

# Installation Manual

## QuadKVM Quadruple View KVM Switch



View four different analog/digital video sources simultaneously on one screen with USB keyboard and mouse support.

#### Introduction

The QuadKVM Switch allows you to view up to four different analog and digital video sources simultaneously on one display device. It also supports keyboard and mouse functionality, allowing you to access all four displays with one set of interface controls. Connections to video sources are managed via DVI-I connectors. Advanced viewing options include dual-mode, quad-mode, full-screen mode, and PIP (picture in picture) mode. Use this device to simplify management of multiple sources by accessing and controlling them all through a single display and set of controls.

#### **Features**

- View up to four computers on a single monitor at the press of a button
- Supports USB keyboard and mouse
- On-screen display (OSD) makes setup and switching easy
- Change views by pressing the tact switches, keyboard hotkeys, and RS-232
- · Display each computer with clean and crisp high-resolution video
- Supports DVI-D resolutions up to 1900 x 1200 @ 60 Hz
- Supports VGA resolutions up to 1600 x 1200 @ 60Hz
- Quad-mode splits the screen to show four computers on one screen
- Dual-mode splits the screen to show two computers on one screen
- PiP-mode displays one computer in full screen with three thumbnail views
- Control any one computer while monitoring three others
- · User-defined frame rate for each input



## What's in the Box?

PART NO.	QTY	DESCRIPTION
SMQKVM	1	4-Port DVI, USB 1.1 KVM switch with PiP/Dual/Quad/Full modes.
PS5VDC4A	1	5VDC4A Power Supply

## **Technical Specifications**

VIDEO	
Format	DVI-D Single Line
Maximum Pixel Clock	165 MHz
Input Interface	(4) DVI-D 29-pin female
Output Interface	(1) DVI-D 29-pin female
	DVI-D up to 1920 x 1200 @60Hz VGA up to 1600 x 1200 @60Hz
DDC	5 volts p-p(TTL)
Input Equalization	Automatic
Input Cable Length	Up to 20 ft.
Output Cable Length	Up to 20 ft.
USB	
Signal Type	USB 1.1 and 1.0
Input Interface (TX)	(4) USB Type B (Female)
Output Interface (RX)	(2) USB Type A (Female)
CONTROL	
Front Panel	Tact Switches
Keyboard	Hotkeys
RS-232	RS-232 Commands
OTHER	
Power	External 100-240 VAC/5VDC4A @20W
Dimensions	17"W x 1.75"H x 10.25"D
Weight	5 lbs.
Approvals	UL, CE, ROHS Compliant
Operating Temp.	32-131°F (0-55 °C)
Storage Temp.	-4-185 °F (-20-85 °C)
Humidity	Up to 95%



#### **Applications**

The QuadKVM can be used in many applications that require the real-time monitoring of multiple computers. It is a perfect solution in situations where a user needs to monitor several computers at the same time. In Air Traffic Control environments, several computers need to be monitored for the progress of flights and flight information. The QuadKVM is perfect for multi-tasking, allowing the user to run tasks on each computer and monitor their progress without having to switch back and forth between them.

- Corporate or Educational Presentations
- Financial (Remote Servers/User Control)
- Call Centers for Technical Support
- Industrial (Long-Range Workstation Isolation)
- Airport Installations (Air Traffic Control/Passenger Information)
- KVM Extension where Exceptional Quality of Signal is Crucial
- Medical (Remote Operation Away from Sensitive/Magnetic Equipment)
- Recording (for Large Studios where Editing/Mixing Stations are Compact and/or Require Complete Silence)

#### **Operation**

#### **Setting the Resolution**

The first time you connect a display to the QuadKVM, you will need to set the output resolution to that of your display. To change the resolution, press **MENU** and then a number **1-3**.

The corresponding resolutions are as follows:

- 1 XGA 1024x768
- 2 HDTV 1080p
- 3 WUXGA 1920x1200

#### **Front Panel Operation**

The QuadKVM operates in much the same way as a conventional KVM. To view and control any input, simply press the corresponding button on the front of the QuadKVM. For example, press 1 for the first input, 2 for the second input, and so on.

In addition to the standard KVM functions, the QuadKVM is capable of displaying several inputs at a time with different modes of operation. To switch to a particular mode, simply press the the corresponding button of the front of the QuadKVM. The available modes are defined as follows:



**FullScreen Mode** - In the FullScreen mode, one of the four computers` video sources is displayed in full screen size and maximum resolution. Keyboard and mouse operation automatically switch to the corresponding computer.

For Fullscreen Mode, press FULL.



**PiP Mode** - In the PiP(picture in picture) mode, the full screen display of one of the four video sources is accompanied by one or three small images (thumbnails) containing the other video sources on the right-hand margin of the screen allowing simultaneous monitoring.

For Picture-in-Picture Mode, press **PiP.** 

#### **Front Panel Operation** continued



**Dual-Mode** - In Dual mode, the screen is split into two fields of equal size with the screen content of two video sources or computers being displayed in each of these fields. Keyboard and mouse operation can be selected to the field of the corresponding computer.

Press **Quad** to toggle between Dual-Mode and Quad-Mode. After selecting Dual-Mode, press the number for the left-side input and then the number for the right-side input.



**Quad-Mode** - In Quad mode, the screen is split into four fields of equal size with the screen content of four video sources or computers being displayed in each of these fields. Keyboard and mouse operation can be selected to the field of the corresponding computer.

Press Quad to toggle between Dual and Quad-Mode

#### **Keyboard Hot-Key Operation (OSD)**

The QuadKVM can be controlled via keyboard hot-keys that make the functions of the QuadKVM available at the console keyboard.

To change the active input, press **Scroll Lock** twice and then press the up/down arrows to cycle the next/previous inputs.

To bring up the on-screen display (OSD), press **Scroll Lock** twice and then the letter **O**. Once the OSD is displayed, use the number or arrow keys to select a menu option.



Screenshot of the QuadKVM's Main OSD

#### **RS-232 Operation**

The QuadKVM may also be controlled via RS-232 commands. To use these commands, you must use HyperTerminal or an alternate terminal application. The settings for the connectic are as follows:



Once connected to the QuadKVM, the following commands may be issued:

Help and a list of options	? <enter></enter>
Dual Mode	d <space>[LEFT 1-4]<space>[RIGHT 1-4]<enter></enter></space></space>
Full-Screen	f <enter></enter>
Quad-Mode	q <enter></enter>
PiP-Mode	p <enter></enter>
Output Resolution	o <space>[0-XGA 1-HD 2-WUXGA]<enter></enter></space>

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