



AlterPath KVM

Quick Installation Guide

Use this guide to install and configure the Cyclades AlterPath KVM and related Cyclades AlterPath products. For detailed information on KVM refer to the *AlterPath KVM Installation, Administration, and User's Guide* located at <http://cyclades.com/support/downloads.php>, or on the documentation CD shipped with the product.

Important Preconfiguration Requirements

You must complete the following tasks after the basic network configuration is performed. See “Perform Basic Network Configuration” on page 5.

▼ **Change the default root password.**

For security reasons, it is strongly recommended that you change the default root password as soon as possible. To change the default root password, enter the “passwd” command in the console shell, and enter a new password when prompted. Execute the “saveconf” command to save the new password to flash memory.

```
KVM login: root
Password: cyclades
[root@KVM root]# passwd
New password:*****
Re-enter new password:*****
[root@KVM root]# saveconf
```

▼ **Login to the Web Manager and select a Security Profile.**

A Security Profile must be selected to complete the initial setup. Security is dependent on policy and is Configurable to fit in environments with varying levels of Security. Cyclades provides three pre-set Security Levels; Secure, Moderate, and Open. In addition, the ability to set a Custom Security Profile.

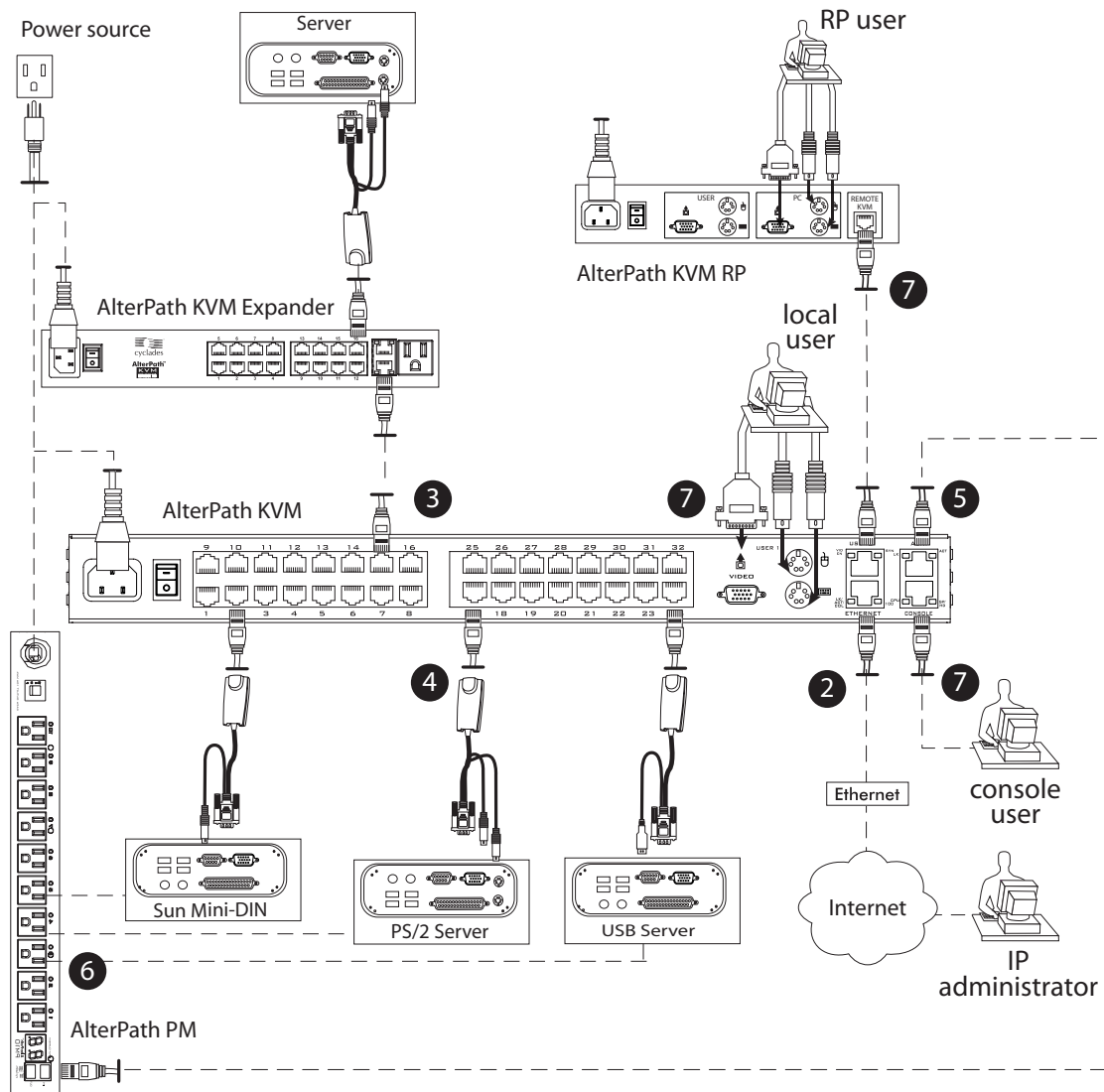
Security Profiles

1. Secure - The Secure profile disables all protocols except SSHv2 and HTTPS. SSH root access is not allowed.
2. Moderate (Default) - The Moderate profile is the recommended security level. This profile enables SSHv1, SSHv2, HTTP, HTTPS, and Telnet. In addition, ICMP and HTTP redirection to HTTPS are enabled.
3. Open - The Open profile enables all services such as Telnet, SSHv1, SSHv2, HTTP, HTTPS, SNMP, RPC, ICMP, and Telnet.
4. Custom - The Custom profile opens up a dialog box to allow custom configuration of individual protocols and services.

For detailed information refer to *AlterPath KVM Installation, Administration, and User's Guide*, Chapter 4 “Security Profiles”.

KVM Connections

The following graphic illustrates the connections that can be made to the AlterPath KVM. The circled numbers in the graphic correspond to the circled numbers in the list of steps in the table below.



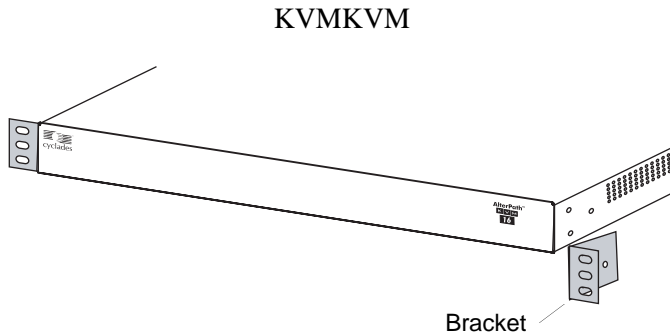
The following table lists the basic installation instructions in the order they should be performed. For more-detailed procedures, see the page number listed for each step.

1	Mount the KVM.	Page 3
2	Make an Ethernet connection.	Page 3
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4	Connect servers to be managed through the KVM.	Page 3
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6	(Optional) Plug servers to be managed through the KVM into an AlterPath PM.	Page 4
7	Make a direct connection to the KVM console, User 1, or User 2 port for network configuration.	Page 4
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10	Add users, configure ports, and add in-band servers using the web manager.	Page 7

1. Mount the KVM/netPlus

Obtain a Phillips screwdriver and appropriate nuts and bolts before starting the following procedure.

1. Decide whether you need to mount the KVM by the front or back and locate the appropriate sets of holes on the KVM.



2. Use a Phillips screwdriver to tighten the screws.
3. Use the mounting hardware recommended for your rack to mount the KVM on a rack.

2. Make an Ethernet Connection

Use an Ethernet cable to connect the Ethernet port on the KVM to your local area network (LAN).

3. Connect Cascaded KVM Units to the Primary KVM [Optional]

KVM supports the cascading of four types of secondary KVM devices: the KVM Analog, the KVM/net, the KVM/netPlus, and the KVM Expander.

1. Power off all KVM hardware and connected devices.
2. Use a CAT-5 cable to connect from a KVM port on the primary KVM unit to the User 2 port on the secondary KVM box.

Warning: In a single user configuration, ensure that the master KVM is connected to the User 2 port on a cascaded KVM unit.

3. To connect the primary KVM unit to the User 1 port of a secondary KVM box:
 - a. Use a CAT-5 cable to connect a KVM port on the primary KVM to a KVM Terminator.
 - b. Connect the Terminator's VGA and PS/2 or USB connectors to the User 1 port on the secondary KVM.
4. Repeat steps 1 through 3 for each secondary KVM connection to the primary KVM.

5. To Connect a KVM Expander to the Primary KVM, use a CAT-5 cable to connect the KVM port on the primary KVM to the User A or the User B port on the secondary KVM Expander.

Note: To support two concurrent users accessing the cascaded KVM units, ensure that both of the user ports (User 1 and User 2 or User A and User B) are connected to the master unit.

See Chapter 3, "Advanced Installation Procedures" in the *AlterPath KVM Installation, Administration, and User's Guide*.

4. Connect Computers to KVM Ports

The KVM components are hot-pluggable, but components of connected devices, such as the PS/2 keyboard and mouse ports on a computer, may not be hot-pluggable. Turn off power to all devices before connecting them. Power on connected devices again only after the KVM is powered on.

1. Connect the appropriate Terminator for the server to be connected.

Note: If you are using a PS/2 Terminator make connections in this order: mouse, keyboard, video. If you are using a USB Terminator connect the USB first and then video.

2. To extend the connection from the computer to the KVM, use an RJ-45 to RJ-45 CAT5 cable up to 500 feet long to connect the Terminator to a KVM port on the KVM.
3. Repeat the steps for all computers to be connected to the KVM ports.
4. If this is a first-time installation, go to "Access the KVM to Perform Basic Network Configuration" on page 4.

5. Connect AlterPath PMs to the KVM [Optional]

By daisy-chaining any combination of PM models to the AUX port on the KVM, you can control up to 128 outlets from one KVM.

1. Use a CAT-5 cable to connect the AUX port on the KVM to the IN port of your AlterPath PM.
2. To connect multiple PMs to the KVM:
 - a. Use a CAT-5 cable to connect the OUT port of a PM that is already connected to the AUX port of a KVM to the IN port of the next AlterPath PM.

- b. Repeat Step a. until you have connected the desired number of PMs.

To configure AUX port for power management, see *AlterPath KVM Installation, Administration, and User's Guide*.

6. Plug KVM Connected Servers into an AlterPath PM [Optional]

In order to manage power of servers while connected to them through KVM ports, the server must be powered by an AlterPath PM that is connected to the KVM. You can manage single or dual dual power supplied servers while connected to the server through a KVM port. See the Power Management sections in the *AlterPath KVM Installation, Administration, and User's Guide*.

7. Access the KVM to Perform Basic Network Configuration

To configure network parameters, make a direct connection to the KVM by doing one of the following:

- a. Connect a terminal or computer to the console port of the KVM to perform the basic network configuration using a terminal emulation application such as hyperterminal.
- b. Connect a keyboard, monitor, and mouse to the keyboard, monitor, and mouse connectors on the KVM.
- c. Connect the AlterPath KVM RP to the KVM's User 2 port.

▼ To Connect to the Console Port

Perform the following steps to connect a computer to the console port of the KVM. An RJ-45 to DB-9 crossover adapter is included.

1. Connect CAT-5 cable with RJ-45 connector to the console port on the KVM.
2. Connect the other end of the CAT-5 cable to the DB-9 crossover console adapter that ships with the KVM.
3. Plug the DB-9 console adapter into the DB-9 connector on your computer.

4. Using a terminal emulation program start a session with the following console port settings:

Serial Speed: 9600 bps	Stop Bits: 1
Data Length: 8 bits	Flow Control: None
Parity: None	ANSI emulation

5. Go to "Power On the KVM and Connected Devices" on page 4.

▼ To Connect to the User 1 Management Port

Connect a keyboard, monitor, and mouse to the User 1 port on the back of the KVM.

1. Plug the station's monitor, keyboard, and mouse cables to the Keyboard, Video, and Mouse connectors, labelled User 1, on the KVM.
2. Go to "Power On the KVM and Connected Devices" on page 4.

▼ To Connect the KVM RP to the KVM

1. Place the KVM RP on a desk or table up to 500 feet away from the KVM.
2. Use a CAT-5 cable to connect the Remote User port on the KVM RP to the User 2 port on the KVM.
3. Connect your monitor, keyboard, and mouse cables to the User port on the KVM RP.
4. Optionally, connect the KVM RP to your local work station: Use a KVM cable to connect the VGA port and PS/2 keyboard and mouse ports on the back of your PC to the PC VGA port and PS/2 keyboard and mouse ports on the KVM RP.
5. Plug in the KVM RP's power cord.

Note: If you performed Step 4, you can skip step 5. The PC can supply power to the KVM RP.

6. Go to "Power On the KVM and Connected Devices" on page 4.

8. Power On the KVM and Connected Devices

1. Make sure the KVM's power switch is off.
2. Plug in the power cable.
3. Turn on the power switches of the KVM, its connected devices, and, if needed, the KVM RP.

9. Perform Basic Network Configuration

You can perform one of the following procedures to assign a static IP address to the KVM and to specify other network parameters:

- Use the “wiz” command through a console connection to the console port.
See “Configuring Network Parameters Using the “wiz” Command” on page 5.
- Use the OSD through a local KVM connection to the User 1 or User 2 ports.
See “Configuring Basic Networking Using the OSD” on page 6.

Before you start, collect the following network information from your network administrator.

<input type="checkbox"/> Hostname:	
<input type="checkbox"/> KVM’s public IP address:	
<input type="checkbox"/> Domain name:	
<input type="checkbox"/> DNS server’s IP address:	
<input type="checkbox"/> Gateway IP address:	
<input type="checkbox"/> Network mask:	
<input type="checkbox"/> KVM’s MAC address:	
<input type="checkbox"/> NTP server’ IP address:	

Configuring Network Parameters Using the “wiz” Command

The following procedure require a hardware connection between the KVM’s console port and the COM port of a computer as described under “To Connect to the Console Port” on page 4.

▼ To Log Into the KVM Through the Console

From your terminal emulation application, log into the console port as “root”.

```
KVM login: root
Password: cyclades
```

The default password is “cyclades.” If the password has been changed from the default use the new password.

▼ To Change the Password Through the Console

If the default password “cyclades” is still in effect, change the “root” password.

Warning: For security reasons, it is strongly recommended that you change the default password “cyclades” as soon as possible.

1. Enter the following command in the terminal window.

```
[root@KVM /]# passwd
```

2. Enter a new password when prompted..

```
New password: new_password
Re-enter new password: new_password
Password changed
```

3. Issue the “saveconf” command to save the new password in the flash memory.

```
[root@KVM /]# saveconf
```

▼ To Use the wiz Command to Configure Network Parameters

1. Launch the Configuration Wizard by entering the **wiz** command.

```
[root@KVM /]# wiz
```

2. At the prompt, enter **n** to change the defaults.

```
Set to defaults (y/n)[n]: n
```

3. Press Enter to accept default hostname, otherwise enter your own hostname.

```
Hostname [KVM]: kvm_hostname
```

4. Press Enter to disable DHCP.

```
Do you want to use DHCP to
automatically assign an IP for your
system? (y/n)[n]: n
```

5. Enter a public IP address to assign to the KVM.

```
System IP[192.168.160.10]:
public_IP_address
```

6. Enter the domain name.

```
Domain name[cyclades.com]:
domainname
```

7. Enter the IP address of the DNS (domain name) server.

```
Primary DNS Server[192.168.44.21] :
DNS_server_IP_address
```

8. Enter the IP address for the gateway.

```
Gateway IP[eth0] :
gateway_IP_address
```

9. Enter the netmask for the subnetwork.

```
Network Mask[#] : netmask
```

10. Review the network configuration parameters, as shown in the following screen example. The values shown are for example only.

```
Current configuration:
Hostname : kvm
DHCP : disabled
System IP : 192.168.45.32
Domain name : cyclades.com
PrimaryDNSServer : 192.168.44.21
Gateway IP : 198.168.44.1
Network Mask : 255.255.252.0
Are all these parameters correct?
(y/n) [n] :
```

11. Enter **y** if the parameters shown are correct, or press Enter to return to the “wiz” command and make any necessary changes.

12. The following prompt appears when “y” is entered.

```
Do you want to activate your
configurations now? (y/n) [y] : y
```

13. Enter **y** to save the configuration to flash memory. The following prompt appears.

```
Do you want to save your
configuration to flash? (y/n)[n]: y
```

14. To display the saved configuration, enter the `ifconfig` command.



▼ To Log Into the OSD

1. On the OSD login screen, enter “admin” as the Login name.
2. Enter the password and press Enter. The default password is “cyclades.” If the password has been changed from the default, use the current password.
3. If you are performing an initial configuration of basic networking parameters, go to “To Change Default Password Using the OSD” on page 6; otherwise, go to “To Configure Network Parameters Using the OSD” on page 6.

▼ To Change Default Password Using the OSD

1. Log into the OSD.
2. From the Main Menu, select the Configure option.
3. From the Configure Menu, select the Users and Groups option.
4. From the list of users on the User Database screen, select the admin username.
5. On the “Enter the Password” screen, enter the new password.
6. On the password confirmation window, re-enter the password.
7. Select OK.

▼ To Configure Network Parameters Using the OSD

1. From the OSD Main Menu, go to Configure > Network.
2. Disable DHCP to assign a static IP address to the KVM.
3. Enter the IP address for the KVM.
4. Enter the netmask (in the form 255.255.255.0).
5. Enter the IP address for the gateway.
6. Enter the IP address for the DNS server.
7. Enter the domain name.
8. Enter the hostname for the KVM and save the changes to complete the basic network configuration.

Configuring Basic Networking Using the OSD

This procedure requires a hardware connection between the KVM’s User 1 port and a local monitor, keyboard, and mouse. After the KVM and monitor are powered on, the following OSD login screen appears.

▼ **To Set the Time and Date Using the OSD**

1. From the Main menu of the OSD, go to Configure.
2. Select Date/time.
3. To enable the NTP time and date server, do the following.
 - a. On the Date/time conf. form, select the “enabled” option.
 - b. Enter the IP address of the NTP server.
 - c. Save the changes.
4. To enter the date and time manually, do the following.
 - a. On the Date/time conf. form, select disabled.
 - b. Enter the date in the format shown and press Enter.
 - c. Enter the time in the format shown and save the changes.

10. Add Users, Configure Ports, and Add In-band Servers Using the Web Manager

Connect to the Web Manager by entering the IP address of the KVM in a supported browser. The “admin” user can administer the KVM through the Web Manager.

For more information on the KVM, see the chapters in the *AlterPath KVM Installation, Administration, and User’s Guide* that are listed below.

- Prerequisites for using the Web Manager – Chapter 1, “Introduction”
- How to use the Web Manager to add users and configure ports – Chapter 4, “Web Manager for Administrators”
- How to install external modems – Chapter 3, “Advanced Installation Procedures”
- How to access servers and devices that are connected to the KVM – Chapter 6, “Accessing Connected Devices”
- How to use the Web Manager to manage power and to change your user password – Chapter 5, “Web Manager for Regular Users”

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