SC&T

HDMI Switcher Series

User Manual

Model : HKM41E

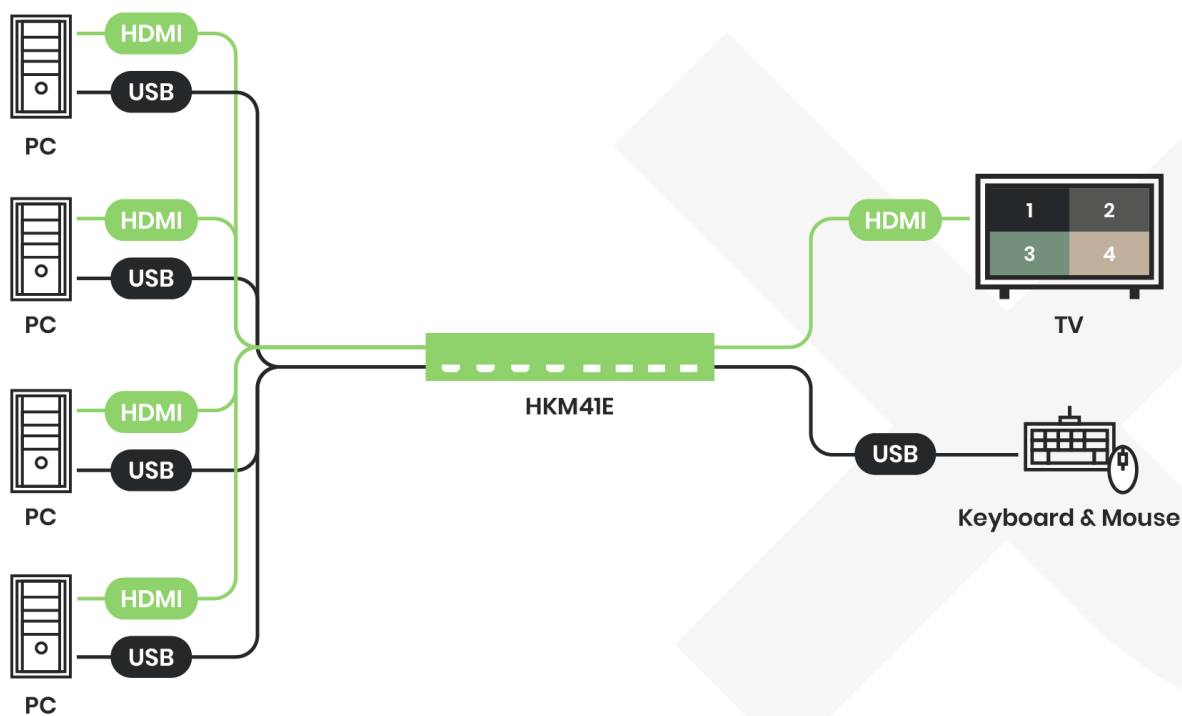## 4 x 1 HDMI KVM Multiviewer & Seamless Switcher

Introduction

HKM41E is a 4 input HDMI automatic KVM switcher that supports resolution up to 1080p@60Hz 4:4:4. This switcher is designed to control four HDMI sources (PC/NVR/DVR) from an HDMI display, a keyboard and a mouse. It also supports Multiview function which can reproduce all four images in one screen.
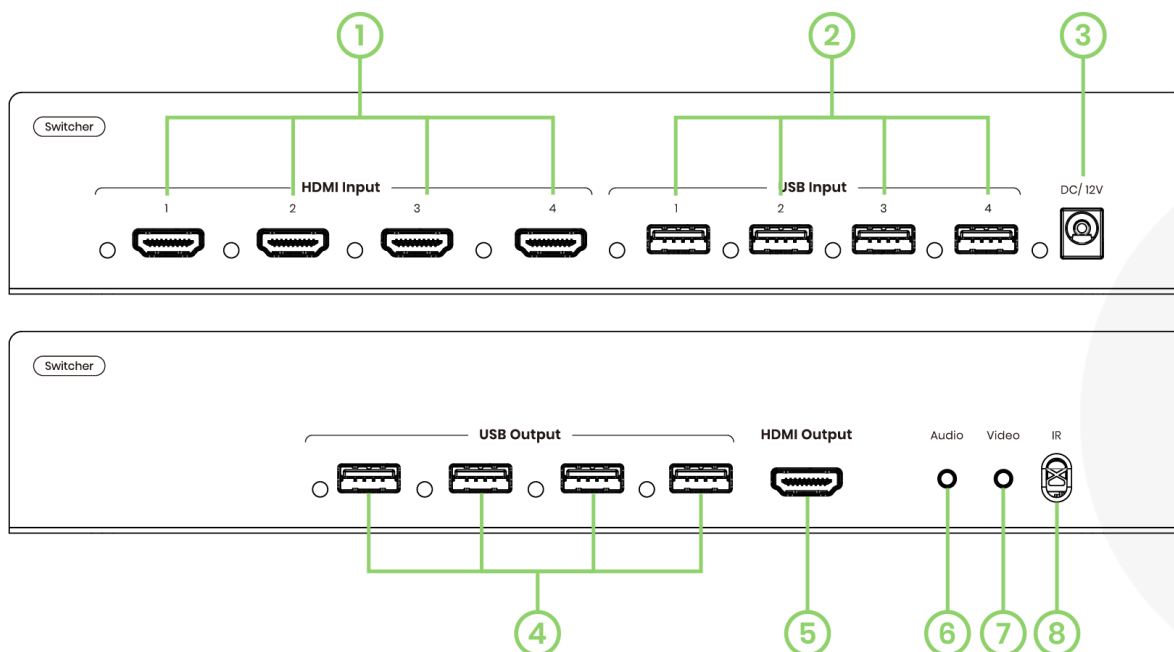
Features

- Resolution up to 1080p@60Hz 4:4:4.
- Supports Multiview function, providing different working modes.
- Controlled by panel buttons, keyboard/mouse, IR remote.
- Support mouse roaming, using one display and one keyboard/mouse to control four PC. Just move the mouse across the multi-viewer border, and the mouse immediately switches to the source and take control of the device.

Installation view

Panel view

No	Interface	Description
1	HDMI Input	To input up to 4 HDMI sources
2	USB Input	To connect up to 4 USB sources
3	DC/ 12V	To input a DC 12V power
4	USB Output	To connect a keyboard & a mouse
5	HDMI Output	To connect an HDMI display
6	Audio	To mute/unmute audio or select an audio source (see page 6)
7	Video	To select a video mode
8	IR	To receive an IR control signal

LED Indication

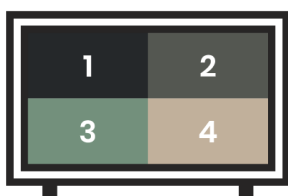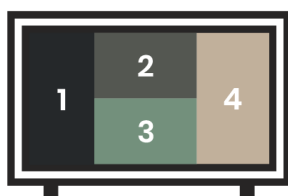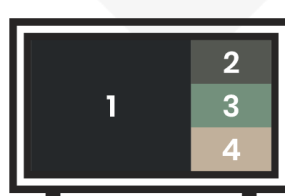| Interface	LED Status	Description
Power	Green On	Power on
	Green Off	Power off
HDMI Input 1~4	Blue On	HDMI source detected
	Blue Off	No HDMI source
USB Input 1~4	Blue On	Corresponding PC host has been selected for KVM control (single-view)
		When set to control 4 PCs at the same time (4 LEDs on at the same time)
		When mouse position is in the corresponding PC host screen while in mouse roaming mode/multi-view (the USB LED would only be on one at a time, depending on which source the mouse currently on)
	Blue Off	No PC host has been selected for KVM control (single-view)
		Mouse position is not in the corresponding PC host screen while in mouse roaming mode (multi-view)
USB Output 1~4	Blue On	USB device detected (mouse/keyboard)
	Blue Off	USB device not connected

Video Modes

Mode 1   Mode 2   Mode 3   Mode 4
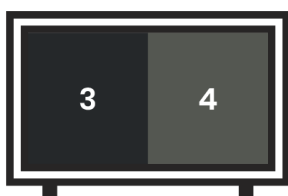
Mode 5   Mode 6   Mode 7   Mode 8
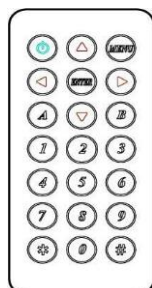
Mode 9

IR Controller

If you use the IR remote for the first time or just replace the battery, please set up the IR remote ID as 0 by pressing ⏻ and ⓪ , which will match the remote ID with that of HKM41E.

Button	Function
▽	To the previous video (single-view) Sequence: Input 4 → 3 → 2 → 1 → 4 → …
◁	To the previous video (single-view) Sequence: Input 4 → 3 → 2 → 1 → 4 → …
△	To the next video (single-view) Sequence: Input 1 → 2 → 3 → 4 → 1 → …
▷	To the next video (single-view) Sequence: Input 1 → 2 → 3 → 4 → 1 → …
1	Select input 1 as the video source (Mode 1)
2	Select input 2 as the video source (Mode 2)
3	Select input 3 as the video source (Mode 3)
4	Select input 4 as the video source (Mode 4)
5	Quad-view (Mode 5)
6	Quad-view (Mode 6)
7	Quad-view (Mode 7)
8	Dual-view (Mode 8)
9	Dual-view (Mode 9)
0	Select output resolution as 720p@60Hz/ 1080p@60Hz
A	Mute/ unmute audio (see page 6)
B	Auto-switching from Mode 1 ~ 9

Keyboard Hot Key Switching

Hot Key Combination	Function
' * ' + ' F1 '	Control PC 1
' * ' + ' F2 '	Control PC 2
' * ' + ' F3 '	Control PC 3
' * ' + ' F4 '	Control PC 4
' * ' + ' F5 '	Control 4 PCs (mouse/keyboard) at the same time
' * ' + ' F6 '	Mouse Roaming (only in Absolute Mouse Positioning Mode)
' * ' + ' F9 '	Absolute Mouse Positioning Mode (can only be used while controlling PCs)
' * ' + ' F10 '	Relative Mouse Position Mode (can only be used while controlling DVR/NVR)
' * ' + ' 1 '	Select input 1 as the video source (Mode 1)
' * ' + ' 2 '	Select input 2 as the video source (Mode 2)
' * ' + ' 3 '	Select input 3 as the video source (Mode 3)
' * ' + ' 4 '	Select input 4 as the video source (Mode 4)
' * ' + ' 5 '	Quad-view (Mode 5)
' * ' + ' 6 '	Quad-view (Mode 6)
' * ' + ' 7 '	Quad-view (Mode 7)
' * ' + ' 8 '	Dual-view (Mode 8)
* ' + ' 9 '	Dual-view (Mode 9)
' * ' + ' Page Up '	To the next video (single-view) Sequence: Input 1 → 2 → 3 → 4 → 1 → …
' * ' + ' Page Down '	To the previous video (single-view) Sequence: Input 4 → 3 → 2 → 1 → 4 → …
' * ' + ' F7 '	Mute/ unmute audio (see page 6)
' * ' + ' F8 '	Select output resolution as 720p@60Hz/ 1080p@60Hz

Mute/ unmute Audio

By pressing (A) IR button, pressing the audio button on the front panel or '*' +'F7' Hot Key, you can mute/ unmute/switch audio under video mode 1 ~ 9 as below.

Mode	"A" IR button/ front panel audio button/ '*' +'F7' Hot Key Function
Mode 1	Mute/ unmute Input 1 audio
Mode 2	Mute/ unmute Input 2 audio
Mode 3	Mute/ unmute Input 3 audio
Mode 4	Mute/ unmute Input 4 audio
Mode 5	Select Input 1/ 2/ 3/ 4/ mute
Mode 6	Select Input 1/ 2/ 3/ 4/ mute
Mode 7	Select Input 1 / 2/ 3/ 4/ mute
Mode 8	Select Input 1/ 2/ mute
Mode 9	Select Input 3/ 4/ mute

Caution

- This product is designed for indoor applications. If it is desired for outdoor use, please install additional equipment for waterproof protection and surge protectors to prevent damages caused by lighting.
- Do not put anything on the power and system cables; place them where they cannot be stepped on. Please be sure there is nothing resting on any cables.
- Avoid using this product close to water places, or near high temperature devices such as radiators, stoves, etc.
- Shut down the power supply and unplugged all equipment immediately if:
  - water or any kind of liquid has been spilled into the product;
  - the product has been damaged by external force;
  - the product does not operate normally as this manual indicates;
  - Please contact us for further repair if above conditions happen.
- Using certified Premium HDMI cable to transfer high-resolution video is recommended.
- Seamless switching is supported only when switching between Mode 1 ~ 4.
- There is no constraint border when using mouse roaming function.
- When input video resolution is 800 x 600, output picture will be with black border on the left and right side of the screen.
- The sequence of the HDMI input should be matched along with the USB input (HDMI 1 corresponding with HDMI 1 source, etc.)
- While setting up HKM41E, please use the keyboard to get full access of all functions.
- When using DVR/NVRs as sources, must switch to Relative Mouse Position Mode, in this mode HKM41E doesn't support mouse roaming.
- When using PCs as sources , must switch to Absolute Mouse Position Mode in this mode HKM41E supports mouse roaming.
- The mouse roaming could not work under Relative Mouse Position Mode, so using DVR/NVR as sources could not active mouse roaming, but it can still be controlled by using keyboard hot keys.
- If HKM41E uses both PCs and NVR/DVRs as sources, the connected mouse/keyboard won't operate normally due to the restrictions of Absolute/Relative Mouse Position Modes.

What's in the Package

No	Item	Qty
1	HKM41E	x 1
2	IR01 (IR Remote)	x 1
3	12V 2A Power Adapter	x 1
4	Accessory	x 1

Specification

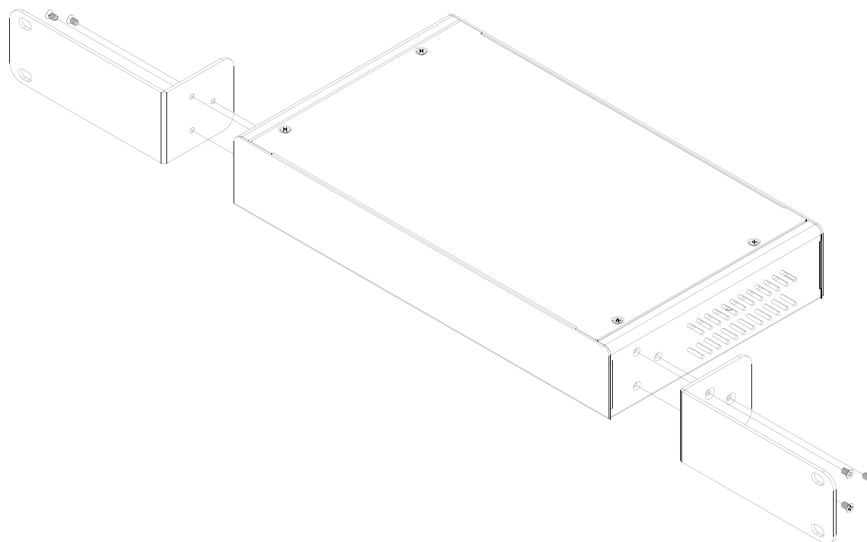| ITEM NO.	HKM41E
Support	
Input Video Resolution	1080p@60Hz
Output Video Resolution	1080p@60Hz
Audio Format	PCM2.0
Multi-view working modes	Normal View: display 1 input Dual View: display 2 inputs Quad View: display 4 inputs
Control Interface	Panel Buttons IR Remote Keyboard/Mouse (with Hot Key)
Seamless switching	Yes
Boundless switching	Yes
Ports & Interfaces	
Video Input	4 x HDMI Type A
Video Output	1 x HDMI Type A
USB Input	4 x USB Type A
USB Output	4 x USB Type A
Power	
Power Supply	12V 2A
Power Consumption	5W
Ambient Temperature	
Operation	0 to 55℃
Storage	-40 to 85℃
Humidity	Up to 95%
Physical Characteristics	
Dimensions	257 x 153 x 44 mm
Weight	1265.2g

RoHS CE

Installation Guide

Stand-alone

Use rubber pads on the bottom of the products, preventing it from slippery.

Use in a Cabinet

Fix angle irons on both sides of the products

Fix in a cabinet