Quick Start Guide

NetCommander[®] IP Cat5 KVM Switch

Models: B070-008-19-IP, B070-016-19-IP, B072-008-1-IP, B072-016-1-IP (Series Number: AG-00C3)

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1. Product Overview

1.1 Features and Benefits

- Directly connect up to 16 (B070-016-19-IP or B072-016-1-IP) or 8 (B070-008-19-IP or B072-008-1-IP) computers/servers.
- Up to 2 users (1 local, 1 remote) can simultaneously access the KVM
- Up to 5 users can share a single remote session
- Multi-level account access: Administrator and User account types.
- Remote authentication support; RADIUS and LDAP/S
- Supports both IPv4 and IPv6
- PDU Control Add IP PDUs as devices that can be controlled by the KVM. Assign individual ports on the KVM to a PDU port to power cycle or power off/on the computer/server connected to that port.
- BIOS level control to any server's brand and model, regardless of the server condition and network connectivity. Covers the entire spectrum of crash scenarios.
- Compatible with Windows and Linux operating systems.
- Connect computer/servers up to 100 ft. (30 m.) away from the KVM using inexpensive Cat5e/6 cabling* and B078-101-USB2, B078-101-USB-1 and B078-101-PS2 SIUs
- Java-based application allows control of a target server via web browser from any location over a secured IP connection.
- Features two 10/100 Mbps LAN ports, so that if one fails, the other takes over.
- Supports the highest security standards for encryption (128-bit AES and HTTPS).
- Virtual Media allows an .iso file located in a Shared folder of a SAMBA or NFS server to be mounted to a Target Server and accessed as if
 it were directly stored on it.
- Supports Virtual Media data transfer rates up to 12Mbps (B078-101-USB2 required). A B078-101-USB-1 can be used to provide Virtual Media support, but only at speeds up to 1Mbps.
- Event log records events that take place on the installation, such as logins, reboots, network settings changes, etc..
- Features two RJ45 serial ports for connecting serial manageable devices, such as PDUs, firewalls, and routers.
- Allows for system sent messages to SNMP server to notify of LAN failures.
- Allows for the installation of a SSL certificate to ensure secure transactions between the Web servers and browsers.
- Graphical OSD and toolbars provide convenient, user-friendly remote operation.
- Text based OSD provides convenient, user-friendly local operation.
- Supports video resolutions up to 1920 x 1080 @ 60Hz. (B070-console KVMs are limited to video resolutions up to 1366 x 768 at the local console.)
- Flash upgradeable firmware over the network.

* To ensure proper functionality, shielded Cat5e/6 cable must be used with the B078-101-USB2, and is recommended for all other SIUs for best performance.

1.2 Terminology

The following table describes terms used in this guide.

Term	Definition
Target Server	The computer/server that is connected directly to the KVM, and which is accessed via the local console or by a Client Computer running a remote session.
Client Computer	A computer running a remote session, which is used to access computer/servers or devices connected to the KVM.
Remote Session	The process of remotely accessing the KVM via Client Computer, and controlling Target Servers and other connected devices.
RICCs/ROCs/SIUs	RICC, ROC, and SIU refer to the dongles that are used to connect the KVM switch to a computer/server via Cat5e/6 cable. RICCs are the earliest versions of these dongles, and stand for Remote Interface Connection Cable. ROCs are the second generation of these dongles, and stand for RICC on Cable. SIUs are the current versions of these dongles, and stand for RICC on Cable. SIUs are the current versions of these dongles, and stand for RICC on Cable. SIUs are the current versions of these dongles, and stand for RICC on Cable. SIUs are the current versions of these dongles, and stand for Server Interface Units. Functionally, they all serve the same purpose. The B078-101-PS2, B078-101-USB-1, and B078-101-USB2 are the SIUs that will be used with the NetCommander UP KVM Switches.

1.3 Target Server Compatibility

- PS/2 and USB computers/servers
- Computer/servers with a HD15 (VGA) port
- Computer/servers running Windows or Linux operating systems

1.4 Client Computer Compatibility

- Pentium 4 with 2 GB memory
- Supports Windows 7, 8, and 10 operating systems.
- Windows operating systems can use Internet Explorer 11.0 or later, Firefox 52 or later, or Chrome 56.0 or later browsers.
- Supports Java 8 (also known as 1.8) and Java 9 (also known as 1.9) 32-bit or 64-bit.

1.5 Safety

- Read all of these instructions. Save them for future reference.
- Follow all warnings and instructions marked on the device.
- Use of this equipment in life support applications where failure of this equipment can reasonably be expected to cause the failure of the life support equipment or to significantly affect its safety or effectiveness is not recommended. Do not use this equipment in the presence of a flammable anesthetic mixture with air, oxygen or nitrous oxide.
- This device is designed for IT power distribution systems with up to 230V phase-to-neutral voltage.
- Do not place the device on any unstable surface (cart, stand, table, etc.). If the device falls, serious damage will result.
- Do not use the device near water.
- Do not place the device near, or over, radiators or heat registers.
- The device cabinet is provided with slots and openings to permit adequate ventilation. To ensure reliable operation and protect against overheating, these openings must never be blocked or covered.
- The device should not be placed on a soft surface (bed, sofa, rug, etc.), as this will block its ventilation openings. Likewise, the device should not be placed in a built-in enclosure unless adequate ventilation has been provided.
- Never spill liquid of any kind on the device.
- Unplug the device from the wall outlet before cleaning. Use a damp cloth for cleaning. Do not use liquid or aerosol cleaners.
- The device should be operated from the type of power source indicated on the marking label. If you are not sure of the type of power available, consult your dealer or local power company.
- To prevent damage to your installation, ensure that all devices are properly grounded.
- The device is equipped with a 3-wire grounding type plug. This is a safety feature. If you are unable to insert the plug into the outlet, contact your electrician to replace your obsolete outlet. Do not attempt to defeat the purpose of the grounding-type plug. Always follow your local/national wiring codes.
- Position system cables and power cables carefully to ensure that nothing rests on any cable. Route the power cord and cables so that they cannot be stepped on or tripped over.

- If an extension cord is used with this device, make sure that the total ampere rating of all products used on the cord does not exceed the extension cord ampere rating. Make sure that the total of all products plugged into the wall outlet does not exceed 15 amperes.
- To help protect your system from sudden transient increases and decreases in electrical power, it is recommended that you plug your devices into a Tripp Lite surge suppressor, line conditioner, or uninterruptible power supply (UPS).
- When connecting or disconnecting power to hot-pluggable power supplies, observe the following precautions:
 - o Install the power supply before connecting the power cable to the power supply
 - o Unplug the power cable before removing the power supply
 - o If the system has multiple sources of power, disconnect power from the system by unplugging all power cables from the power supplies
 - o Never push objects of any kind into or through cabinet slots. They may touch dangerous voltage points or short out parts, resulting in a risk of fire or electrical shock
 - o Do not attempt to service the device yourself. Refer all servicing to qualified service personnel
- If the following conditions occur, unplug the device from the wall outlet and bring it to qualified service personnel for repair:
- o The power cord or plug has become damaged or frayed
- o Liquid has been spilled into the device
- o The device has been exposed to rain or water
- o The device has been dropped or the cabinet has been damaged
- o The device exhibits a distinct change in performance, indicating a need for service
- o The device does not operate normally when the operating instructions are followed
- Adjust only those controls that are covered in the operating instructions. Improper adjustment of other controls may result in damage that will require extensive repair work by a qualified technician.

1.6 System Components

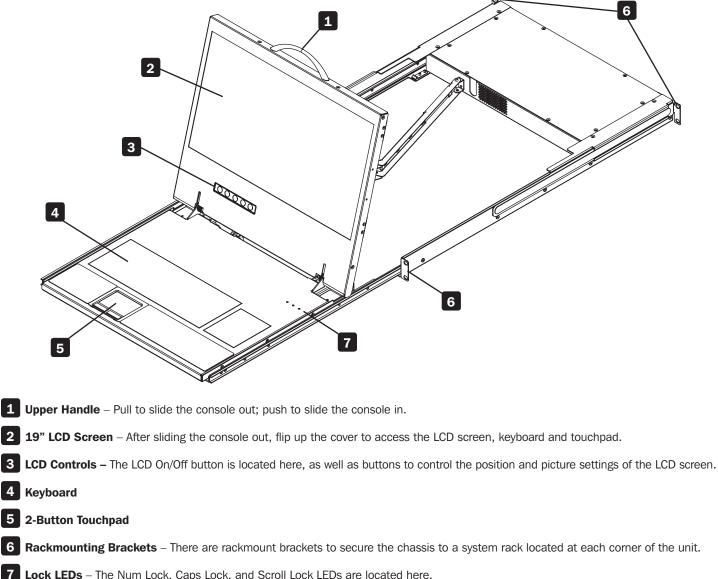
Before installing the NetCommander IP, verify that you have all the components on the following list, as well as any other items required for installation.

- B070-008-19-IP, B070-016-19-IP, B072-008-1-IP or B072-016-1-IP NetCommander IP KVM
- A B078-101-PS2, B078-101-USB-1 or B078-101-USB2 (ordered separately) for each computer/server you will be connecting.
- Cat5e/6 cable* (ordered separately) for each computer/server you will be connecting, as well as for network and serial connections.
- Rackmount hardware (included).
- Power cord (included).

* To ensure proper functionality, shielded Cat5e/6 cable must be used with the B078-101-USB2, and is recommended for all other SIUs for best performance.

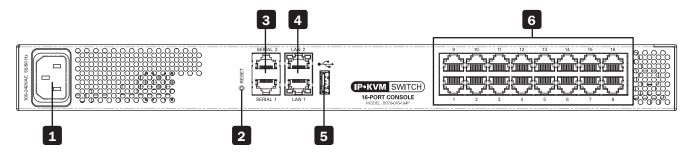
1.7 The NetCommander IP Unit

Console KVM Switch Front View



Lock LEDs – The Num Lock, Caps Lock, and Scroll Lock LEDs are located here.

Console KVM Switch Rear View



1 Power Outlet – The power cord included with the console connects to the unit here.

2 Reset Button – Pressing this button for 10 seconds restores the system to its factory default settings.

3 Serial Ports 1 and 2 – The KVM features two RJ45 serial ports for connecting serial manageable devices, such as PDUs, firewalls, and routers (see the Serial Pinout section in the Owner's Manual for the pinout information).

4 LAN Ports 1 and 2 – The KVM features two RJ45 LAN ports for connecting to 10/100 Mbps networks. If LAN 1 goes down, LAN 2 takes over. When LAN 1 becomes operational again, the KVM will need to be rebooted to make it the default LAN port again. Note: Only one LAN port can be turned on at a time; they cannot both be turned on. If you don't wish to use network redundancy, connect a single network cable to the LAN 2 Port.

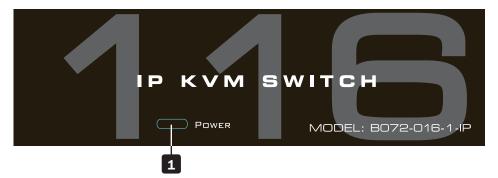
5 USB Port – This port currently serves no functional purpose. It is included for future functionality upgrades.

6 Server Ports – When connecting a computer/server, Cat5e/6* cabling connects from an available server port to a B078-101-PS2, B078-101-USB-1 or B078-101-USB2 SIU which in turn connects to the computer/server.

* To ensure proper functionality, shielded Cat5e/6 cable must be used with the B078-101-USB2, and is recommended for all other SIUs for best performance.

Rackmount KVM Switch Front View

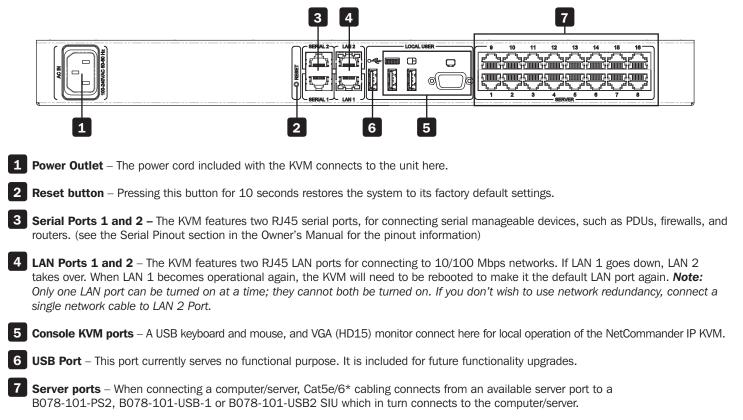
The NetCommander IP front panel is illustrated in the figure below. **Note:** The figure below shows a B072-016-1-IP, but the front panel will be functionally the same for all models.



1 Power LED – This Blue LED illuminates to indicate that the unit is powered on. No light indicates that the unit is powered off. When a LAN redundancy event occurs, and LAN 2 takes over for LAN 1, this LED will blink slowly. To stop the LED from blinking after a redundancy event, the KVM must be powered off and back on.

Rackmount KVM Switch Rear View

The NetCommander IP back panel is illustrated in the figure below. **Note:** The figure below shows the back panel for a B072-016-IP, but the back panel will be functionally the same for all models, with the only difference being the number of server ports.



* To ensure proper functionality, shielded Cat5e/6 cable must be used with the B078-101-USB2, and is recommended for all other SIUs for best performance.

1.8 Rackmounting the NetCommander IP

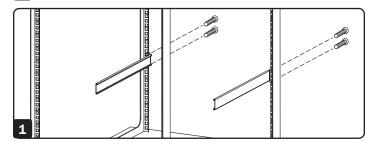
Follow all instructions in the safety section of the Owner's Manual before rackmounting. Make sure to write down the MAC Address and Device Number from the bottom of the unit before rackmounting, as they will be useful when finding the IP address assigned by the DHCP server. For the B072-Series, attach the included mounting brackets to the sides of the KVM switch (either front or rear, depending on user preference) using the included hardware, and then mount the KVM into your rack using user supplied screws. The B070-Series Console KVM Switches come with removable rackmount brackets, allowing the unit to be installed by a single person.

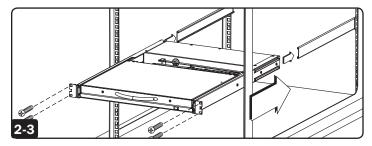
1.8.1 Standard Console KVM Switch Instructions

Remove the rackmount brackets from the unit and mount them to the back of the rack using user-supplied screws.

Take the Console KVM switch and gently slide it into the rack so that it inserts into the rackmount brackets you just mounted.

3 Mount the rackmount brackets on the front of the unit to the rack using user-supplied screws.



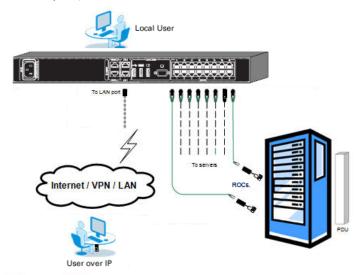


1.8.2 2-Post Rack Console KVM Switch Instructions

The B070-Series Console KVM Switches can be mounted to a 2-Post Rack using Tripp Lite's B019-000 2-Post Rackmount Kit (sold separately). See the B019-000 owner's manual for installation instructions.

1.9 Connecting the System

The figure below illustrates the NetCommander IP system overview. **Note:** The figure below shows a B072-016-1-IP. The only difference in set up between models is the number of ports, and the lack of an external console on the B070-Series console KVMs.



- 1. Make sure that power to all the devices you will be connecting has been turned off.
- 2. (B072-Series KVM Switches Only) Connect a VGA cable from the monitor to the HD15 (VGA) port on the back of the KVM.
- 3. (B072-Series KVM Switches Only) Connect the keyboard's USB connector to the USB Keyboard port on the back of the KVM.
- 4. (B072-Series KVM Switches Only) Connect the mouse's USB connector to the USB Mouse port on the back of the KVM.
- Connect a Cat5e/6* cable from an available server port on the back of the KVM to a SIU (B078-101-PS2, B078-101-USB-1 or B078-101-USB2) appropriate for the computer you are adding.
- 6. Connect the SIU's connectors to the corresponding ports on the computer/server.
- 7. Repeat steps 5 and 6 for each computer/server you are adding.
- 8. Connect a Cat5e/6 cable from your network to the LAN 1 port on the back of the KVM.
- 9. Connect a second Cat5e/6 cable from your network into the KVM's LAN 2 port.
- 10. **Optional:** Connect up to two serial devices to the RJ45 Serial Ports 1 and 2 on the back of the KVM switch (See the *Configuring Serial Port Settings* section of the Owner's Manual for details on configuration. See the *Serial Pinout* section in the Owner's Manual for the pinout information).
- 11. Connect the included power cord between the C14 outlet on the back of the unit and a Tripp Lite Surge Suppressor, Power Distribution Unit (PDU), or Uninterruptible Power Supply (UPS). There is no Power On/Off switch, so plugging in the power cord will power on the KVM.
- 12. Turn on the power to all of the connected devices.
- * To ensure proper functionality, shielded Cat5e/6 cable must be used with the B078-101-USB2, and is recommended for all other SIUs for best performance.

1.10 Initial Settings (Default IP Address)

By default, the NetCommander IP is set to have the network's DHCP server pull an IPv4 address for it. Referencing the unit's Mac address, which can be found on the bottom panel of the KVM, have your network administrator provide you with the IP address that was assigned by the DHCP server. You can also obtain the IP address by logging into the KVM's OSD via the local console, and navigating to the F2 Settings menu.

On networks that do not have a DHCP server, the KVM boots with the default static IPv4 address of 192.168.0.254. **Note:** There is no default IPv6 address for the KVM switch. An IPv6 address can be automatically assigned via DHCP server, a Stateless address can be assigned, or a static address can be manually entered.

To configure an IP address for the KVM, you can use the local console OSD or the Web Configuration Interface. Both methods are described in the following sections.

To set the IPv4 address via the local console OSD:

1. From the local console, press the left [Shift] key twice to open the OSD.

- 2. Press the [F2] key to open the Settings menu.
- 3. In the Settings menu, press the **[Tab]** key until the DHCP field is highlighted. Press the **[Spacebar]** key to toggle the DHCP field from Enabled to Disabled.
- 4. Pressing the **[Tab]** key to navigate to the additional fields, type in the desired IP Address, Subnet Mask, Gateway and DNS Server Address (optional).
- Once the IP address is satisfactory, press the [Esc] key to save your changes. This will require that the KVM be rebooted to save the new settings.

To set the IPv6 address via the local console OSD:

- 1. From the local console, press the left [Shift] key twice to open the OSD.
- Press the [F2] key to open the Settings menu, and then press the [F2] key again to open the IPv6 Settings menu.
- 3. In the IPv6 Settings menu, with the Mode field at the top of the screen highlighted, press the **[Spacebar]** key to toggle between DHCP, Stateless, and Static. DHCP is selected by default, and automatically assigns an IP address via the IPv6 DHCP server. Stateless is an option for networks with a compliant router that performs Stateless IPv6 configuration. Static allows you to manually assign an IP address.
- Pressing the [Tab] key to navigate to the additional fields, type in the desired IP Address, Gateway, and DNS Server Address (optional).
 Note: DNS IP should be set to 0.0.0.0 to indicate no DNS.
- 5. Once the IP address is satisfactory, press the **[Esc]** key twice to exit and save your changes. This will require that the KVM be rebooted to save the new settings.

TRIPPLITE NETCOMMANDER MAIN

	NAME		USER	PM
Ø1				- Q-
02	Server (ð2		-@-
03	Server (13		-0-
04	Server (14		
05	Server (25		
06	Server (26		
07	Server (2 7		
08	Server (28		
MON	/E LABEL	F1	ESC-LOGO	UT
TUI	NING	F5	F2-SETTI	NG

TRIPPLITE NETCOMMANDER SETTINGS

MAC ADDR 00:15:	9D:02:ED:E6
DHCP ENABLED	
IP ADDRESS 172	2.72.0.27
SUBNET MASK 255	5.255.0.0
GATEWAY 172	2.72.0.1
DNS IP(Opt) 172	2.72.5.30
HOTKEY :Shift-S	
KEYBOARD LANGUA	GE :English

Toggle-Space Navigate-Tab DDC-F10 Next-F2 Save-ESC

TRIPPLITE NETCOMMANDER IPV6 SETTINGS

Mode DHCP
IP ADDRESS
2001:db8:0:1::12d
/ 64
DEFAULT GATEWAY
fe80::21b:21ff:fe0d:
£959
DNS IP (Optional)
2001:db8:0:1::128
Toggle-Space Navigate-Tab
Back-FSC

To set the IP address via the Web Configuration Interface:

Notes:

• Before logging on the first time, verify the latest Java version (1.8 or 1.9) is installed on your computer. If the Java Runtime Environment is not installed on the client PC, a popup window similar to the one below will likely appear.



To resolve this issue, install a supported version of Java (1.8 or 1.9).

- Once a supported JRE has been installed, restart the browser and retry accessing the KVM Web Configuration Interface.
- The installed version of Java may require the KVM Web Configuration Interface be added to an exception list. In such cases, upon logging into the KVM application, a popup window similar to the one below will appear.

Java Applica	tion Blocked				
Applicatio	n Blocked by Java Security				
For security, applications must now meet the requirements for the High or Very High security settings, or be part of the Exception Site List, to be allowed to run.					
	More Information				
Name:	Tripp Lite KVM Web Configuration Interface				
Location: Reason:	https://192.168.123.96 Your security settings have blocked an application signed with an expired or not-yet-valid certificate from running				
(ОК				

Resolving this issue will require performing the following steps for each KVM:

- 1. Open the Java Control Panel to the client.
- 2. Select the Security tab.

🛃 Java Control Panel	- • ×				
General Update Java Security Advanced					
✓ Enable Java content in the browser					
Security level for applications not on the Exception Site list					
🔘 Very High					
Only Java applications identified by a certificate from a trusted at allowed to run, and only if the certificate can be verified as not re					
High					
Java applications identified by a certificate from a trusted authority are allowed to run, even if the revocation status of the certificate cannot be verified.					
Exception Site List					
Applications launched from the sites listed below will be allowed to appropriate security prompts.	o run after the				
Click Edit Site List					
to add items to this list.	Edit Site List				
Restore Security Prompts Ma	nage Certificates				
ОК	Cancel Apply				

3. Click the Edit Site List...button. In the panel that opens, click the Add button, then enter the URL of the relevant KVM device.

🛓 Exception Site List	×
Applications launched from the sites listed below will be allowed to run after the appropriate security prompts.	
Location	
https://192.168.123.96	
Add Remove	
FILE and HTTP protocols are considered a security risk. We recommend using HTTPS sites where available.	
OK Cance	!

4. Click the **OK** buttons to close the windows. Restart the browser and retry accessing the KVM WEB Configuration Interface.

- Only SSL connections are allowed. You must start the IP address with HTTPS, not HTTP.
- 1. Open your web browser (see section 1.4 Client Computer Compatibility for browser support). Enter in the KVM's IP address.

- 2. When logging in to the KVM from your web browser, a Security Alert message will appear stating the device's certificate is not trusted. A prompt will ask if you want to proceed.
 - If working on a computer other than your own, accept this certificate for only this session by clicking the Continue to this website (not recommended) link.

$\leftarrow \bigcirc$	(2) https://192.168.123.96/ Contemport Search	₽- ि☆☺
Certifica	te Error: Navigatio ×	
8	There is a problem with this website's security certificate.	
	The security certificate presented by this website was issued for a different website's address. The security certificate presented by this website was not issued by a trusted certificate authority.	
	Security certificate problems may indicate an attempt to fool you or intercept any data you send to the server.	
	We recommend that you close this webpage and do not continue to this website.	
	Ø Click here to close this webpage.	
	Continue to this website (not recommended).	
	⊙ More information	

- If working at your own computer, install the certificate (refer to the instructions in section 6. Security Certificate Installation).
- 3. Upon installing the certificate or accepting the unrecognized certificate for the current session, the initial web page will appear and the Java application will launch. Before the installation completes, a Security Warning popup may appear stating the connection to the website is untrustworthy. This is a security issue similar to the one you get from your web browser. Click the *Continue* button or install the certificate in the Java Control Panel. Refer to 6. Security Certificate Installation for more information.



4. A Java-generated window may appear as a warning that unrestricted access will be given to the KVM Web Configuration Interface.

Do y	vou wan	t to run t	x his application?
ſ	4	Name:	Tripp Lite KVM Web Configuration
	Ê	Publisher:	Tripp Lite
		Location:	https://192.168.123.90
			restricted access which may put your computer and personal lication only if you trust the location and publisher above.
Do	not show th	nis again for a	pps from the publisher and location above
Û	More Infor	mation	Run Cancel

After the Java application is launched, the login page will appear. To launch the KVM Web Configuration Interface, select the *Connect* button in the home HTML page. An additional step may be required, depending on the web browser being used:

- Microsoft Internet Explorer The Interface typically launches directly; no additional steps required.
- Mozilla Firefox A dialog appears, prompting the user to select an application with which to open the targets.jnlp file. Ensure "Java™ Web Start Launcher" is selected, then click the OK button.

U Device Manager	x +		
↔ → ♂ ŵ	① https://192.168.123.90/targets_nat.html	••• 🛡 🏠 🔍 Search	II\ ⊡ ≡
Web Security Troubleshooting	Cat5 IP KVM Solutions Connect>> Afterwards, launch targets.jnl	Opening targetsjrilp You have chosen to open: Itargetsjrilp You have chosen to open: Itargetsjrilp Which is: JNLP File (12 KB) from: data: What should Firefox do with this file? Open with @Open with Java(TM) Web Start Launcher (default) Save File Do this gutomatically for files like this from now on. OK	

• Google Chrome - The targets.jnlp file is downloaded to the status line in the browser. Click it to launch the Interface.

Device Manager ×						8			23
← → C ▲ Not secure https://192.168.123.90/targets_nat.html					JB	C	쒭	4	:
								_	
									Î
Cat5 IP KVM Solutions									
Connect>>									
Afterwards, launch targets.jnlp									
									•
argets.jnlp							Show a	all	×

If the login page does not appear on its own, click the Log On button in the center of the web page to open. If clicking on the Log On button does not open the login page, add /targets.jnlp to the end of your IP address. See Troubleshooting at the end of this section if issues persist.

Note: The NetCommander-AXS software application is an alternative to the KVM Web Configuration Interface and can be used to manage KVM devices. Available as a free download from the Tripp Lite website, this software can be installed and run on a desktop PC.

5. Enter in your username and password, and press *Enter*. If this is the first time you are accessing the KVM, enter in the default username (*admin*) and password (*access*). The *My Targets* page of the Web Configuration Interface opens, showing the state of your unit, and displaying all your available Target Servers.

TrippLite CetS IP KVM 5	iciutions Device Manager - NetComm	ander 106 IP - 192 168 129 253				
Wy Targets 👜 Configuration 🙆 Passound 🚨 Events						
Targets for User admin	· · · · · · · · · · · · · · · · · · ·					
P tetral O Power a	Decervent P Dealey					
	3	🗯 III —	*******			
AT Server Name	Server Status	Clast .				
Server 81	Available					
Server 62	04					
Server 65	0#					
Server 04	07					
Server 05	0#					
Server D6	OW					
Server 07	07					

6. Click on the Configuration icon at the top of the screen to pull up the KVM's Configuration screen. It opens with the Device tab displayed.

nfiguration		
ave 🕐 Reload 🔛 Device Reboot 🧃	Povice Upgrade 🔮 RoCs Upgrade 🛛 🚱 Factory Restore 📸 Backup /	Restore 0 55L Certifica
vice Users Switch Configuration User	Targets Power Devices Power Outlets Serial Port Security Authenti	cation Date & Time
Device ID		
Device Name:	D1172782	
TCP Port:	900	
IPv4LAN		
Enable DHOP:		
MAC Address:	00:15:9D:02:9A:ED	
IP Address:	192 . 168 . 123 . 253	
Subnet Mask:	255.255.255.0	
Default Gateway:	192.168.123.1	
Obtain DNS Server Address Automation	aly	
ONS Server:	0.0.0	
IPv6 LAN		
Enable IPv6:		

- 7. There are two LAN sections in the Device tab, one for IPv4 and one for IPv6. For IPv4, you have the options of automatically assigning an address via DHCP server (default) and manually assigning an address. For IPv6, you have the options of automatically assigning an address via DHCP server (default), automatically assigning a stateless address, manually assigning an address, or disabling IPv6 altogether. Make the desired selections, depending on how you wish the IP address to be assigned.
- 8. Populate the fields in the IPv4 or IPv6 sections with the desired network information.
- 9. Click the Save icon in the toolbar above the *Configuration* menu tabs to save the network settings. Upon clicking Save, you will be prompted to reboot the KVM to finish the implementation of the new Device settings. Click Yes to proceed.

Troubleshooting

Below is a list of tips that may help resolve common issues when accessing the KVM Interface:

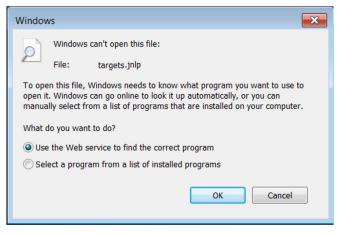
- Verify that file downloads are enabled in the browser. If a supported JRE has not been installed, downloading the necessary file is required.
- Clear the Java Web Start cache prior to accessing the KVM Web Configuration Interface. To clear the cache, open a command prompt, type the following command, then press the Enter key: javaws -uninstall
- For troubleshooting purposes, the Interface can be opened directly through the browser's text field. Type the following command, then press the *Enter* key: https://<</IP address of the KVM Device>>/targets.jnlp
- Ensure the Java cache and JavaScript are enabled.
- Uninstall older versions of Java or verify they cannot be loaded by managing the Java Runtime versions from the Java Control Panel.
- Enter the KVM Interface's URL in the Java Control Panel's Exception Site List, as described above.
- Changing Java Control Panel's advanced settings may compromise the Interface. **Consider resetting to defaults if they have been changed.**

The NetCommander IP can be accessed in two ways: locally via the local console OSD, or remotely via the Web Configuration Interface. This section details the Web Configuration Interface, which can be used to access the computer/servers and other devices connected to the KVM, as well as to configure the KVM's settings and accounts.

2.1 Logging Into the Web Configuration Interface

Notes:

• Before logging on the first time, verify the latest Java version (1.8 or 1.9) is installed on your computer. If the Java Runtime Environment is not installed on the client PC, a popup window similar to the one below will likely appear.



To resolve this issue, install a supported version of Java (1.8 or 1.9).

- Once a supported JRE has been installed, restart the browser and retry accessing the KVM Web Configuration Interface.
- The installed version of Java may require the KVM Web Configuration Interface be added to an exception list. In such cases, upon logging into the KVM application, a popup window similar to the one below will appear.

Java Applica	tion Blocked	×					
Applicatio	n Blocked by Java Security						
For security, applications must now meet the requirements for the High or Very High security settings, or be part of the Exception Site List, to be allowed to run.							
	More Information						
Name:	Tripp Lite KVM Web Configuration Interface						
Location:	https://192.168.123.96						
Reason:	Your security settings have blocked an application signed with expired or not-yet-valid certificate from running	an					
,							
	C	ОК					

Resolving this issue will require performing the following steps for each KVM:

- 1. Open the Java Control Panel to the client.
- 2. Select the Security tab.

🛃 Java Control Panel	
General Update Java Security Advanced	
Enable Java content in the browser	
Security level for applications not on the Exception Site list	
🔘 Very High	
Only Java applications identified by a certificate from a trusted a allowed to run, and only if the certificate can be verified as not r	
High	
Java applications identified by a certificate from a trusted author run, even if the revocation status of the certificate cannot be ver	
Exception Site List	
Applications launched from the sites listed below will be allowed to	o run after the
appropriate security prompts.	
to add items to this list.	Edit Site List
Restore Security Prompts Ma	nage Certificates
L	
ОК	Cancel Apply

3. Click the Edit Site List...button. In the panel that opens, click the Add button, then enter the URL of the relevant KVM device.

4	E	ception Site List		×
		lications launched from the sites listed below will be allow ropriate security prompts.	wed to run after the	
		Location		
		https://192.168.123.96		
	L			
	1	FILE and HTTP protocols are considered a security risk. We recommend using HTTPS sites where available.	Add Remo	ove
			ОК Са	ncel

4. Click the OK buttons to close the windows. Restart the browser and retry accessing the KVM WEB Configuration Interface.

- Only SSL connections are allowed. You must start the IP address with HTTPS, not HTTP.
- 1. Open your web browser (see section 1.4 Client Computer Compatibility for browser support). Enter in the KVM's IP address.

- 2. When logging in to the KVM from your web browser, a Security Alert message will appear stating the device's certificate is not trusted. A prompt will ask if you want to proceed.
 - If working on a computer other than your own, accept this certificate for only this session by clicking the *Continue to this website (not recommended)* link.

					- • •
(-)	Attps://192.168.123.96/		- C	Search	₽- ि☆☺
Certifica	ate Error: Navigatio ×				
8	There is a problem	with this website's sect	urity certificate.		
			as issued for a different website's as not issued by a trusted certifica		
	Security certificate pro server.	blems may indicate an attem	pt to fool you or intercept any da	ata you send to the	
	We recommend that	you close this webpage and	d do not continue to this websi	te.	
	Sclick here to close	this webpage.			
	😵 Continue to this we	bsite (not recommended).			
	More information	n			

- If working at your own computer, install the certificate (refer to the instructions in section 6. Security Certificate Installation).
- 3. Upon installing the certificate or accepting the unrecognized certificate for the current session, the initial web page will appear and the Java application will launch. Before the installation completes, a Security Warning popup may appear stating the connection to the website is untrustworthy. This is a security issue similar to the one you get from your web browser. Click the *Continue* button or install the certificate in the Java Control Panel. Refer to 6. Security Certificate Installation for more information.



4. A Java-generated window may appear as a warning that unrestricted access will be given to the KVM Web Configuration Interface.

Doy	* Do you want to run this application?						
ſ	4	Name:	Tripp Lite KVM Web Configuration				
	Ê	Publisher:	Tripp Lite				
		Location:	https://192.168.123.90				
			restricted access which may put your computer and personal plication only if you trust the location and publisher above.				
Do	not show t	his again for a	pps from the publisher and location above				
Û	More Info	rmation	Run Cancel				

After the Java application is launched, the login page will appear. To launch the KVM Web Configuration Interface, select the *Connect* button in the home HTML page. An additional step may be required, depending on the web browser being used:

- Microsoft Internet Explorer The Interface typically launches directly; no additional steps required.
- Mozilla Firefox A dialog appears, prompting the user to select an application with which to open the targets.jnlp file. Ensure "Java™ Web Start Launcher" is selected, then click the OK button.

😃 Dev	vice Manager	×				×
(← → C	* ŵ	0 🖍	https://192.168.123.90/targets_nat.html	••• 🛡 🏠 🔍 Search	lil\	≡
Web Security	Troubleshcoting		Cat5 IP KVM Solutions Connect>> Afterwards, launch targets.jnlp	Opening targetsjnlp You have chosen to open: I targetsjnlp Wich is: JNLP File (L2 KB) from: data: What should Firefox do with this file? I gopen with Java(TM) Web Start Launcher (default) Save File Do this gutomatically for files like this from now on. OK	Cancel	

• Google Chrome - The targets.jnlp file is downloaded to the status line in the browser. Click it to launch the Interface.

Device Manager ×								
← → C ▲ Not secure https://192.168.123.90/targets_nat.html	43	9	13	JB	C	-	4	:
								Î
Cat5 IP KVM Solutions								
Connect>>								
Afterwards, launch targets.jnlp								
								-
i targets,jnlp ↑						Show	all	×

If the login page does not appear on its own, click the Log On button in the center of the web page to open. If clicking on the Log On button does not open the login page, add /targets.jnlp to the end of your IP address. See Troubleshooting at the end of this section if issues persist.

Note: The NetCommander-AXS software application is an alternative to the KVM Web Configuration Interface and can be used to manage KVM devices. Available as a free download from the Tripp Lite website, this software can be installed and run on a desktop PC.

5. Enter in your username and password, and press *Enter*. If this is the first time you are accessing the KVM, enter in the default username (*admin*) and password (*access*). The *My Targets* page of the Web Configuration Interface opens, showing the state of your unit, and displaying all your available Target Servers.

TrippLite CetS IP KVM	Solutions Device Manager - NetCo	mmander 136 IP - 192 568 125 253	
Try Targets 🔘 Configu	ration 🙆 Password 🚨 Events		
of Targets for User admin	()		000
Takad O Pover	Decennent () Depley		
	G] 🟥 💷 —	
AT.			
Server Name	Server Status	User	
Server 81	Available		
Server 82	0#		
Server 60	0#		
Server 04	017		
Server 05	0#		
Server DS	0#		
Server 07	0#		
Server D8	0#		
Server 09	0#		
Server 10	OW		
Server 11	0#		
Server 12	off		
Server 13	0#		
Server 14	OW		
Genuer 15	0#		

Troubleshooting

Below is a list of tips that may help resolve common issues when accessing the KVM Interface:

- Verify that file downloads are enabled in the browser. If a supported JRE has not been installed, downloading the necessary file is required.
- Clear the Java Web Start cache prior to accessing the KVM Web Configuration Interface. To clear the cache, open a command prompt, type the following command, then press the Enter key: javaws -uninstall
- For troubleshooting purposes, the Interface can be opened directly through the browser's text field. Type the following command, then press the *Enter* key: https://<</IP address of the KVM Device>>/targets.jnlp
- Ensure the Java cache and JavaScript are enabled.
- Uninstall older versions of Java or verify they cannot be loaded by managing the Java Runtime versions from the Java Control Panel.
- Enter the KVM Interface's URL in the Java Control Panel's Exception Site List, as described above.
- Changing Java Control Panel's advanced settings may compromise the Interface. Consider resetting to defaults if they have been changed.

3. Conducting a Remote Session

A remote session allows accounts IP access to computer/servers and serial devices connected to the KVM. In a remote session, accounts can access computers/servers, power cycle or turn power to a Target Server Off/On, virtually mount an .iso file, and configure the remote session settings. The sections that follow explain the features of a remote session, and how to use them.

3.1 Starting a Remote Session

To start a remote session:

Open the Web Configuration Interface, and click on the By Yargets icon in the menu bar. The My Targets screen appears, displaying only those ports that the logged-in account is permitted to use. For administrator accounts, a graphic of the KVM's back panel is displayed in between the Toolbar and Data Pane.

THEFT CARS IN KYM S	olutions Device Manager - NetCon	warder 100 P - 102 000 129 251	
My Targets 🖨 Configur	ation 🙆 Passoord 🚨 Events		50 e 12
Targets for User admin			04
National O Power P	Decement Depley		
	3	🟥 III —	
Server Name	Server Status	User	
Server 61	Australiable		
Server 82	0#		
Server 00	0#		
Server 04	04		
Server 05	0#		
Server D6	0#		
Server 07	0#		
Server D8	07		
Server 09	0#		
Server 10	Off		
Server 11	0#		
Server 12	0#		
Server 13	off		
Server 14	0#		
Server 15	0#		

- 2. A remote session can be initiated in one of four ways:
 - Select a port from the Data Pane of the My Targets screen, and click on the Display icon in the toolbar.
 - Select a port from the Data Pane of the My Targets screen, and press the [Enter] key.
 - Double-click on a port in the Data Pane of the My Targets screen.
 - Administrator's Only Double-click on a port in the graphic of the KVM's back-panel.

Note: A Target Server with a Remote Exclusive Session or Local Exclusive Session status is being accessed by another account in Exclusive Mode (see the Exclusive Session section in the Owner's Manual for details), and cannot be accessed. A Target Server with a Remote Session status is being accessed by another account in Share Mode, which allows for up to 5 users to access the port at the same time (see the Sharing a Remote Session section in the Owner's Manual for details).

3. Upon initiating a remote session in one of these four ways, the screen of the selected Target Server appears inside a remote console window with the remote session toolbar displayed.

Dideo - 192.168.123.122 - Server 01		
	* 🖷 🖌 🔍 🖉 📮 💷	×
My Documents	N 3	
10		
My Computer		
M		
My Network		
Places		
3		
Recycle Bin		

4. Local Console

This section explains how to operate the NetCommander IP via the local console. The local console allows you to access connected computer/servers, configure the KVM's network settings, and to configure some more basic settings specific to local access.

To display the OSD:

1. From the local keyboard, press the left **Shift** key twice. The OSD Main window appears.

Lines with sun icons in the **PM** column show active computers/ servers. A computer that is connected, but is powered-off, does not have a sun icon. When a server is busy (when an account is accessing it in an *Exclusive Session*), the entire line appears in red characters.

TRIPPLITE		NETCOMMANDER MAIN				
	NAME			USI	ER	PM
01	Server					- 25-
02	Server	02				- <u>S</u> -
03	Server	03				- ģ.
04	Server	04				
05	Server	05				
06	Server	06				
07	Server	07				
08	Server	08				
MO	JE LABEI	L F1	E	SC-L	DGO	UT
TUI	NING	F5	F	2-SE	TTI	NG

Navigating the OSD:

- To move the highlight bar throughout the list, press the $[\uparrow]$ and $[\downarrow]$ arrow keys.
- To jump from one column to the next (when relevant), press the [Tab] key.
- To exit the OSD or return to a previous window within the OSD, press the [Esc] key.

To select a computer:

- 1. Navigate to the desired port using the $[\uparrow]$ and $[\downarrow]$ arrow keys, or type the two-digit port number of the desired computer.
- 2. Press the [Enter] key. The selected computer is accessed.

5. Warranty and Product Registration

Limited Warranty

TRIPP LITE warrants its products to be free from defects in materials and workmanship for a period of two (2) years (B072-008-1-IP and B072-016-1-IP) or one (1) year (B070-008-19-IP and B070-016-19-IP) 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.

PRODUCT REGISTRATION

Visit www.tripplite.com/warranty today to register 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. Open to U.S. residents only. See www.tripplite.com for details.

FCC Notice, Class A

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

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 equipment. Any changes or modifications to this equipment not expressly approved by Tripp Lite could void the user's authority to operate this equipment.

WEEE Compliance Information for Tripp Lite Customers and Recyclers (European Union)



Under the Waste Electrical and Electronic Equipment (WEEE) Directive and implementing regulations, when customers buy new electrical and electronic equipment from Tripp Lite they are entitled to:

- · Send old equipment for recycling on a one-for-one, like-for-like basis (this varies depending on the country)
- · Send the new equipment back for recycling when this ultimately becomes waste

Tripp Lite has a policy of continuous improvement. Specifications are subject to change without notice.



1111 W. 35th Street, Chicago, IL 60609 USA • www.tripplite.com/support