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**AV Access**

## **4KSW41-KVM**

**4x1 HDMI2.0 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

4KSW41-KVM is a 4x1 HDMI KVM Switcher with HDMI2.0 and HDCP2.2 compatibility. With the four port KVM switch allows the user controls four source devices/computers with only one set of USB devices (e.g. USB mouse, USB keyboard, USB flash and other USB2.0 compliant devices). This product provides a cost-effective way to share one USB keyboard, one USB mouse, one USB2.0 device and one HDMI monitor to control four computers.

The switcher supports HDMI2.0 specification features including data rates up to 18Gbps 4Kx2K@60Hz (4:4:4) video, multi-channel audio and automatic HDCP 2.2/1.4 compatibility.

The switcher provides four USB-B ports to connect upstream USB host devices and three USB-A ports to control. These USB ports are USB2.0 compliant and downward compatible with USB1.1/1.0. The switcher also provides a unique microphone input and a headphone output interface for computer that doesn't have audio input/output.

The switcher supports direct switching through buttons on the front panel 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.

The switcher can be used in conference rooms, boardrooms, auditoriums, education, hotels and churches with A/V routing, etc. Any application where high quality conversion and switching is required for projection purposes.

## Features

- 4x1 HDMI KVM switcher with HDMI2.0 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 four 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.

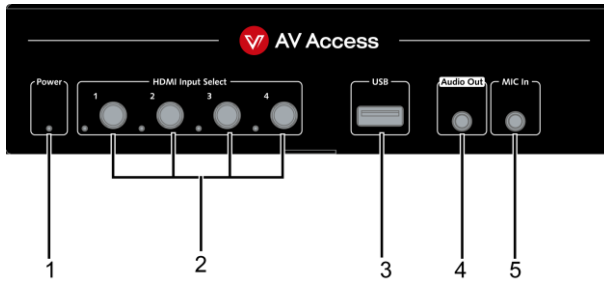
## Package Contents

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

- 4KSW41-KVM Switcher x 1
- DC 12V Power Supply (with US pins) x 1
- Mounting Brackets x2
- USB-A to USB-B Data Cable (1500mm) x 4
- User Manual x 1

# Panel

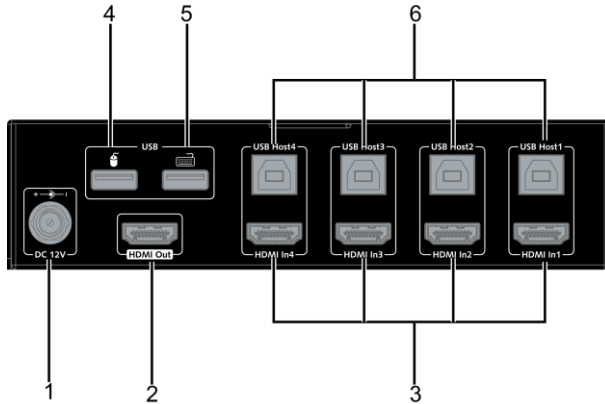
## Front Panel



No.	Name	Description
1	Power LED (Red)	<b>On:</b> The switcher is powered on. <b>Off:</b> The switcher is powered off.
2	HDMI In 1 ~ 4 Button and LED	<b>HDMI In 1~4 Buttons:</b> Press this button select HDMI IN 1~4 as input. <b>LED:</b> LED is located on the left of the button. <b>Red:</b> Select HDMI IN 1 (or 2~4) as input. <b>Off:</b> HDMI IN 1 (or 2~4) is not selected.
3	USB-A Port	Connects to an USB device such as camera.
4	Audio Out	Connects to an earphone.
5	Mic In	Connects a microphone.



## Rear Panel



No.	Name	Description
1	DC 12V	Connects to a DC 12V power adapter.
2	HDMI Out	Connects to a HDMI Display device.
3	HDMI IN (1~4)	Connects to (1~4) HDMI sources.
4	USB A Port	Connects to a USB device such as a keyboard.
5	USB A Port	Connects to a USB device such as a Mouse.
6	USB HOST (1~4)	Connects to a PC which is followed with HDMI IN (1~4), when the source is selected, the USB devices can be connected to the host PC.

# Installation and Application

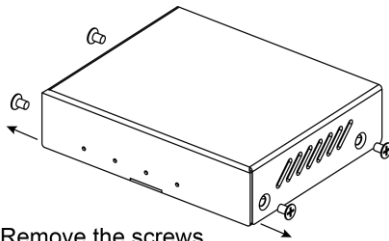
## Installation

**Note:** Before installation, please ensure the device is disconnected from the power source.

In order to keep elegant appearance, we design to share screws with the product chassis, please refer to the below steps to install.

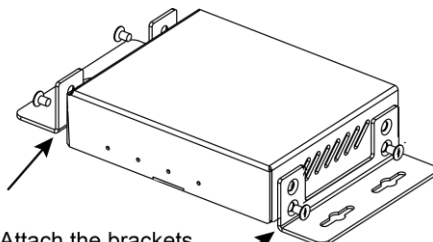
### Steps to install the device in a suitable location:

1. Remove the four screws that secure the side panels to the device.



- 1 Remove the screws from the side panels

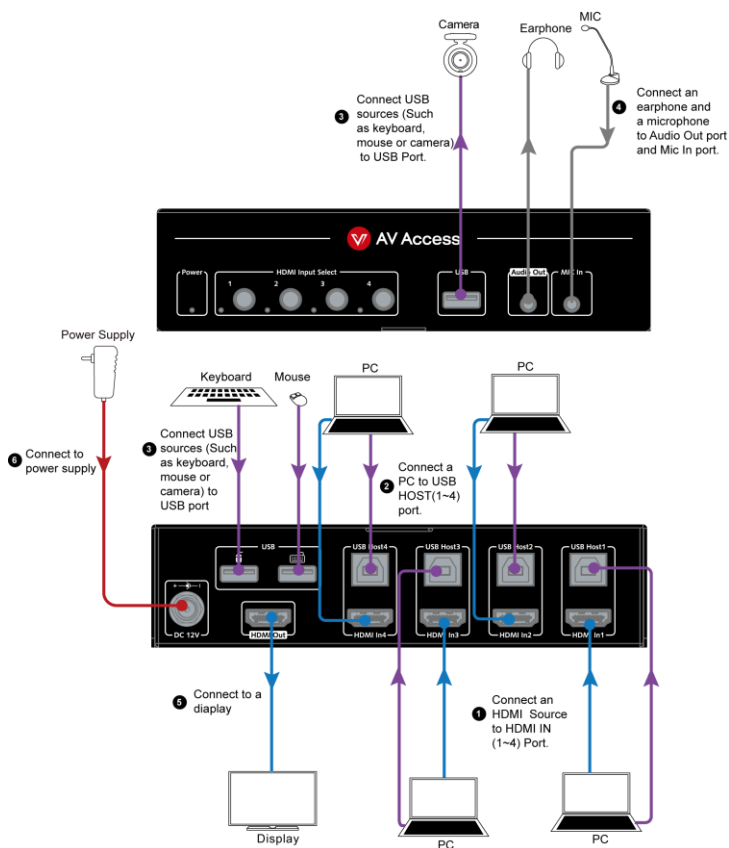
2. Position and install the mounting brackets with the four mounting screws mentioned above.



- 2 Attach the brackets provided to the side panels of the device

3. Mount and secure the device to a surface or a suitable location with the mounting screws.

## Application



### 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.
- When connecting with HDMI2.0 sources, standard HDMI2.0 cables are required.

# Specification

Technical	
Video Input	4 x HDMI in, 4x USB2.0 type-B Host
Input Signal Type	HDMI: HDMI 2.0 / HDCP 2.2 USB: USB2.0
Input/Output Resolution Supported	VESA: 640x480 <sup>8, 9, 10</sup> , 800x600 <sup>8, 9, 10</sup> , 1024x768 <sup>8, 9, 10</sup> , 1024x768 <sup>8, 9, 10</sup> , 1280x768 <sup>8, 10</sup> , 1280x800 <sup>8</sup> , 1280x960 <sup>8, 10</sup> , 1280x1024 <sup>8, 9, 10</sup> , 1360x768 <sup>8</sup> , 1366x768 <sup>8</sup> , 1400x1050 <sup>8</sup> , 1440x900 <sup>8</sup> , 1600x900 <sup>8</sup> , 1600x1200 <sup>8</sup> , 1680x1050 <sup>8</sup> , 1920x1200 <sup>8</sup> , SMPTE: 720x480P <sup>7, 8</sup> , 720x576P <sup>8</sup> , 1280x720P <sup>1, 2, 3, 4, 5, 6, 7, 8</sup> , 1920x1080I <sup>6, 8</sup> , 1920x1080P <sup>1, 2, 3, 4, 5, 6, 7, 8</sup> , 3840x2160 <sup>2, 3, 5, 6, 8</sup> , 4096x2160 <sup>2, 3, 5, 6, 8</sup> , 1 = at 23.98 Hz, 2 = at 24 Hz, 3 = at 25 Hz, 4 = at 29.97 Hz, 5 = at 30 Hz, 6 = at 50 Hz, 7 = at 59.94 Hz, 8 = at 60 Hz, 9 = at 75 Hz, 10 = at 85 Hz;
Maximum Data Rate	HDMI: 18Gbps USB: 480Mbps
Output	1 x HDMI, 3x USB2.0 type-A devices, 1x MIC in, 1x Audio out (Analog)
Output Signal Type	HDMI: HDMI 2.0 /HDCP 2.2 USB: USB2.0
Audio format supported	PCM 2.0/5.1/7.1, Dolby True HD and DTS HD Master Audio
Control method	Front Panel Button Control

<b>General</b>	
Operating Temperature	0 to + 45°C (32 to + 113 °F), 10% to 90%, non-condensing
Storage Temperature	-20 to +70°C (-4 to +158 °F), 10% to 90%, non-condensing
Humidity	10% to 90%, non-condensing
ESD Protection	Human Body Model: ±8kV (air-gap discharge)/ ±4kV (contact discharge)
Product Supply	DC 12V/2A
Power Consumption	4K Full load Power Consumption:7.7W
Product Dimension	170mm × 101mm × 42mm / 6.69" × 3.98" × 1.65"
Product Weight	1.32lb/0.60kg

**Cable Specifications:**

<b>Cable Type</b>	<b>Range</b>	<b>Supported Video</b>
HDMI	Input/Output: 15m/50ft	1080P@60Hz
	Input/Output: 10m/33ft	4K@30Hz 4:4:4 8bit 4K@60Hz 4:2:0 8bit
	Input/Output: 5m/16ft	4K@60Hz 4:4:4 8bit

# Trouble Shooting

## Steps of Regular Troubleshooting Routine

- 1 **Power:** Please make sure the source, display devices and switcher are powered on.
- 2 **Indicator:** Please make sure all LED indicators of the switcher are normal according to user manual.
- 3 **Devices:** Please make sure picture can be shown normally when connecting source to display device directly.
- 4 **Cable:** Plug in and out HDMI cable or try another HDMI cable. Ensure the specific cable length is within the available transmission range according to the Specification section.  
Standard HDMI 2.0 cable is required when 18G signal (4K@60Hz 4:4:4 8bit) is being transmitted.
- 5 **Compatibility:** Please test other source and display devices to determine if it is a compatibility issue.

# 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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