KVM-HDU-4
4-Port HDMI KVM Switch
with
USB 2.0 and 4K Video Support

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FCC RADIO FREQUENCY INTERFERENCE STATEMENT

This device complies with part 15 Class A of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

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

1.0 Introduction

The KVM-HDU-4 is a compact 4 port HDMI KVM Switch with USB 2.0. The switch offers advanced features such as ultra high resolution video support (2560x1440, 2560x1600, and 3840x2160). The switch provides keyboard and mouse emulation for all 4 PC inputs. It does not matter if a PC is selected on the KVM Switch or not, all PCs "see" connection to a keyboard and a mouse. But the data from the "actual" keyboard and mouse connected to the KVM is sent only to the selected PC.

The KVM-HDU-4 also has an integrated 2-port USB 2.0 Hub. When you select a new PC on the KVM, the USB 2.0 hub connects to the selected PC. The hub allows users to connect other USB devices to the PC. For example, USB touch-screens, USB cameras, or USB audio devices, can be accommodated).

The front panel features 4 individual buttons for selecting inputs. LED indicators show the current selected input channel and the status of each input. Inputs can also be selected via hot-key sequences from the keyboard.

2.0 Features

- Supports high resolution video such as1920x1080@60, 2560x1440@60, 2560x1600@60 and 3840x2160@30
- 4 Individual buttons on the front panel for selecting inputs
- Full plug-and-play support with USB keyboard, mouse, and connected peripherals
- Emulates keyboard and mouse for each PC
- Provides USB 2.0 Hub that switches to the selected PC
- Computer OS independent - No driver or software required
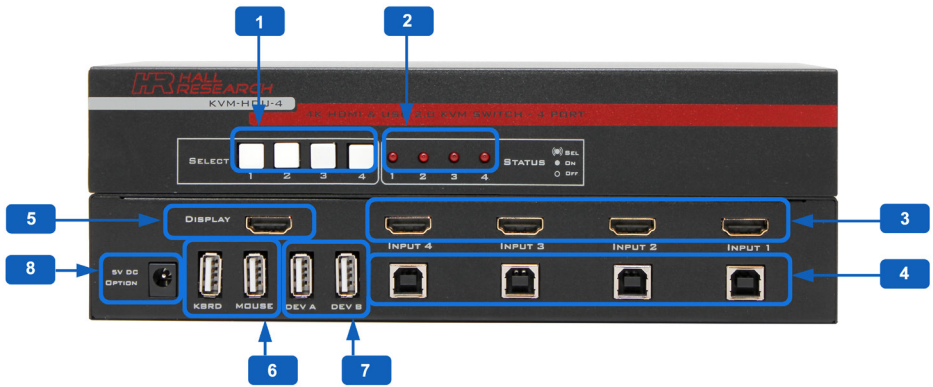- No power supply required for most applications

3.0 Setup and Operation

The figure below shows the rear panel connections on the KVM Switch.

Cables are not included. For each input you must provide one HDMI and one USB cable.

For the vast majority of KVM switching applications, the KVM-HDU-4 does not require any power supply since it draws power from the USB connections from the host PCs.

If the KVM-HDU-4 is going to be used for switching video only with no USB inputs, then a power supply needs to be connected. This separately sold power supply is part number 511-U5V2AP5.

Front and Rear Panels

1. Press to select inputs
2. Status of inputs:
   - Off = No input detected (or connected PC is off)
   - Solid On = Input detected (or connected PC is on)
   - Blinking = Current selection
3. HDMI inputs – Connect to video sources (of each PC)
4. USB inputs – Connect to Host PC USB ports
5. HDMI output – Connect to a Monitor
6. Dedicated Keyboard and Mouse ports
7. USB 2.0 Peripherals Ports – These ports are from a USB 2.0 Hub that gets switched to the selected input PC's USB
8. Optional Power Input – For KVM applications no external power would be required for most applications.

3.1 HotKey Sequences

- To select inputs press the following key sequence (1 represents the desired input channel)

- To start SCAN MODE press the following key sequence

Notes: (1) You must complete the key sequence in 3 seconds.
(2) In SCAN mode the switch automatically cycles through all inputs one at a time. Each input is shown for 10 seconds. To stop the scan mode, press any key.

4.0 Troubleshooting

If you are experiencing problems getting the switch to work properly, please use the following troubleshooting suggestions.

- Make sure that all of the connections are solid.
- Check the LED's on the front panel.
- Disconnect power and all USB inputs and reconnect them

If you still are not able to get the system working properly, contact Hall Research support via email or fill out the form on support page of www.hallresearch .com. Give a detailed description of the issue and the troubleshooting steps you have taken.

Do not open or try to repair the unit yourself as this will void your warranty. To return the extender for repair, contact HR Support and obtain an RMA (Return Material Authorization) number.

5.0 Specifications

Video

Standard	HDMI
Number of inputs	4
Bandwidth	300 MHz pixel clock or 10.2 Gbps video data rate
Max Resolution	3840 x 2160 @ 60Hz (with 4:2:0 YUV color sampling)
	3840 x 2160 @ 30Hz (with 4:4:4 YUV color sampling)

USB

Standard	Version 2.0
Connectors	4x USB Type B Female for Hosts (PCs)
	1x Keyboard Type A Female
	1x Mouse Type A Female
	2x USB 2.0 Peripherals from Built in Hub. Type A Female

General

Optional Power Supply	2 VDC @ 2A
	Note: Power supply is not needed if USB inputs are connected
Power Consumption	0.7 watts
	Excluding extra power drawn by USB devices that may be connected
Temp/humidity	Storage: -40 to +158 °F (-40 to +70 °C) / 10% to 90%, non-condensing
	Operating: +32 to +122 °F (0 to +50 °C) / 10% to 90%, non-condensing
Cooling	Convection
Enclosure type	Metal
Dimensions	Device: 9.65 x 3.74 x 1.61 inch (245 x 95 x 41 mm)
	Package/box: 11.38 x 7.88 x 2.75 inch (290 x 200 x 70 mm)
Weight	Device: 1.85 lbs (840 g)
	Shipping: 2.2 lbs (1 kg)
Vibration	ISTA 1A in carton (International Safe Transit Association)
Safety	CE
EMI/EMC	CE, FCC Class A
MTBF	90,000 hours (Calculated Estimate)
Warranty	3 years parts and labor

Specifications are subject to change without notice

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