4K/UHD
Five-Input Universal Switcher
with Wireless Presentation Link

Introduction

The Atlona **AT-UHD-SW-510W** is a 5x1 multi-format switcher with wireless presentation capability. It provides universal BYOD (bring your own device) compatibility with HDMI, DisplayPort, and USB-C inputs, plus wireless connectivity for mobile devices. The AT-UHD-SW-510W is HDCP 2.2 compliant, and features an HDMI output and a mirrored HDBaseT™ output that can be used with the Atlona AT-UHD-EX-100CE-RX-PSE HDBaseT receiver. It also includes automatic input switching and automatic display control capability, both applicable to wired and wireless source connections. Additionally, the AT-UHD-SW-510W can be integrated with an occupancy sensor to automatically power up the unit and display. This unique multi-format switcher and wireless gateway provides a universal connectivity solution for presentation devices in a wide range of professional AV applications.

The SW-510W features two HDMI inputs and a DisplayPort input, plus a USB-C input for newer Mac®, Chromebook™, and Windows® PCs. It is compatible with video signals up to 4K/UHD @ 60 Hz with 4:2:0 chroma subsampling. For integration convenience and flexibility, simultaneous HDMI and HDBaseT outputs make the SW-510W ideal for various presentation scenarios such as primary and confidence displays in a corporate auditorium or lecture hall. The HDBaseT output extends video, audio, control, and Ethernet up to 100 meters.

Applications

- Flexibility to accept any presenter device
- Conference rooms, boardrooms, and classrooms
- Small to medium-sized meeting spaces
- Presentation spaces where two displays are needed

Key Features

5x1 universal AV switcher

- Two HDMI, one DisplayPort, and one USB-C input, plus an input for wireless AV.

- Delivers true BYOD capability for a very wide range of presentation sources.

Wireless AV gateway

- Provides convenient Wi-Fi connectivity for an iOS, Android, Mac, Chromebook, or Windows-based device.

- Integrated access point can be segregated from the facility network for security reasons.

Native platform-based, wireless interfacing

- Allows screen mirroring without the need for a separate app.

- Supports wireless video up to 1080p/30 4:2:0.

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.

- Works for both wired and wireless source devices.

- Enables effortless, automated system operation without the need for an external control system.

USB-C charging for laptops, tablets, and smartphones

- Conveniently provides mobile device powering during a meeting or presentation.

- Simple one-cable connection for AV and charging.

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.

Mirrored HDMI and HDBaseT outputs networks

- SHDBaseT output transmits AV, control, and Ethernet up to 330 feet (100 meters) @ 1080p with CAT5e/6 or 4K/UHD using CAT6a/7 cable.

- Mirrored HDMI and HDBaseT outputs provide flexible options for AV system designs and applications.

HDCP 2.2 compliantencode to decode

- Adheres to latest specification for High-bandwidth Digital Content Protection.

- Allows protected content stream to pass between devices.

Occupancy sensor triggering

- When used with a third-party occupancy sensor, the switcher can wake from standby, power up the display, and deliver a welcome screen when someone walks into the room.

- Greatly simplifies user operation by avoiding the need to manually power up the system.

- A wireless connection can be automatically timed out for security and privacy.

Audio embedding and de-embedding

- Embeds incoming analog two-channel audio onto the HDMI and HDBaseT outputs.

- De-embeds two channel PCM audio from any video source to a balanced, analog audio output.

- Independent gain controls for embedded and de-embedded two-channel PCM audio, plus bass / treble controls for the analog audio output.
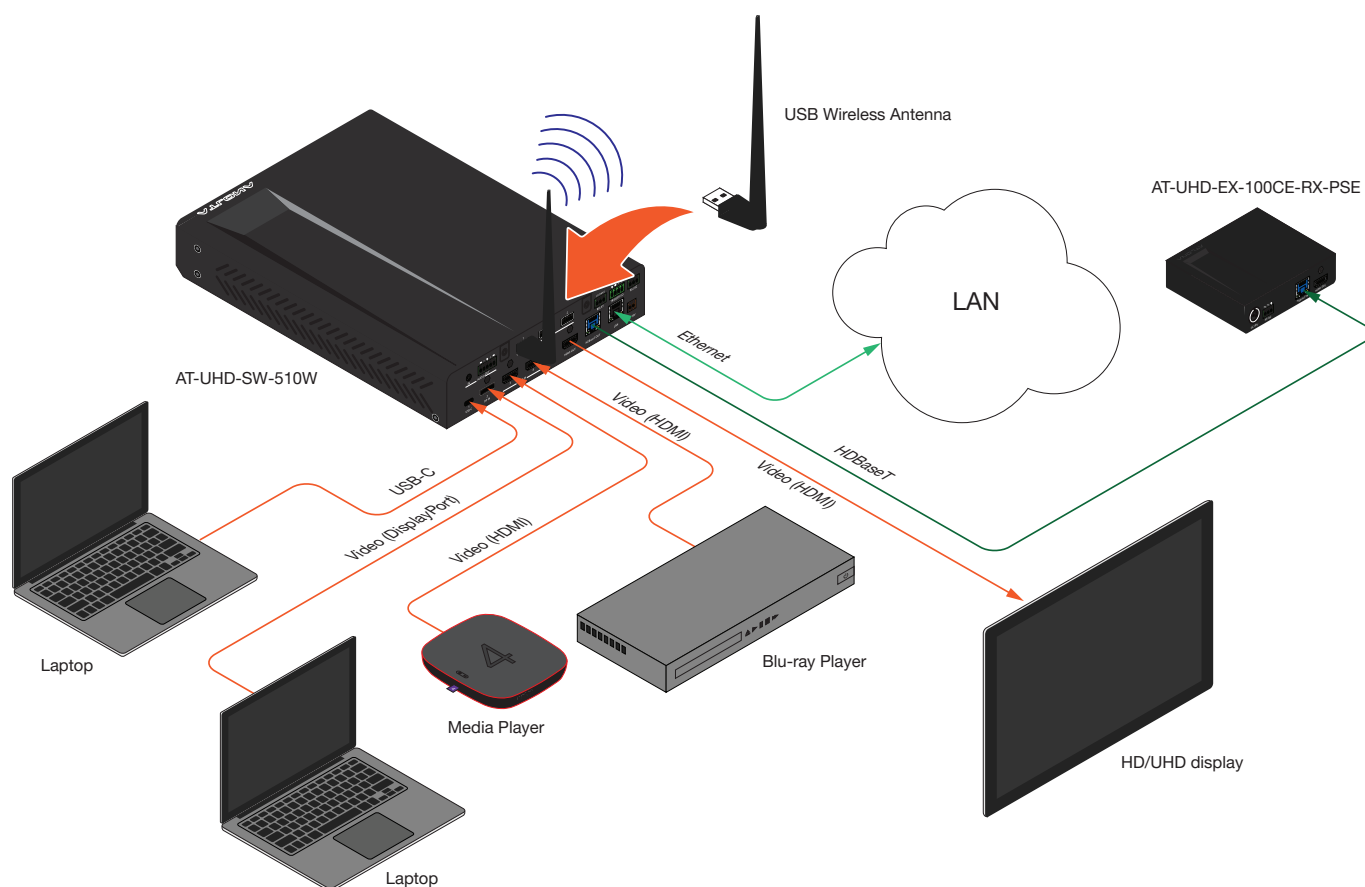
EDID management

- 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.

Award-winning 10 year product warranty

- Ensures long-term product reliability and performance in commercial and residential systems.

- Specify, purchase, and install with confidence.

Connection Diagram

USB Wireless Antenna

AT-UHD-EX-100CE-RX-PSE

LAN

AT-UHD-SW-510W

Ethernet

Video (HDMI)

HDBaseT

Video (HDMI)

USB-C

Video (DisplayPort)

Video (HDMI)

Laptop

Media Player

Blu-ray Player

HD/UHD display

Laptop

Specifications

Video	
HD/SD	3840×2160@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	2560×1600, 2048×1536, 1920×1200, 1680×1050, 1600×1200, 1440×900, 1400×1050, 1280×1024, 1280×800, 1366×768, 1360×768, 1152×864, 1024×768, 800×600, 640×480

Further specifications are TBD.