



# **User Manual**

v1.0.1

# Contents

Contents	.2
Overview	.3
Features	.3
Package Contents	.3
Specifications	.4
Panel Description	.6
Installation	.9
Wiring Diagram	.9
Front Panel Control	0
IR Operation	11
Web UI Control	15

# Overview

The kit includes one 8x8 HDMI/HDBT matrix and eight slim HDBT receivers. It supports resolutions up to 4K@60Hz 4:2:0 8bit and HDCP 2.2 compatibility. HDBT ports can transmit 4K@60Hz 4:2:0 8bit signals up to 40m/131ft and transmit 1080P signals up to 70m/230ft via a single Cat 6a/7 cable.

The matrix of the kit allows eight HDMI inputs to be switched to any of the eight HDBT ports and four mirrored HDMI ports. It features four balanced audio outputs, allowing to output de-embedding audio from HDBT output 5 to 8 respectively. With PoC ability, the matrix can power the remote HDBT receivers.

The kit supports multiple control methods, including front panel buttons, IR, RS232, and LAN control with telnet API and web GUI.

As a kit of a compact 1U stand-alone 8x8 HDMI/HDBT matrix and eight slim HDBT receivers, it offers the convenience of future-ready Ultra HD A/V switching and distribution solution, and the reliability of advanced HDCP 2.2 compatibility.

# Features

- The matrix includes eight HDMI inputs, eight HDBT outputs and four HDMI outputs.
- The matrix features four balanced audio outputs to output de-embedding audio from HDBT OUT 5-8 respectively.
- All inputs and outputs support resolutions up to 4K@60Hz 4:2:0 8bit and HDCP 2.2 compatibility.
- HDBT outputs can transmit 4K@60 4:2:0 signals up to 35m/115ft via Cat 5e/6 cable, or 40m/131ft via Cat 6a/7 cable; and transmit 1080P signals up to 60m/197ft via Cat 5e/6 cable, or 70m/230ft via Cat 6a/7 cable.
- HDMI inputs, HDMI outputs and HDBT outputs support HD audio formats including Dolby Atmos and DTS-X.
- The matrix can provide power for HDBT receivers, so no receiver power supply is needed.
- IR call back from each HDBT output zone to remote control the matrix.
- Smart EDID and HDCP management, including well developed EDID presets and copy EDID.
- Varieties of control methods including front panel buttons, IR, RS-232, LAN control (Telnet & Web GUI).
- Firmware upgrade via Micro-USB or Web GUI.

# **Package Contents**

- 1 x Matrix
- 8 x HDBT Receivers
- 1 x AC Power Cord with EU Pins
- 1 x AC Power Cord with US Pins
- 1 x AC Power Cord with AU Pins
- 1 x AC Power Cord with UK Pins
- 1 x Matrix IR Remote
- 8 x IR Emitters
- 8 x Broadband IR Receivers (30-50KHz)

- 4 x Phoenix Connectors (5 Pins, 3.5mm)
- 16 x Receiver Mounting Brackets (with Screws)
- 2 x Matrix Mounting Brackets (with Screws)
- 1 x Quick Start Guide

# **Specifications**

# Technical

Input/Output Ports	Matrix: 8 x HDMI IN, 4 x HDMI OUT (Mirrored HDBT 1~4), 8 x HDBT OUT, 8 x IR TX, 8 x IR RX, 4 x AUDIO OUT (5-Pin, 3.5mm), 1 x LAN, 1 x RS232, 1 x Micro USB UPDATE, 1 x AC Power IN Receiver: 1 x HDBT IN, 1 x HDMI OUT, 1 x IR TX, 1 x IR RX, 1 x UPDATE (RS232), 1 x DC 18V IN	
Input/Output Video Type	Matrix: Input: HDMI with 4K@60Hz 4:2:0, HDCP 2.2 Output: HDMI with 4K@60Hz 4:2:0, HDCP 2.2, HDBT Receiver: Input: HDBT Output: HDMI with 4K@60Hz 4:2:0, HDCP 2.2	
Input/Output Resolution Supported	VESA: 800x600 <sup>8</sup> , 1024x768 <sup>8</sup> , 1280x768 <sup>8</sup> , 1280x800 <sup>8</sup> , 1280x960 <sup>8</sup> , 1280x1024 <sup>8</sup> , 1360x768 <sup>8</sup> , 1366x768 <sup>8</sup> , 1440x900 <sup>8</sup> , 1600x900 <sup>8</sup> , 1600x1200 <sup>8</sup> , 1680x1050 <sup>8</sup> , 1920x1200 <sup>8</sup> SMPTE: 720x576P <sup>6</sup> , 1280x720P <sup>6,7,8</sup> , 1920x1080P <sup>2,5,6,7,8</sup> , 3840x2160 <sup>2,3,5,8</sup> (4:20 8bit only), 4096x2160 <sup>2,3,5,8</sup> (4:20 8bit only) 2 = at 24 Hz, 3 = at 25 Hz, 5 = at 30 Hz, 6 = at 50 Hz, 7 = at 59.94 Hz, 8 = 60 Hz	
Audio Format	HDMI IN/OUT: Fully supports audio formats in HDMI 2.0 specification, including PCM 2.0/5.1/7.1, Dolby TrueHD, Dolby Atmos, DTS-HD Master Audio and DTS:X S/PDIF OUT: Stereo	
Maximum Data Rate	10.2Gbps	
Control Method	Front panel buttons, IR, RS232, LAN (Telnet API & Web UI)	

## General

Operating Temperature/RH	0°C ~ 45°C (32°F ~ 113°F)
Storage Temperature/RH	-20°C ~ 70°C (-4°F ~ 158°F)
Humidity	10% ~ 90%, non-condensing
ESD Protection	Human-body model: ±8kV (air-gap discharge)/

	±4kV (contact discharge)
Power Supply	Matrix: AC 100-240V 50/60Hz Receiver: Powered by the matrix via PoC
Power Consumption (max)	105.4W
Dimensions (W x H x D)	Matrix: 440mm x 43.5mm x 330mm/17.32" x 1.71" x 12.99" (Without mounting brackets) Receiver: 108.8mm x 15mm x 64.2mm/4.28" x 0.59" x 2.53" (Without Mounting Brackets)
Weight	Matrix: 5.02kg/11.07lb Receiver: 0.18kg/0.40lb
Rack Space Required	Matrix: 1U

## **Transmission Distance**

Note: Straight-through category cable wired to T568B standard is recommended.

Cat 5e/6	60m/197ft	1080P@60Hz 36bpp
Cat 6a/7	70m/230ft	
Cat 5e/6	35m/115ft	1080P@60Hz 48bpp 4K@30Hz 4:4:4 24bpp
Cat 6a/7	40m/131ft	4K@60 4:2:0 24bpp
HDMI	Input/Output: 15m/49ft	1080P@60Hz 24bpp 4K@30Hz 4:4:4 24bpp
	Input: 5m/16ft Output: 15m/50ft	4K@60Hz 4:4:4 24bpp

# Panel Description Matrix

## Front Panel



A	Output Channel Indicator	Indicates input for output port 1-8.	
B	IR Window	Receives signals from IR remote.	
C	Selection Button	<ul> <li>Output Select Left (◄)/Right (►): Press to select output channels.</li> <li>Input Select Up(▲)/Down(▼):</li> <li>Short press to select input channels.</li> <li>Hold down the Up (▲) and Down (▼) buttons simultaneously for at least 3s to display the matrix's IP address on LED indicator.</li> <li>ENTER Button: Press to implement input and output selection. Note: More detail information for front panel buttons, please refer to "Front Panel Control" section for instruction.</li> </ul>	
D	Power Switch	Press to Power On/Off the matrix.	

## **Rear Panel**



A	HDMI IN 1-8	Connect to HDMI source devices.
B	MIRRORED OUTPUTS (1~4)	Connect to HDMI display devices. Mirrored HDBT 1~4 respectively.
C	HDBT (5-8) AUDIO	Connect to audio devices for de-embedding balanced audio output from the HDBT outputs 5-8 respectively.
D	AC 100-240V 50/60Hz	Connect to the power cord provided. Accepts AC power of 100-240V 50/60Hz.
Ð	UPDATE	Connect to a PC for firmware update.
F	LAN	Connect to a control system for Web UI or Telnet control.
G	RS232	Connect to a control PC or control system for RS232 serial control.
Ð	IR RX 1-8	Connect to the broadband IR receiver provided.
0	IR TX 1-8	Connect to the IR emitter provided.
J	HDBT OUT 1-8	Connect HDBT IN port of the HDBT receiver.

# Receiver

# Front Panel



A	POWER LED	On/Off: The device is powered on/off.	
B	STATUS LED	Blinking: The device is working properly. Off: The device is not working properly.	
С	HDCP LED	On: HDCP protected content is being transmitted.	
Copyright © 2024 WyreStorm Pro AV Corportation  Technical Support: 844.280.WYREWyreStorm.com7 of 27MX-0808-KIT V2 User Manual   240305Support@WyreStorm		Technical Support: 844.280.WYRE (9973) Support@WyreStorm.com	

		<ul><li>Blinking: Non-HDCP protected content is being transmitted.</li><li>Off: No content is being transmitted.</li></ul>
D	LINK LED	<ul><li>On: The link between the matrix and the receiver is normal.</li><li>Blinking/Off: Link error or no link.</li></ul>

## **Rear Panel**



A	DC 18V	Connect to a DC 18V power adapter.
B	HDBT IN	Connect to the HDBT OUT port of the matrix via a Cat 5e/6/6a/7 cable.
С	IR RX	Connect to the IR receiver provided.
D	IR TX	Connect to the IR emitter provided.
8	UPDATE	RS232 port. 3.5mm, 3-Pin, phoenix connector.
Ð	HDMI OUT	Connect to an HDMI display device.

# Installation

Note: Before installation, please ensure the kit is disconnected from the power source.

The matrix occupies 1U space and can be placed on a solid and stable surface or installed on a standard equipment rack.

Steps to install the matrix and the receiver on a suitable location:

- 1. Attach the installation bracket to the enclosure using the screws provided in the package separately.
- 2. The bracket is attached to the enclosure as shown.



- 3. Repeat steps from 1 to 2 for the other side of the unit.
- 4. Attach the brackets to the surface you want to hold the unit against using the screws (provided by others).

# **Wiring Diagram**

Warnings:

- Before wiring, disconnect the power from all devices.
- During wiring, connect and disconnect the cables gently.



# **Front Panel Control**

Front panel buttons of the matrix can be used to switch input sources to output displays, copy EDID and get matrix IP address.

Power on matrix and wait until the front panel LED shows the input channel numbers corresponding to output channels. Then the matrix is ready for operation.

## Switch Input Sources to Output Displays

To select input source for output display:

1. Press the Left (◀) or Right (►) button to select output channel. The LED blinks to show the selected output channel.



2. Press the Up ( $\blacktriangle$ ) or Down ( $\triangledown$ ) button to select input channel. If the LED shows "-", the output is closed.



3. Press the "ENTER" button to confirm the selection. When the selection takes effect, the LED stops blinking.

Note: Long press the Enter button for 5s, the LED window will display the LED version, such as "V 11".

Copyright © 2024 WyreStorm Pro AV Corportation		Technical Support: 844 280 WYRF (9973)
WyreStorm.com	10 of 27	Support@W/woStorm.com
MX-0808-KIT V2 User Manual   240305		Supportervyrestorm.com

# Copy EDID Settings

Using the front panel controls, you can copy HDMI/HDBT Output EDID settings to the desired HDMI Input. For instance, to copy HDBT OUT 2's EDID to HDMI Input 1.

- 1. Press the selection button on the front panel of matrix to select Input 1 for Output 2; the LED will blink.
- 2. Long press the Enter button for at least 5 seconds. When the LED window displays "COPY OK", EDID copy setting is successful. Otherwise, "COPY FAIL" will appear to indicate failed setting.

Note:

- If copy fails, the inputs' EDID will be set as 4K@30Hz 2.0ch only 8bit without HDR and without 4K@60Hz 4:2:0.
- EDID switch setting takes effect immediately without rebooting the matrix.

# Get IP Address

To display matrix IP address on LED indicator:

(Suppose the matrix is with the IP address 192.168.11.143)

Hold down the Up ( $\blacktriangle$ ) and Down ( $\nabla$ ) buttons simultaneously for at least 3 seconds and then release, the LED indicators will display the matrix IP address "192.168", ".011.143" in sequence for 3 times.

# **IR Operation**

# **IR Remote Control**

You can switch among multiple inputs for each output display by pointing the matrix IR remote directly at the IR window on the front panel.

The matrix can be controlled by the IR remote provided. Point the remote directly to the matrix, now you can select input source for each output display.



## To select input source for output display:

- 1. Locate the target output you want to switch inputs for, numbered 1-8 vertically in the middle.
- 2. Press the previous  $(\blacktriangleleft)$  or next  $(\blacktriangleright)$  button to select the desired input source.

## System Code Switch

The IR remote provided with the matrix is shipped in "00" IR system code. If Remote's IR signal interferes with IR devices, e.g., TV, DVD player, the Remote can be switched to "4E" code by short pressing the System Code Switch on the remote panel. At the same time, you may redefine the IR system code of the matrix using the API command.



Virtual IR Code Supported by Default	(Matrix Switching Code)

Code	Out1	Out2	Out3	Out4	Out5	Out6	Out7	Out8
ln1	0x80	0x90	0xA0	0xB0	0xC0	0xD0	0xE0	0xF0
In2	0x81	0x91	0xA1	0xB1	0xC1	0xD1	0xE1	0xF1
ln3	0x82	0x92	0xA2	0xB2	0xC2	0xD2	0xE2	0xF2
In4	0x83	0x93	0xA3	0xB3	0xC3	0xD3	0xE3	0xF3
In5	0x84	0x94	0xA4	0xB4	0xC4	0xD4	0xE4	0xF4
ln6	0x85	0x95	0xA5	0xB5	0xC5	0xD5	0xE5	0xF5
In7	0x86	0x96	0xA6	0xB6	0xC6	0xD6	0xE6	0xF6

Copyright © 2024 WyreStorm Pro AV Corportation | WyreStorm.com MX-0808-KIT V2 User Manual | 240305

In8	0x87	0x97	0xA7	0xB7	0xC7	0xD7	0xE7	0xF7

## **IR Call Back**

You can remote control the matrix at the display location by pointing the matrix remote at the broadband IR receiver connected to an HDBT receiver.

Please refer to the following diagram for installation (You can set IR Call Back function ON/OFF through Web UI and API commands).



# **IR Matrix**

IR TX 1-8 ports of the matrix corresponds to HDMI IN 1-8 of the matrix respectively. IR TX 1 corresponds to HDMI IN 1, IR TX 2 corresponds to HDMI IN 2...IR TX 8 corresponds to HDMI IN 8.

The matrix's HDBT OUT n (n=1, 2...,7, 8) select HDMI IN m (m=1, 2...8) as input source, connect IR emitter to IR TX m (m=1, 2...8), and IR receiver to IR RX of the receiver connected to HDBT OUT n port, the source remote at the display end can control the source HDMI IN m connected.

## Take HDMI IN 5 and HDBT OUT 3 as an example:

- 1. Connect an HDMI source to HDMI IN 5 of the matrix.
- 2. Connect the IR Emitter provided to IR TX 5 of the matrix.
- 3. Connect HDBT OUT 3 of the matrix to HDBT IN port of the HDBT receiver.
- 4. Connect a display to the HDMI OUT of the connected receiver.
- 5. Connect the broadband IR receiver to the connected receiver.
- 6. Power on all attached devices.
- 7. Switch HDMI IN 5 to HDBT OUT 3.

13 of 27

8. The source connected to HDMI IN 5 can be controlled at the remote display end through the source's IR remote.

Note: When HDBT OUT n (n=1, 2...7, 8) select HDMI IN m (m=1, 2...7, 8) as input source, you should connect IR emitter to IR TX m (m=1, 2...7, 8), the source remote at display end can control the source HDMI IN m connected.



# **IR Pass-Through**

Users can use display remotes control the displays at the matrix end. IR RX 1-8 ports of the matrix corresponds to HDBT OUT 1-8 of the matrix respectively. IR RX 1 corresponds to HDBT OUT 1, IR RX 2 corresponds to HDBT OUT 2...IR RX 8 corresponds to HDBT OUT 8. Connect the broadband IR receivers provided to the IR RX ports (1-8) of the matrix and connect the IR emitters provided to IR TX ports of HDBT receivers connected to HDBT OUT (1-8). The displays connected to the receivers can be controlled at matrix side.

# Take HDBT OUT 3 as an example:

- 1. Connect the Broadband IR Receiver provided to the IR RX 3 of the matrix.
- 2. Connect HDBT OUT 3 of the matrix to HDBT IN of the HDBT receiver.
- 3. Connect a display to the HDMI OUT of the HDBT receiver.
- 4. Connect the IR Emitter provided to the HDBT receiver.
- 5. Power on all attached devices.
- 6. The display connected to the receiver can be controlled at the matrix side through the display's IR remote.



## RS232

Advanced users may need to control the kit through RS232 serial communication. Connect a control PC or control system to the RS232 port of the matrix. API command for RS232 control is available in the separate document "API Command Set\_MX-0808-KIT V2". A professional RS232 serial interface software (e.g. Serial Assist) may be needed as well.

Before executing the API command through RS232 serial connection, please ensure RS232 interface of the device and the control PC are configured correctly.

Baud Rate	9600 bps
Data bits	8 bits
Parity	None
Stop bits	1 bit
Flow control	None

# Web UI Control

The Web UI designed for the matrix is available for basic controls and advanced settings of the device. The Web UI can be accessed through a browser with latest version, e.g., Chrome, Firefox, Safari, Opera, IE, etc.

The default network mode of matrix is DHCP, in this mode, if the matrix is not connected to a DHCP server, the matrix will generate a local 169.254 IP address.

## To get access to Web UI

- 1. Connect the LAN port of the matrix to the local area network, and connect your PC to the same network (ensure the local area network is connected with a DHCP server). Or to your PC directly using a straight UTP cable.
- 2. Press up and down buttons on front panel of the matrix or send API commands (more information, please refer to

Copyright © 2024 WyreStorm Pro AV Corportation   WyreStorm.com MX-0808-KIT V2 User Manual   240305	15 of 27	Technical Support: 844.280.WYRE (9973) Support@WyreStorm.com
--	----------	---

the separate document "API Command Set\_MX-0808-KIT V2") to get IP address. If connect the matrix and the PC directly, set your PC to the same network segment as the matrix.

3. Input the IP address obtained in step 2 in your browser and press Enter. The following window will display.



• To implement basic video and audio control of the matrix, click "User" to login as User. When login as User, no password is required. In this mode, only the submenus in Matrix Control tab can be set.

Wire	Styrm	8			
3.0		MX-0808-KIT V2(Con	inected)	Web	UI Version: \
Matrix Control	General Setting	Advanced Setting	User Mode		Admin Login
• Video Matrix	Control				
→ Audio Mute					
Presets Matrix	x Control				

• If advanced setting is required, click "Admin" and enter "admin" (default password) to login as Admin. The main page will appear.

		1	lyre:					
			Matrix Co	ntrol Login				
			User	Admin				
		Admin Passwo	ord: •••••		Admin Login			
Wires	St <b>s</b> rm	0						
		MX-0808-KIT V2(Con	nected)				v	Veb UI Version: V4.1
Matrix Control	General Setting	Advanced Setting				l	Jser Mode	Admin Login
→ Video Matrix C	ontrol							
Audio Mute								
Presets Matrix	Control							

• In User mode, you can also click "Admin Login" on the upper right corner, then input the default password "admin" to enter Matrix Control, General Setting and Advanced Setting pages.

Admin Login	×
Password:	Login

The main page includes three tabs: Matrix Control, General Setting and Advanced Setting.

# Web UI Introduction

#### 1. Matrix Control

There are three sub-menus: Video Matrix Control, Audio Mute, Presets.

1) Video Matrix Control

Outputs\Inputs	Input 1	Input 2	Input 3	Input 4	Input 5	Input 6	Input 7	Input 8	A/V Mute	CEC Contro
Output 1 & Output 1M										On Of
Output 2 & Output 2M										On O
Output 3 & Output 3M										On O
Output 4 & Output 4M										On O
Output 5										On O
Output 6										On O
Output 7										On O
Output 8										On O
All Outputs										On O

This section manages distribution of input video sources to output displays. Click the button in the table to select the input for the output display (button turns from white to green once selection is done).

- All Outputs: Click to route one input to all outputs.
- A/V Mute: Click to mute the video and audio outputs.
- CEC Control On/Off: Click to power on or off the connected CEC-enabled display immediately. Click On/Off in the "All Outputs" line, power on/off all displays at the same time.

By default, Video Input 1 routes to Output 1 & Output 1M...Video Input 7 routes to Output 7, Video Input 8 routes to Output 8.

2) Audio Mute

▼ Audio Mute			
HDBT 5 OFF	HDBT 6 OFF	HDBT 7 OFF	HDBT 8 OFF

This section allows you to set the de-embedding audio outputs from HDBT 5-8 AUDIO ports to mute/unmute respectively.

Copyright © 2024 WyreStorm Pro AV Corportation		Technical Support: 844 280 W/VPE (0073)
WyreStorm.com	17 of 27	Support@W/woStorm.com
MX-0808-KIT V2 User Manual   240305		Supportervyresionn.com

ON/OFF: Click to set HDBT (5-8) audio output to mute/unmute.

The default settings are OFF (unmute).

3) Presets Matrix Control

• Presets Matrix Control		
Preset 1 Save Load	Preset 2 Save Load	Preset 3 Save Load

This section saves/loads the input/output switch settings to or from the matrix.

- Save: Settings in Video Matrix Control section are saved.
- Load: Preset already saved is loaded.

## 2. General Setting

iput Naming									
Input 1	Input 1		Input 2	Input 2		Input 3	Input 3		
Input 4	Input 4		Input 5	Input 5		Input 6	Input 6		
Input 7	Input 7		Input 8	Input 8					
te: The length	of alias name is li	mited to 15 character	s total.				S	ave	Reset
te: The length one Naming	of alias name is li	mited to 15 character	s total.				S	ave	Reset
te: The length	of alias name is li	mited to 15 character	s total.				S	ave	Reset
te: The length one Naming Output 1	of alias name is li Output 1	mited to 15 character	s total.	Output 2	2 Output 2		San	ave Output 2M	Reset
one Naming Output 1 Output 3	of alias name is li Output 1 Output 3	Output 1M	s total.	Output 2	2 Output 2 4 Output 4		Sutput 2M Dutput 4M	Output 2M Output 4M	Reset

General Setting page allows you to redefine names of inputs and outputs that easy to remember.

- Save: Click to save the name change.
- Reset: Click to reset the name change.

Note: The length of alias name is limited to 15 characters total.

# 3. Advanced Setting

Advanced Setting page is used to set the following functions:

Matrix Control	General Setting	Advanced Setting				U	ser Mode	) A	dmin Login
IR Call Back									
→ Low Power Mo	de								
• EDID Preset									
→ CEC Control									
Input HDCP Su	ipport								
Output HDCP	Support								
→ Input & Outpu	t Hide								
Front Page Ma	trix Login								
• Change Admin	Login Password								
• Network									
• System Update	e								
• FW Update									
▶ System									
→ Log									

#### 1) IR Call Back

▼ IR Call Back
Note: Enable to allow IR source control commands to be sent from zones.

ON/OFF: Set IR Call back function to on/off. The default setting is ON.

#### 2) Low Power Mode

▼ Low Power Mode
Standby: OFF
Note: Turning on will place the unit into Standby using less power than normal operating mode. While in this mode the Front Panel display will be off and outputs will be powered down.

The Lower Power Mode allows you to set standby function on or off. The default setting is OFF.

Note:

- When set to "ON", the unit will enter the Standby mode, which save power than normal operating mode. While in this mode, the front panel display will show "LPM" for about 10s then off and outputs will be powered down.
- Switch video channel through web UI, IR or API commands also can exit standby mode.
- 3) EDID Preset

put	Preset	Input	Preset	Input	Preset
nput 1	4K@30Hz 2.0CH with HDR	Input 2	4K@30Hz 2.0CH with HDR	Input 3	4K@30Hz 2.0CH with HDR
put 4	4K@30Hz 2.0CH with HDR	Input 5	4K@30Hz 2.0CH with HDR	Input 6	4K@30Hz 2.0CH with HDR
nput 7	4K@30Hz 2.0CH with HDR	Input 8	EDID Write		

This section allows you to configure EDID setting of each input port.

## To set up the EDID setting for HDMI input:

Go to the target HDMI Input and select the settings from its drop-down menu.

	input	ŀ
K@30Hz 2.0CH with HDR	Input 2	4K@30Hz 2.0CH
Сору		
Copy From HDMI Output 1	Copy From H	DMI Output 2
Copy From HDMI Output 3	Copy From H	DMI Output 4
Copy From HDBT Output 1	Copy From H	DBT Output 2
Copy From HDBT Output 3	Copy From H	DBT Output 4
Copy From HDBT Output 5	Copy From H	DBT Output 6
Copy From HDBT Output 7	Copy From H	DBT Output 8
Fix		
4K@30Hz 7.1CH with HDR	4K@30Hz 5.1	CH with HDR
4K@30Hz 2.0CH with HDR	4K@30Hz/8bit 2.	OCH without HDR
1080P@60Hz 2.0CH		
Other		
	K@30Hz 2.0CH with HDR Copy Copy From HDMI Output 1 Copy From HDMI Output 3 Copy From HDBT Output 1 Copy From HDBT Output 3 Copy From HDBT Output 3 Copy From HDBT Output 5 Copy From HDBT Output 7 Fix 4K@30Hz 7.1CH with HDR 4K@30Hz 2.0CH with HDR 1080P@60Hz 2.0CH Other Separt EDD	K@30Hz 2.0CH with HDR     Input 2       Copy     Copy From HDMI Output 1     Copy From HI       Copy From HDMI Output 3     Copy From HI       Copy From HDBT Output 1     Copy From HI       Copy From HDBT Output 3     Copy From HI       Copy From HDBT Output 3     Copy From HI       Copy From HDBT Output 3     Copy From HI       Copy From HDBT Output 5     Copy From HI       Copy From HDBT Output 7     Copy From HI       Fix     4K@30Hz 7.1CH with HDR     4K@30Hz/8bit 2.0CH       Other     Copy From FIND     DDD

Note: If EDID copy fails, the input EDID will be set as 4K@30Hz only 8bit 2.0CH without HDR and without 4K@60Hz 4:2:0.

When configure EDID to "EDID Write" for one input port, you will enter the following page:

Input	Preset	Input	F
Input 1	4K@30Hz 2.0CH with HDR	Input 2	4K@30Hz 2.0CH
Input 4	Сору		
	Copy From HDMI Output 1	Copy From H	IDMI Output 2
Input 7	Copy From HDMI Output 3	Copy From H	IDMI Output 4
	Copy From HDBT Output 1	Copy From H	IDBT Output 2
	Copy From HDBT Output 3	Copy From H	IDBT Output 4
EC Control	Copy From HDBT Output 5	Copy From H	IDBT Output 6
	Copy From HDBT Output 7	Copy From H	IDBT Output 8
Outro	Fix		
Outpu	t 4K@30Hz 7.1CH with HDR	4K@30Hz 5.	1CH with HDR
	4K@30Hz 2.0CH with HDR	4K@30Hz/8bit 2	OCH without HDR
Output	1080P@60Hz 2.0CH		
Output 1	Other		
- acput i	Smart EDID	EDID	Write

elect	Port	1				кеас	1		write		Sa	ve As		Ope	en	
tatus	:															
	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	10
01																
02																
03																
04																
05																
06																
07																
08																
09																
10																
11																
12																
13																
14																
15																
16																

This page allows you to read/save EDID of an output port, or write specific EDID to the input port.

- a) Select Port: Select one output port from the drop-down menu for EDID setting.
- b) Read: Click to read EDID of the desired output port.
- c) Write: Click to write EDID to the selected input port.
- d) Save As: Save the EDID as a bin file on your local computer.
- e) Open: Click to open the EDID bin file on your local computer.



By default, input EDID is set as 4K@30Hz 2.0CH with HDR.

4) CEC Control

Output	Manual		Auto
Output	Mallual	On/Off	Delay Time(1~30min)
Output 1	Display On Display Off	OFF	2
utput 1M	Display On Display Off	OFF	2
Output 2	Display On Display Off	OFF	2
utput 2M	Display On Display Off	OFF	2
Output 3	Display On Display Off	OFF	2
utput 3M	Display On Display Off	OFF	2
Dutput 4	Display On Display Off	OFF	2
utput 4M	Display On Display Off	OFF	2
Output 5	Display On Display Off	OFF	2
Output 6	Display On Display Off	OFF	2
Dutput 7	Display On Display Off	OFF	2

- f) Display On: Click to power on the connected CEC-enabled display immediately.
- g) Display Off: Click to power off the connected CEC-enabled display immediately.
- h) Auto On/Off: Click to enable or disable the CEC Auto Control.
- i) Delay Time (1~30min): click the up/down arrow to set the time for the display to power off automatically when no signal is present. For example, if Auto control is set as on and the time is set to 2 minutes, the output display will power off automatically when there's no signal at the display for 2 minutes.

By default, CEC Auto control is set as OFF.

5) Input HDCP Support

▼ Input HDCP Support		
Input 1 ON	Input 2 ON	Input 3 ON
Input 4 ON	Input 5 ON	Input 6 ON
Input 7 ON	Input 8 ON	
Note: HDCP support should remain enabled unless conflic	ts with HDCP are experienced like when connecting	g devices such as MacBooks to the input.

This section allows you to enable or disable HDCP capability of each input. By default, HDCP Support is switched to ON at each input to allow for HDCP-protected content transmission.

## 6) Output HDCP Support

Output 1	FOLLOW -	Output 1M	FOLLOW -	Output 2	FOLLOW -
Output 2M	FOLLOW -	Output 3	FOLLOW -	Output 3M	FOLLOW -
Output 4	FOLLOW -	Output 4M	FOLLOW -	Output 5	FOLLOW -
Output 6	FOLLOW -	Output 7	FOLLOW -	Output 8	FOLLOW -

Output HDCP Support allows you to set output HDCP from "FOLLOW", "HDCP1.4", "OFF". By default, Output HDCP is set as "FOLLOW", it means output HDCP follows the input HDCP settings. For example, input HDCP is HDCP 2.2, output HDCP is also HDCP 2.2.

7) Input & Output Hide

🖌 Input 1	🗸 Input 2	🛃 Input 3	✓ Input 4
🗹 Input 5	🗹 Input 6	🗹 Input 7	🗹 Input 8
🗸 Output 1 & Output 1M	🗸 Output 2 & Output 2M	🗹 Output 3 & Output 3M	🗸 Output 4 & Output 4M
🗸 Output 5	🗸 Output 6	🗸 Output 7	Output 8

This section is used to hide or unhide input and output ports in Video Matrix Control section.

#### To hide specific input and output ports:

a) Uncheck the boxes next to the desired ports, click "Apply".

_ Input 1	🗹 Input 2	🗹 Input 3	🗹 Input 4
🗹 Input 5	🗌 Input 6	✓ Input 7	🗹 Input 8
🖌 Output 1 & Output 1M	🗌 Output 2 & Output 2M	🗸 Output 3 & Output 3M	🗹 Output 4 & Output 4M
Output 5	Output 6	Output 7	Output 8

b) The Input 1, Input 6, Output 2 & Output 2M and Output 7 disappear in Video Matrix Control section.

Outputs\Inputs	Input 2	Input 3	Input 4	Input 5	Input 7	Input 8	A/V Mute	CEC Cont
Output 1 & Output 1M								On
Output 3 & Output 3M								On
output 4 & Output 4M								On
Output 5								On
Output 6								On
Output 8								On
All Outputs								On (

By default, all the input and output ports are set as unhide.

8) Front Page Matrix Login

▼ Front Page Matrix Login	
Remove login step	

This section allows you to remove login step and re-login Web UI in User Mode directly.

By default, Remove login step is set as disabled.

#### 9) Change Admin Login Password

▼ Change Admin Login Password	
Old Password	
New Password	
Confirm New Password	
Note: Password must be 4 to 16 characters in length, alphanumeric only.	Save

This section is where Admin Login Password to be changed.

Note: Password must be 4 to 16 characters in length, alphanumeric only.

By default, Login password is admin.

#### 10) Network

▼ Network		
ІР Туре	DHCP	
IP Address		
Subnet Mask		
Default Gateway		
Note: LAN Module will automatica	Ily reboot after changing Network setting.	Save

- a) DHCP: once enabled, IP address of the matrix is assigned automatically by the DHCP server connected.
- b) Static: once enabled, set up the IP address manually.
- c) Apply: click to enable the network settings.

Note:

- When "Static" is selected, please ensure your PC is in the same network segment as the matrix, i.e., the IP address of your PC should be set as 192.168.xxx.xxx.
- Please wait for 2-3 minutes for the matrix's LAN module to reboot and reconnect after the network setting is changed.
- In DHCP mode, if the matrix is not connected to DHCP server, the matrix will generate a local 169.254 IP address.

By default, the IP type is set as DHCP.

Copyright © 2024 WyreStorm	Pro AV Corportation
WyreStorm.com	
MX-0808-KIT V2 User Manual	240305

## 11) System Update

▼ System Update	
Web UI ( V4.1 )	Start
Main MCU (V4.0.2)	

This section allows you to obtain information of the current firmware in use, and Update Web UI.

#### To update Web UI:

a) Click "Start" button to enter Update File page.

Upload File	×
Web UI	Browse
Note: LAN Module will update and reboot automatically. Please wa Do not power off the matrix when updating.	it about 3 minutes, then refresh and log in again.

- b) Click "Browse" for the update bin file.
- c) Click "Update" to proceed.
- d) When the upgrading is completed, the following page will pop up on the upper right corner.



#### Note:

- The matrix LAN module will upgrade and reboot automatically when Web UI upgrade is completed. Please wait for about 2-3 minutes, then refresh the web page to log in again. If the web connection is failed after refreshing, please get IP address again to login.
- Do not power off the matrix during the process.

#### 12) FW Update

▼ FW Update	
File:	Browse
	Update
Note: Do not power off the matrix when updating.	

This section allows you to upgrade firmware of the matrix.

## To update Firmware:

- a) Click "Browse" to select upgrade bin file from local PC.
- b) Click "Update" to upgrade the firmware of the matrix.
- c) When the last process bar reaches 100% and a prompt window "Matrix is disconnected, press F5 to reconnect" pops up, the firmware upgrade is completed.

#### Note:

- When you start upgrading the matrix, do not power off the matrix.
- If the web connection is failed after refreshing the web page, please get the IP address to login again.

#### 13) System



This section allows you to reboot or reset the matrix to factory defaults.

- a) Reboot: Click to reboot the matrix.
- b) Factory Reset: Click to reset the matrix to factory default.

#### To reboot the matrix:

Click "Reboot" and click "OK" in the pop-up window. Then wait 2 minutes to refresh and re-login the Web UI.



Note: If the web connection is failed after refreshing, please get the IP address to login again.

#### To reset the matrix to factory defaults:

a) Click "Factory Reset" and then click "OK" in the pop-up window.



b) When the reset is successful, the following window will appear. All the matrix settings will be restored to factory default and matrix will reboot automatically. Please wait for about 2 minutes to refresh the web page and re-login the Web UI.

Matrix is rebooting, please wait 2 minutes to reaccess Web UI

Note: If the web connection is failed after refreshing, please get the IP address to login again.

#### 14) Log

▼Log	
11:49:37 Receive : showInOutput 01111011 10111101	
11:49:36 Send : SET showInOutput 01111011 10111101	
11:45:22 Receive : HDCP HDBTOUT4 FOLLOW	
11:45:22 Receive : HDCP HDBTOUT3 FOLLOW	
11:45:22 Receive : HDCP HDBTOUT2 FOLLOW	
11:45:22 Receive : HDCP HDBTOUT1 FOLLOW	
11:45:22 Receive : HDCP HDBTOUT8 FOLLOW	
11-45-22 Receive - HDCP HDRTOILTZ FOLLOW	•

The Log window is where Web UI setting change records display.