

## HDMI MATRIX

### HDMI Matrix 4x4 (4K60Hz)



Where every Moment comes Alive

**ER2893M44**

**HDMI®**  
HIGH-DEFINITION MULTIMEDIA INTERFACE

## Introduction:

The HDMI Matrix 4x4 is a versatile and efficient solution for connecting up to four HD signal sources to four HD display terminals. It features optical fiber and stereo headphone output via HDMI Out 1, allowing seamless audio extraction. Designed for both switching and splitting functions, the matrix enables effortless distribution of HDMI signals to multiple monitors or projectors.

With support for lossless transmission, this HDMI matrix is ideal for various applications, including security monitoring, data center control, information distribution, conference room presentations, educational institutions, and corporate training environments.

## Features:

- **Compact & Reliable** – Durable design for stable performance
- **Audio Output Options** – Supports **3.5mm earphone jack** and **optical audio output** via HDMI Out 1
- **Cost-Effective** – Efficient solution for multi-display setups
- **3D Support** – Compatible with high-quality 3D video formats
- **IR Remote Control** – Enables convenient remote operation
- **RS232 Control Support** – Allows for professional control system integration
- **Flexible Display Options** – Four outputs can display the same or different sources simultaneously

## Specifications :

- **HDMI Resolution:** Up to **4K/60Hz**
- **Supported Video Format:** 8-bit, 10-bit, and 12-bit deep color
- **Supported Audio Formats:** DTS-HD, Dolby TrueHD, LPCM 7.1, DTS, Dolby-AC3, DSD
- **Maximum Baud Rate:** 18Gbps

### Cable Distance

#### Input Cable Distance:

- **4K/30Hz** – Up to **15M** (AWG26 HDMI standard cable)
- **4K/60Hz** – Up to **5M** (HDMI 2.0 standard cable)

#### Output Cable Distance:

- **4K/30Hz** – Up to **15M** (AWG26 HDMI standard cable)
- **4K/60Hz** – Up to **5M** (HDMI 2.0 standard cable)

## Connectivity

- **HDMI Inputs: 4**
- **HDMI Outputs: 4**

## Power & Environmental Conditions

- **Max Working Current: 0.8A**
- **Operating Temperature: -15°C to 45°C**
- **Operating Humidity: 5% to 90% RH (N o Condensation)**

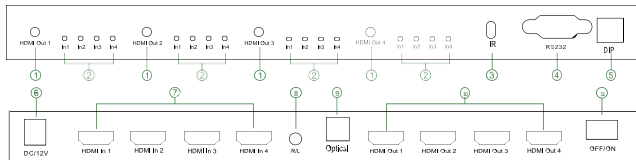
## Power Adapter:

- **Input: AC 100V-240V (50Hz/60Hz)**
- **Output: DC 12V/1A**

## Physical Dimensions

- **Size (L x W x H): 276 x 143 x 26 mm**
- **Weight: 720g**

## Function Interface Figure:



1: HDMI Out1-4 -- Output selection;

2: In1-4 -- Input LED indicator for each output selection;

3: IR -- IR port;

4: RS232 -- RS232 port;

5: DIP -- EDID;

6: DC/12V -- DC/12V power port;

7: HDMI In1-4 -- HDMI Input 1-4 port;

8: R/L -- 3.5MM headphone interface;

9: Optical -- Optical port;

10: HDMI Out1-4 -- HDMI Output 1-4 port;

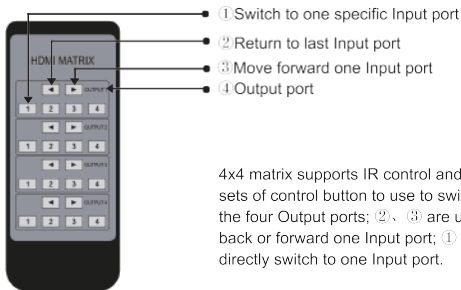
11: OFF/ON -- Power switch;

## EDID setting

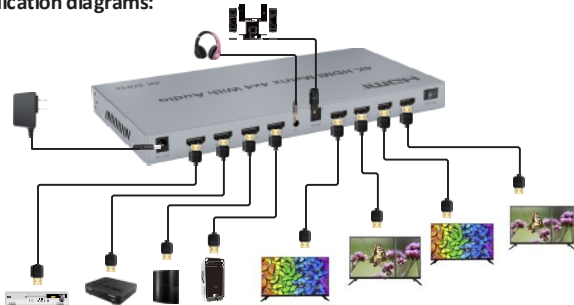
Position 1	Position 2	Position 3	Position 4	Function
0	0	0	0	Copy EDID from Output 1
0	0	0	1	3D 4K 60HZ 7.1CH
0	0	1	0	3D 4K 30HZ 2CH
0	0	1	1	3D 4K 30HZ 7.1CH
0	1	0	0	2D 1080P stereo 2CH
0	1	0	1	2D 1080P 7.1CH
0	1	1	0	3D 1080P stereo 2CH
0	1	1	1	2D 1080P DVI

Noted: the dial switch to dial downward is 1, dial upward is 0.

## The Remote Control instruction:



## Application diagrams:



## Operating and Connecting :

1. Connect each HDMI source devices and input of HDMI Matrix with HDMI cable.
2. Connect display devices and output of HDMI Matrix with HDMI cable.
3. Connect the audio output to the stereo amplifier via stereo headphones or optical fiber.
4. Connect 12V power supply to the HDMI 4x4 Matrix.
5. Use the IR remote or button control to switch the signal source freely.

NOTE: HDMI port and audio ports are connected according to user needs , not every be connected; but not reversed.

## Application scenario :



TV Store



Teaching room



Video Conference

## Notes :

Pls use the machine as the instruction listed to keep the long use lifetime of the machine.

1. The machine should be placed at the spot far from the Damp, High-Temperature, Dusty, Erosive, and oxidative environment.
2. All parts will be free from the strong shake, hit, fall.
3. Touching the power adaptor with the wet hands is prohibited.
4. Pls hold the power adaptor head and do not pull the power cord when cut off from the socket.
5. Pls turn the power off when the machine is not used for long time.
6. Pls do not open the cover and do not touch the inside parts.
7. Pls use the original factory power adaptor.

Before power on, pls check the connection line carefully. And make sure that all interfaces are normally connected. The common trouble shooting way shows below.

Trouble Description	Cause and Ways to deal with
Non-Power-Connected	1. Check if the power adaptor head is truly and correctly inserted the power socket.
	2. Check the power switch if it is in on status.
No Picture	1. Pls make sure that the TV is on and has been connected with the machine.
	2. Check if the signal source is on and well connected.
	3. Check the system connection quality.
	4. Check if the line is all good quality.
	5. Check the cable quality
Obscure Picture	1. To try again to connect the cable to be free from the unsuccessful connection.
	2. HDMI Cable Quality

## Accessories :

1. HDMI Matrix 4X4	1PC	3. 12V power adapter	1PC
2. IR Remote Control	1PC	4. User Manual	1PC