ATEN Touchboards

ATEN Altusen™

KH1508A/KH1516A Cat 5 High-Density KVM Switch Quick Start Guide

All information, documentation, firmware, software utilities, and specifications contained in this package are subject to change without prior notification by the manufacturer. Please visit our website http://www.aten.com/download/?cid=dds for the most up-to-date versions.

1 Package Contents

1 KH1508A or KH1516A Cat 5 High-Density KVM Switch
1 Firmware Upgrade Cable
1 Power Cord
1 Mounting Kit
1 Foot Pad Set (4 pcs.)
1 User Instructions

Important Notice
Considering environmental protection, ATEN does not provide a fully printed user manual for this product. If the information contained in the Quick Start Guide is not enough for you to configure and operate your product, please visit our website www.aten.com, and download the full user manual.

2 Requirements

Console
• A VGA, SVGA, or multisync monitor capable of the highest resolution that you will be using on any computer in the installation
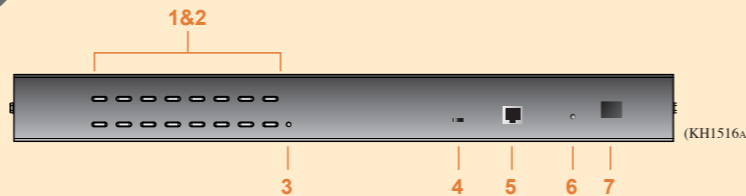• A PS/2 or USB mouse
• A PS/2 or USB keyboard

Computers
The following equipment must be installed on the computers that connect to the KH1508A or KH1516A KVM ports:
• A VGA, SVGA or multisync port
• A Type A USB port and USB host controller (for USB KVM adapter cable connection, see following section)
- or -
• 6-pin Mini-DIN keyboard and mouse ports (for PS/2 KVM adapter cable connection, see following section)

KVM Adapter Cables
• Cat 5e/6 cable is required to connect the KH1508A / KH1516A to one of the KVM adapter cables.
• The following KVM adapter cables are required for use with the KH1508A / KH1516A:
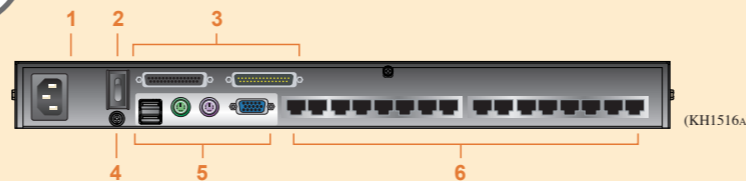
Function	Module
Connect to devices with PS/2 ports	KA7920 / KA7520 / KA7120
Connect to devices with USB ports	KA7970 / KA7570 / KA7170
	KA7166 /KA7168 / KA7169
Connect to Sun Legacy systems (with 13W3 port)	KA7130
Connect to Sun USB systems	KA7170
Connect to serial based devices	KA9140

3 Hardware Review (Front View)

1&2

(KH1516A)

3   4   5   6 7

1. Port Selection Pushbuttons
2. Port LEDs
3. Reset Switch
4. Firmware Upgrade Recovery Switch
5. Firmware Upgrade Port
6. Power LED
7. Station ID LED

4 Hardware Review (Rear View)

1   2   3

(KH1516A)

4   5   6

1. Power Socket
2. Power Switch
3. Daisy Chain Ports
4. Grounding Terminal
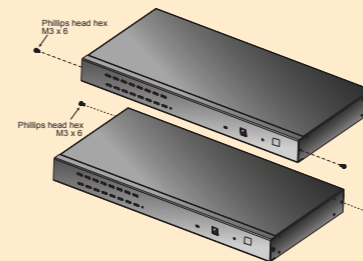5. Console Ports
6. KVM Port Section

Note: The front and rear panel views are similar for the KH1508A, the difference being that the KH1508A has only one row of LED lights (front) and one row of CPU ports (rear)
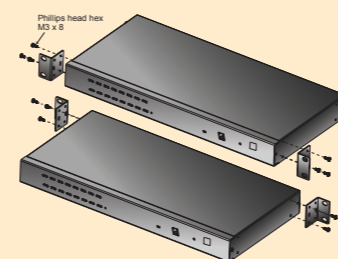
5-1 Hardware Installation

Rack Mounting
The KH1508A / KH1516A can be mounted in a 19" (1U) rack. The mounting brackets can screw into either the front or the back of the unit so that it can attach to the front or the back of the rack. To rack mount the unit:
1. Remove the screws at the front or the rear, as shown in the diagram below.

2. Screw the mounting brackets into the sides of the unit at the front or the rear, as shown in the diagram below.
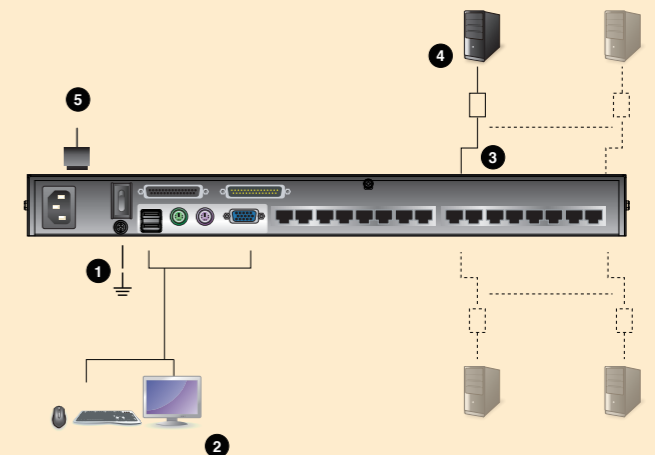

3. Slide the unit into the front or rear of the rack and secure it to the rack.

5-2 Hardware Installation

Single Station Installation
1. Ground the KH1508A / KH1516A by connecting one end of the grounding wire to the grounding terminal, and the other end of the wire to a suitable grounded object.
   Note: Do not omit this step. Proper grounding helps to prevent damage to the unit from surges or static electricity.
2. Plug the console keyboard, monitor, and mouse into the unit's console ports. The ports are color coded and marked with icons for easy identification.
   Note: You can use any combination of keyboard and mouse connections. For example, you can use a PS/2 keyboard with a USB mouse.
3. Use Cat 5e/6 cable to connect any available KVM port to a KVM adapter cable that is appropriate for the computer you are installing.
   Note: To support a resolution of 1280x1024, the recommended maximum distance between the unit and the KVM adapter cable is 50 meters.
4. Connect the KVM adapter cable to the computer. Plug the connectors on the KVM adapter cable into the appropriate ports of the computer you are installing.
5. Plug the female end of the power cord into the KH1508A / KH1516A's power socket; plug the male end into an AC power source.

After the KH1508A / KH1516A is cabled up, you can turn on the power. After it is powered up, you can turn on the servers.

6 Operation

Port Selection

KH1508ᴀ / KH1516ᴀ installations provide three methods to obtain instant access to any computer on your installation: Manual, OSD (on-screen display), and Hotkey.

Manual

Manual port selection simply involves pressing the port selection switch that corresponds to the device you wish to access.
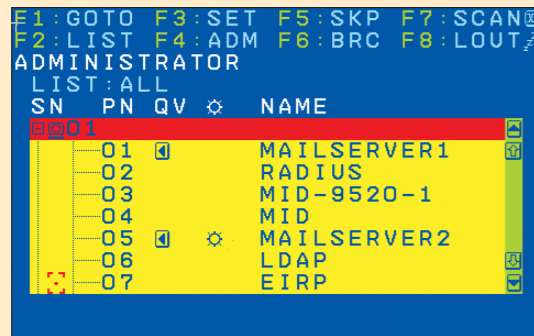
OSD

The On Screen Display (OSD) is a menu driven method to handle computer control and switching operations. All procedures start from the OSD Main Screen. To display the Main Screen, tap the OSD hotkey twice. The default hotkey is [Scroll Lock]. You can change the hotkey to the Ctrl key or the Alt key if you like.

The OSD incorporates a two level (administrator / user) password system. Before the OSD Main Screen comes up, a login dialog box appears that asks for a username and password. You must provide a valid username and password in order to continue.

If this is the first time that the OSD is being run, or if the password function has not been set, simply press [Enter]. The OSD main screen displays in administrator mode. In this mode, you have administrator privileges, with access to all administrator and user functions, and can set up operations (including password authorization) as you like

When you invoke the OSD, a screen similar to the one below appears:

```
F1:GOTO F3:SET F5:SKP F7:SCAN
F2:LIST F4:ADM F6:BRC F8:LOUT
ADMINISTRATOR
LIST:ALL
SN  PN QV ☼   NAME
001
    01  ◄      MAILSERVER1
    02          RADIUS
    03          MID-9520-1
    04          MID
    05  ◄  ☼    MAILSERVER2
    06          LDAP
    07          EIRP
```

To bring the KVM focus to a port, double-click it, or move the highlight bar to it and then press [Enter].

Hotkey

Hotkeys allow you to conveniently provide KVM focus to a particular computer from the keyboard instead of having to manually select them by pressing port selection switches, or accessing the OSD.

Invoking Hotkey Mode

Number Lock and Minus Keys (Default)
1. Hold down the **Num Lock** key;
2. Press and release the **minus** key;
3. Release the **Num Lock** key:
[Num Lock] + [-]

Control and F12 Keys (Alternate)
1. Hold down the **Ctrl** key;
2. Press and release the **F12** key;
3. Release the **Ctrl** key:
[Ctrl] + [F12]

7 Hotkey Summary Table

[Num Lock] + [-] or [Ctrl] + [F12]	[A] [Enter]	Invokes Auto Scan mode. When Auto Scan mode is in effect, [P] or left-click pauses auto-scanning. When auto-scanning is paused, pressing any key or another left-click resumes auto-scanning.
	[B]	Toggles the Beeper On or Off.
	[Esc] or [Spacebar]	Exits hotkey mode.
	[F1]	Sets Operating System to Windows
	[F2]	Sets Operating System to Mac
	[F3]	Sets Operating System to Sun
	[F5]	Performs a keyboard / mouse reset on the target computer.
	[H]	Toggles the Hotkey invocation keys.
	[Port ID] [Enter]	Switches access to the computer that corresponds to that Port ID.
	[R] [Enter]	Administrator only hotkey. It returns the switch's settings to their default values.
	[T]	Toggles the OSD Hotkey between [Ctrl] [Ctrl] and [Scroll Lock] [Scroll Lock].
	[←]	Invokes Skip Mode and skips from the current port to the first accessible port previous to it.
	[→]	Invokes Skip Mode and skips from the current port to the next accessible port.
	[↑]	Invokes Skip Mode and skips from the current port to the last accessible port of the previous Station.
	[↓]	Invokes Skip Mode and skips from the current port to the first accessible port of the next Station.

8 Specification

Function			KH1508ᴀ	KH1516ᴀ
Computer Connections	Direct		8	16
	Max.		256 (via Daisy Chain)	512 (via Daisy Chain)
Port Selection			OSD (On Screen Display); Hotkeys; Pushbuttons	
Connectors	Console	Keyboard	1 x 6-pin Mini-DIN Female (Purple) 1 x USB Type A Female (White)	
		Video	1 x HDB-15 Female (Blue)	
		Mouse	1 x 6-pin Mini-DIN Female(Green) 1 x USB Type A Female (White)	
	KVM Ports		8 x RJ-45 Female	16 x RJ-45 Female
	Daisy Chain	In	1 x DB-25 Female (Black)	
		Out	1 x DB-25 Male (Black)	
	F/W Upgrade		1 x RJ-11 Female (Black)	
	Power		1 x 3-Prong AC socket	
Switches	Port Selection		8 x Pushbutton	16 x Pushbutton
	KVM Reset		1 x Recessed pushbutton	
	F/W Upgrade		1 x Slide	
	Power		1 x Rocker	
LEDs	Port	On Line	8 (Green)	16 (Green)
		Selected	8 (Orange)	16 (Orange)
	Power		1 (Blue)	
	Station ID		1 x 2 Digit 7-segment (Orange)	
Emulation	Keyboard		PS/2; USB	
	Mouse		PS/2; USB	
Scan Interval			1–255 sec.	
Video			1920 x 1200 @ 60 Hz (30 m); 1600 x 1200 @ 60 Hz (40 m); 1280 x 1024 @ 75 Hz (50 m) *	
I/P Rating			100-240 VAC; 50/60 Hz; 1A	
Power Consumption			120V/5.8W; 230V/6W	120V/5.9W; 230V/6.1W
Environment	Operating Temp.		0–40°C	
	Storage Temp.		-20–60°C	
	Humidity		0–80% RH, Non-condensing	
Physical Properties	Housing		Metal	
	Weight		2.74 kg	2.77 kg
	Dimensions(L x W x H)		43.72 x 15.58 x 4.40 cm	

* With KVM Adapter Cable KA7xxx series.