



USER MANUAL

WolfPack 4K 60 Hz 5x1 Multiviewer

Part Number: HDTVVPX5014K60



Version: V24.09

Safety Reminder

To protect the device and operating personnel from electrostatic discharge, you need to check and ensure that the device is grounding well before the device is powered on. Please observe the following when you install, use, and maintain this equipment.



Make sure the device has a ground connection.

Important Safety Instructions

	<p>1. Do not expose this apparatus to rain, moisture, dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on the apparatus.</p>		<p>6. Clean this apparatus only with dry cloth.</p>
	<p>2. Do not install or place this unit in a bookcase, built-in cabinet or in another confined space. Ensure the unit is well ventilated.</p>		<p>7. Unplug this apparatus during lightning storms or when unused for long periods of time.</p>
	<p>3. To prevent risk of electric shock or fire hazard due to overheating, do not obstruct the unit's ventilation openings with newspapers, tablecloths, curtains, and similar items.</p>		<p>8. Protect the power cord from being walked on or pinched particularly at plugs.</p>
	<p>4. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.</p>		<p>9. Only use attachments / accessories specified by the manufacturer.</p>
	<p>5. Do not place sources of naked flames, such as lighted candles, on the unit.</p>		<p>10. Refer all servicing to qualified service personnel.</p>

Warnings of FCC

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and decoder.
- Connect the equipment into an outlet on a circuit different from that to which the decoder is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Introduction

This product is a real 4K60 multi-viewer switcher with seamless switching (*when single-window mode) and scaling function, it supports 3 HDMI inputs, 2 Display Port inputs and 1 HDMI output with 3.5mm audio out. The resolution of both inputs and output can up to 4K@60hz 4:4:4, the bandwidth can up to 18Gbps. Users can use the front panel push buttons, IR remote control, and RS232 codes to control the unit. In general, this product is a very practical and friendly use real 4K60 multi-viewer switcher. It can be widely used in games, professional conferencing, radio and television projects, security monitoring field, and so on applications.

Features

- Support 8 working modes/layouts
- Support HDMI2.0, and the resolution up to 3840*2160@60Hz
- Support 4K60 inputs and 4K60 output, pixel to pixel display without losses
- Support seamless switching even when different resolutions inputs
- Support the front panel push-button, IR remote
- Support USB-A upgrading

Specifications

Video	
Input port	1 x HDMI2.0; 3 x HDMI1.4
Input resolution	HDMI2.0: 640x480, 800x600, 1024x768, 1280x768, 1280x800, 1280x1024, 1360x768, 1366x768, 1440x900, 1400x1050, 1600x1200, 1680x1050, 1920x1200, 720x480 (480p), 720x576 (576p), 1280x720 (720p30), 1280x720 (720p50), 1280x720 (720p60), 1920x1080 (1080p24), 1920x1080 (1080p25), 1920x1080 (1080p30), 1920x1080 (1080p50), 1920x1080 (1080p60), 3840x2160 (2160p30), 3840x2160 (2160p50), 3840x2160 (2160p60)
Output port	1 x HDMI2.0
Output resolution	HDMI2.0: 1920x1080 (1080p50), 1920x1080 (1080p60), 3840x2160 (2160p30), 3840x2160 (2160p50), 3840x2160 (2160p60) 1 = 23.98 Hz, 2 = 24 Hz, 3 = 25 Hz, 4 = 29.97 Hz, 5 = 30

	Hz, 6 = 50 Hz, 7 = 59.94 Hz, 8 = 60 Hz, 9 = 75 Hz	
Audio		
Input port		
Input audio signal	RAW PCM, 16 bit, 32/44.1/48KHz sips; PCM 2.0	
Output port	1 x HDMI2.0;1 x Analog Audio	
Output audio signal	RAW PCM, 16 bit, 32/44.1/48KHz sips; PCM 2.0	
Control		
Front control	IN1: Input 1 IN2: Input 2 IN3: Input 3 IN4: Input 4 IN5: Input 5	Single-view mode
	田: Default input 1 to input 4	Quad-view mode
IR	All the functions of the button can be realized through the remote control, and it also supports fast switching.	
RJ45	DB9, serial port control	
Data		
Operating temperature	0 to +45°C (32 to + 113 °F)	
Storage temperature	-20 to +70°C (-4 to + 158 °F)	
Humidity	10% to 90%	
Static Protection	Human body discharge mode: ±8kV (air gap discharge)/ ±4kV (contact discharge)	
Power adapter	12 V 1.5 A DC	
Power consumption	10W (Max)	
Product size	Without the ears	
Net	kg	

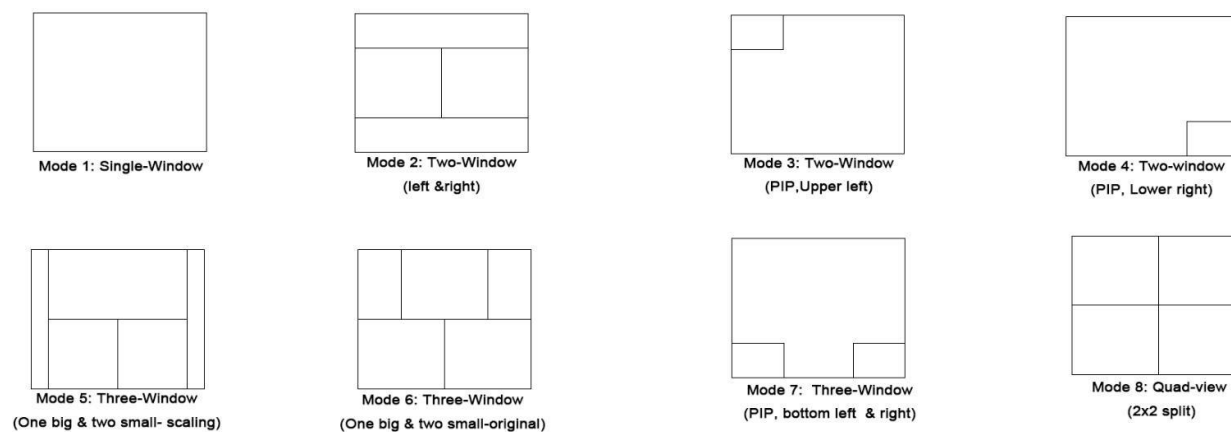
Panels



Connection diagram



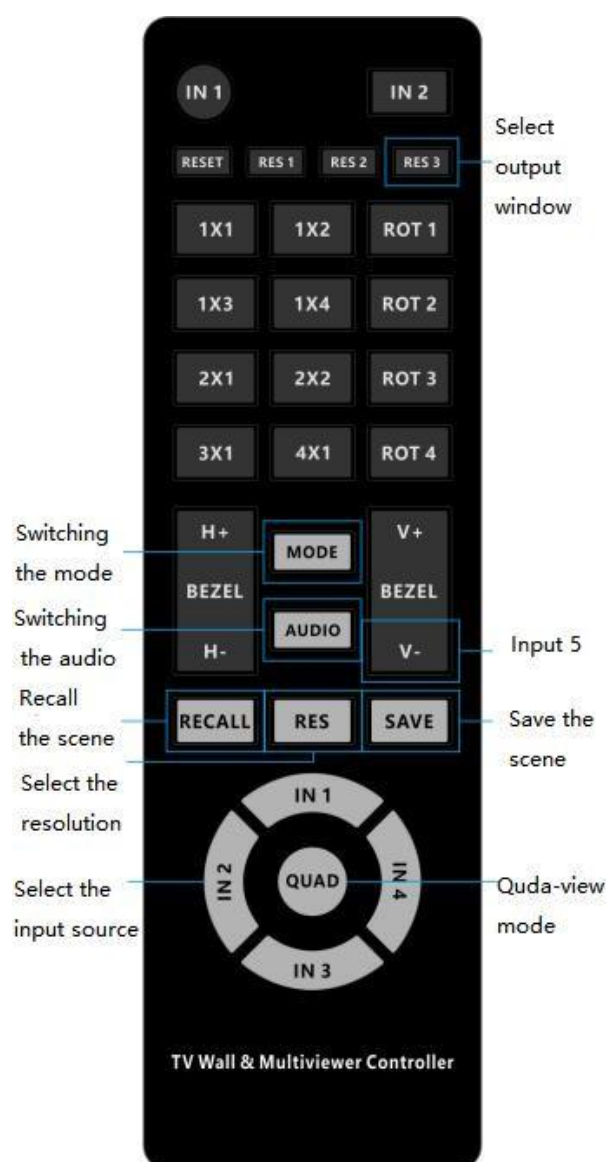
Working Modes



IR remote

RESET: Press 6 times continuously to reset

Lock/ unlock the screen: Press (RES3+RECALL) 3 times continuously to lock, another 3 times to unlock.



RS232 control command

RS232 cable with straight-through

connection (USB-RS232 can be used directly to control) Communication protocol:

Baud rate: 115200

Data bit: 8

Stop bit: 1 Check bit: None

All control commands are sent in hexadecimal format or can be sent ASCII command (get help.) to get the full commands list in return.

Function	Control command	Description
Reset	EB 90 00 12 00 ff 21 00 00 00 00 00 00 00 00 00 00 00 00	Reset to quad-view mode, and the output resolution to 1080P60
Adjust the output resolution	EB 90 00 12 00 ff 23 00 00 00 00 00 00 00 00 00 00 00 00	Output resolution is 1920x1080@60
	EB 90 00 12 00 ff 23 01 00 00 00 00 00 00 00 00 00 00 00	Output resolution is 1920x1080@50
	EB 90 00 12 00 ff 23 02 00 00 00	Output resolution is 1920x1200@60
	00 00 00 00 00 00 00 00	
	EB 90 00 12 00 ff 23 03 00 00 00 00 00 00 00 00 00 00 00	Output resolution is 1360x768@60
	EB 90 00 12 00 ff 23 04 00 00 00 00 00 00 00 00 00 00 00	Output resolution is 1280x720@60
	EB 90 00 12 00 ff 23 05 00 00 00 00 00 00 00 00 00 00 00	Output resolution is 1024x768@60
	EB 90 00 12 00 ff 23 06 00 00 00 00 00 00 00 00 00 00 00	Output resolution is 2560x1600@60
	EB 90 00 12 00 ff 23 07 00 00 00 00 00 00 00 00 00 00 00	Output resolution is 2560x1600@50
	EB 90 00 12 00 ff 23 08 00 00 00 00 00 00 00 00 00 00 00	Output resolution is 3840x2160@60
	EB 90 00 12 00 ff 23 0B 00 00 00 00 00 00 00 00 00 00 00	Output resolution is 3840x2160@30
	EB 90 00 12 00 ff 23 0B 00 00 00 00 00 00 00 00 00 00 00	Output resolution is 3840x2160@25
	EB 90 00 12 00 ff 23 0C 00 00 00 00 00 00 00 00 00 00 00	Output resolution is 3840x2160@24

	EB 90 00 12 00 ff 23 0D 00 00 00 00 00 00 00 00 00 00 00	Output resolution is 4096x2160@60
	EB 90 00 12 00 ff 23 0E 00 00 00 00 00 00 00 00 00 00 00	Output resolution is 4096x2160@30
	EB 90 00 12 00 ff 23 11 00 00 00 00 00 00 00 00 00 00 00	Output resolution is 2560x1080@60
	EB 90 00 12 00 ff 23 12 00 00 00 00 00 00 00 00 00 00 00	Output resolution is 2560x1440@60
Recall the scene	EB 90 00 12 00 ff 2E 00 00 00 00 00 00 00 00 00 00 00 00	Recall the scene 1
	EB 90 00 12 00 ff 2E 01 00 00 00 00 00 00 00 00 00 00 00	Recall the scene 2
	EB 90 00 12 00 ff 2E 02 00 00 00 00 00 00 00 00 00 00 00	Recall the scene 3
	EB 90 00 12 00 ff 2E 03 00 00 00 00 00 00 00 00 00 00 00	Recall the scene 4
	EB 90 00 12 00 ff 2E 04 00 00 00 00 00 00 00 00 00 00 00	Recall the scene 5
	EB 90 00 12 00 ff 2E 05 00 00 00 00 00 00 00 00 00 00 00	Recall the scene 6
	EB 90 00 12 00 ff 2E 06 00 00 00 00 00 00 00 00 00 00 00	Recall the scene 7
	EB 90 00 12 00 ff 2E 07 00 00 00 00 00 00 00 00 00 00 00	Recall the scene 8
	EB 90 00 12 00 ff 2E 08 00 00 00 00 00 00 00 00 00 00 00	Recall the scene 9
	EB 90 00 12 00 ff 2F 09 00 00 00 00 00 00 00 00 00 00 00	Recall the scene 10
Save the scene	EB 90 00 12 00 ff 2F 00 00 00 00 00 00 00 00 00 00 00 00	Save to scene 1
	EB 90 00 12 00 ff 2F 01 00 00 00 00 00 00 00 00 00 00 00	Save to scene 2
	EB 90 00 12 00 ff 2F 02 00 00 00 00 00 00 00 00 00 00 00	Save to scene3
	EB 90 00 12 00 ff 2F 03 00 00 00 00 00 00 00 00 00 00 00	Save to scene 4
	EB 90 00 12 00 ff 2F 04 00 00 00 00 00 00 00 00 00 00 00	Save to scene 5
	EB 90 00 12 00 ff 2F 05 00 00 00 00 00 00 00 00 00 00 00	Save to scene 6
	EB 90 00 12 00 ff 2F 06 00 00 00 00 00 00 00 00 00 00 00	Save to scene7
	EB 90 00 12 00 ff 2F 07 00 00 00 00 00 00 00 00 00 00 00	Save to scene 8
	EB 90 00 12 00 ff 2F 08 00 00 00 00 00 00 00 00 00 00 00	Save to scene 9
	EB 90 00 12 00 ff 2F 09 00 00 00 00 00 00 00 00 00 00 00	Save to scene 10

Screen working modes	EB 90 00 12 00 ff 32 00 00 01 02 03 00 00 00 00 00 00	Mode 1: Single-Window
	EB 90 00 12 00 ff 32 01 00 01 02 03 00 00 00 00 00 00	Mode 2: Two-Window (left &right)
	EB 90 00 12 00 ff 32 02 00 01 02 03 00 00 00 00 00 00	Mode 3: Two-Window (PIP, Upper left)
	EB 90 00 12 00 ff 32 03 00 01 02 03 00 00 00 00 00 00	Mode 4: Two-window (PIP, Lower right)
	EB 90 00 12 00 ff 32 04 00 01 02 03 00 00 00 00 00 00	Mode 5: Three-Window (One big & two small, the two small ones with scaling)
	EB 90 00 12 00 ff 32 05 00 01 02 03 00 00 00 00 00 00	Mode 6: Three-Window (One big & two small, the two small ones with original sizes)
	EB 90 00 12 00 ff 32 06 00 01 02 03 00 00 00 00 00 00	Mode 7: Three-Window (PIP, bottom left & right)
	EB 90 00 12 00 ff 32 07 00 01 02 03 00 00 00 00 00 00	Mode 8: Quad-view (2x2 split)
Window signal switching	EB 90 00 12 00 ff 31 00 01 02 03 00 00 00 00 00 00 00	Win1~4 correspond to input 1~4 respectively
	EB 90 00 12 00 ff 31 00 00 00 00 00 00 00 00 00 00 00	Win1~4 all corresponds to input 1
	EB 90 00 12 00 ff 31 01 01 01 01 00 00 00 00 00 00 00	Win1~4 all corresponds to input 2
	EB 90 00 12 00 ff 31 02 02 02 02 00 00 00 00 00 00 00	Win1~4 all corresponds to input 3
	EB 90 00 12 00 ff 31 03 03 03 03 00 00 00 00 00 00 00	Win1~4 all corresponds to input 4
Freeze	EB 90 00 12 00 ff 2A 00 00 00 00 00 00 00 00 00 00 00	Freeze all windows
Unfreeze	EB 90 00 12 00 ff 2A 01 01 01 01 00 00 00 00 00 00 00	Unfreeze all windows
	EB 90 00 12 00 ff 30 00 00 00 00 00 00 00 00 00 00 00	Switch to channel 1
	EB 90 00 12 00 ff 30 01 00 00 00 00 00 00 00 00 00 00	Switch to channel 2
Multi-screen audio channel switching	EB 90 00 12 00 ff 30 02 00 00 00 00 00 00 00 00 00 00	Switch to channel 3
	EB 90 00 12 00 ff 30 03 00 00 00 00 00 00 00 00 00 00	Switch to channel 4

After Sales

Warranty Information

The Company warrants that the process and materials of the product are not defective under normal use and service for 2 (2) years following the date of purchase from the Company or its authorized distributors.

If the product does not work within the guaranteed warranty period, the company will choose and pay for the repair of the defective product or component, the delivery of the equivalent product or component to the user for replacement of the defective item or refund the payment which users have made.

The replaced product will become the property of the Company. The replacement product could be new or repaired.

Whichever is longer, any replacement or repair of the product or component is for a period of ninety (90) days or the remaining period of the initial warranty. The Company shall not be responsible for any software, firmware, information, or memory data contained in, stored in, or integrated with the product repaired by the customer's return, whether or not during the warranty period.

Warranty limitations and exceptions

Except above limited warranty, if the product is damaged by over usage, incorrectly use, ignore, accident, unusual physical pressure or voltage, unauthorized modification, alteration or services rendered by someone other than the Company or its authorized agent, the company will not have to bear additional obligations. Except using the product properly in the proper application or normal usage.



HDTV Supply, Inc

Inquiries and Aftersales Support

For any inquiries or assistance related to this product, including aftersales service, please contact our customer support team. We are committed to providing you with the highest level of service.

Contact Details:

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Our team is ready to assist with any questions or concerns you may have.