

Professional Audio Video Manufacturer

VIS-UHD0808-VW 4K60 HDMI Matrix PRODUCT DATASHEET



VISSONIC ELECTRONICS LTD.

Think Solutions



8x8 Seamless 4K UHD Matrix and Video Wall Processor



1. Product Introduction

VIS-UHD0808-VW is professional seamless UHD matrix switcher with 8x8 HDMI input/output video wall processor. It provides high peak data transfer rate and perfectly supports synchronous switching of HDMI signals, resolution up to 4K@60,4:4:4, create creative video wall layouts through an intuitive web GUI, FPGA-based pure hardware structure, can be widely used in stage presentations, digital classroom, video conference rooms etc.

2. Features

- 1. 8 HDMI inputs, 8 HDMI outputs, real-time seamless switching
- 2. 8 IR and 8 analog audio inputs, 8 IR and 8 analog audio outputs.
- 3. Input and output support up to 4K@60,4:4:4, backward compatible.
- 4. 4K scaler converts the input resolution to the monitor's native resolution.
- 5. Input image clipping can capture a portion of the input image as a display signal.
- 6. Station logo display.
- 7. Input optional test images, each input channel comes with 11 built-in professional test images.
- 8. Output matrix or single layer splicing.
- 9. Output optional test images, each input channel comes with 11 built-in professional test images.
- 10. Support splicing LED or LCD screens, up to 4x2 configuration.
- 11. Support scrolling text.
- 12. Independent audio and IR switching.
- 13. Graphical web and pc software control.
- 14. Full digital seamless switching technology.
- 15. Enables input volume control for each channel via web-based software or control protocols
- 16. Multiple control methods including front key panel with LCD control, RS232 control and TCP/IP control withRJ45 ports, make control more flexible.
- 17. Fan with silent operation and intelligent control
- 18. Multiple built-in EDID options for input
- 19. Supports DHCP, configurable via software or front panel



- 20. Output reads monitor EDID to automatically select the best resolution
- 21. Multiple output modes: full screen, proportional scaling
- 22. Added features for screen freeze and unfreeze
- 23. One-click audio mute for input
- 24. Configurable output for no signal input: no signal or black screen
- 25. Software displays status of whether the output is connected to a monitor
- 26. Configurable HDCP version for input

3. Functions

8x8 HDMI Matrix--Full 18G signal processing throughout the entire signal path, from input to output. Capable of handling HDR signals and resolutions up to 4K60 4:4:4 with a total bandwidth of 18Gbps

Video Wall -- create creative video wall layouts through an intuitive web GUI, multiple monitors can be easily configured to display video as one big screen.

4K Scaler -- 4K scaling technology that converts various input resolutions to the monitor's native resolution, providing viewers with the best picture and video quality.

Seamless Switching -- FPGA-based pure hardware structure can provide high peak data transfer rate up to 4K@60 and perfectly supports synchronous switching of HDMI signals.

Input volume control -- Provides volume control for the audio inputs, so when we changed the volume, every outputs from this inputs changed.

HDMI to DVI Interface Format Correction -- Automatically reformats HDMI source signals for output to a connected DVI display

Automatic input cable equalization -- Actively conditions incoming HDMI signals to compensate for signal loss when using long cables, low quality cables, or source devices with poor HDMI signal output. 4K/60 signals are equalized to 35 feet (10.7 meters) when used with HDMI 2.0 Pro cable.

Automatic output reclocking -- Reshapes and restores timing of HDMI signals at each output, enabling transmission overlong HDMI cables.

Provides +5 VDC, 250 mA power on the HDMI outputs for external peripheral devices

Output muting control -- Provides the capability to mute one or all outputs at anytime. This allows, for example, content to be viewed on a local monitor prior to appearing on the main presentation display

Ethernet monitoring and control -- Can be proactively monitored, managed, or controlled over aLAN, WAN, or the Internet using standard TCP/IP protocols.

Station logo -- add a station logo for each input signal, making it easy to distinguish different inputs.

Splicing subtitles -- Can add scrolling subtitles or welcome slogans to the splicing wall.

Input Test Image -- Input can automatically generate test images for engineering debugging and testing purposes

Output Test Image -- Output test images to test whether the output ports and display devices are connected properly

Splicing synchronization -- Support frame synchronization to ensure perfect synchronization of various output units

Audio Embedder and De-embedder -- The analog audio can embed into the HDMI signals or de-embed from the HDMI signals.



EDID Management-- The monitor EDID can copy to the input port or we can update a available EDID file to the input port.

Pre-Sets -- The matrix can be stored 8 different Pre-sets, we can call it quickly through the panel buttons or RS232.

Panel locking -- We can set panel into "locking" to prevent accidental switching.

IR Matrix -- Independent IR switching

Audio Matrix -- Independent audio switching

Web GUI -- Offers refined simplistic control of parameters.

Front panel -- Control of all video routing, Pre-sets save and recall, IP Management, Check or set the net parameters

4. VIS-UHD0808-VW work with a 4x2 videowall effect







5. Specification

Model	VIS-UHD0808-VW
Input	8xHDMI, 8x IR, 8x analog audio
Output	8xHDMI, 8x IR, 8x analog audio
Video Protocol	HDMI 2.0, HDCP 2.2
Maximum resolution	4096 x 2160@60Hz (4:4:4)
HDMI interface	Type A, 19 pin, female
Serial Interface	RS-232 IN, DB9, Female; RS-232 OUT, DB9, Male
Input cable length	10 meters by HDMI2.0 cable
Output cable length	10 meters by HDMI2.0 cable
Impedance	$100\pm15\mathrm{ohm}$
RJ45 control protocol	TCP/IP
Ethernet rate	Self-adaptive 10M/100M
Storage environment	Temperature: -20° C ~ $+70^{\circ}$ C, humidity: 10% ~ 90%
Work environment	Temperature: 0° C ~ +50°C, humidity: 10% ~90%
Power supply	AC 110~240V
Maximum power	100W
Chassis Specifications	1U
Dimensions (WxDxH)	430x260x44.5 mm
Weight	3.5Kg
MTBF	30,000 hours
Warranty	One-year warranty and lifetime maintenance



About VISSONIC Electronics Limited

Our mission is to develop and manufacture the most comprehensive and innovative audiovisual products for our clients. We provide the best performance/price ratio products because it could give you satisfaction just from the time you use them, we believe the good design with cutting edge technology on products will provide value to all our partners and end users. Listen to your demands, we fulfill it.



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