# ALTUSEN™
### Enterprise KVM Solutions by ATEN

**KN2108 8 Port KVM over the NET Quick Start Guide**
**KN2116 16 Port KVM over the NET Quick Start Guide**

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## 1  Package Contents

**Package Contents:**
1 KN2108 or KN2116 KVM over the NET KVM Switch
1 Power Cord
1 User Manual
1 Rack Mount Kit (brackets and Phillips hex head screws M3 x 8)
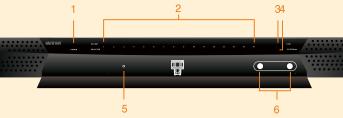1 Footpad Set (4 pcs.)
1 Quick Start Guide
1 Registration Card

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## 2  Front View

| | |
|---|---|
| 1  Power LED | 4  10/100 Mbps Data LED |
| 2  Port LEDs | 5  Reset Switch |
| 3  Link LED | 6  Port Switching Buttons |

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## 3  Rear View

| | |
|---|---|
| 1  Power Socket | 4  LAN Port |
| 2  Power Switch | 5  Local Console Section |
| 3  PON Port | 6  KVM Ports |

The front and rear panels of the KN2108 and KN2116 are similar, only has LEDs and ports for 8 connectors whereas the KN2116 has LEDs and ports for 16 connectors

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## 4  System Requirements

**Remote Computers**
For best results, computers that remotely access the switch should have at least a P III 1 GHz processor, with their screen resolution set to 1024 x 768.

Users who want to access the switch with the Windows Client must have DirectX 7.0 or higher installed.  If you don't already have it, DirectX is available for free download from Microsoft's web site: http://www.microsoft.com/downloads.

Users who want to access the switch with the Java Client must have Sun's Java 2 (1.4.2 or higher) runtime environment installed. Java is available for free download from the Sun Java website: http://java.sun.com
Browsers must support 128 bit SSL encryption.
For best results, a network transfer speed of at least 128kbps is recommended.

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**Computers**
The following equipment must be installed on the computers that connect to the KN2108 or KN2116 KVM ports:

A VGA, SVGA or Multisync port
A Type A USB port and USB host controller (for USB KVM Adapter Cable Connection)
A 6-pin mini-DIN keyboard port (for PS/2 KVM Adapter Cable Connection)
A 6-pin mini-DIN mouse port (for PS/2 KVM Adapter Cable Connection)
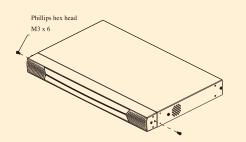
**KVM Adapter Modules**
Cat 5 (or higher) cable is required to connect the KN2108 / KN2116 to one of the KVM Adapter Modules
The following KVM Adapter Modules are required for use with the KN2108 / KN2116:

| Function | Module |
|---|---|
| Connect to devices with PS/2 ports | KA9120 |
| Connect to devices with USB ports | KA9170 |
| Connect to Sun Legacy Computers | KA9130 |
| Connect to Sun USB Computers | KA9131 |
| Connect to serial based devices | KA9140 |

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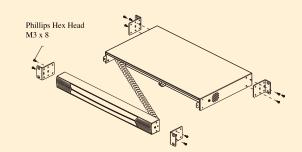
## 5  Hardware Installation 1

**Rack Mounting**
1. Separate the front and rear modules by removing the four module attachment screws.
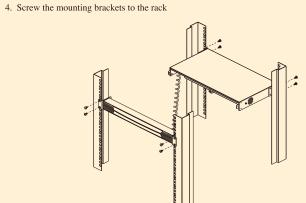
Phillips hex head
M3 x 6

2. Use the screws you just removed, and the ones supplied with the rack mounting kit to screw the rack mounting brackets into both modules:
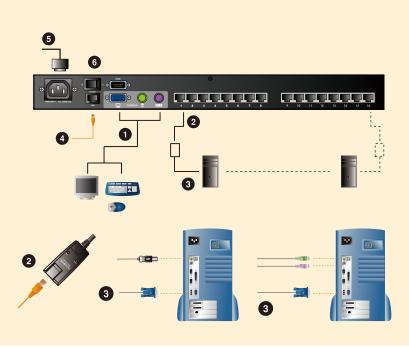
Phillips Hex Head
M3 x 8

3. Position the device in the rack and align the holes in the mounting brackets with the holes in the rack.
4. Screw the mounting brackets to the rack

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## 6  Hardware Installation 2

**Single stage installation**
1. Plug your Local Console's keyboard, mouse, and monitor into the unit's Console Ports.
   Note: The distance between the console and the KN2108 / KN2116 must not exceed 20m.
2. Use Cat. 5 cable to connect any available KVM port to a KVM adapter that is appropriate for the computer you are installing
   Note: The distance between the KN2108 / KN2116 and the KVM adapter must not exceed 40m.
3. Connect the KVM adapter to the computer. Plug the connectors on the KVM adapter into the appropriate ports of the computer you are installing.
4. Plug the cable from the LAN or WAN into the KN2108 / KN2116's RJ-45 socket.
5. Plug the female end of the power cord into the KN2108 / KN2116's Power Socket; plug the male end into an AC power source.
6. Turn on the power to the KN2108 / KN2116.
7. After the KN2108 / KN2116 is powered up, you can turn on the computers.

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## 7  Administrator setup

**Administrator setup**
Once the KN2108 / KN2116 has been cabled up, the next step that the Administrator needs to perform is setting the unit up for user operation. The most convenient way to do this for the first time is from the local console.

After the local console has been connected up and the KN2108 / KN2116 turned on, a login prompt appears on the console monitor:

Since this is the first time you are logging in, use the default Username: **administrator**; and the default Password: **password**. For security purposes, we strongly recommend you use the User Management function to remove these and give yourself a unique Username and Password with the appropriate permissions.

After you successfully log in, the Local Console OSD comes up:

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## 8  Browser Operation

**Browser Operation**
The KN2108 / KN2116 computer control and switching operations are governed by an On Screen Display (OSD) interface. The OSD can be accessed remotely with a Windows-based client, or a Java-based client. To connect to the switch and bring up its OSD you must log in from an internet browser.

To log in from an internet browser:
1. Open the browser and specify the IP address of the KN2108 / KN2116 you want to access in the browser URL location bar.
   Note: If you don't know the IP address, get it from the administrator.
2. When the Security Alert dialog box appears, accept the certificate.
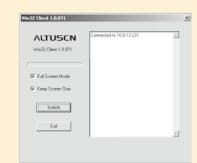3. A login page appears:

Provide a valid Username and Password (set up by the administrator), then Click Login to continue

After you have successfully logged in, the KN2108 / KN2116 Main Web Page appears with the General dialog box displayed:

To activate the browser Windows Client OSD do the following:
1. Click the Windows Client button (the one without the arrow) at the left of the web page.

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When a connection to the KN2108 / KN2116 has been established a screen similar to the one below appears:

Click on Switch to bring up the OSD.

The OSD comes up with the Main page visible, the KN2108/KN2116 OSD appears in the center of your screen. In addition to an OSD control panel appears at the lower right-hand corner.

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## 9  Operation/OSD Tool bar/Specifications

Hotkeys allow you to provide KVM focus to a port directly from the keyboard.
* The KN2108 / KN2116 provides the following hotkey features:

**Auto Scanning**
**Invoking Auto Scan:** To start Auto Scanning, tap the **A** key.
**Pausing Auto Scan:** While you are in Auto Scan Mode, you can pause the scanning in order to keep the focus on a particular computer by pressing **P**.
**Exiting Auto Scan Mode :** press **Esc** or the **Spacebar**
**Skip Mode:** The Skip Mode hotkeys are the four Arrow keys. Their operation is explained in the table below:

| | |
|---|---|
| ← | Skips from the current port to the first accessible port previous to it. |
| → | Skips from the current port to the first accessible port that comes after it. |
| ↑ | Skips from the current port to the very first accessible port on the installation. |
| ↓ | Skips from the current port to the very last accessible port on the installation. |

* This feature becomes active once the OSD has been invoked.

**The OSD Toolbar**
The OSD provides a toolbar to help you control the KN2108/KN2116 from within the captured port. To bring up the toolbar, tap the OSD Hotkey (Scroll Lock or Ctrl), twice. The toolbar appears at the upper left corner of the screen:

**Recalling the OSD**
To dismiss the toolbar and bring back the OSD display (the Main, Configuration, and Administration pages), tap the OSD Hotkey once. The OSD Toolbar disappears, and the main OSD display reappears.

**Mouse Setup**

The following mouse setting procedures should be performed on each computer connected to the KN2108/KN2116.

Windows Systems:
Note: You must use the generic mouse driver supplied with Windows.
* XP / Server 2003 -- middle position; Enhance pointer precision: off
* 2000 / ME -- Mouse motion: middle position; Acceleration: off
* NT / 98 / 95 -- Mouse speed: slowest

Sun / Linux Systems:
Open a terminal session and issue the following command:
* Sun: xset m 1
* Linux: xset m 0

**Specifications**

| Function | | | KN2108 | KN2116 |
|---|---|---|---|---|
| Computer Connections | | | 8 | 16 |
| Port Selection | | | OSD, Hotkey, Pushbutton | |
| Connectors | Console Port | Keyboard | 1 x 6-pin Min-DIN Female (Purple) | |
| | | Video | 1 x HDB-15 Female (Blue) | |
| | | Mouse | 1 x 6-pin Min-DIN Female (Green) | |
| | KVM Port | | 8 x RJ45 Female | 16 x RJ45 Female |
| | LAN | | 1 x RJ45 | |
| | PON | | 1 x DB-9 Male | |
| | Power | | 3 Prong AC Socket | |
| Switches | Power | | 1 x Rocker switch | |
| | Reset | | 1 x Semi-recessed pushbutton | |
| | Port Selection | | 2 x pushbutton | |
| LEDs | On Line | | 8 (Green) | 16 (Green) |
| | Selected | | 8 (Orange) | 16 (Orange) |
| | Link | | 1 (Green) | |
| | 10 / 100Mbps | | 1 (Orange / Green) | |
| | Power | | 1 (Blue) | |
| I/P Rating | | | 100-240VAC, 50/60Hz; 1A | |
| Power Consumption | | | 120V 12W; 230V 12W | |
| Emulation | Keyboard/Mouse | | PS/2, USB, and Serial | |
| Scan Interval | | | User Specified: 1-255 secs. | |
| Video | | | 1280 x 1024@60Hz | |
| Environment | Operating Temp. | | 0-40°C | |
| | Storage Temp. | | -20-60°C | |
| | Humidity | | 0-80% RH, NC | |
| Physical Properties | Housing | | Metal | |
| | Weight | | 3.65 kg | 3.70 kg |
| | Dimensions (L  x W x H) | | 43.84 x 28.40 x 4.40 cm (19" 1U) | |