



## Introduction

The Atlona **AT-UHD-CLSO-840** is a 4K/UHD 8x4 matrix switcher for HDMI and HDBaseT with eight inputs, four discrete outputs, flexible audio integration capabilities, and Ethernet-enabled 100 meter HDBaseT extension with PoE remote device powering. It is highly versatile and ideal for presentation environments with content on multiple displays, as well as videoconferencing, presentation capture, and divisible rooms.

The CLSO-840 supports resolutions up to 4K/UHD at 60 Hz with 4:2:0 chroma subsampling. Ethernet pass-through allows HDBaseT Ethernet extension from a control system or network. Audio system integration is streamlined with audio embedding and de-embedding, independent audio matrix switching, dedicated input and output gain controls, and a five-band EQ for each output. The CLSO-840 is configured and managed using Atlona Management System software to simplify installation and enable remote monitoring and support.

The CLSO-840 features three HDBaseT and five HDMI inputs. There are four discrete outputs, including two HDBaseT and two HDMI outputs. This matrix switcher is ideal for use with the UHD-EX Series and HDVS-200 Series transmitters and receivers. The CLSO-840 can conveniently power connected HDBaseT devices via Power over Ethernet.

The CLSO-840 is designed for simplified integration with a codec and audio DSP. It is equipped with independent 8x4 matrix switching for two-channel audio de-embedded from the video inputs. This matrix switcher also includes four two-channel analog audio inputs for embedding audio directly onto the corresponding numbered HDMI and HDBaseT outputs. The CLSO-840 features input and output gain controls, as well as a five-band equalizer for each output.

## Applications

- Conference rooms, auditoriums, and other environments
- Videoconferencing systems
- Divisible rooms with up to four displays

## Key Features

### 8x4 matrix switcher with HDBaseT and HDMI inputs and outputs

- Three HDBaseT and five HDMI inputs; two HDBaseT and two HDMI outputs.
- Integrates local and remote sources and destinations based on AV application requirements.
- Allows a wide array of system designs with multiple displays, videoconferencing, presentation capture, divisible room configurations, and more.

### 4K/UHD capability @ 60 Hz with 4:2:0 chroma subsampling

- Compatible with sources and displays up to 4K/60 4:2:0 and 4K/30 4:4:4.
- Supports high resolution applications such as CAD, 3D visualization, desktop publishing, and detailed financial reporting.

### Extended distance HDMI extension

- Delivers AV, control, and Ethernet up to 330 feet (100 meters) @ 1080p with CAT5e/6 or 4K/UHD using CAT6a/7 cable.
- Use easy-to-integrate network cabling between sources, control system, matrix switcher, network, and displays.

### 8x4 audio matrix switching for de-embedded audio

- Allows independent routing of HDMI de-embedded stereo audio to four analog outputs
- Integrates easily with audio destinations including DSPs, sound reinforcement systems, and videoconferencing codecs

### HDMI audio embedding

- Dedicated inputs allow two-channel source audio to be embedded directly onto HDMI and HDBaseT outputs.
- Deliver audio from a DSP or videoconferencing codec to a display.

### PoE power source – remotely powers PoE-compatible transmitters and receivers

- IEEE 802.3af PoE Power Sourcing Equipment (PSE).
- Delivers power to PoE-compatible HDBaseT devices including the Atlona HDVS and UHD-EX Series.
- Allows convenient installation at a lectern, conference table, wall, or display without the need for local AC power.

### HDCP 1.4 compliant

- Adheres to version 1.4 specification for High-bandwidth Digital Content Protection.
- Allows protected content stream to pass between devices.

### EDID management

- Manages EDID communications between source and switcher; allows integrators to force a source to a preferred resolution.
- Ensures desired audio formats and video resolutions are provided to the AV system.

### TCP/IP and RS-232 control

- Compatibility with third-party control systems provides flexible control options.
- Reduces integration time and costs.

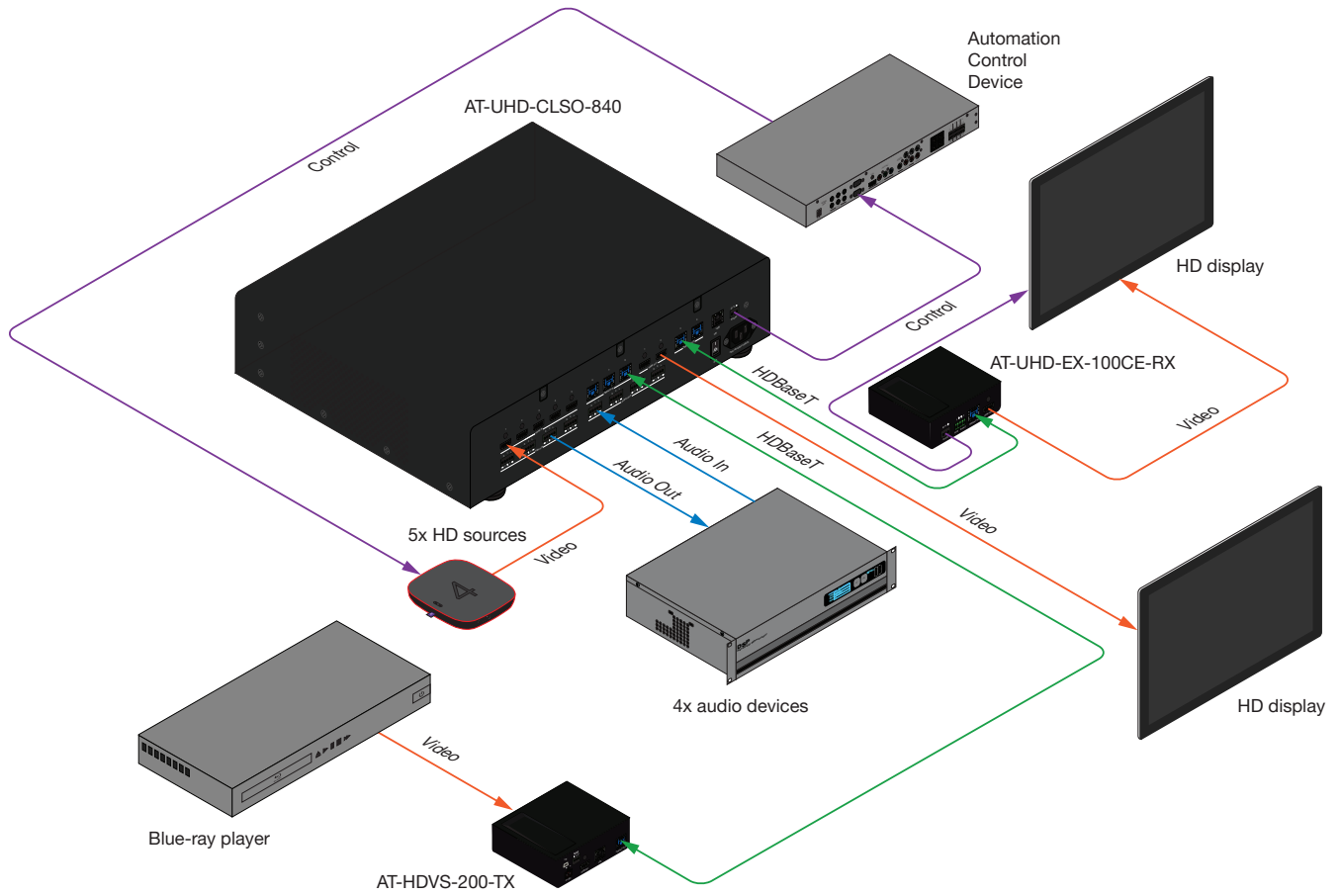
### Configured and managed by AMS (Atlona Management System)

- This IP-controllable product is remotely managed by the Atlona Management System software.
- Integrates product configuration, management, and updates to reduce installation time and enable remote support.

### Award-winning 10 year limited product warranty

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

## Connection Diagram



## Specifications

Video		
HD/SD	3840x2160@30/25/24Hz*, 1080p@60/59.9/50/30/29.97/25/24/23.98Hz, 1080i@60/59.94/50Hz, 720p@60/59.94/50Hz, 576p@50Hz, 576i@50Hz, 480p@60/59.96Hz, 480i@60Hz	
VESA	2560x1600, 2048x1536, 1920x1200, 1680x1050, 1600x1200, 1440x900, 1400x1050, 1280x1024, 1280x800, 1366x768, 1360x768, 1152x864, 1024x768, 800x600, 640x480	
Color Space	YUV, RGB	
Chroma Subsampling	4:4:4, 4:2:2, 4:2:0	
Color Depth	8-bit, 10-bit, 12-bit	
Audio		
Analog Output	PCM 2Ch (de-embedded)	
HDBaseT Output	PCM 2Ch, LPCM 5.1, LPCM 7.1, Dolby® Digital, Dolby Digital Plus, Dolby TrueHD, DTS® 5.1, DTS-HD Master Audio™	
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	1080p / 4K - Feet	1080p / 4K - Meters
CAT5e/6	330	100
CAT6a/7	230	70
CAT-6a / CAT-7	50	15
Signal		
Bandwidth	9 Gbps	
CEC	Yes	
HDCP	1.4	
Temperature	Fahrenheit	Celsius
Operating	32 to 104	0 to 40
Storage	-40 to 158	-40 to 70
Humidity (RH)	10% to 90%, non-condensing	
Power		
Consumption	77 W	
Idle Consumption	60 W	
Supply	100 - 240 V AC, 50/60 Hz	
Dimensions	Inches	Millimeters
H x W x D	3.46 x 17.24 x 12.04	88.00 x 438.00 x 306.00
H x W x D with feet	3.90 x 17.24 x 12.04	99.00 x 438.00 x 306.00
H x W x D with rack ears	3.46 x 19.00 x 12.04	88.00 x 482.60 x 306.00
Rack unit	2U	
Weight	Pounds	Kilograms
Device	10.85	4.92
Certification		
Device	CE, FCC	
Power Supply	CE, FCC, Level VI, RoHS, cULus, RCM, CCC	

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