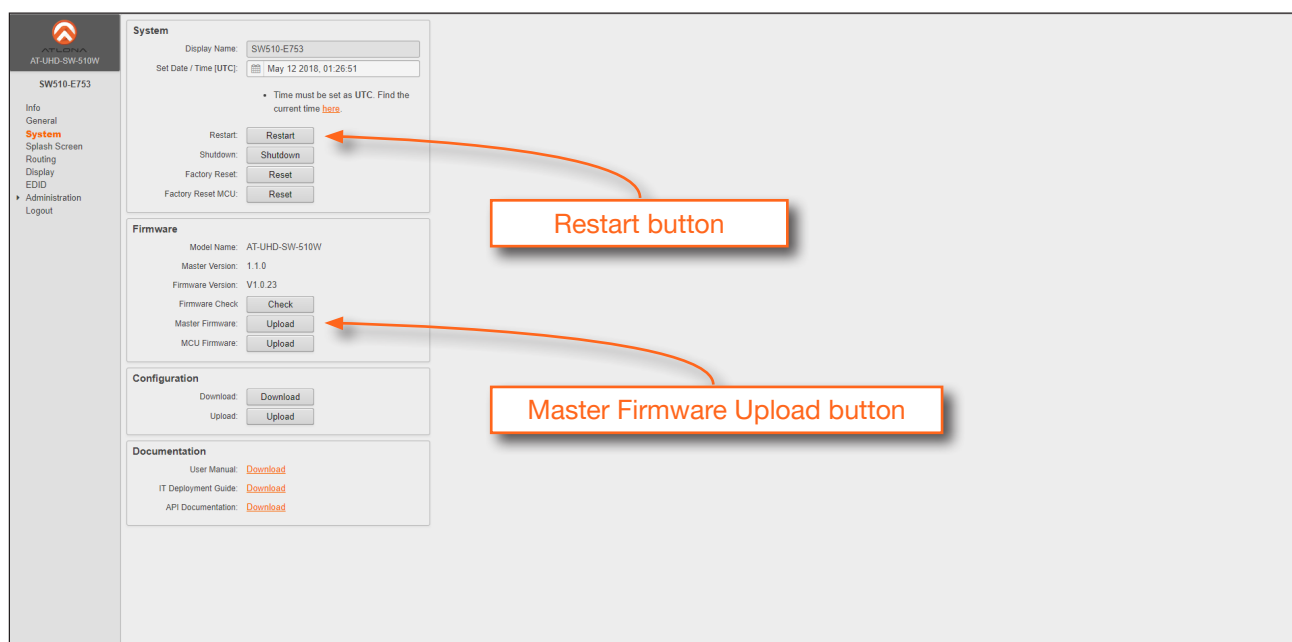


10. Click the message to return to the **Login** screen. Enter the login credentials.
11. Click **System** on the side menu bar.
12. Click the **Restart** button to reboot the AT-UHD-SW-510W.



**IMPORTANT:** The AT-UHD-SW-510W must be rebooted after each firmware update, in order to make sure that the unit is properly initialized and prepared to receive the Master firmware file.

13. Wait for the reboot process to complete.
14. Click the **Upload** button next to **Master Firmware** and select the AT-UHD-SW-510W\_MASTER\_[version].war file.



15. Repeat steps 8 through 13, making sure to reboot the unit after the Master firmware has been updated. The firmware process will take approximately four minutes.



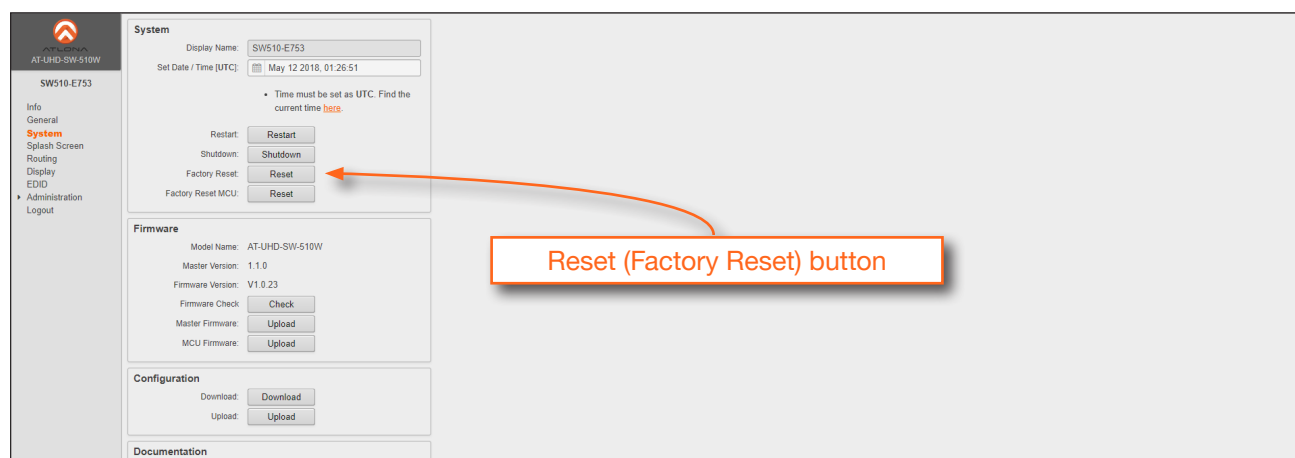
**IMPORTANT:** The next and final step requires that the AT-UHD-SW-510W be reset to factory-default settings. Before proceeding, make sure to record all settings by taking screen shots, or writing down all pertinent information. Once the factory-reset is complete, it will be necessary to re-enter these settings / values. Refer to the next page for instructions.

16. Click the **Reset** button, next to **Factory Reset**.

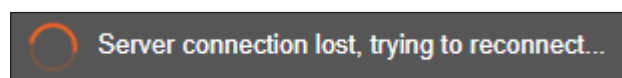


**WARNING:** Performing a factory reset will erase all settings and configuration information. Make sure that all current settings and values are recorded before proceeding. Performing a factory reset will also set the AT-UHD-SW-510W to DHCP mode. If a static IP is being used, make sure to record these IP settings.

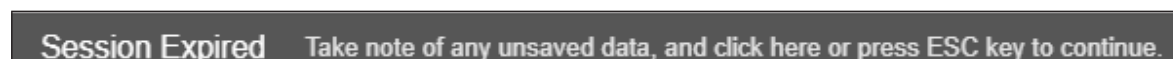
The factory-reset procedure will take approximately four minutes.



17. During the update process, the following message will appear in the upper-right corner of the screen:



18. After a while, the following message will appear at the top of the screen:

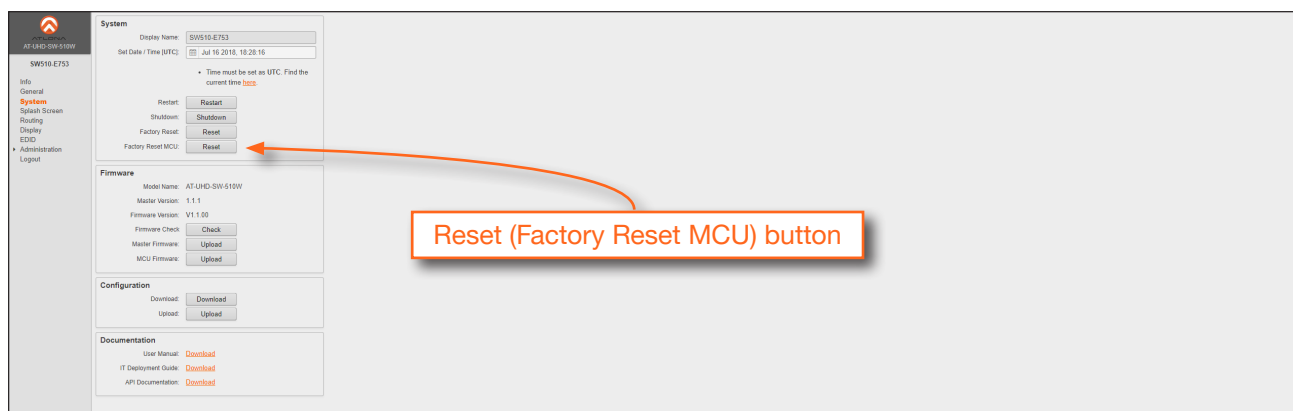


19. Click the message to return to the **Login** screen. Enter the login credentials, using the default username and password:

<b>User</b>	admin
<b>Password</b>	Atlona



20. Click **System** on the side menu bar, then click the Factory Reset MCU **Reset** button.




21. Power-cycle the AT-UHD-SW-510W by disconnecting and reconnecting the power supply.

22. Login to the webGUI using the default username and password.

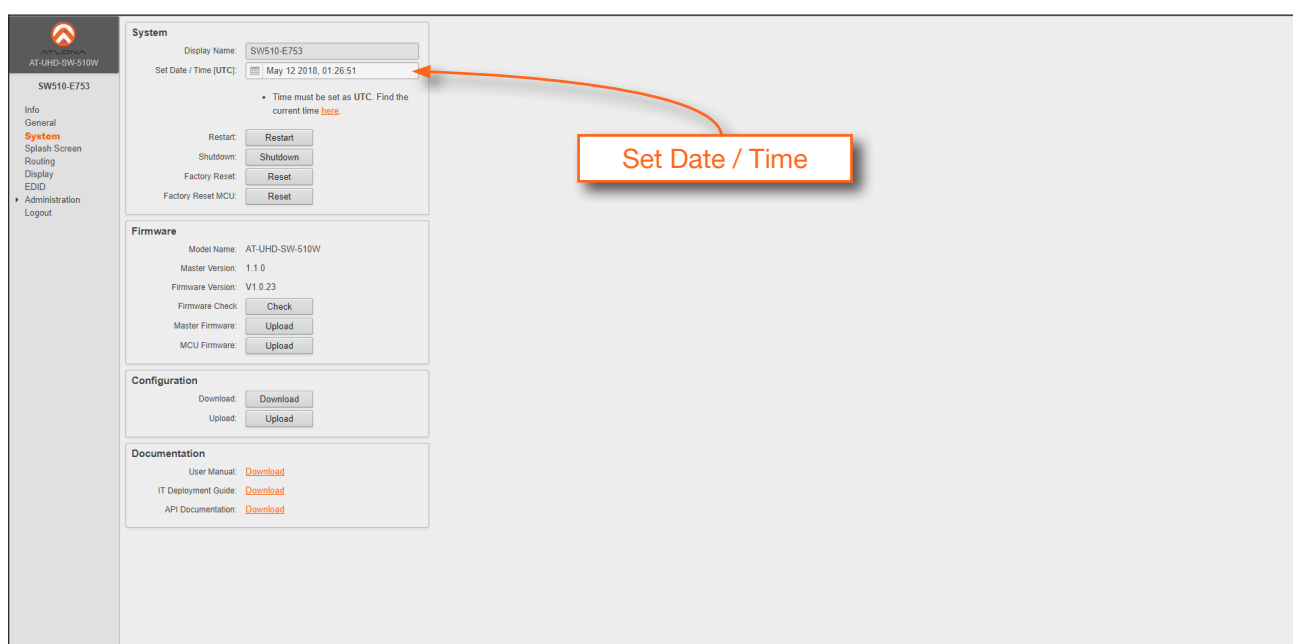
The AT-UHD-SW-510W has been reset to factory-default settings and will use DHCP (if a DHCP server is available) to assign itself an IP address, once connected to a network.

If a static IP was used prior to the firmware update procedure, refer to Step 3a.

23. Set the  icon to display the calendar fly out and set the correct UTC time and date. UTC for specific regions can be obtained from <https://time.is/UTC>.



**IMPORTANT:** Setting the correct UTC time and date must be performed as a final step. When setting a time or date that is ahead of the default settings, the web session will automatically time out. This is normal behavior.



## Default Settings

The following tables list the factory-default settings, as defined in the web GUI, for the AT-UHD-SW-510W.

Web GUI Page	Setting	Default Value
Login	Username Password	admin Atlona
General	Name	SW510-{id}
Splash Screen	Show Metadata Show Panel Y Offset Title Subtitle Column Title Column #1  Show Second Column Column #2	Disabled Enabled 0 Welcome {name} : {version} : [{eth0}] To begin your presentation: Connect wired: Connect the HDMI, USB-C, or DisplayPort cable at the table to your device Enabled Connect wirelessly: Search for SW510-xxxx on your AirPlay, GoogleCast (Google Home App), or Miracast device.
Routing	Fallback Delay Matrix Switch Matrix Mode HDMI Source Matrix Mode HDBaseT Source	5000 (ms) Disabled BYOD BYOD
Display	Autoswitch Display Auto Power Power Lock Button Lamp Cool Down Timer Display Warm Up Timer Auto Power Off Timer Control Type Volume Mute Enable Momentary Relay	Enabled Disabled Disabled 15 seconds 15 seconds 30 seconds CEC Audio Out Enabled
EDID	USB-C DP HDMI 3 HDMI 4	Default Default Default Default
Administration > Moderator	Enable	Disabled
Administration > Networking	Wifi Firewall (Access Point mode) Channel (Access Point mode) Mode (Ethernet)	Disabled None 6 DHCP
Administration > Advanced	Enable OSD Max BYOD Time Miracast EDID AirPlay - Bluetooth AirPlay PIN AirPlay Enable Googlecast Enable Miracast Enable Arrow Buttons Portal Mode	Enabled 1 hour 1080p30 Disabled Disabled Enabled Enabled Enabled Volume HTTP and HTTPS

## Mounting Instructions

The AT-UHD-SW-510W can be mounted in different ways, based on the number of units that are being installed. The AT-UHD-SW-510W can be mounted in a rack or on/under any flat surface.



**NOTE:** AT-UHD-510W-RM rack ears are sold separately. Contact Atlona for more information.

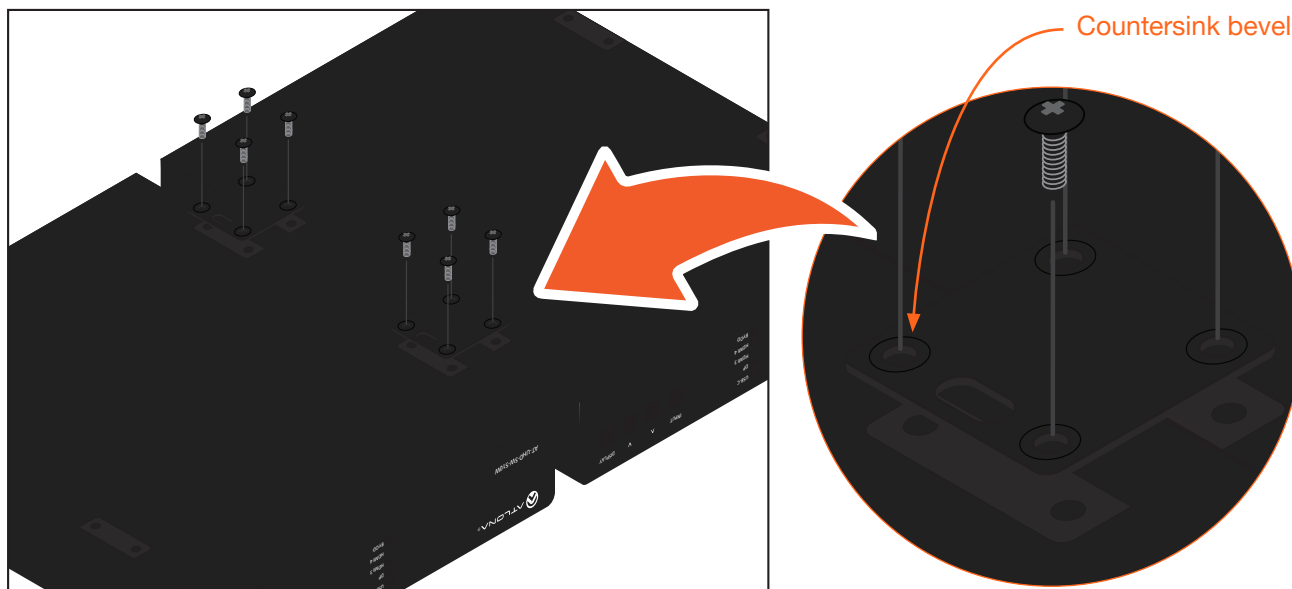
### Single-unit Rack Installation

1. Attach the included small rack ear (sold separately) to one side of the AT-UHD-SW-510W, using the included screws.
2. Attach the included longer rack ear (sold separately) to the opposite side of the AT-UHD-SW-510W using the included screws.



### Dual-unit Rack Installation

1. Turn both units upside-down on a flat surface, next to each other, as shown.
2. Position the included mounting plates over the holes on the bottom of the enclosure.  
When attaching mounting plates, the countersink bevels on the mounting plate should face upward.

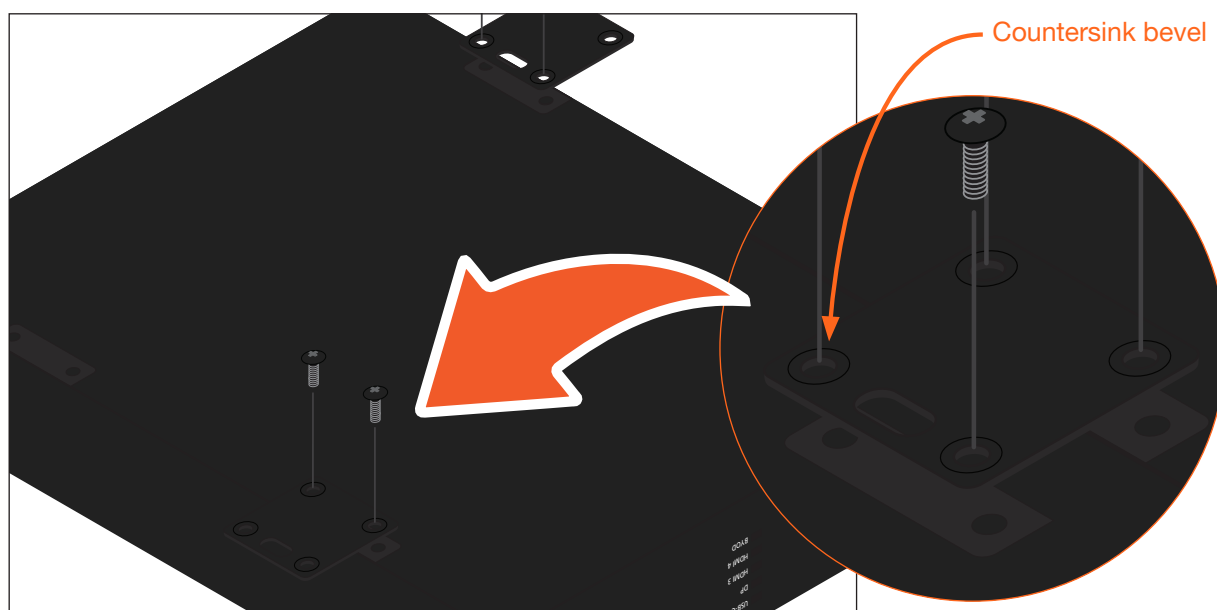


3. Turn the attached units over and install the rack ears (sold separately) to one side of each enclosure using the included screws.



### Flat Surface

1. Turn the unit upside down, on a flat surface.
2. Position the included mounting plates over the pre-drilled holes on the bottom of the enclosure. When attaching mounting plates, the countersink bevels on the mounting plates should face upward.



3. Mount the unit using the circular holes, on each mounting plate. If using a drywall surface, a #6 drywall screw is recommended. Mounting screws are not included.



**NOTE:** The unit can also be mounted under a flat surface, such as a table, by turning the unit upside down.

## Specifications

Connectors, Controls, and Indicators	
HDMI IN	2 - Type A, 19-pin female
HDMI OUT	1 - Type A, 19-pin female
DP IN	1 - 20-pin female
USB-C IN	1 - USB Type-C v3.1, 24-pin female, AV input (Alternate Mode)
USB	3 - USB 2.0 Type A for Wi-Fi® antenna modules
RS-232	1 - 3-pin captive screw (bidirectional)
RELAY	1 - 3-pin captive screw, normally open (NO), with adjustable Toggle and Pulse modes Electrical rating: 48 V @ 1 A
TRIGGER	1 - 4-pin captive screw Electrical rating: 30 V @ 1 A (max.)
AUDIO IN	1 - 3.5 mm, unbalanced 2-channel
AUDIO OUT	1 - 5-pin captive screw, balanced / unbalanced 2-channel
HDBaseT OUT	1 - RJ45
LAN	1 - RJ45
DC 24V	1 - 4-pin, locking
<b>Control Buttons:</b> INPUT, CURSOR (UP/DOWN), DISPLAY	4 - momentary, tact-type
<b>Input Indicators:</b> USB-C, DP, HDMI 3, HDMI 4, BYOD	5 - LED, blue

Video	
UHD/HD/SD	4096x2160@60/30/25/24Hz*, 3840x2160@60/30/25/24Hz*, 1080p@60/59.9/50/30/29.97/25/24/23.98Hz, 1080i@60/59.94/50Hz, 720p@60/59.94/50Hz, 576p@50Hz, 576i@50Hz, 480p@60/59.96Hz, 480i@60Hz
VESA	2560x1600, 2048x1536, 1920x1200, 1680x1050, 1600x1200, 1440x900, 1400x1050, 1280x1024, 1280x800, 1366x768, 1360x768, 1152x864, 1024x768, 800x600, 640x480
USB-C	Up to 4K/UHD @ 60Hz for devices supporting USB-C Alternate Mode video output
Wireless	Up to 1080p @ 30Hz 4:2:0 (up to 1080p @ 60Hz with Miracast™); dependent on wireless signal quality
Color Space	YUV, RGB
Chroma Subsampling	4:4:4, 4:2:2, 4:2:0
Wireless Chroma Subsampling	4:2:0
Color Depth	8-bit, 10-bit, 12-bit
HDR †	HDR10 and Dolby® Vision™ @ 60Hz; HDMI or DisplayPort inputs only

\* HDMI output supports 4K/UHD @ 50 or 60Hz with 4:4:4 chroma sampling. HDBaseT output supports 4K/UHD @ 50 or 60Hz with 4:2:0 chroma subsampling. † HDR not supported for HDBaseT output.

Audio	
Pass-Through Formats	PCM, Dolby® Digital, Dolby Digital Plus™, Dolby TrueHD, Dolby Atmos®, DTS® Digital Surround™, DTS-HD Master Audio™, and DTS:X®
Sample Rate	32 kHz, 44.1 kHz, 48 kHz, 88.2 kHz, 96 kHz, 176.4 kHz, 192 kHz
Bit Rate	24 Mbits/s max

Resolution / Distance	4K/UHD - Feet / Meters		1080p - Feet / Meters	
HDMI IN/OUT	15	5	30	10
CAT5e/6	230	70	330	100
CAT6a/7	330	100	330	100

Signal	
Maximum TMDS Clock	600 MHz (300 MHz over HDBaseT)
HDMI	HDMI 2.0*
HDBaseT	10 Gbps †
CEC Support	Yes
HDCP	2.2 (wired device connections, only)

\* 18 Gbps supported for HDMI 2.0 output. † HDBaseT output limited to 10 Gbps.

USB	
USB-C Power	Up to 60 W / 3 A at 20 V
USB-C Device Charging Capability	Up to 20 V, 3 A Output: 60 W @ 20 V, 36 W @ 12 V, 15 W @ 5 V

IP	
Protocols	DHCP, HTTP, Telnet, SSH, TCP/IP, UDP
Security	HTTPS, SSL, TLS
Ethernet Speed	10/100/1000 Mbps
Addressing	DHCP, static
Wi-Fi	IEEE 802.11n/ac 2.5 GHz / 5 GHz
Wi-Fi Protocols	WPA, WPA2, PSK
Antenna	2 included

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

Power	
Consumption (full load)	121 W
Idle Consumption	35 - 40 W
Supply	Input: 100 - 240 V AC, 50/60 Hz Output: 24 V / 5 A DC

Dimensions	Inches	Millimeters
H x W x D (w/ feet)	1.77 x 8.46 x 10.19	48 x 215 x 259
H x W x D (w/o feet)	1.73 x 8.46 x 10.00	44 x 215 x 254

Weight	Pounds	Kilograms
Device	3.70	1.68

Certification	
Device	CE, FCC, UL

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