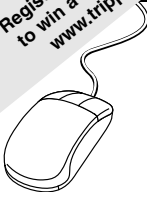


**WARRANTY  
REGISTRATION**  
Register online today for a chance  
to win a FREE Tripp Lite product!  
[www.tripplite.com/warranty](http://www.tripplite.com/warranty)

# Owner's Manual



## 8- and 16-Port NetCommander™ Cat5 Rackmount KVM Switches

*Model #: B072-008-1 and B072-016-1*



Tripp Lite World Headquarters  
1111 W. 35th Street, Chicago, IL 60609 USA  
(773) 869-1234, [www.tripplite.com](http://www.tripplite.com)



Tested To Comply With FCC Standards  
FOR HOME OR OFFICE USE

Note: Follow these instructions and operating procedures to ensure correct performance and to prevent damage to this unit or to its connected devices.

Copyright © 2006 Tripp Lite. All rights reserved. All trademarks are the property of their respective owners. The policy of Tripp Lite is one of continuous improvement. Specifications are subject to change without notice.

# Table of Contents

Features..	p. 3
System Components.....	p. 3
Compatibility... ..	p. 3
Configuration... ..	p. 4
Front Panel .....	p. 4
Rear Panel.....	p. 4
Installation.....	p. 5
Pre-Installation Guidelines .....	p. 5
Connecting the NetCommander KVM System.....	p. 5
NetCommander Server Interface Unit.....	p. 5
Connecting the Power Supply .....	p. 7
Resetting the NetCommander KVM System .....	p. 7
Rackmount Considerations.....	p. 7
Rackmounting the NetCommander KVM System .....	p. 7
Cascading NetCommander KVM Switches .....	p. 8
Operation .....	p. 8
Basic Operation .....	p. 8
Keyboard Hotkeys .....	p. 8
On-Screen Display .....	p. 9
Navigating the OSD .....	p. 9
Selecting a Computer .....	p. 9
OSD Settings (F2) .....	p. 9
General Settings .....	p. 10
F7 Defaults .....	p. 11
Port Settings .....	p. 12
Time Settings .....	p. 13
Users .....	p. 13
Security .....	p. 14
OSD Help Window (F1).....	p. 14
Scanning Computers (F4).....	p. 15
Tuning (F5).....	p. 15
Moving the Label (F6) .....	p. 15
System Requirements.....	p. 16
Software .....	p. 16
Upgrading the KVM Firmware .....	p. 16
Connecting RS232 Serial Cable .....	p. 16
Installing the Software .....	p. 16
Starting and Configuring the KVM Update .....	p. 17
Verifying the Version Numbers .....	p. 18
Obtaining New Firmware .....	p. 18
Updating the Firmware.....	p. 18
Reset .....	p. 19
Troubleshooting .....	p. 20
USB/SUN Combo Keys.....	p. 20
Specifications .....	p. 21
FCC Statement .....	p. 21
1-Year Limited Warranty .....	p. 23

## Features

- Access and control multiple multi-platform computers from a single console
- Hot-swappable: disconnect and reconnect computers without rebooting
- Auto-scan: with variable time interval
- Compact design: 1U rack mountable
- Easy port selection using (1) On Screen Display (OSD), (2) front panel pushbuttons or (3) keyboard hotkeys key sequences
- Expandable: control up to 256 computers by adding additional KVM switches
- Simple cable management: use standard Cat5e patch cord (maximum distance 33ft) to connect to each computer
- Multi-platform: supports PS/2 and USB computers/servers

## System Components

The NetCommander Cat5 KVM system consists of:

- NetCommander Rackmountable Cat5 KVM Switch (Model B072-016-1 or B072-008-1)
- NetCommander Server Interface Unit - PS/2 (Model B078-001-PS2)\*  
- USB (Model B078-001-USB)\*
- Cat5e Cable (models N105, N001 or N002 series cables)\*
- RS232 Serial Cable (provided with KVM Switch)

\* Sold separately

## Compatibility

The KVM is compatible with:

- PS/2 and USB computers/servers
- VGA, SVGA, or XGA monitors
- DOS, Windows (3X, 9X, 2000, NT4, ME, XP, 2003 Server) LINUX, UNIX, QNX, SGI, FreeBSD, BeOS, Open VMS, Novell 3.12-6, Alpha UNIX, HP UX, SUN

# Configuration

Figure 1 illustrates the basic configuration of the KVM system.

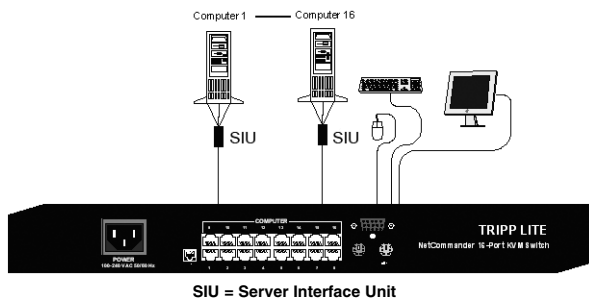


Figure 1 The KVM system configuration

## Front Panel

Figure 2 shows the front of the 16 port KVM (Model B072-016-1). The 8 port version (model B072-008-1) is the same but with only 8 sets of LEDs.



Figure 2 NetCommander KVM front panel

## Rear Panel

Figure 3 shows the rear of the 16 port KVM (Model B072-016-1). The 8 port version (model B072-008-1) is the same but with only 8 computer ports.



Figure 3 NetCommander KVM rear panel

# Installation

## Pre-Installation Guidelines

- Switch off all computers
- Ensure that the cables are not close to any sources of electrical noise interference such as fluorescent lights, HVAC systems or motors
- Ensure that the distance between any computer and the KVM switch does not exceed 33 ft.

## Connecting the NetCommander KVM System

Connect each computer to the KVM using a Server Interface Unit (SIU) and Cat5e patch cable (for best results, use STP cables—N105 series). Figure 4 illustrates the connection options.

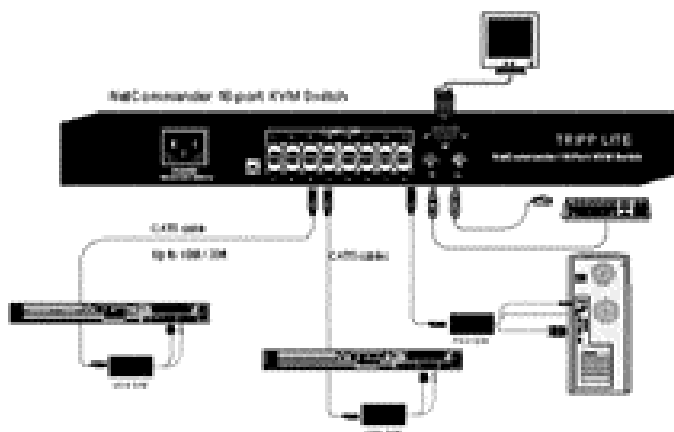


Figure 4 NetCommander KVM system connections

## NetCommander Server Interface Unit (SIU)

### The NetCommander Server Interface Unit

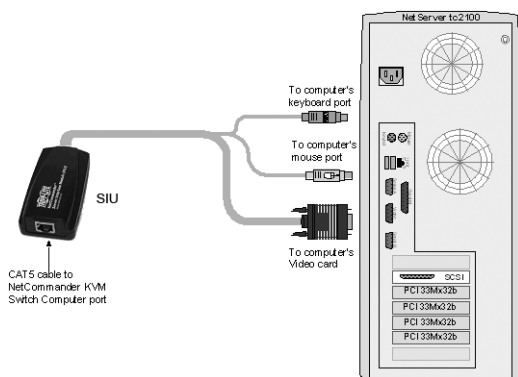
The Server Interface Unit gets its power from the connected computer. In the case of the NetCommander PS/2 Server Interface Unit (B078-001-PS2), the power is drawn from the keyboard port. In the case of the NetCommander USB Server Interface Unit (B078-001-USB), the power is drawn from the USB port.

### Connecting a NetCommander PS/2 Server Interface Unit (B078-001-PS2)

To connect the PS/2 Server Interface Unit:

1. Connect the VGA connector to the computer's Video card.
2. Connect the PS/2 Keyboard connector to the computer's Keyboard port.
3. Connect the PS/2 Mouse connector to the computer's Mouse port.

# Installation *(continued)*



**SIU = Server Interface Unit**

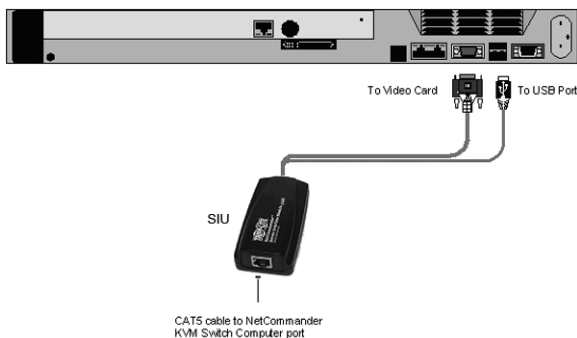
*Figure 5 NetCommander PS/2 Server Interface Unit*

## Connecting a NetCommander USB Server Interface Unit (B078-001-USB)

The USB Server Interface Unit supports Windows 98 SE and later, MAC, SUN and SGI.

To connect the USB Server Interface Unit:

1. Connect the VGA connector to the computer's Video card.
2. Connect the USB connector to the computer's USB port.



**SIU = Server Interface Unit**

*Figure 6 NetCommander USB Server Interface Unit*

## Connecting the Console

1. Connect the VGA monitor to the KVM's HD15 Monitor port.
2. Connect the PS/2 keyboard to the KVM's MiniDIN6 Keyboard port.
3. Connect the PS/2 mouse to the KVM's MiniDIN6 Mouse port.

## Connecting the Cat5e Cables

1. Connect one end of the patch cord to the RJ45 port on the Server Interface Unit.
2. Connect the other end to the chosen RJ45 port on the KVM.
3. Do this for each computer.

# Installation *(continued)*

## Connecting the Power Supply

1. Plug in the KVM. Use only the power cord supplied with the unit.
2. Switch ON the computers.

## Resetting the KVM Switch

To reset the KVM switch, press both Select buttons on the front panel simultaneously. The Server Interface Units are unaffected by this reset.

## Rackmount Considerations

### Ambient Operating Temperature

The ambient operating temperature in the rack may be an issue and is dependent upon the rack load and ventilation. When installing in a closed or multi-unit rack assembly, make sure that the temperature will not exceed the maximum rated ambient temperature.

### Airflow

Ensure that the airflow within the rack is not compromised.

### Circuit Overloading

When connecting the equipment to the supply circuit, consider the effect that overloading of circuits might have on over-current protection and supply wiring.

Reliable grounding of rack-mounted equipment should be maintained.

## Rackmounting the NetCommander KVM

Use the L-shaped brackets and screws provided to mount the KVM in a server rack as illustrated below.



*Figure 7 Connecting the L-shaped bracket*

# Installation *(continued)*

## Cascading NetCommander KVM Switches

To cascade two or more NetCommander KVM switches, follow the connections in the figure below.

Setting the different OSD display hotkeys is explained on page 11.

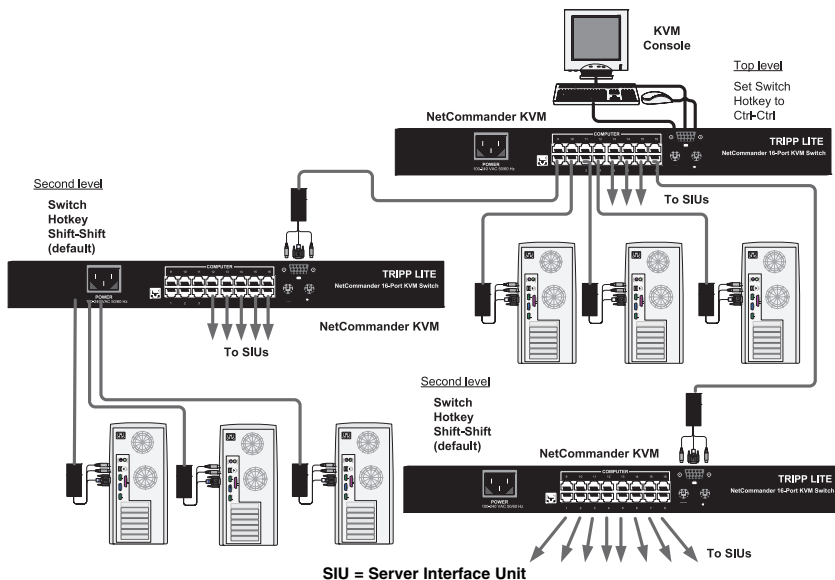


Figure 8 Cascading NetCommander KVM switches

## Operation

### Basic Operation

Switch between the connected computers using any of the following methods:

- The OSD (On Screen Display)
- Keyboard hotkey commands
- Manual selection buttons on the front panel

The OSD is also used to adjust various settings.

The illuminated LED of the top row of LEDs identifies which computer is currently selected.

### Keyboard Hotkeys

To switch to the next computer, press and release the [Shift] key, then press the [+] key.

To switch to the previous computer, press and release the [Shift] key, then press the [-] key.

**Note!** You can use the [+] key of the alphanumeric section or of the numeric keypad on a US English keyboard. With a Non-US English keyboard, use the [+] key of the numeric keypad only.



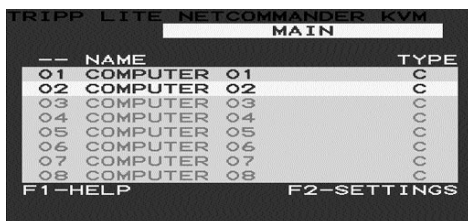
# Operation *(continued)*

## On-Screen Display

To invoke the OSD:

Press and release the [Shift] key twice. The OSD Main window appears. See Figure 9. Lines with blue text show active computers. Lines with grey text show inactive computers.

The Type column indicates whether a computer “C” or another KVM switch “S” is connected to the port.



```
RIIP LITE NETCOMMANDER KVM
MAIN
-- NAME                                TYPE
01 COMPUTER 01                         C
02 COMPUTER 02                         C
03 COMPUTER 03                         C
04 COMPUTER 04                         C
05 COMPUTER 05                         C
06 COMPUTER 06                         C
07 COMPUTER 07                         C
08 COMPUTER 08                         C
F1-HELP                                F2-SETTINGS
```

Figure 9 The OSD Main Window

## Navigating the OSD

To move up and down, use the [ ↑ ] and [ ↓ ] arrow keys.

To jump from one column to the next (when relevant), use the [Tab] key.

To exit the OSD or to return to the previous OSD window, press [Esc].

## Selecting a Computer

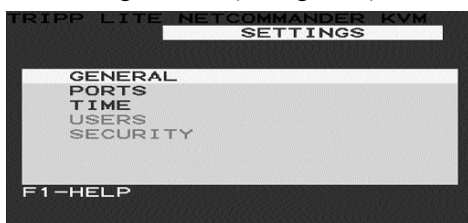
To select a computer:

1. Move to the desired computer line.
2. Press [Enter]. The selected computer will be accessed. A confirmation label appears to show which computer is selected.

Note: While the OSD is activated, you cannot use the front panel “Select” buttons or the keyboard hotkeys to connect to a computer.

## OSD Settings (F2)

Press [F2] to open the OSD Settings window (see Figure 10).



```
RIIP LITE NETCOMMANDER KVM
SETTINGS
GENERAL
PORTS
TIME
USERS
SECURITY
F1-HELP
```

Figure 10 The Settings Window

Note: If the OSD is password protected, only the Administrator will be able to get access to the F2 settings window by using the appropriate password.

## General Settings

With the highlight line on the word GENERAL, press **[Enter]**. The General Settings window appears (see Figure 11).

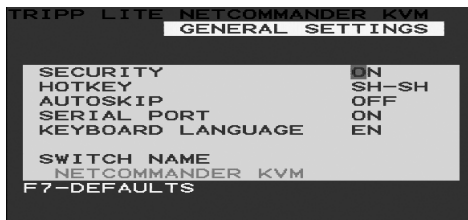


Figure 11 The General Settings window

From this screen you can do the following:

### Security

The OSD offers an advanced password security system made up of three different security levels. Each security level has its own access rights.

These levels are as follows:

#### Administrator (Status A)

The Administrator can:

- Set and modify all Passwords and security profiles
- Get full access to any computer
- Use all OSD functions

#### Supervisor (Status S)

The Supervisor can:

- Get full access to any computer
- Access the following OSD functions:
  - **F4** Scan, **F5** Tune and **F6** Moving the Confirmation label

#### User (Status U)

You can set up six different Users in the KVM system. Each User has its own Profile set by the Administrator, which defines the access level to different computers. There are three different access levels.

### Activating Password Protection

The factory default setting for the OSD access is to have it not password protected. Only the Administrator can password-protect the OSD or disable it.

To password protect the OSD:

1. Go to the Security line in the General Settings window.
2. Toggle between Security On and Off using the space bar.
3. Type the Administrator's password (default is "admin") into the Password Box and Press **[Enter]**.
4. The new security status is set.

# Operation *(continued)*

## Changing the OSD hotkey

By pressing **[Shift]**, **[Shift]** the OSD appears. You can replace **[Shift]**, **[Shift]** with any of the following:

- **[Ctrl]**, **[Ctrl]**
- **[Ctrl]**, **[F11]**
- **[Print Screen]**

To change the hotkey:

1. Navigate to the Hotkey line.
2. Press the **[Space]** bar to toggle between options. To display the OSD in the future, press the new hotkey.

## Autoskip

With the Autoskip feature set, the arrow keys will only access the active computer lines on the OSD. When Autoskip is Off, the arrow keys will access both active and inactive computer lines.

To change the Autoskip setting:

1. Navigate to the Autoskip line.
2. Toggle between the options using the Space bar.

## Serial port

The Serial port is used for the Firmware upgrade. Serial port On means the program can be used.

To change the Serial port setting:

1. Navigate to the Serial port line.
2. Toggle between the options using the Space bar.

## Changing the Keyboard language

The keyboard is preset to US English. It can be changed to French (FR) or German (DE) by doing the following:

1. Navigate to the Keyboard language line.
2. Toggle between the options using the Space bar.

## Editing the Switch name

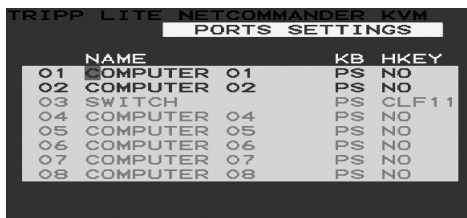
You can name a switch using a character string up to 18 characters long. A space constitutes a character. When there is more than one switch in the system, give each switch's OSD a different name.

## F7 Defaults

Press F7 to return the OSD to the factory default settings. **Note: All changes that have been made will be removed.**

## Ports Settings

In the Settings window, go to the Ports line and press **[Enter]**. The Ports settings window opens (see Figure 12).



	NAME		KB	HKEY
01	COMPUTER	01	PS	NO
02	COMPUTER	02	PS	NO
03	SWITCH		PS	CLF 1 1
04	COMPUTER	04	PS	NO
05	COMPUTER	05	PS	NO
06	COMPUTER	06	PS	NO
07	COMPUTER	07	PS	NO
08	COMPUTER	08	PS	NO

Figure 12 Ports Settings window

### Editing the computer name

Use this window to edit the computer names (maximum of 15 characters).

To erase a character:

Select it and press the **[Space bar]**. Blank spaces remain in place of the erased character.

To erase an entire line:

Place the cursor at the beginning of the line. Keep the **[Space bar]** depressed until the line is erased.

### Keyboard (KB)

The KVM operates with Windows, Linux, HP UX, Alpha UNIX SGI, DOS, Novell, MAC, USB or Open VMS.

By default the keyboard mode is set to PS for Intel based computers.

For the other systems set the KB column as follows:

- U1 for HP UX
- U2 for Alpha UNIX, SGI, Open VMS

### Adding/changing a hotkey (HKEY)

Cascade the KVM by connecting another KVM Switch to a Computer port instead of a computer, and then connecting more Server Interface Units to the second Switch. Connect a third and fourth Switch in the same way. With the KVM 16 Port model, connect up to 256 computers through cascading.

You will need to define a hotkey to display the OSD of each Switch. These hotkeys must be different for the top and bottom layers. The hotkeys can be any of the choices as set out previously.

To add/change a hotkey:

1. On the line to which the Switch is connected, press Tab to jump to the HKEY column.
2. Toggle between the options using the Space bar.

## Time Settings

In the Settings window navigate to the Time line and press **[Enter]**. The Time settings window appears (see Figure 13).

	NAME	SCN	LBL	T/O
01	COMPUTER	01	030	030 030
02	COMPUTER	02	030	030 030
03	SWITCH		030	030 030
04	COMPUTER	04	030	030 030
05	COMPUTER	05	030	030 030
06	COMPUTER	06	030	030 030
07	COMPUTER	07	030	030 030
08	COMPUTER	08	030	030 030

Figure 13 Time settings window

### Scan (SCN) - Label (LBL) - Time out (T/O)

**SCN** - Sets the scan period.

**LBL** - Sets the amount of time the OSD label that show which computer is currently accessed is displayed.

**T/O** - When password protection is activated, you can automatically disable the keyboard, mouse and screen after a set amount of idle time.

To set the above periods:

1. On the desired line press Tab to jump to the desired column.
2. Place the cursor over one of the 3 digits and type a new number. Enter a leading zero where necessary. For example, type 030 for 30 seconds.

Enter 999 in the **LBL** column to have the label displayed continuously. Enter 000 if you do not want the label to appear.

Enter 999 in the **T/O** column to disable the Timeout function.

Enter 000 if you want the Timeout function to work immediately. (WARNING: we suggest a minimum time of no less than 005 seconds as 000 causes the timeout function to work immediately.)

Enter 999 in the **SCN** column to display the screen for 999 seconds.

Enter 000 to skip the computer screen.

## Users

In the Settings window navigate to the Users line and press **[Enter]**. The Users settings window appears (see Figure 14).

	NAME	USER
01	COMPUTER	01 123456
02	COMPUTER	02 YNNVYN
03	SWITCH	04 YYYYYY
05	COMPUTER	05 YYYYYY
06	COMPUTER	06 YYYYYY
07	COMPUTER	07 YYYYYY
08	COMPUTER	08 YYYYYY

Figure 14 The Users Settings Window

## Operation *(continued)*

There are three different access levels. These are:

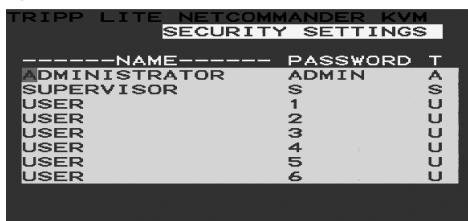
- Y - Full access to a particular computer. Plus access to the **F4**, **F5** and **F6** OSD functions
- V -View access only, to a particular computer (No keyboard/mouse functionality)
- N - No access to a particular computer - A TIMEOUT label appears if access is attempted

To give each user the desired access level:

1. Navigate to the desired computer line and User.
2. Toggle between the options using the Space bar.

## Security

Go to the Security line in the Settings window and press **[Enter]**. The Security settings window appears (see Figure 15).



NAME	PASSWORD	T
ADMINISTRATOR	ADMIN	A
SUPERVISOR	S	S
USER	1	U
USER	2	U
USER	3	U
USER	4	U
USER	5	U
USER	6	U

Figure 15 The Security settings window

The “T” column on the right hand side refers to the Type of password.

There can only be 1 Administrator password, 1 Supervisor password, and 6 User passwords.

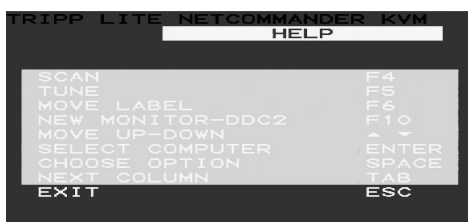
To change a user name or password:

1. Move to the desired line and column.
2. Type a new user name / password. User authentication is done solely via the password, there is no security significance to the names.

The factory default setting for the User Profile Settings is full access.

## OSD HELP Window (F1)

To access the HELP window press **[F1]**. The HELP window is displayed (see Figure 16).



SCAN	F4
TUNE	F5
MOVE LABEL	F6
NEW MONITOR-DDC2	F10
MOVE UP-DOWN	↑ ↓
SELECT COMPUTER	ENTER
CHOOSE OPTION	SPACE
NEXT COLUMN	TAB
EXIT	ESC

Figure 16 The HELP window

Please note! All the functions in the Help window are performed from the Main window. The Help window is only a reminder of the hotkeys and their functions.

# Operation *(continued)*

## Scanning Computers (F4)

You can adjust the scan time in the Time Settings window (see Figure 13).

To activate scanning:

1. Press the **[Shift]** key twice to activate the OSD.
2. Press the **[F4]** key.

Each active computer will be displayed in sequence. A Scan label appears in the top left corner.

To deactivate scanning:

- Press **[F4]**.

## Tuning (F5)

You can tune the image of any remote computer screen.

To adjust the screen image:

1. Move to the remote computer you want to adjust.
2. Press the **[F5]** key. The screen image of the selected computer is displayed, along with the Image Tuning label.
3. Adjust the image by using the **Right** and **Left Arrow** keys.
4. When the image is satisfactory, press **[Esc]**.

**Note! Distance affects picture quality. The further away a remote computer is from the KVM, the lower the image quality and the more tuning needed. Therefore put any higher resolution computers closer to the KVM.**

## Moving the Label (F6)

You can position the OSD label anywhere on the screen.

To position the label from the Main window:

1. Move to the desired computer using the **Up** and **Down Arrow** keys.
2. Press the **[F6]** key. The selected screen image and Identification label are displayed.
3. Use the arrow keys to move the label to the desired position.
4. Press **[Esc]** to save and exit.

# System Requirements

- Pentium 166 or higher with 16MB RAM and 10MB free Hard Drive space
- Free Serial port
- Windows 98 and later

To update the firmware the KVM system must be connected and switched on

## Software

### Upgrading the KVM Firmware

With the NetCommander KVM Update software program you can upgrade the firmware for the:

- OSD
- Manager
- Server Interface Units

KVM Update enables you to add new features and take advantage of product improvements in a quick and efficient manner.

You can install the KVM Switch Update on any computer, even one not part of the KVM system.

### Connecting the RS232 Serial Cable

To run the software, connect the RS232 Serial cable to the computer containing the software, and to the KVM Switch.

### Installing the Software

To install the KVM Switch Update software:

1. Download KVM update software from [www.tripplite.com](http://www.tripplite.com)
2. Run the software.



## Starting and Configuring the KVM Update

1. Start the KVM Update software. The KVM Update window appears (see Figure 17).

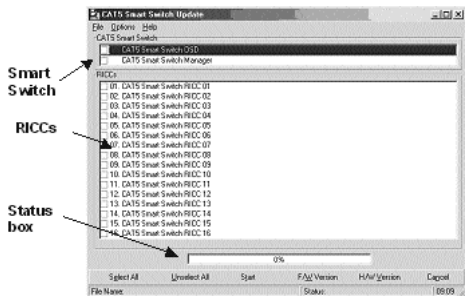


Figure 17 The KVM Switch Update window

The table below explains the functions of the buttons and boxes in the KVM Switch Update window.

Button or Box	Function
Select All	Selects all Server Interface Units
Unselect All	Unselects selected Server Interface Units
Start	Starts firmware download
F/W Version	Displays the firmware version number
H/W Version	Displays the hardware version number
Cancel	Cancels selected function
10:06	System time
Status:	Displays download status
File Name:	Name of Update file

2. From the Options menu choose Com Port. The Com Port box appears (see Figure 18).



Figure 18 The Com Option box

3. Choose an available Com Port and click OK.

Note! The RS232 Serial cable must be connected to the selected Serial port.

## Verifying the Version Numbers

Before upgrading the firmware, you must first verify which firmware and hardware versions you have.

### The OSD version number

To verify the OSD version number:

1. Open the KVM Switch Update program.
2. In the Switch Unit box, check the OSD option. See Figure 17.
3. Click . The version number appears in the Switch box.

The H/W Version button is grayed out, as there is no hardware relevant to the OSD.

### The KVM Manager version number

To verify the KVM version number:

1. Open the KVM Switch Update program.
2. In the **Switch Unit** box, check the **KVM Manager** option.
3. Click . The firmware version number appears in the Switch Unit box.
4. Click . The hardware version number appears in the Switch Unit box.

### Verifying the Server Interface Unit's version number

Before you can check a Server Interface Unit, you must uncheck the Switch Unit box options.

To verify the Server Interface Unit version number:

1. Open the KVM Switch Update program.
2. Check one or more or all of the Server Interface Units.
3. Click . The firmware version number appears after the Server Interface Unit number.
4. Click . The hardware version number appears after the Server Interface Unit number.

When “**Not responding**” appears, no computer is connected, or it is switched off.

## Obtaining New Firmware

Download the latest firmware for your system from [www.tripplite.com](http://www.tripplite.com)

## Updating the Firmware

**Warning! Never switch off any computer connected to the KVM system during the updating process.**

To update the firmware:

1. Open the KVM Switch Update program.

2. In the KVM Switch Update window, check the appropriate option in the Switch Unit box or the desired Server Interface Unit.
3. From the **File** menu, choose **Open**. The **Open** box appears (see Figure 19).
4. Navigate to the folder that contains the firmware update file. You may only see the files that match the file selection mask.

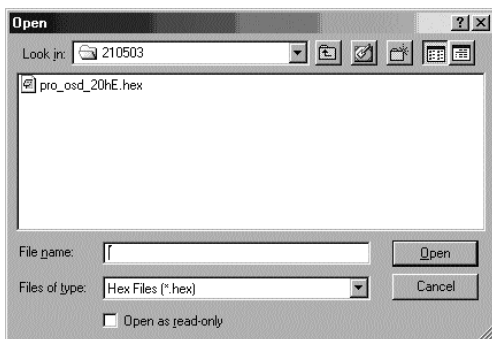


Figure 19 The Open box

5. Open the file.
  6. Click **Start**. The KVM Switch Update flashes the firmware. On completion the firmware version number appears.
  7. Check that the updated version number is correct by pressing FWVersion.
- Firmware Update generates one log file per session that displays a chronological list of actions. You can read the log file in any ASCII text editor. The log file is located in the Windows directory.

## Reset

Reset the software for the KVM Manager or Server Interface Units when for example the unit hangs or when the mouse fails to work properly. Resetting is done via the Serial port, and avoids the need to shut down the computer.

**NOTE! The Reset function does not affect the parameters of the unit settings.**

### Resetting the Switch or Server Interface Units

To reset the Switch or Server Interface Unit units:

1. For the Switch, check the KVM Switch option in the **Switch Unit** box.  
For the Server Interface Units, check one or more Server Interface Units in the **Server Interface Units** box.
2. From the Options menu choose Advanced / Reset. The units reset. The system should now be operational.

# Troubleshooting

When using Firmware Update software you may at times get a Communication Error message.

If a Communication Error message does appear during the update procedure, do the following:

1. Ensure that the RS232 Serial cable's RS232 connector is connected to the Switch's Communication port.
2. Ensure that the RS232 Serial cable's DB9F connector is connected to the DB9M Serial port on the CPU's rear panel.
3. Restart the download process.

## Electricity failure

If the electricity fails during an update to the KVM firmware, do the following:

If the electricity fails while the switch firmware is updating, a Communication Error message will appear. Simply resume the firmware update by opening the folder that contains the firmware update file and continue from there.

If the electricity fails while the Server Interface Unit firmware is updating, a **Not Responding** or **Upgrade Error** message will appear. Restart the upgrade from the beginning.

# USB/SUN Combo Keys

The connected PS/2 keyboard does not have a special SUN keypad to perform special functions in the SUN Operating System environment. So when a server interface unit (USB or SUN) is connected to a SUN computer, the server interface unit emulates these SUN keys using a set of key combinations called Combo keys. See the table below.

SUN key	Combo key	SUN key	Combo key
Stop	Left <b>Ctrl</b> + <b>Alt</b> + <b>F1</b>	Compose	Application key or Left <b>Ctrl</b> + <b>Alt</b> + Keypad *
Props	Left <b>Ctrl</b> + <b>Alt</b> + <b>F3</b>	Crescent	<b>Scroll Lock</b>
Front	Left <b>Ctrl</b> + <b>Alt</b> + <b>F5</b>	Volume Up	Left <b>Ctrl</b> + <b>Alt</b> + Keypad -
Open	Left <b>Ctrl</b> + <b>Alt</b> + <b>F7</b>	Volume Down	Left <b>Ctrl</b> + <b>Alt</b> + Keypad +
Find	Left <b>Ctrl</b> + <b>Alt</b> + <b>F9</b>	Mute	Left <b>Ctrl</b> + <b>Alt</b> + <b>F12</b>
Again	Left <b>Ctrl</b> + <b>Alt</b> + <b>F2</b>	Sun Left ◊ key	Left <b>Windows</b> key
Undo	Left <b>Ctrl</b> + <b>Alt</b> + <b>F4</b>	Sun Right ◊ key	Right <b>Windows</b> key
Copy	Left <b>Ctrl</b> + <b>Alt</b> + <b>F6</b>	Alt-Graph	Right <b>Alt</b> or <b>Alt Gr</b>
Paste	Left <b>Ctrl</b> + <b>Alt</b> + <b>F8</b>	Stop A	Left <b>Ctrl</b> + <b>Alt</b> + <b>1</b>
Cut	Left <b>Ctrl</b> + <b>Alt</b> + <b>F10</b>		
Help	Left <b>Ctrl</b> + <b>Alt</b> + <b>F11</b>		

# Specifications

<b>Operating Systems</b>	DOS, Windows (3X, 9X, 2000, NT4, ME, XP, 2003 Server) LINUX, UNIX, QNX, SGI, FreeBSD, BeOS, Open VMS, Novell 3.12-6, Alpha UNIX, HP UX, SUN	
<b>Mouse</b>	PS/2, Wheel mouse, Intellimouse, 5-button mouse	
<b>Resolution</b>	1600x1200@75Hz	
<b>Transmission distance</b>	Up to 33 ft.	
<b>NetCommander KVM Switch</b>	<b>Models B072-016-1 or B072-008-1</b>	
<b>Dimensions - 8/16 port</b>	17" x 5' x 1.7"	
<b>Weight - 8/16 port</b>	Product - 3.5 lbs. Shipping - 5.5 lbs.	
<b>Power supply</b>	Internal switching 85-260 VAC 50 / 60 Hz	
<b>Connections</b>		
<b>System</b>	RJ45	
<b>Serial</b>	RJ11	
<b>Monitor</b>	HD15	
<b>Keyboard</b>	MiniDin6	
<b>Mouse</b>	MiniDin6	
<b>Operating / Recommended ambient temperature</b>	32°F to 104°F	
<b>Storage temperature</b>	-40°F to 158°F	
<b>Humidity</b>	80% non-condensing relative humidity	
<b>NetCommander Server Interface Units</b>	<b>Model B078-001-PS2</b>	<b>Model B078-001-USB</b>
<b>Connections</b>		
<b>VGA</b>	HD15	HD15
<b>Keyboard/Mouse</b>	MiniDin6	USB
<b>System</b>	RJ45	RJ45
<b>Power</b>	From Keyboard port	From USB port

# FCC Radio/TV Interference Notice

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense. The user must use shielded cables and connectors with this product. Any changes or modifications to this product not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

# 1-Year Limited Warranty

TRIPP LITE warrants its products to be free from defects in materials and workmanship for a period of one (1) year from the date of initial purchase. TRIPP LITE's obligation under this warranty is limited to repairing or replacing (at its sole option) any such defective products. To obtain service under this warranty, you must obtain a Returned Material Authorization (RMA) number from TRIPP LITE or an authorized TRIPP LITE service center. Products must be returned to TRIPP LITE or an authorized TRIPP LITE service center with transportation charges prepaid and must be accompanied by a brief description of the problem encountered and proof of date and place of purchase. This warranty does not apply to equipment, which has been damaged by accident, negligence or misapplication or has been altered or modified in any way.

EXCEPT AS PROVIDED HEREIN, TRIPP LITE MAKES NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. Some states do not permit limitation or exclusion of implied warranties; therefore, the aforesaid limitation(s) or exclusion(s) may not apply to the purchaser.

EXCEPT AS PROVIDED ABOVE, IN NO EVENT WILL TRIPP LITE BE LIABLE FOR DIRECT, INDIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OF THIS PRODUCT, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE. Specifically, TRIPP LITE is not liable for any costs, such as lost profits or revenue, loss of equipment, loss of use of equipment, loss of software, loss of data, costs of substitutes, claims by third parties, or otherwise.

## Warranty Registration

Visit [www.tripplite.com/warranty](http://www.tripplite.com/warranty) today to register the warranty for your new Tripp Lite product. You'll be automatically entered into a drawing for a chance to win a FREE Tripp Lite product!\*

\* No purchase necessary. Void where prohibited. Some restrictions apply. See website for details.

This product is designed and engineered in the USA.

The policy of TRIPP LITE is one of continuous improvement. Specifications are subject to change without notice.





Tripp Lite World Headquarters  
1111 W. 35th Street, Chicago, IL 60609 USA  
(773) 869-1234, [www.tripplite.com](http://www.tripplite.com)