

## KL1508Ai / KL1516Ai

### 8/16-Port Dual Rail LCD KVM Switch

LCD Console + Cat 5 High-Density KVM Switch with KVM over IP

- The KL1508Ai and KL1516Ai Dual Rail LCD KVM Switches are control units that allow secure access up to 8/16 computers from a single KVM (keyboard, video, and mouse) console. They consist of an integrated LCD monitor, keyboard, and touchpad in a 1U rack-mountable retractable sliding housing.

The LCD and keyboard/touchpad modules slide independently of each other. To maximize space in your data center, the keyboard/touchpad module slides back to "hide away" when not in use, while the thin profile LCD monitor rotates back – flush against the rack – allowing convenient monitoring of computer activity.

The KL1508Ai / KL1516Ai features IP-based connectivity that allows local and remote operators to monitor and access the computers on your installation. Because it uses TCP/IP for its communications protocol, the KL1508Ai / KL1516Ai can be accessed from any computer on the LAN, WAN, or Internet – whether that computer is located down the hall, down the street, or halfway around the world.

Compact, high-density, RJ-45 connectors and Cat 5e/6 cable make for a compact, efficient, wiring configuration, while the use of KVM Adapter Cables to link to the computers, permits any combination of PCs, Macs, Sun computers, and serial devices to coexist on the installation.

For added convenience, ports for an external keyboard, monitor, and mouse are provided on the rear panel – permitting you to manage the switch from a local console. There is also an external USB mouse port on the keyboard module, allowing you to use an external mouse, rather than the touchpad.

Enhanced features include a Panel Array Mode™ that displays the video output of up to 16 computers at the same time, and a Message Board that allows logged in users to conveniently and instantly communicate with one other – no matter where in the world they actually are. The KL1508Ai / KL1516Ai is an ideal solution for your server room management.

● KL1516Ai Front view



● KL1516Ai Rear view



## Features

### Hardware

- Integrated KVM console with 17" or 19" LCD monitor in a Dual Rail housing
- A single console controls up to 8 (KL1508Ai) or 16 (KL1516Ai) computers
- Daisy chain up to 15 additional KVM switches to control up to 256 computers\*
- One bus for remote KVM over IP access
- Space-saving RJ-45 connectors and Cat 5e/6 cabling
- KVM adapter cables designed with automatic conversion to allow flexible interface combinations (PS/2, USB, Sun and serial) to control all computer types
- Extra console port – manage computers in the LCD KVM switch from an external console (monitor, USB or PS/2 keyboard, and USB or PS/2 mouse)
- Multiplatform support: PC, Mac, Sun and Serial
- Supports external USB mouse
- Dual Rail housing is slightly less than 1U with top and bottom clearance for smooth operation in 1U of rack space
- Dual Rail – LCD monitor slides independently of the keyboard/touchpad
- LCD module rotates up to 120 degrees for a more comfortable viewing angle
- Console lock – enables the console drawer to remain securely locked away in position when not in use
- LCD power button helps save energy and prolong displays' life

\* Compatible KVM switches: KH1508A/KH1516A, KH0116, ACS1208A/ACS1216A, CS1708A/CS1716A, KH1508/KH1516

### Management

- Up to 64 user accounts – up to 32 concurrent remote logins
- End session feature – administrators can terminate any running session
- Adapter ID – stores port information allowing administrators to relocate servers to different ports, without having to reconfigure the adapters and switch
- **Port Share Mode allows multiple users to gain access to a server simultaneously**
- Remote power control for attached Power Over the NET™ devices
- Integration with ALTUSEN CC2000 Management software
- Event logging and Windows-based Log Server support
- Local Log Event
- Firmware upgradeable
- IPv6 capable

### Easy-to-Use Interface

- Easy computer selection via pushbuttons, Hotkey Mode, OSD (OnScreen Display), and Browser-based GUI
- Local Console, Browser, and AP GUIs offer a unified multi language interface to minimize user training time and increase productivity
- Multiplatform client support (Windows, Mac OS X, Linux, Sun)
- Multi-browser support: Internet Explorer, Chrome, Firefox, Safari, Opera, Mozilla, Netscape
- Browser-based UI in pure Web technology allows administrators to perform administrative tasks without the need for Java to be pre-installed
- Panel Array Mode™
- Keyboard broadcast\* – keyboard input can be duplicated on all the attached servers

\* Local Console only

### Advanced Security

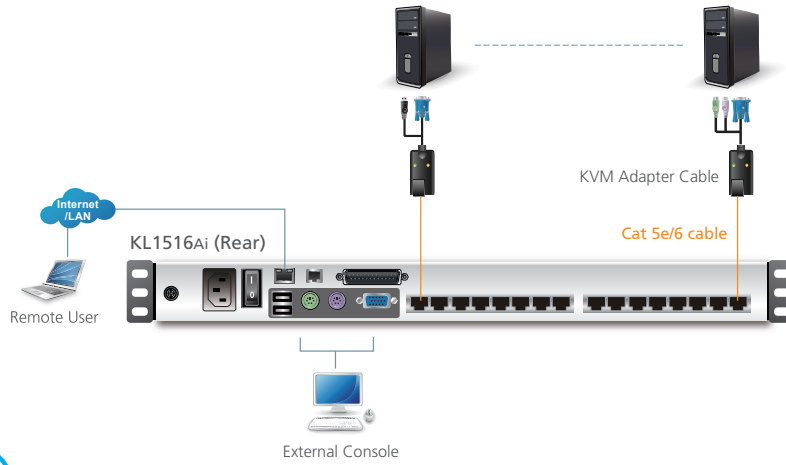
- Remote authentication support: RADIUS, LDAP, LDAPS, and MS Active Directory
- 128-bit SSL encryption to protect password when users log in
- Flexible encryption design allows users to choose any combination of 56-bit DES, 168-bit 3DES 256-bit AES, 128-bit RC4, or Random for independent KB/Mouse, and video data encryption
- IP/MAC Filter support for enhanced security protection
- Configurable user and group permissions for server access and control

### Virtual Remote Desktop

- Video quality and video tolerance can be adjusted to optimize data transfer speed; monochrome color depth setting, threshold and noise settings for compression of the data bandwidth in low bandwidth situations
- Full-screen or sizable and scalable Virtual Remote Desktop
- [Message board feature allows logged in users to communicate with each other](#)
- Mouse DynaSync™ – automatically synchronizes the local and remote mouse movements
- On-screen keyboard with multi language support
- BIOS-level access

## Benefits

<b>Space Efficient</b>	The KL1508Ai/KL1516Ai provides a streamlined method to conserve server room rack space by integrating a retractable LCD monitor, keyboard, and touchpad in a 1U Dual Rail housing that is designed to install easily and operate smoothly.
<b>Convenient Monitoring</b>	The Dual Rail system separates the LCD module from keyboard/touchpad module so they can move independently of each other. This allows the keyboard/touchpad to be pushed back into the housing and out of the way when not in use, while the LCD screen can be rotated up to the rack for convenient monitoring of server operation – the LCD module's range of rotation is adjustable to provide the best viewing angle.
<b>Enhanced Console Control</b>	The extra console ports provide administrators with the ability to use a standard keyboard/monitor/mouse console, if they like. Other, even more powerful options for the external console ports are to connect a KVM extender.
<b>Easy Cabling</b>	The KL1508Ai/KL1516Ai features RJ-45 connectors and Cat 5e/6 cable to link to the computers. Utilizing PS/2, USB, and serial KVM Adapter Cables for the final linkup, the KL1508Ai/KL1516Ai reduces cable bulk and simplifies cable management.
<b>Adapter Cables with ID</b>	The KL1508Ai/KL1516Ai supports automatic ID recognition of the new ATEN KVM Cable Adapter KA7000 series. Using the new adapter cables with ID means it is not required to change cable configuration settings when moving cables from port to port– allowing you to hot-swap port connections without having to reconfigure attributes.
<b>Panel Array Mode™</b>	Panel Array Mode™ permits simultaneous monitoring of the video output of the installations' servers. Operators can monitor the screen display of up to 8/16 servers for real-time server monitoring.
<b>Mouse DynaSync™</b>	Automatically synchronizes the local and remote mouse movements for perfect alignment of mouse pointers, regardless of server mouse acceleration settings.
<b>Message Board</b>	To alleviate the problem of access conflicts arising from multiple logins, the Message Board functions like an Internet chat program, allowing users who are logged in to instantly communicate with each other.



## Optional

### Rack Mount Kits

ALTUSEN LCD KVM Switches allow you to choose from a host of optional rack mount kits to meet your needs, including the Single Person Easy Installation Rack Mount Kit, which streamlines the rack mounting process.

Normal rack mounting procedures call for at least two people to rack mount a KVM switch. The Single Person Easy Installation Rack Mount Kit enables one person to rack mount a LCD KVM Switch. In just a matter of minutes, your new LCD KVM Switch can go from the box to the rack.

For convenience and flexibility, there is one standard, and three optional rack mounting kits available:



### KVM Adapter Cables

The following KVM Adapter Cables are required for use with the KL1508Ai / KL1516Ai:

Type:	PS/2	USB	PS/2	USB	Sun Legacy	Serial
Interface:	 6-pin Mini-DIN Male  6-pin Mini-DIN Male  HDB-15 Male	 USB Type A Male  HDB-15 Male	 6-pin Mini-DIN Male  6-pin Mini-DIN Male  HDB-15 Male	 USB Type A Male  HDB-15 Male	 13W3 Male  DIN 8 pin Male	 RS-232 DB-9 Female

# Specification

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	
LEDs	Station		2 x Pushbutton	
	Station		2 x 7 Segments (Orange)	
	Port	Online	8 (Green)	16 (Green)
		Selected	8 (Orange)	16 (Orange)
	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 (50m*, Local); 1600 x 1200 @ 60 Hz; DDC2B (40m*, Remote)		
Scan Interval		1 – 255 secs		
Input		100–240V AC, 50/60 Hz, 1A		
Power Consumption		120V, 31W / 230V, 32W (17"); 120V, 33W / 230V, 34W (19")	120V, 33W / 230V, 34W (17"); 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"/19")		15.96 kg / 16.19 kg      16.00 / 16.25 kg	
	Dimensions (L x W x H)		70.12 x 48.00 x 4.40 cm	

\* With KVM Adapter Cable KA7000 series, please see page 4 for details.

