

SIMPLIFIED

MFG

VW2

**4K/UHD 4x4 Matrix with
Video Wall Processor**



User Manual

VER 1.1

Thank you for purchasing the VW2

The Simplified Manufacturing VW2 is designed to provide years of reliable service. At Simplified MFG, we want the experience with this device to be the best possible and are committed to helping achieve that experience. Please keep this manual for future reference.

Surge protection device recommended

This product contains sensitive electrical components that may be damaged by electrical spikes, surges, electric shock, lighting strikes, etc. Use of surge protection systems is highly recommended to protect and extend the life of your equipment. Cable and satellite boxes can send surges through the HDMI port as will the Simplified MFG HDSURGE can help prevent damage from these occurrences.

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1. Introduction

The VW2 is a Video Wall processor with a high-speed 4x4 matrix switch. The VW2's primary use is a 4K/UHD video wall processor with the ability to also place four individual images on the 4 displays. Because of the fast switch, it is also good for live performance or boardroom applications. Control of the VW2 can be accomplished via the Innovative web GUI, the included IR remote, or by RS-232 or TCP/IP via third party control.

2. Features

- HDMI 2.0b Compliant
- HDCP 2.2 and HDCP 1.4
- 4x4 instant switch (1/60 second)
- Video wall processor
- Thin for mounting behind displays
- Video inputs support all industry standard video resolutions including VGA-WUXGA
(up to 1920×1200 @60Hz) and 480i-4K (3840 x 2160 @60Hz 4:4:4,
4096 x 2160 @60Hz 4:4:4)
- Output resolution supports 50Hz. and 60Hz. in nearly any resolution up to 4096 x 2160p
- Audio formats supported; LPCM, DD, DD+, DTS, Dolby TrueHD, DTS HD-master pass-through
- Advanced EDID management
- Innovative web GUI for set up and control of device
- Additional control via front panel buttons, supplied IR remote, RS-232, or TCP/IP

3. Package Contents

- 1 x VW2 18Gbps 4x4 Matrix with Video Wall processing
- 1 x IR Remote
- 1 x 3 pin-3.81mm Phoenix Connector (male)
- 1 x 20-60KHz IR Wideband Receiver Cable (1.5 meters)
- 2 x Mounting Ears w/screws
- 1 x 12V/2.5A Locking Power Supply
- 1x User Manual

4. Specifications

Technical	
HDMI Compliance	HDMI 2.0b
HDCP Compliance	HDCP 2.2/1.4
Video Bandwidth	594MHz/18Gbps
Video Resolution	Input: VGA-WUXGA (up to 1920×1200@60Hz), 480i-4K (3840x2160@60Hz 4:4:4, 4096x2160@60Hz 4:4:4) Output: 4096x2160p60, 4096x2160p50, 3840x2160p60, 3840x2160p50, 3840x2160p30, 1920x1080p60, 1920x1080p50, 1920x1080i60, 1920x1080i50, 1920x1200p60rb, 1360x768p60, 1280x800p60, 1280x720p60, 1280x720p50, 1024x768p60, auto
Color Space	RGB, YCbCr 4:4:4/4:2:2, YUV 4:2:0
Color Depth	8/10/12-bit
IR Level	12Vp-p
IR Frequency	38KHz
HDMI Audio Formats	LPCM, Dolby Digital/Plus/EX, Dolby True HD, DTS, DTS-EX, DTS-96/24, DTS High Res, DTS-HD Master Audio
Connection	
Inputs	4 x HDMI Type A [19-pin female]
Outputs	4 x HDMI Type A [19-pin female]
Control	1 × RS-232 [3pin-3.81mm phoenix connector] 1 × TCP/IP [RJ45] 1 × IR EXT [3.5mm Stereo Mini-jack]
Mechanical	
Housing	Metal Enclosure
Color	Black
Dimensions	270mm/10.63" (W) × 166mm/6.53" (D) × 30mm/1.18" (H)
Weight	1165g/ 3lb, 9.1oz.
Power Supply	Input: AC 100 - 240V 50/60Hz Output: DC 12V/2.5A (US/EU standard, CE/FCC/UL certified)
Power Consumption	19.56W (Max)
Operating Temperature	0°C ~ 40°C / 32°F ~ 104°F
Storage Temperature	-20°C ~ 60°C / -4°F ~ 140°F
Relative Humidity	20~90% RH (non-condensing)

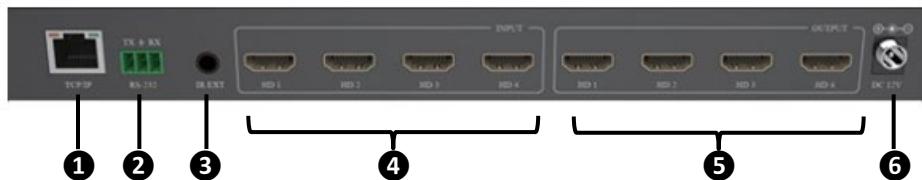
5. Operation Controls and Functions

5.1 Front Panel



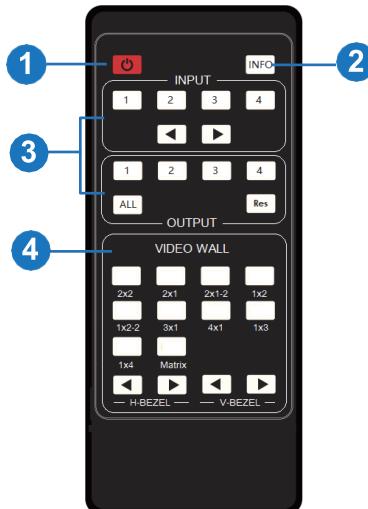
No.	Name	Function Description
1	Power button	▪ Short press this button to power on the device. ▪ Hold this button for 1 second to enter the standby mode.
2	Power LED	The LED will illuminate in green when the VW2 is operational, and red when the VW2 is in standby mode.
3	IR Window	IR receiver window for control of VW2
4	Signal source LED	Signal source indicator for the OUT 1 - OUT 4 port.
5	Input source switching button	Input source switching button for the OUT 1- OUT 4 port.

5.2 Rear Panel



No.	Name	Function Description
1	TCP/IP	Link port for TCP/IP control. Connects to an active Ethernet connection via RJ45 cable to control VW2 via web GUI or TCP/IP
2	RS-232	RS-232 serial command control port, connects to a PC or control system to control/setup the VW2.
3	IR EXT	Direct connection to front IR port for control of VW2. Use instead of applying IR blaster to front of VW2 or when the IR port on front of VW2 is blocked from IR signals via IR remote
4	HDMI INPUTS	HDMI signal input ports, connects to signal source.
5	HDMI OUTPUTS	HDMI signal output ports, connects to displays.
6	DC 12V	DC 12V/2.5A power input port.

6. IR Remote



- ① Power on or Standby:** Enables power to VW2, press again for standby mode.
- ② INFO:** Press this button to display the serial port baud rate and IP address in the upper right corner of the screen. (The information will disappear after 5 seconds.)
- ③ INPUT/OUTPUT**
INPUT 1/2/3/4: Select the signal input channel.
◀ ▶ : Select the last or next signal input channel.
OUTPUT 1/2/3/4: Select the signal output channel.
ALL: Select all output channels simultaneously. For example, when you press the “ALL” button and then press INPUT “1” button, at this time the input “1” source will be output to all display devices.
Res: Press this button to switch output channel resolution.
Matrix mode: Press **OUTPUT 1/2/3/4** or **ALL**, then press **Res** to switch the output resolution circularly.
Video wall mode: Press **Res** directly to switch the output resolution for four output channels simultaneously.

Operation Instruction: You need to press the OUTPUT button first, and then press the INPUT button to select the corresponding input source. For example, Press OUTPUT-X (X means output button from 1 to 4, including “ALL” button), then press INPUT-Y (Y means input button from 1 to 4).

④ VIDEO WALL:

Video wall mode selection:

Press the video wall mode button directly to enter corresponding mode.

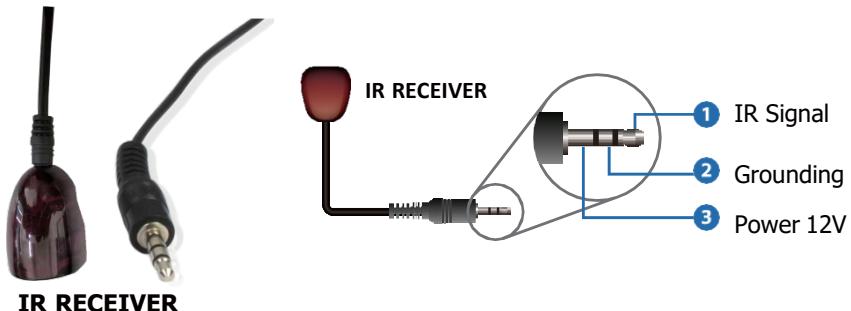
Source selection for the video wall group:

Press **OUTPUT 1/2/3/4** or **◀/▶** to select the video wall group first, then press **INPUT 1/2/3/4** or **◀/▶** to select the input source.

Bezel Adjustment: Press **◀/▶** of H-BEZEL / V-BEZEL to adjust the bezel.

7. IR Pin Definition

IR Receiver pin's definition is as below:



Note: When the angle between the IR receiver and the remote control is $\pm 45^{\circ}$, the transmission distance is 0-5 meters; when the angle between the IR receiver and the remote control is $\pm 90^{\circ}$, the transmission distance is 0-8 meters.

8. EDID Management

This Matrix has 12 factory defined EDID settings, 2 user-defined EDID modes and 4 copy EDID modes. You can select defined EDID mode or copy EDID mode to input port through RS-232 control or Web GUI.

RS-232 control operation: Connect the Matrix to PC with a serial cable, then open a Serial Command tool on PC to send ASCII command "s edid in x from z!" to set EDID. For details, please refer to "EDID Setting" in the ASCII command list of "11. RS-232 Control Command".

Web GUI Operation: Please check the EDID management in the "Input page" of "10. WebGUI User Guide".

The screenshot shows the "Input Setting" section of the VW2-4x4 Video Matrix with Video Wall web interface. The left sidebar includes links for Status, Input, Output, Video Mode, Network, and System. The main area displays a table for Input Setting:

Inputs	Active	Name	EDID
HDMI 1	●	Input1	4K2K50 444 Stereo Audio 2.0
HDMI 2	●	Input2	4K2K50 444 Stereo Audio 2.0
HDMI 3	●	Input3	4K2K50 444 Stereo Audio 2.0
HDMI 4	●	Input4	4K2K50 444 Stereo Audio 2.0

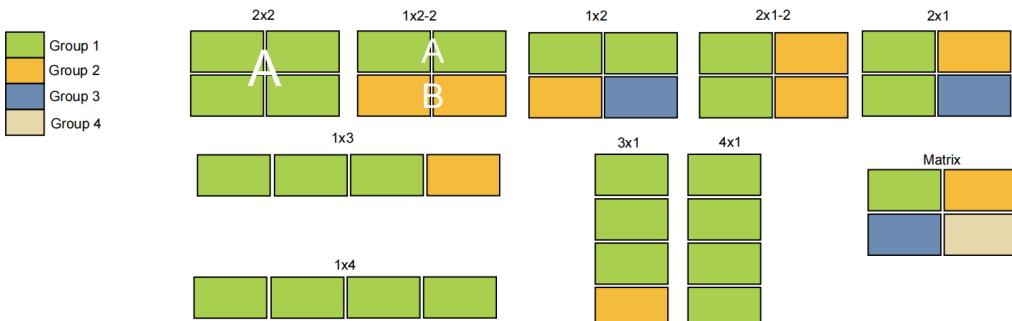
Below the table, there are sections for "Load EDID to user memory" and "DownLoad EDID to your computer".

The defined EDID setting list of the product is shown as below:

EDID Mode	EDID Description
1	4k2k60_444, stereo audio 2.0
2	4k2k60_444, dolby/dts 5.1
3	4k2k60_444, hd audio 7.1
4	4k2k30_444, stereo audio 2.0
5	4k2k30_444, dolby/dts 5.1
6	4k2k30_444, hd audio 7.1
7	1080p, stereo audio 2.0
8	1080p, dolby/dts 5.1
9	1080p, hd audio 7.1
10	1920x1200, stereo audio 2.0
11	1360x768, stereo audio 2.0
12	1024x768, stereo audio 2.0
13	user define1
14	user define2
15	copy from hdmi output 1
16	copy from hdmi output 2
17	copy from hdmi output 3
18	copy from hdmi output 4

9. Video Wall

The VW2 supports 10 categories of display modes shown below:



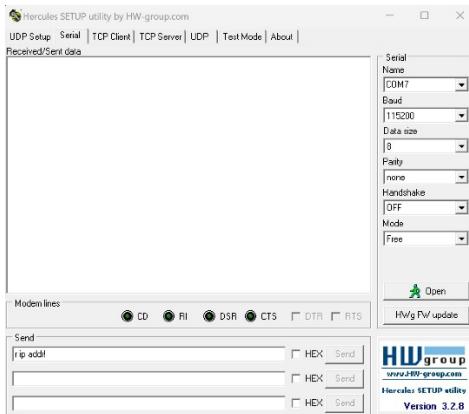
These modes can be selected via IR remote, Web GUI or RS-232 commands.

10. Web GUI User Guide

The VW2 can be set up and controlled via the web GUI. The process is shown as below:

Step 1: Get the current IP Address.

The default IP address is set to DHCP. You can view the current IP address quickly by pressing the "INFO" button on the supplied IR Remote. Another way is to use the Hercules set up utility (freeware available on the web page of the VW2). This is done by connecting a windows pc to the VW2 via RS-232 to USB cable. Once connected, open Hercules, click the serial tab (make sure to set baud rate to 115200 shown on page 14) and then type the command "r ip addr!" in the first send line and press send. The VW2 will respond in the communication window with the current IP address. This can also be done with many third-party control systems via TCP/IP or with a network scan utility like Fing.



Step 2: Input the current IP address of VW2 into your browser on the PC to enter Web GUI page.



After entering the IP address, you will be taken to a Login page, as shown below:



Select the Username from the drop-down list and enter the password. The default passwords are:

Username	User	Admin
Password	user	admin

After entering the password, click the “LOGIN” button and the following Status page will appear.

■ Status Page

The Status page provides basic information about the product model, installed firmware version and the network settings of the device.

The screenshot shows the 'Status' page of the VW2- 4x4 Video Matrix with Video Wall. The left sidebar has a dark background with white text: 'Simplified' at the top, followed by 'Status', 'Input', 'Output', 'Video Mode', 'Network', and 'System'. The main content area has a light blue header bar with the title 'VW2- 4x4 Video Matrix with Video Wall' and three buttons: 'Admin', 'Log out', and 'Power on'. Below the header is a table with the following data:

Status	
Model	VW2
Firmware Version	V1.00.07/V1.00.19
Hostname	IP-module-054B3
IP Address	192.168.0.100
Subnet Mask	255.255.0.0
Gateway	192.168.0.1
MAC Address	6C:D9:FB:00:54:B3

■ Input Page

The screenshot shows the 'Input Setting' page of the VW2- 4x4 Video Matrix with Video Wall. The left sidebar has a dark background with white text: 'Simplified' at the top, followed by 'Status', 'Input', 'Output', 'Video Mode', 'Network', and 'System'. The main content area has a light blue header bar with the title 'VW2- 4x4 Video Matrix with Video Wall' and three buttons: 'Admin', 'Log out', and 'Power on'. The page contains two main sections: 'Input Setting' and 'Load EDID to user memory'. The 'Input Setting' section includes a table for managing four HDMI inputs:

Inputs	Active	Name	EDID
HDMI 1	●	Input1	4KQ900 444 Stereo Audio 2.0
HDMI 2	●	Input2	4KQ900 444 Stereo Audio 2.0
HDMI 3	●	Input3	4KQ900 444 Stereo Audio 2.0
HDMI 4	●	Input4	4KQ900 444 Stereo Audio 2.0

The 'Load EDID to user memory' section includes fields for 'Select EDID File' (with a 'Browse...' button), 'Select Destination' (a dropdown menu with 'User Default' selected), and an 'Upload' button. It also includes a 'DownLoad EDID to your computer' section with a 'Select EDID File' dropdown set to 'HDMI.INI' and a 'Download' button.

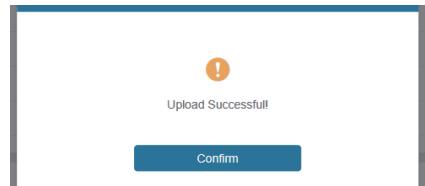
The following shows information and operations available on the Input page:

- ① **Inputs:** Indicates Input channel of the device.
- ② **Active:** It indicates that the channel is connected to a signal source. When the input port is connected to the signal, it shows green, otherwise, it shows gray.
- ③ **Name:** The input channel's name. You can modify it by entering the corresponding name in the input box (up to 31 characters)
- ④ **EDID:** You can set the current channel's EDID. Click drop-down list to select.
- ⑤ **Loads EDID to user memory:** Set EDID for the User.

Click the “Browse” button, then select the bin file. If you select the wrong EDID file, there will be a prompt, as shown in the following figure:



Make sure to select the correct file, then you can check the name of the selected file. Select “User 1” or “User 2”, then click “Upload”. After successful setting, it will prompt as follows:



⑥ Download EDID to your computer:

Click the drop-down box of “Select EDID File” to select the corresponding input channel. Then click “Download” to download the corresponding EDID file.

■ Output Page

A screenshot of the "Output Setting" page for the VW2-4x4 Video Matrix. The page title is "VW2-4x4 Video Matrix with Video Wall". On the left, there is a sidebar with buttons for "Status", "Input" (selected), "Output", "Video Mode", "Network", and "System". The main content area is titled "Output Setting" and contains a table with four rows, each representing an output channel:

Output	Cable	Name	Output Resolution	Color Space	HDCP	H source	V source	Stream
HEM 1	●	Output1	AUTO	RGB 4:4:4	1.4	[color bar]	[color bar]	[color bar]
HEM 2	●	Output2	AUTO	YCbCr 4:4:4	1.4	[color bar]	[color bar]	[color bar]
HEM 3	●	Output3	AUTO	YCbCr 4:2:2	1.4	[color bar]	[color bar]	[color bar]
HEM 4	●	Output4	AUTO	YCbCr 4:2:0	1.4	[color bar]	[color bar]	[color bar]

The following shows the available operations on the Output page:

- ① **Outputs:** Output channel of the device.
- ② **Cable:** It indicates the connection status of output ports. When the output port is connected to the display, it shows green, otherwise, it shows gray.
- ③ **Name:** The current output channel's name. You can modify it by entering the corresponding name (max length: 31 characters) in the input box.
- ④ **Output Resolution:** Set the current output resolution mode. Click the drop-down list to select other resolutions.
- ⑤ **Color Space:** Set the color space of the output signal.
- ⑥ **HDCP:** Set the HDCP version that the current output port supports.
- ⑦ **H mirror:** Flips the image on the display horizontally
- ⑧ **V mirror:** Flips the image on the display vertically (use when flipping display upside down)
- ⑨ **Stream:** Turn on/off the signal output stream of the output port.

Note: User cannot set each output resolution separately in video wall mode.

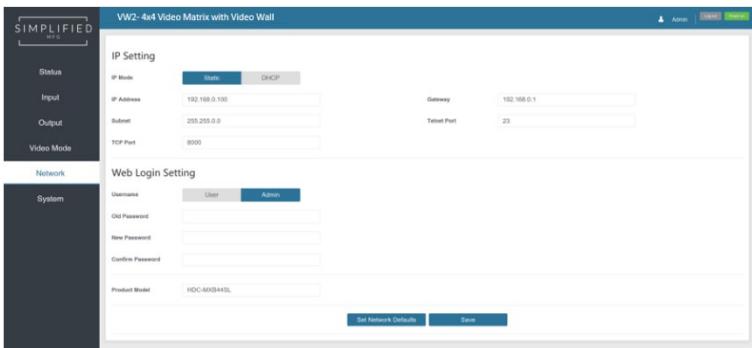
■ Video Mode Page



You can do the following operations on the Video mode page:

- ① **Matrix:** Click to go to Matrix mode.
- ② **Video Wall:** Click to select any multiview display mode.
- ③ **Matrix/Video Wall Adjustment:** Displays the input & output information.
- ④ **Input Source:** Can be changed by dragging the pattern to any of the matrix or video wall windows or clicking on window and using the **◀ ▶** to select the input source.
- ⑤ **Bezel Adjustment:** Click **+-** to adjust the corresponding Horizontal/Vertical Bezel (Up to 10 adjustments).
- ⑥ **Output Resolution:** Set the resolution of all current output ports. Click the drop-down list to select.

■ Network Page



You can do the following operations on the Network page:

Modify Network Setting

Modify the IP Mode Address/Gateway/Subnet Mask/Telnet Port as required, click "Save" to save the settings, then it will come into effect.

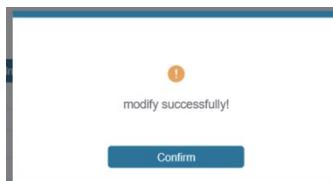
After modification, if the Mode is "Static", it will switch to the corresponding IP Address; if the Mode is "DHCP", it will automatically search and switch to the IP Address assigned by the router.

IP Setting

IP Mode	Static	DHCP	
IP Address	192.168.0.100	Gateway	192.168.0.1
Subnet	255.255.0.0	Telnet Port	23
TCP Port	8000		

Modify User Password

Click the "User" button, enter the correct Old Password, New Password, and Confirm Password, then click "Save". After successful modification, there will be a prompt, as shown in the following figure:

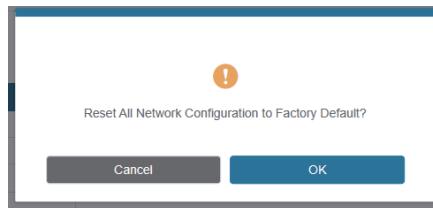


Note: Input rules for changing passwords:

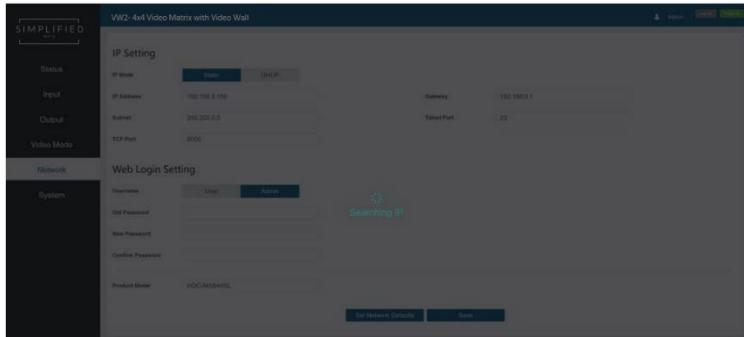
- (1) The password can't be empty.
- (2) New Password can't be the same as Old Password.
- (3) New Password and Confirm Password must be the same.

Set the Default Network

Click “Set Network Defaults” button, there will be a prompt, as shown in the following figure:

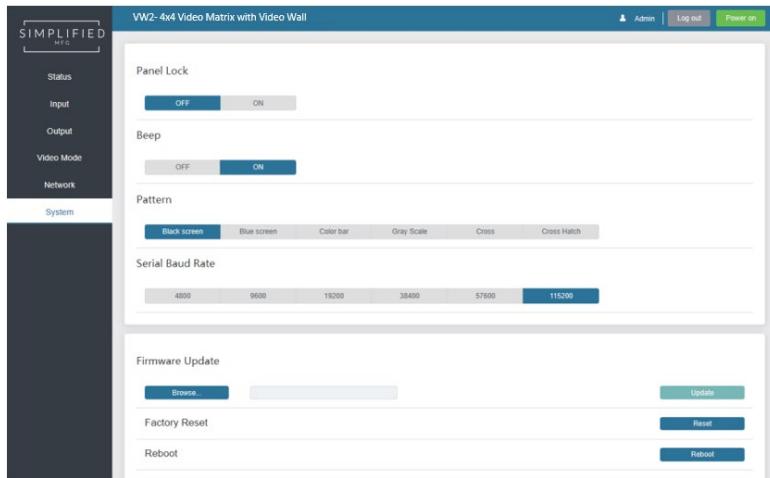


Click “OK” to search the IP Address again, as shown in the following figure:



After searching is completed, it will switch to the login page, the default network setting is completed.

■ System Page



You can do the following operations on the System page:

- ① **Panel Lock:** Click to lock/unlock panel buttons. "ON" indicates that panel buttons are unavailable; "OFF" indicates panel buttons are available.
 - ② **Beep:** Click to turn on/off the beep.
 - ③ **Pattern:** Click to select 6 test patterns.
 - ④ **Serial Baud Rate:** Click the value to set the Serial Baud Rate.
 - ⑤ **Firmware Update:** Click "Browse" to select the update file, then click "Update" to complete firmware update.
 - ⑥ **Factory Reset:** You can reset the VW2 to factory defaults by clicking "Reset".
 - ⑦ **Reboot:** You can reboot the machine by clicking "Reboot".
- Note:** After reset/reboot, it will switch to the login page.

11. RS-232 Control Command

The VW2 also supports RS-232 command control. Connect the RS-232 port of the VW2 to a PC with a 3-pin phoenix connector cable and an RS-232 to USB cable. The connection method is as follows.



Then open a Serial Command tool such as Hercules (available on webpage of VW2) on a PC to send ASCII commands to control/set up the VW2. List shown below:

ASCII Command				
Serial port protocol: Baud rate: 115200(default) Data bits: 8 Stop bits: 1 Check bit: 0				
x - Parameter 1 y - Parameter 2 ! - Delimiter				
Command Code	Function Description	Example	Feedback	Default Setting
System setting				
help!	Lists all commands	help!		
r status!	Get device current status	r status!	get the unit all status: power, beep, lock, in / out connection, video/ audio crosspoint, edid, scaler, network status	
r type!	Get device model	r type!	4x4 hdmi seamless matrix	

Command Code	Function Description	Example	Feedback	Default Setting
r fw version!	Get firmware version	r fw version!	mcu fw version x.xx.xx	
s power z!	Power on/off the device,z=0~1 (z=0 power off, z=1 power on)	s power 1!	power on system initializing... initialization finished! mcu fw version x.xx.xx	
r power!	Get current power state	r power!	power on /power off	
s beep z!	Enable/disable buzzer function, z=0~1(z=0 beep off, z=1 beep on)	s beep 1!	beep on beep off	beep on
r beep!	Get buzzer state	r beep!	beep on / beep off	beep on
s lock z!	Lock/unlock front panel button, z=0~1(z=0 lock off,z=1 lock on)	s lock 1!	panel button lock on panel button lock off	panel button lock off
r lock!	Get panel button lock state	r lock!	panel button lock on/off	
s reboot!	Reboot the device	s reboot!	reboot... system initializing... initialization finished! mcu fw version x.xx.xx	
s reset!	Reset to factory defaults	s reset!	reset to factory defaults system initializing... initialization finished! mcu fw version x.xx.xx	

Output setting

s in x av out y!	Set input x to output y , x=1~4, y=0~4(0=all)	s in 1 av out 2!	input 1 -> output 2	ptp
r av out y!	Get output y signal status y=0~4(0=all)	r av out 0!	input 1 -> output 1 input 2 -> output 2 input 4 -> output 4	
s output y res x!	Set output y resolution (y=0~4, x=1~16) y=0. output all y=1. output 1 y=2. output 2 y=3. output 3 y=4. output 4 1. 4096x2160p60, 2. 4096x2160p50, 3. 3840x2160p60, 4. 3840x2160p50, 5. 3840x2160p30, 6. 1920x1080p60, 7. 1920x1080p50, 8. 1920x1080i60, 9. 1920x1080i50, 10. 1920x1200p60rb, 11. 1360x768p60, 12. 1280x800p60, 13. 1280x720p60, 14. 1280x720p50, 15. 1024x768p60, 16. auto	s output 1 res 3!	output 1 resolution: 3840x2160p60	3840x2160p60

Command Code	Function Description	Example	Feedback	Default Setting
r output y res!	Get output y resolution(y=0~4) y=0. output all y=1. output 1 y=2. output 2 y=3. output 3 y=4. output 4	s output 1 csc 1!	output 1 resolution: 3840x2160p60	
s output y csc x!	Set output y color space (y=0~4, x=1~4) y=0. output all y=1. output 1 y=2. output 2 y=3. output 3 y=4. output 4 x=1. rgb444 x=2. ycbr444 x=3. ycbr422 x=4. ycbr420	s output 1 csc 1!	output 1 csc: rgb444	rgb444
r output y csc!	Get output y color space status. (y=0~4) y=0. output all y=1. output 1 y=2. output 2 y=3. output 3 y=4. output 4	r output 1 csc!	output 1 csc: rgb444	
s output y hdcp x!	Set output hdcp(y=0~4, x=1~4) y=0. output all y=1. output 1 y=2. output 2 y=3. output 3 y=4. output 4 x=1. hdcp 1.4 x=2. hdcp 2.2 x=3. follow sink x=4. follow source	s output 1 hdcp 1!	output 1 hdcp: hdcp 1.4	hdcp1.4
r output y hdcp!	Get output y hdcp status.(y=0~4) y=0. output all y=1. output 1 y=2. output 2 y=3. output 3 y=4. output 4	r output 1 hdcp!	output 1 hdcp: hdcp 1.4	
s output y hmirror x!	Set output y h mirror(y=0~4,x=0,1) y=0. output all y=1. output 1 y=2. output 2 y=3. output 3 y=4. output 4 x=0. h mirror off x=1. h mirror on	s output 1 hmirror 1!	output1 h mirror on	output 1 h mirror off output 2 h mirror off output 3 h mirror off output 4 h mirror off
s output y vmirror x!	set output y v mirror(y=0~4,x=0,1) y=0. output all y=1. output 1 y=2. output 2 y=3. output 3 y=4. output 4 x=0. v mirror off x=1. v mirror on	s output 1 vmirror 0!	output1 v mirror off	output 1 v mirror off output 2 v mirror off output 3 v mirror off output 4 v mirror off
r output y mirror!	Get output y mirror status(y=0~4) y=0. output all y=1. output 1 y=2. output 2 y=3. output 3 y=4. output 4	r output 0 mirror!	output 1 h mirror on, v mirror off output 2 h mirror on, v mirror off output 3 h mirror on, v mirror off output 4 h mirror on, v mirror off	

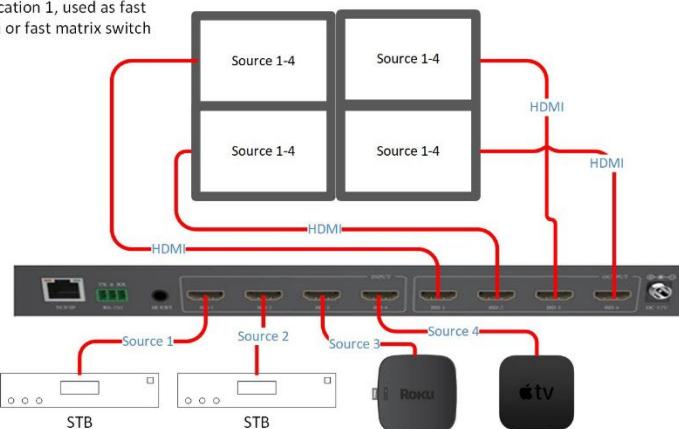
Command Code	Function Description	Example	Feedback	Default Setting
s output y stream x!	Set output y stream enable/disable (y=0~4, x=0~1) y=0. output all y=1. output 1 y=2. output 2 y=3. output 3 y=4. output 4 x=0. stream disable x=1. stream enable	s output 1 stream 1!	output 1 stream: enable	enable
r output y stream!	Get output y stream status. (y=0~4) y=0. output all y=1. output 1 y=2. output 2 y=3. output 3 y=4. output 4	r output 1 stream!	output 1 stream: enable	
s output bg x!	Set output no signal background display mode (x=1~6) x=1. black screen x=2. blue screen x=3. color bar x=4. gray scale x=5. cross x=6. cross hatch	s output bg 1!	output background: black screen	black screen
r output bg!	Get output no signal background display mode	r output bg!	output background: black screen	
EDID setting				
s edid in x from z!	Set hdmi input x edid mode (x=0~4,z=1~18) x=0. all input x=1. input1 x=2. input2 x=3. input3 x=4. input4 z=1. 4k2k60_444,stereo audio 2.0 z=2. 4k2k60_444,dolby/dts 5.1 z=3. 4k2k60_444,hd audio 7.1 z=4. 4k2k30_444,stereo audio 2.0 z=5. 4k2k30_444,dolby/dts 5.1 z=6. 4k2k30_444,hd audio 7.1 z=7. 1080p,stereo audio 2.0 z=8. 1080p,dolby/dts 5.1 z=9. 1080p,hd audio 7.1 z=10.1920x1200,stereo audio 2.0 z=11.1360x768, stereo audio 2.0 z=12.1024x768, stereo audio 2.0 z=13.user define1 z=14.user define2 z=15.copy from hdmi output 1 z=16.copy from hdmi output 2 z=17.copy from hdmi output 3 z=18.copy from hdmi output 4	s edid in 1 from 1!	input 2 edid:1080p, stereo audio 2.0	4k2k60_444, stereo audio 2.0
		s edid in 0 from 1!	all inputs edid:1080p, stereo audio 2.0	
r edid in x!	Get input x edid mode(x=0~4) x=0. all input x=1. input1 x=2. input2 x=3. input3 x=4. input4	r edid in 0!	input 1 edid: 4k2k60_444, stereo audio 2.0 input 2 edid: 4k2k60_444, stereo audio 2.0 input 3 edid: 4k2k60_444, stereo audio 2.0 input 4 edid: 4k2k60_444, stereo audio 2.0	

Command Code	Function Description	Example	Feedback	Default Setting
Video wall setting				
s tw mode x!	Set tv wall display mode(x=1~10) x=1. 2x2 mode x=2. 2x1 mode x=3. 2x1-2 mode x=4. 1x2 mode x=5. 1x2-2 mode x=6. 3x1 mode x=7. 4x1 mode x=8. 1x3 mode x=9. 1x4 mode x=10. matrix mode	s tw mode 1!	tv wall mode: 2x2	tv wall mode: 2x2
r tw mode!	Get tv wall display mode	r tw mode!	tv wall mode: 2x2	
s tw h bezel x!	set tv wall horizontal bezel (x=0~10,+,-)	s tw h bezel 0!	tv wall horizontal bezel: 0	tv wall horizontal bezel: 0
r tw h bezel!	Get tv wall row bezel	r tw h bezel!	tv wall horizontal bezel: 0	
s tw v bezel x!	Set tv wall vertical bezel (x=0~10,+,-)	s tw v bezel 0!	tv wall vertical bezel: 0	tv wall vertical bezel: 0
r tw v bezel!	Get tv wall vertical bezel	r tw v bezel!	tv wall vertical bezel: 0	
s tw group y input x!	Set tv wall group y display which source input(y=0~4, x=1~4) y=0. tv wall group all y=1. tv wall group 1 y=2. tv wall group 2 y=3. tv wall group 3 y=4. tv wall group 4 x=1. hdmi input 1 x=2. hdmi input 2 x=3. hdmi input 3 x=4. hdmi input 4	s tw group 1 input 1!	tv wall group 1 input: hdmi input 1	tv wall group 1 input: hdmi input 1
r tw group y source!	Get tv wall group y display which source input(y=0~4) y=0. tv wall group all y=1. tv wall group 1 y=2. tv wall group 2 y=3. tv wall group 3 y=4. tv wall group 4	r tw group 0 source!	tv wall group 1 input: hdmi input 1 tv wall group 2 input: hdmi input 2 tv wall group 3 input: hdmi input 3 tv wall group 4 input: hdmi input 4	
s tw res x!	Set tv wall resolution (x=1~15) 1. 4096x2160p60, 2. 4096x2160p50, 3. 3840x2160p60, 4. 3840x2160p50, 5. 3840x2160p30, 6. 1920x1080p60, 7. 1920x1080p50, 8. 1920x1080i60, 9. 1920x1080i50, 10. 1920x1200p60rb, 11. 1360x768p60, 12. 1280x800p60, 13. 1280x720p60, 14. 1280x720p50, 15. 1024x768p60,	s tw res 3!	tv wall resolution: 3840x2160p60	3840x2160p60
r tw res!	Get tv wall resolution	r tw res!	tv wall resolution: 3840x2160p60	3840x2160p60

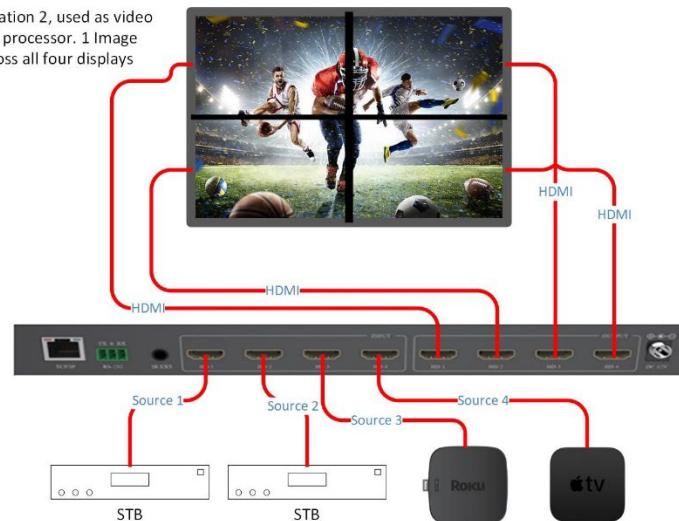
Command Code	Function Description	Example	Feedback	Default Setting
Network setting				
r ipconfig!	Get the current ip configuration	r ipconfig !	ip mode: static ip: 192.168.0.100 subnet mask: 255.255.255.0 gateway: 192.168.0.1 tcp/ip port=8000 telnet port=23 mac address: 00:1c:91:03:80:01	
r mac addr!	Get network mac address	r mac addr!	mac address: 00:1c:91:03:80:01	
s ip mode z!	Set network ip mode to static ip or dhcp,z=0~1 (z=0 static, z=1 dhcp)	s ip mode 0!	set ip mode:static. (please use "s net reboot!" command or repower device to apply new config!)	
r ip mode!	Get network ip mode	r ip mode!	ip mode: static	
s ip addr xxx.xxx.xxx.xxx!	Set network ip address	s ip addr 192.168.0.100!	set ip address: 192.168.0.100 (please use "s net reboot!" command or repower device to apply new config!) dhcp on, device can't config static address, set dhcp off first.	
r ip addr!	Get network ip address	r ip addr!	ip address: 192.168.0.100	
s subnet xxx.xxx.xxx.xxx!	Set network subnet mask	s subnet 255.255.255.0!	set subnet mask: 255.255.255.0 (please use "s net reboot!" command or repower device to apply new config!) dhcp on, device can't config subnet mask, set dhcp off first.	
r subnet!	Get network subnet mask	r subnet!	subnet mask: 255.255.255.0	
s gateway xxx.xxx.xxx.xxx!	Set network gateway	s gateway 192.168.0.1!	set gateway: 192.168.0.1 (please use "s net reboot!" command or repower device to apply new config!) dhcp on, device can't config gateway, set dhcp off first.	
r gateway!	Get network gateway	r gateway!	gateway:192.168.0.1	
s tcp/ip port x!	Set network tcp/ip port (x=1~65535)	s tcp/ip port 8000!	set tcp/ip port:8000	
r tcp/ip port!	Get network tcp/ip port	r tcp/ip port!	tcp/ip port:8000	
s telnet port x!	Set network telnet port(x=1~65535)	s telnet port 23!	set telnet port:23	
r telnet port!	Get network telnet port	r telnet port!	telnet port:23	
s net reboot!	Reboot network modules	s net reboot!	network reboot... ip mode: static ip: 192.168.0.100 subnet mask: 255.255.255.0 gateway: 192.168.0.1 tcp/ip port=8000 telnet port=10 mac address: 00:1c:91:03:80:01	

12. Application Example

Application 1, used as fast switch or fast matrix switch



Application 2, used as video wall processor. 1 Image across all four displays



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13. Warranty Information

Should you feel that this product does not function adequately due to defects in materials or workmanship, we (referred to as "the warrantor") will, for the length of the period indicated below (starting from the original date of the purchase) either a) repair the product with new or refurbished parts. Or b) Replace the product with new or refurbished product. All Simplified MFG products are covered by a 3-year warranty. During this period there will be no charge for unit repair, replacement of unit components or replacement of the product if deemed necessary. The decision to repair or replace is made by the warrantor. The purchaser must mail in the product during the warranty period. This limited warranty only covers the product purchased as new and is extended to the original purchaser only. It is non-transferrable to subsequent owners, even during the warranty period. A purchase receipt or other proof of purchase date is required for the limited warranty service.

14. Contact Information

Sales and Tech Support

P. 833-HDMI-411 (833-436-4411)

E. info@simplifiedmfg.com



The logo consists of the word "SIMPLIFIED" in a large, bold, sans-serif font, centered within a blue rectangular frame. Below it, the letters "M F G" are written in a smaller, regular sans-serif font.