



**KEYPORT**  
***MILLENNIA USB Series***

***Models: USB-2, USB-4***

**User Manual**

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Please read this manual thoroughly and follow the **Installation** procedures to prevent any damage to the KVM or any connecting device.

# ----- **Introduction**

## **Overview**

The **USB-2** and **USB-4**, are fully compatible with USB specifications, and combine USB KVM (keyboard / Video / mouse) switching and USB peripheral sharing. With the **USB-2** or **USB-4**, you can easily operate up to 2 or 4 PCs, G3/G4 Macs, or iMacs respectively from 1 USB keyboard, 1 USB mouse, and 1 monitor saving you space, time, equipment and money. Its peripheral sharing function enables you to share additional USB peripherals between all computers.

Installation is as easy as connecting USB A-B cables to computers and to the USB KVM switch. Computer selection is as easy as pressing front panel buttons. The built-in USB hub ensures smooth switching from one computer to the other. The USB KVM switches provide the easiest way to manage multiple computers with USB interfaces and share USB peripherals among computers. No more tangled cables and a messy working environment; let the USB KVM switch do the computer switching for you.

## Features

- Manage 2 or 4 PCs, G3/G4 Macs, or iMacs from one USB keyboard, mouse and monitor with **USB-2** and **USB-4** respectively.
- 2 or 4 computers share up to 3 or 4 different USB peripherals with **USB-2** and **USB-4** respectively.
- Front panel push buttons for easy computer selection.
- No drivers needed for keyboard and mouse operation.
- Supports keyboard and mouse plug-n-play.
- High VGA resolution: 1920x1440.
- **USB-4** can be Linked to a Millennia PS/2 switch as a slave USB peripheral sharing device.
- Buzzer sound for computer switching confirmation.
- Activate Auto Scan by pressing front buttons.
- Selectable Scan Time interval.
- Supports the latest DDC2B VGA monitor.
- Saves time, space, equipment and power.
- USB self-powered operation.
- No software required.

## ----- **System Requirements**

### **Console side**

- One VGA, SVGA or Multisync monitor
- One USB keyboard
- One USB mouse

### **Computer side**

Each USB-enabled computer must be connected to the USB KVM switch by

- One HDB15 male-to-female VGA cable for monitor.
- One USB A-B cable with Type-A and Type-B plug for USB devices, as shown in figure 1.

**Note:** An optional HDB-15 to DB-15 VGA adapter is required for Mac computer VGA port.

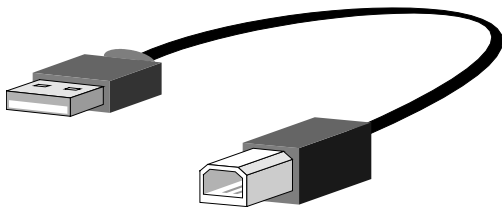


Figure 1. USB A-B cable

## ----- **Installation**

### **PC BIOS Notice**

*The following BIOS setup changes are necessary for PC users and **not** necessary for Mac users:*

1. In STANDARD CMOS, set HALT ON ERROR to ALL BUT KEYBOARD.
2. In PNP AND PCI SETUP, set PNP OS INSTALLED to YES and set USB IRQ to ENABLED.

**Note:** The USB KVM switch is applicable for USB keyboard and mouse switching from one computer to the other. If you plan to share other peripherals such as a CCD camera, printer or scanner, you are required to shut down the driver of the computer before switching to another computer. Because port switching is equivalent to unplugging the USB cable from one computer and plugging it to another one, some USB drivers check attached USB peripherals all the time and do not accept plug-n-play function.

## Console Connection

*Before installation, make sure all devices and computers to be connected to the USB KVM switch have been turned off.*

Plug a monitor to the Console's VGA port; plug a USB keyboard and a USB mouse to any two of the Console's USB ports as shown in figure 2.

*For **USB-4** only:* As an option, a Master Connect-Tek Millennia PS/2 KVM 4 port switch can be linked to the **USB-4** with a mini-DIN8 male-to-male cable. The **USB-4** can operate as USB-peripheral sharing device.

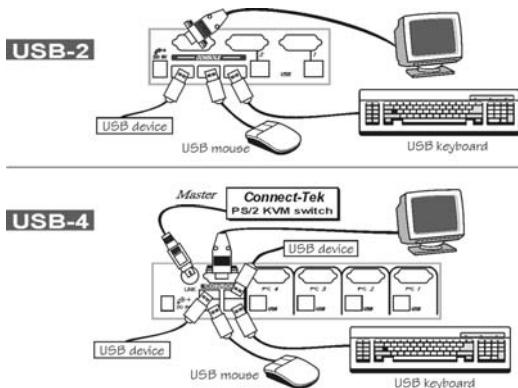


Figure 2. Console Connection



## Computer Connections

Use a HDB15 male-to-female cable to connect from a computer's VGA port to the USB KVM Switch's VGA port of **PC** side, as shown in figure 3.

Use a USB A-B Cable to connect from the USB KVM Switch's **USB** port (B connector, square connector) to the USB port on the corresponding computer (A connector, flat connector), as shown in figure 3.

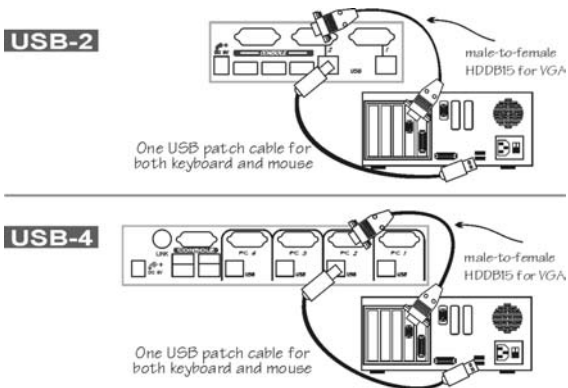


Figure. 3 Computer Connection

Now, you can turn on all devices and computers.

## ----- **Operation**

### **Front Panel**

1. On-line LED & Selected LED

When the LED turns green, the connected computer is powered-on. When a computer is selected, its corresponding red LED illuminates.

2. Pushbuttons

Each computer has a button associated with it on the front panel for selection.

### **Auto Scan**

*Auto Scan* automatically scans through computers one by one in a fixed interval (see *Scan Time* below).

*Note: keyboard and mouse are not operable during Auto Scan.*

### **Scan Time**

It sets the scan interval for *Auto Scan*. The Scan Time options are 3, 8, 15 and 30 seconds.

**Note:** *Scan Time is automatically set to the default of 3 seconds when the USB KVM switch loses power.*

### ***For USB-2***

To activate the *Auto Scan*, press and hold the pushbutton down for 2 seconds till you hear a long beep followed by a short beep. To exit from it tap the pushbutton again.

To change the *Scan Time* interval, press and hold the pushbutton for 4 seconds till you hear two long beeps. Then by tapping the pushbutton each time, the **USB-2** responds with 1, 2, 3 or 4 beeps corresponding to 3, 8, 15 or 30 seconds respectively. Once set, leave the **USB-2** as it is and it will automatically return for normal operation.

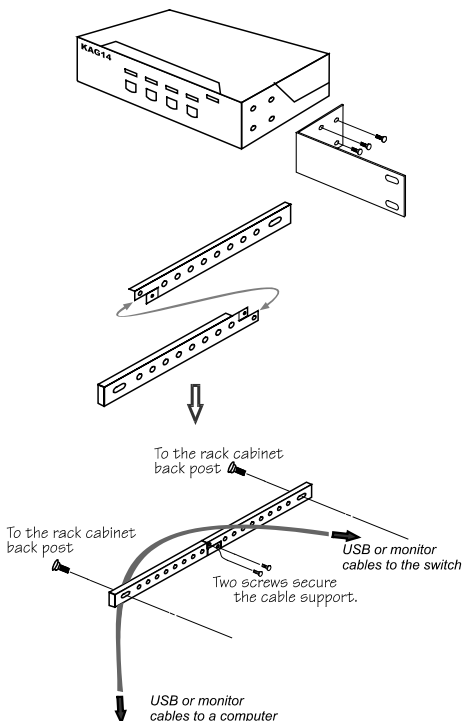
### ***For USB-4***

To activate *Auto Scan*, press down front panel push buttons "3" and "4" simultaneously. The port LED flashes during *Auto Scan*. *Auto Scan* is effective for powered-on computers only. To exit the *Auto Scan* mode, just tap any one of the pushbuttons.

To change the *Scan Time* interval, press both front panel buttons "1" and "2" simultaneously. The **USB-4** beeps 1, 2, 3 or 4 times for *Scan Time* of 3, 8, 15 or 30 seconds respectively.

## ----- **Rack Mount Kit for USB-4 (optional)**

The figure below shows how to attach optional mounting brackets and cable support to the **USB-4** for standard 19-inch rack cabinet.



## ----- Appendices

### Specifications

<b>Specification</b>	<b>USB-4</b>	<b>USB-2</b>
No. of computers supported	4	2
Front panel push button	4	1
Hot plug-and-play	Yes	
Automatic scan interval	3, 8, 15, 30 seconds	
Cable Length (Max)	30M(100ft) for VGA 5M(15ft) for USB	
Computer ON-LINE LED	4	2
Computer selected LED	4	2
VGA	1920 X 1440, DDC2B	
Computer peripheral connector	<i>USB Type B x 4</i>	<i>USB Type B x 2</i>
Monitor	<i>HDB-15 male x 4</i>	<i>HDB-15 male x 2</i>
Console peripheral connector	<i>USB Type A x 4</i>	<i>USB Type A x 3</i>
monitor	<i>HDB-15 female x 1</i>	<i>HDB-15 female x 1</i>
Weight (g)	900	420
(oz.)	31.74	14.8
H x W x D (mm)	44 x 220 x 130	40 x 124 x 70
(in.)	1.7 x 8.7 x 5.1	1.6 x 4.9 x 2.7
size	<i>Compact</i>	<i>Micro</i>

## ----- **Troubleshooting**

*Ensure that all cables are well seated. Label the cable for each computer to avoid confusion when connected to the USB KVM switch.*

*The USB KVM switch has built-in power protection that works automatically when needed. When it works, USB communication halts and the only way to restart the USB KVM switch properly is to remove all power sources (USB patch cables and power adapter), wait a few seconds, apply power sources and start again.*

### **Symptom**

### **Causes**

### **Solutions**

Keyboard or mouse does not work	<ul style="list-style-type: none"><li>■ In Auto Scan, keyboard and mouse are not operable.</li><li>■ Too many keyboard or mouse drivers installed.</li></ul>	<ul style="list-style-type: none"><li>■ Press any front button to select a computer, then use the keyboard and mouse.</li><li>■ Remove ALL unnecessary keyboard and mouse drivers.</li></ul>
Newly installed USB device does not work.	<ul style="list-style-type: none"><li>■ Improper device driver.</li><li>■ Device consumes too much power.</li><li>■ Device consumes too</li></ul>	<ul style="list-style-type: none"><li>■ Re-install device driver.</li><li>■ The device should be self-powered, add a power adapter to the device.</li><li>■ If the device does not provide power jack, add</li></ul>

	<p>much power instantaneously.</p> <ul style="list-style-type: none"> <li>■ Improper device initialization.</li> <li>■ When the USB KVM switch works under self-power, i.e., no power supply added, it supports max of 100mA as per USB spec.</li> </ul>	<p>a power adapter with DC5V of less than 1A current rating to the USB KVM switch.</p> <ul style="list-style-type: none"> <li>■ Be sure the USB cable is well seated to ensure communication.</li> <li>■ Remove all power sources to the USB KVM switch by unplugging all USB A-B cables and the power adapter; then start all over again.</li> <li>■ Select the computer by pushbutton, restart the computer and try again.</li> </ul>
Computer hangs up while switching computer.	<ul style="list-style-type: none"> <li>■ Device initialization takes too much time.</li> </ul>	<ul style="list-style-type: none"> <li>■ Wait at least 5 seconds before computer switching to ensure proper USB communication.</li> <li>■ Turn off device driver (not keyboard nor mouse) before computer switching.</li> </ul>
Auto Scan does not switch PC automatically and USB KVM beeps	<ul style="list-style-type: none"> <li>■ All PCs are off or only one PC is turned on. Scan mode works for power-on computers only.</li> </ul>	<ul style="list-style-type: none"> <li>■ Turn computers on.</li> </ul>

## ----- Other PS/2 KVM Switches

Other high-performance Connect-Tek KVM switches for PS/2 interface.

<i>One console-to-multiple-computer</i>		
	No OSD	OSD model
2-computer	MILLENNIA 2 PORT	
4- computer		MILLENNIA 4 PORT
8- computer		MILLENNIA 8 PORT
16- computer		MILLENNIA 16 PORT

<i>Dual console-to-multiple-computer</i>	
	OSD model
8- computer	Dual Console MILLENNIA 8 PORT

-OSD: advanced On-Screen Display interface enabling you to assign PC names, access PCs by the names. Other features include programmable scan pattern, password security, etc.

### Technical Support:

**FOR TECHNICAL SUPPORT OF ANY KIND, PLEASE CONTACT A FACTORY REPRESENTATIVE BY CALLING (718) 729-3700, PHONE SUPPORT HOURS ARE 9:00 – 5:00 EST. EMAIL TO: [sales@connect-tek.com](mailto:sales@connect-tek.com)**