

HDMI (HDBaseT) Matrix Switcher Series

ITEM NO.: HE04M

With the latest and more affordable HDBaseT technology extend HDMI sources up to 100M at 1080p or 1920x1200. HE04M HDMI 4 by 4 Matrix Switcher allows for effortless control of up to 4 devices through IR remote control, RS-232 and the front panel.



HE04M 4 x 4 HDMI (HDBaseT) Matrix Switcher

Feature:

- 4 x HDMI inputs , 4 x HDMI Outputs Matrix switcher
 - Dual Output: local HDMI port or remote RJ45 termination
 - Work with HE02ER, HE02R receiver at each monitor up to 100 meters over CAT5e/6.
 - Work with HE02EIR receiver at each monitor up to 70 meters over CAT6a cable.
 - Three control option: Front panel button, IR remote control, RS232 through remote PC.
 - Support local/remote IR control to select input/output.
 - Built in RS232 console port to select input/output.
 - Uncompressed high definition video 1080p@60Hz 12 bit and 3D capable
 - HDMI 1.4 video features supported.
 - Built in IR extender (work with Receiver: HE02EIR)
 - Built in RS232 extender (work with Receiver: HE02R)
 - Input/Output status could be displayed at panel LED.
- **Optional CAT5E/CAT6 Receiver Model:**
 - HE02ER 100m HDMI Receiver
 - HE02R 100m HDMI, IR and RS232 Receiver
 - HE02EIR 70m HDMI with IR Receiver

Panel View:



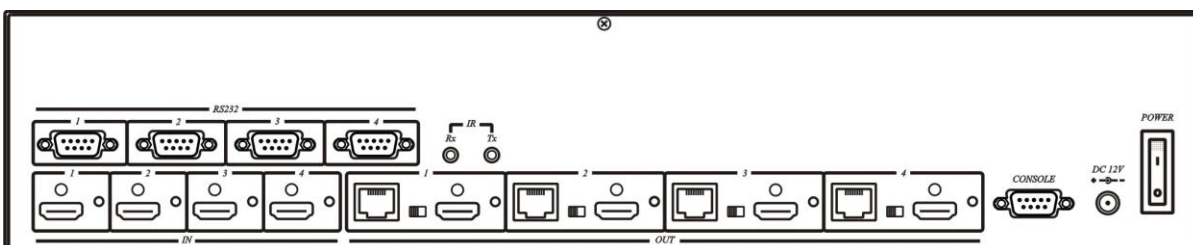
LED Indication:

Power ON/OFF

OUTPUT / INPUT: 4x4 led matrix

 LEDS Flash :Select INPUT Channel

 LED ON :Input Selected



HDMI/RJ45 Output Selection:

Slide switch to right → HDMI OUT

Slide switch to left → Auto Detection HDMI or RJ45 output, HDMI priority when HDMI and RJ45 are connected at the same time.



Input/Output Channel Switch:

1. Select the output channel :press top button (1 , 2 , 3 , 4), the selected column will LEDS flash
2. Select the input channel :press left button (1 , 2 , 3 , 4, OFF) to complete the channel selection.

Example 1 : Input 1 switch to output 2 :Press top button 2, then press left button 1.

Example 2 : Turn off output 3 :Press top button 3, then press left button OFF.

Local (HE04M) IR Control Function :

IR01 IR Remote Control Setting :

The ID number must be setup before using IR remote control or change new batteries.

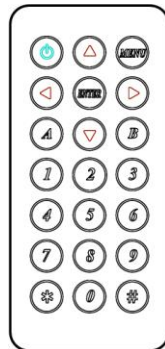
Setup IR remote ID number :Press and hold “**Power Symbol**” button and press number **4**.

Using IR01 remote control to select input/output channel.

Input/Output Channel Switch:

1. Select the output channel :Press IR button (1 , 2 , 3 , 4) the selected column will LEDS flash
2. Select the input channel :Press IR button (7 , 8 , 9 , *, 0) to complete the channel selection.

- | | |
|------------|----------|
| 1 → Select | Output 1 |
| 2 → Select | Output 2 |
| 3 → Select | Output 3 |
| 4 → Select | Output 4 |
| 7 → Select | Input 1 |
| 8 → Select | Input 2 |
| 9 → Select | Input 3 |
| * → Select | Input 4 |
| 0 → OFF | |



Remote IR Extender & HE04M Control Function :

IR01 IR Remote Control Setting :

The ID number must be setup before using IR remote control or change new batteries.

Setup IR remote ID number :Press and hold “**Power Symbol**” button and press number **5**.

Work with HDMI source/monitor:

-HE02EIR IR setting at TX (connect IR blaster to 3,5 mm jack), from HE04M to control remote HDMI equipments. (connect IR receiver to RX 3,5 mm jack on HE04M-2)

-HE02EIR IR setting at RX (connect IR receiver to 3,5 mm jack), from remote HDMI equipment to control HE04M (connect IR blaster to TX 3,5 mm jack on HE04M-2, see Installation View pag.3)

Input Channel Switch (user can select only the inputs on his own output):

- 1 → Select input 1
- 2 → Select input 2
- 3 → Select input 3
- 4 → Select input 4
- 0 → OFF

PC RS232 Port Remote Control (HE04M Console):

The communication format is 9600,8, N, 1 (9600 bps, 1 start bit, 8 data bits, 1 stop bit).

Use **straight** 15 pin Sub-D RS232 cable. (Pin 2 to 2, pin 3 to 3, pin 5 to 5)

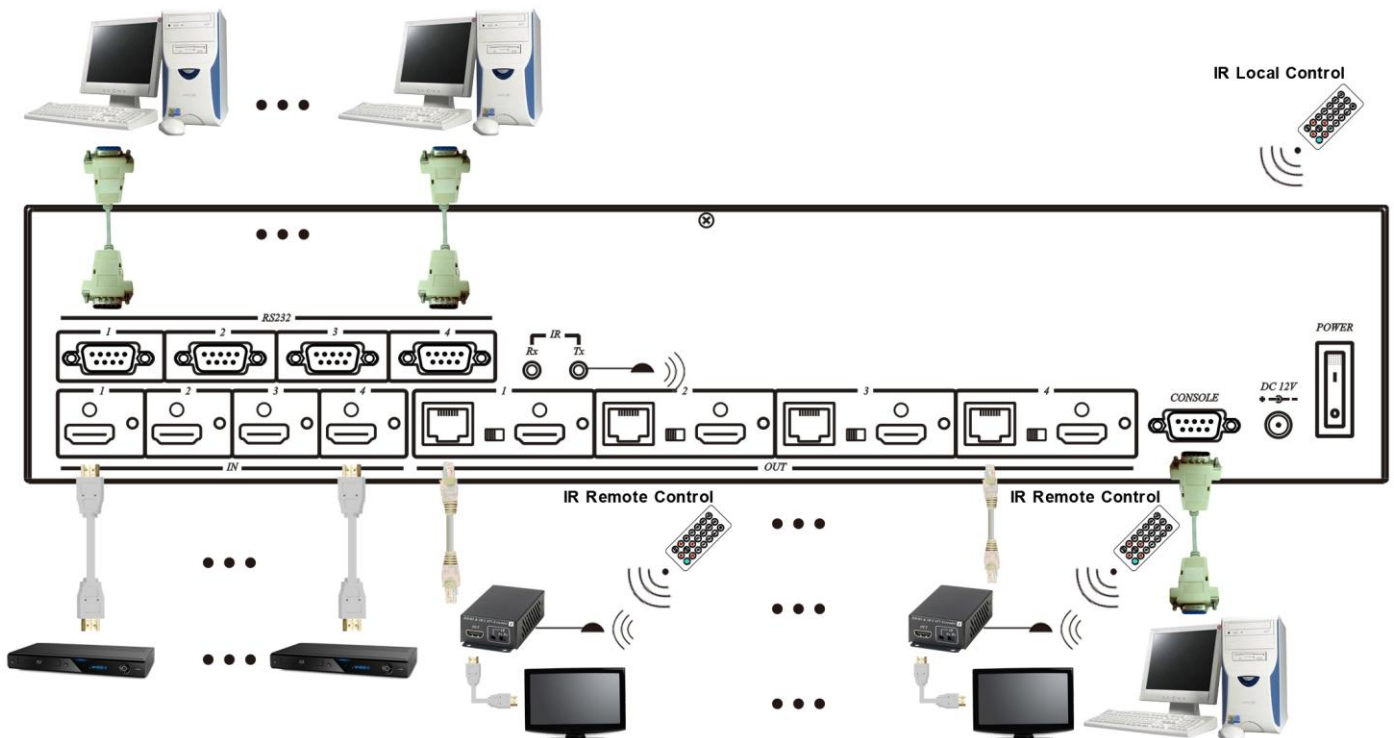
Command List :

Use command as below :

Command + Space + Parameter + Enter (enter only, no LF)

	IN	OUT	
1.	TX1	01	output 1 switch to input 1
2.	TX1	02	output 1 switch to input 2
3.	TX1	03	output 1 switch to input 3
4.	TX1	04	output 1 switch to input 4
5.	TX1	00	turn off output 1
6.	TX2	01	output 2 switch to input 1
7.	TX2	02	output 2 switch to input 2
8.	TX2	03	output 2 switch to input 3
9.	TX2	04	output 2 switch to input 4
10.	TX2	00	turn off output 2
11.	TX3	01	output 3 switch to input 1
12.	TX3	02	output 3 switch to input 2
13.	TX3	03	output 3 switch to input 3
14.	TX3	04	output 3 switch to input 4
15.	TX3	00	turn off output 3
16.	TX4	01	output 4 switch to input 1
17.	TX4	02	output 4 switch to input 2
18.	TX4	03	output 4 switch to input 3
19.	TX4	04	output 4 switch to input 4
20.	TX4	00	turn off output 4

Installation View:



EDID learning priority:

1. Duplicate EDID from 1st HDMI local output.
2. Duplicate EDID from 1st CAT5 output if no device connect 1st HDMI output.
3. Use default EDID if no device connect 1st HDMI and CAT5 output.

Note: make sure all above connection must be done then plug power of HE04M.

HE04M Standard Package Include:

HE04M Matrix x 1 pcs
 IR01 IR Remote Control x 1 pcs
 Power Adapter x 1 pcs

HE04MEK Package Include:

HE04M Matrix x 1 pcs
 HE02ER HDMI Receiver x 4 pcs
 IR01 IR Remote Control x 1 pcs
 Power Adapter x 5 pcs

HE04MEIK Package Include:

HE04M Matrix x 1 pcs
 HE02EIR HDMI Receiver x 4 pcs
 IR01 IR Remote Control x 5 pcs
 IR Emitter Cable x 4 pcs
 IR Receiver Cable x 4 pcs
 Power Adapter x 5 pcs

Specification:

Item No.	HE04M	
Max. Resolution	1080p at 60Hz 12bit	
Video Input	HDMI Type A x 4	
Video Output	HDMI Type A x 4 and RJ45 x4	
RJ45 Output Distance	100 meters	
IR Input/Output	Phone Jack x 2	
RS232 Input/Output	DB9 x 5	
Power Adapter	DC 12V 4Amp	
Power Consumption	2Amp (Max)	
Temperature	Operation: 0 to 55°C, Storage: -20 to 85°C, Humidity: up to 95%	
Dimension	mm	483 x 220 x 88.4
Weight	kg	3.180

Item No.	HE02ER (Optional CAT5E Receiver)	HE02EIR (Optional CAT5E Receiver)
Resolution	Up to 1080p / 60Hz / 12 bit	
Distance	100 m (Max)	50 m by CAT5e/6, 70 m by CAT6a
Video Output	HDMI Type A x 1	
IR Carrier Frequency	X	30-60KHz
IR Angle	X	±55
IR Distance	X	5m
Power Supply	Regulated DC5V 2A	
Power Consumption	1200mA (Max)	820mA (Max)
Temperature	Operation: 0 to 55°C, Storage: -20 TO 85°C, Humidity: up to 95%	
Dimensions	mm	49 x 92.3 x 25
Weight	g	135



Rev. A