



## Introduction

The Atlona **AT-OME-SW32** is a 3x2 matrix switcher with HDMI and USB-C inputs, and HDMI outputs. Part of the Omega™ Series of integration products for modern AV communications and collaboration, the OME-SW32 is HDCP 2.2 compliant and supports 4K HDR and 4K/60 4:4:4 at HDMI data rates up to 18 Gbps. The USB-C input is ideal for AV interfacing with newer Mac®, Chromebook™, and Windows® PCs, as well as smartphones and tablets. Additionally, 4K downscaling to 1080p @ 60, 30, and 24 Hz is available for one of the HDMI outputs when connected to an HD sink. Depending on the intended application, the OME-SW32 can be set to specific switching modes that include mirrored outputs (default), one of the outputs fixed to an input, or unrestricted matrix switching.

## Applications

- **Meeting rooms with dual displays**  
The OME-SW32 is compact and easily installs under a conference table. The matrixed, dual HDMI outputs can directly feed into two flat-panel displays side-by-side.
- **Conference rooms and classrooms**  
One or more OME-SW32 units can be integrated with a larger AV switcher or matrix switcher.
- **Multi-room AV distribution systems**  
This compact matrix switcher is also ideal for localized switching into or out of a centralized AV distribution system such as OmniStream™.
- **Video conferencing system upgrade**  
The OME-SW32 can provide a cost-effective update to an existing system, adding 4K/60 capability with down-conversion to 1080p for the codec.

## Key Features

### 3x2 matrix switcher

- USB-C and two HDMI inputs, plus two HDMI outputs. Immediate compatibility with laptops and tablets with USB-C ports supporting A/V.
- No need to provide USB-C to HDMI adapters for USB-C<sup>(1)</sup> AV sources.

### Selectable AV switching modes

- Three selectable switching modes, including mirrored HDMI outputs, matrixed outputs, and a special mode with one input fixed to one of the outputs.
- Enables simple configuration and effortless user operation, tailored to the specific AV application.

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

- Ideal for new and emerging 4K/UHD and HDR-capable sources and displays. Supports HDR10 @ 60 Hz and Dolby Vision @ 60 Hz, as well as HLG.
- Fully supports video resolutions, audio formats, and color space formats in the HDMI 2.0b specification.

### Selectable 4K to 1080p downscaling

- Integrated video processing available on output 1 for down-converting 4K/UHD @ 60 Hz to 1080p
- Ideal for applications with 1080p displays, video conferencing codecs, and other HD sink devices .

### Automatic input selection and automatic display control

- Automatically changes display power state, and switches between inputs based on device connection or disconnection from the switcher. Also can be configured to power off display after a period of inactivity.
- Enables effortless, automated system operation without the need for an external control system.

### Audio de-embedding

- De-embeds two channel PCM audio from the selected video source on HDMI output 1 to a balanced, analog audio output.
- Independent mute control available for embedded two-channel PCM audio with both HDMI outputs.

## Specifications

Video		
Signal Type	Input - HDMI and DisplayPort Alternate Mode (USB-C) Output - HDMI	
Copy Protection	HDCP 1.4/2.0	
Pixel Clock	600MHz	
UHD/HD/SD	4096x2160@60/50/30/25/24Hz 3840x2160@60/50/30/25/24Hz 1920x1080p@60/59.9/50/30/29.97/25/24/23.98Hz 1920x1080i@30/29.97/25Hz	1280x720p@60/59.94/50Hz 720x576p@50Hz 720x576i@25Hz 720x480p@60/59.96Hz 720x480i@30Hz
VESA All resolutions are 60Hz	2560x1600 1920x1200 1680x1050 1600x1200 1440x900 1400x1050 1280x1024	1280x800 1366x768 1360x768 1152x864 1024x768 800x600 640x480
Scaler	IN 4K @ 24 Hz 4K @ 30 Hz 4K @ 60 Hz, 4:2:0	OUT 1080p @ 24 Hz 1080p @ 30 Hz 1080p @ 60 Hz (YUV/RGB, 4:4:4)
USB-C	Up to 4K/UHD @ 60Hz	
Color Space	YUV, RGB	
Chroma Subsampling	4:4:4, 4:2:2, 4:2:0 <sup>(2)</sup>	
Color Depth	8-bit, 10-bit, 12-bit	
HDR	HDR10, Hybrid-Log Gamma (HLG), and Dolby® Vision™ @ up to 60Hz	

Audio			
HDMI Pass-Through Formats	PCM 2.0 LPCM 5.1 LPCM 7.1	Dolby® Digital Dolby Digital Plus™ Dolby TrueHD Dolby Atmos®	DTS® Digital Surround™ DTS-HD Master Audio™ DTS:X®
Analog Audio Format	PCM 2.0		
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		

Ethernet	
Port	1 x RJ45
Standards and Protocols	HTTPS, Telnet, mDNS, SSL, IEEE 802.1x
Speeds	10/100/1000 Mbps
Addressing	DHCP, Static – selectable through rear panel, IP & RS-232 commands, and built-in web server

RS-232	
Port	1 x 3-pin captive screw
Default Parameters	115200, 8-bit, None, 1
Use	Unit and external device control and configuration
Baud Rates	2400, 4800, 9600, 19200, 38400, 57600, 115200
Data flow	Bi-directional

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

Resolution / Distance	4K/UHD - Feet / Meters		1080p - Feet / Meters		HDR - Feet / Meters	
HDMI IN/OUT	15	5	30	10	10	3

Buttons and Indicators	
<b>Control Buttons:</b> INPUT, DISPLAY, IP MODE, RESET	4 - momentary, tact-type
<b>Input Indicators:</b> USB-C, HDMI IN 1, HDMI IN 2	3 - LED, green

Connectors	
HDMI IN	2 - Type A, 19-pin female
HDMI OUT	2 - Type A, 19-pin female
USB-C IN	1 - USB Type-C v3.1, 24-pin female, AV input (Alternate Mode)
FW	1 - Mini-USB, 5-pin female
AUDIO OUT	1 - 5-pin captive screw, balanced / unbalanced 2-channel
RS-232	1 - 3-pin captive screw (bidirectional)
LAN	1 - RJ45, 100Base-T
DC 24V	1 - 4-pin, mini-DIN locking connector
PWR indicator	1 - LED, green
LINK indicator	1 - LED, amber

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

Power	
Consumption	6.98 W
BTU/h	23.8
Supply	Input: 100 - 240 V AC, 50/60 Hz Output: 24 V / 2.7A DC

Dimensions (H x W x D)	Inches	Millimeters
Unit	1.02 x 8.62 x 5.98	26 x 219 x 152
Power Supply	1.26 x 1.93 x 4.69	32 x 49 x 119

Weight	Pounds	Kilograms
Device	1.87	0.85

Certification	
Device	CE, FCC, UL

Warranty	
Device	To view the product warranty, use the following link: <a href="https://atlon.com/warranty">https://atlon.com/warranty</a>

## Accessories

SKU	Description
AT-LC-H2H-1M	LinkConnect HDMI to HDMI 1 Meter Cable
AT-LC-H2H-2M	LinkConnect HDMI to HDMI 2 Meter Cable
AT-LC-H2H-3M	LinkConnect HDMI to HDMI 3 Meter Cable
AT-LC-UC2UC-2M	LinkConnect USB-C to USB-C 2 Meter Cable

## Footnotes

- 1 USB-C port does not support USB data or device powering.
- 2 USB-C does not support 4:2:0

## Copyright, Trademark, and Registration

© 2025 Atlona Inc. All rights reserved. "Atlona" and the Atlona logo are registered trademarks of Atlona Inc. Pricing, specifications and availability subject to change without notice. Actual products, product images, and online product images may vary from images shown here.



The terms HDMI, HDMI High-Definition Multimedia Interface, HDMI trade dress and the HDMI Logos are trademarks or registered trademarks of HDMI Licensing Administrator, Inc.



Dolby, Dolby Atmos, and the double-D symbol are registered trademarks of Dolby Laboratories Licensing Corporation.



For DTS patents, see <http://patents.dts.com>. Manufactured under license from DTS, Inc. DTS, the Symbol, DTS and the Symbol together, and Digital Surround are registered trademarks and/or trademarks of DTS, Inc. in the United States and/or other countries. © DTS, Inc. All Rights Reserved.

All other trademark(s), copyright(s), and registered technologies mentioned in this document are the properties of their respective owner(s).