# 8K HDMI 4x2 Matrix
# HM842A



# 1. Introduction

This 8K HDMI 4x2 Matrix can not only switch any of the four HDMI input signals, but also distribute it to two displays simultaneously. The video resolution is up to 8K@60Hz 4:2:0. It supports eARC function (only for INPUTS 1 port and OUT 1 port). Built-in EDID DIP switch supports advanced EDID management. It also supports audio de-embedding function. As able to be used either as a splitter or a switcher, this multi-functional product can be widely applied in scenarios of demonstration, video conference, multimedia teaching and other occasions requiring for big-screen demonstration.

# 2. Features

- ☆ HDMI 2.1 and HDCP 2.3 compliant
- ☆ Support 40Gbps video bandwidth
- ☆ Support video resolution up to 8K@60Hz 4:2:0 10bit, 8K@30Hz 4:4:4 10bit, 4K@120Hz 4:4:4 10bit
- ☆ VRR, FVA, ALLM supported
- ☆ Support HDR, HDR10, HDR10+, Dolby Vision, HLG pass through
- ☆ Support HDMI audio formats: LPCM, Dolby Digital/Plus/EX, Dolby True HD, Dolby Atmos, DTS, DTS-EX, DTS-96/24, DTS High Res, DTS-HD Master Audio, DSD
- ☆ INPUTS 1 port and OUT 1 port support eARC/ARC function
- ☆ Allows HD audio up to Dolby Atmos, DTS:X over TrueHD from ANY external HDMI source to any eARC/ARC sound system
- ☆ Support audio de-embedding function (output through the optical and analog port)
- ☆ Built-in EDID DIP switch supports advanced EDID management
- ☆ 8K->4K, 8K/4K->2K downscaler support
- ☆ Support IR remote control and front panel button switching
- ☆ Built-in Equalizer, Retiming and Driver
- ☆ Compact design for easy and flexible installation

# 3. Package Contents

① 1 × 8K HDMI 4x2 Matrix
② 1 × IR Remote
③ 1 × 5V/2A Multinational Power Supply
④ 1 × User Manual

# 4. Specifications

| | |
|---|---|
| **Technical** | |
| HDMI Compliance | HDMI 2.1 |
| HDCP Compliance | HDCP 2.3 |
| Video Bandwidth | 40Gbps |
| Video Resolution | Up to 8K@60Hz 4:2:0 10bit, 8K@30Hz 4:4:4 10bit,<br>4K@120Hz 4:4:4 10bit |
| Color Depth | 8/10/12-bit |
| Color Space | RGB_4:4:4, YCbCr_4:4:4, YCbCr_4:2:2, YCbCr_4:2:0 |
| Audio Formats | **HDMI input/output:**<br>LPCM, Dolby Digital/Plus/EX, Dolby True HD, Dolby Atmos, DTS, DTS-EX, DTS-96/24, DTS High Res, DTS-HD Master Audio, DSD<br>**Audio de-embedding output:**<br>Optical: Up to LPCM/Dolby/DTS 5.1 CH<br>Analog: LPCM 2.0 CH |
| ESD Protection | Human body model — ±8kV (Air-gap discharge) &<br>±4kV (Contact discharge) |
| **Connection** | |
| Input | 4 × HDMI IN [Type A, 19-pin female] |
| Output | 2 × HDMI OUT [Type A, 19-pin female]<br>1 × OPTICAL [S/PDIF port]<br>1 × L/R [3.5mm Stereo Mini-jack] |
| Control | 1 × SERVICE [Micro USB, Update port] |
| **Mechanical** | |
| Housing | Metal Enclosure |
| Silkscreen Color | Black |
| Dimensions | 200mm (W) × 85mm (D) × 21mm (H) |
| Weight | 411 g |
| Power Supply | Input: AC100 - 240V 50/60Hz, Output: DC 5V/2A<br>(US/EU standards, CE/FCC/UL certified) |
| Power Consumption | 2.05 W (Max) |
| Operation Temperature | 0°C ~ 40°C / 32°F ~ 104°F |
| Storage Temperature | -20°C ~ 60°C / -4°F ~ 140°F |
| Relative Humidity | 20~90% RH (non-condensing) |

| Recommended HDMI Cable | | | | |
|---|---|---|---|---|
| **Video Resolution** | 8K | 4K60 | 4K24 | 1080P |
| **HDMI Cable Type** | Ultra HDMI 2.1 | HDMI 2.0 | HDMI 1.4 | HDMI 1.4 |
| **HDMI Cable Length** (HDMI IN / OUT) | 3m/10ft | 8m/26ft | 12m/39ft | 15m/49ft |
| The use of “Premium High Speed HDMI” cable is highly recommended. | | | | |

## Application Example

