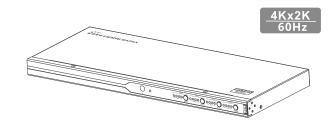


**User Manual** 

# **HDMI MATRIX SWITCH**

HDMI Matrix 4x4 (4K x 2K @60Hz)



ER2681M44



Thank you for purchasing this product. For optimum performance and safety, please read the instructions carefully and keep the manual for future reference.

### Important Safety Notice

Please read below safety instructions carefully before installation and operation:

- \* Please pay attention to all the warnings and hints on this device.
- \* Do not expose this unit to rain, moisture and liquid.
- \* Do not put any stuff into the device.
- \* Do not repaire the device or open the enclosure without professional person guidence to avoid electronic shock.
- \* Make sure good ventilation openings to avoid product overheating damage.
- \* Turn off power and make sure environment is safe before installation.
- \* Do not plug-in/out the connection cables when it is in using to avoid cables damage.
- \* Use DC12V/2A power adapter. Make sure the specification matched if using 3rd party DC adapters.

## Introduction

This product is a 4×4 HDMI2.0 Matrix Switch, supports resolution up to 4K×2K@60Hz, with 4 HDMI inputs and 4 HDMI outputs. 4 HDMI inputs accommodate the simultaneous connection up to 4 high definition video sources, such as satellite systems and Blu-ray players. 4 HDMI outputs send the high definition A/V signals to 4 ultra HD displays. This Matrix Switch supports IR remote control, button control and RS232 for switching inputs and outputs. This product is perfect for security system, digital monitoring system, school education system, exhibition center, multimedia conference, command system etc.

#### Features

- Support up to 4 ways of HDMI signal switching or distributing to up to 4 HDMI displays.
- 2. Supports up to ultra HD resolution 4K×2K@60Hz.
- 3. Transmission data rate up to 18Gbps.
- 4. Pure hardware design, plug and play.
- 5. Support IR remote and button control for switching inputs/outputs.
- 6. Support RS232 control.
- 7. Supports YUV 4:4:4.
- 8. Support 3D.

# Package Contents



Matrix Switch unit ×1pc



DC12V2A power adapter ×1pc



Remote Controller ×1pc

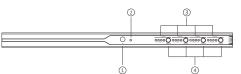
Wall-mount kit x2pcs

## • Installation Requirement

- 1. HDMI source device (DVD, PS3, Set top box, PC etc)
- 2. HDMI display device like SDTV, HDTV, and projector with HDMI port.

## Panel Description

#### Front Panel

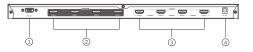


① IR receiver window Receive IR signal

2 Power indicator
 3 Output select indicator
 Display corresponding input channel

4 Output button To choose input channel

#### **Back Panel**



RS232 RS232 control
 HDMI output Connect with HDMI display device
 HDMI input Connect with HDMI source device
 Power input Connect with DC12V/2A power adapter

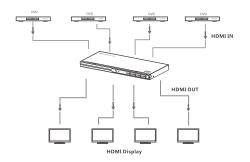
#### Remote Controller

This remote controller is just used for inputs or outputs switched/selected.



#### Connections

#### 1. Connection Drawing



- 1) Connect all your HDMI source devices to this product's inputs via HDMI cables.
- 2) Connect up to the HD display devices on the HDMI outputs via HDMI cables.
- 3) Power on all source device, this Matrix Switch and display device, then it works.
- 4) Select/switch inputs and outputs via IR remote, buttons or RS232 command.

#### 2. RS232 control

- 1) It supports RS232 control to select the input and output channel, the baud rate is 9600, and the connector is a 9-pin port.
- 2) Use the serial port software, please set COM firstly, and then correspond to the following figure in the various channel commands.

Instruction list				
HDMI output	HDMI input 1	HDMI input 2	HDMI input 3	HDMI input 4
HDMI output 1	PS11R	PS12R	PS13R	PS14R
HDMI output 2	PS21R	PS22R	PS23R	PS24R
HDMI output 3	PS31R	PS32R	PS33R	PS34R
HDMI output 4	PS41R	PS42R	PS43R	PS44R
HDMI output 1	PA1R	PA2R	PA3R	PA4R
HDMI output 2				
HDMI output 3				
HDMI output 4				
Change all output/input states	PAP1P2P3P4R, Output 1 selects signal source P1 Output 2 selects signal source P2 Output 3 selects signal source P3 Output 4 selects signal source P4			
Gets the current output / input state	PA?R			
Command return	All of the above commands, if they were sent successfully, the output status will be returned accordingly  For example, send command "PA? R"  Return OK+ 1 2 2 4 output 4 selects input 4 output 3 selects input 2 output 2 selects input 2 output 1 selects input 1  If the command is wrong, return "err"			

## • FAQ

- Q: No video/audio signal output on the displays?
- A: 1) Please check and make sure the Matrix Switch is connected well and powered on.
- 2) Please check and make sure all HDMI cables are connected well
- 3) Please check and make sure the input channel of displays are correct.
- Q: Picture quality is not fluent and stable?
- A: 1) Please check and make sure all HDMI cables are connected well
- Try to connect the source device to display device directly, or change to another source device for a try to see the picture quality.
- 3) Please use high quality HDMI2.0 standard cable when HDMI 4Kx2K signal input.

## Specification

Items	Specification	
HDMI signal	HDMI2.0, Full compatible with HDCP2.2	
Inputs	4 HDMI	
Outputs	4 HDMI	
Transmission rate	18Gbps	
Support resolution	480i@60Hz, 480p@60Hz, 576i@50Hz, 576p@50Hz, 720p@ 50/60Hz, 1080i@50/60Hz, 1080p@50/60Hz, 3840×2160@25/30/60Hz	
Support audio format	DTS-HD/Dolby-true HD/LPCM7.1/DTS/Dolby-AC3/DSD	
YUV	4:4:4	
Video signal	0.5~ 1.5Vp-p(TM DS)	
DDC signal	5Vp-p(TTL)	
Video bandwidth	600MHZ	

HDMI port	Type A 19 pin, female	
RS232	9 pin serial port seat	
Working temperature	0°C ~ 60°C	
Working Humidity	0~90% (no condensation)	
Power supply	DC12V/2A	
Power consumption	<20W	
Product dimension	429.8(L)X170.7(W)X28(H)mm	
Weight	1.65kg	
Color	Black	

#### Disclaimer

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