4K/HDR
5x2 HDMI Matrix Switcher
AT-HDR-SW-52

The Atlona **AT-HDR-SW-52** is a 5×2 HDMI matrix switcher for high dynamic range (HDR) formats. Part of the comprehensive family of Atlona 4K HDR integration products, it features five HDMI inputs and matrixed or mirrored HDMI outputs. The HDR-SW-52 is HDCP 2.2 compliant and supports 4K/UHD video @ 60 Hz with 4:4:4 chroma sampling, as well as HDMI data rates up to 18 Gbps. It is ideal for the latest as well as emerging 4K/UHD and HDR sources and displays, and includes EDID management features, and automatic input switching. Additionally, 4K downscaling to 1080p @ 60, 30, or 24 Hz is available for the HDMI outputs when connected to an HD display. The HDR-SW-52 can de-embed audio from an HDMI input to S/PDIF or balanced analog audio outputs. This HDMI switcher can be controlled via Ethernet, RS-232, and IR.

Package Contents

1 x AT-HDR-SW-52
1 x Captive screw connector, 2-pin
1 x Captive screw connector, 3-pin
1 x Captive screw connector, 5-pin
1 x Long rack ear
1 x Short rack ear
2 x Mounting plates
4 x Mounting screws
4 x Rack screws
4 x Feet w/rubber grips
1 x 5 V / 4 A DC power supply

⚠ **IMPORTANT**: Visit https://www.atlona.com/product/at-hdr-sw-52 for the latest firmware updates and User Manual.

Front Panel Descriptions
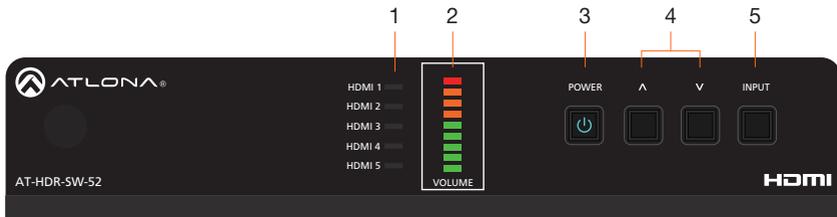
1 HDMI 1 - HDMI 5
These LED indicators display which input is routed to the **HDMI OUT** ports. A solid blue indicator represents the active input being used

2 VOLUME
Displays the output audio level.

3 POWER
Press this button to toggle between "on" and "standby" power states. When in "standby", A/V is muted. When "on", A/V muting will be disabled.
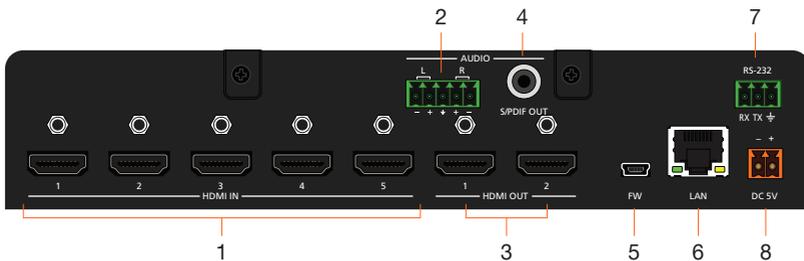
4 Cursor Buttons
Press and release these buttons to increase or decrease the audio output volume on the **L/R** port.

5 INPUT
Press and release this button to cycle through each of the HDMI inputs.

Rear Panel Descriptions

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

2   L/R
Connect an analog audio output device to this port using the included captive screw block. Refer to Audio (page 5) for information on wiring.

3   HDMI OUT
Connect an HDMI cable from each of these ports to an HDMI display.

4   S/PDIF OUT
Connect an RCA-type cable from this port to the S/PDIF audio input port on an A/V receiver or other audio output device.

5   FW
Connect a USB-to-mini USB cable to this port from a computer for firmware updates.

6   LAN
Connect an Ethernet cable from this port to the Local Area Network (LAN). The AT-HDR-SW-52 includes a built-in web server, which can be used to manage and configure the product.

7   RS-232
Connect the included captive screw block to an RS-232 controller to control the AT-HDR-SW-52. Refer to RS-232 (page 4) for more information on wiring.

8   DC 5V
Connect the included 5 V DC power supply from this power receptacle to an available AC electrical outlet. Refer to Power (page 4) for more information on wiring.

Power

Connect the included 2-pin captive screw connector to the DC 5V power receptacle on the rear of the unit. The captive screw comes pre-wired as shown.
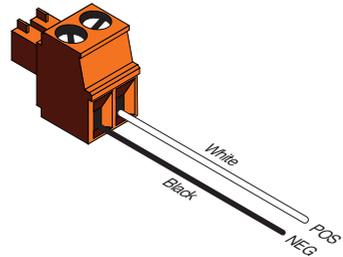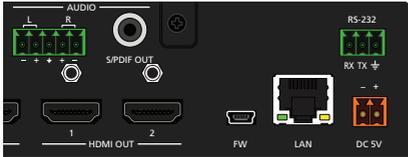

RS-232

The AT-HDR-SW-52 provides an RS-232 port which can be used to directly control the AT-HDR-SW-52 using a control system.

1. Use wire strippers to remove a portion of the cable jacket.

2. Remove at least 3/16" (5 mm) of insulation from each of the wires.

3. Insert the wires into correct terminal using the included 5-pin captive screw connector.

4. Attach the 3-pin connector block to the **RS-232** port on the AT-HDR-SW-52.

> **i** NOTE: Typical DB9 connectors use pin 2 for TX, pin 3 for RX, and pin 5 for ground. On some devices functions of pins 2 and 3 are reversed.
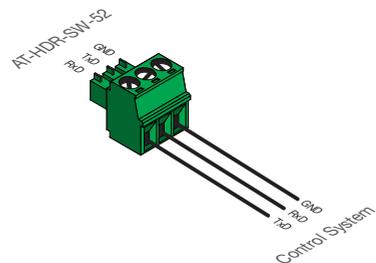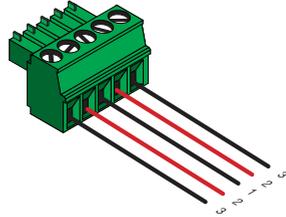
Audio

The included 5-pin captive screw block can be wired to support balanced audio using XLR connectors, or unbalanced audio using RCA connectors.
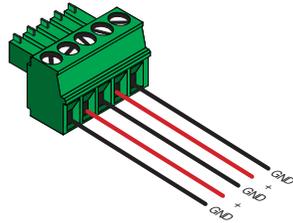
Balanced Audio (XLR)

Channel	Signal (AT-HDR-SW-52)	Pin (XLR)
R	-	3
R	+	2
--	GND*	1
L	+	2
L	-	3

*The GND signal, from the 5-pin captive screw connector on the AT-HDR-SW-52, should be tied to pin 1 on both XLR connectors.

Unbalanced Audio (RCA)

Channel	Signal (AT-HDR-SW-52)	Pin (RCA)
R	to GND*	--
R	+	+
--	GND	GND
L	+	+
L	to GND*	--

*The GND signal, from the captive screw connector on the AT-HDR-SW-52, should be tied to L- and R- on the captive screw connector.

Installation

1. Connect a source device to each of the **HDMI IN** (**1** - **5**) ports.

2. Connect a display device to each of the **HDMI OUT** (**1** - **2**) ports.

3. Connect an Ethernet cable from the **LAN** port to the Local Area Network (LAN). This step will be required in order to access the built-in web server.

> ⚠️ **IMPORTANT:** Stranded or patch cable is not recommended due to performance issues. Shielded cables are strongly recommended to minimize signal noise and interference.

4. Connect the included 5-pin captive screw connector to the 5-pin **L/R** port. Refer to Audio (page 5) for more information.

5. Connect an RCA-type cable from the **S/PDIF OUT** port to an audio output device.

6. Connect an RS-232 cable from the control system to the **RS-232** port. Refer to RS-232 (page 4) for more information.

7. Connect the included power supply to the **DC 5V** connector and connect the power cord to an available electrical outlet.
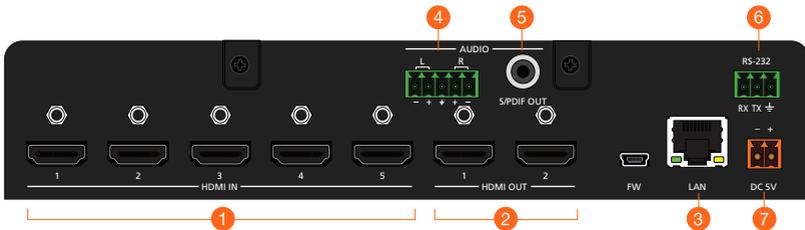
IP Configuration

The AT-HDR-SW-52 is shipped with DHCP enabled. Once connected to a network, the DHCP server (if available), will automatically assign an IP address to the unit. If the AT-HDR-SW-52 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/16`. If this occurs, refer to the AT-HDR-SW-52 User Manual for more information.

Use an IP scanner, along with the MAC address on the bottom of the unit, to identify the unit on the network. If a static IP address is desired, the unit can be switched to static IP mode.

Switching the IP mode using the Front Panel

1. Make sure the AT-HDR-SW-52 is powered.

2. Connect an Ethernet cable between the **LAN** port of the AT-HDR-SW-52 and the Local Area Network (LAN).

3. Press and hold the **POWER** button for approximately 15 seconds. Release the **POWER** button once all the front-panel LED indicators begin to flash. The number of flashes will indicate the currently selected IP mode. Refer to the table, below.

POWER button flashes	Description	Settings
Two	Static IP mode	IP address: `192.168.1.254` Netmask: `255.255.0.0` Gateway: `192.168.1.1`
Four	DHCP mode	DHCP server assigned

POWER button
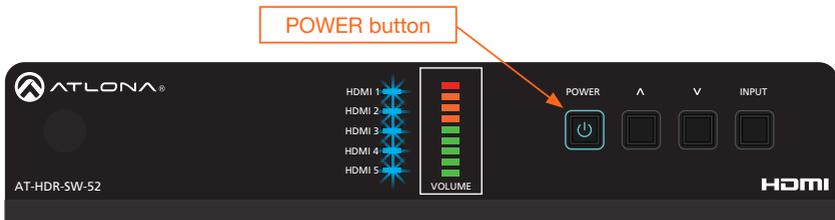
Accessing the built-in Web Server

The AT-HDR-SW-52 includes a built-in web server, which allows easy management and control of all features. Follow the instructions below to access the web server.

1. Make sure that an Ethernet cable is connected between the **LAN** port on the AT-HDR-SW-52 and the network.
2. Launch a web browser and enter the IP address of the unit.
3. The AT-HDR-SW-52 **Register** page will be displayed.
4. Create a username and password.
5. Click the **Register** button.
6. The **Login** page will be displayed.
7. Enter the username and password that was created during the registration process.
8. Click the **Login** button.
9. Refer to User Manual for more information on using the built-in web server.

Notes

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Warranty

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

https://atlona.com/warranty/.

English Declaration of Conformity

The English version can be found under the resources tab at:

https://atlona.com/product/at-hdr-sw-52/.

Chinese Declaration of Conformity 中国RoHS合格声明

由SKU列出於:

https://atlona.com/about-us/china-rohs/.

HDMI
HIGH-DEFINITION MULTIMEDIA INTERFACE

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