

## HDMI MATRIX

### HDMI Matrix 4x2 (4K60Hz)



Where every Moment comes Alive

# ER2892M42

## Introduction:

The **HDMI Matrix 4x2** is a versatile and efficient solution designed to connect **four HD signal sources** to **two HD display terminals**, with support for **optical fiber and stereo headphone audio output**. It enables seamless switching or splitting of **four HDMI devices** across **two HDMI-compatible monitors or projectors**, providing **independent audio output** for each display via optical fiber or stereo headphone.

This advanced matrix switcher is ideal for various professional applications, offering solutions for **noise reduction, space optimization, and enhanced security**. It is widely used in **data centers, information distribution, conference room presentations, school environments, and corporate training setups**. With its **flexible connectivity and high-performance output**, the HDMI Matrix 4x2 ensures a reliable and convenient audio-visual experience.

## Features:

- **Supports 3D video format** for an immersive viewing experience.
- **Supports 4K input resolution with 2K output (Downscaler)** for compatibility with different display resolutions.
- **Dual HDMI audio outputs with 3.5mm earphone jack and optical output**, allowing simultaneous audio transmission.
- **4 HDMI inputs can be switched or split across 2 HDMI displays**, providing flexible connectivity.
- **Supports LPCM, Dolby, and DTS 5.1-channel audio** for high-quality sound output.

This HDMI Matrix is an excellent choice for **home theaters, conference rooms, and multimedia setups**, ensuring seamless audio and video distribution.

## Specifications:

- **HDMI Resolution:** Up to 3840×2160 @ 60Hz
- **Video Format Support:** 8-bit, 10-bit, and 12-bit deep color
- **Audio Format Support:** LPCM, DTS, Dolby-AC3
- **Maximum Bandwidth:** 600MHz
- **Maximum Baud Rate:** 3 × 6Gbps

### Cable Distance Support

- **Input Cable Distance:**
- 4K @ 30Hz: ≤15M using AWG26 HDMI standard cable
- 4K @ 60Hz: ≤5M using HDMI 2.0 standard cable
- **Output Cable Distance:**
- 4K @ 30Hz: ≤15M using AWG26 HDMI standard cable
- 4K @ 60Hz: ≤5M using HDMI 2.0 standard cable

### Connectivity

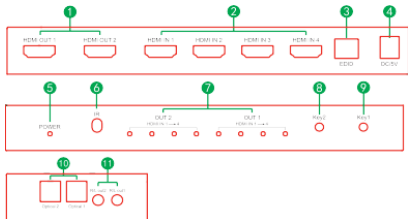
- **HDMI Inputs:** 4
- **HDMI Outputs:** 2

### Power & Environmental Conditions

- **Maximum Working Current:** 600mA
- **Power Adapter:**
- Input: AC (50Hz, 60Hz) 100V-240V
- Output: DC 5V/1A
- **Operating Temperature:** -15°C to +45°C
- **Operating Humidity:** 5% to 90% RH (No Condensation)

### Physical Dimensions

- **Size (L × W × H):** 199 × 70 × 27 mm
- **Weight:** 300g



1 : HDMI OUT1-2 -- HDMI output ;  
 2 : HDMI IN1- 4 -- HDMI input ;  
 3 : EDID -- EDID management ;  
 4 : DC/5V-- 5V power supply ;  
 5 : POWER -- Power Indicator;

6 : IR -- IR Receive ;  
 7 : HDMI IN1- 4 -- HDMI input indicator  
 8 : Key2 -- Video switching button  
 9 : Key1 --Video output switching button  
 10 : Optical1-2 -- Optical output  
 11 : R/L OUT1-2 -- Stereo output

## EDID setting

Position 1	Position 2	Position 3	Position 4	Function
0	0	0	0	Copy the EDID of HDMI OUT 1
0	0	0	1	Copy the EDID of HDMI OUT 2
0	0	1	0	3D 1080P 2 CH LPCM
0	0	1	1	3D 1080P 5.1 CH (LPCM/Dolby/DTS)
0	1	0	0	2D 1080P 2 CH (LPCM)
0	1	0	1	2D 1080P 5.1 CH (LPCM/Dolby/DTS)
0	1	1	0	3D 4k 2 CH (LPCM)
0	1	1	1	3D 4k 5.1 CH (LPCM/Dolby/DTS)

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

## The Remote Control instruction :

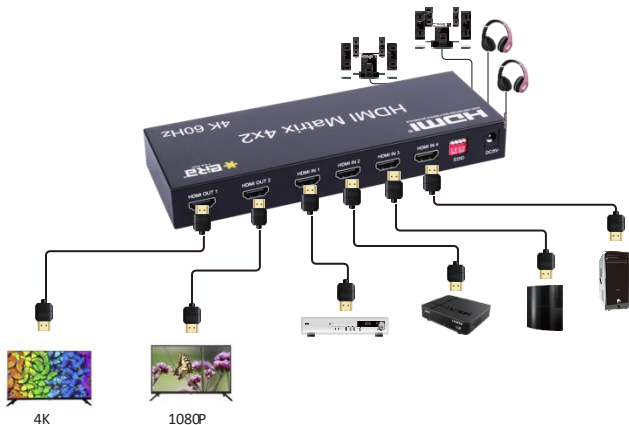


- 1) The four buttons on Output 1 is the corresponding input source IN1-IN4 which out from Output 1, IN1-IN4 can be switched freely.
- 2) The four buttons on Output 2 is the corresponding input source IN1-IN4 which out from Output 2, IN1-IN4 can be switched freely.

### Instruction of Buttons and LED:

1. Instruction of LED: IN1-IN4 indicator is the corresponding input sources out from Output 1 or Output 2.
2. Operation of Buttons: SWITCH 1 or SWITCH 2 is used to switched the corresponding input source out from Output 1 or Output 2.

## Connection Diagram :



## 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 audio output and stereo amplifier with stereo headphone or fiber.
4. Connect 5V power supply to the HDMI 4x2 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 adapter.

## Accessories :

- |                      |      |                     |      |
|----------------------|------|---------------------|------|
| 1. HDMI Matrix 4X2   | 1PCS | 3. 5V power adapter | 1PCS |
| 2. IR Remote Control | 1PCS | 4. User Manual      | 1PCS |