1 Package Contents

- KH2508A or KH2516A Cat 5 High-Density KVM Switch
- 1 Firmware Upgrade Cable
- 1 Power Cord
- 1 Mounting Kit
- 1 Foot Pad Set (4 pcs.)
- 1 Console Selection Buttons
- 5. Station ID LED
- Power LED
- Console Selection Buttons
- Firmware Upgrade Recovery Switch
- AC power source.
- Daisy Chain Ports
- Firmware Upgrade Port
- 1. Power Socket
- 2. Power Switch
- 3. Daisy Chaining Ports
- 4. Grounding Terminal

Note: The front and rear panel views are similar for the KE2508A, the difference being that the KH216A has only one row of LED lights (front) and one row of CPU ports (rear).

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 KE2508A or KE2516A 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 and mouse ports (for PS/2 KVM adapter cable connection)

KVM Adapter Cables:
- A 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 KE2508A / KE2516A:

<table>
<thead>
<tr>
<th>Function</th>
<th>Module</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connect to devices with PS/2 ports</td>
<td>KA7520 / KA7520 / KA7120</td>
</tr>
<tr>
<td>Connect to devices with USB ports</td>
<td>KA7510 / KA7510 / KA7110</td>
</tr>
<tr>
<td>Connect to KVM adapter cables (3 PS/2 ports)</td>
<td>KA7516 / KA7516</td>
</tr>
<tr>
<td>Connect to KVM adapter (6 PS/2 ports)</td>
<td>KA7166 / KA7166 / KA7169</td>
</tr>
<tr>
<td>Connect to KVM adapter cables (3 USB ports)</td>
<td>KA7156 / KA7156</td>
</tr>
<tr>
<td>Connect to KVM adapter (6 USB ports)</td>
<td>KA71590 / KA71590</td>
</tr>
</tbody>
</table>

3 Hardware Review (Front View)

- 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 KH2508A / KH2516A has only one row of LED lights (front) and one row of CPU ports (rear).

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 Hardware Installation

Single Station Installation
In a single stage installation, there are no additional KVM switches daisy chained down from the KE2508A / KE2516A. 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 mouse 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.

5. Plug the console end of the power cord into the KE2508A / KE2516A’s power socket; plug the male end into an AC power source.

After the KE2508A / KH2516A is cabled up, you can turn on the power. After it is powered up, you can turn on the servers.

Rack Mounting
The KE2508A / 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 making your port selection, first make your console selection by pressing the appropriate console selection button.

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:

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:

1. Hold down the Control and F12 Keys
2. Press and release the Num Lock and Minus Keys

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.

Hotkey Summary Table

<table>
<thead>
<tr>
<th>Function</th>
<th>KH2508s</th>
<th>KH2516s</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer Connections</td>
<td>Direct</td>
<td>8</td>
</tr>
<tr>
<td>Port Selection</td>
<td>Max</td>
<td>128 (via Daisy Chain)</td>
</tr>
<tr>
<td>Switches</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Power</td>
<td>1 x Slide</td>
<td>1 x Slide</td>
</tr>
<tr>
<td>Console</td>
<td>2 x Pushbuttons</td>
<td>2 x Pushbuttons</td>
</tr>
<tr>
<td>KVM Reset</td>
<td>1 x Recessed pushbutton</td>
<td>1 x Recessed pushbutton</td>
</tr>
<tr>
<td>F/W Upgrade</td>
<td>1 x Slide</td>
<td>1 x Slide</td>
</tr>
<tr>
<td>LEDs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Power</td>
<td>1 x Red</td>
<td>1 x Red</td>
</tr>
<tr>
<td>Status</td>
<td>1 x 2 Digit 7-segment (Orange)</td>
<td>1 x 2 Digit 7-segment (Orange)</td>
</tr>
<tr>
<td>Indication</td>
<td>Keyboard</td>
<td>PS/2, USB</td>
</tr>
<tr>
<td>Mouse</td>
<td>PS/2, USB</td>
<td></td>
</tr>
<tr>
<td>Scan Interval</td>
<td>1–255 seconds</td>
<td></td>
</tr>
<tr>
<td>Video</td>
<td>1920 x 1200 @ 60 Hz (90 m); 1280 x 1024 @ 75 Hz (50 m); 1600 x 1200 @ 60 Hz (40 m); 1280 x 1024 @ 75 Hz (50 m)</td>
<td>1280 x 1024 @ 75 Hz (50 m); 1600 x 1200 @ 60 Hz (40 m); 1280 x 1024 @ 75 Hz (50 m)</td>
</tr>
<tr>
<td>CPU Rating</td>
<td>Intel Core i3, i5, i7, Xeon</td>
<td></td>
</tr>
<tr>
<td>Power Consumption</td>
<td>2.81 kg</td>
<td>2.85 kg</td>
</tr>
<tr>
<td>Environment</td>
<td>Operating Temp.</td>
<td>10° – 30°C</td>
</tr>
<tr>
<td>Storage Temp.</td>
<td>-20° – 60°C</td>
<td></td>
</tr>
<tr>
<td>Humidity</td>
<td>0 – 85% RH, Non-conditioning</td>
<td></td>
</tr>
<tr>
<td>Housing</td>
<td>Metal</td>
<td></td>
</tr>
<tr>
<td>Physical Properties</td>
<td>Weight</td>
<td>2.81 kg</td>
</tr>
<tr>
<td>Dimensions</td>
<td>L x W x H</td>
<td>45.72 x 15.50 x 4.40 cm</td>
</tr>
</tbody>
</table>

* With KVM Adapter Cable KA7xx series.