



**KL1508Ai/KL1516Ai Dual Rail LCD KVM Switch
Quick Start Guide**

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Please visit our website to find the most up to date version.

1 Package Contents

- 1 KL1508Ai or KL1516Ai Dual Rail LCD KVM Switch
- 1 Power Cord
- 1 Standard Rack Mount Kit
- 1 Firmware Upgrade Cable
- 1 User Instructions

Optional Equipment

Depending on any optional equipment that you may have purchased, one of the following may be included in your package:

- Standard Rack Mounting Kit - Long
- Easy-Installation Rack Mounting Kit - Short
- Easy-Installation Rack Mounting Kit - Long

Important Notice

Considering environmental protection, ATEN may 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.

2-1 Requirements

General

- We recommend computers with at least a P 4 2GHz processor, and 1 GB RAM.
- Browsers must support 128 bit SSL encryption.
- A network transfer speed of at least 512kbps is recommended.
- For the Log Server, you must have the Microsoft Jet OLEDB 4.0 or higher driver installed.

External Console

- A VGA, SVGA, or Multisync monitor capable of the highest resolution that you will be using on any computer in the installation.
- A USB or PS/2 style mouse
- A USB or PS/2 style keyboard

Computers

The following equipment must be installed on the computers that connect to the KL1508Ai or KL1516Ai's KVM ports:

- A VGA, SVGA or Multisync port
 - A Type A USB port and USB host controller (for USB KVM Adapter Cable Connection, see below)
 - 6-pin mini-DIN keyboard and mouse ports (for PS/2 KVM Adapter Cable Connection, see below)
- Note:** The integrated LCD monitor's maximum screen resolution is 1280 x 1024 @ 75 Hz.

2-2 Requirements

KVM Adapter Cables

- Cat 5e/6 cable is required to connect the KL1508Ai / KL1516Ai to one of the KVM adapter cables.
- The following KVM adapter cables are required for use with the KL1508Ai / KL1516Ai:

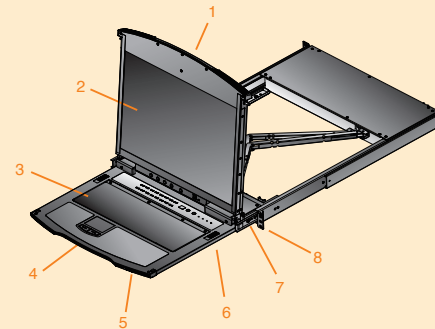
Function	Module
Connect to devices with PS/2 ports	KA7920 / KA7520 / KA7120 / KA9520 / KA9120
Connect to devices with USB ports	KA7970 / KA7570 / KA7170 / KA9570 / KA9170
Connect to Sun Legacy systems (with 13W3 port)	KA9130 / KA7130
Connect to Sun USB systems	KA9170 / KA7170
Connect to serial based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

- Note:** 1. KVM adapter cables are referred to as I/O Modules in some dialog boxes.
2. The following cable models support the Adapter Cable ID function: KA7920 / KA7970 / KA7520 / KA7570 / KA7120 / KA7130 / KA7170.

3 Hardware Review

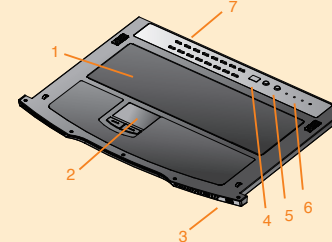
Front View

1. Upper Handle
2. LCD Module
3. Keyboard Module
4. Lower Handle
5. Power LED
6. Keyboard Release Catch
7. LCD Release Catch
8. Rack Mounting Tabs



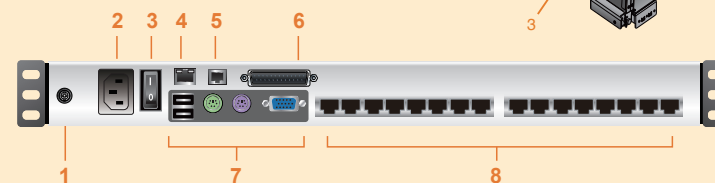
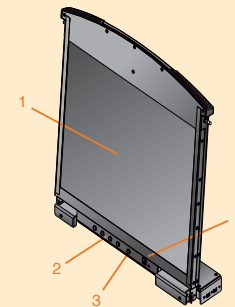
Keyboard Module

1. Keyboard
2. Touchpad
3. External Mouse Port
4. Station ID LED
5. Station Selection Area
6. Lock LEDs & Reset Switch
7. Port Selection Buttons and LEDs



LCD Module

1. LCD Display
2. LCD Controls
3. LCD On/Off Button
4. Firmware Upgrade Section



Rear View

1. Grounding Terminal
2. Power Socket
3. Power Switch
4. LAN Port
5. PON Port
6. Daisy Chain Port
7. Local Console Port Selection
8. KVM Port Selection

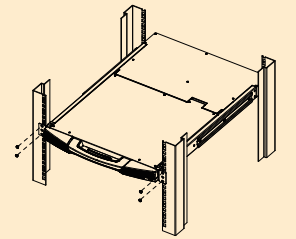
* The KL1516Ai is pictured above. The KL1508Ai rear panel is the same as that of the KL1516Ai, except that it has 8 KVM ports instead of 16.

4 Hardware Installation

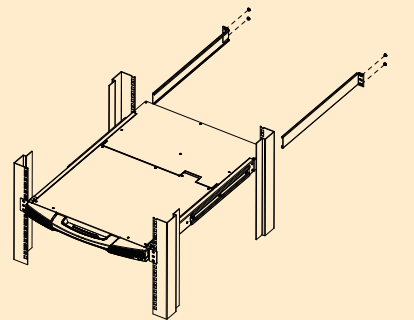
Rack Mounting

To rack mount the switch, do the following:

1. While one person positions the switch in the rack and holds it in place, the second person loosely screws the front brackets to the rack.



2. While the first person still holds the switch in place, the second person slides the L brackets into the switch's side mounting brackets, from the rear until the bracket flanges contact the rack, then screws the L brackets to the rack.



3. After the L brackets have been secured, tighten the front bracket screws.

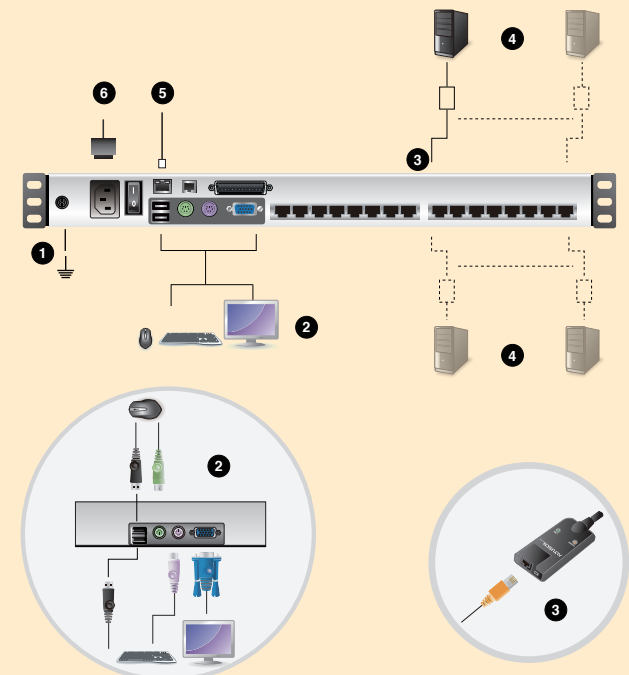
Note: Allow at least 5.1 cm on each side for proper ventilation, and at least 12.7 cm at the back for the power cord and cable clearance.

Single Station Installation

In a Single Stage installation, there are no additional switches daisy chained down from the first unit. To set up a single stage installation, refer to the installation diagrams (the numbers in the diagram correspond to the numbers of the installation steps), and do the following:

1. Ground the KL1508Ai / KL1516Ai 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. If you choose to install an external console, plug your keyboard, monitor, and mouse into the Console Ports located on the switch's rear panel. The ports are color coded and marked with an icon to identify themselves.
Note: This step is optional.
3. For each of the computers you are installing, use Cat 5e cable to connect any available KVM port to a KVM adapter cable that is appropriate for the computer you are installing.
Note: The maximum supported distance to the adapter cable is 50 m.
4. Connect the KVM Adapter cable to the computer.
Plug the adapter cable connectors into their respective ports on the computers you are installing.
5. Plug the LAN or WAN cable into the KL1508Ai / KL1516Ai's LAN port.
6. Connect the power cord to the switch and to an AC power source.

After the KL1508Ai / KL1516Ai is cabled up, you can turn on the power. After the switch is powered up, you can turn on the servers.



Basic Operation

KL1508Ai / KL1516Ai installations provide three methods to obtain instant access to any computer on your installation: Manual, OSD (on-screen display)/GUI, and Hotkey.

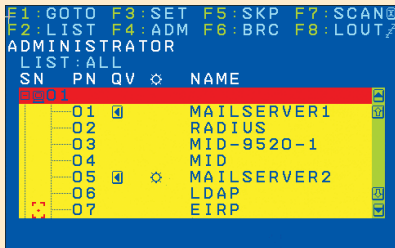
Manual

For manual port selection, simply press the Port 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 requesting a username and password. You must provide a valid username and password in order to continue. The first time that the OSD is accessed, you must use the default username and password. The default username is **administrator**; the default **password** is password. For security purposes, we strongly recommend changing these to something unique after you log in for the first time. After logging in with the default username and password, the OSD Main Screen opens in Administrator mode as below.



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 local console keyboard instead of having to manually select them by pressing port selection switches.

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]

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.

Browser Login

Open an Internet browser and specify the IP address of the switch you want to access in the browser's location bar.

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: 192.168.0.100/kl1516ai

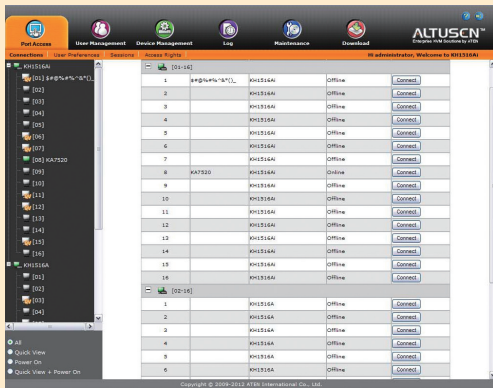
If you don't know the IP address and login string, ask your Administrator.The KL1508Ai / KL1516Ai's default IP address is: 192.168.0.60

Windows Client / Java Client AP Login

To connect to the KL1508Ai / KL1516Ai, go to the location on your hard disk that you downloaded the Windows AP Client / Java AP Client program to, and double-click its icon to bring up the Windows Client Connection Screen

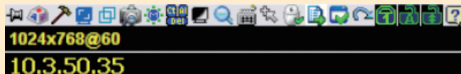
GUI Main Page

Once you have successfully logged in, the KL1508Ai / KL1516Ai user interface Main Page appears with the Port Access page displayed. The look of the page varies slightly, depending on which method you used to log in.



The Control Panel

The Control Panel consists of three rows: a row of icons at the top, with two text rows below it.



By default, the upper text row shows the video resolution of the remote display. As the mouse pointer moves over the icons in the icon bar, however, the information in the upper text row changes to describe the icon's function. In addition, if a message from another user is entered in the message board, and you have not opened the message board in your session, the message will appear in the upper row.

The lower row shows the IP address of the device you are accessing at the left of the row.

Right clicking in the text row area brings up a menu-style version of the toolbar .

The functions that the icons perform are described in the table below:

	Control Panel		Message Board		Automatic mouse sync
	Macros		Click to send a Ctrl+Alt+Del		User macros list
	Video Options		Toggle color and gray scale views		Control Panel Configuration
	Video and mouse autosync operation		Zoom in		Exit
	Full Screen Mode		On-screen keyboard		Lock indicator
	Snapshot		Mouse pointer type		

Port Operation

The KL1508Ai / KL1516Ai KVM Over the NET™ switch's interface provides a toolbar to help you with port switching operations from within the captured port. To bring up the toolbar, tap the GUI Hotkey (Scroll Lock or Ctrl) twice. The toolbar appears at the upper left corner of the screen.

- Note:** 1. You can adjust the toolbar transparency.
2. The toolbar functions and icons are also incorporated in the Control Panel. If you choose to enable them in the Control Panel, you can disable the Toolbar . To recall the Port Access Connections page when there is no Toolbar, simply tap the GUI hotkey twice.

Function		KL1508Ai	KL1516Ai
Computer Connections	Direct	8	16
	Max.	128 (via Daisy-Chain)	256 (via Daisy-Chain)
Console Connections	Local	1	
	Remote		
Port Selection		OSD, Hotkey, Pushbutton	
Connectors	Console Ports	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		1 x DB-25 Male (Black)
	Power		1 x 3-prong AC socket
	F/W Upgrade		1 x RJ-11 Female (Black)
	External Mouse		1 x USB Type A (Female)
	LAN		1 x RJ-45 Female
	PON		1 x RJ-45 Female
Switches	Power		1 x Rocker
	LCD Power		1 x Pushbutton
	LCM Adjustment		4 x Pushbutton
	Port Selection		8 x Pushbutton 16 x Pushbutton
	F/W Upgrade		1 x Slide
	KVM Reset		1 x Semi-recessed Pushbutton
	Station		2 x Pushbutton
	Station		1 x 2-digit 7-segment (Orange)
	Port	Online	8 (Green) 16 (Green)
		Selected	8 (Orange) 16 (Orange)
LEDs	Power		1 (Blue)
	Lock	Num	1 (Green)
		Caps	1 (Green)
		Scroll	1 (Green)
	Link		1 (Green)
	10/100 Mbps		1 (Orange/Green)
	LCD Power		1 (Orange)
Emulation	Keyboard/Mouse		PS/2; USB
Video		1280 x 1024 @ 75 Hz; DDC2B (50 m* Local); 1600 x 1200 @ 60 Hz; DDC2B (40m* Remote)	
Scan Interval		1 – 255 secs	
Input		100–240V AC, 50/60 Hz, 1A	
Power Consumption	17"	120V/31W; 230V/32W(17");	120V/33W; 230V/34W(17");
	19"	120V/33W; 230V/34W(19")	120V/34W; 230V/36W(19")
Environment	Operating Temp.		0–40° C
	Storage Temp.		-20–60° C
	Humidity		0–80% RH, Non-condensing
Physical Properties	Housing		Metal
	Weight	17"	15.96 kg 16.00 kg
		19"	16.19 kg 16.25 kg
	Dimensions (L x W x H)		70.12 x 48.00 x 4.40 cm

* With KVM Adapter Cable KA7xxx series