

## HDMI Matrix Switcher Series

### ITEM NO.: HS42M-4K6G 4x2 HDMI Matrix Switcher



**HS42M-4K6G 4x2 HDMI Matrix Switch** allows you to route 4 HD sources to any 2 HD displays! The 4x2 **HDMI Matrix switch** is a complete HD routing solution for whole home HDTV systems. It provides **3D support, UltraHD 4K**, In addition, the **HS42M-4K6G could be easy control by** IR remote control, RS-232 and the front panel.

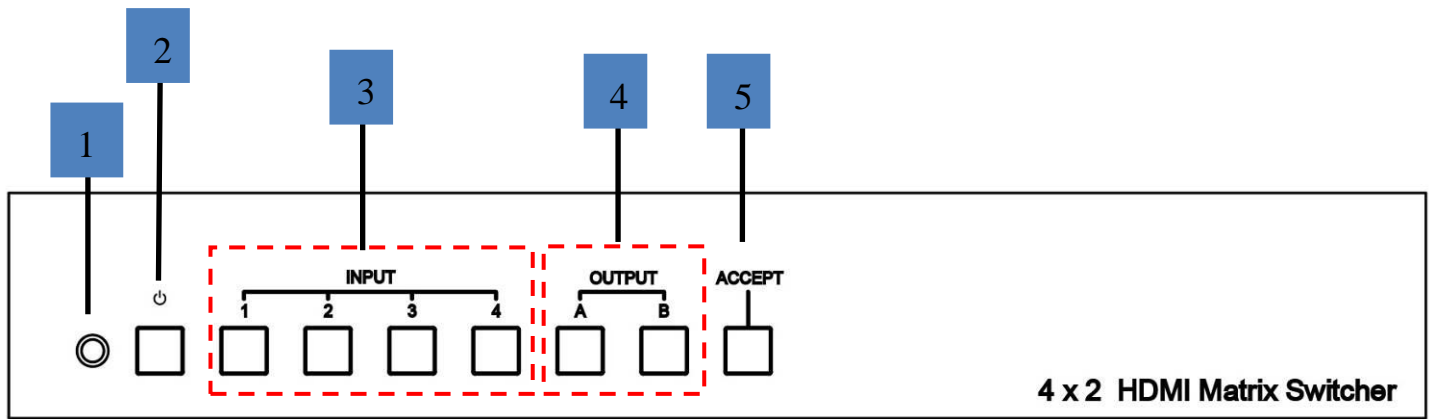
#### Features:

- 4 x HDMI Video input to two 2 HDMI output Switcher.
- Support HDMI 2.0, HDCP 2.2, 4K@60Hz 4:4:4 18Gbps (6Gbps per color) 3D,HDR.
- Supports LPCM, DTS Digital, DTS-HD Master Audio and Dolby TrueHD audio.
- Support ARC audio return channel.
- Support optical & LPCM audio output.
- HDCP Compliant.
- 3 operation mode: Matrix, Splitter and Separation
- Separation Mode: one output is straight pass through output, the second output is fixed HDMI 1.4 output with video removed . ( Audio output for AVR)
- Connects up to 2 HDMI displays at the same time from a digital video source.
- RS232, IR remote and front panel button for easy control.
- Allow to do 4K Downscaling to 1080p and 1080p Upscaling to 4K.
- Support 4K 4:4:4 to 4:2:0.
- HDCP 2.2 and HDCP 1.4 compliant.
- Support LPCM convert to analog stereo audio.
- Support CEC
- Built OSD
- Built in IR sensor or external IR receiver cable for remote control.
- Front panel LED brightness adjustable.

#### Application View:



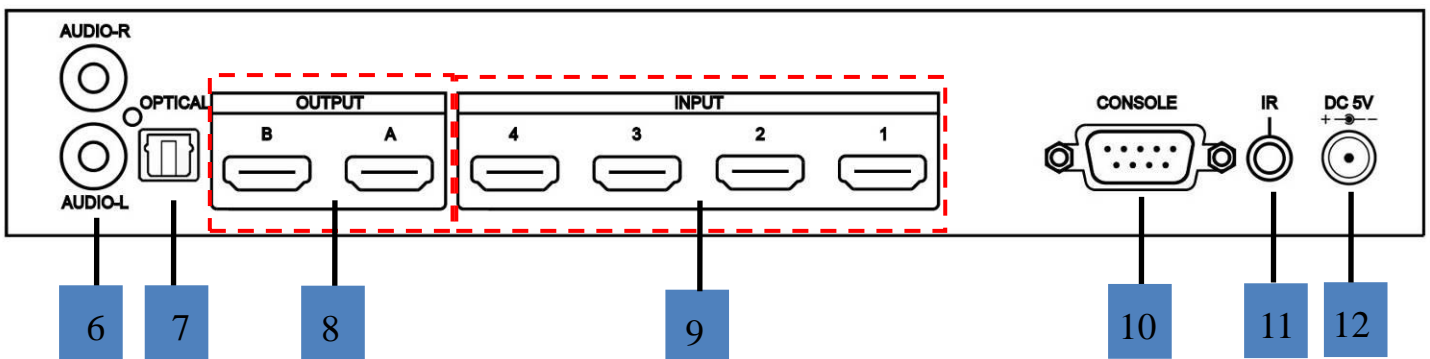
## Front Panel Function:



## Panel Button Function:

No.	Function	LED Status	OSD Status	Description
1	IR	N/A	N/A	Receiving IR remote signal
2	POWER	Blue	N/A	Power on
		Red	N/A	Standby
3	INPUT 1~4	On	Input 1~4	Video input been selected
		Flash		Video input not selected
		Off		No input
4	OUTPUT A~B	On	Output A/B/A+B	Select output to switch (press A and B together to select both) then press INPUT and ENTER to confirm.
5	ENTER	On	Input resolution and connection	System status / Confirm input selection

## Rear Panel Function:



## Panel Button Function:

No.	Function	Description
6	RCA	Analog audio output
7	TOSLINK	Digital audio output
8	HDMI	HDMI video output A/B
9	HDMI	HDMI video input 1~4
10	DB9	RS232 Console
11	3.5mm Phone Jack	External IR receiver connector
12	DC Jack	DC Jack 5.5mmx2.5mm

## IR Remote Control (IR01) :

Initial at first time use the remote control or after change battery of remote control, the IR remote control and the equipment IR Remote ID must be using same. The default IR Remote ID is 0.

To setting the Remote ID, Press and hold power button, then press button 0 to complete the setting.



(for example)

### Remote Control Button Function:

Symbol	Function Name	Description	OSD Function
	POWER	Power on / standby	
	UP	Reserved	Move menu function up
	DOWN	Reserved	Move menu function down
	LEFT	Reserved	Reserved
	RIGHT	Reserved	Reserved
	ENTER	<ul style="list-style-type: none"> <li>● System status</li> <li>● Confirm input selection</li> </ul>	Execution selected function
	MENU	<ul style="list-style-type: none"> <li>● Enter OSD menu</li> <li>● Back to upper level of menu</li> </ul>	<ul style="list-style-type: none"> <li>● Enter OSD menu</li> <li>● Back to upper level of menu</li> </ul>
	Input selection	Press to select input 1	
	Input selection	Press to select input 2	
	Input selection	Press to select input 3	
	Input selection	Press to select input 4	
	Reserved		
	Reserved		
	Reserved		
	Reserved		
	Reserved		
	Reserved		
	Output A	Select output A in matrix mode	
	Output B	Select output B in matrix mode	
	Reserved		
	Reserved		

## OSD MENU Function :

Main Menu	Sub Menu	Description
OPERATION MODE	MATRIX MODE	Independent input for output A & B
	SPLITTER MODE	Same input for both output A & B
	SEPARATION MODE	Set output A video only and output B audio only
	EXIT	Back to menu
OUTPUT A	UP SCALING	Upscale 1080p resolution to 4K60
	4 : 4 : 4 → 4 : 2 : 0	Convert 4K60 4:4:4 to 4K60 4:2:0
	EXIT	Back to menu
OUTPUT B	DOWN SCALING	Downscale 4K60 resolution to 1080p
	4 : 4 : 4 → 4 : 2 : 0	Convert 4K60 4:4:4 to 4K60 4:2:0
	EXIT	Back to menu
EDID	OUTPUT A	Use monitor EDID from output A
	OUTPUT B	Use monitor EDID from output B
	MERGE	Merge EDID from output A and B
	EXIT	Back to menu
	<b>*Will use 4K60, 4:4:4, LPCM 2ch if selected output EDID not existed</b>	
CEC	ENABLE CEC	Enable CEC function at output A
	POWER ON SYNC	Power on when received CEC command "active source" from DVD/STB box
	STANDBY ON SYNC	Standby when received CEC command "standby" from monitor
	EXIT	Back to menu
	<b>* Power on and standby sync function only works when CEC enabled</b>	
AUDIO OUTPUT	HDMI AUDIO	SPDIF and Analog audio from HDMI
	ARC	SPDIF and Analog audio form ARC
	MUTE	Turn off SPDIF and Analog audio output
	EXIT	Back to menu
	<b>* ARC only works when CEC enabled</b>	
LED BRIGHTNESS	MAXIMUM	Set LED brightness to maximum
	MEDIUM	Set LED brightness to medium
	MINIMAL	Set LED brightness to minimal
	AUTO	Auto adjust to maximum in operation or input source changed, after 10 seconds it will back to minimal
	EXIT	Back to menu
MISCELLANEOUS	Main MCU V1.01	Show main MCU firmware version
	Sub MCU V1.00	Show sub MCU firmware version
	EXIT	Back to menu

## RS232 remote control command:

Connect the RS232 CONSOLE port to the COM port of the host by an F/M RS232 straight cable (pin 2 to pin 2; pin 3 to pin 3, pin 5 to pin 5)

**Communication format is 9600, 8, N, 1 (9600 bps, 8 data bits, no parity check, 1 stop bit)**

CONSOLE



### Operation Instruction format:

[Command]		[Description]
X	n	Select output A or B from input 1,2,3 4
n	x	Select input & output and disable auto scan.
POWER	y	System activate or standby.
OPERATION	n	Select operation mode, 1=Matrix, 2=Splitter, 3=Separation.
UPSCALING	y	Upscaling function
DOWNSCALING	y	Downscaling function
A_SUBSAMPLING	y	Output A chroma subsampling function
B_SUBSAMPLING	y	Output B chroma subsampling function
A_MUTE	y	Output A Mute in Separation Mode
EDID	n	Select EDID mode, 1=Output A, 2=Output B, 3=Merge Output A & B.
CEC	y	CEC Function
CEC_POWER_ON_SYNC	y	CEC Power control function
CEC_STANDBY_SYNC	y	CEC Power sync function
AUDIO	n	1=HDMI Audio, 2=ARC, 3=Mute.
LED	n	LED Brightness adjustment, 1=Maximum, 2=Medium, 3=Minimal, 4=Auto.
STATUS		Display Input signal status
VERSION		Display firmware version
?		Show all commands.

### [SYMBOL]

### [PARAMETER]

n	1   2   3   4
x	A   B
y	ON   OFF

**Space characters between the command and parameters can be ignored**

## Package:

Item	Q'ty
HS42M	x 1
DC 5V 2A Adapter	x 1
IR Receiver Cable	x 1
IR01	x 1
User Manual	x 1

**Specification:**

<b>ITEM NO</b>	<b>HS42M-4K6G</b>
HDMI Resolution	Up to 4096x2160/60Hz/4:4:4(18Gbps), 3D,HDR
HDMI Audio Support	Up to 7.1 LPCM 192KHz / Dolby TrueHD / DTS-HD MA
Video Input Interface	HDMI Type A x 4
Video Output Interface	HDMI Type A x 2
Digital Audio Connector	TOSLINK Type x 1
Analog Audio Connector	RCA Jack x 2
RS-232 Input /Output Interface	DB9 x 1(CONSOLE)
IR Receive Angle	± 45 degree
IR Receive Distance	5M
Power Adapter	DC 5V 2A
Power Consumption	6W
Temperature	Operation: 0 to 55°C, Storage: -20 to 85°C, Humidity: up to 95%
Dimension mm	253 x 144 x 40
Weight g	840

RoHS   

Rev.A