

4K HDR Four-Input HDMI Switcher with Auto-Switching and Return Optical Audio

AT-JUNO-451



The Atlona **JunoX™ 451 (AT-JUNO-451)** is a 4x1 HDMI switcher for high dynamic range (HDR) formats. Part of the comprehensive family of Atlona 4K HDR integration products, it 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. The JunoX 451 is ideal for residential applications with the latest as well as emerging 4K/UHD and HDR sources and displays. It includes EDID management features and automatic input switching. The JunoX 451 also supports the HDMI Audio Return Channel (ARC) for receiving digital audio from a television. A TOSLINK digital audio output is provided for sending ARC or de-embedded HDMI audio to an AV receiver or soundbar. This JunoX Series HDMI switcher can be controlled via Ethernet, RS-232, and IR.

Package Contents

- 1 x AT-JUNO-451
- 1 x 4-pin captive screw connector
- 2 x Mounting plates
- 4 x Rubber feet
- 4 x Screws
- 1 x DC 5V power supply
- 1 x IEC cord

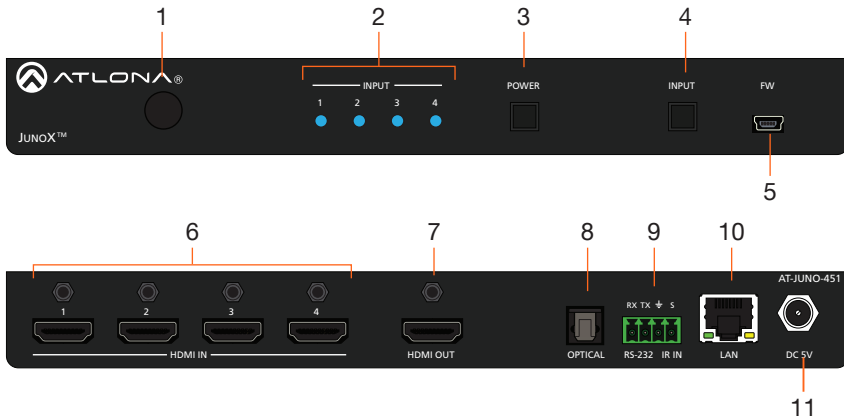


IMPORTANT: Visit <https://www.atlona.com/product/AT-JUNO-451> for the latest firmware updates and User Manual.



NOTE: The AT-JUNO-451 no longer ships with an IR remote control. However, IR documentation remains for units currently in the field.

Panel Descriptions



- 1 IR Window**
Receives IR signals from the IR remote.
- 2 Input Indicators**
These LED indicators glow solid blue to indicate the active input.
- 3 POWER**
Press this button to power-on or power-off the unit.
- 4 INPUT**
Press and release this button to cycle through each of the inputs.
- 5 FW**
Connect a mini USB cable to this port to update the firmware.
- 6 HDMI Inputs**
Connect an HD/UHD source to each of these HDMI ports.
- 7 HDMI OUT**
Connect an HDMI cable from this port to a display or other sink device. This output supports multichannel audio.
- 8 OPTICAL**
Connect an optical audio cable from this TOSLINK port to an audio output device. This port can be used as part of the Audio Return Channel (ARC). Refer to the User Manual for more information.
- 9 RS-232 / IR IN**
Connect the included 4-pin captive screw block to this port. Refer to [RS-232 / IR Connector \(page 3\)](#) for wiring information.
- 10 LAN**
Connect an Ethernet cable from this port to a Local Area Network (LAN). This port only supports direct control of the unit.
- 11 DC 5V**
Connect the included 5 V DC power supply to this power receptacle.

IR Remote Control

The IR remote control that can be used to operate the unit from a remote location.

1 On / Off buttons

Press the **On** button to power-on the unit.
Press the **Off** button to power-off the unit.

2 Input

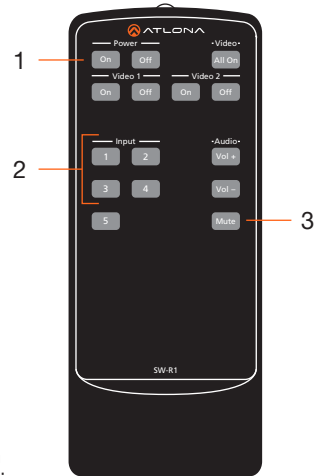
Press these buttons (1 - 4) to select the desired input.

3 Mute

Press this button to toggle audio muting on the **HDMI OUT** port. The **Output 1** toggle switch, in the web GUI, will also change to reflect the current muting state. Refer to the User Manual for more information.



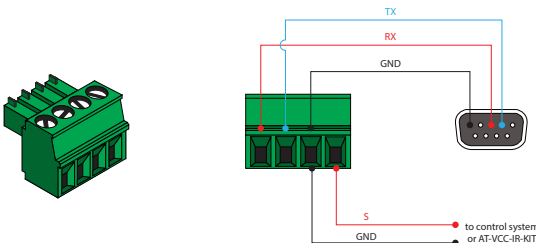
NOTE: The AT-JUNO-451 no longer ships with an IR remote control. However, IR documentation remains for units currently in the field.



RS-232 / IR Connector

The AT-JUNO-451 provide RS-232 and IR control, using the included four-pin captive screw connector. Electrical IR or RS-232 signals, from a control system, can be used for control. Atlona recommends the AT-LC-CS-IR-2M (sold separately) for easy connection to the captive screw connector.

1. Use wire strippers to remove a portion of the cable jacket.
2. Remove at least 3/16" (5 mm) from the insulation of each wire.
3. Insert the wires into the correct terminal on the included captive screw connector, as shown below.
4. Tighten the screws to secure the wires. Do not use high-torque devices as this may damage the screws and/or connector.



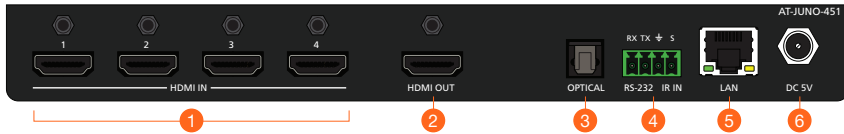
Installation

1. Connect a source to each of the four HDMI inputs (**INPUT 1 - INPUT 4**).
2. Connect a display to the **HDMI OUT** port.
3. Connect an optical audio cable from the **OPTICAL** port to a sound bar or other audio output device. Audio Return Channel (ARC) is supported. Refer to the User Manual for more information.
4. Connect the included 4-pin captive screw block to the **RS-232 / IR IN** port. Refer to **RS-232 / IR Connector (page 3)** for wiring information.
5. Connect an Ethernet cable from the **LAN** port to the Local Area Network (LAN).



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

6. Connect the included 5 V DC power supply to the **DC 5V** power receptacle.
7. Connect the power supply to an available electrical outlet.



IP Configuration

By default, the AT-JUNO-451 is set to DHCP mode, allowing a DHCP server (if present) to assign the unit an IP address.

1. Make sure the unit is powered.
2. Press and hold the **INPUT** button for approximately 10 seconds.
3. Release the button once the **POWER** button begin to flash. The number of flashes will indicate the currently selected IP mode:

POWER button flashes	Description
Two	Static IP mode IP address: 192.168.1.254 Subnet mask: 255.255.0.0 Gateway: 192.168.1.1
Four	DHCP mode

Velocity™ Device Manager

For easy configuration of Atlona devices, Velocity Device Manager is available from <https://atlona.com/velocity-device-manager/> for free. Two options can be used for installation: The free Linux-based software download or the easy-to-install server hardware (AT-VGW-HW).

Once Velocity Device Manager has been set up:

1. Open a browser on the same network as Velocity Device Manager and go to the IP of Velocity Device Manager. View the installation instructions on how to find the IP of the software, if necessary.
2. Enter the login information on the Velocity Device Manager web page, then click the **Login** button.
3. View the AT-JUNO-451 manual for routing and configuration information.

Web GUI

The AT-JUNO-451 include a built-in web server which allows easy management and control of all features. Follow the instructions below to access the web GUI.

1. Set the IP mode of the unit. Refer to the above instructions for more information.
2. Connect an Ethernet cable from the **LAN** port on the AT-JUNO-451, to the Local Area Network (LAN).
3. Use an IP scanner to determine the IP address of the AT-JUNO-451.
4. Launch a web browser and enter the IP address of the unit.
5. The AT-JUNO-451 **Login** page will be displayed.
6. Enter the following information on the **Login** page.

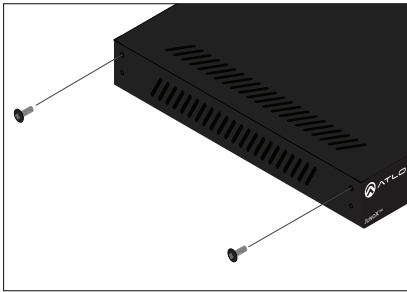
Login: root
Password: Atlona

7. Click the **Login** button.

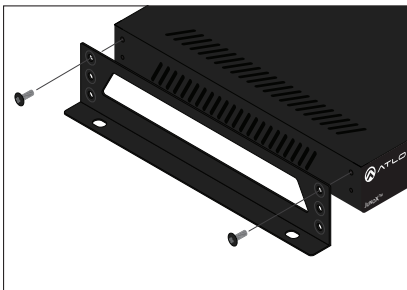
Mounting Instructions

The AT-JUNO-451 includes two mounting brackets, which can be used to attach the unit to any flat surface. Use the two enclosure screws, on the sides of the unit to attach the mounting brackets.

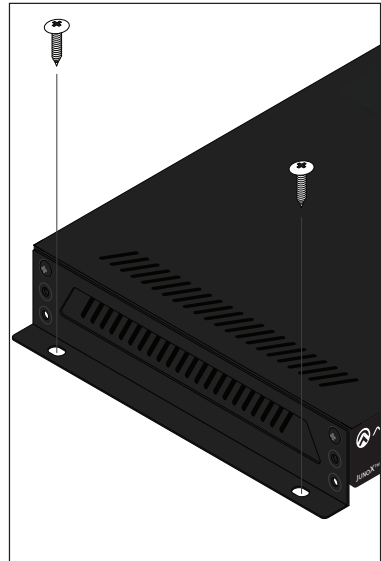
1. Using a small Phillips screwdriver, remove the two screws from the left side of the enclosure.



2. Position one of the mounting brackets, as shown below, aligning the holes on the side of the enclosure with one set of holes on the mounting bracket.
3. Use the screws from Step 1 to attach the mounting bracket.



4. Repeat steps 1 and 2 to attach the second mounting bracket to the opposite side of the unit.
5. Mount the unit to a flat surface using the oval-shaped holes, on each mounting bracket. If using a drywall surface, a #6 drywall screw is recommended.



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



Notes

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-juno-451/>.



Chinese Declaration of Conformity 中国RoHS合格声明

由SKU列出於:

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



HIGH-DEFINITION MULTIMEDIA INTERFACE

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