

## 4x8 HDMI Matrix w/Cat 5e Extender User Manual

### Packing List :

- 1 \* 4X8 HDMI Matrix w/Cat 5 Extender
- 1 \* IR Remote Control (For Matrix use)
- 5 \* IR Receiver Cable
- 4 \* IR Transmitter Cable
- 1 \* DC 12V Power Adapter (For Matrix use)
- 2 \* Rack-ears
- 4 \* Extender
- 4 \* IR Remote Control (For Extender use)
- 4 \* DC 5V Power Adapter (For Extender use)
- 1 \* User Manual

- With 4 HDMI inputs and 4 HDMI outputs and 4 mirrored extended outputs
- Each output group includes 1 HDMI and 1 RJ45 port
- All output groups can share same input or select standalone input
- Support extending digital video, audio and IR through a single Cat5e/6 cable up to 50 meters (need to be used with the Extender)
- Support resolution up to 1920x1080@60Hz
- Compliant HDCP 1.3
- Each output supports Quad View mode
- Support audio switching in Quad View mode
- Support PCM, Dolby®\_AC3, DTS®5.1 and other audio format transmission
- Support IR pass through
- Support 4 configurable user preset connections
- Matrix status could be memorized after power down, automatically restore previous matrix status after next power on
- Easy to control matrix via IR receiver, front panel key, LAN port and RS232 port

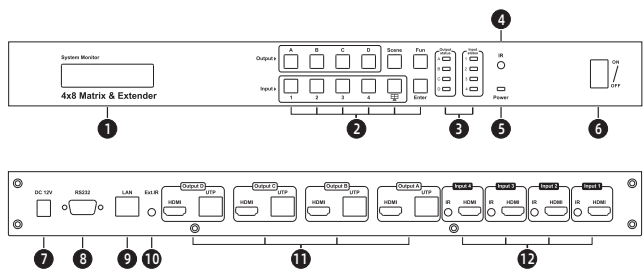
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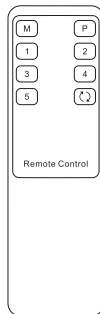
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**Panel Description**



ID	Name	Description
1	LCD display	Display current status and function settings. 0 indicates entering Quad View mode.
2	Keypad	Press to control the Matrix.
3	Input and output connection status	The LEDs are on to indicate that the corresponding devices have been connected to the each HDMI port and have been recognized.
4	IR receiver	Receive IR remote signal.
5	Power status indicator	The LED will be lit (red) if power is on.
6	Power switch	Turn on or turn off power supply.
7	DC 12V	DC 12V power supply.
8	RS232 port	Connect this port to control termination. Use RS232 commands to control the Matrix.
9	LAN port	Connect this port to control termination. Use TCP/IP commands to control the Matrix.
10	IR extension in	Connect IR extension cable to this port to receive IR signal even the Matrix is installed in a rack.
11	Output ports group	Each group contains a remote end(RJ45) output and a local end(HDMI) output.
12	Input ports group	Each group contains an IR transmitter port and a HDMI input port.

**Extender Remote control:**



Press the button **M** to switch the corresponding remote display to Quad View mode at the remote end.

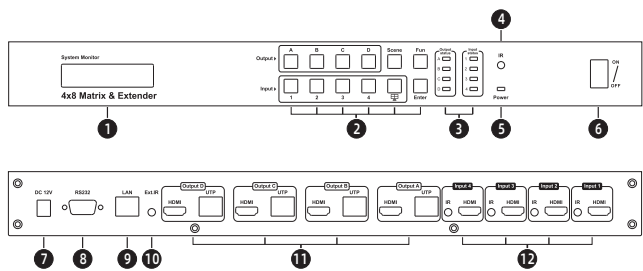
Continuously press the button **P** to switch the audio source in Quad View mode. Audio switches synchronously when multiple output ports are in Quad View mode.

Press the button **1~4** to switch the corresponding input source to display on the corresponding remote end.

Continuously press the button **(cycle)** to cyclically switch through all inputs and Quad View mode.

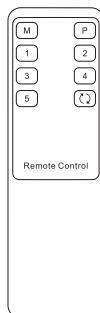
Press the button **S** to show the OSD.

**Panel Description**



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1	LCD display	Display current status and function settings. 0 indicates entering Quad View mode.
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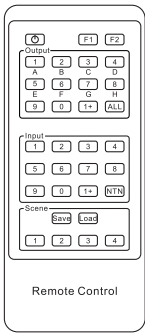
Press the button **M** to switch the corresponding remote display to Quad View mode at the remote end.

Continuously press the button **P** to switch the audio source in Quad View mode. Audio switches synchronously when multiple output ports are in Quad View mode.

Press the button **1~4** to switch the corresponding input source to display on the corresponding remote end.

Continuously press the button **(cycle)** to cyclically switch through all inputs and Quad View mode.

Press the button **S** to show the OSD.



**Switch to mirrored connection:**

Press the key **NTN**, then the routing status will be changed to Input 1-Output A, Input 2-Output B, Input 3-Output C, Input 4-Output D.

**Preset routing for scenes:**

Save preset:

Step 1: Press the key **Save**.

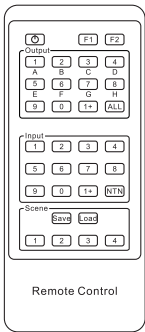
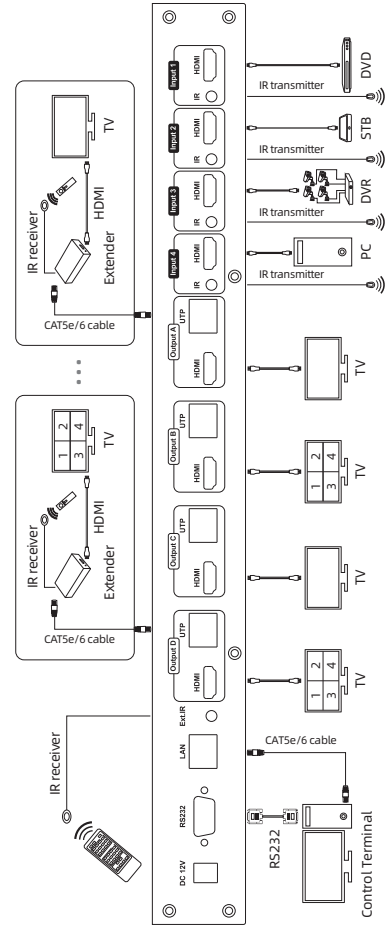
Step 2: Press **1/2/3/4** in 'Scene' to save current routing status to user preset memory 1/2/3/4.

Load preset:

Step 1: Press the key **Load**.

Step 2: Press **1/2/3/4** in 'Scene' to load routing status from user preset memory 1/2/3/4 and apply to current routing.

**Connection Diagram**



**Switch to mirrored connection:**

Press the key **NTN**, then the routing status will be changed to Input 1-Output A, Input 2-Output B, Input 3-Output C, Input 4-Output D.

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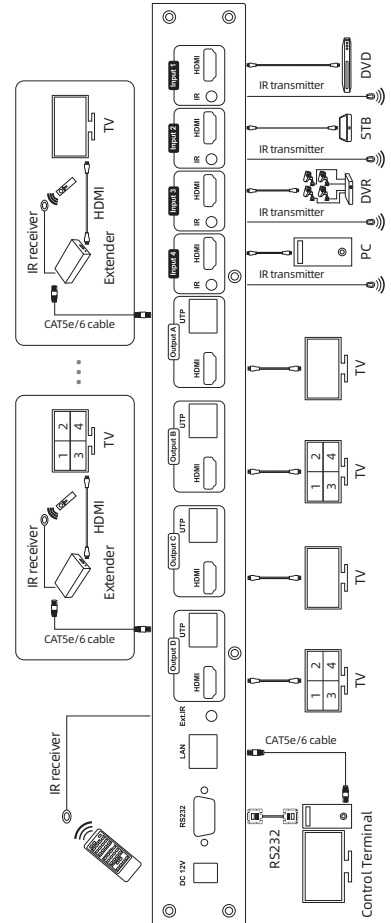
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**Connection Diagram**

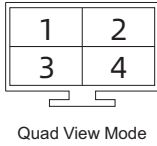


**Function Description**

**1. Quad View Mode Description**

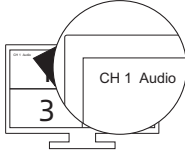
Each group of output port on our Matrix supports Quad View mode. You can set the Quad View mode or full screen display for each group of output port. You can switch input ports with front panel buttons, IR signals, RS232 commands and TCP/IP commands.

Audio switching is supported under the Quad View mode. You can choose the audio source by pressing the front panel [  ] button in Quad View mode and other methods. Audio switches synchronously when multiple output ports are in Quad View mode.



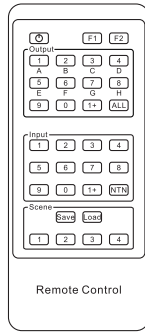
**2. OSD Description**

There are blue characters (OSD information) on the screen on Quad View mode to indicate the input source port numbers and whether it is the current selected audio source. It will appear on the top left corner when each time you switch audio. The OSD will disappear automatically after about 5 seconds of display.




**IR Remote Control**



**Matrix Remote control:**





**Lock the keypad:**




Press the key  to lock or unlock the keypad. If the keypad was locked, all the operation would not take effect. Press it again to unlock the keypad when it is locked.

**1 to 1 switch :**

Step 1: Press the key  ~  to select the output port.



Step 2: Press the key  ~  to select the source which you want to be displayed on selected output.


**1 to all switch:**

Step 1: Press the key  to select all the output port.  
 Step 2: Press the key  ~  to select the source which you want to be displayed on all the outputs.

**Quad View mode switch:**


1. Single display enter Quad View mode:

Step 1: Press the key  ~  to select the output port.


Step 2: Press the key  to enter Quad View mode on the selected output.

2. All displays enter Quad View mode:

Step 1: Press the key  to select all the output ports.

Step 2: Press the key  to make all displays enter the Quad View mode.


3. Switch audio on Quad View mode:

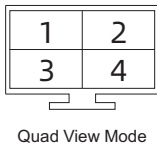
Continuously press the key  to switch the audio in the four segmented pictures. Audio switches synchronously when multiple output ports are in Quad View mode.

**Function Description**

**1. Quad View Mode Description**

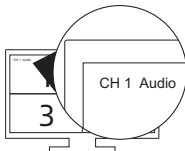
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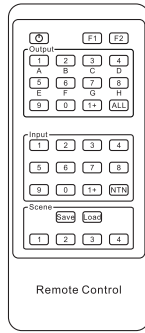
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


**IR Remote Control**



**Matrix Remote control:**





**Lock the keypad:**




Press the key  to lock or unlock the keypad. If the keypad was locked, all the operation would not take effect. Press it again to unlock the keypad when it is locked.

**1 to 1 switch :**

Step 1: Press the key  ~  to select the output port.



Step 2: Press the key  ~  to select the source which you want to be displayed on selected output.

**1 to all switch:**

Step 1: Press the key  to select all the output port.  
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**Quad View mode switch:**


1. Single display enter Quad View mode:

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
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3. Switch audio on Quad View mode:

Continuously press the key  to switch the audio in the four segmented pictures. Audio switches synchronously when multiple output ports are in Quad View mode.

**Function settings button:**

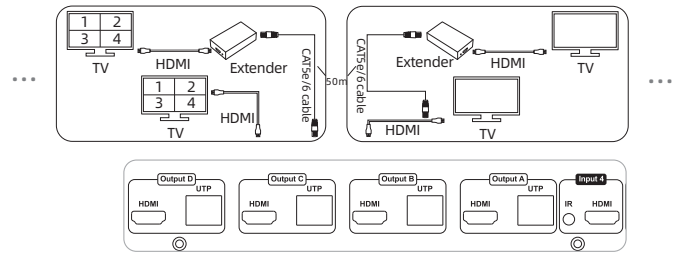
- 1. 1 to all switch: Press [Fun] button once to select desired input to be displayed on all outputs or let all output enter Quad View mode. Press any one of [1~4] button or the [  ] button to confirm according to LCD prompt.
- 2. Mirror connection: After pressing [Fun] button twice, the routing status will be changed to Input 1-Output A, Input 2-Output B, Input 3-Output C, Input 4-Output D. Press [Enter] button to confirm.
- 3. LCD display timeout setting: Press [Fun] button three times to set the LCD display time out. Press any one of [1~3] button to confirm according to LCD prompt.
- 4. Beep state setting: Press [Fun] button four times to turn off/on the buzzer. Press any one of [1~2] button to confirm according to LCD prompt.
- 5. IP address query: Press [Fun] button five times to query current IP address.

**Enter button:**


- 1. Press [Enter] button to lock or unlock the keypad. If the keypad was locked, all the operation would not take effect. Press it again to unlock the keypad when it is locked.
- 2. Press [Enter] button on any LCD display interface will return to the connection status menu.

**3. Mirrored Extended Outputs**

The 4X8 HDMI Matrix w/Cat 5 Extender has a built-in distribution chip in each output port. you will get not only 4 HDMI outputs at the local end but also 4 mirrored extended outputs through Cat 5e/6 network cables. The extension distance is up to 50m. Each group of remote end (RJ45) output is synchronized with the local end (HDMI) output. If the HDMI port of any group of output is full screen display, the RJ45 port of this output group will be a full screen display; if the HDMI port of any group of output is Quad View display, the RJ45 port of this output group will be a Quad View display.



**Function settings button:**

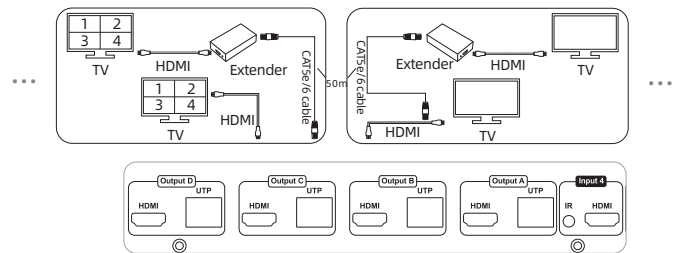
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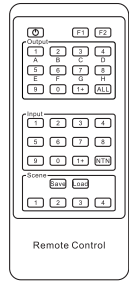
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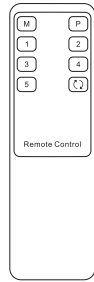
#### 4. IR Pass Through

The IR remote control on the left side of the picture below is used to control the Matrix at the local end. The IR remote control on the right side is used to control the matrix remotely through the corresponding Extender. The Matrix remote control cannot be used at the remote end. The Extender remote control cannot be used at the local end.

This IR remote control can only be used at the local end. The local 4 HDMI outputs can be controlled to switch.



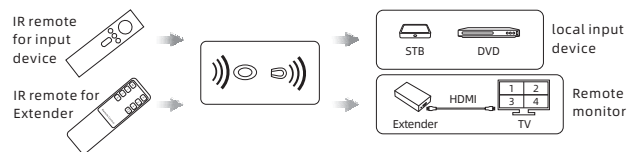
Matrix Remote control



Extender Remote control

This IR remote control can only be used at the remote end. The corresponding extended output can be controlled to switch.

At the remote end, the IR receiver cable connected to the Extender can be used to remotely control HDMI video input devices such as DVD players, set-top boxes and streaming media players. You can experience the same effect as using the remote control directly from the input end. At the same time, it supports the use of the remote control included in the package to control from the remote end.



- Tips:**
1. In order to ensure the normal use of the remote control function, please make sure that the IR receiver cable on the Extender and each IR transmitter cable on the Matrix are well connected, and each transmitter is placed as close as possible to the input device's infrared receiver.
  2. When any remote end is switched to Quad View mode, the corresponding local HDMI output will also be switched to Quad View mode.

#### Operation Method

When you use the front panel button or IR remote control to Matrix, the LCD display will inquire your target action, then execute the command according to your operation.

**A~D buttons:**  
Press to choose the corresponding output port to switch to the desired input or enter Quad View mode.

**1-4 buttons:**

1. After pressing the [A-D] button, press [1~4] button to choose the desired input port.
2. If you press the other settings button, press [1~4] button to choose the desired option.

**Scene button:**

1. Press [Scene] button once then press any one of [1~4] button to save current routing status to user preset memory 1/2/3/4.
2. Press [Scene] button twice then press any one of [1~4] button to load routing status from user preset memory 1/2/3/4 and apply to current routing.

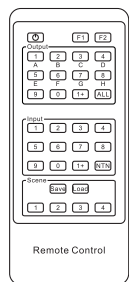
**Quad View button:**

1. After pressing the [A~D] button, press [Quad View] button to let the corresponding output enter Quad View mode.
2. After pressing the [Fun] button selecting all output to switch, press [Quad View] button to let all the outputs enter Quad View mode.
3. Press [Quad View] button then [1~4] button to select the audio source in Quad View mode according to LCD prompt.

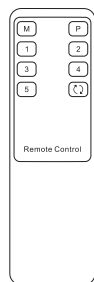
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The IR remote control on the left side of the picture below is used to control the Matrix at the local end. The IR remote control on the right side is used to control the matrix remotely through the corresponding Extender. The Matrix remote control cannot be used at the remote end. The Extender remote control cannot be used at the local end.

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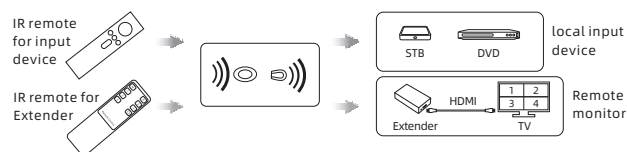
Matrix Remote control



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  2. When any remote end is switched to Quad View mode, the corresponding local HDMI output will also be switched to Quad View mode.

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**A~D buttons:**  
Press to choose the corresponding output port to switch to the desired input or enter Quad View mode.

**1-4 buttons:**

1. After pressing the [A-D] button, press [1~4] button to choose the desired input port.
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**Scene button:**

1. Press [Scene] button once then press any one of [1~4] button to save current routing status to user preset memory 1/2/3/4.
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**Quad View button:**

1. After pressing the [A~D] button, press [Quad View] button to let the corresponding output enter Quad View mode.
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