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KH2508A/KH2516A Cat 5 High-Density KVM Switch Quick Start Guide

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CN ZL 98252015.8	DE 29903667.7	TW I276963	US 7640289	JP 4456936
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CN ZL 200410031689.0	TW 194030	TW 194030	US 6160543	US 7584309
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1 Package Contents

1 KH2508A or KH2516A Cat 5 High-Density KVM Switch
1 Firmware Upgrade Cable
1 Power Cord
1 Rack Mount Kit
1 Foot Pad Set (4 pcs.)
1 User Instructions

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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 KH2508A or KH2516A KVM ports:
• A VGA, SVGA or multisync port
• A Type A USB port and USB host controller (for USB KVM adapter cable connection)
- or -
6-pin Mini-DIN keyboard and mouse ports (for PS/2 KVM adapter cable connection)

KVM Adapter Cables
• Cat 5e/6 cable is required to connect the KH2508A / KH2516A to one of the KVM adapter cables.
• The following KVM adapter cables are required for use with the KH2508A/ KH2516A:

| Function	Module
Connect to devices with PS/2 ports	KA7920 / KA7520 / KA7120 / KA9520 / KA9120
Connect to devices with USB ports	KA7970 / KA7570 / KA7170 / KA9570/ KA9170
Connect to Sun Legacy systems (with 13W3 port)	KA9130 / KA7130
Connect to Sun USB systems	KA9170 / KA7170
Connect to serial based devices	KA9140

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3 Hardware Review (Front View)

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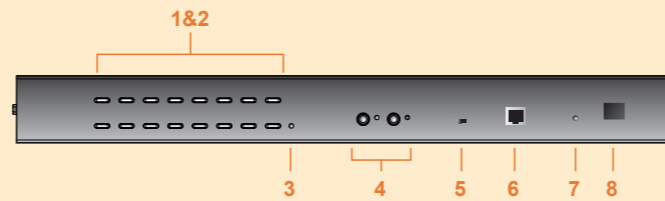
1. Port Selection Buttons
2. Port LEDs
3. Reset Switch
4. Console Selection Buttons
5. Firmware Upgrade Recovery Switch
6. Firmware Upgrade Port
7. Power LED
8. Station ID LED

Note: The front and rear panel views are similar for the KH2508A, the difference being that the KH2508A has only one row of LED lights (front) and one row of CPU ports (rear)

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4 Hardware Review (Rear View)
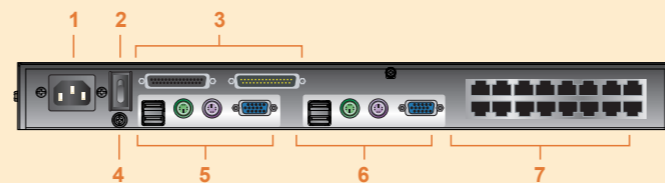
1. Power Socket
2. Power Switch
3. Daisy Chain Ports
4. Grounding Terminal
5. Console 1 Ports
6. Console 2 Ports
7. KVM Port Section

5-1 Hardware Installation

Single Station Installation
In a single stage installation, there are no additional KVM switches daisy chained down from the KH2508A / KH2516A. To set up a single stage installation, refer to the installation diagrams starting (the numbers in the diagram correspond with the numbers of the instruction steps), and do the following:

1. Ground the KH2508A / KH2516A by connecting one end of the grounding wire provided with your switch 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 keyboards, monitors, and mice into the unit's Console 1 and Console 2 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: The KH2508A / KH2516A does not support distances greater than 50 m between itself and the KVM adapter cable.
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 KH2508A / KH2516A's power socket; plug the male end into an AC power source.
   After the KH2508A / KH2516A is cabled up, you can turn on the power. After it is powered up, you can turn on the servers.

5-2 Hardware Installation
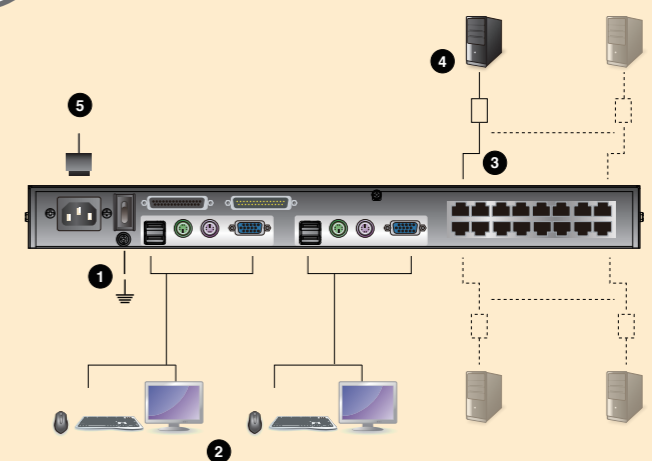
Rack Mounting
The KH2508A / KH2516A can be mounted in a 19" (1U) rack. The mounting brackets can screw into either the front or the back of the unit so that it can attach to the front or the back of the rack. To rack mount the unit:
1. Remove the screws at the front or the rear, as shown in the diagram below.
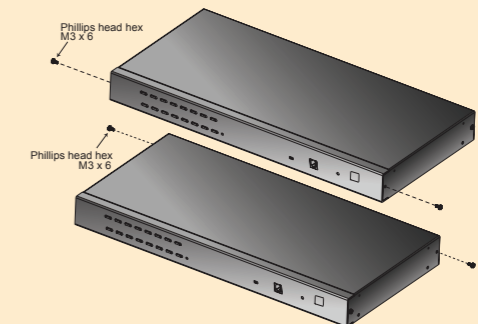
2. Screw the mounting brackets into the sides of the unit at the front or the rear, as shown in the diagram below.
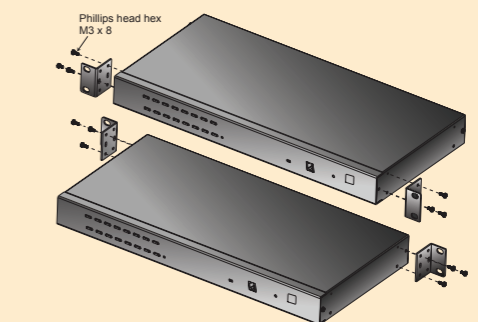
3. Slide the unit into the front or rear of the rack and secure it to the rack.

Port Selection

KH2508A / KH2516A 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.
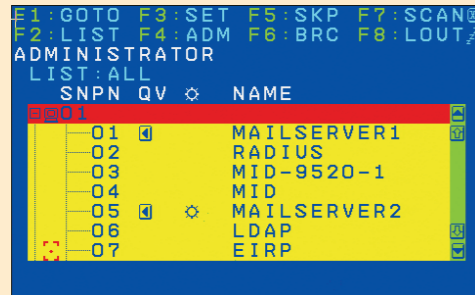
Note: Before making your port selection, first make your console selection by pressing the appropriate console selection button.

OSD Operation

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 requesting a username and password. You must provide a valid username and password to continue. After logging in with the default username and password, the OSD Main Screen opens in Administrator mode as below.

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

Hotkey Command Operation

Hotkey port control allows you to provide KVM focus to a particular computer directly from the keyboard.

All hotkey operations begin by invoking Hotkey mode. There are two possible keystroke sequences used to invoke Hotkey mode, though only one can be operational at any given time:

Number Lock and Minus Keys

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

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

Select the Active Port

You can directly access any computer on the installation with a hotkey combination that specifies the port ID of the KVM port that a computer is connected to. To access a computer using hotkeys:

1. Invoke hotkey mode with the **[Num Lock] + [-]** or **[Ctrl] + [F12]** combination.
2. Key in the port ID.
3. Press [Enter]

After you press [Enter], the KVM focus switches to the designated computer and you automatically exit hotkey mode

[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.

Function			KH2508A	KH2516A
Computer Connections	Direct		8	16
	Max		256 (via Daisy Chain)	512 (via Daisy Chain)
Port Selection			OSD (On Screen Display); Hotkeys Pushbutton Switches	
Connectors	Console Ports	Keyboard	2 x 6-pin Mini-DIN Female (Purple); 2 x USB Type A Female	
		Video	2 x HDB-15 Female	
		Mouse	2 x 6-pin Mini-DIN Female (Green); 2 x USB Type A Female	
	KVM Ports		8 x RJ-45	16 x RJ-45
	Daisy Chain	In	1 x DB-25 Female	
		Out	1 x DB-25 Male	
	FW Upgrade		1 x RJ-11	
	Power		3-prong AC socket	
Switches	Port Selection		8 x Pushbutton	16 x Pushbutton
	Console Selection		2 x Pushbutton	
	KVM Reset		1 x Recessed pushbutton	
	F/W Upgrade		1 x Slide	
	Power		1 x Rocker	
LEDs	Port	Online	8 (Green)	16 (Green)
		Selected	8 (Orange)	16 (Orange)
	Console		2 (Orange)	2 (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 seconds	
Video			1600 x 1200 @ 60 Hz (40m); * 1280 x 1024 @ 75 Hz (50m);	
I/P Rating			100–240 VAC; 50/60 Hz; 1A	
Power Consumption			120V/7.2W; 230V/8.6W	120V/7.6W; 230V/9.0W
Environment	Operating Temp.		0–50° C	
	Storage Temp.		-20–60° C	
	Humidity		0–80% RH; Non–condensing	
Physical Properties	Housing		Metal	
	Weight		2.81 kg	2.85 kg
	Dimensions (L x W x H)		43.72 x 16.36 x 4.40 cm	

* With KVM Adapter Cable KA7000 series.