Mini LCD KVM Switcher
1, 4, 8-port series

User Manual

Statement

Interference Statement of Federal Communications Commission (FCC)

This product has been tested and certified to meet the requirements of the FCC Specification Class B digital equipment and the details of Section 15 of the FCC Specification. However, these regulations are to use the equipment in a commercial environment without harmful interference and to provide effective protection. This equipment will generate and radiate electromagnetic waves, so if it is not installed and used in accordance with the provisions of this manual, it may cause interference to wireless communication equipment. However, there is no guarantee that interference will not occur in special installations. If the opening or closing of the equipment will cause interference from radio and TV reception, users should try the following contents to reduce interference.

◆ Change the direction and move the receiving antenna.
◆ Increase the distance between the equipment and the receiver.
◆ Connect the equipment to the circuit outlet (not the interface to which the receiver is connected).
◆ Ask your dealer and experienced radio/television technician for help.

FCC Warning: Changes and modifications to the equipment that are not made by the responsible qualified party will result in the user losing the right to operate the equipment.

CE Warning: This product is a Class B product. In the home environment, the product may cause radio interference, and users may need to take appropriate measures to prevent it.

RoHS

This product is RoHS compliant.

User Considerations

The manufacturer has the right to modify and change the information, documents and specification tables contained in the manual without prior notice. The manufacturer will not warrant, express, imply or legally declare its contents or specifically deny its marketability and applicability for special purposes. The same applies to any sold and licensed manufacturer's software described in this manual. If any defects in the software program are found after purchase, the Purchaser (and non-manufacturers, their distributors or their purchasers) will be required to bear all necessary services, maintenance costs and any accidental or indirect damages caused by the software defects.

The manufacturer is not responsible for any radio and/or television interference caused by unauthorized adjustment of this equipment, and the user must correct the interference himself.

If the operating voltage setting is not correctly selected before operation, the manufacturer will not be responsible for any damage caused.

Make sure that the voltage is set correctly before use.

Product Model Description:

Model	Configuration Description
HS7104ULS	4 input (VGA&USB), HD 17-inch LCD VGA display, touch pad mouse, 101 standard keyboard, front USB interface, support cascade, support HUB function.
HS7108ULS	8 input (VGA&USB), HD 17-inch LCD VGA display, touch pad mouse, 101 standard keyboard, front USB interface, support cascade, support HUB function
HS7100ULS	1 input (VGA & USB), HD 17-inch LCD VGA display, touch pad mouse, 101 standard keyboard, front USB interface, support cascade, support HUB function
HS7104TLS	4 input (CAT5&USB), HD 17-inch LCD VGA display, touch pad mouse, 101 standard keyboard, front USB interface, support cascade, support HUB function.
HS7108TLS	8 input (CAT5&USB), HD 17-inch LCD VGA display, touch pad mouse, 101 standard keyboard, front USB interface, support cascade, support HUB function
HS7116TLS	16 input (CAT5&USB), HD 17-inch LCD VGA display, touch pad mouse, 101 standard keyboard, front USB interface, support cascade, support HUB function
HS7100TLS	1 input (CAT5 & USB), HD 17-inch LCD VGA display, touch pad mouse, 101 standard keyboard, front USB interface, support cascade, support HUB function
HS7104DLS	4 input (DVI&USB), HD 17-inch LCD VGA display, touch pad mouse, 101 standard keyboard, front USB interface, support cascade, support HUB function.
HS7108DLS	8 input (DVI&USB), HD 17-inch LCD VGA display, touch pad mouse, 101 standard keyboard, front USB interface, support cascade, support HUB function
HS7100DLS	1 input (DVI & USB), HD 17-inch LCD VGA display, touch pad mouse, 101 standard keyboard, front USB interface, support cascade, support HUB function
HS7104HLS	4 input (HDMI&USB), HD 17-inch LCD VGA display, touch pad mouse, 101 standard keyboard, front USB interface, support cascade, support HUB function.
HS7108HLS	8 input (HDMI&USB), HD 17-inch LCD VGA display, touch pad mouse, 101 standard keyboard, front USB interface, support cascade, support HUB function
HS7116HLS	16 input (HDMI&USB), HD 17-inch LCD VGA display, touch pad mouse, 101 standard keyboard, front USB interface, support cascade, support HUB function
HS7100HLS	1 input (HDMI & USB), HD 17-inch LCD VGA display, touch pad mouse, 101 standard keyboard, front USB interface, support cascade, support HUB function
RS7104ULS	4 input (VGA&USB), standard definition 17-inch LCD VGA display, touch pad mouse, 101 standard keyboard, front USB interface, support cascade, support HUB function.
RS7108ULS	8 input (VGA&USB), standard definition 17-inch LCD VGA display, touch pad mouse, 101 standard keyboard, front USB interface, support cascade, support HUB function
RS7100ULS	1 input (VGA & USB), standard definition 17-inch LCD VGA display, touch pad mouse, 101 standard keyboard, front USB interface, support for cascade, support for HUB function

Packaging Contents

The multi-computer KVM switcher package includes the following contents:
◆ LCD KVM Switcher Host x 1
◆ KVM Dedicated Connection Cables
◆ Power adapter x1
◆ Power cord x1
◆ Rack mounting kit x 1
◆ Fixing screw pack x 1

Check and make sure that all parts are present and not damaged in transit. If you encounter problems, please contact your dealer.

In order to prevent damage to the machine or the device connected to the machine, please read this manual carefully and follow the instructions for installation and operation.

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* Since the publication of this manual, there may be new product features. Please visit our website to download the latest version of the user manual.

Contents

About this Manual

This user manual would assist you to effectively use product functions, including device installation, setting and operation procedures. You can understand the contents of this manual from the following contents:

Chapter 1 Introduction-This chapter introduces the rack KVM device system, including its functions, features and advantages, and describe and introduce its front and rear panel components.

Chapter 2 Hardware Installation-This chapter explains how to install this product and its necessary steps-including basic stand-alone installation, multi-switch level connection installation, and extended installation of IP modules.

Chapter 3 Basic Operation- This chapter explains the basic operation concept of KVM switcher.

Chapter 4 OSD Menu Operation- This chapter introduces KVM OSD Menu Operation Method.

Appendix-Mainly provides specification table and other technical information related to KVM switches.

Explanation of Common Terms

Symbols   **Represent text information that should be entered**

【】   The brackets indicate the key you want to enter. For example, 【Enter】 means that the Enter key is pressed. For keys that need to be entered at the same time, they are placed in the same brackets, and the keys are connected by plus signs. For example: 【Ctrl+Alt】

1.   The number indicates the serial number of the actual operation step.

◆   Rhombus indicates that information is provided for reference, but are independent of the operation steps.

●   The origin symbol represents the classification sub-item information and is independent of the operation step.

Explanation of Special Terms

This manual uses Local and Remote terms to describe the operator and equipment side in the KVM over IP switch installation architecture. According to different angles, under certain conditions, users and servers can be regarded as local and under other conditions as remote:

From switch

◆   **Remote User-**When a user logs into the switch from a location far away from the switch over the network, we treat the user as a remote user.

◆   **Local Control Terminal-**The keyboard, mouse and display directly connected to the switch.

◆   **Server-**The server connected to the switch via the KVM module cable.

◆   From the user

◆   **Local Client User-**When a user is sitting in front of his computer and operating on a server connected to a switch far away from him, we treat the user as a local client user.

◆   **Remote Server-**From the user's point of view, we call the server a remote server——Although the server is directly connected to the switcher, it is far away from the user.

◆   When we describe the overall system architecture, we usually adopt the perspective of switcher-in this case, the user will be regarded as remote; When we describe the user's operations using browsers or applications through the network, we usually adopt the user perspective-in this case, the switch and the servers connected to it will be considered remote.

Product Information

To find information about our KVM products and how to use them effectively, you can contact our website or authorized distributors for more contact information.

Chapter I Introduction

Product Introduction

The 1/4/8 port USB rack Mini LCD KVM multi-computer switch is a multi-function device that allows managers to access 1/4/8 VGA computers from a set of USB keyboards, mice. It supports two-level port cascade can manage up to 128 computers from a single control terminal;

In addition, the function can be expanded according to the needs of users and changed to the transmission control mode of KVM OVER IP. Only an IP KVM conversion module needs to be connected outside the product to upgrade to the digital KVM management device managed by remote network, which is convenient for users to quickly upgrade the application of advanced control mode without changing the existing use environment.

Four convenient ways are provided to switch computers in the installation architecture: (1) Use the connection port selection key on the front panel of the switch; (2) inputting hot key combinations from the keyboard; (3) Select from the menu on screen display (OSD). The automatic scanning function provides automatic scanning and monitors computers in the installation architecture one by one. (4) Remote network control operation is carried out through the network port of the extended IP module to connect the computer above KVM.

The installation of this product is very fast and tolerant, as long as the connection line is connected to the appropriate connection port, no software setting is required, no complicated installation procedures are required, and there will be no incompatibility problems. Since the device can directly obtain the input data of the keyboard, it can operate on a variety of operating platforms (compatible with PC, Mac, Sun, etc.).

Since it is allowed to manage computers connected to it from a single control terminal, the installation of a set of KVMs (1) can exempt each computer from the expense of purchasing individual keyboards, displays and mice; (2) Save the space occupied by additional device; (3) saving energy cost; (4) Avoid the inconvenience and waste of moving back and forth between computers. (5) Rapidly upgrade to the remote network control mode of IP control mode.

Digital KVM switcher is an intelligent device that provides IT administrators in large server rooms with efficient management and access control of multiple servers. Switch is an IP-based KVM control device that allows local and remote operators to monitor and access multiple servers from a single set of control terminals. The KVM over IP switch provides ultra-high video quality with resolutions up to 1920x1200 and can access USB-driven devices through high-speed virtual media transmission.

The client software allows the operator to exchange keyboard, display and mouse signals with the server connected to the switch, as if the operator were directly beside the device for operation. Administrators can easily handle many maintenances tasks-from installing and executing GUI applications to troubleshooting at BIOS level, routine monitoring and synchronous maintenance, system management, restart and even pre-start functions.

Product Characteristics

◆ One set of USB control terminals can manage different ports of VGA/CAT5/DVI&HDMI interface computers,single port console can with VGA/CAT5/DVI.HDMI ports module
◆ Ultra-short fuselage with a fuselage length of only 360MM
◆ The control terminal supports USB interface type keyboard and mouse devices
◆ Up to 128 computers can be controlled in cascade two levels
◆ You can switch computers through front panel keys, keyboard hotkeys and on screen display (OSD).
◆ BIOS level access connected to that control device without worrying about the risk of virus and Trojan intrusion
◆ The accused computer does not need to install any software and drivers, and the accused computer directly recognizes KVM.
◆ Remote network control mode can be upgraded by extending the IP KVM module
◆ Support OSD to set user login mode and add KVM login security requirements
◆ Supports DDC communication and adapts to various graphics card devices.
◆ The automatic scan function monitors all computer operations
◆ Supports cross-platform operations-Windows, Linux, Mac* and Sun*
◆ The keyboard and mouse connection port of the controlled computer adopts Keep Online technology to simulate the keyboard and mouse, the device is safe and stable, and the switching is fast without delay.
◆ The controlled display screen can perform the function of window stepless zoom and display in any proportion or size.
◆ Multi-window superposition technology can display multi-window pictures on the desktop of the same remote control end, and select and control any window.
◆ Convenient and friendly remote login mode, Web page access and related settings and queries are carried out through browsers.
◆ Three user level settings and multi-user grouping settings are suitable for various management requirements.
◆ The remote control desktop can set two different mouse application modes w according to the user's usage habits.

Hardware Requirements

Remote User Computer

If the expanded KVM module is replaced and can be used by remote users, the remote user computer (also known as the client computer) is the computer that users use to log in to the switch remotely through the network. These computers must be equipped with the following device:

◆ For best results, we recommend that you use a computer with a CPU of at least P4 1.7 GHz processor and a display resolution of 1024 x 768 or above
◆ IE10 or above Web Browser
◆ Ensure usage efficiency, we recommend that the Internet be connected at a minimum speed of 10Mbps.

◆ Windows XP and above are recommended for the operating system.

Server

The server is a computer connected to the switch through KVM dedicated cables. The following device must be installed on these servers:

◆ A set of VGA/CAT5/DVI/HDMI, SVGA ports
◆ USB KVM Cable Connection: A set of Type A USB ports to the USB Master Controller.

Operating System

◆ Operating systems supported by remote users' computers include Windows XP and above
◆ The operating systems supported by the server connected to the switcher are shown in the following table:

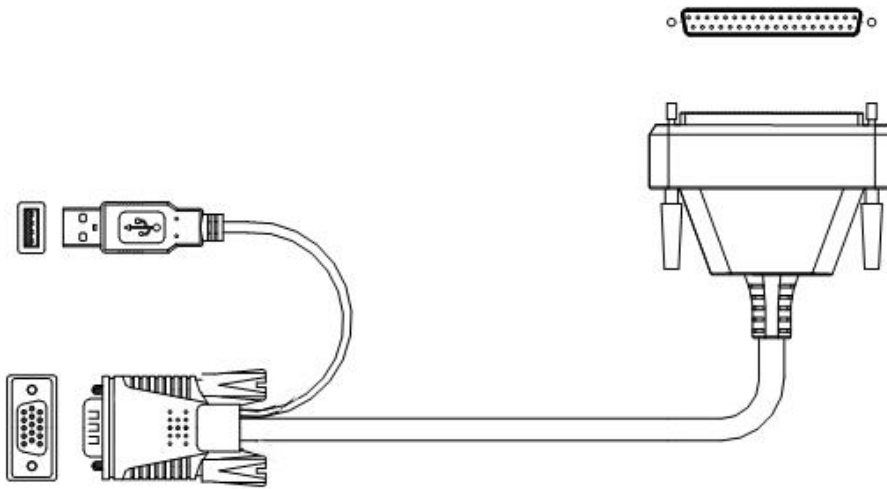| Operating System		Version
Windows		Windows 2000/XP/2003/2008/Vista/7/10
Linux	RedHat	9.0 or higher
	SuSE	10/11. 1 or higher
	Debian	3.1/4.0
	Ubuntu	7.04/7.10
UNIX	AIX	4.3 or higher
	FreeBSD	5.5 or high
	Sun Solaris	8 or high
Mac		OS 9.0 to 10.6 (Snow Leopard)
Novell	Netware	6.0 or high

KVM Dedicated Connection Cable

KVM device provides a variety of connection cables to choose from according to the user's usage:
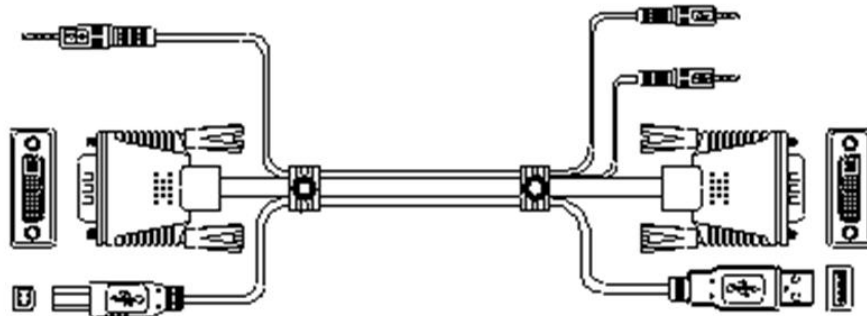
◆ USB dedicated cable VGA + USB (Type A)

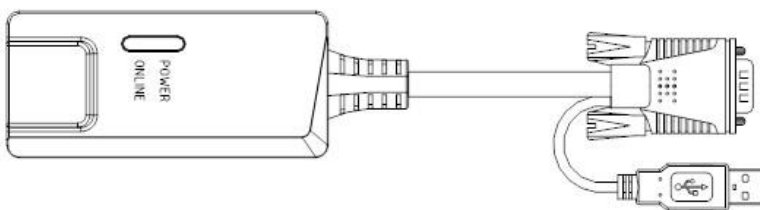◆ LCD KVM switch single port DVI cable
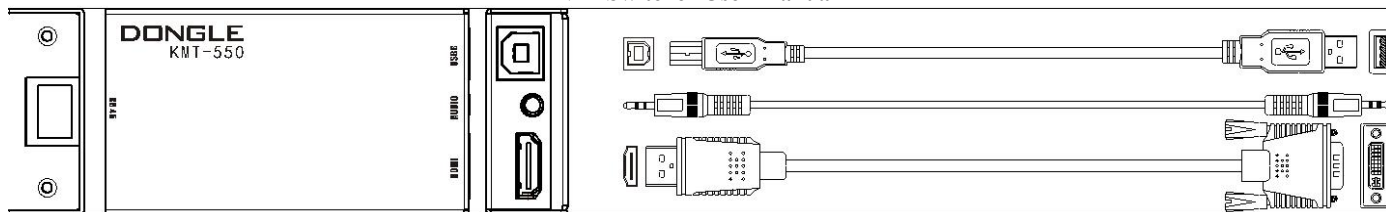
LCD Connector DB37P

◆ DVI-I + USB（Type A） + Audio

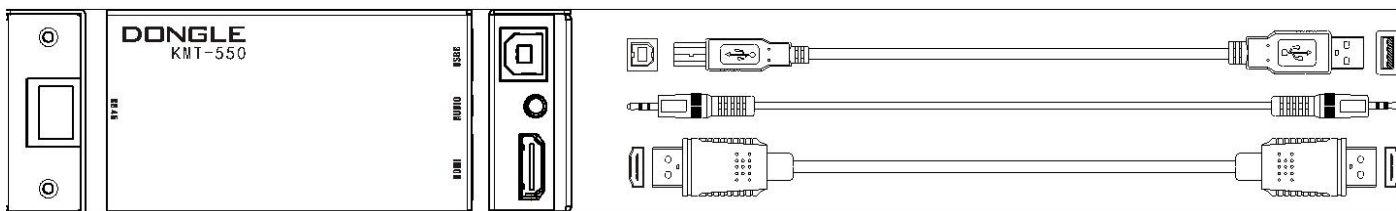KVM connection   Computer connection
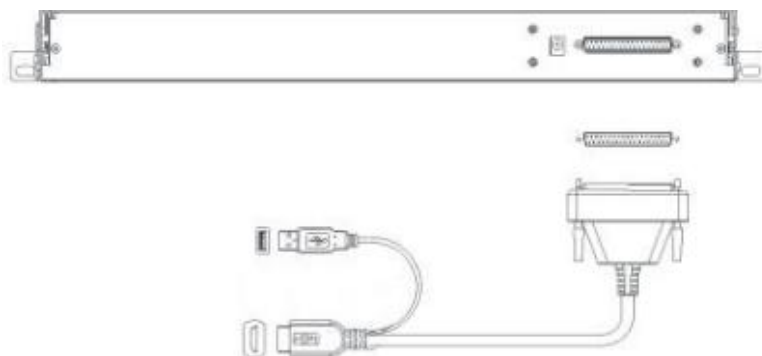
◆CAT5 connection Dongle

VGA + USB (Type A)

DVI＋USB（Type A）

HDMI＋USB（Type A）

◆ HDMI+ USB（Type A） ＋Audio

Note: Cable length will affect the quality of the display screen. If you need another length of cable, please contact the merchant you purchased to purchase the cable suitable for this switch.

Operating System

Operating System		Version
Windows		Windows 2000/XP/2003/2008/Vista/7/10
Linux	RedHat	9.0 or higher

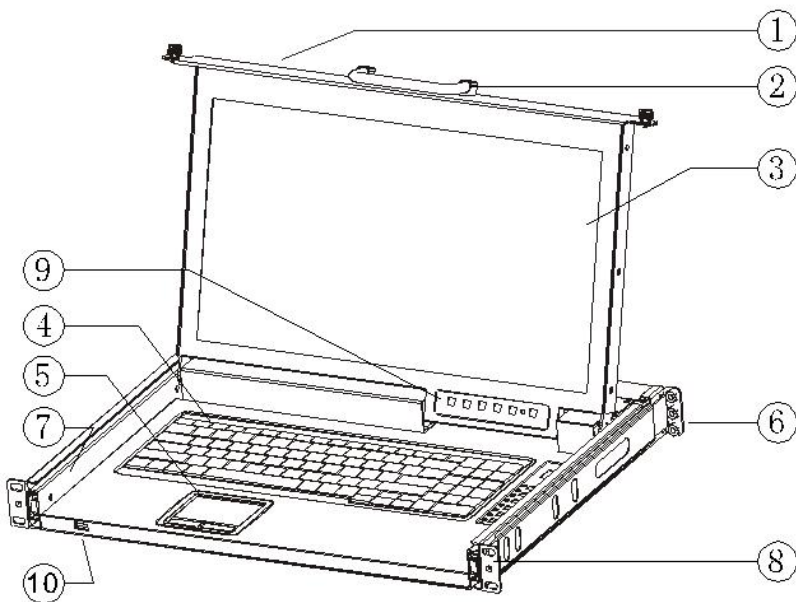|	SuSE	10/11. 1 or higher
	Debian	3.1/4.0
	Ubuntu	7.04/7.10
UNIX	AIX	4.3 or higher
	FreeBSD	5.5 or high
	Sun Solaris	8 or high
Mac		OS 9.0 to 10.6 (Snow Leopard)
Novell	Netware	6.0 or high

For more operating system support, please pay attention to the latest product compatibility related versions.

Components

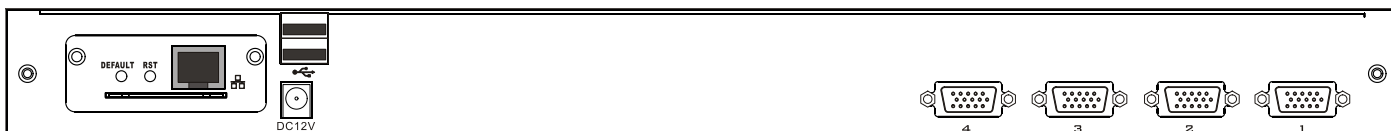## Front View

KVM Panel Front View

1. Front panel
2. Handle
3. LCD screen
4. Keyboard
5. Mouse touch board
6. Rear hang ear channel
7. Guide
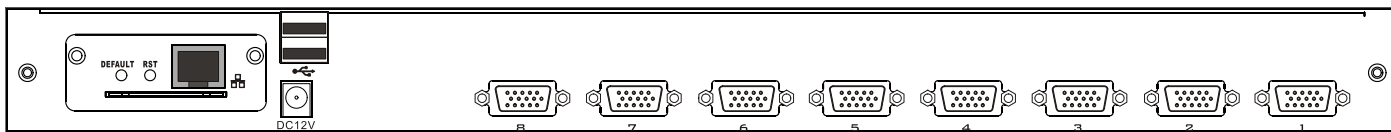8. Front hang ear
9. LCD OSD control key
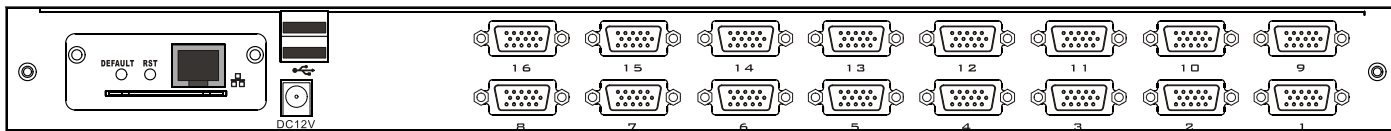10. Front USB

Rear View

LCD KVM Single port Rear View

LCD KVM 4 port VGA Rear View

LCD KVM 8 port VGA Rear View
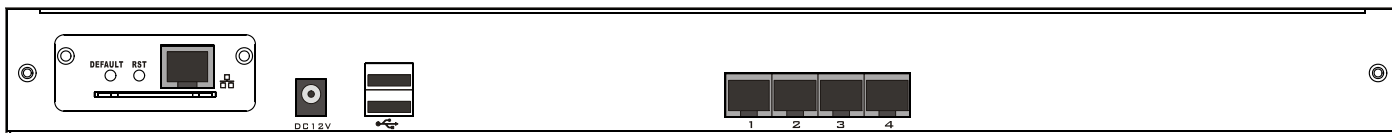
LCD KVM 16 port VGA Rear View

LCD KVM 4 port CAT5 Rear View
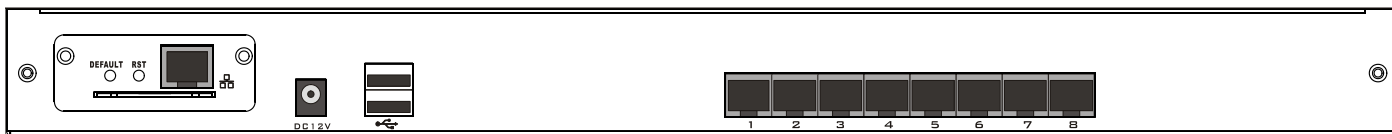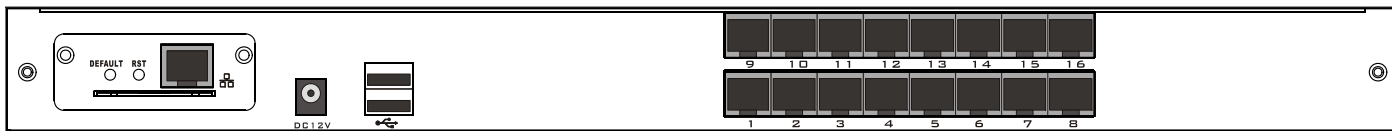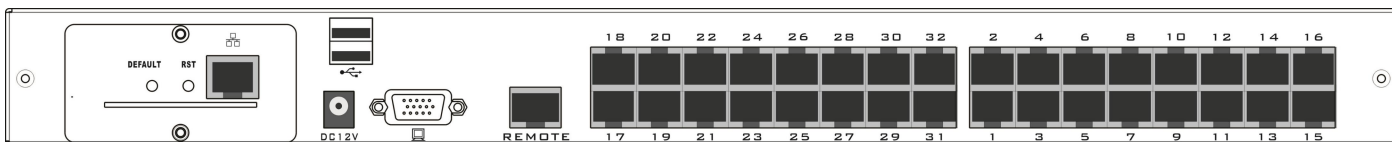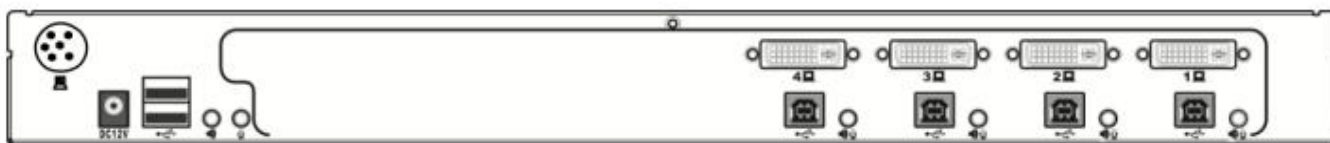
LCD KVM 8 port CAT5 Rear View

LCD KVM 16 port CAT5Rear View

LCD KVM 32□CAT5Rear View

LCD KVM 4 port DVI Rear View
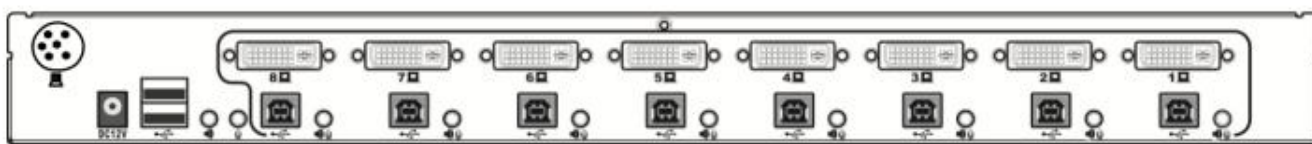
LCD KVM 8 port DVI Rear View
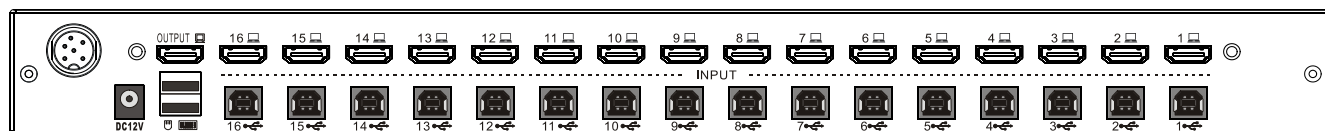
LCD KVM 16-port HDMI rear view
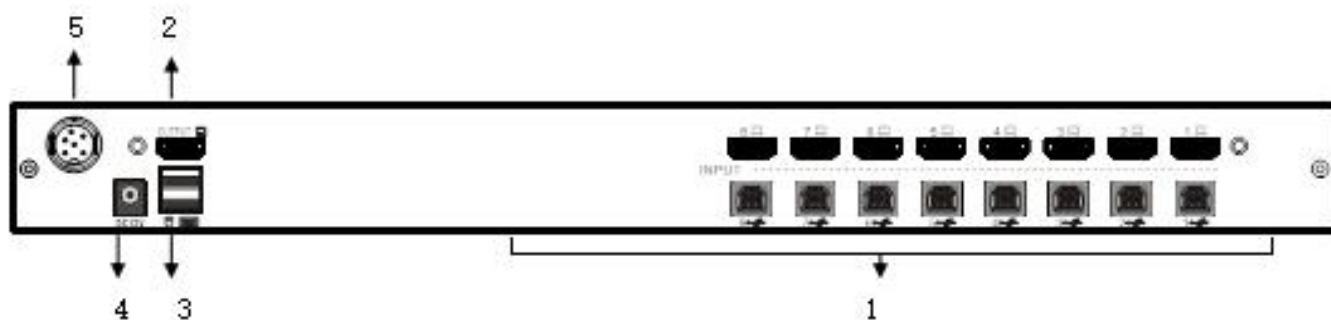
LCD KVM 8-port HDMI rear view
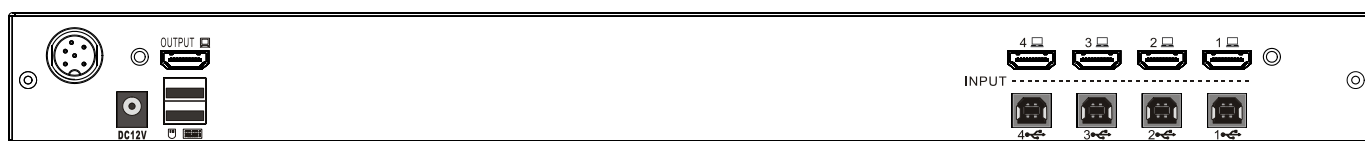
LCD KVM 4-port HDMI rear view

No.	Components	Function Description
1	Power Interface	Connect the device's power adapter to this interface. (Please use the DC12V power supply dedicated to this device)
2	USB keyboard and mouse interface	Connect the local USB keyboard and mouse interface, USB TYPE A type.
3	VGA/CAT5/DVI/HDMI Local Output Port	Connect to a local VGA display with a resolution of up to 1920x1080 @ 60HZ
4	4, 8 channels of controlled computer input interface	Connect the controlled 4-and 8-way KVM dedicated cable interfaces, and connect with the connecting cables using the corresponding computer interfaces.
5	Extended KVM Interface	Connect with other KVM module special interface of the company

Chapter II Hardware Installation

Stacking and Installation

The KVM switcher can be placed on any suitable plane and is sufficient to safely support the device with the weight of additional connecting wires; Please make sure that the plane is clean and there are no other sundries that will affect the ventilation and normal operation of the switch.
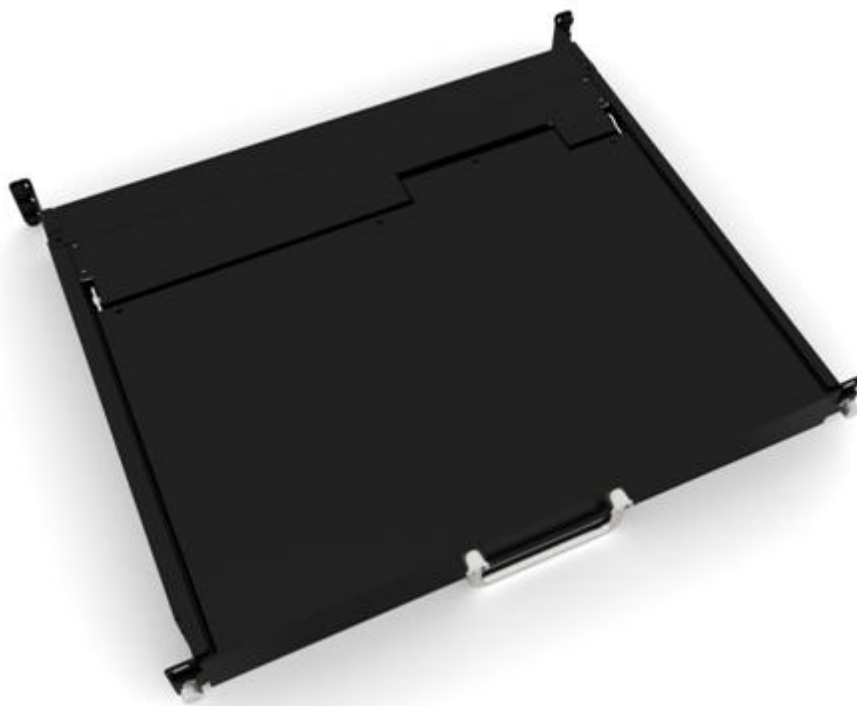
Single Device Installation

Note: Before installing KVM connection cables, please confirm that 12V power supply is switched on to LCD KVM device to ensure that the detection circuit inside the device takes effect. In order to prevent device damage during installation, please confirm that all installed device has good grounding protection.

To install a single-level KVM, refer to the following online diagram (the number corresponding to the online diagram indicates the sequence of steps) and perform the following:
1. First, connect one end of the power connection line of the external power adapter to the device power jack, and the other end to the AC power jack or PDU power jack.
2. Plug your USB keyboard and mouse into the USB control terminal connection port on the backplane of the switch.
3. Connect the video signal line of the VGA display to the VGA control port and turn on the power supply.
4. Terminate the KVM dedicated cable separate VGA connection into the KVM corresponding interface. The number of KVM ports can be 1, 4, or 8.
5. Connect the KVM cable VGA and keyboard mouse connector to the VGA output interface of the controlled computer or server and the keyboard mouse interface of USB .

Note:
The controlled computer is connected to the keyboard. If the mouse is a USB interface, the heat engine can connect the keyboard.
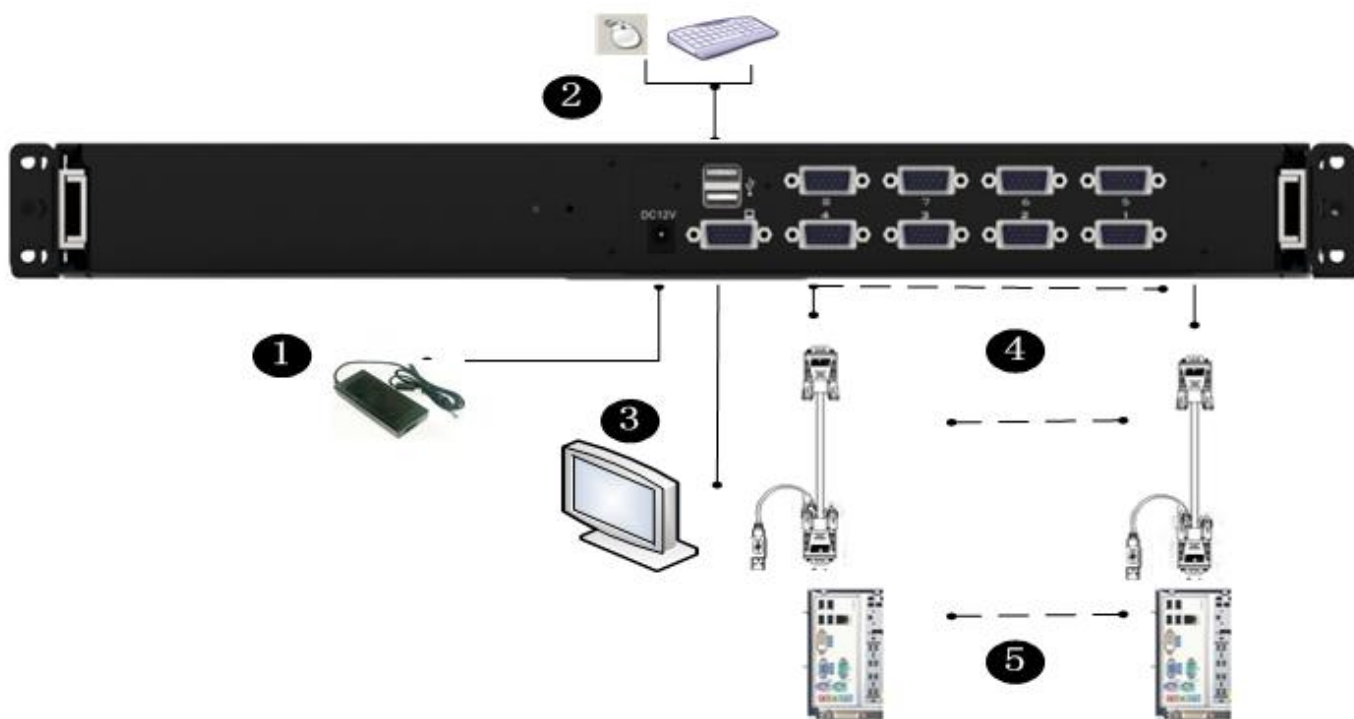
Single Device Installation Schematic Diagram

◆ **VGA port KVM module installation**

To install a single-level KVM, refer to the following online diagrams (numbered in the order of steps on the online graph) and do the following:

1.Plug your USB keyboard and mouse into the USB console port on the back panel of the switch.

2.Using a set of KVM cables corresponding to the model, plug the VGA connector into the VGA Port of any available VGA port on the switch.

3.Plug the corresponding VGA video connector, USB connector of the KVM cable into the corresponding port on the PC.

4.Plug the power adapter supplied with this package into the AC power source, and plug the other end of the power adapter into the power jack on the switch.

5.Connect the network cable to the IP port of the IP module.

6.Turn on the computer.

Note:1. Make sure that all plugs are connected to the same group of KVM connection port jacks (all connected to Port1, or all connected to Port2).

2.IP module is an optional module of the product. If the product you purchased does not contain the module, please ignore the related operation in Step 5.

3.Before using the IP module, please make the appropriate configuration and network debugging

after the access to the network you want to connect, or may fail to connect because of normal remote control. (Refer to the manual of the IP module product manual for how to use and debug the IP module.

◆ **CAT5 port KVM Module Installation**

To install a single-level KVM, refer to the following online diagrams (numbered in the order of steps on the online graph) and do the following:
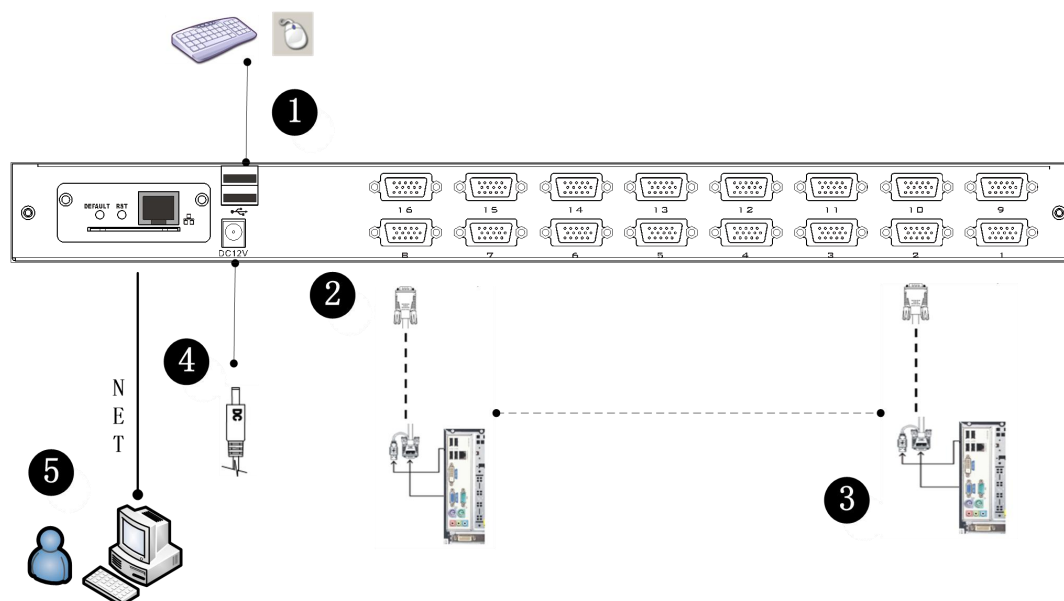
1. Plug your USB keyboard and mouse into the USB console port on the back panel of the switch.

2. Use a set of CAT5e / 6-wire connectors to plug into any available CAT5 Port on the switch.

3. Plug a CAT5e / 6-wire connector into the CAT5 connector on the Dongle module of the KVM, and connect the corresponding VGA video connector, USB connector of the Dongle cable to the corresponding port on the PC.

4. Plug the power adapter supplied with this package into the AC power source, and plug the other end of the power adapter into the power jack on the switch.

5. Connect the network cable to the IP port of the IP module.

6. Turn on the computer.

Note: 1. Make sure that all plugs are connected to the same group of KVM connection port jacks (all connected to Port1, or all connected to Port2).

2. The IP module is an optional module of the product. If the product you purchased does not include the module, please ignore the related operation in Step 5.

3. Before using the IP module, please make the appropriate configuration and network debugging after the access to the network you want to connect, or may fail to connect because of normal remote control. (Refer to the manual of the IP module product manual for how to use and debug the IP module.)

4. Make sure you are connecting to a computer and LCD KVM switches have a good grounding protection altogether, or it may produce a video display problems

5．For display problems caused by transmission distance, electromagnetic interference, common ground, etc., it is recommended to use Category 6 shielded network cable to connect and try to improve the display effect
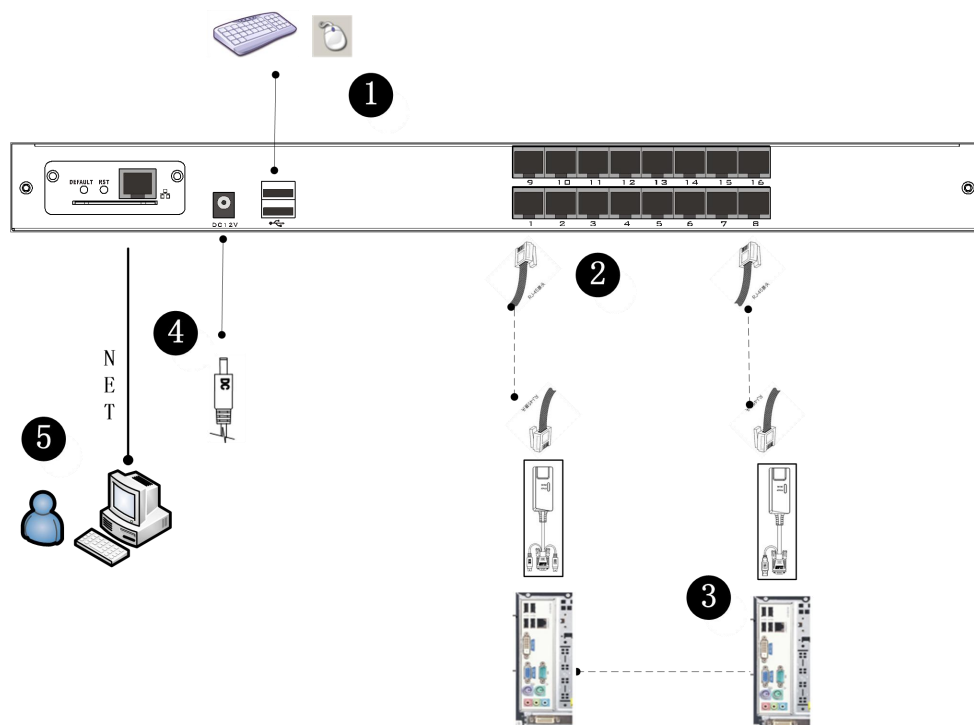
◆ **DVI port KVM module installation**

To install a single-level KVM, refer to the following online diagrams (numbered in the order of steps on the online graph) and do the following:

1. Plug your USB keyboard and mouse into the USB console port on the back panel of the switch.
2. Insert the audio cable plug of the microphone and the speaker into the corresponding type port.
3. Using a set of DVI KVM cable connectors corresponding to this module to plug into any of the available Port ports on the switch, DVI to DVI port, USB Type B to keyboard port, mouse port, composite audio plug into the audio jack.
4. Connect the AC adapter to the AC power source, and plug the other end of the power adapter into the power jack on the switch.
5. Connect the network cable to the IP port of the IP module.
6. Turn on the computer

Note:

1.Please make sure that the computer and the LCD KVM switch you are connecting to have a good common earth ground, otherwise a video display problem may occur.
2.For display problems caused by transmission distance, electromagnetic interference, common ground, etc., it is recommended to use Category 6 shielded network cable to

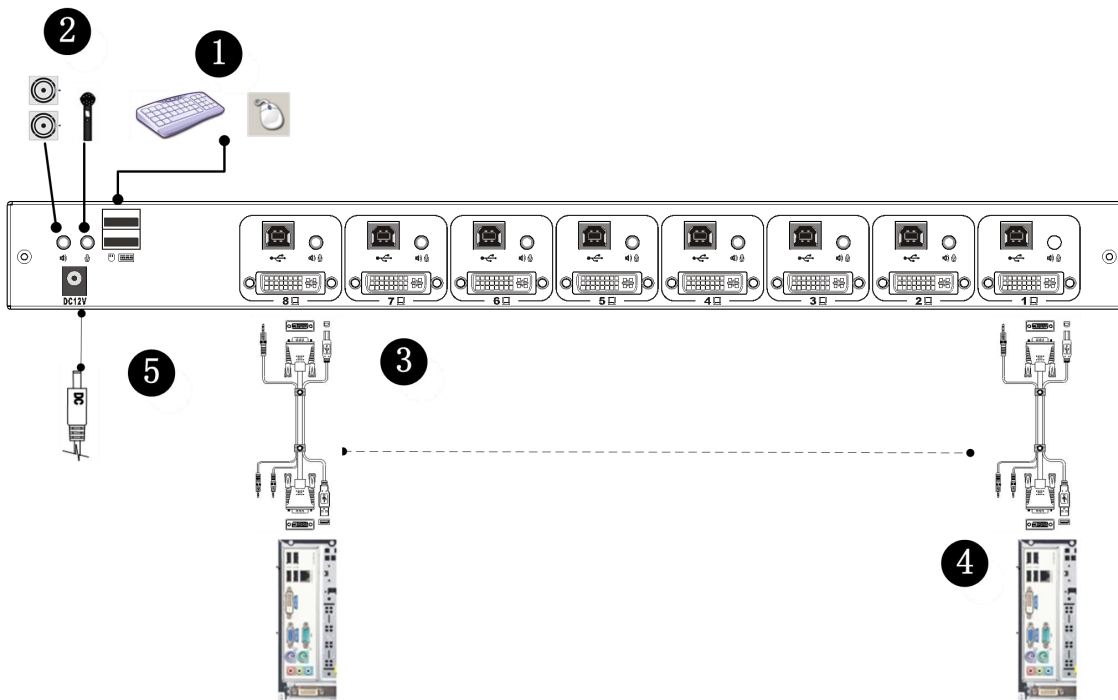connect and try to improve the display effect.

LCD KVM All-in-One Product Schematic Diagram

single-port product opening pattern

8-port product closure pattern

8-port product opening pattern

Mechanical Dimension Drawing of Products
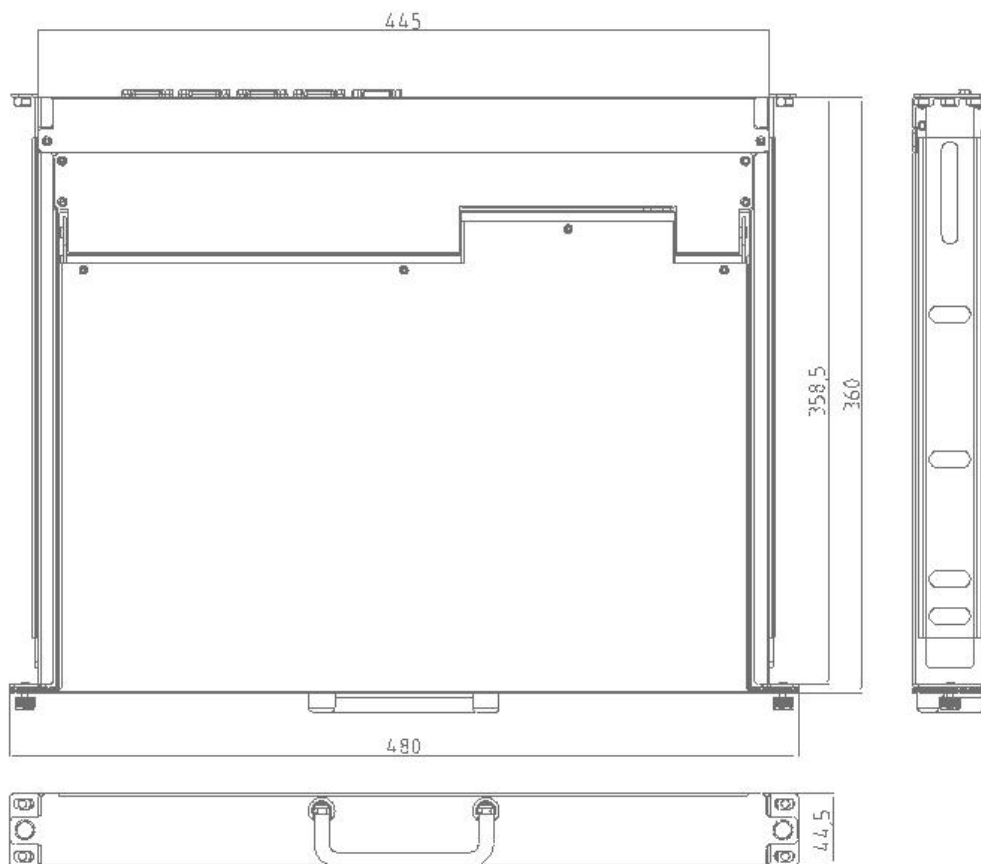
Standard Rack Mounting

1. Take out the mounting bracket and pull the bracket rear lug out of the bracket. Take out the rear lug from the spare parts bag and adjust the direction of the lug according to the installation drawing. Pass the pulled-out rear lug through the lock lug and fit the lug into the joist again. Install cabinet Installation depth Adjust bracket length.
2. Place one end of the bending belt nut of the mounting bracket on the inside of the cabinet mounting column to align with the mounting hole of the cabinet mounting column, and use screws to fix the mounting column and the mounting bracket.
3. Adjust the length of the rear plug lug (pull out or insert it from the mounting bracket), place one end of the rear plug bent with nut on the inside of the cabinet mounting column, and fix it with screws.
4. After the bracket is installed, place the LCD host on the bracket and slowly slide inward until the entire LCD host is loaded into the cabinet.
5. The front mounting hole of the LCD host is fixed with screws to the cabinet mounting column and mounting bracket, and the rear end of the LCD host is fixed with screws provided by the accessory package. (See the following installation diagram for details)
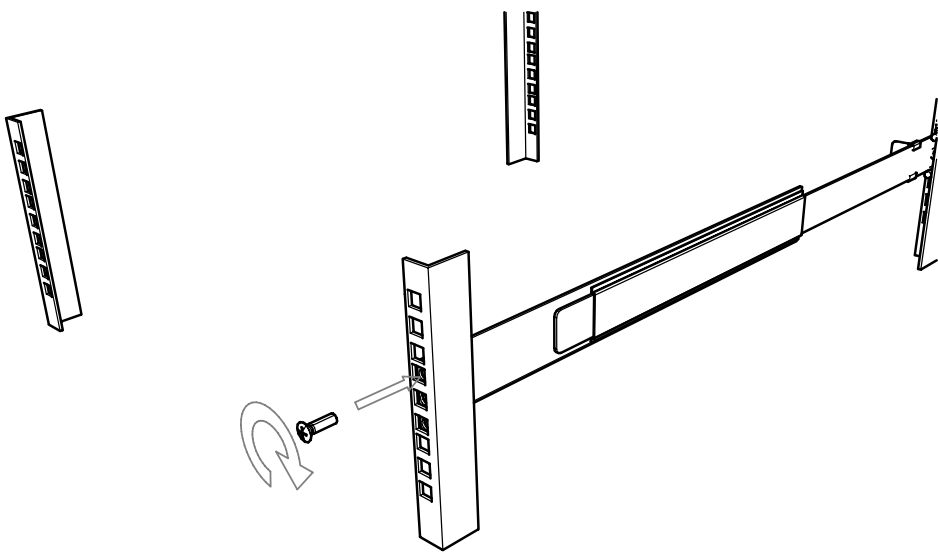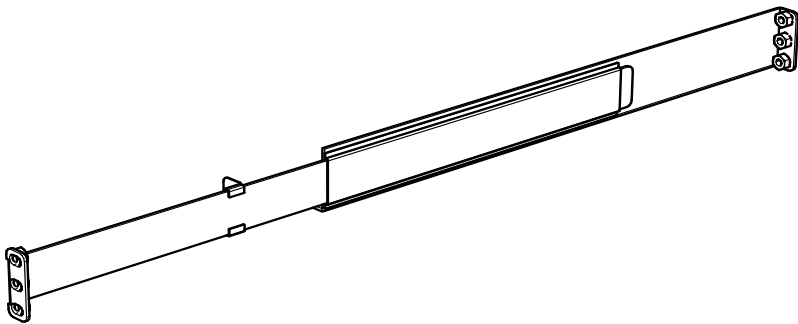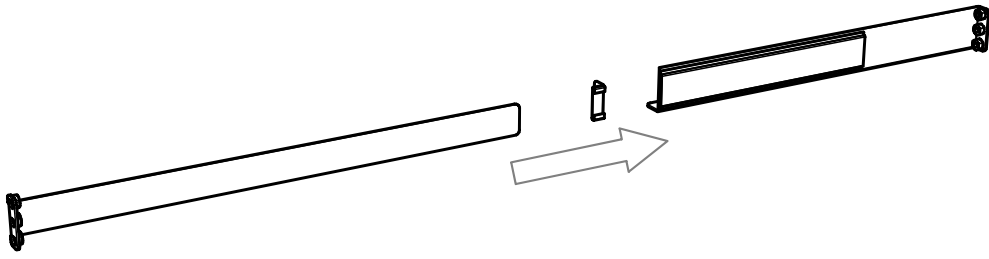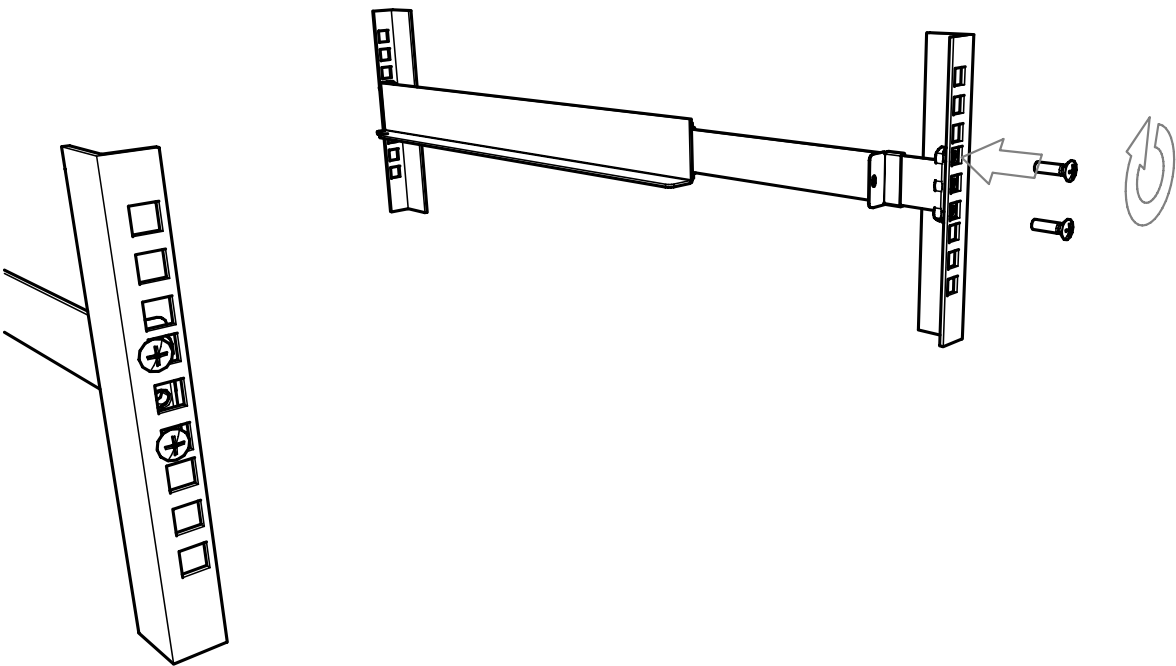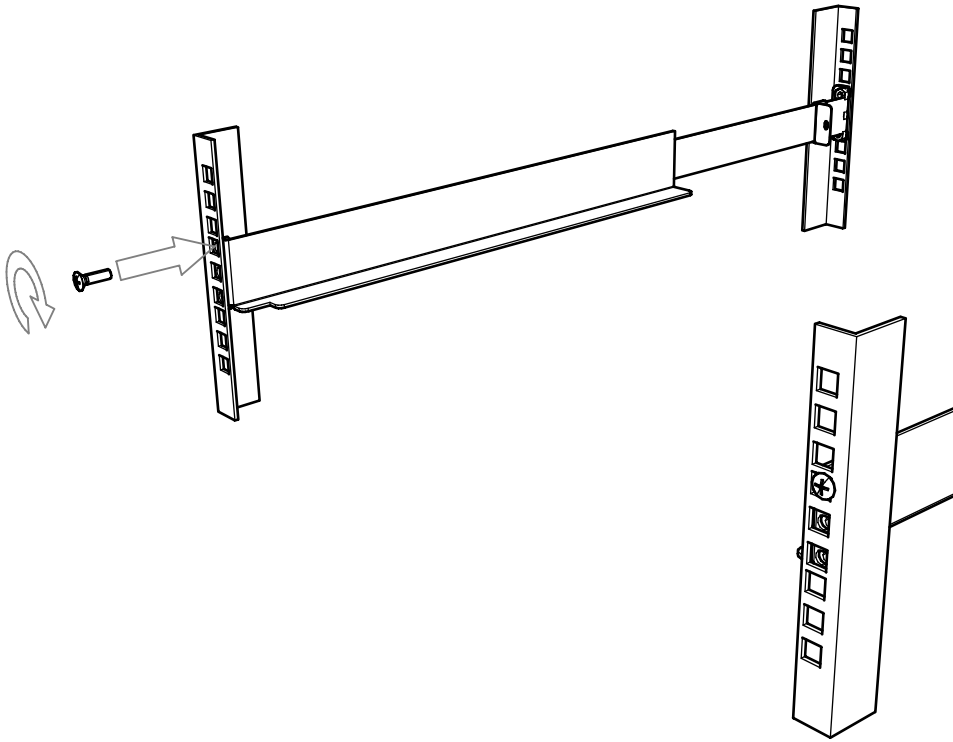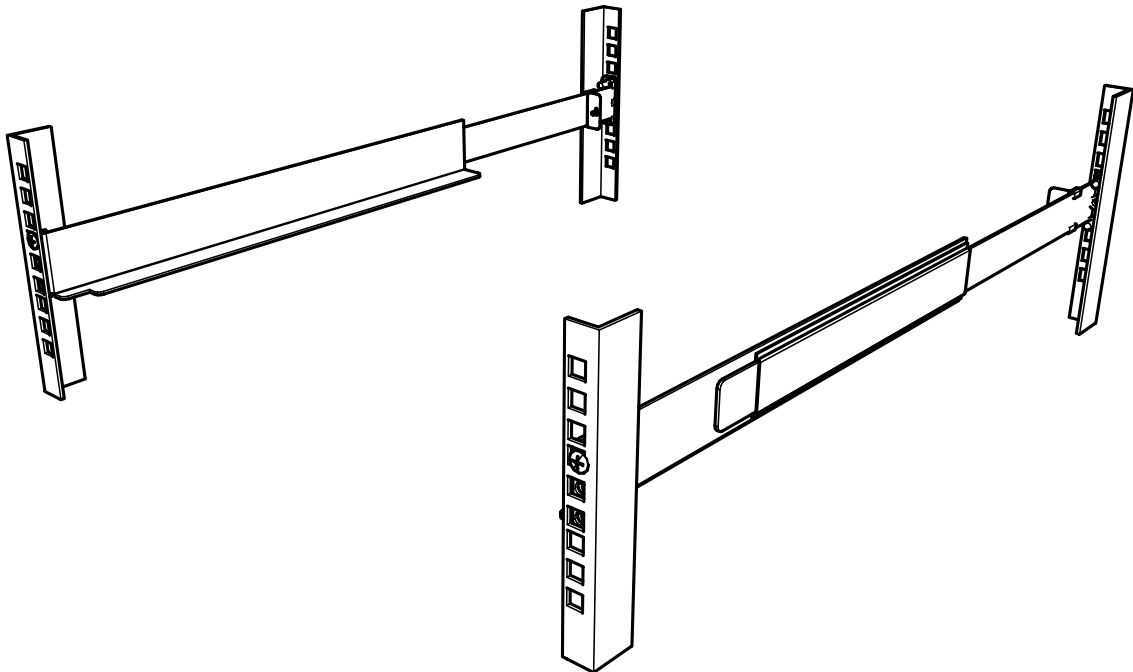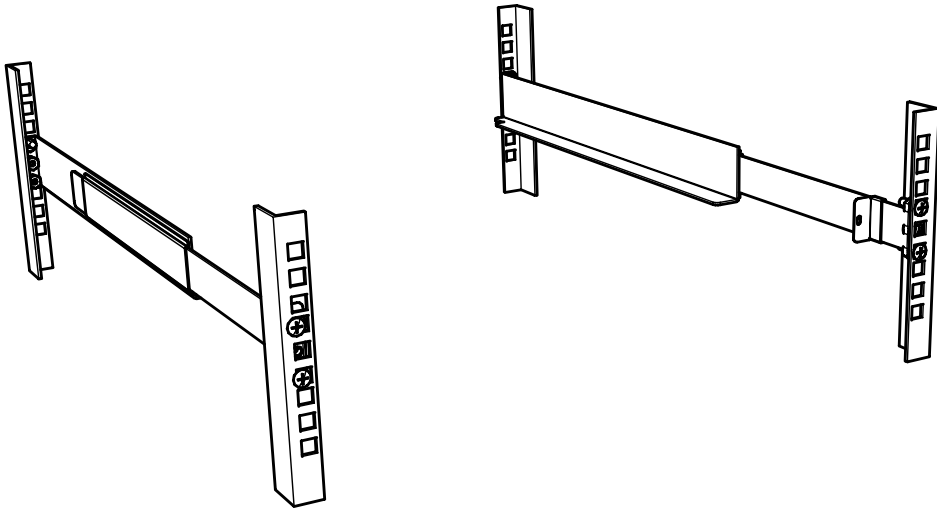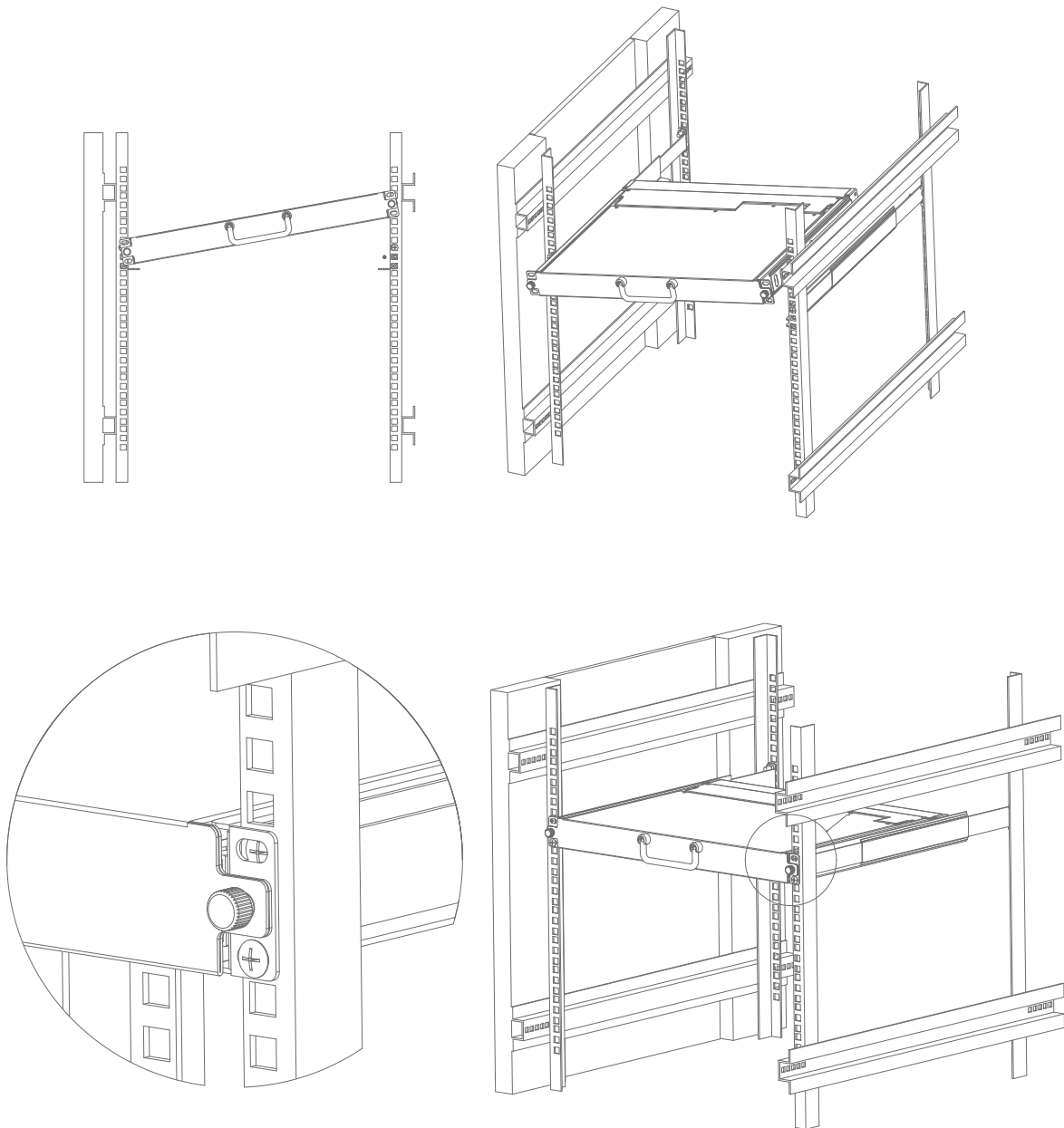
Chapter III Basic Operations

Hot Plug

KVM switcher supports hot plug function, which can remove and plug back components by unplugging the cable connected to the computer connection port without turning off the switch. In order for the hot plug function to work properly, please follow the following steps:

Hot Plug PC Connection Port

In order for the OSD menu to change according to the KVM's connection port, you must reset the OSD menu to display the latest connection port information, the menu settings of the OSD. Please refer to the description of functions and usage in the relevant sections of the OSD menu for more information.

Note: If the computer's operating system does not support hot plug, this function may not work properly.

Hot Plug Control End Connection Port

This product also provides the function of hot plug of keyboard, mouse and display at the control end. This product provides keyboard and mouse interfaces of two interface types. Users can select the corresponding device connection types according to the usage situation and carry out corresponding control operations.

Connection Port Selection

When the KVM switcher is in use, you can choose two ways to quickly switch to any computer connected to the KVM: local OSD menu screen selection and remote user WEB interface selection.

Local OSD Menu Screen Selection

Local users can select and switch ports by enabling OSD menu through the connected USB keyboard hotkey. The default startup hotkey is "CTRL" + "CTRL". The cursor of the menu can be moved by using the direction keys of the keyboard. (See the section on OSD Operations for more information.)

Power Shutdown and Restart

If you need to turn off the power to the KVM switch, do the following before turning it back on:
1、 Turn off the power switch connected to the KVM.
2、 Turn off all computers connected to the KVM switch.
3、 Wait approximately 10 seconds before reconnecting the power to the KVM switch.
4、 Turn on the computer.

Chapter IV OSD Operation

OSD Introduction

OSD on screen display function on screen display operation mode carries out KVM device setting, connection device switching selection and other operations, and completes device control through keyboard operation. All programs must start from opening OSD main screen.

OSD Login

Before operation, you need to access the USB interface keyboard, mouse and a VGA interface monitoring screen at the local end of this product, then enable OSD interactive menu through the hot key action of the keyboard, and complete the setting and modification of corresponding functions through the operation of the monitoring screen and keyboard. If you have set the user and password login, you need to use the correct user name and login password to enter the OSD menu screen. The default OSD user name is: admin and the password is: admin. Users can make modifications in the User Edit Options.

OSD Hotkey

By default, you can type the "CTRL" key twice to display the OSD menu on the screen of the controlled display, and you can see the relevant connection information and status information of the controlled computer connected to the KVM switch.

Note: You can change the keyboard hotkey started by the OSD menu according to your needs. This product provides 4 sets of optional OSD menu hotkey combinations, and you can select according to your needs (please refer to the detailed description of the setting function of the OSD menu.)

OSD Main Menu

When you start OSD, a picture similar to the following figure will appear:
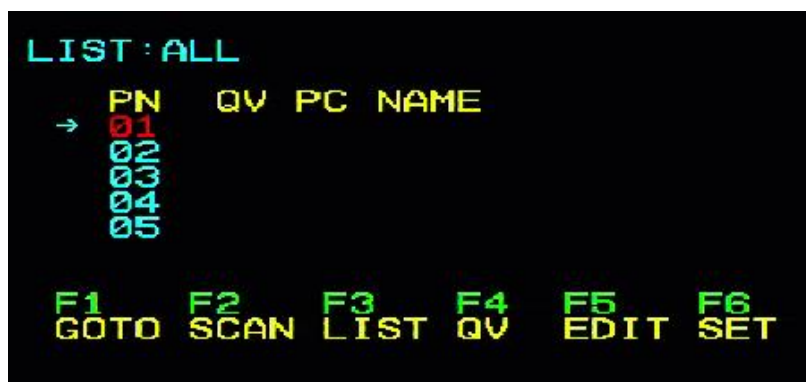
◆ The "F1", "F2", "F3", "F4", "F5" and "F6" at the bottom of the screen are the function settings of OSD menu, and the corresponding function operations and settings are carried out through the corresponding keys of the keyboard.

◆ After entering the OSD main screen, the port number where the light bar in the middle of the screen stays is the port number of the currently selected controlled computer. You can select the port by using the "" "" of the keyboard. After confirmation, please press the "Enter" key to select the switch port.

◆ If you want to exit the OSD menu interface, you can perform the exit operation through the "Esc" of the keyboard.

◆ To move a row up and down in the list, use the "" "" direction key. If the number of rows in the list is greater than the number that the screen can display, the screen scrolls.

OSD Main Menu Title

Title	Description
PN	This column shows the port numbers for all ports. The simplest way to access a specific computer is to move the highlight bar to a port and press the "Enter" key. KVM will switch to the port computer selected by the cursor.
QV	This column displays the Quick Browse settings, which are displayed as.
PC	This column represents the online port display status of the connected PC. If the computer on this port is powered up, a symbol will be displayed.
NAME	If the port is named a name, this column displays the port name.

Introduction to OSD function keys

The OSD function key mainly provides the function of setting and controlling OSD. For example, you can quickly switch to any connection port, scan only the selected connection port, create or edit the name of the connection port, or adjust the OSD settings.

To start the OSD function key function:

1. Press any function key "F1", "F2", "F3", "F4", "F5" and "F6" at the bottom of the main screen to type the function key from the keyboard.

2. Move the selection column to the option on the submenu that appears, 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, which allows you to switch directly to the connection port by typing the port name or its port number.

1. Use the name method, move the cursor to the "NAME" option through the keyboard key, and then press the "Enter" key. The "NAME" input bar box appears at the lower end of the window. You can enter the name of the port to be switched in the bar box, and then press the "Enter" key. The KVM switcher will directly switch to the corresponding port computer of the input name.

2. Using the port connection method, move the cursor to the "PN" option through the keyboard key, and then press the "Enter" key. The input bar box of "PN" appears at the lower end of the window. You can enter the serial number of the port to be switched in the bar box, and then press the "Enter" key. The KVM switcher will directly switch to the corresponding computer of the input port serial number.

Note: 1. You can enter the complete name or number, and the screen will prompt for invalid input. You cannot perform the corresponding switching selection operation until you exit or re-enter correctly.

2. In the "PN" port input box, only numbers are allowed to be input. If other characters are input, they will be regarded as invalid input, and the warning sound from the device can be heard.

Return directly to the main menu without making a selection, and press the "Esc" key to operate.

F2 SCAN

Press the "F2" key to start the SCAN function. The SCAN function allows KVM device to automatically switch connection ports at regular intervals. You can set and view the connection ports according to the set time intervals. After scanning, please press the "Space" key to exit the scanning mode. The default factory setting is 5 seconds for scanning the two ports (please refer to the description of the "F6" function settings for modification).

F3 LIST

Press the "F3" key to start the LIST function, which can display the ports according to the mode that the user wants to display, making it convenient for the user to quickly and selectively view the corresponding ports according to common habits. The modes provided are shown in the following table:

Setting	Function Description
ALL	The main window displays all port information, arranged by port sequence number.
QVIEW	The main window displays only the Quick Browse port information tagged QV.
POWERD ON	The main window displays only the port device information that is online.
POWERD ON + QVIEW	The main window only displays the Quick Browse port information of the online tag QV.
QVIEW + NAME	The main window displays only NAME-named and QV-tagged Quick Browse port information.
NAME	The main window displays only NAME named port information.

F4 QV

Press the "F4" key to set or cancel QV on the port where the cursor stays. If the port has an icon ![icon], it means that the port is set to express browsing mode, and the set port information can be seen in QVIEW mode, otherwise it is a normal port.

F5 EDIT

Press F5 to set or edit the name of the current port

The maximum number of characters that can be input is 15, which will take effect when the "ENTER" confirmation is completed.
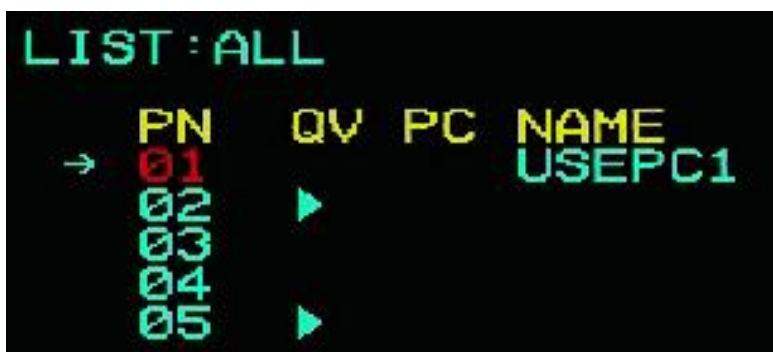
F6 SET

Press the "F6" key to provide the administrator with settings for the OSD menu. Setting and modifying related functions, such as port naming, display mode, switching hotkey adjustment, etc.

To change settings:

1. Move the selection bar to this option, and then press the "Enter" key.
2. After selecting an item, the sub-menu and the further options it provides will appear. To select, you can double-click the mouse or move the selection to the option, and then press the "Enter" key. An icon will appear before the selected option to indicate that the item has been selected. Its setting instructions are shown in the following table:

Setting	Function Description
OSD ACTIVATING HOTKEY	Startup hotkey selection for OSD menu, default is "CTL" + "CTL"
SWITCH HOTKEY	Port Switch Hotkey Selection
SCAN DURATION	Port Scan Interval Selection
SET PASSWORD	Set User Password
SET SUPER PASSWORD	Set Super Password
CLEAR THE NAME LIST	Clear Port Name
RESTORE DEFAULT VALUE	Restore factory default settings
LOCK CONSOLE	Local Password Login Settings

● **OSD ACTIVATING HOTKEY**

This function can set and change the startup shortcut hotkey combination of OSD menu. This device provides 4 hot key menu combinations: "CTRL" + "CTRL", "SCROLL" + "SCROLL", "ALT" + "ALT", "SHIFT" + "SHIFT" You can use the keyboard "" "" direction key to move the cursor to select as needed, and then press "Enter" key to save and take effect. The initial default is "CTRL" and "CTRL" as the startup hotkey of OSD menu.

Note: The set hotkey combination should not be the same as SWITCH HOTKEY, otherwise, the related operation and function switching will be affected. If you conflict with the shortcut keys of the user's application software, please make changes according to the shortcut keys shown in the list to resolve the conflict.

● **SWITCH HOTKEY**

This function can set the shortcut hot key for port switching. Users can directly select the port to be switched and skip the OSD display interface selection to facilitate users' shortcut operation. This function provides 4 hotkey combinations: "SCROLL" + "SCROLL" + "NUM", "CTRL" + "CTRL" + "NUM", "ALT" + "ALT" + "NUM", "SHIFT" + "SHIFT" + "NUM". You can use the keyboard "" "" direction key to move the cursor to select according to your needs, and then press the "Enter" key to save and take effect. The initial default is "SCROLL" + "SCROLL" + "NUM" as the hot key for port switching.

Note: The set hotkey combination should not be the same as OSD ACTIVATING HOTKEY, otherwise, the related operation and function switching will be affected. If you conflict with the shortcut keys of the user's application software, please make changes according to the shortcut keys shown in the list to resolve the

conflict.

- **SCAN DURATION**

The change function can set the interval of port switching in SCAN mode. You can use the keyboard ""
"" direction key to move the cursor to select as needed, and then press "Enter" key to save and take effect.
The initial default is 5 seconds.

- **SET PASSWORD**

This function can set the function permissions of ordinary users. After the setting is successful, the user
can only use this password to clear the operation settings of port names.

- **SET SUPER PASSWORD**

This function can set the administrator password. After the setting is successful, some important

settings need the administrator password to be set and changed. Before the change, the previous password verification needs to be correctly entered before the new password can be entered. As shown in the following figure, the factory default administrator password is Admin.

```
F6:SET


     OSD ACTIVATING HOTKEY
     SWITCH HOTKEY
     SCAN DURATION
     SET PASSWORD
  →  SET SUPER PASSWORD

  NEW PASSWORD        |
  ↑    ↓      ESC  ENTER
  UP  DOWN  EXIT  ACCEPT
```

● **CLEAR THE NAME LIST**

```
F6:SET


     SET PASSWORD
     SET SUPER PASSWORD
  →  CLEAR THE NAME LIST
     RESTORE DEFAULT VALUE
     LOCK CONSOLE

  PASSWORD            . . . . . .
  ↑    ↓      ESC  ENTER
  UP  DOWN  EXIT  ACCEPT
```

This function can clear the NAME settings of all ports. When this function is executed, it needs to verify the administrator's identity password to realize it. If the password is correct, a prompt will pop up: CLEAR ALL THE NAME? "N", enter "Y" for this action to take effect, and then enter keyboard "Enter" to confirm that it takes effect; To cancel this operation, you can enter "N" and then enter "Enter" to confirm the cancellation operation, or enter "Esc" on the keyboard to return directly.

```
F6:SET


     SET PASSWORD
     SET SUPER PASSWORD
  →  CLEAR THE NAME LIST
     RESTORE DEFAULT VALUE
     LOCK CONSOLE

  CLEAR ALL THE NAME?[N]
  ↑    ↓      ESC  ENTER
  UP  DOWN  EXIT  ACCEPT
```

● RESTORE DEFAULT VALUE

This function is to restore the initial setting, and the entry into force of this setting will restore the initial setting of all option functions in OSD menu, so please do this operation carefully. When performing this operation, the administrator's password verification is required. After verification, there is a prompt of "RESTORE DEFAULT VALUE?" N "at the bottom of the window. If this operation is to take effect, please enter" Y "and then enter keyboard" Enter "to confirm its entry into force. To cancel this operation, you can enter "N" and then enter "Enter" to confirm the cancellation operation, or enter "Esc" on the keyboard to return directly.

● LOCK CONSOLE

This feature is used for the OSD menu login password on or off function, By default, this function is turned off. If you need to turn it on, you can enter the setting menu to set it. When setting it, you need to verify the administrator login password, and the setting can be realized only if it is correct. After the setting is successful, you need to type the correct password to further operate the functions of the OSD menu every time you enable the OSD menu. After the setting is successful, the prompt for this item will change to "UNLOCK CONSOLE"

Appendix

Safety Instructions

General

◆ This product is for indoor use only.
◆ Please read all the instructions and use them for future reference.
◆ Follow all warnings and instructions on the equipment.
◆ Do not place this equipment on any unstable plane (such as carts, shelves, tables, etc.). If this equipment falls, it will be built.
Into serious damage.
◆ Do not use this equipment near water.
◆ Do not place this equipment next to or above the radiator or heating equipment.
◆ The enclosure of this equipment is equipped with slots for heat dissipation and ventilation. In order to prevent overheating during operation, do not block or cover the openings.
◆ This equipment should not be placed on a soft surface (such as bed, sofa, blanket, etc.), which will block the fan opening, nor should it be placed in a sealed environment unless proper ventilation has been provided.
◆ Do not spill any liquid on the equipment.
◆ Before cleaning, the power supply of this equipment must be unplugged from the socket on the wall. Please do not use any liquid or foam wiping agent, please use wet cloth for cleaning.
◆ Please use this equipment according to the power type on the label. If you are not sure whether the

power type is available, please contact your distributor or local power company.

◆ This equipment is designed and applied to IT power distribution system with 100V ~ 230V phase-to-phase voltage.

◆ In order to prevent damage to your equipment, it is very important for all equipment to be properly grounded.

◆ Do not place anything on the power cord or connection line, and arrange the wiring path of the power cord and connection line to avoid tripping over it.

◆ If the equipment uses an extension line, ensure that the total power of all products using the line does not exceed the current carrying capacity of the line. Ensure that the total current of all products plugged into wall sockets does not exceed 15A.

◆ Please select equipment such as sudden wave suppressor, regulator or uninterruptible power system (UPS) to help prevent your system from experiencing sudden and instantaneous increase and decrease of power.

◆ Please properly fix the connecting wire and power cord of the system to ensure that nothing presses on the cable.

◆ Do not insert anything into the machine through the slots in the housing, which may come into contact with dangerous voltage points or cause short circuit of parts and lead to the risk of fire or electric shock.

◆ Please do not try to repair this equipment by yourself, please find qualified service personnel to obtain support services.

◆ If any of the following circumstances occur, please unplug the power supply of this equipment from the wall socket and hand it over to qualified service personnel for repair.
   ● Damaged or worn power cord or plug
   ● Liquid is sprinkled into the equipment
   ● The equipment was drenched by rain and water
   ● The equipment has fallen or the enclosure has been damaged
   ● The functions of this equipment have obviously changed
   ● After following the operation instructions, the equipment cannot operate normally

◆ Only the control functions covered in the operation instructions are adjusted, and other improper operations may cause damage, so that more extensive operations by qualified personnel are required to repair.

Frame Installation

◆ Before mounting the rack, make sure that the fixing equipment is safely fixed to the rack and extends to the ground, and the weight of the whole rack can be scattered on the ground. Before starting the work of the rack, install the front and side fixing equipment on a single rack or install the front fixing equipment on a combined plurality of rack.

◆ Please install the rack from bottom to top and install the heaviest thing first.

◆ Ensure that the rack is smooth and stable when extending the equipment out of the rack.

◆ Take care when releasing the spring latch against the equipment slide rail and sliding the equipment into the rack. The track of the slide rail may clip your finger.

◆ After installing the equipment on the rack, carefully unfold the slide rail to the locked position, and then slide the equipment into the rack.

◆ Do not overload the AC supply branch circuit that supplies power to the rack. The carrying capacity of

the whole rack shall not exceed 80% of the branch circuit capacity.

◆ Please ensure that all equipment used on the rack-including power outlets and other power connectors-is properly grounded.

◆ Please make sure that proper air flow is provided for the equipment on the rack.

◆ Please ensure that the operating temperature of the rack environment does not exceed the maximum operating temperature of the equipment set by the manufacturer.

◆ When you are maintaining other equipment on the rack, do not step on or stand on any other equipment.

◆ WARNING: Slide/rail (LCD/KVM) mounting equipment cannot be used in support frame or work area.

Product Specification Parameters

VGA Interface Family Short LCD KVM Switcher Parameters

Functions			HS7100ULS		
Number of computer connections	Direct		1		
	Maximum cascade		16		
Switch Mode			OSD menus, panel keys, hotkeys,		
OSD Toggle Default			Ctrl + Ctrl		
Hotkey Switch Default			Scroll + Scroll + Numbers (01-08)		
Connector	Control Port	Display	17 "Widescreen LED Display		
		Keyboard	1 x USB Type A female head		
		Mouse	1 x USB Type A female head		
		Extension Interface	1 x USB Type A Female Head (Front Extended Keyboard, Mouse Interface)		
	Computer port	Monitor, keyboard and mouse	4 x VGA DB15 Blue Female Head	8 x VGA DB15 Blue Female Head	1x VGA DB15 Blue Female Head
	Power Supply		1 x DC jack		
	Power Supply Specifications		DC 12V4A		
Switchover switch	Connection Port Selection		KVM Operation Panel Numeric Keys		
	KVM Reset		KVM Operation Panel Function Keys		
LED indicator	Computer Select Port		Dual-digit digital tube display LED indicator lamp		
	Computer Online Port		4 x Red	8 x Red	1 x Red
Analog mode	Keyboard and mouse		USB		
Mouse			Touchpad Mouse		
Keyboard			101-key chocolate ultra-thin keyboard		
Maximum Resolution Video			1920 x 1080 @ 60HZ Local		
Scan Interval			3, 5, 10, 15, 20, 30, 40, 60 seconds (default 3 seconds)		
Operating environment	Operating temperature		0-50 ℃		
	Storage Temperature		-20-60 ℃		
	Humidity		0-80% RH, no coagulation		
Body Attribute	Chassis		Metals		

	Product Size	360 x 445 x 45mm
	Appearance Color	Black
	Weight	9.96 KG

VGA Series LCD KVM Switch Specification

Type			1 Port	4 Port	8 Port	16 Port
Model			AS-7100ULS	AS-7104ULS	AS-7108ULS	AS-7116ULS
Computer Connection	Direct Connects		1	4	8	16
	Maximum Connects		1	64	128	256
CPU Port Selection			/	OSD Menu, Front panel buttons, Hot Key, IP Remote Control (Optional)		
Connectors	Console Connector		DB 37PIN			
	PC Connector	Monitor, Keyboard/ Mouse	1 x VGA DB15, USB	4 x VGA DB15, Female Blue	8 x VGA DB15, Female Blue	16 x VGA DB15, Female Blue
	Power		1 x DC Jack			
	Network Port(Optionla for IP)		/	1 x RJ45		
Switch	Connection Port Selection		/	KVM Operation Panel Digital keys		
	KVM Reset		KVM Operation Panel Function Keys			
	IP Module Reset		/	1 x semi-embedded key		
	IP Module Default		/	1 x semi-embedded key		
LED's	Selected		/	Nixie Tube Display		
	Online		/	4 x Red	8 x Red	16 x Red
	IP Network		/	1 x Green, 1 x Orange		
Analog Mode	Keyboard/Mouse		USB			
Resolution (Max)			1920 x 1200 @ 60HZ Local & Remote			
Scan time interval			3, 5, 10, 15, 20, 30, 40, 60s (3s by default)			
Operating Environment	Operating temperature		-10-50˚C			
	Storage temperature		-20-60˚C			
	Humidity		0-80%RH, No Condensation			
Physical Properties	Housing		Plastic	Metal		
	Dimension		50*77*24.5mm	148.4*445*45mm		
	Weight		0.18kg	2.7kg	3.32kg	4.96kg

CAT5 Series LCD KVM Switch Specification

Type		4 Port	8 Port	16 Port	32 Port
Model		AS-7104TLS	AS-7108TLS	AS-7116TLS	AS-7132TLS
Computer Connection	Direct Connects	4	8	16	32
	Maximum Connects	64	128	256	1024
CPU Port Selection		OSD Menu, Front panel buttons, Hot Key, IP Remote Control (Optional)			
Connectors	Console Connector	DB 37PIN			
	PC Connector — Monitor, Keyboard/Mouse	4 x VGA DB15 Female Blue, 4 x USB	8 x VGA DB15 Female Blue, 8 x USB	16 x VGA DB15 Female Blue, 16 x USB	32 x VGA DB15 Female Blue, 32 x USB
	PC Connector — Switch Module Port	4 x RJ45	8 x RJ45	16 x RJ45	32xRJ45
	Power	1 x DC Jack			
	Network Port (optional for IP)	1 x RJ45			
	Remote Control Port	/	/	/	1 x RJ45
	Local VGA Output	/	/	/	1 x HDB-15 Female
Switch	Connection Port Selection	KVM Operation Panel Digital keys			
	KVM Reset	KVM Operation Panel Function Keys			
	IP Module Reset	1 x semi-embedded key			
	IP Module Default	1 x semi-embedded key			
LED's	Selected	Nixie Tube LED Display			
	Online	4 x Red	8 x Red	16 x Red	32 x Red
	IP Network	1 x Green, 1 x Orange			
Analog Mode	Keyboard/Mouse	USB			
Resolution (Max)		1920 x 1200 @ 60HZ Local & Remote			
Scan time interval		3, 5, 10, 15, 20, 30, 40, 60s (3s by default)			
Operating Environment	Operating temperature	-10-50˚C			
	Storage temperature	-20-60˚C			
	Humidity	0-80%RH, No Condensation			
Physical Properties	Housing	Metal			
	Dimension	148.4*445*45mm			
	Weight	2.25kg	2.74kg	3.80kg	4.3kg

HDMI Series LCD KVM Switch Specifications

Features			Single port	4 ports	8 ports	16 ports
Computer connections			1	4	8	16
Port selection				OSD menu, panel buttons, hotkeys		
Connector	Control port	monitor	1 x HDMI female			
		keyboard	1 x USB Type A female			
		mouse	1 x USB Type A female			
	Computer port	monitor	1 x HDMI female	4 x HDMI female	8 x HDMI female	16 x HDMI female
		Keyboard & mouse	1xUSB TYPE B female	4 x USB TYPE B female	8 x USB TYPE B female	16 x USB TYPE B female
	Power		1 x DC jack			
Toggle switch	Connection port selection		/	4xbutton	8xbutton	16 x button
	KVM reset		1 x half embedded button			
LED's	selected		/	4 x green	8 x green	16 x green
	online		/	4 x red	8 x red	16 x red
Analog mode	Keyboard and mouse		USB			
Maximum resolution video			1080P @ 60HZ local			
Scanning interval			3, 5, 10, 15, 20, 30, 40, 60 seconds (default 3 seconds)			
Operating environment	Operating temperature		0-50 ° C			
	storage temperature		-20-60 ° C			
	humidity		0-80% RH, no condensation			
Physical Properties	House		metal			
	size		432 x 155 x 44 mm			
	weight		6.15 KG -7KG			

DVI Series LCD KVM Switch Specification

Type			1 Port	4 Port	8 Port
Model			AS-7100DLS	AS-7104DLS	AS-7108DLS
Computer Connection	Direct Connects		1	4	8
CPU Port Selection			/	OSD Menu, Front panel buttons, Hot Key	
Connectors	Console Connector		DB 37PIN		
	PC Connector	Expansion Interface	/	1 x USB Type A Female (Front expansion Keyboard, Mouse Interface)	
		Microphone	/	4 x Mini Stereo Female (Pink)	8 x Mini Stereo Female (Pink)
		Audio Speaker	/	4 x Mini Stereo Female (Green)	8 x Mini Stereo Female (Green)
		Mouse/ Keyboard	1 x USB Type B Female	4 x USB Type B Female	8 x USB Type B Female
		Monitor	1 X DVI-1	4 x DVI-I	8 x DVI-I
		Mixed Audio Connector	1 x Mini Stereo Female (Black)	4 x Mini Stereo Female (Black)	8 x Mini Stereo Female (Black)
	Power		1 x DC Jack		
Switch	Connection Port Selection		/	KVM Operation Panel Digital keys	
	KVM Reset		/	KVM Operation Panel Function Keys	
LED's	Selected		/	Nixie Tube LED Display	
	Online		/	4 x Red	8 x Red
Analog Mode	Keyboard/Mouse		USB, PS/2		
Resolution (Max)			1920 x 1200 @ 60HZ Local & Remote		
Scan time interval			3, 5, 10, 15, 20, 30, 40, 60s (3s by default)		
Operating Environment	Operating temperature		-10-50°C		
	Storage temperature		-20-60°C		
	Humidity		0-80%RH, No Condensation		
Physical Properties	Housing		Plastic	Metal	
	Dimension		50*77*24.5mm	148.4*445*45mm	
	Weight		0.3kg	3.69kg	4.97kg

Warranty Conditions

The maximum compensation borne by the Company shall not exceed the amount paid by the customer for the product. In addition, the Company does not bear the direct, indirect, special, accidental or consequential damages caused by the use of this product or the CD and documents attached to this product.

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