5 x 2 True 4K Seamless Presentation Matrix Switch with Control

VP3520

The ATEN VP3520 is a multi-in-one presentation matrix switch that integrates a video matrix switch, 4K scaler, HDBaseT extender, and audio DSP functions into one compact device that easily mounts under a table or in a rack. The VP3520 seamless presentation matrix switch with control features the True 4K video resolutions of 4096 x 2160 / 3840 x 2160 @ 60 Hz (4 : 4 : 4) and HDR technology, guaranteeing crystal-clear images across two displays. The VP3520 supporting 4K @ 60 Hz, HDMI, and HDCP 2.2 features Seamless Switch™ that employs an FPGA matrix architecture that ensures continuous video streams, real-time control, and stable signal transmissions. With a built-in high-performance 4K scaler, the VP3520 easily converts various input resolutions into various output display resolutions, giving viewers the best video and picture quality across the two displays.

With flexible audio de-embedding, the VP3520 is designed with the audio routing flexibility to meet different application requirements. In a simple setup, HDMI audio can be connected and switched directly to display audio. For a more complex setup, the HDMI audio can be de-embedded to Audio Line Out in order to connect to your preferred in-room audio equipment. Equipped with five digital inputs to one HDBaseT and one HDMI True 4K separate outputs, the VP3520 enables users to control two displays at the same time and is designed to boost the efficiency and impact of professional presentations. The VP3520 provides users with the flexibility of using both active and passive speakers with its stereo line out port, coaxial port, and 2 x 10 W power amplifiers.

As for the control functions, the VP3520 offers users multiple control options through the front-panel pushbuttons, IR remote control, RS-232 commands, web-based GUI, and ATEN Video Presentation Control App. Moreover, the VP3520 enables the control over AV devices such as TV displays, projectors, and monitors. It is ideal for all meeting spaces and education environments, including huddle rooms, classrooms, training rooms, or any other presentation setting such as exhibition galleries or hotels.

HDMI | HDBT | 4K TRUE | HDR | HDCP 2.2 | EDID

Scaler | Auto Switching | RS-232 Control | IR Remote Control | Phantom Power | PoH

A/V In HDMI | A/V Out HDMI | A/V In HDBaseT | A/V Out HDBaseT | Audio Out Line Out | Audio In Microphone | Audio In Stereo

Front View

Rear View

Features

Display Control

- Auto display on / off control — supports display control through CEC, IR, RS-232, PJLink and controls projector screen through relay port
- Flexible control methods — triggered by source detection or 4 function keys on front panel

Digital AV Matrix Switching

- Supports multi-format 5 inputs — 3 HDMI, 2 HDBaseT
- 1 HDMI and 1 HDBaseT output
- Audio embedding — stereo audio can be embedded into display output or separated to stereo line out and coaxial audio output
- Audio de-embedding — HDMI / HDBaseT audio can be extracted to stereo line out
- Built-in Audio DSP — supports microphone input with selectable 48 V Phantom Power and allows microphone input to be mixed with program audio and embedded into display output
- Automatically reduces program audio when a microphone signal is detected
- Auto switching — automatically detects and switches to a new source as soon as it is connected
- Audio amplifier — 2 x 10 W built-in power amplifier with speaker outputs on terminal block connectors

High-Definition Video with Optimum Output

- Superior video quality — True 4K resolutions up to 4096 x 2160 @ 60 Hz (4 : 4 : 4) (HDMI) / 4096 x 2160 @ 60 Hz (4 : 2 : 0) (HDBaseT)
- Supports 4K HDR
- 4K Scaler — features a 4K video scaler to convert input resolutions to the optimum display resolutions
- Seamless Switch™ — features close-to-zero second switching for continuous video streams, real-time switching, and stable signal transmissions
- EDID Expert™ — automatically selects the optimum EDID settings for smooth power-up, high-quality display, and the best video resolution across the connected devices
- HDMI; HDCP 2.2 compliant

Versatile, Streamlined Operation

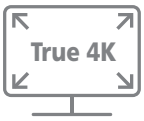
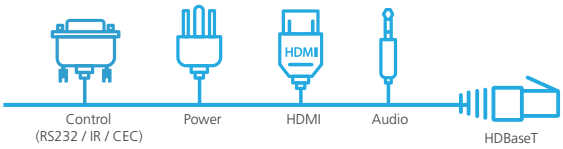
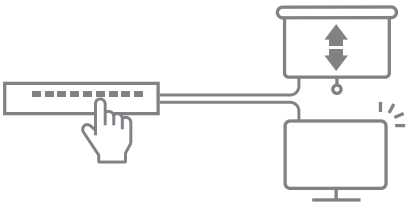
- Multiple control options — flexible control via front-panel pushbuttons, IR remote control, RS-232, and web-based GUI through Ethernet
- View the device status and control it via ATEN Video Presentation Control App in a swift and agile way
- RS-232 and IR channel — allows AV device control over HDBaseT connection without additional cabling
- Supports stand-by mode for power saving and fast waking up
- Consumer Electronics Control (CEC) support

Extended Transmission over One Cable

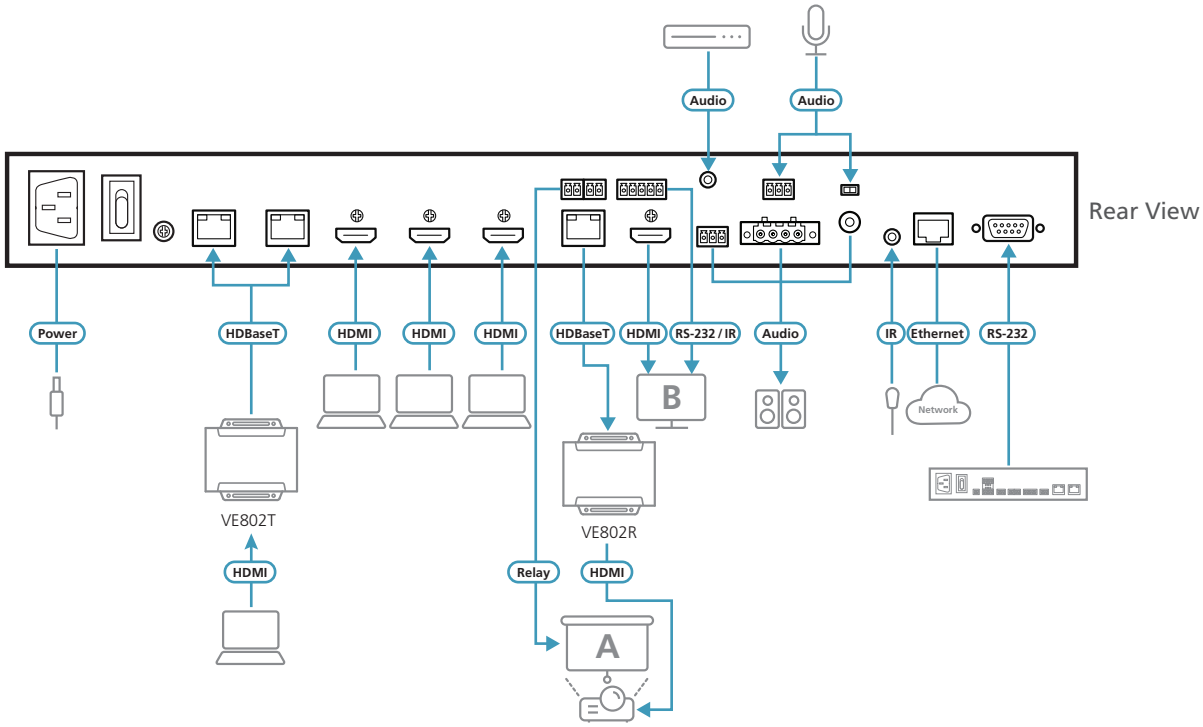
- Power over HDBaseT (PoH) — remote powering over existing communication cable with selectable powering device
- Long-distance transmission — transmits digital AV signal, RS-232 commands, and IR control signals up to 70 m* via Cat 6 / 6a or ATEN 2L-2910 Cat 6 cables through HDBaseT Out port

Note: This is achieved using both the HDBaseT In and the HDBaseT Out ports on the VP3520 with each extending the transmission up to 70 m.

Highlights

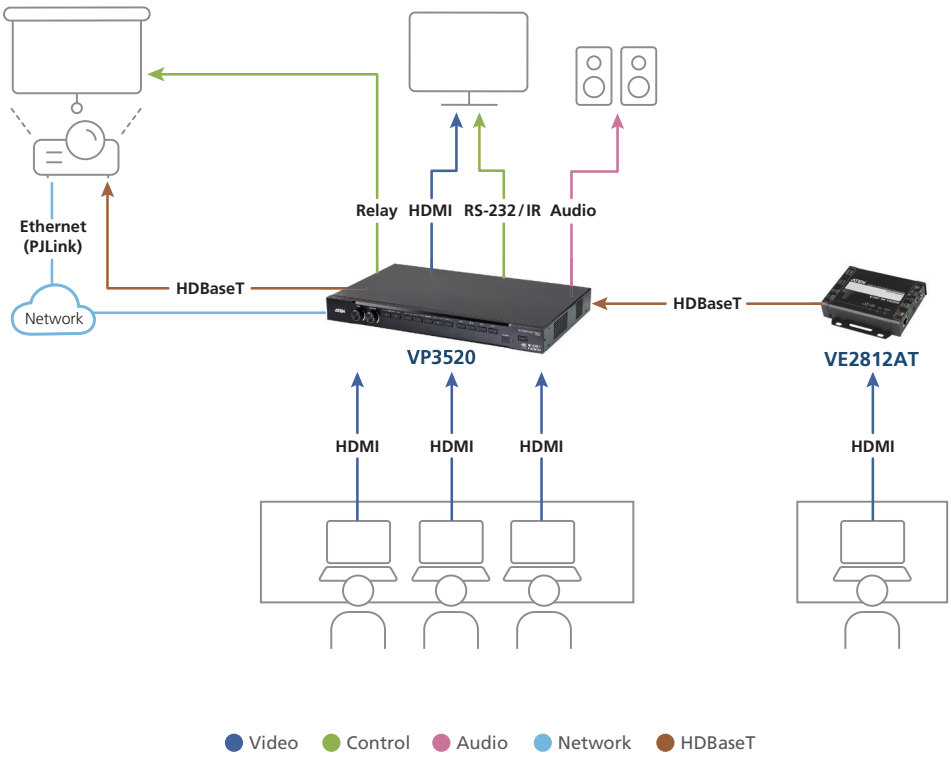
True 4K Support with Scaler	With a built-in high-performance 4K scaler, the VP3520 featuring the True 4K video resolutions of 4096 x 2160 / 3840 x 2160 @ 60 Hz (4 : 4 : 4) and HDR technology is able to easily convert various input resolutions into various output display resolutions, giving viewers the best video and picture quality across the two displays. 
Extended AV Transmission	The HDBaseT-Lite technology extends uncompressed video, audio as well as control signal and power over one Cat 6 / 6a cable up to 70 m. 
Built-in Audio DSP	In addition to the audio embedding and de-embedding, the VP3520 supports microphone input with selectable 48 V Phantom Power and allows microphone input to be mixed with program audio and embedded into display output.
Display Control	To enhance meeting efficiency, VP3520 features display control function to provide auto display on / off control and manage projector screen up / down that is triggered by source detection and the pushbuttons on the front panel. 

Connection Diagram



Scenario Diagram: Meeting Room

This diagram illustrates a meeting room application setup that enables the VP3520 to control the connected display devices via RS-232, PJLink, relay, and IR remote.



Specifications

	VP3520
Video Input	
Interfaces	3 x HDMI Type-A Female (Black) 2 x HDBaseT (RJ-45) Female (Silver) with PoH
Max. Distance	HDMI: 4K @ 60 Hz (4 : 4 : 4) at 5 m; 4K @ 30 Hz at 10 m; 1080p @ 60 Hz at 15 m HDBaseT: 4K @ 30 Hz at 35 m (Cat 5e / 6) / 40 m (Cat 6a / ATEN 2L-2910 Cat 6); 1080p @ 60 Hz at 60 m (Cat 5e / 6) / 70 m (Cat 6a / ATEN 2L-2910 Cat 6)
Video Output	
Interfaces	1 x HDMI Type-A Female (Black) 1 x HDBaseT (RJ-45) Female (Silver) with PoH
Max. Distance	HDMI: 4K @ 60 Hz (4:4:4) at 5 m; 4K @ 30 Hz at 10 m; 1080p @ 60 Hz at 15 m HDBaseT: 4K @ 30 Hz at 35 m (Cat 5e / 6) / 40 m (Cat 6a / ATEN 2L-2910 Cat 6); 1080p @ 60 Hz at 60 m (Cat 5e / 6) / 70 m (Cat 6a / ATEN 2L-2910 Cat 6)
Video	
Max. Resolution	HDMI: Up to 4096 x 2160 / 3840 x 2160 @ 60 Hz (4 : 4 : 4) HDBaseT: Up to 4096 x 2160 / 3840 x 2160 @ 60 Hz (4 : 2 : 0) ; Up to 4096 x 2160 / 3840 x 2160 @ 30 Hz(4 : 4 : 4)
Compliance	HDMI; 4K HDR HDCP 2.2 Compatible; Consumer Electronics Control (CEC)
Audio	
Output	Line Out (Unbalanced): 1 x Captive Screw Connector, 3-pole Digital Audio: 1 x Coaxial Amplifier out: 1 x Captive Screw Connector, 4-pole
Input	Stereo Audio (HDMI / HDBaseT): 1 x mini stereo Jack Female (Green) Microphone: 1 x Captive Screw Connector, 3-pole (with Selectable Phantom Power)
Control	
RS-232	1x DB-9 Female (Black); VP Device Control & Configuration 1 x Captive Screw Connector, 3-pole ; AV Device Control
IR	1 x Mini Stereo Jack Female (Black); VP Device Control 1 x Captive Screw Connector, 2-pole; AV Device Control
Ethernet	1 x RJ-45 Female (Silver); Support PJLink Protocol
Interfaces	
Relay	2 x Captive Screw Connector, 2-pole
Switches	
Power	1 x Pushbutton (LED: Green / Orange) 1 x Slide Switch (+48 V Phantom Power)
Video Input Port Selection	5 x Pushbutton (LED: Green)
Video Output Port Selection	2 x Pushbutton (LED: Orange)
Selection	Mic: 1 x Knob Volume: 1 x Knob Mode / Unlock: 1 x Pushbutton Function Keys: 4 x Pushbutton
EDID Settings	EDID Mode: ATEN Default / Display A / Remix
Connectors	
Power	1 x 3-Prong AC Socket
Power Consumption	AC110V:46.7W; AC220V:45.8W
Environmental	
Operating Temperature	0 – 40 °C
Storage Temperature	-20 – 60 °C
Humidity	0 – 80% RH, Non-Condensing
Physical Properties	
Housing	Metal
Weight	3.80 kg
Dimensions (L x W x H)	43.24 x 27.23 x 4.40 cm

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