Introduction

The Atlona **AT-UHD-SW-52ED** is a 5x1 HDMI switcher with mirrored HDMI and HDBaseT™ outputs, balanced audio outputs, auto-switching, and advanced control capability. The switcher supports 4K/UHD @ 60 Hz, 4:2:0; offers 3D pass-through, and 10.2 Gbps bandwidth. With front-panel buttons and IR control, it can be a standalone switcher. It transmits AV signals along with Ethernet, power, and control over a single cable to displays up to 328 feet (100 meters) from the switcher to PoE-powered HDBaseT receivers or HDBaseT displays. Control options include auto-switching, front-panel buttons, and compatibility with IR, RS-232, or TCP/IP-based control systems. Advanced features also include a web-based GUI for easy set-up and management of EDID, HDCP, and display control. The switcher offers audio de-embedding of PCM audio over HDMI to either S/PDIF or two-channel analog audio outputs. The switcher is a cost-effective product for professional integration featuring a compact, 1U, half-rack width enclosure that is easily installed with the included 19" rack-mount brackets. Two units can be mounted side-by-side.

Applications

- **Conference rooms and meeting rooms**
  The SW-52ED is compact and ideal for under-table mounting. It conveniently provides automatic switching and display control for simplified user operation, especially when laptops are brought into the system.

- **Presentation spaces where two displays are needed**
  This switcher can be installed in a lectern to serve a confidence monitor, plus the primary display in a remote location.

HDMI
HIGH-DEFINITION MULTIMEDIA INTERFACE

Key Features

Mirrored, dual outputs on HDMI and HDBaseT

- Supports dual display environments with local and extended distance 330 foot (100 meter) displays.

- Eliminates cost associated with extra extension components; simplifies installation. HDMI output can be used with additional HDBaseT transmitter.

Automatic display control

- Automatically changes projector power state based on active or standby mode of switcher. Control signals transmitted via CEC, IP, or RS-232.

- Eliminates need for complex control system in AV systems. Enables display and volume control directly or with AT-UHD-EX-100CE. CEC enables control of low-cost consumer displays.

- Any product that has mirrored output with HDMI and HDBaseT will have CEC functionality through the HDBaseT output.

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.

- Eliminates need for complex control system in AV systems.

4K/UHD capability

- Compatible with Ultra High Definition sources and displays.

- Supports high-resolution applications such as CAD, desktop publishing, and detailed financial reporting.

- Supports up to HDCP 1.4[1]

AV, Ethernet, power and control over HDBaseT

- Delivers 4K/UHD video, audio, 100Base-T Ethernet, power and control through a single cable.

- Eliminates multiple cable runs between source, control system router and display.

IR, RS-232 and Ethernet HDBaseT insertion

- Adds internally-generated or externally-generated display control signals to the HDBaseT transmission.

- Simplifies display control from third-party control systems.

Power over Ethernet for remote-powered HDBaseT receivers

- Industry standard IEEE 802.3af PoE supplied by the switcher over HDBaseT.

- No local AC outlet required; saves time and integration costs.

TCP/IP, RS-232, and IR control

- Flexible control options compatible with 3rd-party control systems.

- Reduces integration time and costs.

EDID management

- Manages EDID communications between source and display; allows integrators to force sources to preferred resolution.

- Ensures desired audio formats and video resolutions are provided to the AV system; eliminates the need for EDID management device.

HDCP management

- Allows non-protected material from PCs to pass to non-compliant displays and teleconference systems while protected content is not transmitted.

- HDCP compliance can be switched on/off from control systems for use with non-compliant displays, streaming devices, and codecs.

Easy, GUI-based configuration using integrated web server

- Offers menu-based configuration of network settings, RS-232 settings, input switching, EDID, and HDCP management and audio.

- Allows fast configuration of internal product settings and troubleshooting from a tablet, smart phone, or PC in the field.

Volume controls

- Volume up and volume down button adjust output level to sound system.

- Alternatively send RS-232 or TCP/IP commands to external control device.

Key Features (continued)

Volume setting indicator

- Displays volume level of the switcher.

- Provides quick indication of level during setup.

Balanced, line level output

- Reduces noise and requirement for external components.

- Matches requirements of commercial sound systems.

Multi-channel audio compliant

- Supports PCM, Dolby® Digital, Dolby Digital Plus™, Dolby TrueHD, Dolby Atmos®, DTS Digital Surround™, and DTS-HD Master Audio™.

- Allows any multi-channel audio stream to be used within a professional audio system.

Rack-mountable, 1U, half rack width enclosure

- Installs easily in rack-mounted systems with included 19" rack-mount brackets.

- Simplifies installations; included hardware allows two units to be mounted side-by-side.

Works with Velocity with Integrated AMS

- This IP-controllable product can be remotely managed by the Atlona Management System software.

- Integrates product configuration, management, and updates to reduce installation time and enable remote support.

Included accessories

- User guide, IR remote control, rack and surface mounting hardware, and external universal power supply.

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

Video		
Signal Type	HDMI	
HDCP	1.4	
Pixel Clock	300MHz	
UHD/HD/SD	4096×2160@60[1]/50[1]/30/25/24Hz 3840×2160@60[1]/50[1]/30/25/24Hz 2048x1080p 1920x1080p@60/59.94/50/30/29.97/25/24/23.98Hz 1920x1080i@60/59.94/50Hz	1280x720p@60/59.94/50Hz 720x576p 720x576i 640x480p 640x480i
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	

Audio			
HDMI / HDBaseT 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®
S/PDIF	PCM 2.0	Dolby® Digital	DTS-HD Master Audio™
Bit Depth	Up to 24 bits		
Analog Audio			
Format	Maximum analog output: balanced +18dBu @ 0 dBfs, LPCM 2.0 only		
Sample Rate	32 kHz, 44.1 kHz, 48 kHz, 88.2 kHz, 96 kHz, 176.4 kHz, 192 kHz		

Control			
RS-232	Device control and configuration Bidirectional pass-through from control system over HDBaseT Supported baud rates: 2400, 4800, 9600, 19200, 38400, 57600, 115200		
IP	Protocols: Https, Telnet, mDNS Modes: DHCP, Static - selectable through front panel and web server		
CEC Support	Yes		

Resolution / Distance	4K/UHD - Feet / Meters		1080p - Feet / Meters	
HDMI IN/OUT	15	5	30	10
CAT5e/6	230	70	330	100
CAT6a/7	330	100	330	100

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Buttons and Indicators	
Buttons: POWER, UP, DOWN, INPUT	4 - momentary, tact-type
Indicators: HDMI 1 - HDMI 5 VOLUME	 5 - LED, blue 9 - LED, green, amber, red

Connectors	
HDMI IN	5 – Type A, 19-pin female
HDMI OUT	1 – Type A, 19-pin female
HDBaseT OUT	1 - RJ45
LAN	1 - RJ45, 10/100 Mbps
AUDIO OUT	1 – 5-pin captive screw, balanced / unbalanced 2-channel
S/PDIF OUT	1 – RCA-type, female
RS-232	1 – 3-pin captive screw (bidirectional)
IR IN/OUT	1 – 5-pin captive screw
FW	1 – Mini USB
PWR	1 - 2-pin captive screw

Temperature	Fahrenheit	Celsius
Operating	32 to 113	0 to 45
Storage	-4 to 140	-20 to 60
Humidity (RH)	20% to 60%, non-condensing	

Power	
Consumption	22W
Supply	Input: 100 - 240 V AC, 50/60 Hz Output: 48 V / 5A DC

Dimensions (H x W x D)	Inches	Millimeters
Unit	1.34 x 8.19 x 4.41	34 x 208 x 112
Power Supply	1.42 x 1.81 x 4.41	36 x 46 x 112

Weight	Pounds	Kilograms
Device	1.44	3.15

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

Footnotes

(1) Does not support HDCP 2.2 devices.
(2) 4096×2160 @ 50/60 Hz and 3840×2160@50/60Hz supported @ chroma subsampling 4:2:0 8-bit only.