

4 Ports 4K60 DisplayPort KVM Multiview Switch with Seamless Switching, Scaler, Quad View, PIP, PBP, Mouse Roaming, Button/Hotkey/Serial/Keypad IN Control

Model: KMV-4KD41-U30R

PRODUCT OVERVIEW

The KMV-4KD41-U30R, KVM Multiview Switch, allows users to monitor and manage four computers and enables USB 3.2 peripheral sharing, suitable for video surveillance and business applications to ensure



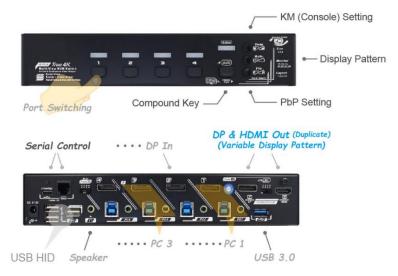
continuous vigilance. With its dual-monitor design and PiP (Picture-in-Picture)/PbP (Picture-by-Picture) split-screen function, the Switch can duplicate the desktop on DP and HDMI monitors in aspect ratios of 16:9, 21:9, and 32:9, which is especially useful for setting up face-to-face meetings. The 4-port KVM switch offers a unique split view with variable display patterns, including Full-View, Quad-View, PiP, and PbP (1+3/3+1) window setups. You can easily switch between four computers using front panel push buttons, hotkey control, mouse roaming functionality, wheel mouse customizable buttons, keypad operation, and serial commands.

Designed also for the video surveillance market, education, and healthcare systems, the KVM Multiview Switch allows users to operate 4 computers and select 1, 2, or 4 PC video sources to be displayed on one monitor. The built-in multiview video processor can create PiP (Picture-in-Picture) or PbP (Picture-by-Picture) images with any DP or HDMI monitor and offers various video layouts and control methods. The scaling function provides multi-window setups with adjustable size, position, and transparency layouts on 16:9, 21:9, and 32:9 monitors. The Switch allows split-screen presentations from four different video sources, supports seamless switching (zero latency), preserves undistorted, uncropped images, and maintains aspect ratios in multi-window setups.





Features a built-in USB HID & USB 3.0 Hub



The Switch's USB Hub supports USB peripheral sharing without any software or driver installation. The real-time USB HID ports provide a seamless HID switching experience, and the USB 3.2 Gen 1 port offers excellent 5 Gbps I/O speed. The USB 3.0 Hub is supported on Mac, Linux, Chrome, and Windows 8 (or later versions).

Audio Function

A unique tracking system enables audio devices to operate independently or concurrently. For example, the audio tracking function allows the users to decide whether the audio switching follows the computer switching. This is useful for users who want to enjoy music from another PC while working on their current computer.

Auto Scan & Manual Scan (Full-View Mode)

To monitor the real-time status of each PC port, the Switch supports an Auto Scan function that sequentially scans powered-on computers at fixed time intervals. It also provides a Manual Scan function, activated by keyboard input, allowing users to manually select computers one after another.

Stable EDID Transmission

The KVM Multiview switch utilizes unique EDID configuration technology to ensure consistent video streaming, optimizing video output and preventing flickering or black-screen issues when switching KVM host ports.



Full-Frame PBP Function

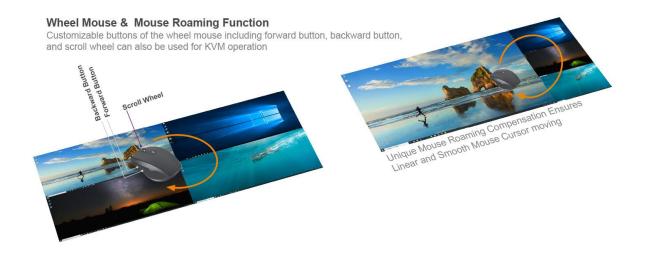
The Full-Frame PBP function allows PC video sources to be simultaneously displayed on one monitor in full-screen mode, without distortion, black borders, or resolution downgrades. A common issue with standard KVM PbP functions is picture compression or persistent black stripes on LCD screens, which significantly impacts visual quality. Manufacturers often adjust aspect ratios or compress images to



address these issues. The Full-Frame PBP function employs unique Pixel-to-Pixel technology to ensure multiview capabilities with full-screen features on 16:9, 21:9, and 32:9 monitors.

Mouse Roaming Functionality and Customizable Buttons

When PCs are connected to the Switch with multiview function enabled, users can easily switch between PCs by smoothly moving the mouse cursor across the screen borders among the 4 computers. This functionality allows users to switch the keyboard, mouse, and USB devices to another PC without the need for hotkey or button pressing. The customizable buttons on the mouse wheel, including the forward button, backward button, and scroll wheel, can also be utilized for KVM operations such as port switching, KM (console) and sub-screen settings.





Serial Control (RS-232 & Virtual Com)

The built-in RJ-11 serial interface (RS-232 to RJ11 converter) and USB-C Virtual Com port provide users with easy and friendly serial connections. The KVM switch's built-in serial interface allows users to control the unit through a PC or serial controller devices. The ability to switch via serial command on the Switch is especially designed for industrial control and communication, enhancing the functionality of both the Switch and serial devices management.



Remote Control Keypad-IN Function

The Keypad-IN function offers a cost-effective and user-friendly method to perform KVM control via wired or wireless keypad. By simply plugging an inexpensive wireless keypad into the specific USB hub port of the Switch, users can remotely access all KVM control functions.

- No Software or Driver Required for Operation
- KVM PC port switching via Standard Numeric Keypad
- Every key of the keypad can be customized with a specific command line (Contact DSGio for customization).



KEY FEATURES

- Allows 4 computers to share 1 set of KVM console
- Most popular resolutions supported up to 4K@60Hz (4:4:4) & 16:9 / 21:9 / 32:9 aspect ratios
- Multi-view modes allow 4 computers to be shown on the monitor at the same time
- Unique full-frame multi-view technology ensures uncut, undistorted, pixel-to-pixel matched views
- Flexible display modes (layouts) for various scenarios:
 - 1. Single-view (full-screen)
 - 2. Quad-view (linear tracking mouse roaming)
 - 3. PiP mode (adjustable view size / transparency)
 - 4. 1+3 PbP (linear tracking mouse roaming)
 - 5. 3+1 PbP (linear tracking mouse roaming)
- 1+3 & 3+1 PbP modes with a 21:9 monitor, empowering four 16:9 views (undistorted / uncut)
- Video modes can be quickly changed by button, hotkey, mouse control, serial control, or keypad-IN
- Flexible control methods suit various scenarios:
 - 1. Push Button
 - 2. Mouse Roaming (move mouse cursor across view borders to switch among computers)
 - 3. Keyboard Hotkey
 - 4. Mouse Control (use mouse button to magnify views or use the wheel to switch among computers)
 - 5. Serial Control
 - 6. Keypad-IN function
- Serial control facilitates industrial control purposes (8-band baud rate selectable)
- · Display modes are easy to configure
- Seamless switch grants the best productivity
- Keypad-IN supports wired and wireless USB keypads, allowing remote control of the KVM
- Independent switching of USB 3.2 and audio
- HDCP 2.2 & 1.4 compliance ensures uninterrupted video playback
- DP Model equipped with an duplicated extra HDMI Output
- Plug-and-play, no driver or software required



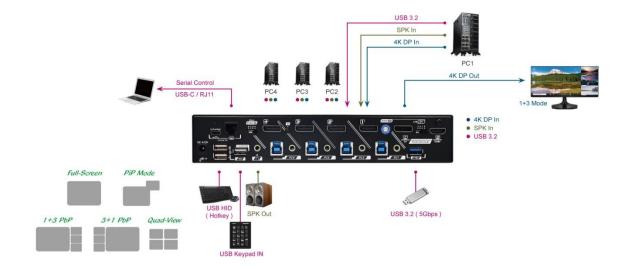
PRODUCT SPECIFICATIONS

Model Number	KMV-4KD41-U30R
Computer / Server Ports (Input)	DP In x 4 (Single Video x 4 PCs) USB 3.2 Gen 1 Type B x 4 3.5mm Speaker Jack In x 4
Console Ports (Output)	HDMI 2.0 Out x 1 DP Out x 1 USB 3.2 Gen 1 Type A x 1 (Rear) USB HID Type A x 2 (Rear) USB HID Type A x 1 (Rear) USB HID Type A x 1 (Rear, Dedicated interface for Keypad) 3.5mm Speaker Jack Out x 1
Video Resolution (Max)	3840 x 2160@60Hz (4:4:4) (16:9) 2560 x 1440@60Hz (4:4:4) (16:9) 1920 x 1080@60Hz (4:4:4) (16:9) 3840 x 1600@60Hz (4:4:4) (21:9) 3440 x 1440@60Hz (4:4:4) (21:9) 2560 x 1080@60Hz (4:4:4) (21:9) 3840 x 1080@60Hz (4:4:4) (32:9)
Serial Control	RJ-11 x 1 (19200bps) (8-Selections, 9600 ~ 115200bps) USB-C x 1
Push Buttons	Port Selection x 4 Status Function x 1 Swap / Size x 1 Multiview / Monitor x 1 Flip (Mirror) / Layout x 1
Control Methods	Keypad IN / Mouse Roaming / Hotkey / Push Button / Serial / Mouse Control (Side Button)
LED Indicator (Power / Status)	PC-Ready / PC-Select x 4 System Status x 1
Video Modes (Layouts)	Single-View / Quad-View / PiP Mode / 1+3 Mode / 3+1 Mode
Unique Functions	Full-Frame Multi View Instant switching via standard Keypad Seamless Switching (Zero Latency) Support 16:9, 21:9, 32:9 Displays
HDCP Compliance	HDCP 2.2 & 1.4

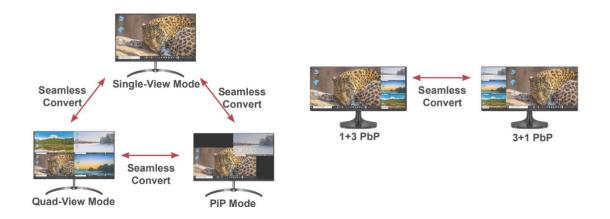


Model Number	KMV-4KD41-U30R
HDCP Engine	Yes
Power Supply	12V/3A DC
Operation Environment	0 ~ 40°C, Humidity < 80%
Storage Temperature	-20 ~ 60°C
Enclosure	Metal
H x W x D (mm)	44 x 240 x 160
Weight (g)	1250

CONNECTION DIAGRAM



MULTIVIEW LAYOUTS





PACKAGE CONTENTS

- 1 × KMV-4KD41-U30R KVM Multiview Switch
- 1 × 12V/3A DC Power Adapter
- 1 × User Manual
- 1 × Foot Pad Set

WARRANTY

- 1-Year Limited Warranty
- Advance Replacement Warranty is available and optional

ORDERING INFORMATION

Part Number	Descriptions
KMV-4KD41-U30R	4 Ports 4K60 DisplayPort KVM Multiview Switch with Seamless Switching, Scaler, Quad View, PIP, PBP, Mouse Roaming, Button/Hotkey/Serial/Keypad IN Control
OPTIONAL	
	RJ11 to DB9 Adapter

CONTACT INFORMATION

For more information, please visit our website or contact our customer service team:

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