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4KSW21-KVM

2x1 HDMI KVM Switcher

User Manual

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Important Safety Instructions

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

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Introduction

Overview

Thank you for purchasing this product. For proper installation and optimum performance, please read the instructions in this manual carefully.

4KSW21-KVM is a 2x1 HDMI KVM Switcher with HDMI and HDCP2.2 compatibility. It supports resolutions up to 4K@60Hz 4:4:4, multi-channel audio and automatic HDCP 2.2/1.4 compatibility. The switcher allows users control two USB source devices/computers with only one set of USB devices (e.g. USB mouse, USB keyboard, USB flash and other USB2.0 compliant devices). 4KSW21-KVM supports switching by buttons on the front panel or IR remote, and 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

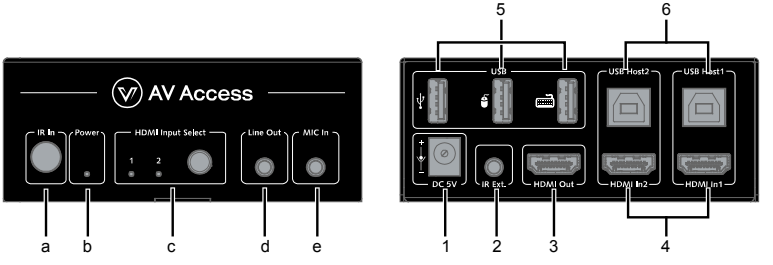
- 2x1 HDMI KVM switcher with HDMI and HDCP2.2 compliant;
- Full 18G bandwidth, up to 4K/UHD @60Hz with 4:4:4 chroma sampling;
- Supports three USB-A port for USB keyboard, USB mouse and other USB2.0 devices to control one of the two computers;
- Supports switching the KVM input port by push button on the front panel, the HDMI input and USB input are switched simultaneously;
- Supports one microphone input and one headphone output for audio application;
- Wide compatibility with Windows 10/8/7 XP, Mac OS and Linux;
- No driver required and simple plug and play.

Package Contents

Before you start the installation of the product, please check the package contents:

- 4KSW21-KVM Switcher x 1
- Power Supply (DC 5V 1A) x 1
- IR Remote x 1
- IR Receive Cable x 1
- USB-A to USB-B Data Cable (1500mm) x 2
- Mounting Brackets (with Screws) x2
- User Manual x 1

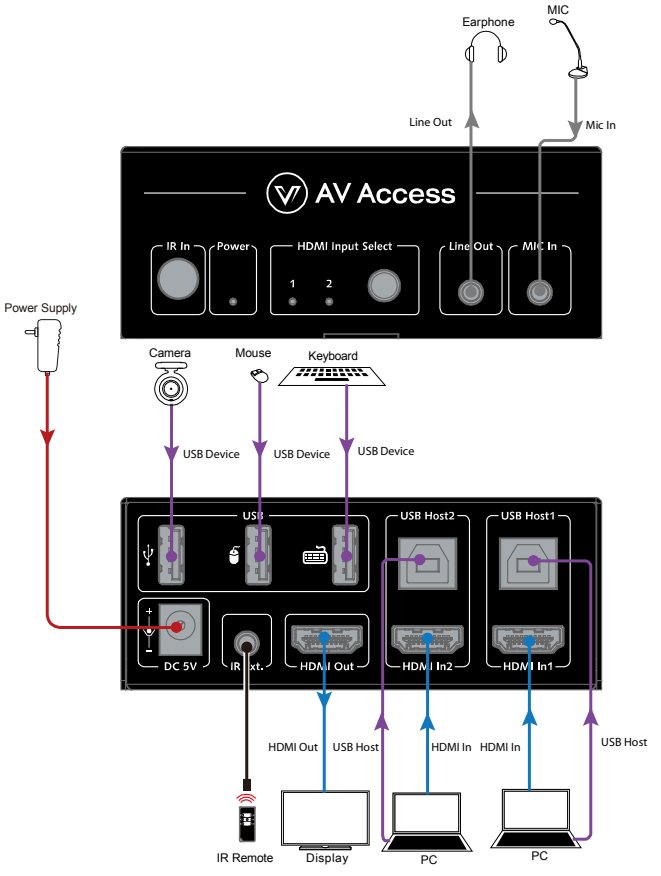
Panel



No.	Name	Description
a	IR In	Receiving the control signal of the IR remote.
b	Power LED	**On:** The switcher is powered on. **Off:** The switcher is powered off.
c	HDMI Input Selection Button and LEDs	**HDMI Input Selection Button:** Press to switch the selected input source. **LED(1 or 2):** **ON:** The corresponding input source (HDMI In 1/2) is selected.

No.	Name	Description
d	Line Out	Connects to an earphone.
e	Mic In	Connects a microphone.
1	DC 5V	Connects to a DC 5V power adapter provided.
2	IR Ext.	Connects to the IR receive Cable provided.
3	HDMI Out	Connects to an HDMI display.
4	HDMI In 1~2	Connects to HDMI sources.
5	USB	Connects to USB devices such as USB keyboard, USB mouse, USB flash.
6	USB Host 1~2	Connects to PC which is followed with HDMI In (1~2), when the source (HDMI In 1 or 2) is selected, the USB devices, earphone and microphone can be connected to the corresponding Host PC.

Application Diagram

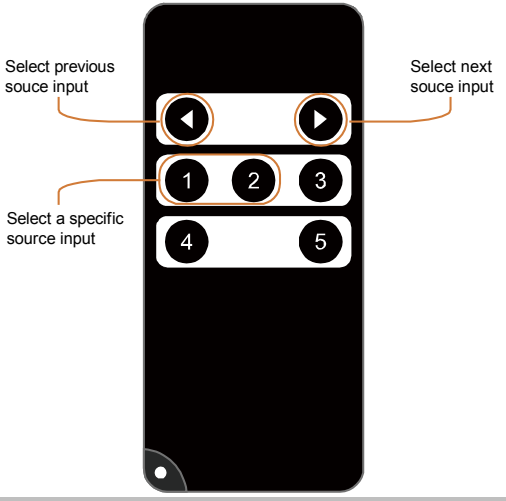


Note:

- The source may be any HDMI source device such as an Apple TV, Blu-ray player, STB, Xbox, etc.
- The display may be any HDMI display device such as a TV, projector, LED/LCD display, video wall, etc.

IR Remote Handset

4KSW21-KVM Switcher can be controlled by the IR remote provided. Point the remote directly at the IR receive cable connected to the "IR Ext." port or point the remote directly at "IR In" window on front panel, switch to the desired input source.



Button	IR Codes	Description
▶	0x02 0x0a	Switch to next active source input (Cycle 1→2)
◀	0x02 0x08	Switch to previous active source input (Cycle 2→1)
1	0x02 0x04	Switch to source 1
2	0x02 0x05	Switch to source 2
3	N/A	Not available
4	N/A	Not available
5	N/A	Not available

Note: Since the encoding format for IR codes above is NEC (38KHz), please ensure any third-party device (e.g. control box) used to IR control the switcher supports NEC (38KHz).

Specification

Video	
Input/Output Signal Type	HDMI with 4K@60Hz 4:4:4, HDCP 2.2; USB: USB2.0
Input/Output Resolution Supported	Up to 4096 x 2160@60Hz, 4:4:4 8bit, including 4K@60Hz/4K@30Hz/1080P/ 1080i/720P
Maximum Data Rate	HDMI: 18Gbps; USB: 480Mbps
Maximum Pixel Clock	600MHz
Control Method	Front Panel, IR Remote
Audio	
Audio format supported	Fully supports audio formats in HDMI 2.0 specification, including PCM, Dolby TrueHD, Dolby Atmos, DTS-HD Master Audio, DTS:X
General	
Operating Temperature	0 to + 45°C (32 to + 113 °F)
Storage Temperature	-20 to +70°C (-4 to +158 °F)
Humidity	10% to 90%, non-condensing
ESD Protection	Human Body Model: ±8kV (air-gap discharge)/ ±4kV (contact discharge)
Product Supply	DC 5V 1A
Power Consumption (Max)	6.5W
Product Dimension	105mm × 42mm × 65.2mm / 4.13" × 1.65" × 2.57"
Product Weight	0.40kg/0.88lb

Transmission Distance

Cable Type	Range	Supported Video
HDMI	Input/Output: 49ft/15m	1080P@60Hz
	Input/Output: 33ft/10m	4K@30Hz
	Input/Output: 16ft/5m	4K@60Hz 4:4:4

Trouble Shooting

1. No Power

Ensure the power is on.

2. No Picture or Video Flash

- Ensure all devices are on, and all cables are qualified and connected properly.
- Ensure all the cables' length are within the transmission distance (refer to Specification table).
- Ensure all the LED indicators are normal.
- When connecting source to display directly, ensure them can work properly.
- Ensure the selected HDMI source is working normally instead of in standby status.
- Ensure the input resolution is supported by the device.

Warranty

Products are backed by a limited 1-year parts and labor warranty. For the following cases AV Access Technology Limited shall charge for the service(s) claimed for the product if the product is still remediable and the warranty card becomes unenforceable or inapplicable.

1. The original serial number (specified by AV Access Technology Limited) labeled on the product has been removed, erased, replaced, defaced or is illegible.
2. The warranty has expired.
3. The defects are caused by the fact that the product is repaired, dismantled or altered by anyone that is not from an AV Access Technology Limited authorized service partner. The defects are caused by the fact that the product is used or handled improperly, roughly or not as instructed in the applicable User Guide.
4. The defects are caused by any force majeure including but not limited to accidents, fire, earthquake, lightning, tsunami and war.
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