

VM5404H

4 x 4 HDMI Matrix Switch with Scaler



reddot award 2015
winner interface design



The VM5404H 4 x 4 [HDMI Matrix](#) Switch is a distinct HDMI solution that offers an easy and affordable way to route any of 4 HDMI video sources to any of 4 HDMI displays, with a quick view of all port connections via the front panel LCD.

The VM5404H includes seamless switching that employs a FPGA matrix architecture that ensures continuous video streams, real-time control and stable signal transmissions. With a built in high-performance scaler, the VM5404H easily converts various input resolutions into various output display resolutions, giving viewers the best video and picture quality across all displays. The switch integrates video wall functionality with an easy to use web GUI that lets you create 8 connection profiles that can be customized into different video wall layouts.

The VM5404H is an ideal solution for applications that require multiple HDMI displays with multiple HDMI sources to be conveniently setup in multiple locations, such as for stage presentations, competitions, control centers, and installations that require real-time reports.



Features

- Connects any of 4 HDMI sources to any of 4 HDMI displays
- Long Distance Transmission – supports up to 15 m (24 AWG)
- HDMI (3D, Deep color); HDCP 1.4 compatible
- **Seamless Switch™** – ATEN FPGA design unifies video formats to provide continuous video streams, real-time switching and stable signal transmissions*
- **Video Wall** –allows you to create custom video wall layouts via intuitive web GUI *
- **Scaler** – features a video scaling function to convert input resolutions to the optimum display resolutions
- **EDID Expert™** – selects optimum EDID settings for smooth power-up and highest quality display
- Multiple Control Methods – system management via front-panel pushbuttons, IR, RS-232 and Ethernet (Telnet / Web GUI) connections
- View and control via ATEN [Video Matrix](#) Control App in a swift and agile way
- **Features a built in high-performance scaler for the best image quality**
- Built-in bi-directional RS-232 serial port for high-end system control
- Superior video quality – [HDTV](#) resolution of 480p, 720p, 1080i and 1080p (1920 x 1080)
- ESD protection for HDMI
- Supports Dolby True HD and DTS HD Master audio
- Consumer Electronics Control (CEC) support
- Supports IR signals for remote control
- Firmware Upgradeable
- Rack Mountable (1U design)

* Note:

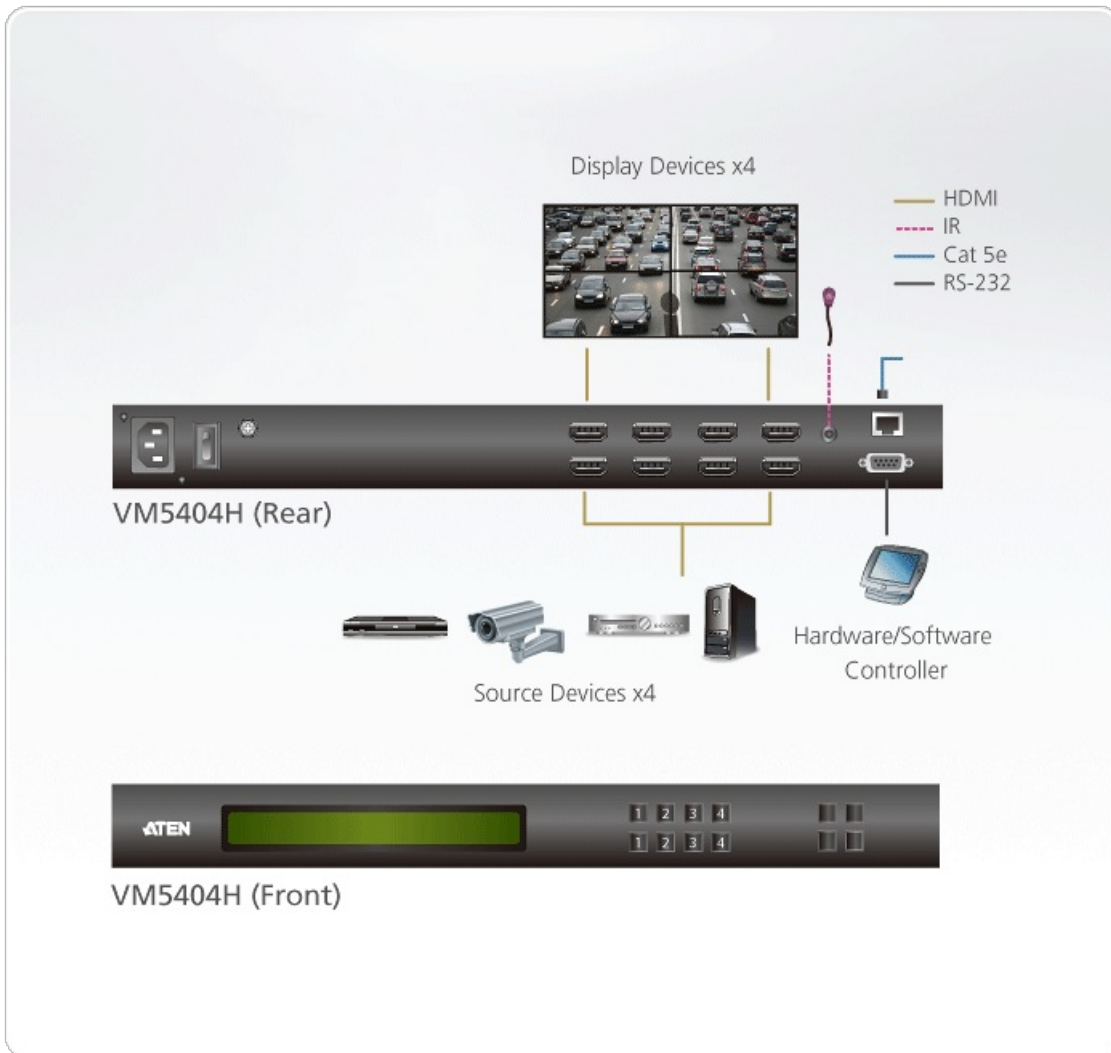
1. If Seamless Switch is enabled, the video output will not display 3D, Deep Color, or interlace (i.e., 1080i) resolution features. To use these features, you must disable Seamless Switch.
2. Videos may not display within range when Seamless Switch™ or Video Wall is enabled, in which case please adjust the display settings on your device.

Specifications

| | |
|------------------|--|
| Video Input | |
| Interfaces | 4 x HDMI Type A Female (Black) |
| Impedance | 100 Ω |
| Max. Distance | 3.0 m |
| Video Output | |
| Interfaces | 4 x HDMI Type A Female (Black) |
| Impedance | 100 Ω |
| Max. Distance | 15 m |
| Video | |
| Max. Data Rate | 6.75 Gbps (2.25 Gbps Per Lane) |
| Max. Pixel Clock | 225 MHz |
| Compliance | HDMI (3D, Deep Color) HDCP 1.4 Compatible Consumer Electronics Control (CEC) |
| Max. Resolution | Up to 1080p |
| Max. Distance | Up to 15 m |
| Control | |
| RS-232 | Connector: 1 x DB-9 Female (Black) Baud rate and protocol: Baud Rate: 19200, Data Bits: 8, Stop Bits:1, Parity: No, Flow Control: No |

| | |
|----------------------------|--|
| IR | 1 x Mini Stereo Jack Female (Black) |
| Ethernet | 1 x RJ-45 Female |
| EDID Settings | EDID Mode: Default / Port1 / Remix / Customized (EDID Wizard support) |
| Connectors | |
| Power | 1 x 3-Prong AC Socket |
| Power | |
| Maximum Input Power Rating | 100-240 VAC; 50-60 Hz; 1.0A |
| Power Consumption | AC110V:34.1W:160BTU/h AC220V:34.4W:161BTU/h Note: <ul style="list-style-type: none"> ● The measurement in Watts indicates the typical power consumption of the device with no external loading. ● The measurement in BTU/h indicates the power consumption of the device when it is fully loaded. |
| Environmental | |
| Operating Temperature | 0-50°C |
| Storage Temperature | -20 - 60°C |
| Humidity | 0 - 80% RH, Non-Condensing |
| Physical Properties | |
| Housing | Metal |
| Weight | 4.05 kg (8.92 lb) |
| Dimensions (L x W x H) | 43.24 x 26.23 x 4.40 cm (17.02 x 10.33 x 1.73 in.) |
| Carton Lot | 1 pc |
| Note | For some of rack mount products, please note that the standard physical dimensions of WxDxH are expressed using a LxWxH format. |

Diagram



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