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KVM-UHD-4

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

USER MANUAL

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Important Safety Instructions

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.

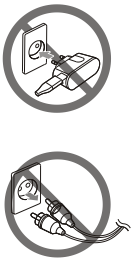
2. Do not install or place this unit in a bookcase, built-in cabinet or in another confined space. Ensure the unit is well ventilated.

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.

4. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.

5. Do not place sources of naked flames, such as lighted candles, on the unit.

6. Clean this apparatus only with dry cloth.



7. Unplug this apparatus during lightning storms or when unused for long periods of time.

8. Protect the power cord from being walked on or pinched particularly at plugs.

9. Only use attachments / accessories specified by the manufacturer.

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Introduction

OVERVIEW

The KVM-HDU-4 is a compact 4 port HDMI KVM Switch that features high speed video switching with HDMI Sink emulation technology, integrated 2-port USB hub, and Keyboard & mouse emulation for each PC input.

The switch supports ultrahigh resolution video including: 2560 x 1440, 2560 x 1600, and 3840 x 2160 @ 60 Hz.

Connected PCs do not experience any interruption to the video, keyboard, and mouse operation as a result of switching among the 4 inputs. All connected PCs continuously detect a keyboard, mouse and display regardless of the currently selected port.

The KVM-HDU-4 provides an integrated 2-port USB 2.0 Hub. This hub gets connected to the selected PC as the user switches among the 4 inputs. Users can connect other USB devices such as webcams, touch screens or printers to the KVM Switch. Devices plugged into the USB hub ports on the KVM Switch are only routed to the selected PC. When you select a new PC, those USB devices disconnect from the last PC and connect to the newly selected PC.

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

A power supply connection is not required. The KVM draws its operating power from the PC USB connections. However, a 5v power input connector is provided on the unit for special cases where power-hungry USB devices are used and/or the PCs do not meet the USB power sourcing specifications.

FEATURES

- Supports high resolution video such as1920x1080, 2560x1440, 2560x1600 and 3840x2160.
- 4 Individual buttons on the front panel for selecting inputs.
- Full plug-and-play support with USB keyboard, mouse, and connected peripherals.
- Emulates keyboard, mouse and display for all PCs.
- Smart EDID Management.
- 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.

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 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 desired input.
2. Status of inputs:
    - Off = No host/PC connected (or host is off)
    - Solid On = Host connected but not selected
    - Blinking = Host port selected

3. HDMI inputs – Connect to video sources (from each host PC)
4. USB inputs – Connect to host PC USB ports.
5. HDMI output – Connect to a display.
6. Dedicated keyboard and mouse ports
7. USB 2.0 Peripherals Ports – These ports are from an integrated USB 2.0 Hub and are routed to the selected PC's USB port.
8. **Optional** Power Input – For KVM applications, no external power would be required for most applications.

Hotkey Sequences

- To select inputs press the following key sequence represents the desired input channel in the example below)

- To start SCAN MODE, press the following key sequence

Note: (1) You must complete the key sequence within 3 seconds.

(1 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.

Smart EDID management

The KVM Switch reads the EDID of the connected display and uses it on all its inputs. If there is no monitor at the output, the Switch will recall and use the EDID of the last monitor that was plugged.

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 LEDs 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 https://halltechav.com

Please give a detailed description of the issue and the troubleshooting steps you have taken along with the serial number.

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.

Specifications

Video	
Standards	HDMI
Number of inputs	4
Bandwidth	600 MHz pixel clock or 18 Gbps video data rate
Max Resolution	3840 x 2160 @ 60Hz

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	5 VDC @ 2A Note: Power supply is not required for normal applications (USB inputs supply power)
Power Consumption	0.7 watts Excluding extra power drawn by USB devices that may be connected.
Temp/humidity	Storage: -40~+158 °F (-40~+70 °C) / 10%~90%, non-condensing Operating: +32~+122 °F (0~+50 °C) / 10%~90%, non-condensing
Cooling	GEM-EX-S: 2.5 A DC depending on # and type of connected USB devices. GEM-EX-R: 1.5 A DC depending on # and type of connected USB devices.
Cooling	Convection
Enclosure Type	Metal (Steel)
Dimensions	Device: 9.65" x 3.74" x 1.61" (245 x 95 x 41 mm) Package/box: 11.38" x 7.88" x 2.75" (290 x 200 x 70 mm)
Product Weight	2.2 lbs. (1 kg)
Vibration	ISTA 1A in carton (International Safe Transit Association)
EMI/EMC	CE
MTBF	90,000 hours (estimate)
Warranty	3 years parts and labor

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