# HDMV-9X

9-PORT FULL HD MULTIVIEWER



# **USER MANUAL**



Smart-**AVI** 

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# **TECHNICAL SPECIFICATIONS**

VIDEO		
Format	HDMI	
Video Bandwidth	3Gbps	
Input Interface	(9) HDMI 19-pin (female)	
Output Interface	(1) HDMI 19-pin (female)	
HDMI Compliance	HDMI 1.4b	
HDCP Compliance	HDCP 1.4	
Resolution	Up to 4K2K @ 30 Hz	
DDC	5 volts p-p (TTL)	
Input Equalization	Automatic	
Input Cable Length	Up to 20 ft.	
Output Cable Length	Up to 20 ft.	
AUDIO		
Input	From HDMI Inputs	
Output	(1) Connector Stereo 3.5 mm Female	
POWER		
Power Requirements	12V DC, 3A power adapter with center-pin positive polarity	
ENVIRONMENT		
Operating Temperature	23 to 95°F (-5 to 35°C)	
Storage Temperature	-4 to 185 °F (-20 to 85 °C)	
Humidity	Up to 95% (No Condensation)	
CONTROL		
Front panel	Push Buttons with LED indicators	
RS-232	Via Serial @ 115200 bps	
IP	Via Web	

## WHAT'S IN THE BOX?

SM-HDMV-9X Unit	9-Port HDMI, Stereo Audio, RS-232, Real-Time Multiviewer with Dual/Quad/9X/Full Modes.
PS12VD3A	12V DC, 3A (minimum) power adapter with center-pin positive polarity.
User Manual	

## **SM-HDMV-9X REAR**

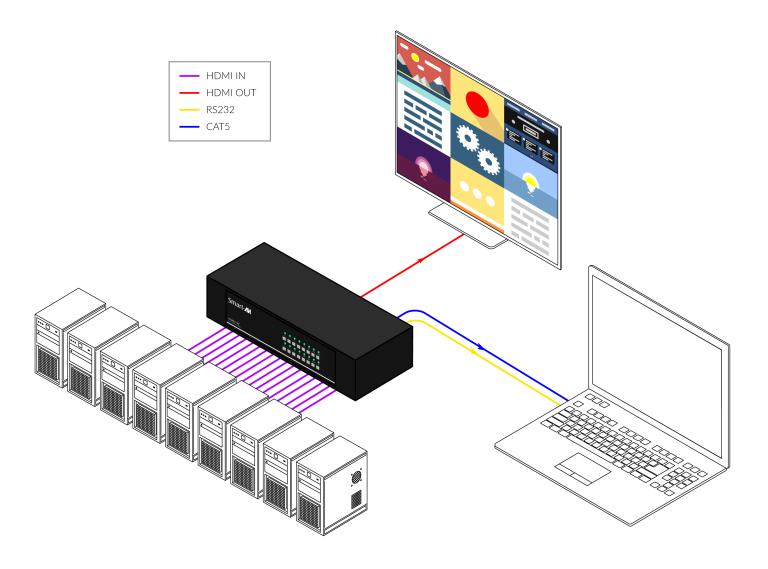


## **SM-HDMV-9X FRONT**



## INSTALLATION

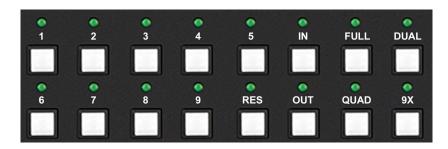
- 1. Ensure that power is turned off or disconnected from the unit and the computers.
- 2. Use a **HDMI cable** to connect the HDMI output port from each computer to the corresponding HDMI IN ports of the unit.
- 3. Connect a monitor to the HDMI OUT console port of the unit using a **HDMI cable**.
- 4. Optionally connect stereo speakers to the AUDIO OUT port of the unit.
- 5. Optionally connect and Ethernet cable to the LAN port.
- 6. Optionally connect and RS-232 Cable to the RS-232 port.
- 7. Finally, power on the KVM by connecting a **12VDC power supply** to the power connector, and then turn on all the computers.



SM-HDMV-9X Shown

## SYSTEM OPERATION

When selecting a channel by pressing buttons 1-9 on the front panel, the Blue backlight LED will light up to indicate that input is selected for output 1.



## **SELECTING VIEWING MODES**

There are a total of 8 viewing modes within the 4 categories, this is a list of all the modes based on the Number given in the command protocol:

1 - Full Screen
2 - Dual (Split)
3 - Dual (PiP)
4 - Quad (Equal)
5 - Quad (T-Quad Right)
6 - Quad (T-Quad Left)
7 - Quad (T-Quad Bottom)
8 - 9X

One of the four Mode Select buttons (FULL, DUAL, QUAD, and 9X) can be used to switch the current viewing mode. For the options with multiple viewing modes, multiple presses of the mode button will switch to a different variation within that same mode. Please refer to the viewing mode list above for more detail on these modes.

The IN/OUT buttons can be used to select which inputs are displayed in modes 2-8 for specific outputs. The button sequence is as follows:

IN -> # -> OUT -> # to set a specific input to output.

## RESOLUTION BUTTON

Pressing the Resolution button (RES) cycles between the available resolutions. Here is a chart of resolution and number associated with it. To view the current resolution, use the RS-232 command (//r?) or available Web UI.

Resolution Number	Specifications
1	4K
2	1080p
3	1080i
4	720p
5	1360 x 768
6	1024 x 768

## **RS-232 COMMANDS**

The HDMV-9X may also be controlled via RS-232 commands. To use these commands, you must use HyperTerminal or an alternate terminal application. The settings for the connection are as follows: Baudrate **115200**; Data Bits **8**; Parity **None**; Stop Bits **1**; Flow Control **None**.

The following commands can be used for RS-232 control:

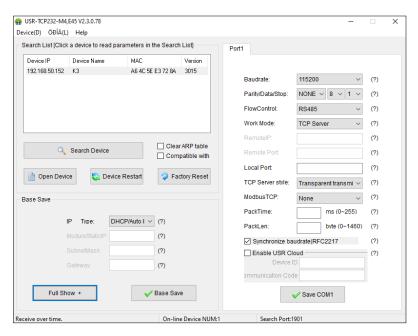
Command Description	RS-232 Command to SMCPU
Switch Video IN/OUT	//m[in#][out#][ENTER]
Switch to Video Mode [1-8]	//x[mode #][ENTER]
Get Current Video Mode	//x?[ENTER]
Switch Resolution	// <b>r</b> [1-6] [ENTER]
Get Current Resolution	//r?[ENTER]
Set EDID	// <b>e</b> [1-2][ENTER]
Read EDID	//e?[ENTER]
Audio SET	// <b>a</b> [1-9][ENTER]
Read Audio	//a?
View Current Status	//??

## **WEB UI / IP CONTROL**

#### Connecting to the Web UI

After connecting the HDMV-9X to the network by LAN, the IP address of the device can be found by using our provided application "IPFinder2". Simply open the application and click "Search Device". It will provide a list of all the devices with their IP address and MAC address. Clicking the "Open Device" button will open a web browser and access the Web UI. The default username and password to access the webpage is:

Username: **admin** Password: **admin** 



Software for SmartAVI products can be found at smartavi.com/helpful-links/

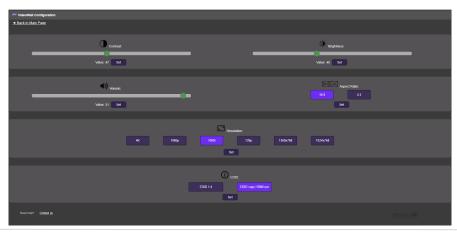
This can be updated from the "IPFinder2" application by pressing the button "Full Show", updating the appropriate details and pressing "Save".

The viewing mode, inputs, outputs, and audio sources can all be updated from the main landing page

of the Web UI.



More configurations can be updated from the "VideoWall Settings" Menu.



#### TROUBLESHOOTING

#### No Power

- Make sure that the power adapter is securely connected to the power connector of the unit.
- Check the output voltage of the power supply and make sure that the voltage value is around 12VDC.
- Replace the power supply.

#### No Video

- Check if all the video cables are connected properly.
- Connect the computer directly to the monitor to verify that your monitor and computer are functioning properly.
- Restart the computers

#### Keyboard is not working

- Check if the keyboard is properly connected to the unit.
- Check if the USB cables connecting the unit and the computers are properly connected.
- Try connecting the USB on the computer to a different port.
- Make sure that the keyboard works when directly connected to the computer.
- Replace the keyboard.

#### Mouse is not working

- Check if the mouse is properly connected to the unit.
- Try connecting the USB on the computer to a different port.
- Make sure that the mouse works when directly connected to the computer.
- Replace the mouse.

#### No Audio

- Check if all the audio cables are connected properly.
- Connect the speakers directly to the computer to verify that the speakers and the computer audio are functioning properly.
- Check the audio settings of the computer and verify that the audio output is through the speakers.

## TECHNICAL SUPPORT

For product inquiries, warranty questions, or technical questions, please contact info@smartavi.com.

## LIMITED WARRANTY STATEMENT

#### A. Extent of limited warranty

SmartAVI, Inc. warrants to the end-user customers that the SmartAVI product specified above will be free from defects in materials and workmanship for the duration of 1 year, which duration begins on the date of purchase by the customer. Customer is responsible for maintaining proof of date of purchase.

SmartAVI limited warranty covers only those defects which arise as a result of normal use of the product, and do not apply to any:

- a. Improper or inadequate maintenance or modifications
- b. Operations outside product specifications
- c. Mechanical abuse and exposure to severe conditions

If SmartAVI receives, during applicable warranty period, a notice of defect, SmartAVI will at its discretion replace or repair defective product. If SmartAVI is unable to replace or repair defective product covered by the SmartAVI warranty within reasonable period of time, SmartAVI shall refund the cost of the product.

SmartAVI shall have no obligation to repair, replace or refund unit until customer returns defective product to SmartAVI.

Any replacement product could be new or like new, provided that it has functionality at least equal to that of the product being replaced.

SmartAVI limited warranty is valid in any country where the covered product is distributed by SmartAVI.

#### B. Limitations of warranty

To the extant allowed by local law, neither SmartAVI nor its third party suppliers make any other warranty or condition of any kind whether expressed or implied with respect to the SmartAVI product, and specifically disclaim implied warranties or conditions of merchantability, satisfactory quality, and fitness for a particular purpose.

#### C. Limitations of liability

To the extent allowed by local law the remedies provided in this warranty statement are the customers sole and exclusive remedies.

To the extant allowed by local law, except for the obligations specifically set forth in this warranty statement, in no event will SmartAVI or its third party suppliers be liable for direct, indirect, special, incidental, or consequential damages whether based on contract, tort or any other legal theory and whether advised of the possibility of such damages.

#### D. Local law

To the extent that this warranty statement is inconsistent with local law, this warranty statement shall be considered modified to be consistent with such law.



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