# Pro.2 HDMI Matrix

Model: HDMIMX44RS

**Operating Instruction** 





Thank you for purchasing this product. For optimum performance and safety, please read these instructions carefully before connecting, operating or adjusting this product. 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, lightning strikes, etc. Use of surge protection systems is highly recommended in order to protect and extend the life of your equipment.

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#### **Dear Customer**

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#### **Features**

- Supports resolutions up to 1080p@60HZ, 36-bit deep color, 4k@30HZ.
- Allows any source to be displayed on multiple displays at the same time.
- Allows any HDMI display to view any HDMI source at any time.
- Dolby TrueHD and DTS-HD master audio pass through HDMI output.
- Advanced EDID management for rapid integration of sources and displays.
- Multiple switching mode, push-in button, IR remote control, and RS-232 control.
- Easy installation with rack-mounting ears.
- Full 3D pass- through.
- HDCP compliant.

#### **Package Contents**

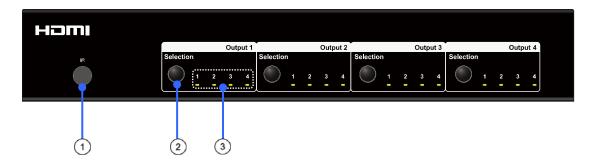
- 1. 1x HDMI Matrix.
- 2. 1x 12V2A DC power supply.
- 3. 1x Remote control.
- 4. 4x Wide Band IR cable
- 5. 4x IR TX cables.
- 6. 1x IR RX cables.
- 7. 1x mounting kit.
- 8. 1x CD for control software & user manual.

#### **Specifications**

Bandwidth	2.97Gbps per color
Video Input Connectors	4xHDMI Type A, 19-pin, female, locking
Video Output Connectors	4xHDMI Type A, 19-pin, female, locking
RS-232 serial port	DB-9, female
IR Input ports	5x3.5mm stereo jack
IR Output ports	4x3.5mm stereo jack
Rack-Mountable	Rack ears included
Dimensions(WxHxD)	256MMx144MMx43MM, without feet
Weight	1.8 kg
Operating Temperature	32°F to 104°F (0°C to 40°C)
Storage Temperature	-4°F to 140°F (-20°C to 60°C)
Power Supply	12V/2A DC

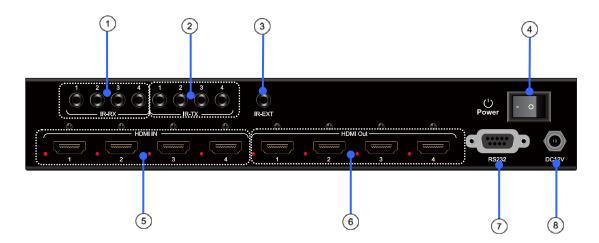
#### **Panel Descriptions**

#### **Front Panel**



- 1. IR receiver window----Receive the IR from the remote control of HDMI Matrix.
- 2. HDMI input selection button 1 to 4---Press to select the input from 1 to 4.
- 3. Input LED indicator---Indicate the status of the inut for the matrix.

#### **Back Panel**



- ① IR inputs 1 to 4 ---- 3.5mm stereo phone-jack.
- ② IR outputs 1 to4 ---- 3.5mm stereo phone-jack.
- ③ IR extension receiver input ---- 3.5mm stereo phone-jack.
- 4 Power switcher---- Press to power on/off the matrix.
- ⑤ HDMI inputs 1 to 4----Connect HDMI sources.
- 6 HDMI outputs 1 to 4----Output for displays, AVR etc.
- 7 RS232 female port----Connect to the PC using RS232 cable.
- Power port---Use included DC adaptor to power the matrix switcher.

# **Application Diagram**



# **Remote Control Description**



- ① Press "M" button to switch to "DIP Switch" mode for EDID Setting.
- ② OUTPUT-X select INPUT-Y:

A. Press OUTPUT-X (X means 1 to 4 of outputs) Press INPUT-Y (Y means 1 to 4 of inputs)

- B. Press OUTPUT-X (X means 1 to 4 of outputs), Press the left and right arrow buttons to select the input.
- ③ All outputs select INPUT-Y: Press ALL button in zone OUTPUT Press INPUT-Y button (Y means 1 to 4 of inputs), then INPUT-Y switched to ALL OUTPUTS.
- ④ Mirror all inputs and outputs (Ex. Input 1 to output 1, input 2 to output 2, etc): Press PTP button in Zone OUTPUT.

# **DIP Switch for EDID Setting**

Press "M" button, switch to "DIP Switch" mode to choose the EDID.

DIP Switch	EDID
0000	1080P_2CH(PCM)
0001	1080i_ audio7.1
0010	1080P_ audio5.1
0011	1080i_2CH(PCM)
0100	1080i_audio7.1
0101	1080i_audio5.1
0110	1080P_3D_2CH(PCM)
0111	1080P_3D_ audio7.1
1000	1080i_3D_ audio5.1
1001	4K30Hz_2CH(PCM)
1010	4K30Hz_audio7.1
1011	4K30Hz_audio5.1

#### **RS-232 Pin Assignment**

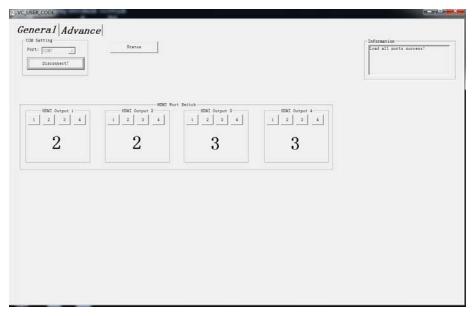
R5-232 Pin Assignment								
Matrix			Control Console					
Assignment		PIN	Assignment					
NC		1	NC					
Tx		2	Rx					
Rx		3	Tx					
NC		4	NC					
GND		5	GND					
NC		6	NC					
NC		7	NC					
NC		8	NC					
NC		9	NC					
	trix  Assignment  NC  Tx  Rx  NC  GND  NC  NC  NC  NC	trix  Assignment  NC  Tx  Rx  NC  GND  NC  NC  NC  NC	Assignment         PIN           NC         1           Tx         2           Rx         3           NC         4           GND         5           NC         6           NC         7           NC         8					

Baud Rate: 57600 bps

Data Bit: 8-bit Parity: None Stop Bit: 1-bit

Flow Control: None

#### **RS232 Control**



Connect RS232 cable to PC, open the software, choose the COM port and connect. Click "General", you can choose the HDMI input and for each HDMI out as below picture



Click "Advance", choose the "HDMI input", then click "PC Set EDID Mode" to set EDID, such as video format, audio format etc. After setting the EDID, click "Apply" to finish the operation

Note: If you need change to "DIP Switch "mode for EDID setting, please press "M" button on the remote controller.

#### **RS232 Command**

# 1. Select HDMI input for HDMI output

Command	Description
00	Output1
01	Output2
02	Output3
03	Output4
04	All Output
00	Input1
01	Input2
02	Input3
03	Input4
SW	Start Write
L	End

E.g: SW 00 01 L: Ouput 1 display Input2

E.g: SW 04 01 01 01 01 L: All outputs display Input2

# 2. EDID Setting

				Byte								
Byte	Name		7	6	5	4	3	2	1	0		
			Byte Bit0~Bit3 is 1(Copy Mode),									
1	CopyEDIDPort	Byte1	Set TX TV port:Set Port			0:Ma	0:Manual; 1:Copy TV; 2:Uart;					
2	Uart_VESA_Format	Byte1	NC	1920*1200	1680*1050	1440*900	1280*1024	1024*768	800*600	640*480	7F	All Mode
3	Uart_Video_Format	Byte1	NC	4K2K	1080P	1080P24	10801	720P	480/576P	480/576i	7F	All Mode
4	Uart_DeepColor	Byte1	DVI_Flag	DC 48Bit	DC36 Bit	DC 30Bit	3D Flag	NC	NC	NC	78	All Set
5	Uart_YC	Byte1	NC	NC	YCBCR444	YCBCR422	NC	NC	NC	NC	30	All Set
6	Uart_Speak	Byte1	NC	RLC/RRC	FLC/FRC	RC	RL/RR	FC	LFE	FL/FR	7F	All Set
		Byte1		Audio Byte Lengh						4	Lengh is 4	
		1n Byte1	NC	NC Format Code Channel-1				0F	PCM 8Channle			
7	Uart_Audio	1n Byte2	NC	192k	175,4K	96K	88.2K	48K	44.1K	32K	7F	All Freq
		2n Byte3	NC	Format Code Channel-1				14	AC-3 5 Channel			
		2n Byte4	NC	192k	175,4K	96K	88.2K	48K	44.1K	32K	7	48K 44.1K 32K

E.g: All Audio and Uart Set: SW 05 02 7F 7F 78 30 7F 04 0F 7F 14 07 L

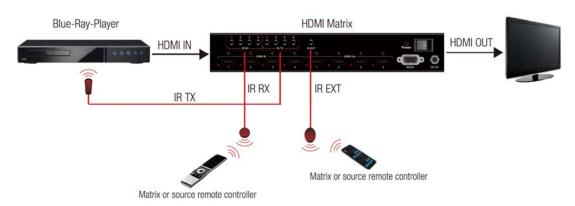
#### IR extender control



User can use the IR receiver cable to change the IR receiver position.

If controlling the HDMI Matrix through the 1/8" (3.5 mm) input jack on the rear panel, connect the IR cable directly to the matrix rear IR receiver extension sockets.

#### IR system



#### 1) Control the sources from the sinks

Step1: Connect 4pcs "IR TX" cables to "IR TX" ports; connect 4pcs "IR RX" cables to "IR RX" ports

Step2: Affix the 4xIR emitter of "IR TX" cables to the IR window of the 4xHDMI source

Step3: Aim the remote control of HDMI source which you choosed to the "IR RX" cable which connected to the Matrix.

#### For example:

If you choosed HDMI source1, then just aim the remote control of HDMI source1 to the "IR RX" cable which connected to the Matrix.

#### 2) Control the HDMI Matrix from "IR RX" port.

Aim the remote of the HDMI Matrix to the "IR RX" cable which connected to the Matrix.



- THIS PRODUCT IS WARRANTED FOR 12 MONTHS FROM THE DATE OF PURCHASE.
  Subject to the conditions of this warranty, the Customer Care Centre will perform necessary service on the product without charge for parts, or labour if, in the opinion of the manufacturer/ manufacturer's agent, the product is found to be faulty within the warranty period.
- This warranty only applies if the product has been installed and used in accordance with the manufacturer's recommendations (as noted in the operating instructions) under normal use and reasonable care. The warranty covers normal domestic use only and does not cover damage, malfunction or failure resulting from use of incorrect voltage, accident, misuse, neglect, build-up of dirt or dust, abuse, misadjustment of customer controls, mains supply problems, thunderstorm activity, infestation by insects or vermin, tampering or repair by unauthorised persons (including unauthorised alterations), exposure to abnormally corrosive conditions or any foreign object or matter having entered the product.
- If warranty service is required you should:
  - Telephone the Customer Care Centre on 1300 662 946
  - Provide a copy of your purchase receipt that shows retailer's identity and date of purchase.
  - Send or bring the product to your Customer Care Centre.
     Please note that freight to and/or from your Customer Care Centre must be arranged by you.
- The warranties hereby conferred do not extend to any costs associated with the delivery, handling, freighting or transportation of the product or any part thereof or replacement of and do not extend to any damage or loss occurring during, or associated with transit.

THIS WARRANTY CARD AND THE PURCHASE DOCKET
(OR SIMILAR PROOF OF PURCHASE)
SHOULD BE RETAINED BY THE CUSTOMER AT ALL TIMES

# TROUBLE SHOOTING HELP LINE 1300 662 946

Customer Care Centre 562 Spencer Street, West Melbourne VICTORIA 3003



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