



## Introduction

The Atлона **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	
Operational	6.98 W
Idle	2.85 W
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

## 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

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