



HDMI Matrix Switcher

User Manual

Model : HM41E

4 x 1 HDMI Seamless Switcher & Multiviewer



Introduction

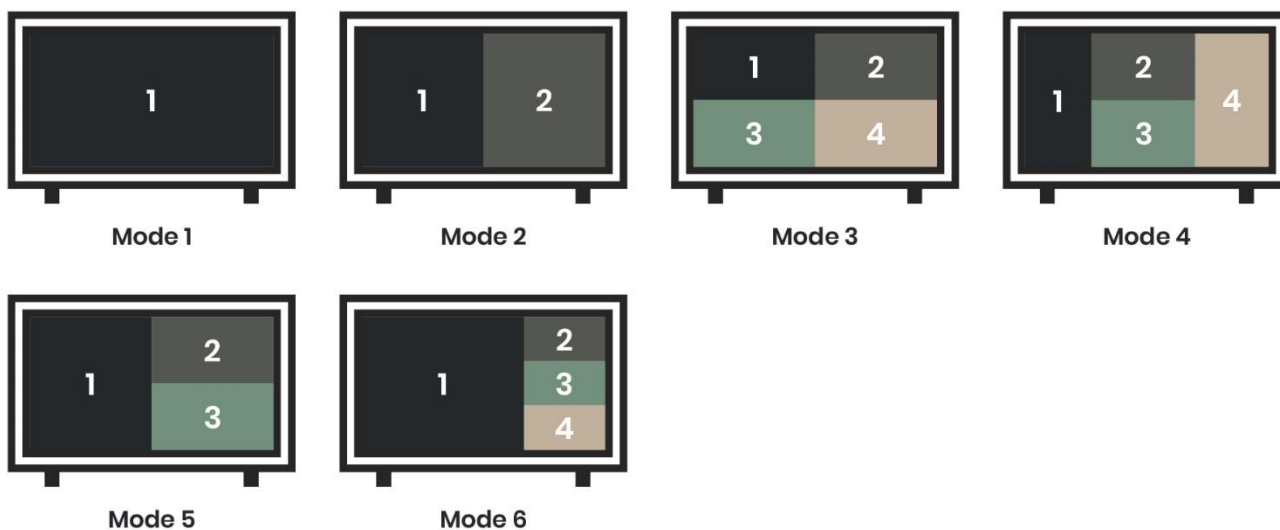
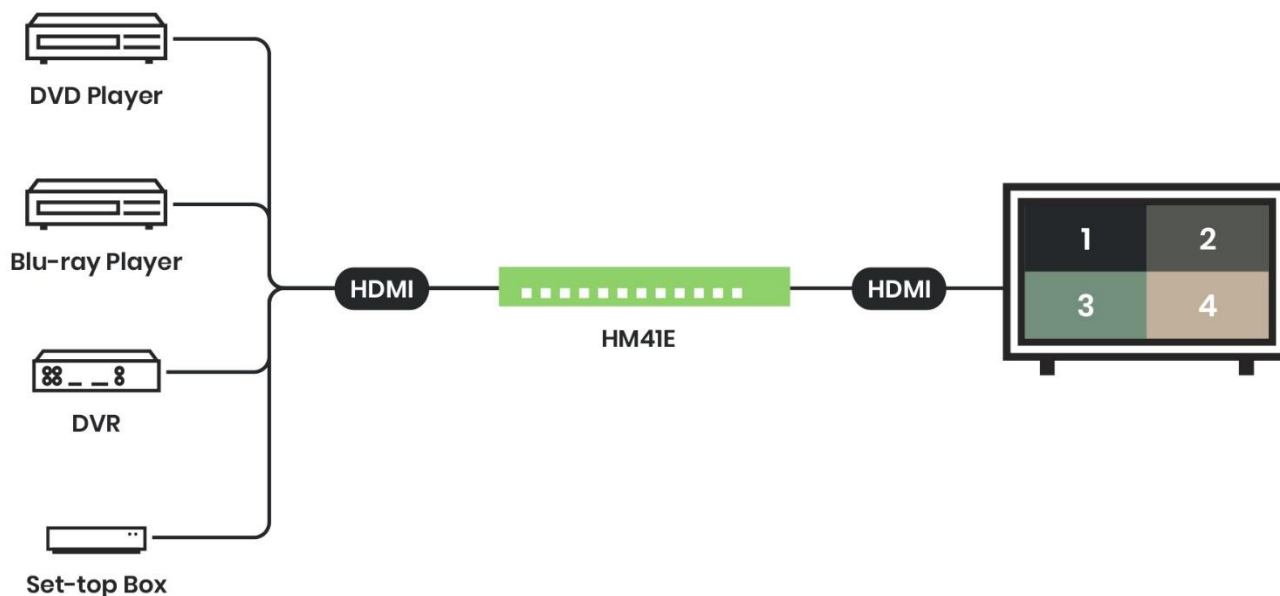
The HM41E is a 4 input HDMI switcher that supports resolution up to 1080p. Moreover, the seamless switching function makes the controllability outstanding, allowing the switcher to switch HDMI sources without any frame loss smoothly. Plus, the Multiview function enables the switcher to play multiple videos on one HDMI display.

It is a perfect solution for a scenario where watching or monitoring multiple videos on one screen simultaneously, such as security room, advertising, education, home theatres, and so on.

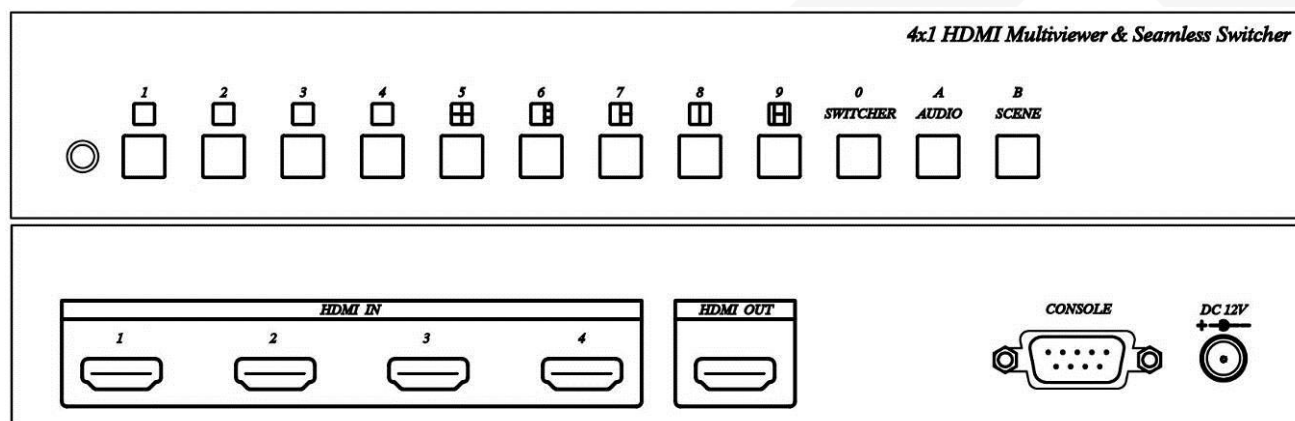
Features

- Resolution up to 1080p@60Hz.
- Supports video scaler function.
- Supports full-screen, dual, triple, quad view.
- Supports auto switching and seamless switching functions.
- Supports save/load preset function.
- Managed via front panel buttons, IR remote and RS232 signal.

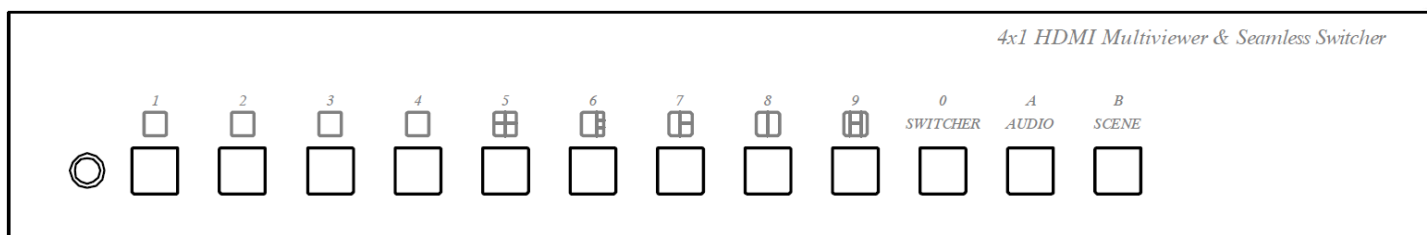
Installation View















Panel View



Panel Button Function



Button	Function
	Select Video 1
	Select Video 2
	Select Video 3
	Select Video 4
	Quad Picture Display
	Quad Picture Display (one big window with three small window), press this button again to change 4 video sequence.
	Select 3 Video Display (Only select input video 1,2,3)
	Select 2 Video Display, press this button again to select video input 1,2 or 3,4.
	Select 4 Video Display
	Auto Switching
	Audio Selection
	Scene Selection

Seamless Switch Function

Press button 1 - 4: the video output is a single full screen, and the button light on indicates the source of video input.

Multi-view Switch Function

Press button 5 - 9: the video output is multi-view window, and the button light on indicates the Multiview mode.

SWITCHER Function

SWITCHER as video auto switching function, you could select two or four videos for automatically display,

the switching time duration setting as below:

Press SWITCHER button: the button light on, then press button 1 - 4 to select the video for auto switching.

Press button 5 - 9 to select the auto switching timing :

5 : 5 seconds

6 : 10 seconds

7 : 20 seconds

8 : 30seconds

9 : 60seconds

To press the SWITCHER button again to leave switching mode.

AUDIO Function

Multiview mode display only could select one audio input, the setting as below:

Press AUDIO button, the button light on, then then press button 1 - 4 to select the audio source. To press AUDIO button again to leave audio selection mode.

SCENE Function

SCENE button for the scene function, there are 9 sets of saved scene mode for easy save and load.

SCENE Saved method:

Press SCENE button 3 seconds until button light flash, then press button 1- 9 to save. Press SCENE button again to exit.

SCENE Load method:

Press SCENE button, the button light on, press button 1 - 9 for load and exit.

Demo Function

Demo mode: 5 - 9 as multi-view window will be auto switching by sequence.

Setting as below:

Press the SCENE button, the button light, press the SWITCHER button to turn on the DEMO mode. To press the SCENE button again to leave DEMO mode.

Output Resolution

Press button 1 and power on, output resolution as 720p@60Hz.

Press button 2 and power on, output resolution as 1080p@60Hz.

IR Remote Control Function

This device could use IR remote control for function setting and control, the ID number must be setup before using IR remote control or change new batteries. Setup IR remote ID number: Press and hold "Power" button and press number 0.

Button	Function
1 ~ 9	same as panel button 1 ~ 9
0	same as panel SWITCHER
A	same as panel AUDIO
B	same as panel SCENE
*	SCENE save setting: B → * → 1 ~ 9
⏻、▲、▼、◀、▶、#、MENU、ENTER: Reserved	

RS232 CONSOLE

1. Firmware updated.
2. RS232 Serial Remote Control function as below:

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

Communication format is 115200, 8, N, 1 (115200 bps, 8 data bits, none parity check, 1 stop bit)

CONSOLE



Operation Instruction format:

Command + △(Space) + Parameter + Enter(CRLF or \r\n)

Command Mode Instruction:

[COMMAND]	[DESCRIPTION]
MODE m	Select Mode.
SWITCHER	Enable/Disable Switcher Mode.
SWITCHER c	Add/Delete "Video Source" for Switcher Mode
TIME t	Switcher Time.
AUDIO	Enable/Disable Audio Mode.
AUDIO a	Select Audio.
IR i	IR Remote ID setting
SAVE n	Save Scene.
LOAD n	Load Scene setting.
DEFAULT	Reset to Default.
DEMO	Demo Mode.
SIGNAL	Display input signal status.
STATUS	Display setting.
VERSION	Display firmware version.
?	Show all commands.

[SYMBOL]	[PARAMETER]
a	1 2 3 4
c	1 2 3 4
n	1 2 3 4 5 6 7 8 9
m	1 2 3 4 5 6 61 62 63 64 7 8 9
i	1 2 3 4 5 6 7 8 9 0
t	5 6 7 8 9 (5s 10s 20s 30s 60s)

Reset Factory Default

Press and hold SCENE button then power on, SCENE button LED flash will clear all the saved data and setup the output resolution at 1080p@60Hz.

Package Include

- HM41E x 1 piece
- IR Remote Control x 1 piece
- Power adapter x 1 piece
- Rubber Pad x 4 pieces
- Mounting screws x 1 bag

Specification

ITEM NO.	HM41E
Support	
Compliance	HDM 1.3a, HDCP 1.2 ,DVI 1.0
Max. HDMI Resolution	1080p@60Hz
Audio Format	LPCM 2.0 CH
RS232 Baud Rate	115200 bps
IR Support	38Khz , ±45°, 5M
Ports & Interfaces	
Video Input	4 x HDMI Type A
Video Output	1 x HDMI Type A
RS232 Interface (Console)	1 x DB9 Female
Power	
Power Supply	DC 12V 1A
Power Consumption	660mA
Ambient Temperature	
Operation	-10 to 70°C
Storage	-20 to 85°C
Humidity	up to 95%
Physical Characteristics	
Dimensions	253 x 144 x 40mm
Weight	840g