Quick Start Guide

NetDirector® Cat5 IP KVM Switches

Models: B064-008-01-IPG, B064-016-01-IPG, B064-016-02-IPG, B064-016-04-IPG, B064-032-01-IPG, B064-032-02-IPG, B064-032-04-IPG and B064-064-08-IPG

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tripplite.com/warranty

TRIPP·LITE

OVER 95 YEARS
Manufacturing Excellence.

Important Safety Instructions

⚠ **WARNING**
Class I Equipment. This equipment must be earthed. The power plug must be connected to a properly wired earth ground socket outlet. An improperly wired socket outlet could place hazardous voltages on accessible metal parts.

⚠ **AVERTISSEMENT**
Équipement de classe I Cet équipement doit être mis à la terre. La fiche d'alimentation doit être connectée à une prise de courant mise à la terre correctement câblée. Une prise de courant incorrectement câblée pourrait introduire des tensions dangereuses sur des pièces de métal accessibles.

62368-1 Clause Equipment for Installation:

Suitable for installation in Information Technology Rooms in accordance with Article 645 of the National Electrical Code and NFPA 75.

Peut être installé dans des salles de matériel de traitement de l'information conformément à l'article 645 du National Electrical Code et à la NFPA 75.

⚠ **BATTERY SAFETY NOTICE**
There is a risk of explosion if the battery is replaced with an incorrect type. Dispose of used batteries according to the relevant instructions.

⚠ **BATTERIE AVIS DE SÉCURITÉ**
Il existe un risque d'explosion si la batterie est remplacée par un incorrect tapez. Jeter les piles usagées selon la pertinente instructions.

1. Hardware Setup

1.1 Rack Mounting

The KVM switch can be mounted in a 19-in (1U) rack. The rack-mount brackets can be installed on either the front or the back of the unit so that it can be mounted to the front or back of the rack.

1. Depending on whether you are mounting the unit from front or rear of the rack, remove the two screws located on both sides of the front or back of the unit.

2. Use the screws supplied with the rack-mount kit to attach the rack-mount brackets to the front or rear of the unit.

3. Position the device in the front or rear of the rack and align the holes in the mount brackets with the holes in the rack.

4. Secure the rack-mount brackets to the rack using user-supplied screws.

Use user supplied hardware to attach to the rack
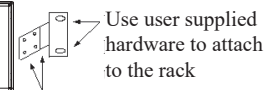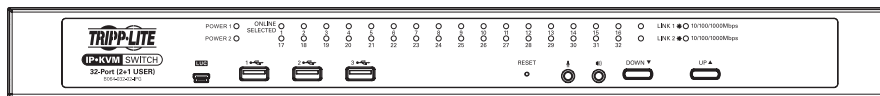
Use the M3 x 8 Phillips head hex screws provided with the rack mount kit

1.2 Single-Stage Installation

In a single-stage installation, there are no additional KVM switches cascaded or daisy-chained from the B064-Series KVM. To set up a single-stage installation, refer to the following instructions and the corresponding installation diagrams.

1. Make sure that power to all the devices you will be connecting, including all pre-existing devices on the installation, have been turned off.

2. *Optional:* Plug your Local Console's keyboard, monitor, and mouse into the KVM's Local Console Ports.

3. Use Cat5e cable to connect any available KVM port to a Server Interface Unit (SIU): B055-001-PS2 (PS/2), B055-001-SER (Serial), B055-001-USB (USB) or B055-001-USB-V2 (USB with Virtual Media).

4. Connect the Server Interface Unit to the computer/server.

5. Repeat steps 3 and 4 for each computer/server you are connecting.

6. Connect a Cat5e cable from the network into the KVM switch's primary network port (LAN 1).

7. **Optional:** Connect a second Cat5e cable from the network into the KVM switch's backup (secondary) network port (LAN 2).

8. **Optional Dial-In Modem Connection:** Use Cat5e cable to connect the KVM switch's Modem port to the included RJ45 to DB9 Adapter, and connect the adapter's DB9 connector to the modem's DB9 port.

9. Use the included grounding wire to ground the unit. Connect one end of the wire to the grounding terminal, and the other end of the wire to a suitable grounded object.

10. Plug the included power cords into the KVM switch's Power Sockets, and then into a Tripp Lite Surge Protector, Uninterruptible Power Supply (UPS) or PDU.

11. Turn on the power to the KVM switch. Once it is powered up, turn on the power to the connected computers.
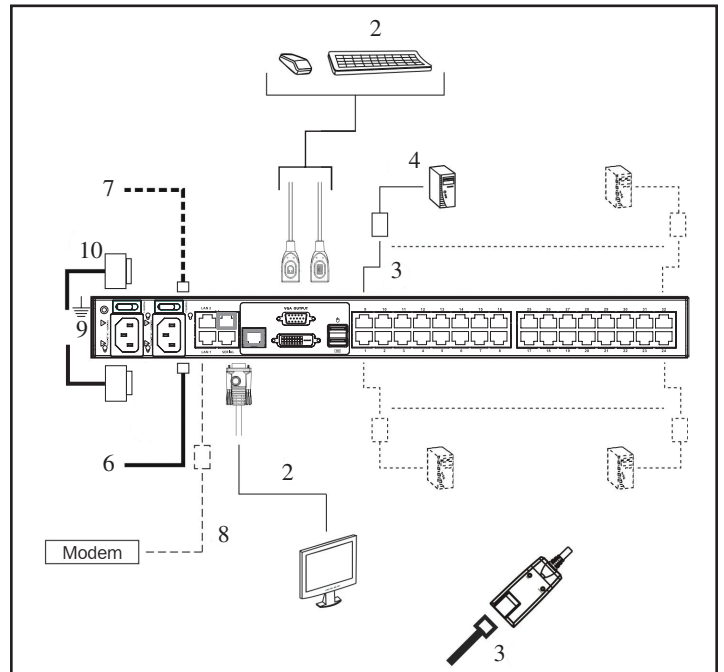
1.3 Two-Stage Installation

Up to 32 additional B064-016 KVM switches can be cascaded from the KVM ports of the B064- Series KVM Switch, expanding the number of connected computers/servers up to 512 units. In a cascaded installation, the top B064-Series KVM Switch is considered the first-stage unit, the cascaded switches are considered second-stage units.

To set up a two-stage installation:

1. Ensure that power to all the devices you will be connecting, including all pre-existing devices on the installation, have been turned off.

2. Use Cat5e patch cable to connect any available KVM Port on the first-stage unit (the B064-Series KVM Switch) to a B054-001-PS2 or B055-001-PS2 Server Interface Unit.

Note: *Although USB SIUs will allow you to cascade to a second stage KVM, only PS/2 SIUs will properly display the cascaded KVM in the OSD. When connected via PS/2 SIU, the cascaded KVM will be displayed as an expandable port, allowing you to easily access the connected computers. When connected via USB SIU, the cascaded KVM will be displayed as an ordinary port. To access computers connected to the cascaded KVM, you will have to use the cascaded KVM's OSD.*

3. Plug the SIU's KVM connectors to the Keyboard, Video, and Mouse Console ports of the second-stage B064-016 unit.

    Note: *The distance between the second-stage unit and the first-stage unit cannot exceed 164 ft. (50 m).*

4. Use the appropriate KVM Cable Kits (See the Second Stage KVMs owner's manual), to connect any available KVM port on the second-stage unit to the Keyboard, Video and Mouse ports of the computer/server you are installing.

5. Plug the power cord that came with the cascaded KVM switch into its power socket, and then into a Tripp Lite Surge Protector, Uninterruptible Power Supply (UPS) or PDU.

6. Repeat these steps for any other second-stage units you wish to connect.

7. First power on the B064-Series KVM Switch and then power on all second-stage KVM switches.

8. Turn on the power to all of the connected computers/servers.

Note: *The Power On sequence requires that the B064-Series KVM Switch be powered on first. After the B064-Series KVM Switch has been powered on, all second-stage units must be powered on. After the second-stage units have been powered on, the connected computers/servers can be powered on.*

1.4 Laptop USB Console (LUC)

The front panel of the KVM switch features a USB Micro-B port, which connects to the USB port on a laptop to provide console control of the KVM switch. To use this feature, connect your laptop to the LUC port on the front of the KVM using a USB Micro-B cable. When connected, an extra drive will appear in your computer's My Computer screen. Click on this drive to bring up the Windows and Java Non-Browser Clients. Run the desired client to access the KVM switch. The client's login screen will appear, with the KVM showing up as a USB Mass Storage device in the Login Screen's Server List. Highlight the KVM and then connect per the instructions in the *AP Windows Client Login* and/or *AP Java Client Login* sections of this quick start guide.

2. Super Administrator Setup

The B064-Series KVM Switches supports three types of users:

User Type	Description
Super Administrator	Super Administrators have full access to all Ports and Devices in the KVM installation. They can manage all aspects of the installation.
Administrator	Administrators have access to Ports and Devices that are authorized by the Super Administrator. They can manage Users and Groups and configure their personal working environment.
User	Users can access Ports and Devices authorized by Super Administrators or Administrators and they can configure their personal working environment.

2.1 First Time Setup

Once the B064-Series KVM Switch has been installed, the Super Administrator must prepare the unit for user operation by setting the network parameters and adding users.

2.2 Network Setup - IP Address Determination

If you are an administrator logging in for the first time, you must access the B064-Series KVM Switch in order to give it an IP address to which users can connect. There are three methods of doing this: *Local Console*, *IP Installer*, and *Browser*.

1. Local Console

After the local console has been connected and the B064-Series KVM Switch is turned on, a login prompt appears on the console monitor:

Log in using the default Username: *administrator* and Password: *password*.

For security purposes, a "Change Password" prompt will appear requiring you to immediately change the password from the default.

Please enter the old default password and then a new unique password in the remaining fields. It is strongly recommended that you also change the username from the default one (see section *2.4 Changing the Super Administrator Login* for instructions).

After you have successfully logged in and changed the password, the *Local Console Main Screen* appears:
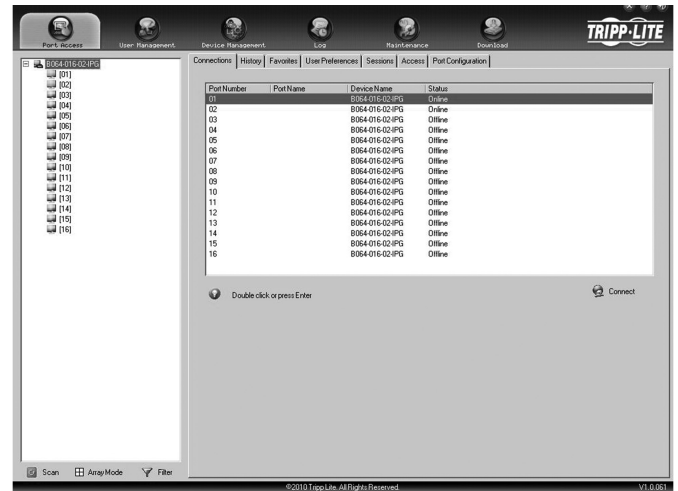
1. Click the Device Management icon at the top of the screen.

2. On the screen that appears on the right-hand side of the page, select the Network tab.
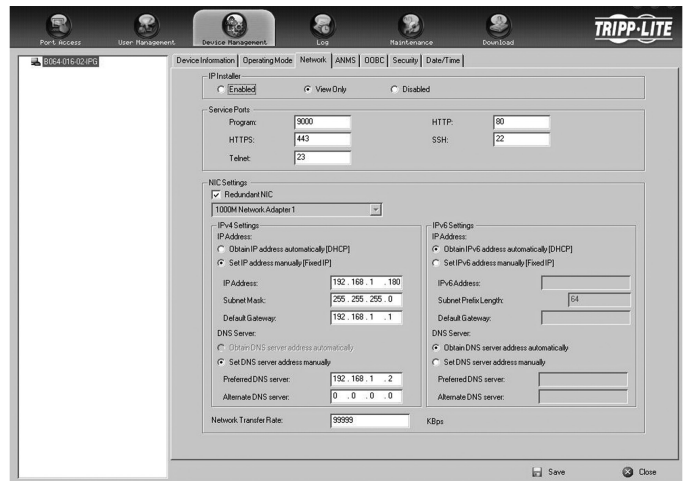
2.3 NIC Settings

The B064-Series KVM Switch has two network interfaces. The NIC Setting section of the Network tab allows you to assign a single IP Address and DNS Server for both network interfaces, or to assign a separate address for each.

Redundant NIC

If Redundant NIC is enabled (the default), both interfaces use the IP address assigned to Network Adapter 1. Under this configuration, the B064-Series KVM Switch will switch to the second network interface in the event there is a crash on the first network interface.

- If you select Redundant NIC, the *Network Interface* drop-down menu will be frozen to Network Adapter 1, and you will only have to enter IP Address and DNS Server settings once.

- If you do not select Redundant NIC, you will have to enter IP Address and DNS Server settings for both Network Adapter 1 and Network Adapter 2. Use the *Network Interface* drop-down menu to select the Network Adapter you want to configure.

IP Address and DNS Server Address

The B064-Series KVM switch supports both IPv4 and IPv6 addresses. The *Network* page allows you to set the IP address manually, or to select to have it automatically assigned via DHCP server. By default, the IP address is set to be assigned automatically via DHCP server.

- To have the IP address assigned by your DHCP server, check the *Obtain IP address automatically* check box in the IPv4 or IPv6 settings section, depending on your network.

- To assign an IP address yourself, check the *Set IP address manually* check box in the IPv4 or IPv6 settings section, depending on your network. When checked, the IP address and DNS server address fields open up, allowing you to enter in the desired settings. Once you have entered in all the IP address and DNS server address information, click the *Save* button at the bottom of the screen. Upon logging out of the KVM (click the *Logout* icon in the upper-right corner of the OSD), the KVM will reset itself and the IP address settings you just entered will be implemented.

Note: When manually assigning a DNS Server address, it is required that you enter the Preferred DNS server*, but the* Alternate DNS server *is an optional field.*

2. IP Installer

For computers running Windows, an IP address can be assigned with the IP Installer utility:

Note: In order to use the IP Installer, the IP Installer Enabled check box in the Network page must be checked. By default, the IP Installer View Only check box is checked, allowing you to view the KVMs IP Address using the IP Installer but not change it.

1. Obtain the IP Installer file from the CD included with the B064-Series KVM Switch and save it to a desired location on a computer that is on the same network as your B064-Series KVM Switch.

2. Go to the IP Installer file you just saved and run the IPInstaller.exe file.
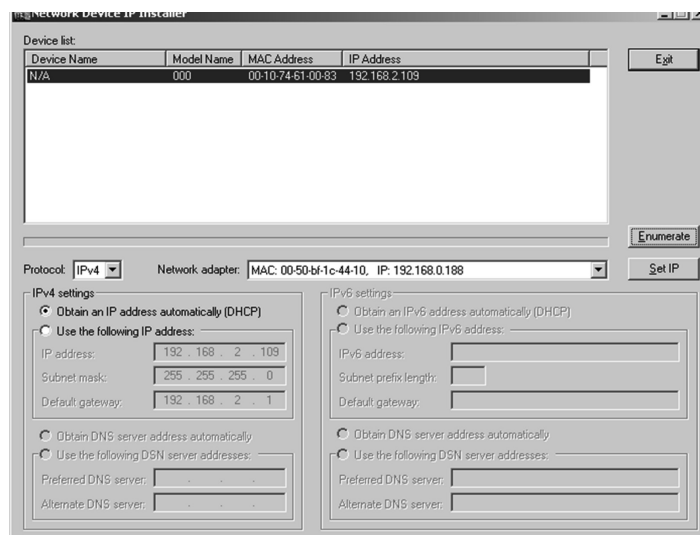
3. In the dialog box that appears, select the B064-Series KVM Switch in the Device List.

Note: If the list is empty, or your device doesn't appear, click Enumerate *to refresh the Device List. If there is more than one device in the list, use the MAC address to pick the one you want. The B064-Series KVM Switches' MAC address is located on its bottom panel.*

4. From here you can choose to *Obtain an IP address automatically (DHCP)*, or *Specify an IP address*. If you choose to assign your own address, fill in the *IP Address, Subnet Mask*, and *Gateway* fields with information appropriate to your network.

5. Click Set IP.

6. After the IP address shows up in the Device List, click Exit.

3. Browser

By default, the KVM switch is set to have its IP address assigned automatically via DHCP server. If the KVM is connected to a network without a DHCP server, it boots with a default IP address. On IPv4 networks, the default IP is 192.168.0.60. If the KVM is on an IPv6 network, the default IP address is determined by the KVM's MAC address. For example, if the KVM has a MAC address of 00-10-74-13-81-01, the IPv6 address is **FE80:0:0:0:**0010:74**FF:FE**13:8101. The parts of the IP address that are bolded and underlined are fixed.

1. Access the B064-Series KVM switch by using the default URL mentioned above.

2. Assign a fixed IP address for the KVM using the same instructions as described in the *Local Console* section of this chapter.

2. Super Administrator Setup

2.4 Changing the Super Administrator Login

To change the default Super Administrator Username and Password, do the following:

1. At the top of the Web page, click *User Management*.

Since this is the first time the page is being accessed, only the Super Administrator appears:

2. Click *Administrator* in the left panel; or, select Administrator in the central panel and click the *Modify* button at the bottom of the page.

The *User Information* page appears:

3. Change the Username and Password to something unique.

4. Re-enter the password to confirm it is correct.

5. Click *Save*.

6. When the dialog box informing you that the change completed successfully appears, click OK.

3. Logging Into the B064-Series KVM Switch

The B064-Series KVM Switches can be accessed in the following ways: via local console, an Internet browser, the AP Windows Client and/or the AP Java Client. Operating the KVM switch and configuring its settings is done the same regardless of how you connect to the B064-Series KVM Switch; the only difference is the way in which you establish the connection. This chapter describes the login procedures for each of these methods.

3.1 Local Console Login

The local console login dialog box is displayed once the installation is complete. Simply key in your Username and Password and click Login to bring up the OSD Main Page.

Note: If you supply an invalid login, the authentication routine will return an Invalid Username or Password message. If you see this message, log in again being careful to enter the correct Username and Password.

3.2 Browser Login

The B064-Series KVM Switches can be accessed via Internet browser from any platform that has the Java Runtime Environment 6, Update 3, or higher installed. If you don't already have the required JRE installed, it is available for free download from the Java web site: www.java.com

Note: Windows 7 users must run Internet Explorer as an administrator for the Active X control to work properly. If you don't run Internet Explorer as an administrator, you will not be able to access the connected computers.

To access the switch via browser, do the following:

1. Open the browser and specify the IP address of the B064-Series KVM Switch you want to access, as given to you by your system administrator.

Note: For security purposes, a login string may have been set by the administrator. If so, you must include a forward slash and the login string along with the IP address when you log in. (For example, a computer with a login string of B064-032-04-IPG would have a URL such as 192.168.0.100/B064-032-04-IPG)

2. When you try to log into the device from your browser, a Security Alert message appears to inform you that the device's certificate is not trusted, and asks if you want to proceed. The certificate can be trusted, but the alert is triggered because the certificate's name is not found on Microsoft's list of Trusted Authorities.

You have two options:

- If you are working on a computer other than your own, accept the certificate for just this session by clicking *Yes*.

- If you are working at your own computer, install the certificate. After the certificate is installed, it will be recognized as trusted. To install the certificate, do the following:

  a) In the Security Alert dialog box, click *View Certificate*. The Certificate Information dialog box appears.

  Note: You may need to run Internet Explorer as an Administrator in order to view and install the certificate.

  b) Click *Install Certificate*.

  c) Follow the Installation Wizard to complete the installation. Unless you have a specific reason to choose otherwise, accept the default options.

  d) When the Wizard presents a caution screen, click *Yes*.

  e) Click *Finish* to complete the installation and click *OK* to close the dialog box. The certificate is now trusted.

Upon installing the certificate or accepting the unrecognized certificate for the current session, the browser login dialog box appears.

3. Provide a valid Username and Password (set by the KVM switch's administrator), and click *Login* to bring up the OSD Main Page.

Note:

1. *If you supply an invalid login, the authentication routine will return and Invalid Username or Password message. If you see this message, log in again, being careful to enter the correct Username and Password.*

2. *If logging in for the first time, a "Change Password" prompt will appear after the login prompt requiring you to change the default password.*

3.3 AP Windows Client Login

In some cases, the Administrator may not want the B064-Series KVM Switches to be available via browser. The Windows AP Client allows Windows systems users access to the KVM switch without having to go through a browser.

The AP Windows Client can be found in the Download Section of the OSD or on the CD that came with your B064-Series KVM Switch. If you do not have access to the CD, and browser access to the KVM switch has already been disabled, you will need to obtain the file from your system administrator. Once you have saved the AP Windows Client, go to its location and double-click the *WinClient.exe* icon to bring up the Windows Client Connection Screen.

Note:

1. *If you have trouble opening the AP Windows Client, save it to your desktop and try again.*

2. *When accessing the AP Windows Client for the first time, you will be prompted to provide a serial number. This serial number can be found on the CD included with your KVM.*
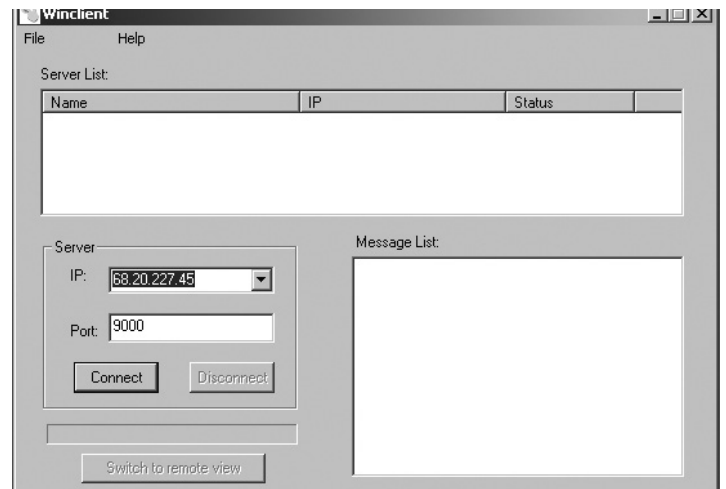
3.3.1 The Connection Screen

A description of the contents of the Connection Screen is given in the following table:

Item	Description
Menu Bar	The Menu Bar contains two menus; File and Help. The File Menu allows the operator to Create, Save, and Open Work files.
Server List	Each time the WinClient.exe file is run, it searches the User's LAN segment for B064-Series KVM Switches, and lists the ones it finds in this box. Double-click on any of the units in this list to connect to it. *Note: For a switch to show up in the Server List, the Enable Device List check box in the* Operating Mode *page (see* Operating Mode *section under* Device Management *in* OSD Operation *for details) must be checked and the Program service port in the Network page (see* Network *section under* Device Management *in* OSD Operation *for details) must be set to the same number as in the AP Windows Client Port field.*
Server	This area is used when you want to connect to a B064-Series KVM Switch at a remote location. • Click on the IP drop-down and select an address from the list. If the address you want is not listed, key in the target IP address in the IP field, and its port number in the Port field. • When the IP address and port number have been specified, click Connect to bring up a login dialog box. Provide a Username and Password as provided by your system administrator and click OK to establish a connection with the B064-Series KVM Switch. • When you have finished with your session, click Disconnect to end the connection.
Message List	Lists status messages regarding the connection to the B064-Series KVM Switch.
Switch to Remote View	Once a remote connection with a B064-Series KVM Switch has been established, this button becomes active. Click it to switch to the KVM Switch's Main OSD Page.

3.3.2 The File Menu

The *File Menu* allows the operator to *Create*, *Save*, and *Open Work Files*. A *Work File* consists of all the information specified in a Client session. This includes the items in the *Server List* and *Server IP List*.

Whenever a user runs the Client program, it opens with the values contained in the current *Work File*, i.e. the values that were in effect when the program was last closed.

The *File* Menu consists of four items:

Item	Description
New	Allows the user to create a named work file so that its values will not be lost and will be available for future use
Open	Allows the user to open a previously saved work file and use the values contained in it
Save	Allows the user to save the values presently in effect as the current work file
Exit	Exits the AP Windows Client

3.4 AP Java Client Login

In those cases in which the Administrator does not want the B064-Series KVM Switch to be available via browser and the remote user is not running Windows, the AP Java Client provides access to the KVM switch.

After downloading the AP Java Client, go to the location on your hard disk where you downloaded the program and double-click on it to bring up the connection screen. The AP Java Client connection screen is the same as the Windows version, except that it does not contain a menu bar with File and Help menus. **Note**: *When accessing the AP Java Client for the first time, you will be prompted to provide a serial number. This serial number can be found on the CD that came with your KVM.*

1. If your KVM is displayed in the *Server List*, connect to it by highlighting it and clicking on the *Connect* button. **Note**: *For a switch to show up in the* Server List*, the* Enable Device List *checkbox in the* Operating Mode *page (see Operating Mode section under* Device Management *in* OSD Operation *for details for details) must be checked and the* Program *server port must match what is set in the* Network *page (See* Network *section under* Device Management *in* OSD Operation *for details.)*

2. If your KVM does not display in the *Server List*, enter in its *IP* address in the IP server field and click the *Connect* button.

3. Upon clicking the connect button, you will be prompted to enter your username and password. Enter in your username and password and press OK.

4. When connected, the *Remote View* button will be activated. Click on it to access the KVM remotely. Click on the *Disconnect* button to log out of the KVM switch.
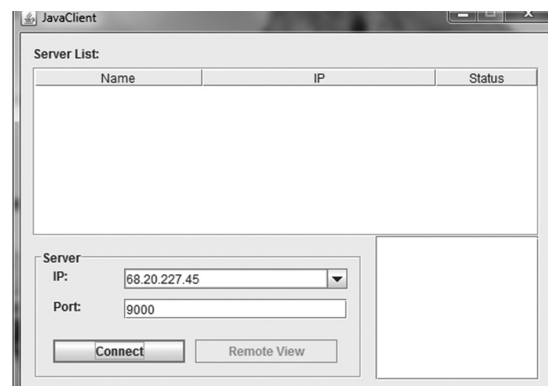
4. Warranty & Product Registration

3-Year Limited Warranty

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

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

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