4K HDR

Four-Input with Auto-Switching

and Return Optical Audio



Introduction

The Atlona **JunoX™ 451 (AT-JUNO-451)** is a 4x1 HDMI switcher for high dynamic range (HDR) formats. 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 is compatible with all video resolutions, audio formats, and color space formats supported in the HDMI 2.0a specification, plus the ability to pass metadata for HDR content. The JunoX 451 includes EDID management features and automatic input switching. It also supports the HDMI Audio Return Channel for receiving digital audio from a television, and includes a TOSLINK digital audio output for sending this audio an AV receiver or soundbar. This JunoX Series HDMI switcher can be controlled via Ethernet, RS-232, and IR. A handheld IR remote control is included.

The JunoX 451 is designed to deliver dependable, pristine-quality image presentations in residential as well as commercial applications. It includes Atlona's award-winning 10 year limited product warranty and customer support services, so that integrators can specify, purchase, and install with confidence.

Applications

- Installations utilizing the latest UHD and HDR sources such as Ultra HD Blu-ray players, plus compatible televisions and projectors
- TV showrooms requiring reliable content distribution to televisions, to properly demonstrate the quality and appeal of 4K and HDR programming
- Professional AV applications with full-motion, highly detailed 4K graphics presentations for visualization, 3D renderings, simulations, and more

HDMI HIGH-DEFINITION MULTIMEDIA INTERFACE

The terms HDMI, HDMI High-Definition Multimedia Interface, and the HDMI Logo are trademarks or registered trademarks of HDMI licensing Administrator, Inc.

Key Features

4x1 HDMI Switcher

- Delivers high performance, reliable HDMI signal switching.
- Easy to install and deploy in residential and commercial applications.

4K/UHD capability @ 60 Hz with 4:4:4 chroma sampling, plus support for HDR formats

- Compatibility with new and emerging 4K/UHD and HDR-capable sources and displays.
- Fully supports video resolutions, audio formats, and color space formats in the HDMI 2.0a specification.

HDCP 2.2 compliant

- Adheres to latest specification for High-bandwidth Digital Content Protection.
- Allows protected content stream to pass between devices.

Automatic input selection using hot plug detect and video detection technology

- Selects active input when sources are connected or if there is a change in source power status.
- Enables simplified, automatic system operation with no user intervention necessary.

EDID management

- Manages EDID communications with the source through a display's EDID or internally stored EDID.
- Ensures desired audio formats and video resolutions are provided to the AV system.

Delivers return audio from a TV to an optical digital audio output

- Supports the HDMI Audio Return Channel and provides a return audio pathway from a television to an AV receiver or soundbar over the TOSLINK digital audio output.
- Easy and convenient integration of television audio for over-the-air broadcasts, smart TV apps, and more.

TCP/IP, RS-232, and IR control

- Flexible control options for compatibility with third-party control systems.
- Reduces integration time and costs. Includes a convenient handheld IR remote control.

Front panel input selection status LEDs

- LED indicators provide HDMI input selection status information.
- Provides easy setup and troubleshooting.

Award-winning 10 year limited product warranty

- Ensures long-term product reliability and performance in residential and commercial systems.
- Specify, purchase, and install with confidence.

Specifications

Connectors, Controls, and Indicators	
HDMI IN	4 - Type A, 19-pin female
HDMI OUT	1 - Type A, 19-pin female
USB	1 - Mini Type A, 5-pin female
RS-232 / IR	1 - 4-pin captive screw
LAN	1 - RJ45
OPTICAL	1 - TOSLINK
DC 5V	1 - Locking
INPUT button	1 - Momentary, tact-type
POWER button	1 - Momentary, tact-type
INPUT indciators	4 - LED, blue

Video	
UHD/HD/SD	4096×2160@24/25/30/50/60Hz, 3840×2160@24/25/30/50/60Hz, 2048x1080p, 1080p@23.98/24/25/29.97/30/50/59.94/60Hz, 1080i@50/59.94/60Hz, 720p@50/59.94/60Hz, 576p, 576i, 480p, 480i
VESA	2560×2048, 2560×1600, 2048×1536, 1920×1200, 1680×1050, 1600×1200, 1600×900, 1440×900, 1400×1050, 1366×768, 1360×768, 1280×1024, 1280×800 1280×768, 1152×768, 1024×768, 800×600, 640×480
Color Space	YUV, RGB
Chroma Subsampling	4:4:4, 4:2:2, 4:2:0
Color Depth	8-bit, 10-bit, 12-bit
HDR	4K HDR10 @ 60 Hz and Dolby® Vision™ @ 30 Hz

Audio	
Formats	PCM 2Ch, LPCM 5.1, LPCM 7.1, Dolby® Digital, DTS 5.1, Dolby Digital Plus™, Dolby TrueHD, DTS-HD Master Audio™, Dolby Atmos®, DTS:X®
Sample Rate	32 kHz, 44.1 kHz, 48 kHz, 88.2 kHz, 96 kHz, 176.4 kHz, 192 kHz
Bit Rate	24-bit (max.)

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

Signal	
Maximum TMDS Clock	600 MHz
HDMI	2.2
CEC	Yes
HDCP	2.2

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	6.6 W
Idle Consumption	5.9 W
Supply	Input: 100 - 240 V AC, 50/60 Hz Output: DC 5V

Dimensions (H x W x D)	Inches	Millimeters
Unit	1.0 x 8.6 x 5.9	29 x 219 x 152
Power Supply (AT-PS-54-L)	1.22 x 1.97 x 3.17	31 x 50 x 80.6

Weight	Pounds	Kilograms
Device	1.82	0.82

Certification	
Device	CE, FCC
Power Supply	CE, FCC, cULus, RoHS, CCC, RCM

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