

# Presentation Switcher SW-0402-MV-HDMI | SW-0402-MV-HDBT

# Installation Guide

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Supported Firmware:	All Versions



## **IMPORTANT!** Safety Information

# **Safety Classifications**

Note:	Provides special information for installing, configuring, and operating the equipment.
IMPORTANT!	Provides special information that is critical to installing, configuring, and operating the equipment.
	Provides special information on avoiding situations that may cause damage to equipment.
	Provides special information on avoiding situations that may cause physical danger to the installer, end user, etc.
ELECTRIC SHOCK!	The source power poses an electric shock hazard that has the potential to cause serious injury to installers and end users.
ELECTRICAL DISCONNECT:	The source power outlet and power supply input power sockets should be easily accessible to disconnect power in the event of an electrical hazard or malfunction.
WEIGHT INJURY!	Installing some of the equipment requires two installers to ensure safe handling during installation. Failure to use two installers may result in injury.

## **Safety Statements**

- 1. Read these instructions in their entirety and retain a copy for later reference.
- 2. Follow all instructions and heed all warnings.
- 3. Do not expose this apparatus to rain, moisture, sprays, drips or splashes and ensure that no objects containing liquids are placed on the apparatus, including cups, glasses and vases.
- 4. Do not place this unit in a confined space such as enclosed shelving, cabinets or bookshelves. Ensure the unit is adequately ventilated.
- 5. To prevent the risk of electric shock or fire hazard due to overheating, do not cover the unit or obstruct ventilation openings with material, newspaper, cardboard or anything that may restrict airflow into the unit.
- 6. Do not install near external heat sources such as radiators, heat registers, boilers or any device that produces heat such as amplifiers or computers and do not place near sources of naked flame.
- 7. Unplug apparatus from power supply during lightning storms or when unused for long periods of time.
- 8. Protect the power cable from being walked on, pinched or restricted in any way, especially at plug connections.
- 9. Only use attachments/accessories specified by the manufacturer.
- 10. Units contain non-serviceable parts Refer all servicing to qualified service personnel.

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Do Not Hot swap HDMI or HDBaseT connections - Please insert and extract cables carefully with the power SWITCHED OFF. Power is passed along transmissions so connecting and disconnecting cables while powered can result in damage to circuitry or possible injury.

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## 1. Overview

This Installation Guide will guide the installer through the process of installing and configuring a WyreStorm SW-0402-MV-HDMI or SW-0402-MV-HDBT Multi-View Scaler. Print out this page to use as a checklist for items required to install this WyreStorm device.

WyreStorm recommends reading through this document in its entirety to become familiar with the product's features prior to starting the installation process.

## 1.1 Before Beginning

WyreStorm recommends visiting the product page before installing this product for updates to this Quickstart Guide as well as other information about this product.

Read through this document in its entirety.	
SW-U4U2-MV-HDIVII OF SW-U4U2-MV-HDB1 MUITI-VIEW Scaler	
Required cables and connectors to connect sources and displays	
Sources and displays to be used in the system	
IR receiver to extend the IR sensor for control of the Multiview Scaler.	
Ethernet network components and network usernames and passwords (if applicable)	
Management Suite Configuration Tool downloaded from WyreStorm.com.	

# 2. Product Overview

The WyreStorm SW-0402-MV-HDMI is a 4-input to 2-output scaling device that allows both analog and/or digital AV sources to be connected. Each of the four source input locations have three connection options: HDMI, VGA or YUV. Additionally, each analog input includes an audio input (stereo mini for VGA and RCA L/R for YUV) for embedding the video with an external audio source.

## 2.1 Key Features

- Both outputs have coaxial S/PDIF connections to allow audio signals from any of the four inputs to be sent to an audio amplifier.
- Advanced image processor controls source opacity and image border.
- Scale and arrange images on the screen in real-time using the API or supplied software package.
- Advanced EDID functionality allows the unit to store and recall settings previously identified.
- The SW-0402-MV-HDMI scales input from any of the sources from 480i to 1080p.
- Each input allows for separate embedded audio via a line in stereo mini connection.
- The product comes with a built-in Web UI for advanced settings via a tablet or computer.
- Audio output with variable delay for AV sync.
- Control with LAN, RS-232 and IR functionality.

## 2.2 In the Box

1x SW-0402-MV-HDMI or SW-0402-MV-HDBT Multi-View Scaler

- 1x 12V DC 3A Power Supply (US/UK/EU)
- 1x Handheld IR Remote

1x IR Receiver Extension Cable

- 2x Mounting Brackets
- 1x Quickstart Guide

## 2.3 Front Panel



A	IR Sensor	38kHz IR Receiver. Receives an IR signal from the included handheld remote or emitter for source selection and other switcher functions.
B	Input 1-4 Selection	Selects the numbered input to assign to an output.
C	Source Selection	Selects the source for the currently selected input number. Example: HDMI 1, VGA 2, etc.
D	MV Mode	Selects the MV mode for the currently selected source.
E	2K QV/4K QV	Selected 2K or 4K output for the currently selected source.
F	LCD Display	Displays current source selection and source type for each output.

2.4 Rear Panel				
AB	<b>9 0</b>		3	7
			WE OUTPUT 1 V. I OF OUTPUT 1	€ Reat. ©→-○ © DC : SV K
A LAN	8-pin RJ-45 female   10 Connect to a Local Are	0/100 Mbps auto-negotiating: ea Network for accessing the built-in Web UI.		
B RS-232 In/Loop	RS-232 Loop: 9-pin DB Connect to a control s See RS-232 Wiring for	39 Male   RS-232 In: 9-pin DB9 Female system to control the switcher and loop to other switcl connector pinouts.	ners.	
C YUV/ CVBS (Component/ Composite Video)	RCA Female(3x): Connect YUV to the cc Connect CVBS (YUV G See YUV/CVBS (Comp	omponent video output of a source device. Green) to the composite video output of a source device conent/Composite Video) Wiring for connector pinout	ve. S.	
Audio In (YUV/CVBS Audio)	RCA Female (2x): Con Out Wiring for connect	nect to the analog audio output of the source connec tor pinouts.	ted to the CVBS input. See Audio In-S/F	PDIF
S/PDIF Out	RCA Female (Digital Co Outputs a digital S/PD See Audio In-S/PDIF O	oax) IF audio signal to the display or amplifier with a digita Out Wiring for connector pinouts.	l coax input.	
<b>F</b> IR Ext	3.5mm (1/8in) Stereo range of the IR remote See IR Wiring for conn	Plug: Connect to an IR receiver (not included) when the e. ector pinouts.	e switcher is placed in a cabinet or out o	of
G HDMI In	19-pin type A HDMI fer HDMI/HDBaseT Wiring	male digital video/audio: Supports HDMI and DVI/D (r g for important wiring guidelines.	equires adapter-not included). See	
Line In (VGA Audio)	3.5mm (1/8in) Stereo Connect to the analog See Line In Wiring for o	Plug audio output of the source connected to the VGA inp connector pinouts.	ut.	
U VGA In	15-pin VGA VESA (D-S Connect to D-SUB 15 \ 15-pin VGA cable is rea	SUB 15): VGA output of a device such as a computer. quired.		
<b>J</b> Video Outputs	SW-0402-MV-HDMI: 2x SW-0402-MV-HDBT: 1	x HDMI Out19-pin type A HDMI female digital video/a x HDMI Out19-pin type A HDMI female digital video/a	udio udio   1x HDBT Out 8-pin RJ-45 female	
K Power In	5.5mm Male Barrel Ja Connect to the include	ick ed 12V DC 3A power supply.		

# 2.5 Specifications

Audio and Video	
Inputs	4x HDMI In 19-pin HDMI type A female   4x VGA In 15-pin DSUB15 VGA 4x YUV IN YUV RCA Female(s)   4x CVBS (Composite In) RCA Female (YUV Green) 4x Line In 3.5mm (1/8in) Stereo Jack   4x Audio In L&R RCA Female
Outputs	HDMI Version: 2x HDMI Out 19-pin HDMI type A female   2x S/PDIF Out RCA Female Digital HDBT Version: 1x HDMI Out 19-pin HDMI type A female   1x HDBT Out 8-pin RJ-45 female   2x S/PDIF Out RCA Female Digital
Audio Formats	2ch PCM
Video Resolutions (Max)	HDMI 1920x1080p @60Hz 12bit (15m/50ft)   16bit (7m/23ft) Output Only: 3840x2160p @30Hz 4:4:4 8bit (7m/23ft)   @24Hz 4:2:0 HDR 10bit (3m/9.8ft) Cat6 (HDBT Version) 1920x1080 @60Hz 12bit (100m/328ft)   @60Hz 16bit (70m/230ft) Output Only: 3840x2160p @30Hz 4:4:4 8bit (70m/230ft) Cat6a/7 (HDBT Version) 1920x1080 @60Hz 12bit (100m/328ft) Output Only: 3840x2160p @30Hz 4:4:4 8bit (100m/328ft)
Color Depth	1080p: 16bit   4K UHD: 8bit
Maximum Pixel Clock	HDMI: 600mHz   HDBaseT: 297MHz
Communication and Control	
HDMI	HDCP   EDID   DVI/D supported with adapter (not included)
HDBaseT	HDCP   EDID   ARC   1-way PoH (to RX)   Bidirectional IR and Ethernet
Ethernet	1x 8-pin RJ-45 female   Web UI   IP Control   Bidirectional over HDBaseT
IR	1x IR Ext - 3.5mm (1/8in) Stereo   Matrix Control 6x IR TX - 3.5mm (1/8in) Mono   Bidirectional over HDBaseT 6x IR RX - 3.5mm (1/8in) Stereo   Bidirectional over HDBaseT
RS-232	Matrix Control   Firmware Updates
Power	
Power Supply	Input: 100~240V AC 50/60Hz
РоН	48V 15.4W
Max Power Consumption	88.6W
Environmental	
Operating Temperature	32°F ~ 113°F (0°C ~ 45°C) 10% ~ 90%, non-condensing
Storage Temperature	-4°F to ~ 158°F (-20°C ~ +70°C) 10% ~ 90%, non-condensing
Maximum BTU	302.3 BTU/hr
Dimensions and Weight	
Rack Units/Wall Box	3U
Height	100mm/3.94in
Width	440mm/17.33in
Depth	340mm/13.39in
Weight	8.2kg/18.04lbs
Regulatory	
Safety and Emission	CE   FCC

## 2.6 Dimensions



## 2.7 Typical Application

A typical application for the SW-0402- Multi-View scaler contains the following components. While other items can be added to the configuration, the items listed below are the devices typically found in the average installation of this product.

- Multi-View scaler
- Blu-ray player
- Cable/Satellite Box(es)
- Media Players
- Laptop or Desktop Computers
- Security Cameras
- Local Area Network (LAN) components
- IR, RS-232, or IP Control System

#### **Basic Wiring Diagram**



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# 3. Installation

### 3.1 Shelf Placement

This product should be installed on a solid, flat, level surface such as a table, cabinet or shelf using the four included feet. The location should be dry, well ventilated, and out of direct sunlight.

It is acceptable to stack multiple products one atop of the other without a ventilation space between the units. However, WyreStorm recommends that if using more than two of this product, an empty space at least 1 rack unit (1.75 in) in height is used between every 2 chassis. This will assist in heat dissipation and prevent thermal protection from activating due to overheating.

## 3.2 Rack Placement

Rack ears (mounting brackets) are included with this product for installation in a standard 19-inch equipment rack. When installing in a rack, the attached feet located on the bottom of the chassis must be removed.

# 4. Wiring and Connections

WyreStorm recommends that all wiring for the installation is run and terminated prior to making connections to the switcher. Read through this section in this entirety before running or terminating the wires to ensure proper operation and to avoid damaging equipment.

# 4.1 HDMI/HDBaseT Wiring

#### IMPORTANT! HDMI/HDBaseT Wiring Guidelines

- The use of patch panels, wall plates, cable extenders, kinks in cables, and electrical or environmental interference will have an adverse effect on HDMI and Ethernet transmission limiting performance. Steps should be taken to minimize or remove these factors completely during installation for best results.
- While similar in nature, the HDBaseT protocol is different than Ethernet and voltages provided for PoH can be higher than those provided by PoE. For this reason, never connect an HDBaseT link to an Ethernet router or switch to avoid damaging the connected devices.
- WyreStorm recommends using high quality HDMI cables such as WyreStorm Express to ensure the highest content performance available.
- The type of category cable used and length can restrict the available video resolution. While Cat5e can be used, WyreStorm recommends using Cat6 or higher to ensure the highest content performance available. See Video Resolutions in the Specifications table before determining cable type and length.

#### HDBaseT Wiring (follows the EIA T568B standard)



Wire colors shown follow EIA/TIA-568B standard.

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## 4.2 Video and Audio Wiring

### YUV/CVBS (Component/Composite Video) Wiring

Connection for YUV/CVBS inputs use an RCA Male connector for each of the individual connections.



#### Line In Wiring

Connection for Line In uses a 3.5mm (1/8in) stereo connector.



Left Channel Right Channel Ground (GND)

### 4.3 IR Wiring

Connection for IR RX (receive) uses a 3.5mm (1/8in) stereo jack that outputs +5V DC to power the included IR receiver.

#### IMPORTANT! IR TX Connection Guidelines

- 3rd party IR receivers may require a different voltage, refer to the documentation provided with the IR receiver before making any connections to avoid damaging the device.
- When connecting to an IR control system use the WyreStorm CAB-IR-LINK cable to remove the sleeve +5V DC.

Visit the CAB-IR-LINK product page for details.

## 4.4 RS-232 Wiring

The following wiring diagram shows the pinouts for the switcher. While not shown, connect the TX (transmit) to RX (receive) pin at the control system or PC side of the cable. Most control systems and computers are DTE where pin 2 is RX, this can vary from device to device. Refer to the documentation for the connected device for pin functionally to ensure that the correct connections can be made.

Additionally, the switcher contains a RS-232 loop out to control additional Multi View Scalers. This is a male DB9 port with DTE configuration. Use a straight-through cable when connecting from one switcher to another. Refer to the SW-0402-MV-HDxx RS-232 Commands document located on the product page for RS-232 control commands.



### Audio In-S/PDIF Out Wiring

Connection for Audio In uses an RCA Male connector for the left and the right inputs.



#### RS-232 In Port DCE Pinout

1x 9-pin DB9 Female



#### **RS-232 Loop Connections**



#### RS-232 Loop Port DTE Pinout

1x 9-pin DB9 Male



# 5. Display Modes

## 5.1 Multi-View (MV)/Picture in Picture (PIP) Mode

When a Multi-View mode is selected, the screen will display a main source and three other sources in smaller PIP windows. While the layouts can be customized, there are 4 presets that correlate to the front panel and handheld remote buttons. The output to each display is mirrored during MV mode displaying the same content on both displays.



#### PIP Window Order

While the graphics above show the main image as input 1, this will change based on the selected input. The main image will change to the input number and image 1 will move to the first PIP window.

Selected Input	PIP Window Order
Input 1	Main= Input 1, PIP2= Input 2, PIP3= Input 3, PIP4= Input 4
Input 2	Main= Input 2, PIP2= Input 1, PIP3= Input 3, PIP4= Input 4
Input 3	Main= Input 3, PIP2= Input 1, PIP3= Input 2 PIP4= Input 4
Input 4	Main= Input 4, PIP2= Input 1, PIP3= Input 2, PIP4= Input 3

## 5.2 Quad-View Mode

When a Quad-View mode is selected, the screen will display the sources in 4 quadrants on the screen. As with Multi-View, there are 4 presets that correlate to the front panel and handheld remote buttons. The output to each display is independent during MV mode allowing for different content on each display.



### 5.3 4x2 Matrix Mode

This mode allows for a single image to appear on the display from a single source.

# 6. Controlling the SW-0402-MV-HDxx

### 6.1 Front Panel Control

Operating the Multiview Scaler from the front panel is as easy as 1, 2, 3, 4...



# 6.2 Handheld Remote Operation

Operation from the Handheld Remote is just as easy.



# 7. Using SW-0402 Console

SW-0402 Console allows for configuring and controlling the SW-0402-MV-HDxx switchers. This software is part of the WyreStorm Management Suite configuration tool available on most product pages on WyreStorm.com. The first step of using the SW-0402 Console is to download and install the Management Suite.

## 7.1 Management Suite Installation

The WyreStorm Management Suite is an All-in-One tool that allows quick and easy access to all the WyreStorm configuration tools. With this tool software to configure Switchers, Matrixes, NetworkHD, and Enado is available under one interface. Bonjour is a requirement to use the Management Suite and must be installed before installing the Management Suite. Follow these steps in order to ensure that the Management Suite is installed properly and can be accessed.

- 1. Download the Management Suite Configuration Tool from WyreStorm.com.
- 2. Extract the contents of the ZIP file into a folder.
- 3. Run the WyreStormManagementSuiteSetup.exe file and follow the prompts to complete the installation.
- 4. Launch the Management Suite to verify the installation.

## 7.2 Connecting to a PC

The PC Console communicates with the scaler via RS-232 serial from a PCs USB port with a COM adapter (not included). Refer to the RS-232 Wiring section for the proper pinout.



## 7.3 Configuring the PCs COM Port

Before communicating with the scaler, the PCs com port settings must be set to match the scalers COM settings.

- 1. Connect the COM adapter to the PC. Wait for any install process to complete.
- 2. Open Device Manager on the PC.
- 3. Navigate to, Ports (COM & LPT).
- 4. Select the Expansion Triangle to expand the list of ports.
- 5. Right click on the port and select Properties.
- 6. In the open dialog, select the Port Settings tab.
- 7. Enter the following values:

Bits per Second (Baud Rate):	115200
Parity:	None
Data Bit:	8
Stop Bit:	1
Row Control:	None

8. Once the values are entered, select OK to save the values.

## 7.4 Establishing Communication with the Scaler

In order to establish communication with the scaler, the COM port that is used on the PC must be selected. The port number must match the port configured in the Configuring the PCs COM Port section.

- 1. Power on the SW-0402-MV-HDxx and wait for the unit to initialize. The lights on the front will stop cycling and become solid once the unit is initialized.
- 2. Power on the PC and open the SW-0402 Console.
- 3. Open the drop down list next to COMM: and select the appropriate COM Port number on the PC.



4. The black dot next to COMM: will turn red when the PC is communicating with the SW-0402-MV-HDxx.



### 7.5 Configuring EDIDs

EDID (Extended Display Identification Data) is data generated by a display device that communicates the capabilities of the device (720p, 2ch Audio, 1080p, 7.1ch Audio).

For communication between devices to be successful, devices must both request and send the required information. For example, a display will communicate 1080p capability with 2ch audio, the source device will then accept and output the correct format for the display. Problems can arise when different devices such as displays with different performance specifications are used within a system.

EDIDs can be set within the PC Console to allow for displays and sources to communicate properly and output audio and video correctly.

#### To Configure EDIDs

- 1. Open the PC Console.
- 2. Navigate to the EDID tab.



### Read the EDID from a Display (Output)

- 1. Select the output to read the EDID from. Out 1 or Out 2.
- 2. Select Read EDID.



- 3. Select the input to write the EDID to. Note that there is a section for HDMI and one for VGA.
- 4. Select Write EDID to xxxx Input Port. Note: xxxx represents either HDMI or VGA depending on which port is desired to be changed.



#### Resetting EDIDs

- 1. Select the output to reset.
- All4 | In1 | In2 | in3 | In4
- 2. Select xxxx EDID Reset.

Note: xxxx represents either HDMI or VGA depending on which port is desired to be reset.

1	- EDID Reset
2	HDMI EDID Reset
	● ALL4 C in 1 C in 2 C in 3 C in 4
L	VGA EDID Reset
	● ALL4 C in 1 C in 2 C in 3 C in 4

## 7.6 Selecting a Source

An input number for each output can be selected using the Matrix tab within the PC Console.

- 1. Open the PC Console and establish communication with the scaler.
- 2. Select the Matrix tab.



3. In the Matrix tab area, select the desired input under the appropriate output.



4. In the Source Select navigation bar, select a source for the input



5.

6. Select the audio source format for each input (HDMI, Stereo or RCA).

HDMI IN1 audio	HDMI IN2 audio	HDMI IN3 audio	HDMI IN4 audio
C HDMI	C HDMI	C HDMI	C HDMI
C Stereo	C Stereo	C Stereo	C Stereo
C RCA	C RCA	C RCA	C RCA

## 7.7 Controlling Multi-View in the PC Console

Multi-View screens can be controlled and configured using the HD MV, HDMV Settings and PRESET tabs in the PC Console. These tabs allows for Multi-View to be activated and adjusted for the following.

- Image to display on which view.
- Position each views on the main screen.
- Assign priority to an input.
- Resize a view.
- Select the overlay setting to use.
- Select background colors and borders
- Set multi-view audio source
- Save up to 20 custom multi-view presets

#### HD MV Tab Overview



A	Set to Multi-view	Sets the output to Multi-View.
B	Image to Adjust	Selects the image in the view to adjust.
С	Size	Adjusts the size of the view selected image.
D	Position	Adjusts the positon of the selected image. Images views can also be positioned by selecting and dragging while holding the mouse button down.
e	Four Input	Allows each PiP source to be more accurately placed by entering X and Y coordinates.
F	Overlay Setting	Selects one of 12 pre-configured multi-view layouts.
G	Main View	Image area for the configured screens. Note that this area is smaller when a 2 column x 2 row overlay is selected.
0	Image Views	Secondary image views. Note that these are the same size as the main view when a 2 column x 2 row overlay is selected.
0	Priority Level	Selects the priority level for inputs when active.

## 7.8 HDMV Settings Tab Overview

Matrix   HD MV HDMV Setting EDID   PRESET   IP setting	
Half tune setting(HD MV only)           ○ 0(off)         ○ 25%         ○ 50%         ○ 75%	-
Background Color(HD MV only)       RED:0     GREEN0         BLUE: 0	- <b>B</b>
Border line setting(HD MV only)           Width:         0           pixel(from 0 to 15)           RED:         0           GREEN         0	-0
Audio source for HDMI out1 in MV mode         Image: C in1 in C in2 in3 in4             Image: C in1 in C in2 in3 in4	-0

A	Half Tune Settings	Adjusts the transparency of the PiP sources.
B	Background Color	Sets the background color in Multi-View mode.
С	Border Line Settings	Adjusts the width and color of source borders in Multi-View mode.
D	Audio Source for Multi-View Mode	Adjust what source plays audio when in Multi-View mode.

### 7.9 Preset Tab Overview

The Preset tab can be used to save up to 20 custom multi-view configurations. To save a custom multi-view configuration perform the following. Created pre-sets are accessible by the SW-0402 Console or through an RS-232/IP Control system such as Enado. The Enado template and the 3<sup>rd</sup> party drivers contain access to these pre-sets. Visit the product page to download the available drivers.

- 1. Configure the desired multi-view layout in the HDMV tab
- 2. Navigating to the PRESET tab.
- 3. Select the PRESET number that the layout will be saved to.
- 4. Click the Save MV Setting button.
- 5. Give the saved PRESET a name by editing the field with the asterisk.

	maduk   HD MV   HDMV Setung	
	Preset Save MV	/ Setting To ) Preset 1  Note: Description for preset will be saved also.
	Preset1	Preset2
	Preset3 *	Preset4
	Preset5	Preset6
	Preset7	Preset8
	Preset9	Preset 10
	Preset11	Preset 12 *
	Preset13	Preset 14
	Preset 15	Preset 16
	Preset17	Preset 18
	Preset 19	Preset20 *
		G In1 C In2 C In3 C In4     VGA Auto Size
	Preset Select	Preset selection
	Save MV Setting	Saves currently configured layout on the HDMV tab to the selected preset
;	Save MV Setting Preset Recall	Saves currently configured layout on the HDMV tab to the selected preset Recalls multi-view layout saved to preset
ę F	Save MV Setting Preset Recall Preset Alias	Saves currently configured layout on the HDMV tab to the selected preset Recalls multi-view layout saved to preset Alias can be entered to better identify saved preset

### 7.10 Configuring the Network Connection

The scaler's network connection can be configured to obtain an IP Address from a router using Dynamic Host Configuration Protocol (DHCP) or be set manually to a static IP Address. The scaler is configured for DHCP by default, WyreStorm recommends that a static IP is used to ensure that the IP Address to the scaler will not change.

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Setting network values incorrectly can prevent the scaler from connecting to the network. Ensure that all network information is correct before making any changes to the IP Settings.

#### To Set a Static IP Address (Manual Configuration)

- 1. On the PC, navigate to the folder for the PC Console software. Open the PC Console.
- 2. Navigate to the IP Setting tab.

>			SW0402MV4K	
	Close	Port	Matrix HD MV HDMV Setting EDID PRESET Presetting	
Co	mm: COM4	•	00	01 11

- 3. Uncheck the box next DHCP.
- 4. Next to Host IP Address, enter an IP address for the scaler.

Select an IP Address outside the range of DHCP assignable addresses. If the routers DHCP range is 1 to 255, use a static IP Address above 255. Example: 192.168.1.256.

- 5. Next to Net Mask, enter the Network Mask of the router.
- 6. Next to Router IP Address, enter the IP Address of the router.



# 8. Troubleshooting

#### No or Poor Quality Picture (snow or noisy image)

- Verify that sources and scaler are powered On and playing content.
- Verify that the scaler and display support the output resolution of the source. If the output resolution of one of the connected displays is lower than the other, follow the step outlined in the Configuring EDIDs section.
- Verify that all source and display connections are not loose and are functioning properly.

#### No or Poor Quality Audio

- Verify that sources are powered On and playing content.
- Verify that all source and scaler connections are not loose and are functioning properly.
- Verify that all cables are properly terminated per the appropriate wiring section:
- Analog In-S/PDIF Out: Audio In-S/PDIF Out Wiring
- Line In: Line In Wiring

#### No or Intermittent Device Control

- Verify that the handheld remote has a clear line of sight to the IR Sensor on the front panel or the IR Receiver if being used.
- Verify that the IR cable(s) is properly terminated if using an external IR Receiver. See IR Wiring.
- Verify that the IR emitter is located near the IR Sensor on the front panel if using an external IR Control System.
- Verify that the RS-232 cable is properly terminated. See RS-232 Wiring.

# Tip:

WyreStorm recommends using a cable tester or connecting the cable to others devices to verify functionality.

### **Contacting Technical Support**

Should further clarification of the content of this manual or assistance on troubleshooting be required, please contact WyreStorm technical support.

Phone: North America: 844.280.WYRE (9973) | UK/EMEA: +44 (0) 1793 230 343 Email: Support@WyreStorm.com On Line Chat (Accessible through website): http://WyreStorm.com/Contact-Tech-Support

## 9. Revision History

#### v1.2 - 180110 - January 2018

Section	Update
Specifications	Removed reference to HDCP 2.2 support as this is not support by this product.

#### v1.1 - 170203 - February 2017

Section	Update
Various	Added HDBT version and reference to Management Suite. Format updated as well.
valious	Note that content has been improved throughout, we recommend that doc be read through in its entirety.

# Warranty and Service

This product is covered by a 2 year limited parts and labor warranty. During this period there will be no charge for unit repair, component replacement or complete product replacement in the event of malfunction. The decision to repair or replace will be made by the manufacturer. This limited warranty only covers defects in materials or workmanship and excludes normal wear and tear or cosmetic damage.

Visit the product page located at wyrestorm.com for additional information on this product including important technical information not provided in this document and warranty terms & conditions.



## **Warranty Limits & Exclusions**

1. This Limited Warranty ONLY COVERS failures due to defects in materials or workmanship and DOES NOT COVER normal wear and tear or cosmetic damage.

The limited warranty also DOES NOT COVER damage that occurs in shipment or failures caused by products not supplied by the warrantor, failures resulting from accident, misuse, abuse, neglect, mishandling, misapplication, alteration, incorrect installation, setup adjustment, implementation of/to consumer controls, improper maintenance, power line surge, lightening damage, modification, service by anyone other than a manufacturer-approved service center or factory-authorized personnel, or damage attributable to acts of God.

2. There are no express warranties except as listed under "limited warranty coverage." The warrantor is not liable for incidental or consequential damage resulting from the use of this product or arising out of any breach of this warranty.

For example: damages for lost time, the cost of having a person/persons remove or re-install previously installed equipment, travel to and from service location, loss of or damage to media, images, data or other recorded/stored content. The items listed here are not exclusive, but are for illustration only.

Parts and service not covered by this limited warranty are not the responsibility of the warrantor and should be considered the responsibility of the individual.

## **Obtaining Warranty Service**

Prior to returning a WyreStorm product for factory service, a service authorization must be obtained from a WyreStorm technical support representative. At the time of contact an address for shipping and an authorization number will be supplied. Refer to Contacting Technical Support for contact information.

When shipping a unit for service, carefully pack in the original packaging when available and send it prepaid, with adequate insurance. Please include a document or letter detailing the reason for return and include a daytime telephone number and/or email address where you can be contacted.

If repair is required during the limited warranty period, the purchaser will be required to provide a sales receipt or other proof of purchase, indicating date and location of purchase as well as the price paid for the product. The customer will be charged for the repair of any unit received unless such information is provided.

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## **Publication Disclaimer**

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WyreStorm reserves the right to change software, control codes and specifications without notice.

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WyreStorm Technologies reserves the right to change the physical appearance or technical specification of this product at any time. Visit wyrestorm.com for the latest product information.