

# MP-UHD89-VW 4K60 HDMI Matrix

### PRODUCT DATASHEET





#### 8x9 Seamless 4K UHD Matrix and Video Wall Processor



#### 1. Product Introduction

MP-UHD89-VW is professional seamless UHD matrix switcher with 8x9 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, 9 HDMI outputs, Realtime seamless switching
- 2. 8 IR and 8 analog audio inputs, 9 IR and 9 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.
- 6. Station logo display.
- 7. Input selectable test images.
- 8. Output matrix or single layer splicing.
- 9. Output selectable test images.
- 10. Support LED splicing.
- 11. Support scrolling text.
- 12. Independent audio and IR switching
- 13. Graphical web 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 with RJ45 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

**8x9 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 Extron HDMI Pro cables.

**Automatic output reclocking** -- Reshapes and restores timing of HDMI signals at each output, enabling transmission over long 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 any time. 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 a LAN, 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. MP-UHD89-VW work with a 3x3 video wall effect

1 3x3 videowall 2 Scrolling Text





## 5. Specification

| Model                  | MP-UHD89-VW  |
|------------------------|--|
| Input type             | 8x HDMI, 8x IR, 8x analog audio  |
| Output type            | 9x HDMI, 9x IR, 9x 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±150hm  |
| RJ45 control protocol  | TCP/IP   |
| Ethernet rate          | Self-adaptive 10M/100M   |
| Storage environment    | Temperature: $-20$ °C $\sim +70$ °C, humidity: $10\%\sim90\%$                        |
| Work environment       | Temperature: $0^{\circ}\text{C} \sim +50^{\circ}\text{C}$ , humidity: $10\%\sim90\%$ |
| 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   |