

# VM6404H

## 4x4 4K HDMI Matrix Switch with Scaler

- 4K is the next generation of image quality for high definition video. 4K delivers eight million pixels which is four times as much detail as 1080p Full HD resolutions. ATEN's VM6404H 4K HDMI Matrix Switch with Scaler is compatible with the two latest 4K video resolution standards: 3840 x 2160 and 4096 x 2160. The VM6404H provides powerful HD processing to produce 4K resolutions across four displays with crystal clear images.

The VM6404H supports 4K@60Hz, HDMI 2.0\* and HDCP 2.2 and features 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 VM6404H 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.

\*HDMI 2.0 supports 3840 x 2160 @30 Hz (4:4:4), 3840 x 2160 @60 Hz (4:2:0), 4096 x 2160 @ 30Hz (4:4:4), 4096 x 2160 @ 60 Hz (4:2:0) resolutions

The VM6404H is an ideal solution for applications that require multiple HDMI displays with multiple HDMI sources to be conveniently setup – such as for stage presentations, digital classroom, video conference rooms and any installation that requires real-time reporting.

Front view



Rear view



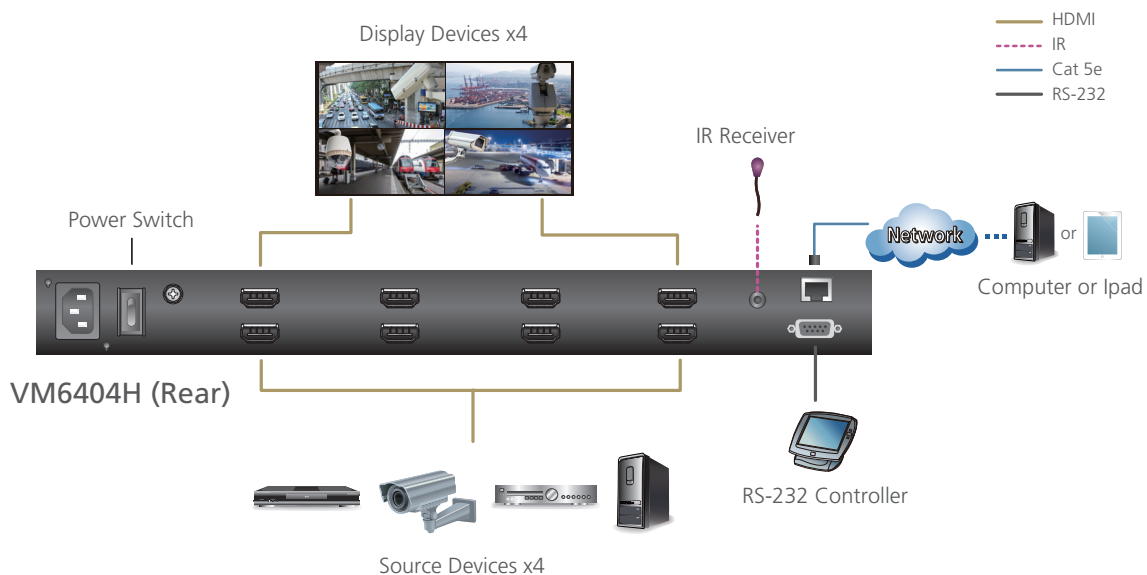
## Features

- 4x4 HDMI input/output connections
- Front-Panel configuration via LCD display / pushbuttons / IR remote control
- System Operation via bi-directional RS-232 serial controller / Ethernet / Telnet / IR Remoter Control / front-panel pushbuttons / GUI
- Built-in Scaler on each output port converts input resolutions into the display's native resolution, supports scaling 4K resolutions up or down
- Seamless Switch™ – ATEN FPGA design unifies video formats to provide continuous video streams, real-time switching and stable signal transmissions
- Video Wall – Features up to 8 video wall profiles for custom screen layouts via point-n-click web GUI
- EDID Expert – configures optimum EDID settings for smooth power-up, high-quality display and use of the best resolution across different screens
- Firmware upgradable
- Rack-mountable (1U design)

\* **Note:** If Seamless Switching is enabled, the video output will not display 3D, Deep Color or interlace (i.e., 1080i) resolutions. To make these features available, you must disable Seamless Switching.

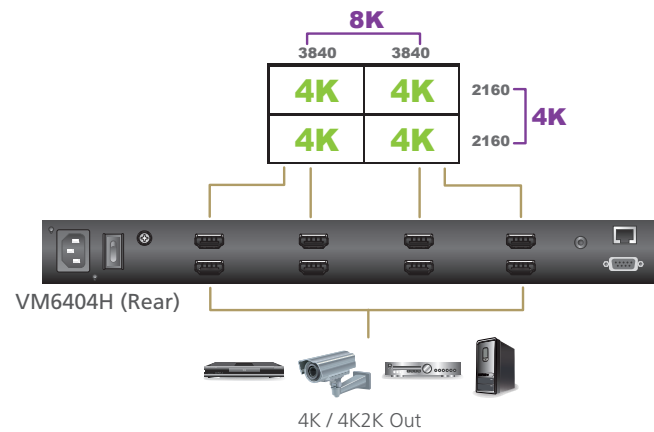
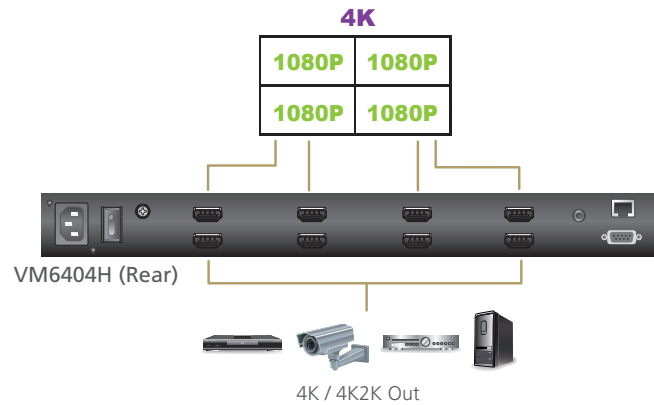
## Highlights

<b>Video Wall</b>	The VM6404H is equipped with video wall functionality integrated through an easy to use web GUI. The video wall setup provides up to 8 connection profiles that you can customize into layouts using a simple point and click web interface. Video walls allow you to setup multiple displays that are configured to form and show video as a single large screen in various layouts – to see what you want, how you want.
<b>Smooth and Seamless Viewing Experience</b>	The VM6404H's built-in FPGA design unifies video formats and provides continuous video streams, real-time switching and stable signal transmissions. It is capable of high-speed switching between all input and output ports – supporting TMDS high data transfer rates of up to 4K @ 60Hz to minimize latency.

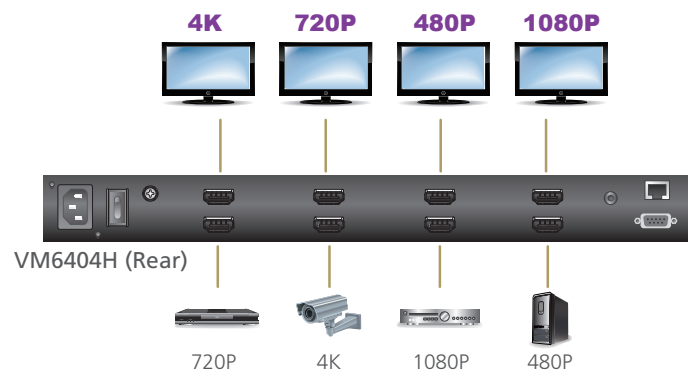


## Video Wall

- Each output supports a resolution up to 4K. When a 2x2 video wall is applied, an 8K resolution can be utilized.



- The VM6404H scales the resolution of different source devices to fit the resolution of various types of displays so that each provides a perfect picture.



## Specifications

Function	VM6404H
<b>Video Input</b>	
Interface	4 x HDMI Type A Female (Black)
Impedance	100 Ω
Max. Distance	1.8 m
<b>Video Output</b>	
Interface	4 x HDMI Type A Female (Black)
Impedance	100 Ω
Max. Distance	15 m
<b>Video</b>	
Max. Data Rate	10.2 Gbps (3.40 Gbps per lane)
Max. Pixel Clock	340 MHz
Compliance	HDMI (3D, Deep Color, 4K); HDCP 2.2 Compatible; Consumer Electronics Control (CEC)
Max. Resolution	Up to 4096 x 2160 / 3840 x 2160 @ 60Hz (4:2:0); 4096 x 2160 / 3840 x 2160 @ 30Hz (4:4:4)
Max. Distance	Up to 15 m
<b>Control</b>	
RS-232	<b>Connector:</b> 1 x DB-9 Female (Black); <b>Baud Rate:</b> 19200, Data Bits: 8, Stop Bits: 1, Parity: No, <b>Flow Control:</b> No
IR	1 x Mini Stereo Jack Female (Black)
<b>EDID Settings</b>	EDID Mode: Default / Port 1 / Remix / Customized
<b>Power</b>	
Connectors	1 x 3-prong AC Socket
I/P Rating	100-240 VAC;50-60Hz;1.0A
Consumption	120VAC,47.6W; 230VAC, 47.5W
<b>Environmental</b>	
Operating Temperature	0-50°C
Storage Temperature	-20 - 60°C
Humidity	0 - 80% RH, Non-Condensing
<b>Physical Properties</b>	
Housing	Metal
Weight	4.72 kg
Dimensions (L x W x H)	43.24 x 30.73 x 4.4 cm

