HDMI Matrix 4 x 4

User manual

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.

Remark:

The connection of the main adapter to the HDMI Matrix switch must be done at first, afterwards you can connect the main adapter to the power outlet. Any other way of connecting of the main adapter to switch / power outlet can cause the damage of the device.

I. Introduction

This is a high performance HDMI Matrix with four HDMI inputs & four outputs. It allows any source (Blue-Ray player, HD DVD player, satellite receiver, game system, etc.) to be shown on the any of the four displays simultaneously, and supports 4K×2K, 3D, Deep Color. With its 3Gbps bandwidth and the additional features of the latest HDMI standards you can be sure of great HDMI distribution.

II. Features

1. Supports display resolutions up to 4K x 2K@30Hz,1080P@120Hz,and 1080P 3D@60Hz

2. 3D HDMI 1.4a video format support.

3. 3D video support including Frame Packing for all 3D formats up to a 297MHz TMDS clock.

4. Supports deep color up to 48-bit per pixel.

5. HDCP 1.4 support (INPUT), HDCP v1.4a protocol compliant (OUTPUT).

6. Supports reception of any audio data conforming to the HDMI specification 1.4 such ad L-PCM at up to 192kHz,compressed audio(IEC 61937),DSD,DST,DTS and HBR.

7. Full colorimetry including sYCC601, Adobe RGB, Adobe YCC601, xvYCC extended gamut color.

8. Operates for TMDS clock frequencies up to 300MHz.

III. Package

HDMI Matrix -- 1PC

Adaptor -- 1PC

Operation Manual -- 1PC

Remote Controller--1PC

RS232 Serial Cable---1PC

IV. Specifications

1. Frequency Bandwidth	297MHZ[10.2Gbps]
2. Input Ports	4 x HDMI Female input ports
3. Output Ports	4 x HDMI Female output ports
4. Power Supply	DC 12V, 2.5A
5. ESD Protection Human Body Model:	± 8kV (air-gap discharge)
	± 4kV (contact discharge)
6. Dimensions (mm)	115(W) X 270 (D) X 45 (H)
7. Weight (g)	900
8. Operating Temperature	0°C ~ 40°C / 32°F ~ 104°F
9. Storage Temperature	-20°C ~ 60°C / -4°F ~ 140°F
10. Relative Humidity	20 ~ 90% RH (Non-condensing)
11. Power Consumption (Max)	20W

V. Operation Controls and Functions

Front Panel
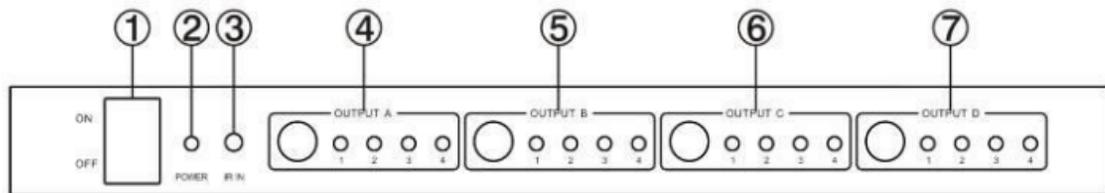
1. ON/OFF: Power on/off switch.

2. POWER: This red LED illuminates when the device is connected with power supply.

3. IR IN: Remote control signal receive.

4. OUTPUT A: Press this button to select the input source to HDMI OUTPUT A, and these red LED illuminate when the output select to the corresponding input.

5. OUTPUT B: Press this button to select the input source to HDMI OUTPUT B, and these red LED illuminate when the output select to the corresponding input.

6. OUTPUT C: Press this button to select the input source to HDMI OUTPUT C, and these red

LED illuminate when the output select to the corresponding input.

7. OUTPUT D: Press this button to select the input source to HDMI OUTPUT D, and these red

LED illuminate when the output select to the corresponding input.

Rear Panel
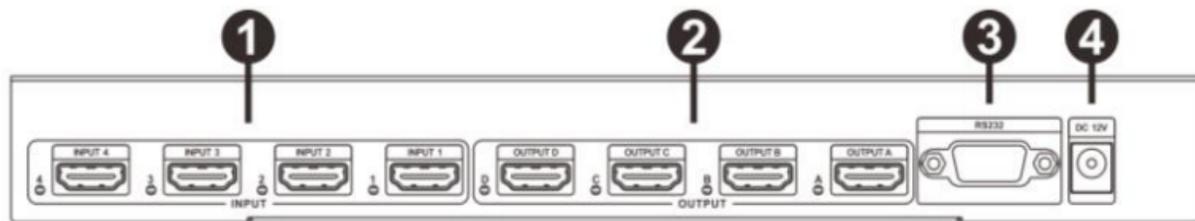
1. INPUT PORTS: LED1-4 illuminate when the HDMI signal plug in INPUT 1-4 port.

INPUT 1-4 ports are where you connect the HDMI source.

2. OUTPUT PORTS: LED A-D illuminate when the TV plug in OUTPUT A-D ports.

OUTPUT A-D ports are where you connect the HDTV or monitor with HDMI cable

3. RS232: This port can control the matrix via PC.

4. DC 12V: Plug the 12V DC power supply into the unit and connect the adaptor to AC wall outlet.

Right Panel
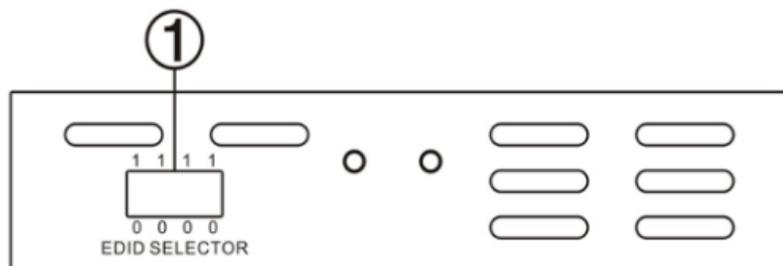
1. EDID Selector: Select HDMI output signal format via EDID Selector.

Number	EDID Selector	Description

1	0000	Auto mode(default)
2	0001	1080I,Stereo Audio 2.0
3	0010	1080I,Dolby/DTS 5.1
4	0011	1080I,HD Audio 7.1
5	0100	1080P,Stereo Audio 2.0
6	0101	1080P,Dolby/DTS 5.1
7	0110	1080P,HD Audio 7.1
8	0111	3D,Stereo Audio 2.0
9	1000	3D,Dolby/DTS 5.1
10	1001	3D,HD Audio 7.1
11	1010	4K2K,Stereo Audio 2.0
12	1011	4K2K,Dolby/DTS 5.1

13	1100	4K2K,HD Audio 7.1
14	1101	1024x768 DVI
15	1110	1920x1080 DVI
16	1111	PC Software control mode

VI. Application Example

Power Supply

DVD or Blu-ray Player

DVD or Blu-ray Player

DVD or Blu-ray Player

DVD or Blu-ray Player

TV

TV

TV

TV

PC
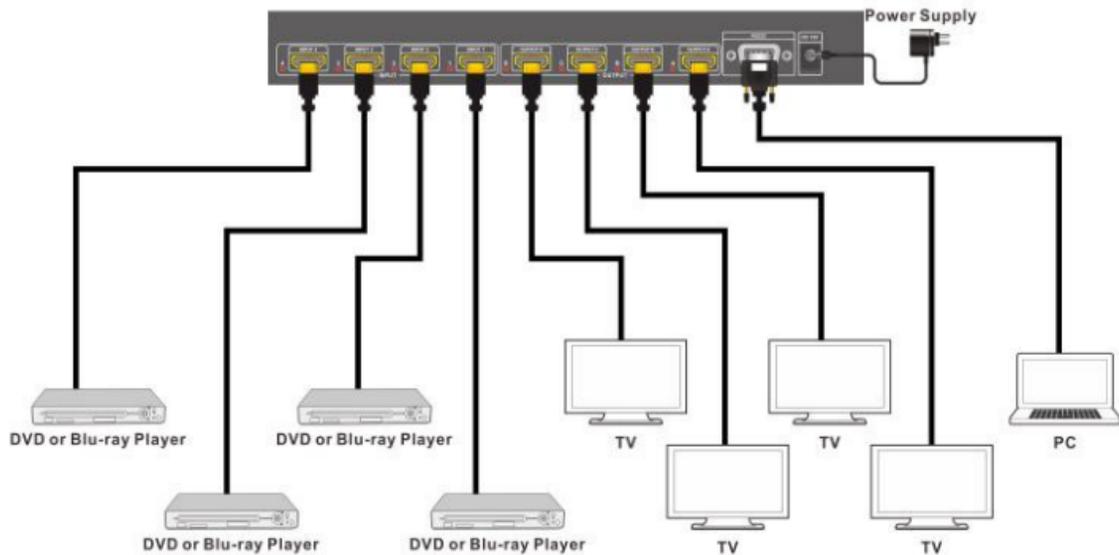
VII. Remote control

OUT A: Press 1\2\3\4 button will to select input source to HDMI OUT A, and the LED will indicate the corresponding input source.

OUT B: Press 1\2\3\4 button to select input source to HDMI OUT B, and the LED will indicate the corresponding input source.

OUT C: Press 1\2\3\4 button to select input source to HDMI OUT C, and the LED will indicate the corresponding input source.

OUT D: Press 1\2\3\4 button to select input source to HDMI OUT D, and the LED will indicate the corresponding input source.

VIII. Matrix controller user guide

Installation

Matrix controller is a green software. Just copy MatrixController.exe to PC which is used to

control the Matrix by RS232 COM port or TCP/IP to complete installation.

Preparation

- Connect PC and Matrix by RS232 cable (headers of both sides of cable should be

    FEMALE) or TCP/IP(local area network)

- Power-up Matrix

- Double click MatirxController.exe icon to run it

How to control Matrix

- **"General" page**

4x4 HDMI Matrix Controller

General | Edid | Matrix | FW upgrade

Control mode select ①
- COM control mode
- TCP control mode

COM control mode
Port ②   Connect ③

TCP control mode
Matrix IP ④   Connect ⑤
Search ⑥ Config... ⑦

☐ Enable IR control
☐ Enable beep ⑧

Device Information ⑨

Status ⑩   Clear ⑪
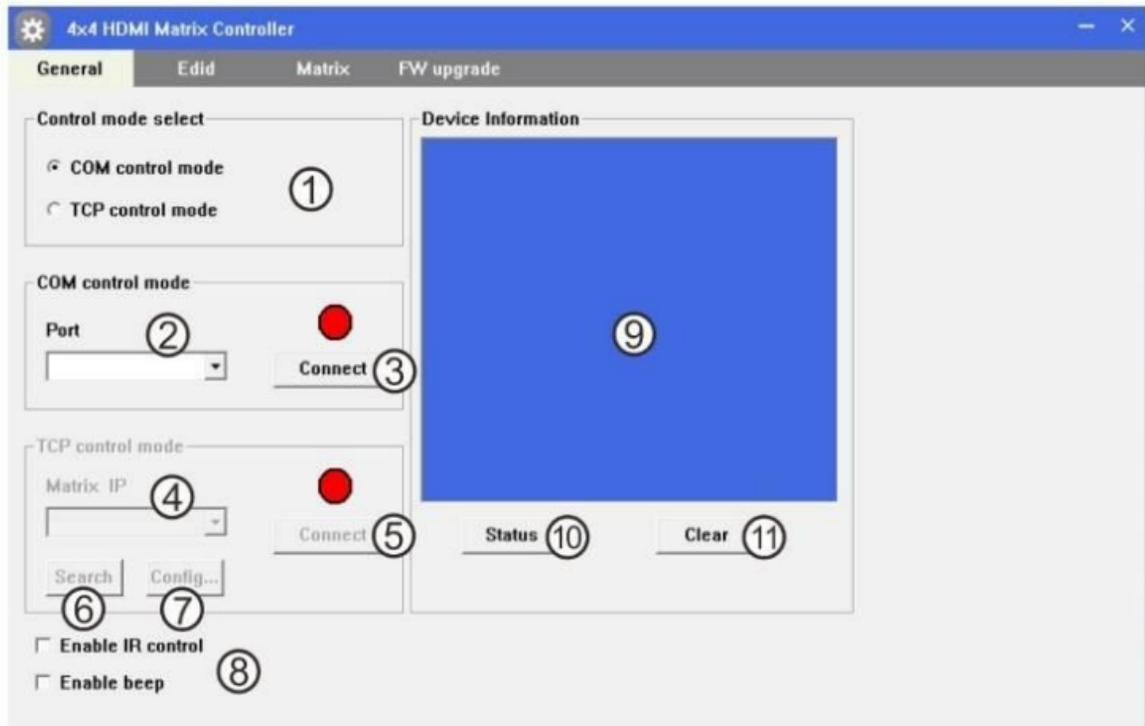
① Select RS232 COM or TCP mode

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② Select RS232 COM port

③ Click to connect or disconnect PC and Matrix

④ Select Matrix IP

⑤ Connet to Matrix IP

⑥ Search Matrix IP

⑦ Configure Matrix IP and MAC

⑧ Enable or disable IR /beep

⑨ Device information display area

⑩ Click to refresh device status: include device information displayed in ⑨

   area and Input/Output Settings on "Matrix" page

> Configure TCP

After action of ⑦ , edit form will pop-up as below:
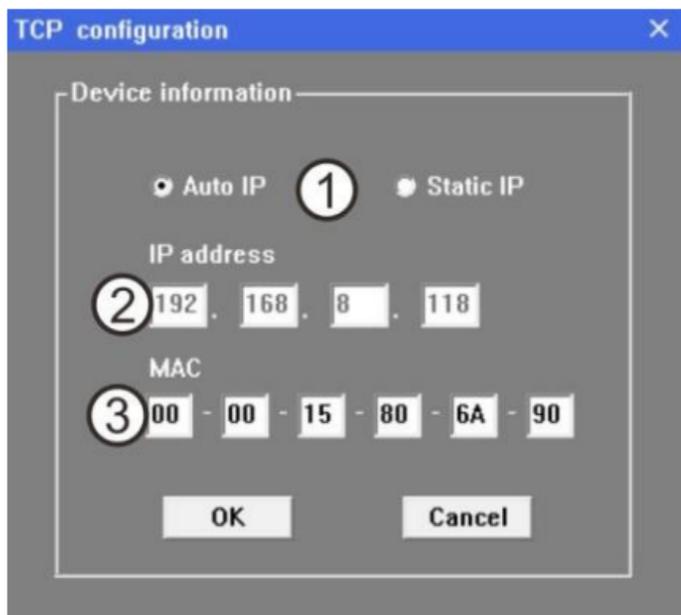
① Select auto or static IP

② Rewrite the Matrix IP

③ Rewrite the Matrix MAC

◆ **"EDID control" page**
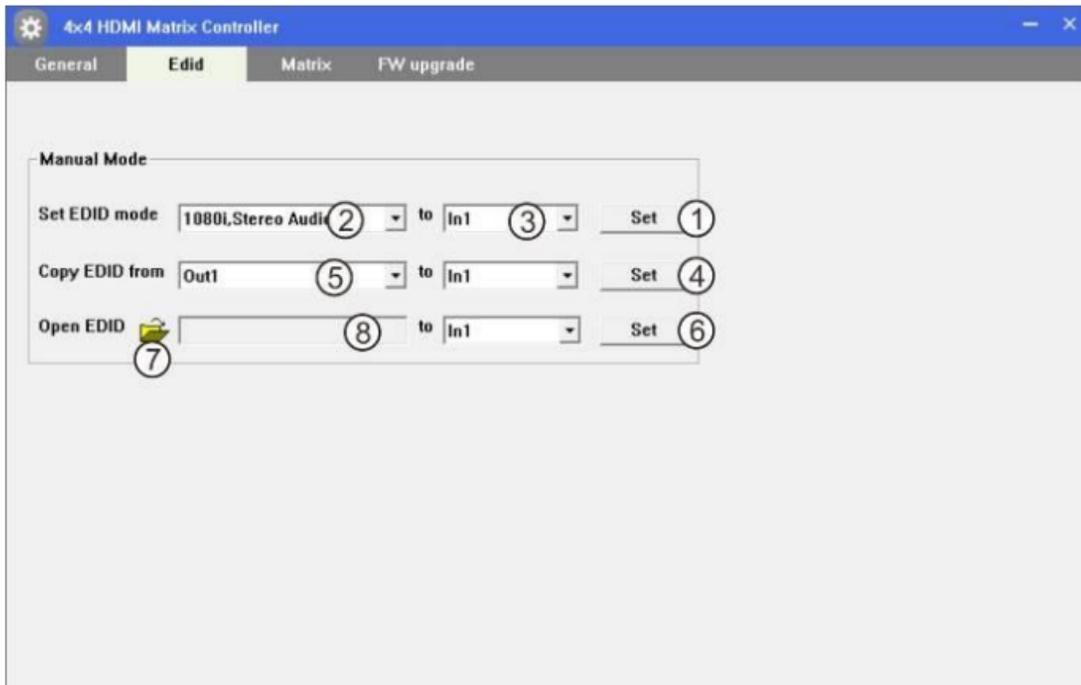
① Set EDID mode for selected Input port or All Input ports, click "Set" button to complete

action

② Select EDID

③ Select Input port

④ Copy EDID from Output port to selected Input port or All Input ports, click "Set" button to
   complete action.

⑤ Select Output port

⑥ Download EDID content to selected Input port or All Input ports, click
   "Download" button to complete action.

⑦ Open EDID binary file

⑧ Display EDID binary file path

◆ **"Matrix" page**
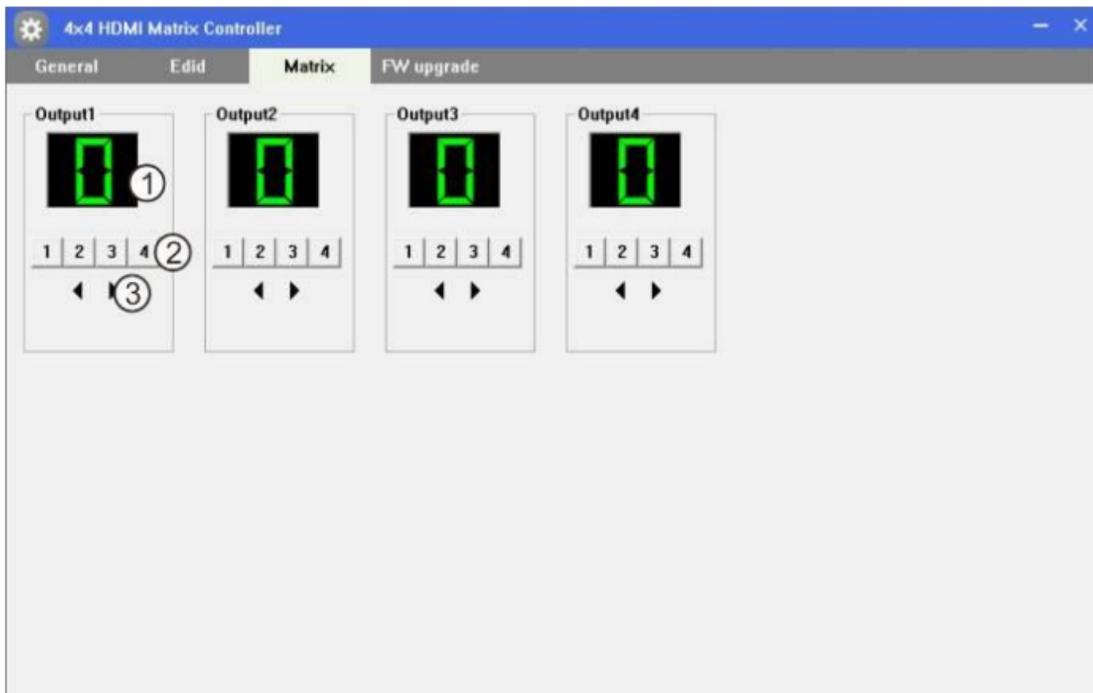
① LED which display Input number for respective Output

② Click to select Input port for respective Output port

③ Click to select previous or next Input port for respective Output port

◆ **"FW upgrade" page**
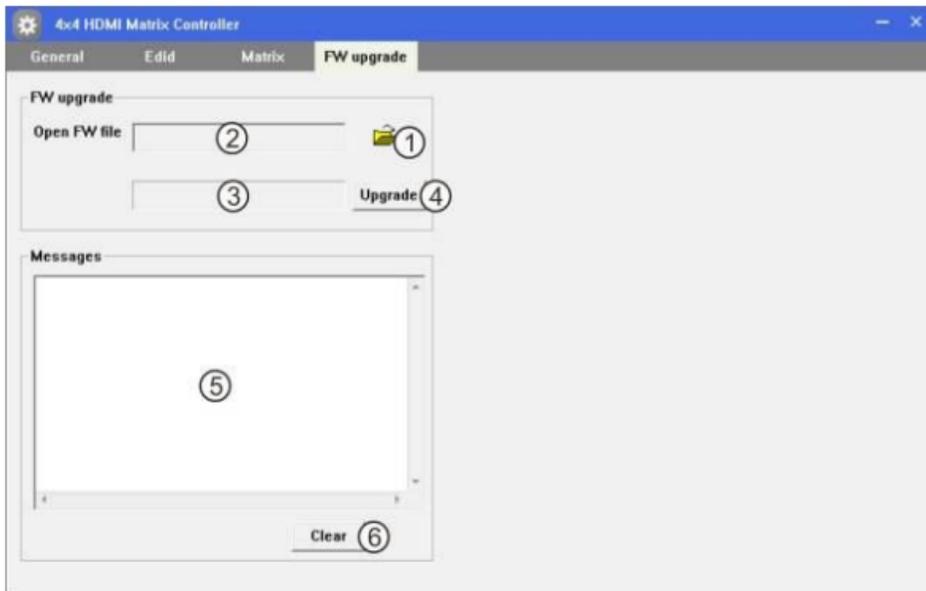
① Click to open FW file(file extension is ".fw")

② Display the FW file path

③ Displaying the progress of the software upgrade

④ Click to upgrade the Matrix software

⑤ Display the message of the software upgrade

⑥ Clear the message of the software upgrade