Description: 4 ports HDMI v2.1 8K60 USB3.0 KVM Switcher w/IR, RS232







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This is a 4x1 KVM Switcher with hotkey switching. It supports resolutions up to 8K@60Hz 4:2:0 10bit and can also transmit USB 3.0 signal up to 5Gbps for KVM function.

The switcher features virtual interaction function, so that it can automatically wake up the connected PC that is in standby mode, which can reduce the switching time. It also supports direct switching through buttons on the front panel, IR remote, and hotkey through keyboard/mouse connected to the special USB port. It provides a wide compatibility choice for different operating systems, such as Windows, Mac OS and Linux, no driver required and simple plug and play.

Features:

- HDCP 2.3 compliant
- Support Ultra-wide Screen, resolution up to 8K@60Hz, 4K@120Hz/144Hz, 1080P@240Hz
- Support VRR, ALLM, QMS, QFT, SBTM as specified in HDMI 2.1
- HDR, HDR10, HDR10+, Dolby Vision, HLG pass-through
- Using only 1 set of keyboard, mouse and monitor to control 4 computers
- Support video fast switching, and keyboard/mouse seamless switching
- Each input port has an EDID emulator to provide the correct information for the PC
- Support hot plug, disconnect or connect devices to the KVM at any time
- Switching via front panel buttons, keyboard/mouse hotkeys, IR remote control, and RS-232 commands
- Support auto switching
- Advanced hardware/software design and production ensure zero latency
- The integrated USB 3.0 ports allow you to share USB peripherals like printer, scanner, webcam and hard disk between computers with data transfer rate up to 5Gbp/s
- Compact design for easy and flexible installation

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Specifications:

Technical:				
HDMI Compliance	HDMI 2.1			
HDCP Compliance	HDCP 2.3			
Video Bandwidth	40Gbps			
Audio Latency	No Latency			
Video Latency	No Latency			
Video Resolution	Up to 8K@60Hz, 4K@120Hz/144Hz, 1080P@240Hz			
IR Level	5Vp-p			
IR Frequency	Fixed frequency 38KHz			
Color Space	RGB 4:4:4, YCbCr 4:4:4, YCbCr 4:2:2, YCbCr 4:2:0			
Color Depth	8/10/12bit			
HDR	HDR, HDR10, HDR10+, Dolby Vision, HLG			
CEC	Support			
Audio Formats	HDMI IN/OUT:			
	LPCM, Dolby Digital/Plus/EX, Dolby True HD, Dolby Atmos, DTS, DTS-			
	EX, DTS-96/24, DTS High Res, DTS-HD Master Audio, DTS:X, DSD			
	L/R OUT:			
	PCM 2.0CH			
ESD Protection	IEC 61000-4-2:			
±8kV (Air-gap discharge), ±4kV (Contact discharge)				
Connection:				
Input ports	4 x HDMI input [Type A, 19-pin female]			
Output ports 1 x HDMI output [Type A, 19-pin female]				
	1 x L/R audio output [3.5mm Stereo Mini-jack]			
Control ports	1 x RS-232 [3pin-3.81mm phoenix connector]			
	1 x IR EXT [3.5mm Stereo Mini-jack]			
	4 x USB HOST [USB Type B]			
	4 x USB DEVICES [USB Type A]			
Mechanical:				
Housing	Metal Enclosure			
Color	Black			
Dimensions	270mm [W] x 100mm [D] x 30mm [H]			
Weight	756g			
Power Supply				
	Output: DC 12V/1A (US/EU standard, CE/FCC/UL certified)			
Power Consumption	, , , , , , , , , , , , , , , , , , , ,			
	Standby mode: 0.6W			
Operating	32 - 104°F / 0 - 40°C			
Temperature				

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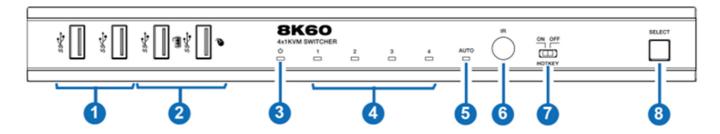
Storage	-4 - 140°F / -20 - 60°C				
Temperature					
Relative Humidity	20 - 90% RH (no-condensing)				
Recommended HDMI Cable					
Video Resolution	8K60/8K30/4K120	4K60	1080P		
HDMI Cable Type	Ultra HDMI 2.1 cable HDMI cable HDMI cable				
HDMI Cable Length	2m/6.6ft	5m/16ft	10m/33ft		
(HDMI IN / OUT)					
The use of "ATZ Premium High Speed HDMI" cable is highly recommended.					

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Operation Controls and Functions:

1) Front Panel

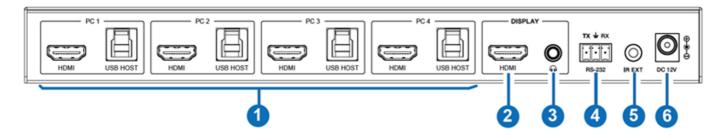


No.	Name	Function Description		
1	USB 3.0 ports	USB 3.2 Gen 1 device ports, connected to USB 3.0 flash disk,		
		camera, printer etc.		
2	USB 3.0 ports	• When Hotkey switch to OFF mode, these two ports support USB 3.2		
	(with hotkey	Gen 1 device.		
	mode)	• When Hotkey switch to ON mode, these two ports support USB 1.1		
		mouse and keyboard only.		
3	3 Power LED The Power LED will light in green when the product is working			
		red when the product is on standby.		
4	4 Input channel When the HDMI input port 1/2/3/4 is selected as the signal			
	LED 1/2/3/4	channel, the corresponding LED 1/2/3/4 will light in green.		
5	AUTO LED	When the auto switching function is enabled, the AUTO LED will light		
		in green, otherwise it will light off.		
6	IR Window	IR signal receiving window.		
7	HOTKEY	Use the switch to enable/disable the hotkey switching mode.		
	switch	Switch to "ON": The connected keyboard and mouse support hotkey		
		switching mode.		
		Switch to "OFF": The connected keyboard and mouse don't support		
		hotkey switching mode.		
8	SELECT	Press the button to switch the input channel.		
	button			

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2) Rear Panel



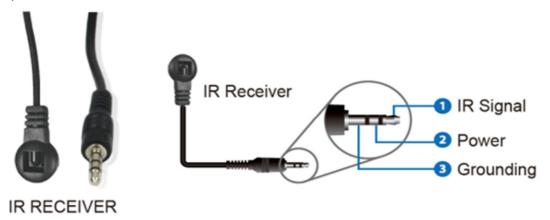
No.	Name	Function Description
1	PC 1/2/3/4 ports	HDMI: HDMI signal input port, connected to HDMI source device such as PC with HDMI cable. USB HOST: USB Host port, connected to the same PC along with HDMI port. (Note: The PC 1 USB HOST port can be used for firmware upgrade.)
2	DISPLAY HDMI port	HDMI signal output port, connected to HDMI display device such as TV or Monitor with HDMI cable.
3	L/R audio port	3.5mm analog audio output port.
4	RS-232 port	3-pin phoenix connector, connected to a PC or control system for serial port upgrade.
5	IR EXT port	IR signal receiving port, connected with 38KHz IR Receiver cable. If the IR signal receiving window of the unit is blocked or the unit is installed in a closed area out of infrared line of sight, the IR receiver cable can be inserted to the "IR EXT" port to receive the IR remote signal.
6	DC 12V	DC 12V/1A power input port.

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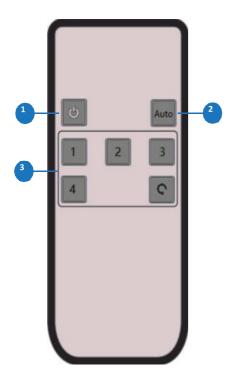


3) IR Pin Definitation

IR Receiver pin's definition is as below:



4) IR Remote



- 1 Power on or Standby: Press this button to power on the switcher or set it to standby mode.
- (2) **Auto:** Press this button to enable/disable the auto switching function.
- ③ 1/2/3/4: Press 1/2/3/4 button to select the HDMI input port 1/2/3/4 as the input channel, and the corresponding channel LED on the front panel will light in green.
 - : Press this button to cyclically switch the input channel.

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5) HotKey Switch Function

The Hotkey switch on the front panel allows you to enable/disable the hotkey switch function.

- (1) When Hotkey switch to OFF mode, the hotkey switch function is disabled, and two USB 3.0 ports (with hotkey mode) support USB 3.2 Gen 1 device.
- (2) When Hotkey switch to ON mode, the hotkey switch function is enabled, and two USB 3.0 ports (with hotkey mode) only support USB 1.1 mouse and keyboard, which can be used for hotkey switching.

6) Keyboard & Mouse Hotkey Function

When the hotkey mode is enabled, you can use keyboard and mouse hot keys to operate and control the product.

(1) Keyboard hotkeys are as following:

(2) Mouse hotkeys are as following:

Double-Click Middle-Right (Double-click the mouse scroll wheel, and then click the right button): Switch to next input

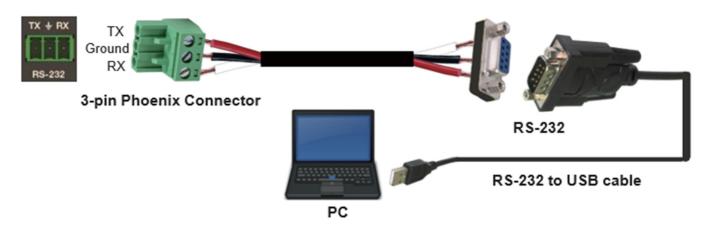
Double-Click Middle-Left (Double-click the mouse scroll wheel, and then click the left button): Switch to previous input

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7) ASCII Commands

The product also supports ASCII commands control. Connect the RS-232 port of the product to a PC with a 3-pin phoenix connector cable and an RS-232 to USB cable. The connection method is as follows.



Then, open a Serial Command tool on PC to send ASCII commands to control the product. The ASCII commands list about the product is shown as below.

ASCII Commands				
Serial port protocol. Baud rate: 115200 (default), Data bits: 8, Stop bits:1, Check bit: 0				
x - Parameter 1 z - Parameter 2 ! - Delimiter				
Command Code	Function Description	Example	Feedback	Default Setting
help!	List all commands	help!		
status!	Get device current status	status!		
r type!	Get device model	r type!	4x1 kvm hdmi2.1 switcher	
r fw version!	Get firmware version	r fw version!	mcu fw version: vx.xx.xx kvm fw version: vx.xx.xx	
power z!	Power on/off the device (z=0~1) 0. power off 1. power on	power 1!	power on	
r power!	Get current power state	r power!	power on	
reboot!	Reboot the device	reboot!	reboot	
Command Code	Function Description	Example	Feedback	Default Setting
reset!	Reset to factory defaults	reset!	reset to factory defaults	

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s output 1 stream	Set output 1 stream	s output 1	output 1 stream:	output 1 stream:
x!	enable/ disable	stream 1!	enable	enable
	(x=0~1)			
	0. disable output			
	stream			
	1. enable output			
	stream			
r output 1 stream!	Get output 1 stream	r output 1	output 1 stream:	
	status	stream!	enable	
s auto switch x!	Enable/disable auto	s auto	auto switch:	auto switch:
	switch feature $(x=0~1)$	switch 1!	enable	enable
	0. disable auto switch			
	1. enable auto switch			
r auto switch!	Get auto switch feature	r auto	auto switch:	
		switch!	enable	
s output 1 in	Route input x source to	s output 1	output1->input1	
source x!	output 1 (x=1~2)	in source 1!		
	1.input1			
	2.input2			
	3.input3			
	4.input4			
r output 1 in	Get output 1 selected	r output 1	output1->input1	
source!	input source	in source!		
s beep z!	Enable/disable buzzer	s beep 1!	beep on	beep off
	function (z=0~1)			
	0. beep off			
	1. beep on			
r beep!	Get buzzer state	r beep!	beep on	

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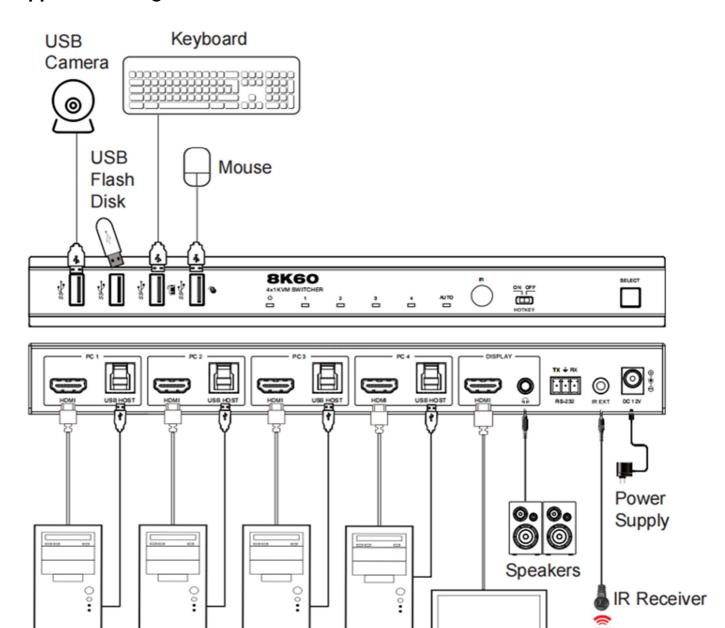


Application Diagram:

PC₁

PC₂

PC₃



PC₄

TV or Monitor

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Package Contents:

- 1 x 8K60 4x1 KVM Switcher
- 1 x IR Remote
- 1 x 3pin-3.81mm Phoenix Connector (male)
- 1 x Fixed Frequency 38KHz IR Receiver Cable (1.5 meters)
- 4 x USB Cable (USB 3.0, AM to BM, 1.8 meters)
- 4 x HDMI Cable (male to male, 1.5 meters)
- 2 x Mounting Ears
- 4 x Machine Screws (KM3*4)
- 1 x 12V/1A Multinational Locking Power Supply
- 1 x User Manual

Warranty: 3 Years

Warranty is effective from the date of original delivery.

This warranty shall be void if a serial number has been removed from the product.