



# **2-PORT USB KVM SWITCH MIT USB 2.0 HUB**



## **User's Manual**

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# 2-port USB KVM Switch

## I. Introduction

Thank you for choosing 2-port USB2.0 KVM Switch with PS/2 keyboard and mouse ports, 3 USB 2.0 downstream ports, 2 upstream USB 2.0 ports, and 3VGA ports. Now, you can operate 2 computers with 1 monitor, 1 keyboard, and 1 mouse and share the USB devices connected to the KVM.

### 1. Features

- Controls 2 PCs with one PS/2 or USB keyboard, one PS/2 or USB mouse, and one monitor.
- Supports Windows 98/98SE/2000/Me/XP/VISTA, Linux Kernel 2.3 or later, Mac OS9/OSX, Sun Micro Solaris 8 ( SUN BLADE 100)
- Supports 3 USB 2.0 downstream ports
- Supports 3 types of switching: hardware push button, hot keys on PS/2 keyboard, and On-Screen-Display (OSD) utility software (for Windows).
- OSD utility indicates:
  - i. Power status of connected computer(s).
  - ii. Active host computer.
- Supports VGA resolutions up to 2048x1536.
- Plug and Play. No driver is needed for PS/2 mouse and keyboard operation.

### 2. Package Contents

The product you purchased should contain the following equipment and accessories:

- 2 port USB 2.0 KVM Switch
- CD with users manual, On-Screen-Display(OSD) utility
- 2 sets of USB+VGA cables

## II. Specifications

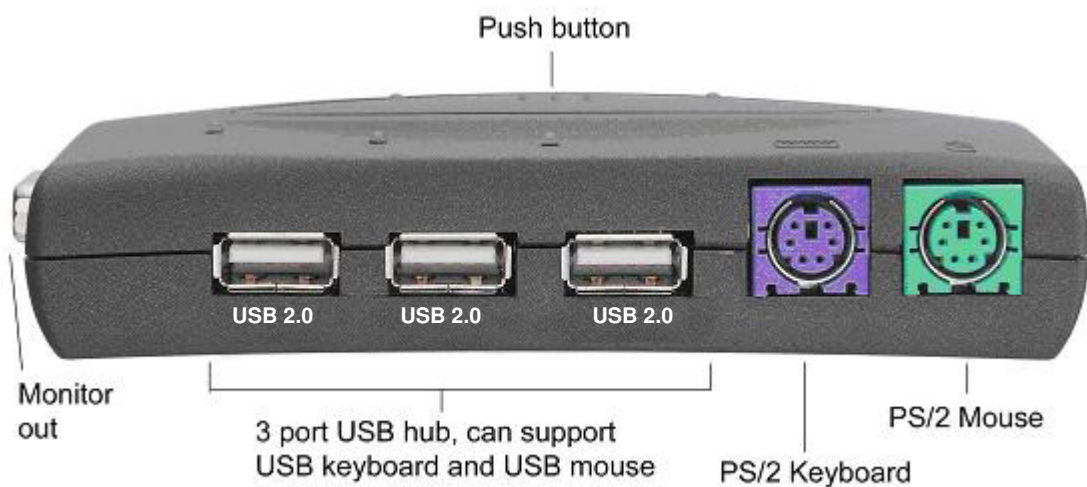
### 1. General

<b>Model</b>	<b>KC-221</b>
Complies USB revision	USB 1.0, 1.1,2.0
Working PC status LED	2
USB upstream port	2
VGA IN port	2
VGA OUT port	1
USB downstream port	3
PS/2 keyboard port	1
PS/2 mouse port	1
Power Jack	DC-5V ( Optional for Power adaptor)
Reset button	1
Video resolution	2048 X 1536.
Hardware supported	PC/Mac/Sun Micro
OS Supported	Windows 98/98SE/ME/2000/XP/Vista, Mac OS9/OSX Linux Kernel 2.3/above Solaris 8/above
Active PC selection	By push button By hotkey (only in PS/2 keyboard) By OSD utility( Windows )

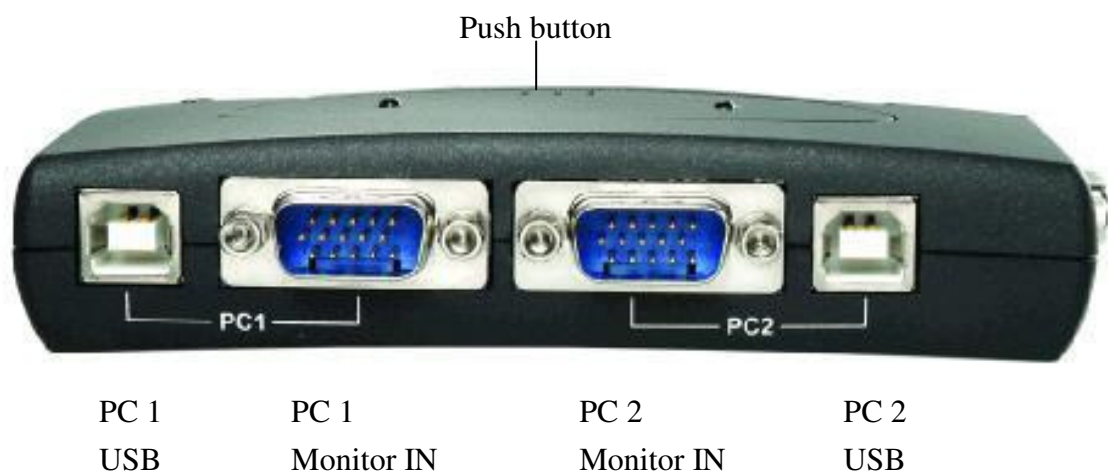
## 2. Connectors

- 1 Mini-din for PS/2 keyboard
- 1 Mini-din for PS/2 mouse
- 3 USB type A downstream connectors
- 2 USB type B upstream connectors
- DC-5V Power Jack
- Reset button

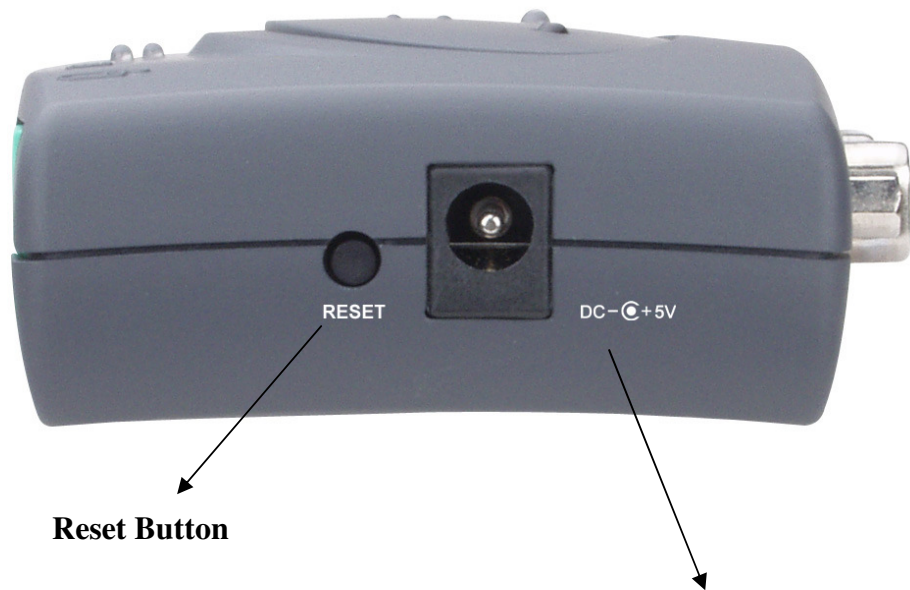
**2 VGA input connectors (HDB15 Male), and one VGA output connector (HDB15 Female).**



### Front View



### Rear View



Side View

DC-5V Power Jack

### **3. LED Indicators**

#### **3.1 Host Indicators (RED)**

**ON:** When host PC is available and active.

**Flash:** Indicates which Host PC is selected but not power on

#### **3.2 HUB Switch with PC1/PC2 Indicators (GREEN)**

**Hub Switch with PC1 ON (Green):** All USB downstream HUB connect to PC1

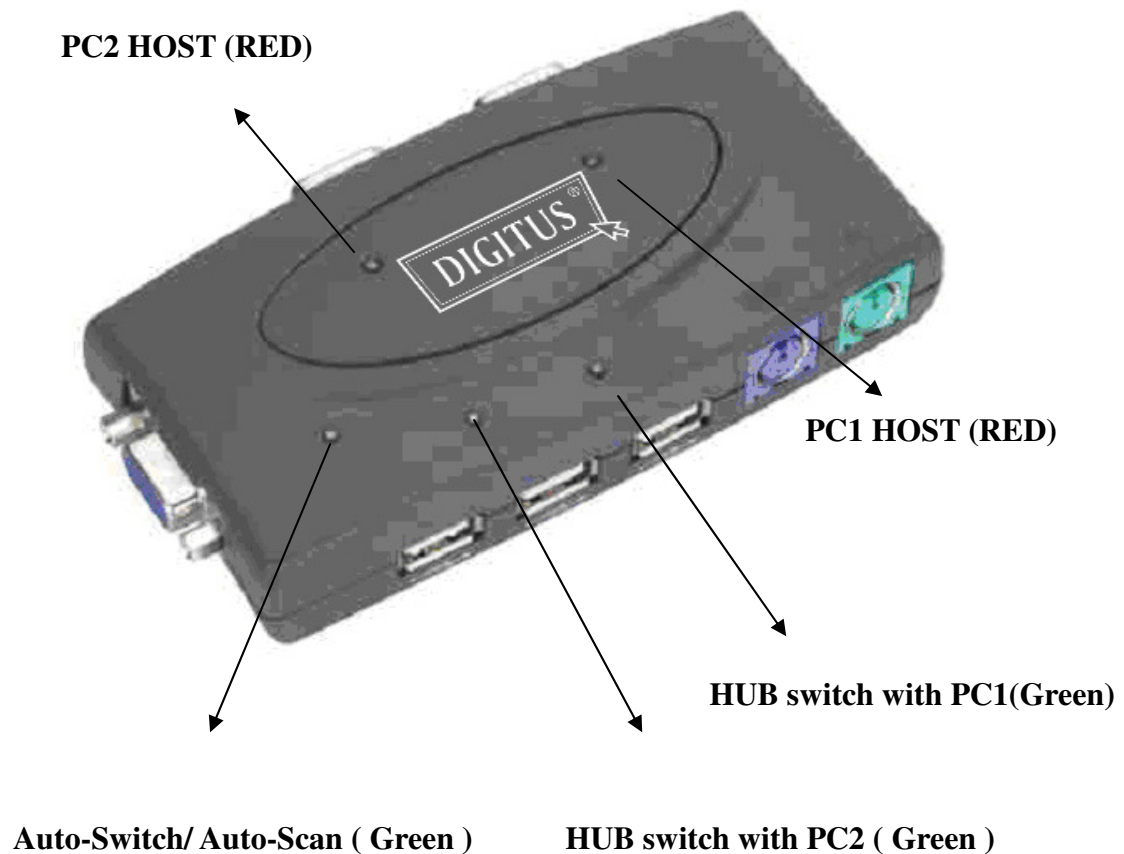
**Hub Switch with PC2 ON (Green):** All USB downstream HUB connect to PC2

#### **3.3 Auto-Switch/Auto-Scan Indicator (GREEN)**

**ON :** Auto-Switch mode is active. The USB HUB will switch with PC

**OFF:** Auto-Switch mode is inactive. The USB HUB switch is independent from PC and can be controlled by hot key.

**Flash:** Auto-Scan mode is active.



### III. 2-port USB KVM Switch installation

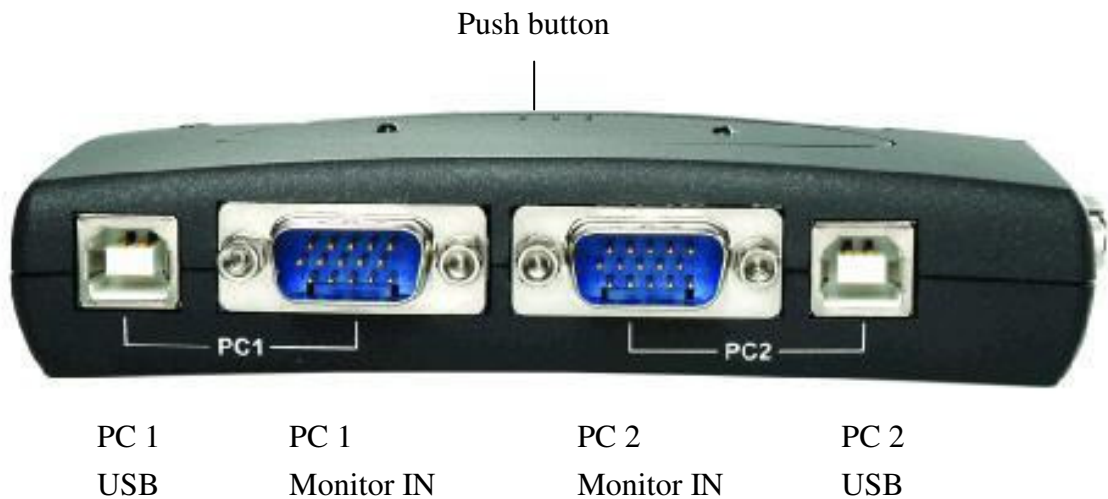
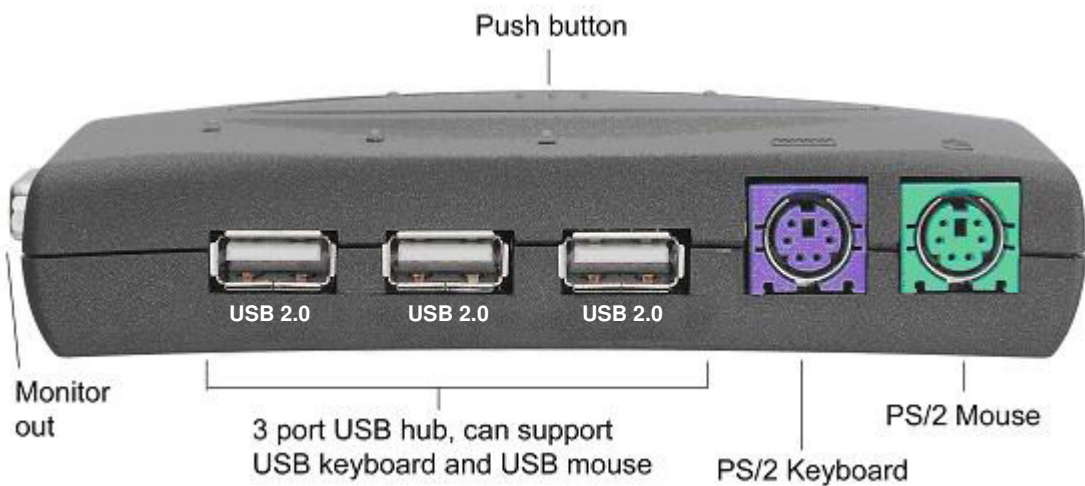
#### 1. System requirements:

- **Computer:** USB port, VGA port
- **Operating System:** Windows 98/98SE/2000/ME/XP/Vista, Mac OS9/OSX, Linux Kernel 2.3 or Later, Solaris 8.
- **VGA Cable:** 1 VGA female-to-male cable per computer
- **USB Cable:** 1 USB cable with one Type-A end and one Type-B end per computer

#### • 2. Hardware installation:

- a. Connect the USB cable's Type-A end to the computer's USB port, and the cable's Type-B end to the KVM's PC1 USB upstream port.
- b. Connect the VGA male-to-Female cable between the VGA port on the computer's video card and the KVM's PC1 monitor IN.
- c. Repeat steps a thru b for the second computer, using the PC2 USB port and monitor IN on the KVM.

- d. Connect the monitor VGA cable to KVM's monitor output port.
- e. Connect PS/2 keyboard and mouse to the KVM's PS/2 ports or USB keyboard and mouse to the KVM's USB downstream ports (Except on Windows 98/SE).
- f. For Window 98/SE users, please go to next chapter for installation.
- g. Turn on the computers and make sure that the USB port is enabled and working properly.





## **Window 98/SE installation :**

For Window 98 and 98/SE system users, you will need a different step of installation. After the hardware installed, please follow up these steps to install the KVM switch :

Step 1 : Remove PS/2 mouse and Keyboard devices from USB KVM Switch and plug them into PC

Step 2 : Turn ON your PC

Step 3 : Use USB KVM Switch push button to switch the screen to the target PC with Windows 98/SE system.

Step 4 : Follow up the chapter 4.Driver installation and finish the driver installation

Step 5 : Remove PS/2 mouse and keyboard from PC and plug into USB KVM Switch

## 4. Driver installation:

### 4.1 OS without driver installation

No driver is needed for 2-port USB KVM Switch for the following operating systems.

- a. Windows ME/2000/XP
- b. MAC OS9/OSX
- c. Linux Kernel 2.3 or above
- d. Sun Micro Solaris 8 or above

### 4.2 Windows 98/98SE:

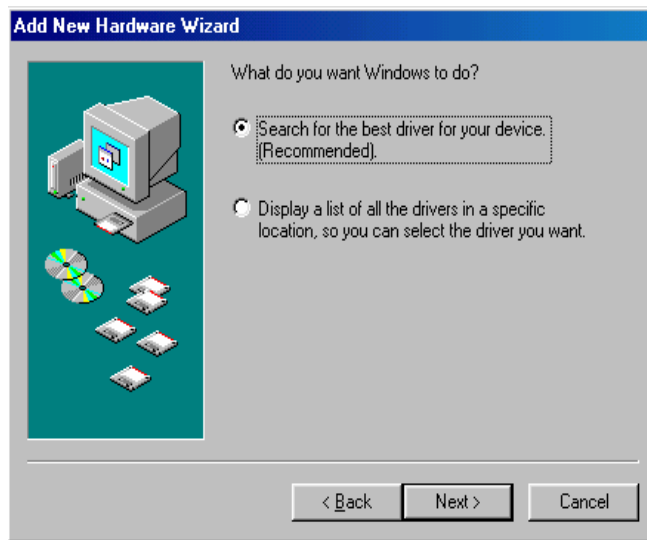
After you connect 2-port USB KVM Switch to your PC, Win 98 will automatically detect the device and prompt for the driver installation. Please proceed the installation of driver by following the instructions from **Step A-H**. Please have your Windows 98 CD ready.

#### Step A



A. Click “Next” to Continue

## Step B



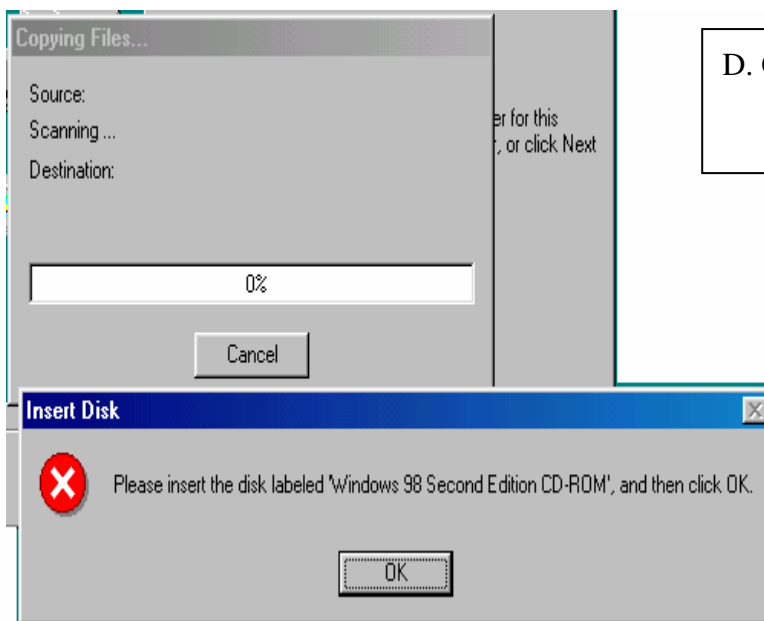
B. Click “Next” to initiate the search for the best driver for your device.

## Step C



C. Click “Next” to start and search.

### Step D



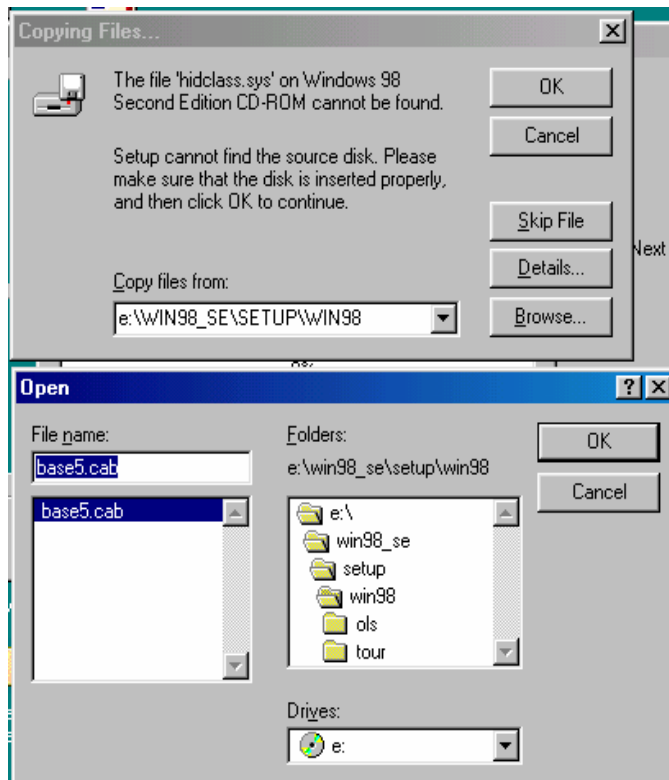
D. Click “OK” to continue

### Step E



E. Click “Next” to continue

## Step F



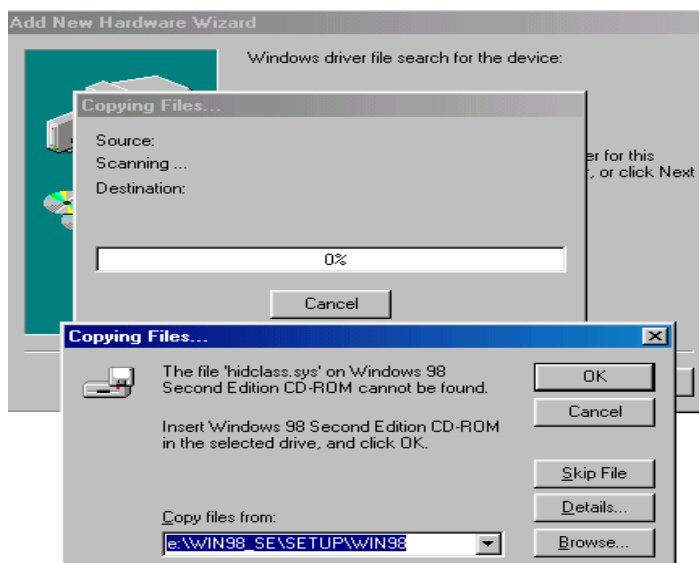
F. Please specify the location of the Windows source disk and Click “OK” to continue.

You may use “Browse” to locate the driver.

(Ref Figure F)

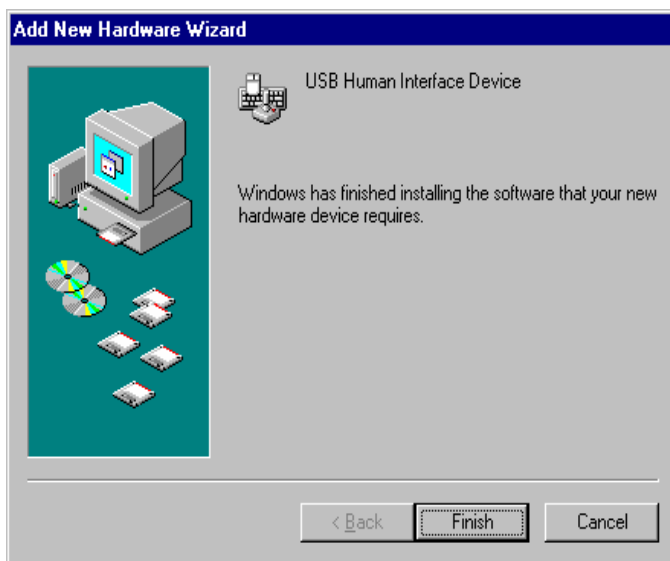
\*Note: Your hidclass.sys file might be located in a different directory from the figure above.

## Step G



G. Click “OK” to continue

## Step H



H. Click “Finish”, Windows has finished installing the USB Human Interface Device driver for PS/2 keyboard & mouse.

## 5. On-Screen-Display(OSD) utility software installation for windows

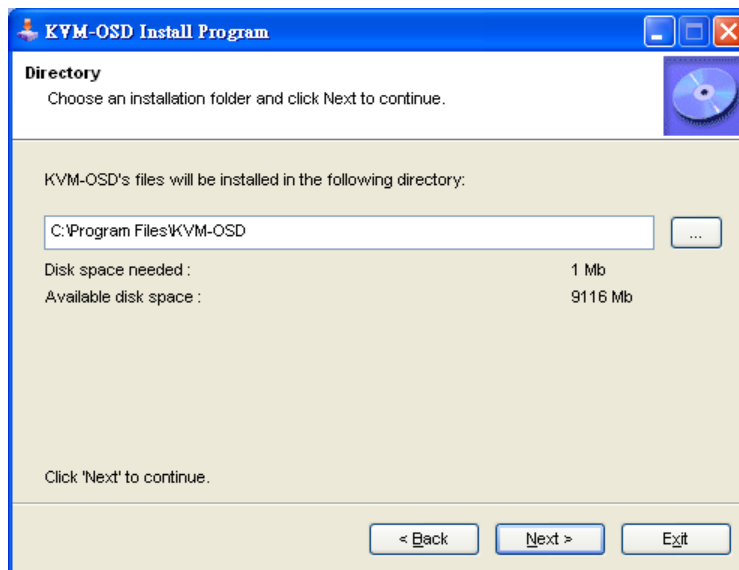
Place the enclosed CD into your CD-ROM drive. The AutoManual screen will automatically pop up on your monitor. Click the “Install OSD utility” button to proceed. If the AutoManual screen does not present, then please use the file explorer to choose the CDROM driver, and execute the AutoManual.exe.

### Step A



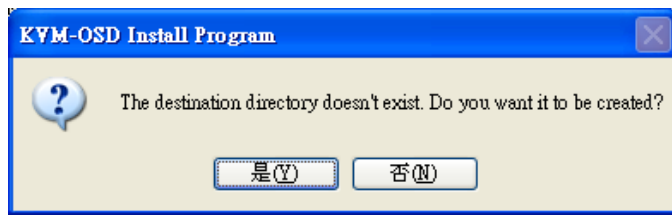
A. Click “Next” to continue the installation

### Step B



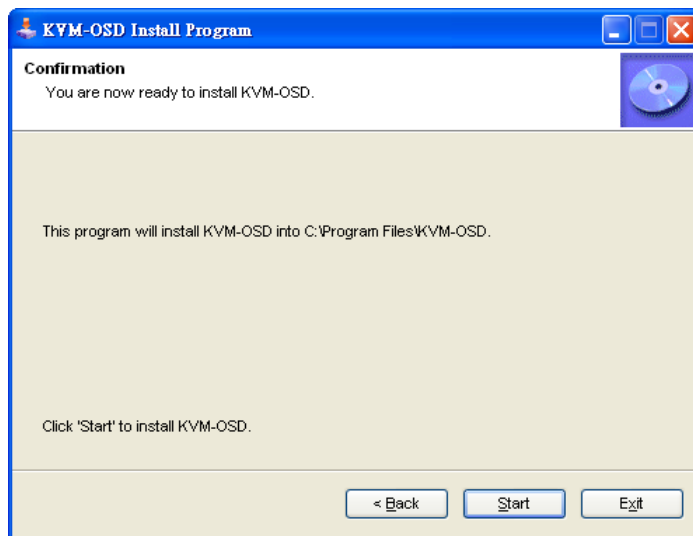
B. Click “Next” to continue

### Step C



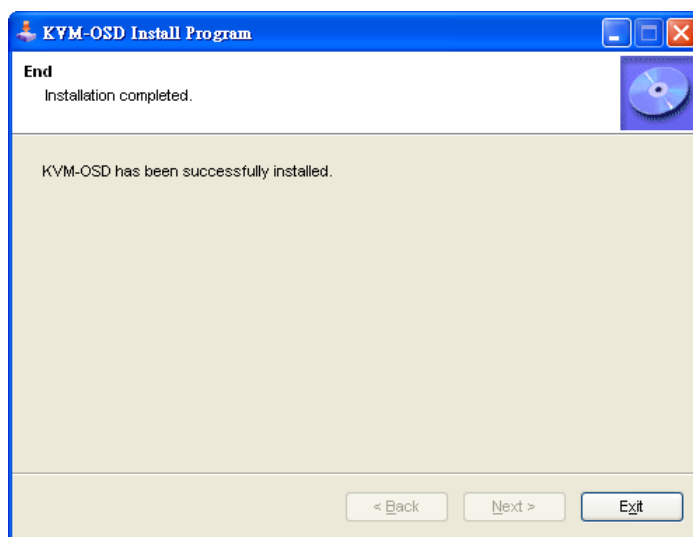
C. Click "Yes" to continue

### Step D



D. Click "Start" to continue

### Step E



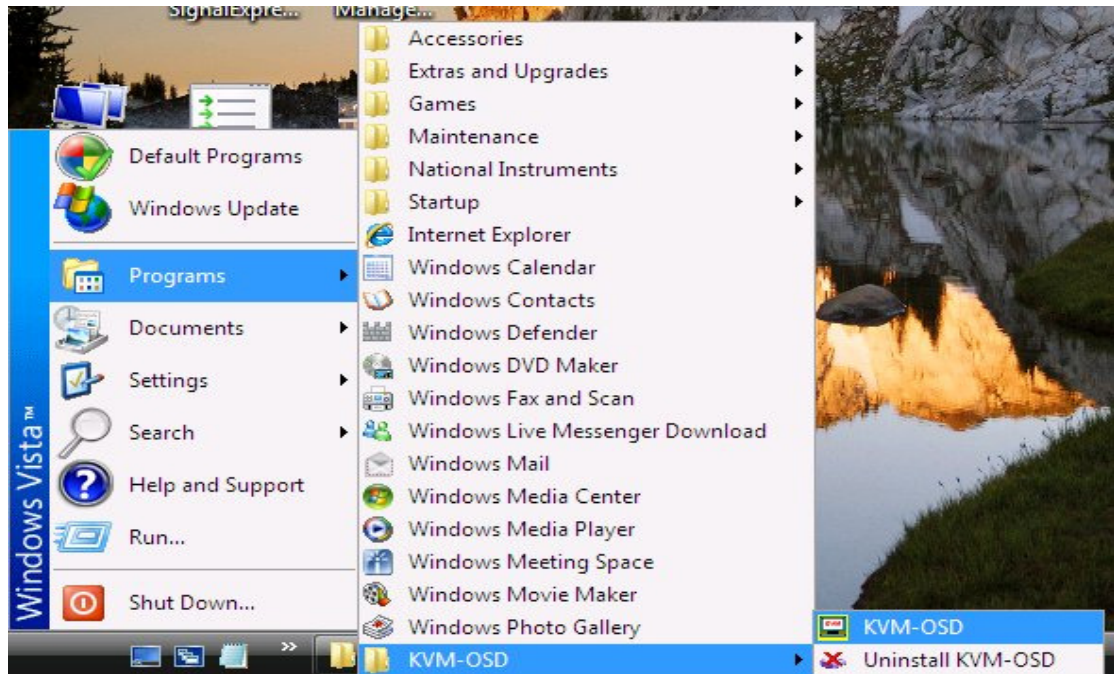
E. Click "Exit"



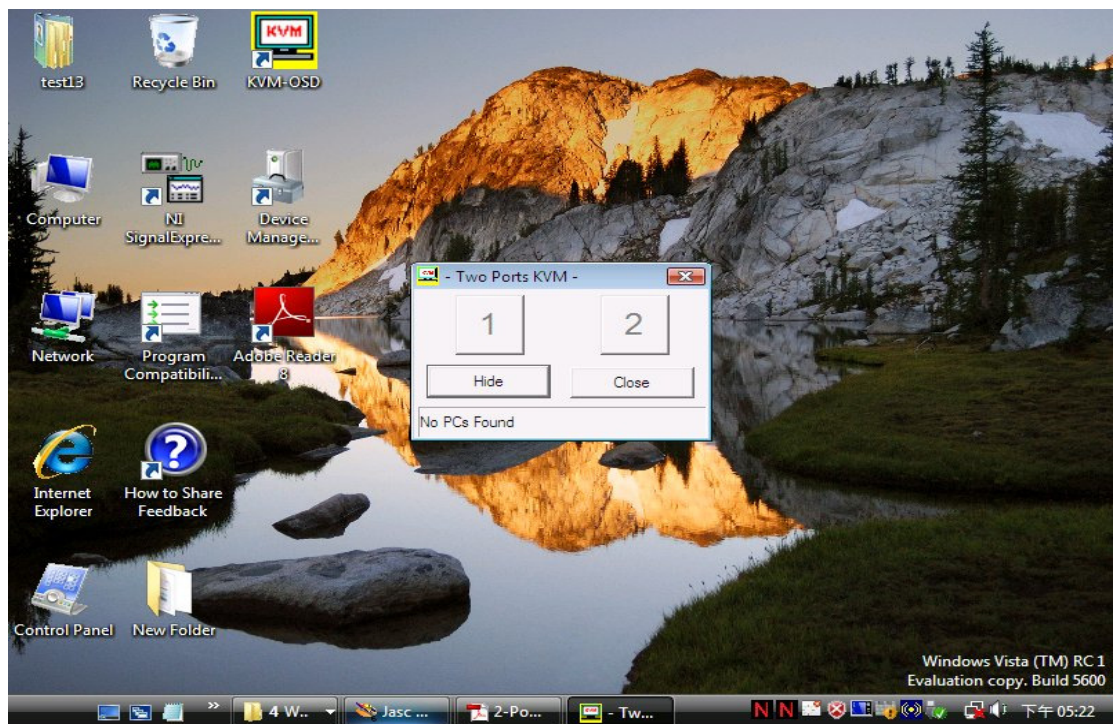
## 6. Using the OSD Program

### 6.1 Activating the OSD program

- From Start Menu \Program \KVM-OSD\KVM-OSD

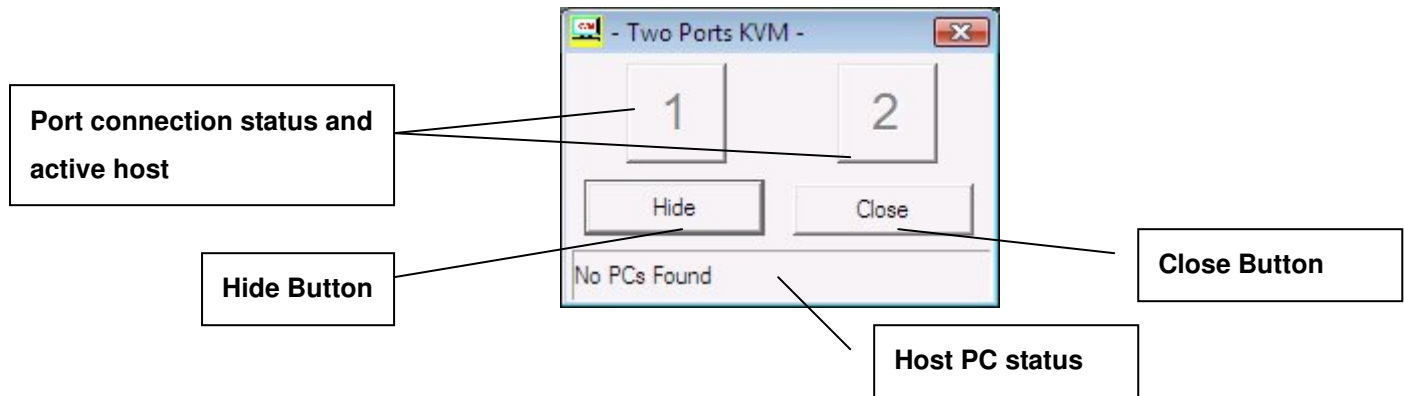


- OSD will start



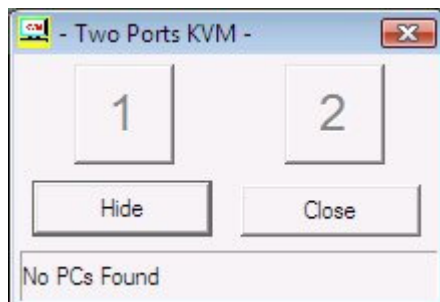
## 6.2 Interpreting the OSD window

The OSD indicates the status of the connections, host PC and the USB device.

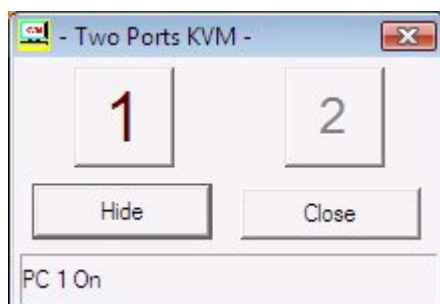


**There are four different status:**

**A.** "No PC Found" indicates no PCs are connected to the Pocket KVM or that connected PCs are off.



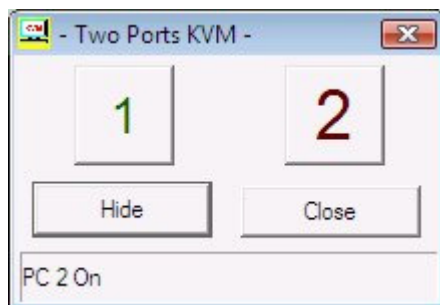
**B.** "PC 1 On" indicates the first port has a PC connected to it, the PC is on and the active host. The second port either has NO PC connected to it, or the PC is connected, but not on.



C. “PC 2 On” indicates the second port has a PC connected to it, the PC is on and the active host. The first port either has NO PC connected to it, or the PC is connected, but not on.

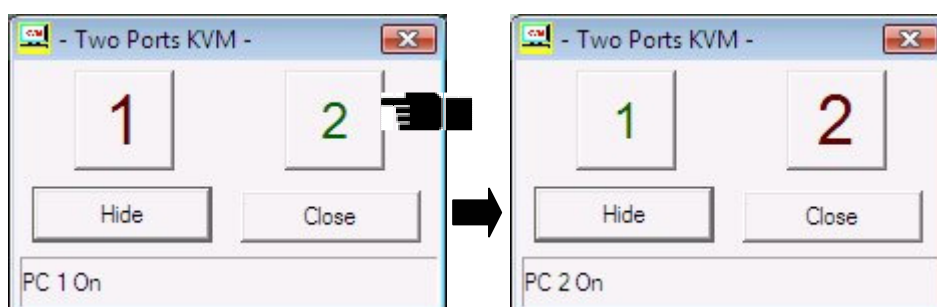


D. Both ports have PCs connected and on. The red letter and larger numeral indicates the second port is the active host. The green letter and smaller numeral indicates that the first port is NOT the active host, but is available for connection.



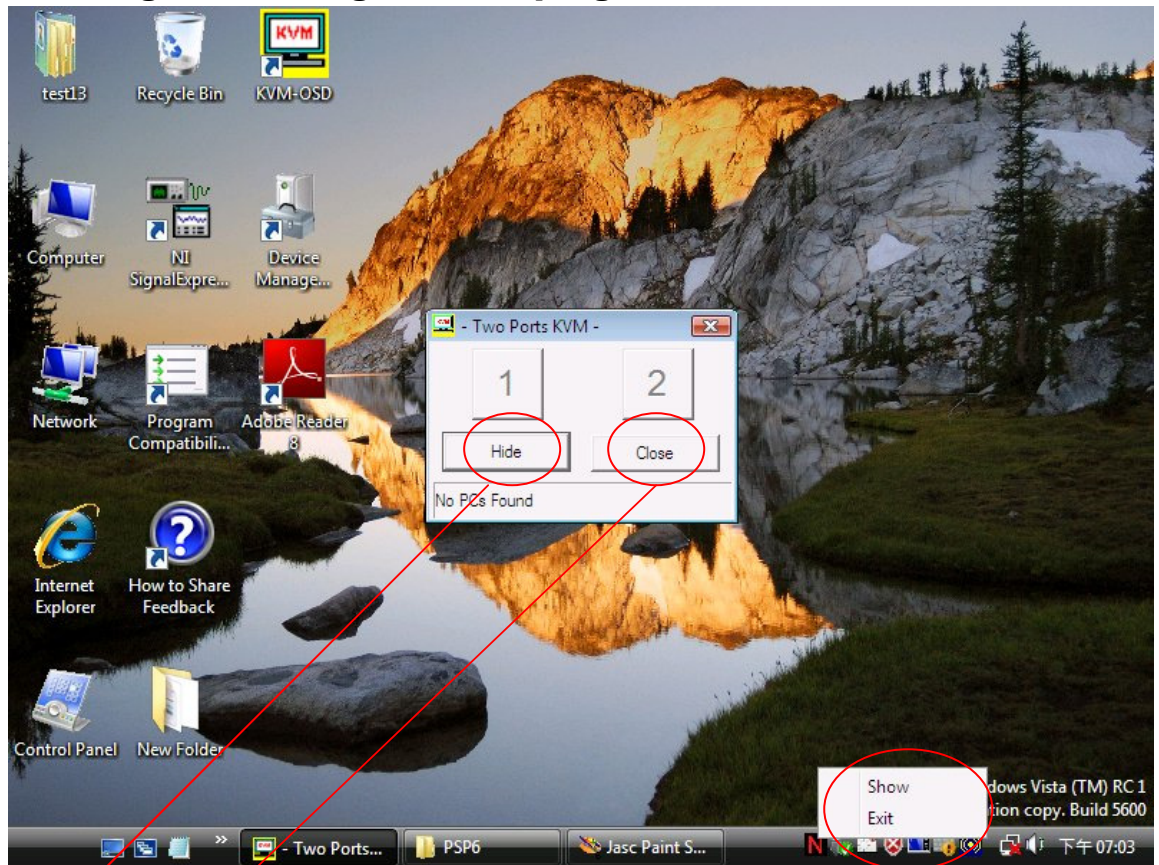
### 6.3 Switching the active host using the OSD program

Using the mouse, simply click on the button of the port that you want as the active host. The program will automatically switch the active host and the numbers on the button will change accordingly.





## 6.4 Hiding and closing the OSD program



- When you click the “Hide” button, OSD program window will hide in Taskbar.
- When you click the “Close” button, OSD program will exit.
- If OSD program is hidden in Taskbar, you can right click on the taskbar icon to show or close the program.

## IV. Operate the 2-port USB KVM Switch

### 1. Manual Switch by push button

#### 1.1 HOST selection

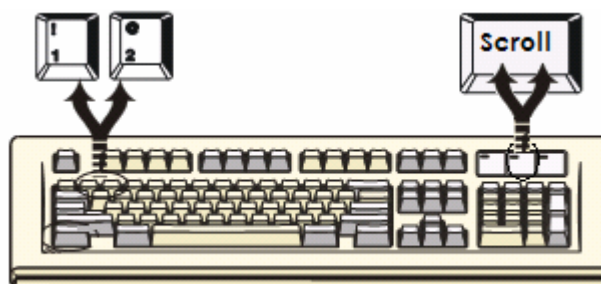
You can switch to the next available active USB host connection by pushing the switch button on the 2-port USB KVM Switch

#### 1.2 Activate Auto Switch Function

You can activate Auto Switch Function by pushing the switch button for 3 second. The USB HUB will switch with Host together when Auto switch function is enable.

## 2. Hot Key Switch (PS/2 keyboard only, not available for USB keyboard)

[Scroll] , [Scroll], [1] or  
[Scroll], [Scroll], [2]



Switches to PC1: Scroll Lock + Scroll Lock + [ 1 ]

Switches to PC2: Scroll Lock + Scroll Lock + [ 2 ]

Switches to upper host: Scroll Lock + Scroll Lock + ↑

Switches to next host: Scroll Lock + Scroll Lock + ↓

Auto switch : Scroll Lock + Scroll Lock + [ H ]

**Note:** When using the two-step Hot Key sequences, the keys must be pressed within 3 seconds, otherwise the Hot Key action will be canceled. After pressing the Scroll key twice, the Scroll LED will start blinking and wait for the Step 2 hotkey, after pressing any key or over 3 seconds, the keyboard LED will switch back to the original status.

## 3. On-Screen-Display (OSD) Switch (Windows only)

Activate the OSD and click the port number on the OSD. The active host will change to the indicated port.

## 4. Auto-Scan Function

### 4.1 Activate Autoscan

Pressing Scroll + Scroll + [ S ] will activate AutoScan Mode.

### 4.2 Disable Autoscan

Pressing any Keys excluding number key [ 1 ], [ 2 ], [ 3 ] and [ 4 ] to turn off the AutoScan Mode and the monitor screen will jump back to the original Host.

When you activate the Auto-Scan mode, the USB KVM Switch alternates between the two PCs and displays them on the monitor. Each PC can be displayed at 5, 10, 15, or 20 seconds:

### **4.3 Auto-Scan Interval**

[n] \*(Available only when Auto-Scan function is ON)

You can change the Auto-Scan interval by pressing the appropriate number key or the number pad keys.
































<b>n</b>	<b>Scan Interval</b>
<b>[1]</b>	<b>5 sec.</b>
<b>[2]</b>	<b>10 sec.</b>
<b>[3]</b>	<b>15 sec.</b>
<b>[4]</b>	<b>20sec.</b>

## 5. Sun Micro system Function key emulation :

There are 16 special functions on the Sun Micro system keyboard, the USB KVM Switch can emulate these function keys via the PS/2 keyboard ( it won't work on the USB keyboard ). Here is the mapping table for these function operation. To active these emulation on the PS/2 keyboard, you have to press the LEFT Window KEY first ( this key usually is located between the left [Ctrl] and left [Alt]), then choice the second relative key.

Sun Micro System Function Key	PS/2 Keyboard
Stop	L_Win & L_Alt
Props	L_Win & L_Ctrl
Compose	L_Win & L_Shift
Front	L_Win & F1
Open	L_Win & F2
Find	L_Win & F3
Again	L_Win & F4
Undo	L_Win & F5
Copy	L_Win & F6
Paste	L_Win & F7
Cut	L_Win & F8
Help	L_Win & F11
Power	L_Win & F12
Mute	L_Win & 1
Volume Down	L_Win & 2
Volume UP	L_Win & 3

## 6. Hot key definition table

Step 1		Step2	Action
			USB HUB Auto-Switch mode
			Switches access to the computer which connecting to host1
			Switches access to the computer which connecting to host2
			Switch next host
			Switch the upper one host
			Switch the next one host
			Switch the HUB to host 1
			Switch the HUB to host 2
			Start to Autoscan
No Scroll Key Need		* 	AutoScan time interval is 5 seconds (Available only when Auto-Scan function is ON)
		* 	AutoScan time interval is 10 seconds (Available only when Auto-Scan function is ON)
		* 	AutoScan time interval is 15 seconds (Available only when Auto-Scan function is ON)
		* 	AutoScan time interval is 20 seconds (Available only when Auto-Scan function is ON)



## V. Application Notes

1. **IMPORTANT:** Please select “Safely Remove Hardware” or “Eject” for USB devices connected to any of the 3 downstream USB ports on the 2-port USB KVM Switch before switching between the hosts. Switching hosts is equivalent of removing the USB devices, which may damage your USB devices or data if not removed properly by the OS.
2. The 2-port USB KVM Switch normally derives its own power from host computer. When the 2-port USB KVM Switch and the USB port of computer are connected, the LED will turn red, and the keyboard and mouse can operate.
3. Unknown Device:  
If the installation process has been completed and some of the devices still don't work, please go to: Device Manager, check to see if any “Unknown device” icons appear on the screen. You may need to “Remove” and “Refresh”, then start the installation process again. If after trying the above mentioned process and your device still does not work, please contact your retail dealer.  
\*\*Note: If you are connected to a heavy-duty HDD / CD-ROM, ‘unknown device’ might occur. Please plug in the appropriate adaptor for power sufficiency.

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This device generates and uses radio frequency and may cause interference to radio and television reception if not installed and used properly. This has been tested and found to comply with the limits of a Class B computing device in accordance with the specifications in Part 15 of FCC Rules. These specifications are designed to provide reasonable protection against such interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation. If this device does cause harmful interference to radio or television reception, which can be determined by plugging the device in and out, the user can try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the device and receiver.
- Connect the computer into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.