



Cat 5e / 6 Rackmount KVM User Manual

NOTE

This equipment has been tested and found to comply with the limits for a class B digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the measures listed below.

- ⌵ Reorient or relocate the receiving antenna.
- ⌵ Increase the separation between the equipment and receiver.
- ⌵ Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- ⌵ Consult the dealer or an experienced radio/television technician for help.



PACKING LIST

The complete AR-UV04L/AR-UV08L/AR-UV16L/AR-UV32L 4ports/8 ports/16 ports PS/2 / USB switch package consists of:

- u AR-UV04L/AR-UV08L/AR-UV16L/AR-UV32L 4ports/ 8 ports/16 ports/32ports PS/2 / USB switch
- u Power Adapter
- u User Manual

Please check to make sure that all the components are present and that nothing was damaged in shipping. If you encounter a problem, contact your dealer.

Read this manual thoroughly and follow the installation and operation procedure carefully to prevent any damage to the unit, and/or any of the devices that connect to it.

OVERVIEW

The AR-UV04L/AR-UV08L/AR-UV16L/AR-UV32L 4ports/8 ports/16 ports PS/2 / USB CAT5 UTP KVM

(Keyboard, Video, Mouse) Switches are control units that allow access and control of up to 4(AR-UV04L) or 8 (AR-UV08L) or 16 (AR-UV16L) or 32 (AR-UV32L) computers from a single PS/2 / USB keyboard, PS/2 / USB mouse, and monitor console.

There are two convenient methods to access any computer connected to the installation: (1) using the push button port selection switches located on each unit's front panel; (2) selecting from menus provided by the On Screen Display (OSD).

Setup is fast and easy: simply plug cables into their appropriate ports. There is no software to configure, and no incompatible problems. It works on multiple operating platform (PC compatible, Sun, etc.).

There is no better way to save time and money than with a AR-UV04L/ AR-UV08L / AR-UV16L / AR-UV32L installation. Since a single console manages all of the computers, the AR-UV04L/ AR-UV08L /AR-UV16L/AR-UV32L; setup: (1) eliminates the expense of having to purchase a separate keyboard, monitor, and mouse for each computer; (2) saves all the space those extra components would take up; (3) saves on energy costs; (4) eliminates the inconvenience and wasted effort involved in constantly moving from one computer to another.

FEATURES

- ⌌ Control 4(AR-UV04L) or 8 (AR-UV08L) or 16 (AR-UV16L) or 16 (AR-UV32L) computers with local or remote console.
- ⌌ Both the console and the computer are compatible with PS/2 / USB mouse and keyboard.
- ⌌ Computer selection via front panel switches and OSD.
- ⌌ LED's display for easy status monitoring.
- ⌌ Auto Scan Mode for monitoring all computers.
- ⌌ Superior video quality.
- ⌌ Easy installation – no software required
- ⌌ Hot plug gable – add or remove computers for maintenance without powering down the switch
- ⌌ Support Windows, Solaris etc

HARDWARE REQUIREMENTS

CONSOLE

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

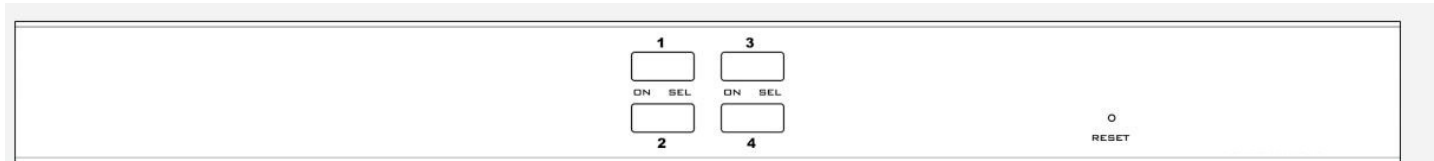
COMPUTER

The following equipment must be installed on each computer:

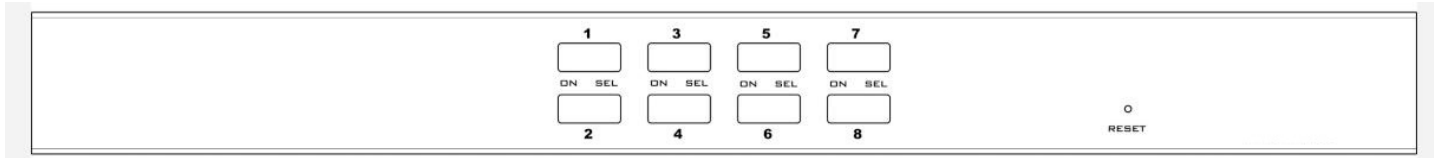
- ⌌ A VGA, SVGA card
- ⌌ Either USB port or PS/2 keyboard and mouse ports.

INTRODUCTION

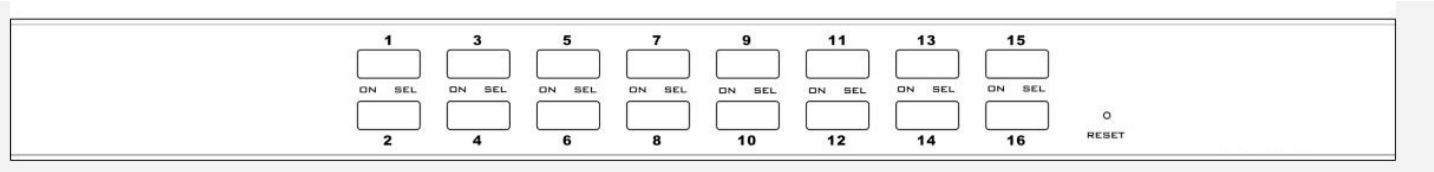
AR-UV04L FRONT VIEW



AR-UV08L FRONT VIEW

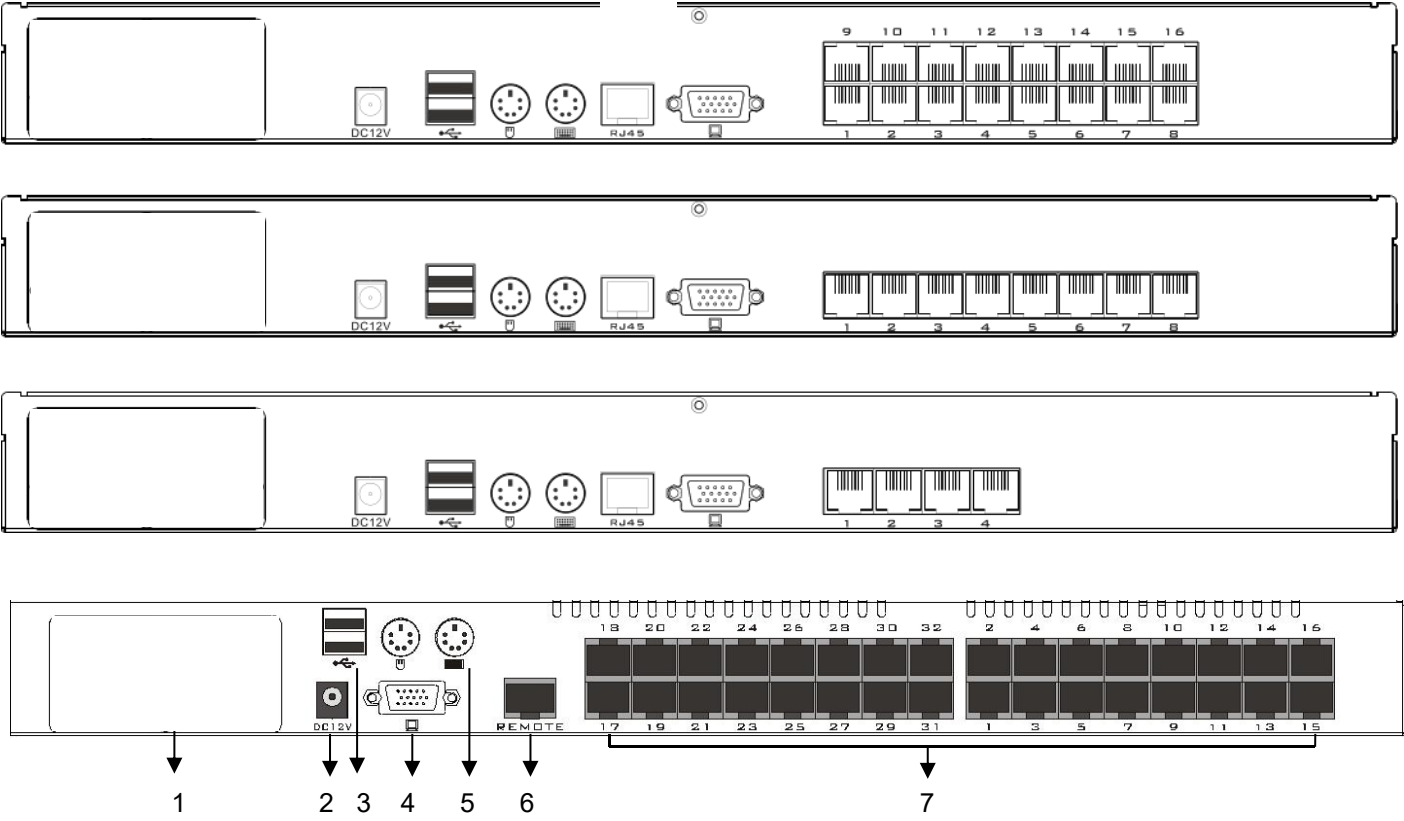


AR-UV16L FRONT VIEW



Numbering	component	Functional description
1	Online device indicator of the terminal device	<p>Each number represents the serial number of a controlled port, and an LED indicator is embedded inside. The user can judge the working condition and usage of the currently controlled port device according to the embedded LED indicator.</p> <p>I The LED is lit, indicating that the computer with the corresponding serial number is in the connected working state. Users with permissions can select the port for corresponding operation and control.</p> <p>I The LED light is off, indicating that the computer with the corresponding serial number is disconnected from the KVM device, or the computer at the controlled terminal is not powered.</p> <p>I The LED light flashes, indicating that the computer with the corresponding serial number is selected as the current operating port for the KVM control port.</p>

REAR:



Numbering	component	Functional description
1	IP remote control card	To provide users with remote network control.(Optional)
2	Power interface	Connect the device's power adapter to this connector.
3	USB keyboard, mouse interface	Connect a local USB keyboard and mouse interface, USB TYPE A type.
4	VGA local output port	Connect to a local VGA monitor with a resolution of up to 1920x1200@60HZ
5	PS2 keyboard and mouse control port	Local PS2 keyboard and mouse interface, green for the mouse interface, purple for the keyboard interface.
6	Remote console interface	The CAT5 remote control port needs to be connected to a remote control device for control operation and connected using a CAT 5e/6e connection cable.
7	4, 8, 16 channel controlled module input interface	Connect the controlled 32-channel KVM converter module interface and connect using the CAT 5e/6e connection cable.

INSTALLATION

BEFORE YOU BEGIN

1. Make sure that power to all the devices you will be connecting up have been turned off.
2. To prevent damage to your installation, make sure that all devices on the installation are properly grounded.

SINGLE STAGE INSTALLATION

To set up your AR-UV04L/ AR-UV08L / AR-UV16L/AR-UV32L installation, do the following:

1. Plug your PS/2 / USB keyboard, PS/2 / USB mouse and monitor into the console port section located on the unit's rear panel.
2. Plug one end of the CAT5 UTP into the available computer port on the switch.
3. Plug the other end of the CAT5 UTP into the RJ45 port on the matching dongle. Connect the dongle to the computer.
4. Repeat step 2-4 for any other computers you are connecting up
5. To connect the remote VNC client, plug CAT5 UTP into the RJ45 port on the rear panel.
6. Plug the power adapter cable into the switch's power jack, then plug the power adapter into an AC power source.

This completes the single stage installation, and you can turn on the power to the computers.

NOTE: The AR-UV04L/ AR-UV08L/ AR-UV16L /AR-UV32L initially links to computer connected to the first Computer port. ILLUSTRATION:

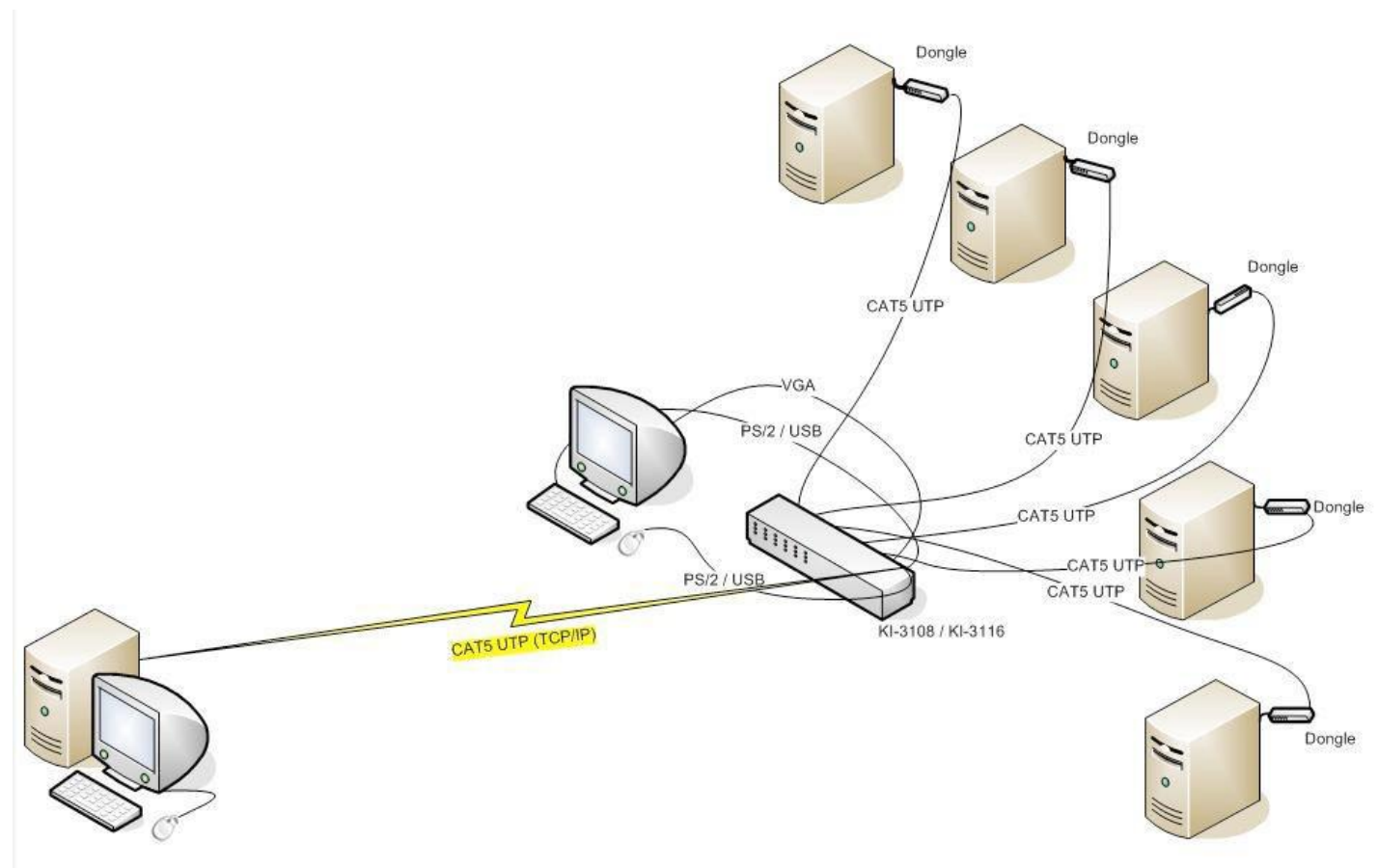
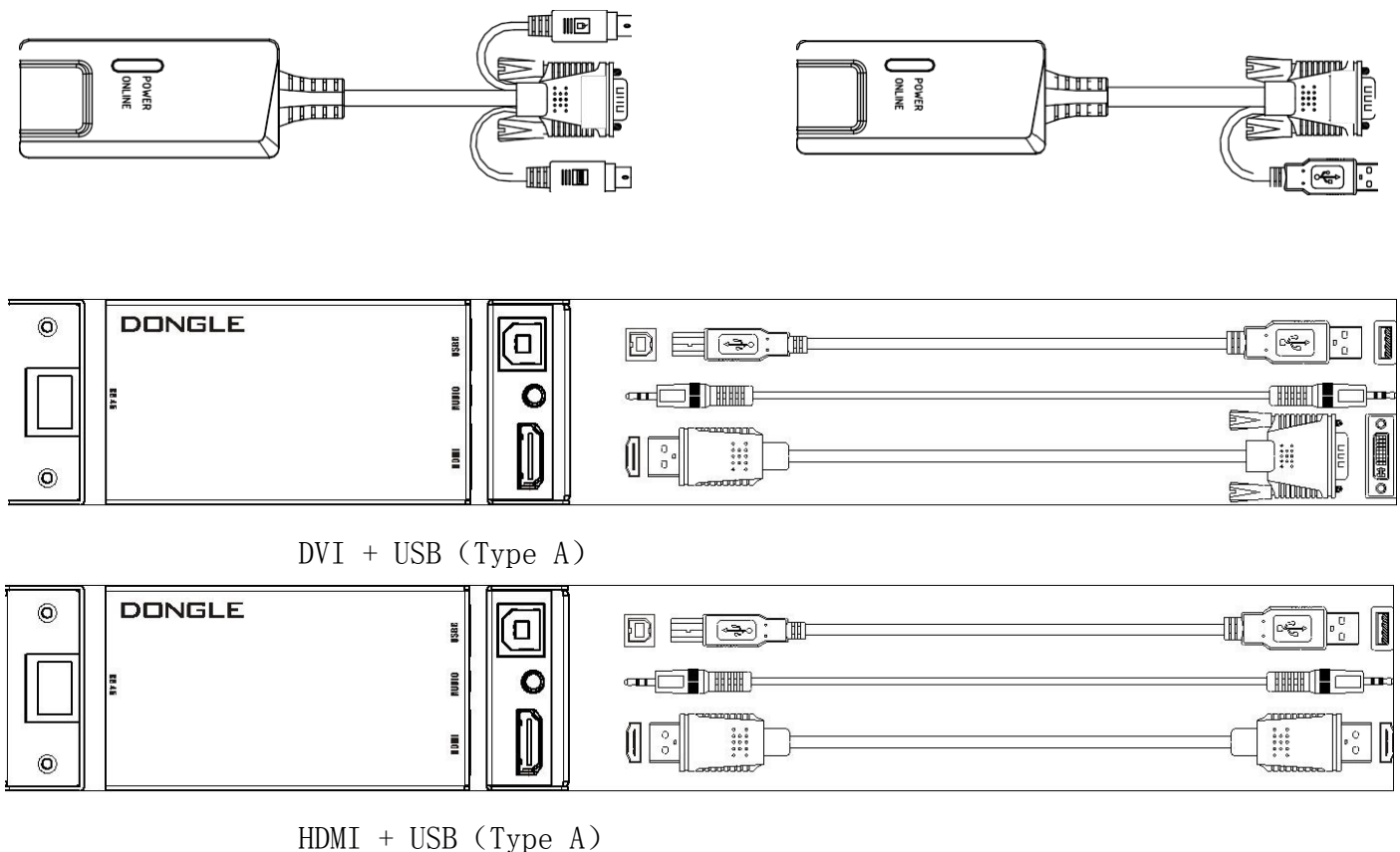


Illustration of Dongle



OPERATION

HOT PLUGGING

The AR-UV04L/ AR-UV08L/ AR-UV16L /AR-UV32L supports hot plugging. Components can be removed and added back into the installation by unplugging and replugging their cables from their respective ports without the need to shut the switch down. For hot plugging to work properly, the following procedure must be observed:

☐ Hot Plugging CPU Ports

When to plug or unplug the cable from the port in powering;

1. The cable must be plugged back into the same port it was removed from.

☐ Hot Plugging Console Ports:

The PS/2 / USB keyboard, mouse can be hot plugged.

POWERING OFF AND RESTARTING

If it becomes necessary to power off one of the KVM unit, before starting it back up you must do the following:

1. Shut down all the computers that are attached to the unit.

Note: If the unit is operating under external power, unplug the power adapter cable.

2. Wait 10 seconds, then plug the power adapter back and power on all computers.

PORT SELECTION©

The AR-UV04L/AR-UV08L/AR-UV16L/AR-UV32L provides two methods to obtain instant access to any

computer in your installation: manual and OSD.

Manual

Simply press the appropriate port selection switch on the AR-UV04L/AR-UV08L/AR-UV16L/AR-UV32L's front panel. After pressing the switch, the selected LED lights to indicate that the port has been selected.

OSD

OSD (On Screen Display), provides a menu driven interface to handle the computer switching procedure to provide instant access to any computer on the installation. OSD operation is discussed below.

OSD Introduction

OSD (On Screen Display), provides a menu driven interface to handle the computer switching procedure to provide instant access to any computer on the installation.

OSD Log in

The OSD function provides a two-level (administrator / user) password mechanism. The factory default setting is no need to login password authentication, so you are the first time to open the OSD main menu, no need to enter the login password to enter the OSD main menu screen for the corresponding operation. If you want to add this function, you can enter the OSD menu, in 【F6】 "SET" option to set the login password is set successfully, the subsequent login requires the correct administrator / user password to enter the OSD menu Interface operation. When you enter the setting options, some functions may need to be edited and modified by the administrator. The default administrator password is admin. You can also modify and change them as needed.

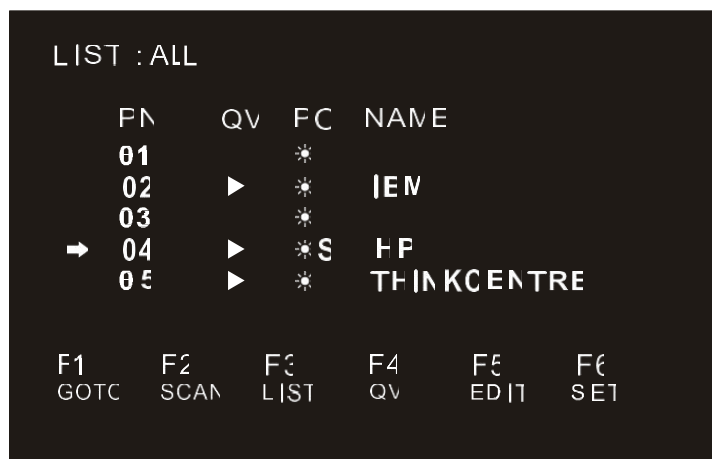
OSD Hot-Key

By default, you can type the [CTRL] key twice to have the OSD menu appear on the screen of the controlled display and see the connection information and status information about the connected computers on the KVM switch.

Note: You can change the keyboard hotkey on the OSD menu according to your needs. This product provides 4 sets of optional OSD menu hotkey combinations. You can select the operation according to your needs. (Please refer to the OSD menu for detailed description.)

OSD Main Menu

Active OSD, following picture will be shown on the screen:



- u **【 F1 】 --- 【 F6 】** at the bottom of the screen is the function setting of OSD menu, and corresponding operation and setting of corresponding function by keyboard.
- u After entering the OSD main screen, the port number in the center of the screen is the port number of the selected PC. To move up and down through the list one line at a time, use the **【↑】 【↓】** Arrow Keys, press **【Enter】** to select the switch port.
- u Please press **【Esc】** to exit the OSD menu interface
- u To move up or down a row in the list, use the **【↑】 【↓】** arrow keys. If the number of rows in the list is larger than the number that the screen can display, the screen scrolls.
- u When the OSD menu is closed, a small blue window will appear on the screen showing the port number that is currently switched to.

OSD Main Screen Headings

Heading	Explanation
PN	This column lists the port numbers for all the CPU ports on the installation. The simplest method to access a particular computer is to move the highlight bar to it, then press [Enter].
QV	If a port has been selected for Quick View scanning, an arrowhead symbol displays in this column to indicate so.
PC	The computers that are powered on and are on line have an arrowhead symbol in this column to indicate so.
NAME	If a port has been given a name, its name appears in this column.

OSD Function

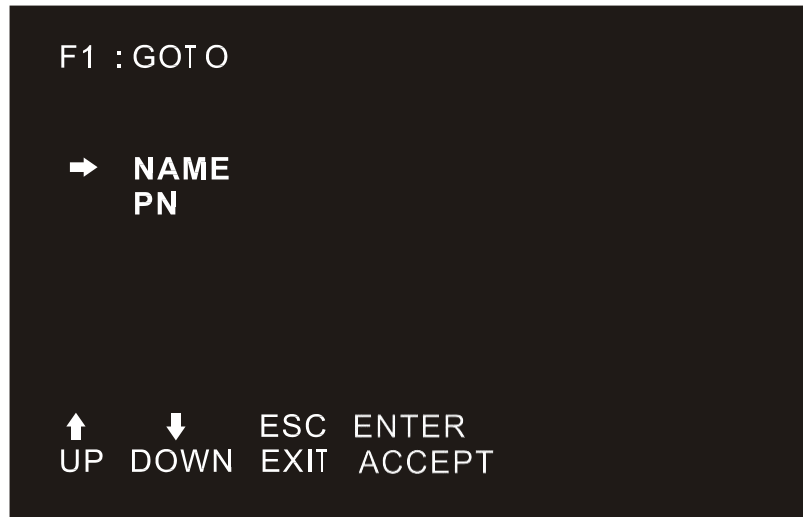
OSD functions are used to configure and control the OSD. For example, you can: rapidly switch to any port; scan selected ports only; limit the list you wish to view; designate a port as a Quick View Port; create or edit a port name; or make OSD setting adjustments.

To activate the OSD function key:

1. Press any function key **【F1】 --- 【F6】** at the bottom of main screen to input the function key.
2. On the sub-menu, move the selection column to the option, and then press the {Enter} key.
3. Press the **【Esc】** key to return to the previous menu.

F1 GOTO:

Press the **【F1】** key to start the GOTO function. The GOTO function allows you to switch directly to the connection port by typing the port name or its port number.



1. To use "NAM" method, move highlight bar to "NAME", press **【Enter】** , input name of a port, then press [Enter] to confirm.
2. To use PN method, move highlight bar to "PN", press **【Enter】** , input port number, then press **【Enter】** to switch. If the port number is invalid, it will remind the user to input again.

Note:1. When keying name, if there is a matching name, the matched name will appear on the screen, just press [Enter] to switch to that port.
2. In the "PN" port input box, only allow the input of numbers, such as the input of other characters are regarded as invalid input, and can hear the equipment issued by the warning tone.

To return to main menu, press [Esc].

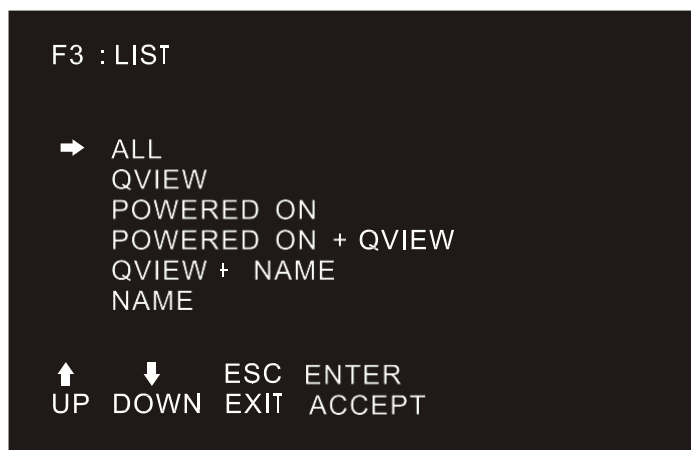
F2 SCAN:

The "SCAN" function allows you to perform automatic port scanning of the connected computers. Users can switch ports in order to view the corresponding port computer status.

- u The SCAN function can automatically scan from current selected port, the scan interval can be set by users.
- u When scanning, a small window on the screen indicates the current port number.
- u Press [Space] to stop scanning, and the KVM switches to the port last scanned.

F3 LIST:

The LIST function lets you broaden or narrow the scope of which ports the OSD displays on the main screen.



Many of the OSD functions only operate on the computers that have been selected for listing on the main screen with this function. The choices and their meanings are given in the table below:

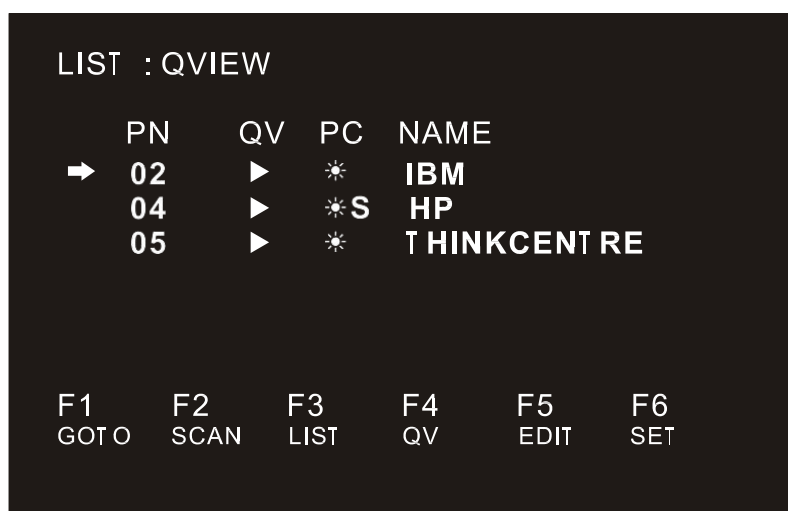
Choice	Meaning
ALL	Lists all of the ports on the installation.
QVIEW	Lists only the ports that have been selected as Quick View Ports.
POWERED ON	Lists only the ports that have their attached computers powered on.
POWERED ON + QVIEW	Lists only the ports that have their attached computers powered on and have been selected as Quick View Ports.
QVIEW + NAME	Lists only the ports that have been selected as Quick View Ports and have name.
NAME	Lists only the ports that have names.

Move the highlight bar to the choice you want, then press [enter]. An icon appears before the choice to indicate that it is the currently selected one.

After you make your choice and press [Enter], you return to the OSD main screen with the newly formulated list displayed.

F4 QV:

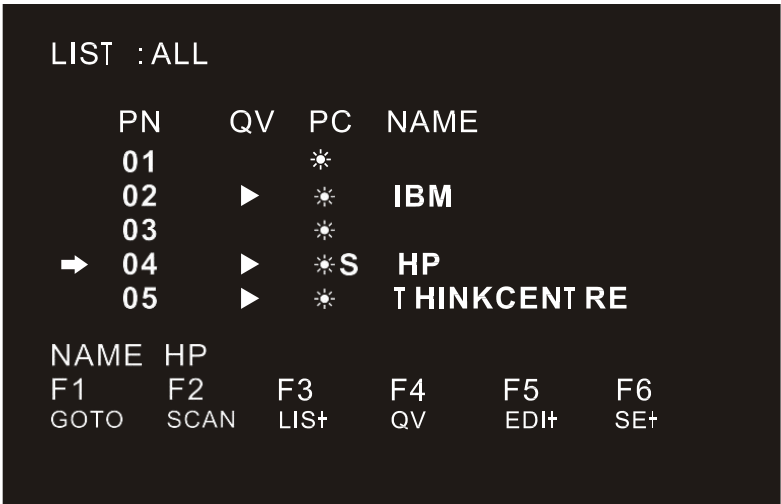
QV function can select port as Quick View.



Move the highlight bar to a port, press [F4], an icon of up triangle appears. Press [F4] again, the icon disappears.

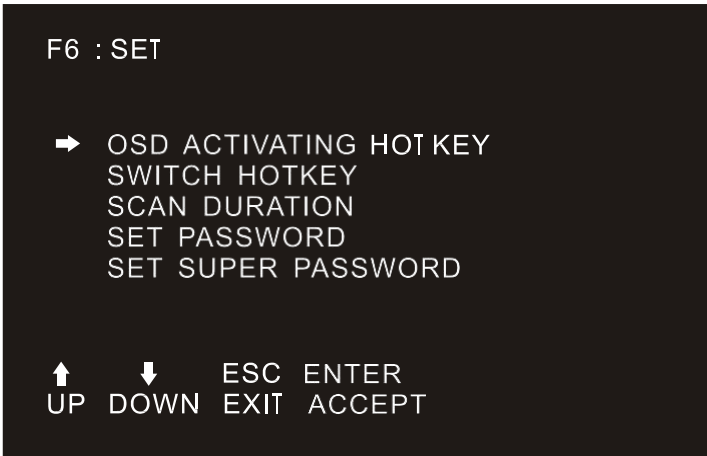
F5 EDIT:

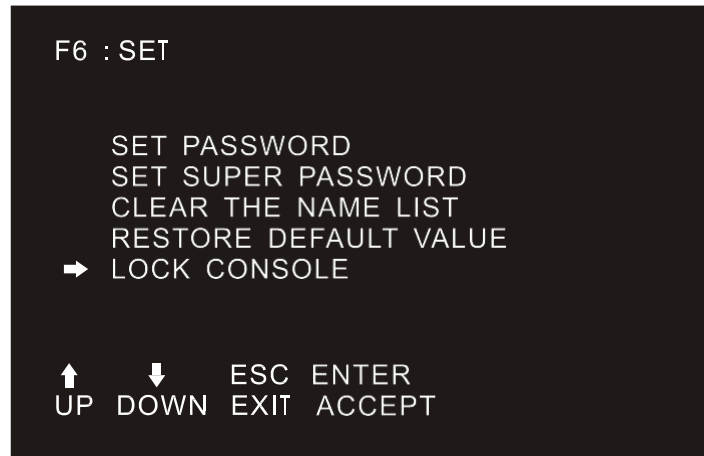
EDIT function creates or edits the name of a port. Press [F5], a pink edit box will appear on the screen. Input name, and then press [Enter], the port is set a name and it will also appear on the screen.



F6 SET:

SET function settings can be set to the administrator and the user to set the OSD menu. The related functions and user rights related settings, such as management settings login password, display mode, switch hotkey adjustment and so on.



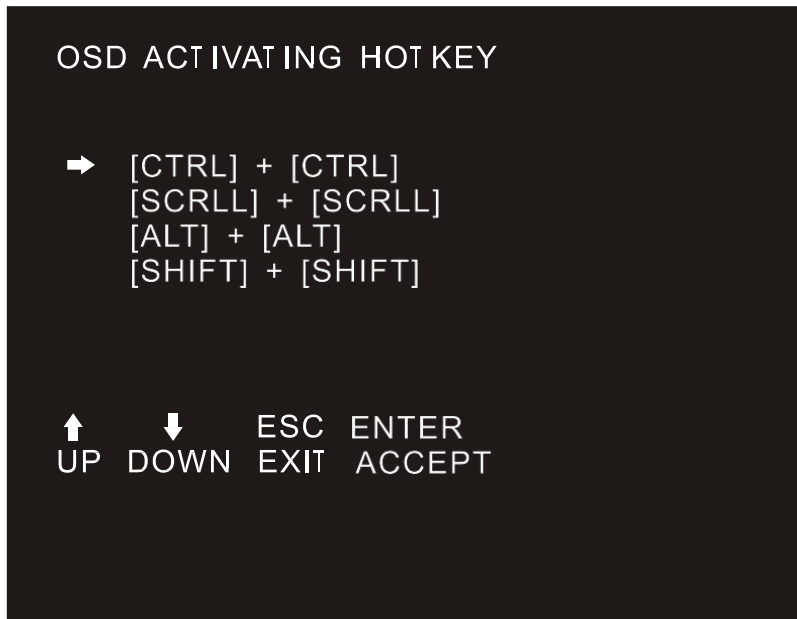


To change your settings:

1. Move the selection column to this option, press **【Enter】** to enter a setting option.
2. After selecting an item, the sub-menu and the further options provided will appear. To select it, double-click the mouse or move the selection column to the option, and then press the [Enter] key, an icon will appear. Select the option before to indicate that the item has been selected. The settings are described in the following table:

Settings	Function
OSD ACTIVATING HOTKEY	OSD Menu Activates hotkey combination selection settings
SWITCH HOTKEY	KVM port switch hot-key combination selection setting
SCAN DURATION	Port scan dwell time setting
SET PASSWORD	User login password settings
SET SUPER PASSWORD	The administrator login password settings
CLEAR THE NAME LIST	Clear the port name setting
RESTORE DEFAULT VALUE	Reset
LOCK CONSOLE	OSD Menu Password Login Function settings

OSD ACTIVATING HOTKEY



It provides you with four hotkey combinations:

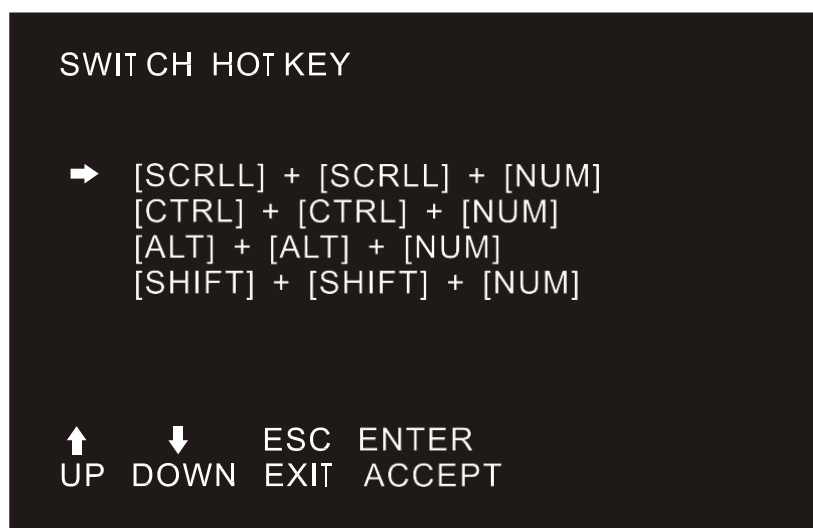
You can use the keyboard **【↑】** **【↓】** to move cursor to select, and then press **【Enter】** key to save. The default is to use **【CTRL】** **【CTRL】** as the OSD menu start hotkey.

SWITCH HOTKEY

It provides you with four hotkey combinations:

【SCROLL】 **【SCROLL】** **【NUM】**、**【CTRL】** **【CTRL】** **【NUM】**、**【ALT】** **【ALT】** **【NUM】**、**【SHIFT】** **【SHIFT】** **【NUM】** You can use the keyboard **【↑】** **【↓】** to move cursor to select, and then press **【Enter】** key to save. The default is to use **【SCROLL】** **【SCROLL】** **【NUM】** as the OSD menu start hotkey.

【NUM】 is the numeric keypad of the keyboard. The valid numeric range is **【01】** - **【16】** .



SCAN DURATION

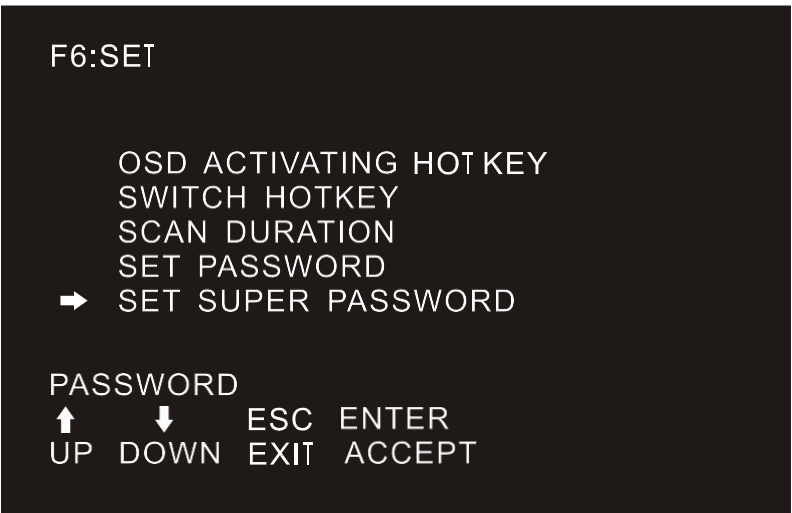


Duration for scanning one port.
Options are 3 seconds, 5 seconds, 10 seconds, 15 seconds, 20 seconds, 30 seconds, 40 seconds, 60 seconds. Move the highlight bar to an option and press [Enter] to select it.

SET PASSWORD

Set new password.
First enter old password, then enter new password and confirm it. The new password is set. If error occurs, the screen will remind users.

SET SUPER PASSWORD



When setting the administrator password, you need to enter the correct password. Before new password is updated, input the previous password twice, the new password to take effect

CLEAR THE NAME LIST

This function clears the name of a port in the OSD menu. If you use this function, all the port names will be emptied, so please do it carefully. When doing this, you need to verify the password of the

administrator, input **【Y】** key, then press **【Enter】** to confirm the operation. To cancel this operation, input **【N】** key, and then press **【Enter】** to confirm the cancel operation, or keyboard input **【Esc】** directly back.

RESTORE DEFAULT VALUE

Restore settings to default value. This setting will make all the OSD menu options to restore the initial settings, so please be careful to do this. When doing this, you need to verify the password of the administrator, input **【Y】** key, then press **【Enter】** to confirm the operation. To cancel this operation, input **【N】** key, and then press **【Enter】** to confirm the cancel operation, or keyboard input **【Esc】** directly back.

LOCK CONSOLE

You cannot switch or scan after you lock the console (including switch by push button on the panel or OSD). You need to enter password to set.

Note: After Locking the console, you can also unlock the console by this option. It also needs password verification.

(Descriptions of the OSD Menu functions may vary. Refer to the description of each interface KVM switch manual for details.)

TROUBLE SHOOTING

Symptom	Possible Cause	Action
Keyboard and/or mouse not responding.	Keyboard and/or mouse need to be reset.	Unplug the cables from the console ports , then plug them back in.
	No connection to the computer.	Check the cable from the switch to the computer to make sure it is properly connected.
	KVM switch needs to be reset.	Press reset button on the rear panel.
OSD menu no display.	Power supply problem.	Plug power adapter to supply enough power.

SAFE GUIDE

Please follow the directions below when installing, using and maintaining it in order to guarantee the device to work well.

- ⌚ When installing and operating the device, please make sure proper power supply first, and then do other operations after it is initialized.
- ⌚ As signal and power transfer need custom cable, please use matched cable, unmatched cable may cause system work improperly or even damage the device.
- ⌚ Keep airy during operating to prevent high temperature.
- ⌚ Keep the device away from working long in wet environment to prevent short circuit.
- ⌚ Please do not open the device without permission of professionals.