

HDMI Matrix Switch User manual

4x4
8x8

Introduction

HD matrix switch can switch and assign HDMI signals. It can switch multiple video and audio input signals at the same time to one or several output channels. It is a high-performance and professional video and audio signal switcher.

HD HD matrix switch adopts high-performance processing chip, internal with buffer circuit and signal compensation circuit to make the image signal fidelity output, and the long distance transmission will be more stable.

Feature

- 4/8 HDMI input, 4/8 HDMI output, input and output can be switched arbitrarily
- The resolution up to 1080P@60Hz
- Support 36bit deep color display
- Support 3D video technology
- Support high-definition digital audio such as: Dolby, TrueHD, DTS-HD Audio
- Support remote control / button / RS232 software to switch HDMI input and output signal
- Support EDID management
- With several save / recall scene modes, can save / recall up to 10 modes
- Power supply: DC 5V

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Connection Steps

Signal Connection
The interface of the matrix is divided into HDMI IN and HDMI OUT. HDMI IN for signal input, HDMI OUT for signal output. Please use correct cable to connect input and output devices. Put the input device (such as DVD, computer) into the matrix’ s HDMI IN, and put the output device (such as projector, TV set) into the matrix’ s HDMI OUT.

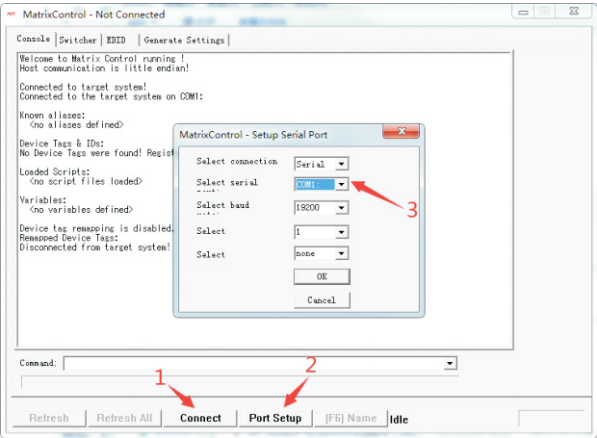
The Introduction of RS-232 Connection
The matrix switch has a standard RS-232 port that helps users to control the remote devices. It needs a straight line between the matrix’ s RS-232 and the computer’ s RS-232.

Pin NO.	Pin	Description
1	NC	None
2	TXD	Signal transmitter
3	RXD	Signal receiver
4	NC	None
5	GND	Ground wire
6	NC	None
7	NC	None
8	NC	None
9	NC	None

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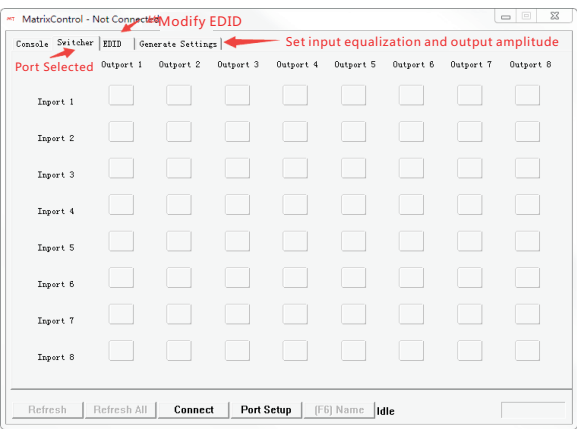
Usage of RS-232 software

Note: Firstly, connect the RS-232 cable between the matrix and the computer. Secondly, install the software (CD in the product) on the computer. After that, open the software, as shown below.



After opening the software, you need to select the corresponding COM to use RS-232 control normally.

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Panel Keys

Press “SW” to the switch menu. Then press “SW” several times to the following function.

1. To view the current status, IN for input, OUT for output. As shown below.

IN	1	2	3	4
OUT	1	2	3	4

(Figure 1)

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INPUTPORT:1
SEL:OUT1

(Figure 2)

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3.STORE SENCE: saves the current connection state to the default storage space. Saves the current connection state to the corresponding storage space. Press the SW key 4 times, call to the STORE SENCE page, press OK, and then press the SW button, and then press the SW key again, the STORE SENCE:1, appears on the screen. Press OK again, the current output and input state have been saved to storage space 1 as a preset value for subsequent RECALL SENCE to quickly pull out. As shown in figure 3.

STORE SENCE:
1

(Figure 3)

4.RECALL SENCE: calls out the input and output connection state that saved in the default storage space. Get out the connection state of input and output quickly from the default state of the storage space corresponding to the number. Press the SW key three times and call to the RECALL SENCE page, press OK, press SW button again, press SW again, the screen show RECALL SENCE:1, presses the OK key again, the input and output state from the No. 1 storage space will be called out and the matrix switch is set according to this connection state. As shown in figure 4.

RECALL SENCE:
1

(Figure 4)

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5.RX EQ ADJUST: adjusts the gain of the input Adjust the input gain, when using long cable trans- mission, the signal has a certain Degree. The larger the gain, the longer the transmission distance. Press the SW key 5 times , the RX EQ ADJUST page appears, and press the port number key, then press SW key, there are 0 ≤ 27 gains available. As shown in figure 5

INPUTPORT:
SEL:0

(Figure 5)

6.TX Swing ADJUST: adjusts output amplitude Increase driving force, press SW key 6 times, TX Swing ADJUST page appear, press the input port number key, and then press SW button, 0-800MV is available, as shown in figure 6.

OUTPUT:
0 M V

(Figure 6)

7.Firmware: Version

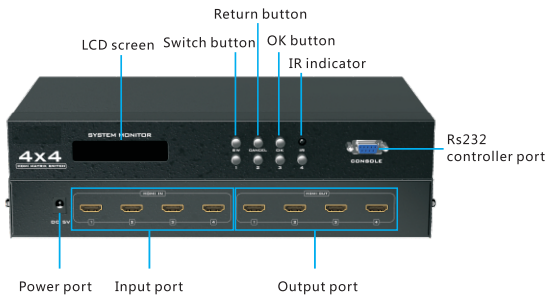
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8. Select the output/ input port: AS the port number (1.2.3.4) The frontal number corresponds to the input port, and the following number corresponds to the output port.
For example: 1 for all output ports, press button 1, and then press 1.2.3. 4, then press the OK key, and set it successfully as shown in figure 7. 2 to 2 port output, press button 2, press 2 again, press OK Key, set succe- ssfully, and so on

SWITCH:
1->1,2,3,4

(Figure 7)

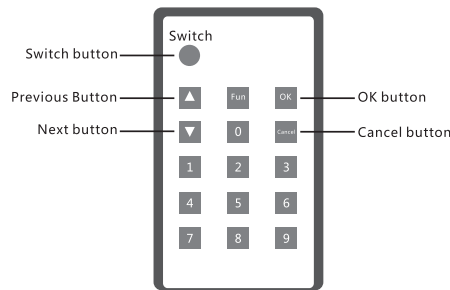
Product panel introduction



4x4

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IR remote controller



The function, button definition and the operation of IR remote controller is the same as product panel button.

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Matrix switch package list

- 1* Matrix switch
- 1* Power adapter
- 1* RS232 cable
- 1* User manual
- 1* CD
- 1* IR remote
- 2* Mounting rack

Common faults and maintenance

1. Large signal interference: check whether the signal connection cable and plug are good, whether the cable meets the requirements of the specification, whether the system ground is good, and whether the AC power ground wire system between the devices is consistent.
2. When the color is missing or there is no video signal output, the two ends of the signal cable may not be connected properly.
3. When the serial port cannot control the matrix switch, please check whether the port number of the software serial port is correct.

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2. EDID Function

NO.	Selection	Function
1	SEL:USER1	Can modify EDID through RS-232 port
2	SEL:USER2	Can modify EDID through RS-232 port
3	SEL:OUT1	Connect the output device that needs to read EDID to OUT1, read it, and the product will be saved automatically.
4	SEL:HD8Stereo	1080P stereo
5	SEL:HD8Do1byDTS	1080P DTS
6	SEL:HD8Do1byDTS	1080P PCM
7	SEL:HD12Stereo3D	1080P 12bit 3D stereo
8	SEL:HD12Do1byDTS	1080P 12BIT DOBY DTS
9	SEL:HD12Loss1ess	1080P 12BIT PCM

For example,
Connect the display device that needs to read EDID to OUT1, power the matrix, press “SW” twice, the LCD screen will appear EDID ADJUST, and then select “1.2.3.4” . Press “SW” three times, the LCD screen will appear SEL:OUT1, and then press “OK” . Wait a few seconds, the LCD screen will appear EDID DONE. At this time, the EDID setting will be saved in the port. Note: Unplug the input cable when setting the EDID.

- (1). Check the signal at the corresponding input. (It can be detected by oscilloscope or multimeter.) If there is no signal input, the input cable may be broken or the connector is loose. Replace the cable.
- (2). Check the signal at the corresponding output. (Use an oscilloscope or a multimeter for testing.) If there is no signal output, the output cable may be broken, or the connector may be loose. Replace the cable.
- (3). Both of the above situations will not work after replacement. The internal failure of the host may be caused. Please contact a professional engineer for troubleshooting.
- (4). If there is no display on the LCD and there is no response, the power supply may be abnormal.
- (5). When connecting the device, if you feel that the static electricity is strong, it is possible that the power ground wire is not connected to the ground, please connect it properly, otherwise it will easily damage the host and shorten the host life.

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