2, 4 Control Terminal 32-port Matrix Digital KVM Switch

KMD-xx32VM 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
KMD-3432VM	4 remote users, 1 local users, 32 controlled ports, dual power supply, dual 1000M Ethernet
KMD-3232VM	2 remote user, 1 local user, 32 controlled port, dual power supply, dual 1000M Ethernet
KMD-3416VM	4 remote users, 1 local users, 16 controlled ports, dual power supply, dual 1000M Ethernet
KMD-3408VM	4 remote users, 1 local users, 8 controlled ports, dual power supply, dual 1000M Ethernet
KMD-3216VM	2 remote users, 1 local users, 16 controlled ports, dual power supply, dual 1000M Ethernet
KMD-3208VM	2 remote users, 1 local users, 8 controlled ports, dual power supply, dual 1000M Ethernet
AI7416TLS/AI9416TLS	With 17" / 19" monitor, keyboard &mouse; 4 remote users, 1 local users, 16 controlled ports, dual power supply, dual 1000M Ethernet
AI7408TLS/AI9408TLS	With 17" / 19" monitor, keyboard &mouse; 4 remote users, 1 local users, 8 controlled ports, dual power supply, dual 1000M Ethernet
AI7216TLS/AI9216TLS	With 17" / 19" monitor, keyboard &mouse; 2 remote users, 1 local users, 16 controlled ports, dual power supply, dual 1000M Ethernet
AI7208TLS/AI9208TLS	With 17" / 19" monitor, keyboard &mouse; 2 remote users, 1 local users, 8 controlled ports, dual power supply, dual 1000M Ethernet
KMT-351VM	USB interface virtual media KVM conversion module
KMT-232	232 serial interface KVM conversion module
KMT-550	HDMI + USB interface conversion module
KMT-550DVI	DVI + USB interface conversion module

Packaging Contents

The multi-computer KVM switch package includes the following contents:
◆ Matrix KVM Switch Master x 1
◆ KVM Conversion Module x8/16/32 (User Optional)
◆ Power Cord x2
◆ Rack Mounting Kit x 1
◆ User Manual (CD-ROM) 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 equipment 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 the User Manual

This user manual will assist you to effectively use product functions including equipment 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 equipment system, including its functions, features and advantages, and describe and 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 Switch.

Chapter 4 Remote Web Operation: This chapterdescribes the login of remote WEB and the function setting operation of related pages.

Chapter 5 Client KVM Session Operation: This chapter describes the relevant function settings and operations of the client KVM operation interface.

Chapter 6 OSD Operation: This chapterprovides a complete OSD (Screen Menu) introduction of the KVM Switch and explains how to operate and use it.

Appendix: It mainly provides specification table and other technical information related to KVM switch.

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 1. Introduction

Product Introduction

Matrix digital KVM switch is an intelligent equipment that provides IT administrators in large server rooms with efficient management and access control of multiple servers. The switch is an IP-based KVM control equipment 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 equipment through high-speed virtual media transmission.

This digital matrix KVM uses TCP/IP protocol for communication transmission, so users can access it through their IP addresses from local area networks, wide area networks or the Internet-whether the connected computers are in halls, streets or anywhere in the world. Remote operators can log in and control through browsers and using independent graphical applications.

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 equipment 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.

By using the keyboard to enter hot key combinations in the full-screen GUI interface, the local control side operation can be easily completed. It is also very simple to monitor the activity status of each equipment under the architecture. Administrators can also use the function of "one screen and multiple displays" to monitor and operate multiple different pictures, and the keyboard and mouse can freely switch and operate between different pictures.

The switch uses an RJ-45 connector that allows the server to be connected using a CAT 5e cable. This space-saving innovation allows a 16/32-port switch to be easily installed on a 1U system rack, and the installation architecture can utilize the network wiring built in most modern commercial buildings. Installation is fast and simple; Just insert the cable into the appropriate port. Since the switch can directly obtain the input instructions of the keyboard, there is no need for tedious software installation procedures and compatibility issues.

Since firmware can be updated over the network, you can download the latest firmware version from our website to enable your equipment to have the latest improvements. KVM over IP Switcher has a powerful security mechanism, which can provide the fastest, most reliable and most effective way for users to remotely access and manage multiple server installation architectures throughout the world.

KVM over IP switcher supports UID function of computer module and can store connection port information, such as computer module ID, type, computer module name, operation mode, department information, geographical location, transmission settings, etc. Administrators can conveniently establish classification and identification of controlled servers according to this information. This series supports advanced virtual media functions, allowing you to directly transfer and map USB storage media to the server

at a higher speed. The virtual media function allows you to handle file transfer, install applications and operating systems, and you can update your overall system from a remote control terminal anywhere in the world.

This series of products provide dual power supply. When the first group of power supply is abnormal, the second group of power supply will be automatically activated. In addition to supporting dual power supplies, it can also prevent abnormalities in the power socket in the computer room. If you have multiple power sources in your computer room, you can connect the power supply to different power sources. In this way, when one of the power supplies cannot supply power, the switch will automatically adjust to obtain power from the second power supply to ensure the normal operation of the system.

This series of products support temperature and humidity sensors and can control internal fans. The sensor will adjust the fan speed to the optimal operating speed according to the temperature in the machine room-reduce the fan speed when necessary, save energy consumption and prolong the service life of the fan and switch.

Product Characteristics

Hardware

◆ High density connection ports-RJ-45 connection ports and Cat 5e/6 online provide up to 32 ports
◆ Stand-alone channel that provides 2/4 sets of remote connections for KVM over IP access
◆ Two sets of built-in 1000 Mbps network adapter cards provide local area network redundancy or dual IP operation capabilities
◆ Supports PS/2, USB, and serial port (RS-232) connections
◆ The local control side supports USB keyboard and mouse
◆ Supports cross-platform server environments: Windows, Mac, Sun, Linux-based serial port equipment
◆ High Video Resolution-Local Control Video and Remote Video Resolution Up to 1920x1200 @ 60Hz
◆ Up to 8, 16, 32 servers can be monitored at a single level, or up to 1024 servers can be managed through a cascade of ports
◆ The keyboard and mouse connection port of the controlled computer adopts Keep Online technology to simulate the keyboard and mouse, so that the equipment is safe and stable, and the switching is rapid.

Administration

◆ Provides up to 3000 groups of user accounts, and users can be divided into 3 levels according to their permissions.
◆ Supports Terminating Online-Administrators can terminate running connection jobs
◆ Supports log generation and conditional query for KVM equipment systems
◆ Supports SYS LOG Service Function of Computer Room Management System
◆ Supports firmware updates
◆ Connects equipment port information settings and storage functions, customizing equipment connection information
◆ Port sharing mode supports multiple users to access a single server

◆ After user rights and group management, users can be divided into super administrator, administrator and ordinary user levels.

◆ Supports permission setting, administrators can set different levels of user operation permissions and ports

◆ Embedded WEB management server, browser login management mode, fast and reliable

Interface and Operation

◆ The local control terminal can use the OSD menu to switch ports and operate keys and mice.

◆ Supports multi-platform client systems (Windows, Mac OS X, Linux, Sun)

◆ Multiple Browser Support: IE, Chrome, Firefox, Safari, Opera, Mozilla, Netscape

◆ Pure Web Technology Browser-based UI that administrators do not need to install Java packages to manage

◆ Users can start multiple virtual remote desktops on the same remote login end to manage multiple servers

◆ Unique control panel interface can be used to set video, keyboard and mouse parameters.

◆ Supports stepless scaling of full screen or virtual remote desktop, and displays in any scale or size.

◆ The multi-screen display mode can be used by both the local control terminal operator and the remote visitor at the same time.

◆ Unique screen adjustment settings

◆ The sampling speed of the mouse pointer is set according to the bandwidth of different networks to ensure effective following speed.

◆ The display modes of two mouse operations can be set according to the user's habits.

◆ Advanced security mechanism, asymmetric encryption mechanism to ensure the security of receiving and receiving data

◆ Supports filtering of IP addresses, blacklisting of illegal and potential IP risks

◆ MD5 encryption and random keys to ensure secure login from the browser

◆ Strict encryption design, with asymmetric sending and receiving two sets of keys to encrypt and protect keyboard/mouse, display and virtual media data to ensure the security of network transmission

◆ Can set access and control server permissions for users and groups

◆ Supports reading, writing and copying of files from USB storage equipment

◆ Can be used at the USB-enabled server operating system and BIOS level

◆ Video compression rate adjusts video quality to provide optimal data transmission speed

◆ The video frame rate is set to allow the user to compress the data traffic to achieve the best transmission amount under the condition of low frequency width.

◆ Supports DDC communication and adapts to various graphics card equipment.

◆ Advanced FPGA Graphics and Video Processor with High Speed, Reliable, Low Delay and High Quality Processing

◆ High performance graphic method to provide optimal image quality

◆ Supports full display or adjustable window display

◆ Mouse dynamic synchronous display function, automatic calibration function, free switching function between virtual desktop and local desktop

◆ Server BIOS level access without system compatibility concerns

Hardware Requirements

Remote User Computer

Remote user computers (also known as client computers) are computers that users use to log in to switches remotely through the network. These computers must be equipped with the following equipment:

◆ 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
◆ To ensure usage efficiency, we recommend that the Internet be connected at a minimum speed of 2Mbps.
◆ Windows XP and above are recommended for the operating system.
◆ Before connecting the equipment, the control software supporting this product must be installed (please refer to the corresponding chapter for the installation steps).

Server

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

◆ A set of VGAs, SVGA ports
◆ USB KVM Module Cable Connection: A Set of Type A USB Ports to USB Master Controller
◆ PS/2 KVM Module Cable Connection: 6-pin mini-DIN Keyboard and Mouse Ports
◆ 232 Serial KVM Module Cable Connection: A Set of Type A USB Ports and 232 Main Controller (Optional)

KVM Module Cable

◆ Cat 5e (or above) cable is required to connect the KVM over IP switch to the KVM module
◆ The KVM over IP switch must be use with that following KVM module

Functions	Module
Connect to an equipment with a PS/2 connection port	KMT-250
Connect to equipment with USB connection ports (all platform PCs, Mac, Sun)	KMT-150
Connect to an equipment with a USB connection port and support for virtual media	KMT-151V
Connect to serial port equipment	KMT-350
Users can freely choose PS/2 or USB connection port equipment according to their use.	KMT-151

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 higher
	Sun Solaris	8 or higher
Mac		OS 9.0 to 10.6 (Snow Leopard)
Novell	Netware	6.0 or higher

Browser

This product supports the following browsers through which users can log on to the KVM over IP switcher

| Browser	Version
Chrome	23.0 and above
Firefox	48.0.2 and above
IE	10 and above
360	8.1. 1 and above (speed mode)
Sogou	6.0. 5 and above (speed mode)

KVM Conversion Module

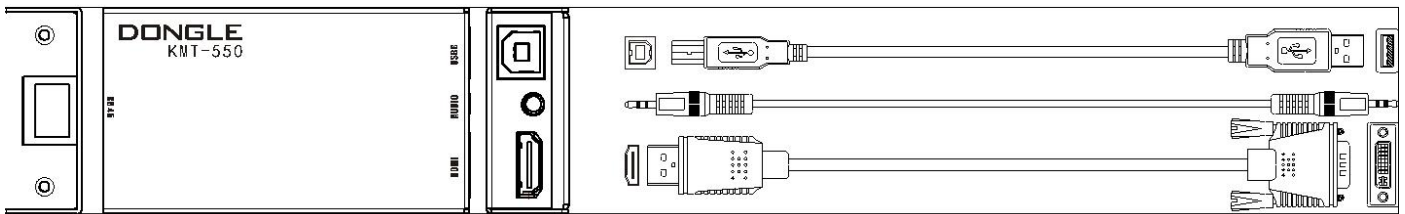KVM equipment provide a variety of connection conversion modules to select according to the user's usage:
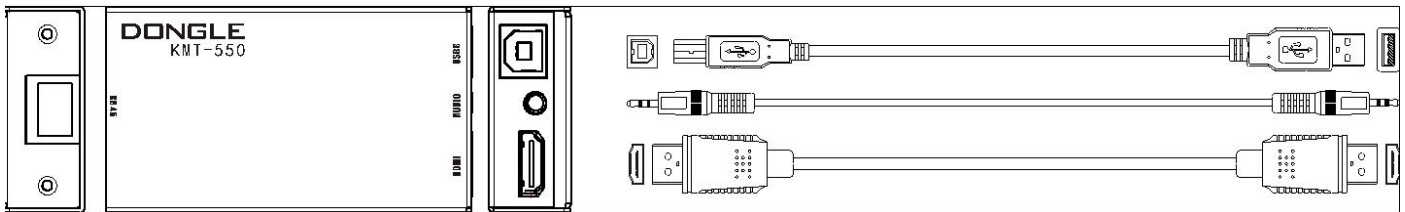
◆ KMT-232 Dongle VGA + USB (Type A)
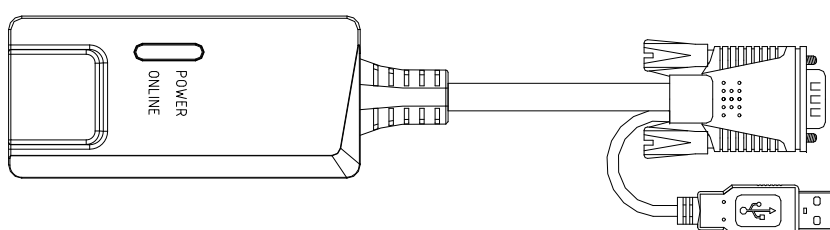
◆ KMT-232 Dongle Serial Port (DB9 Female Head) + DC5V Source + USB to DC5V Power Cord (or DC5V Power Supply Optional)
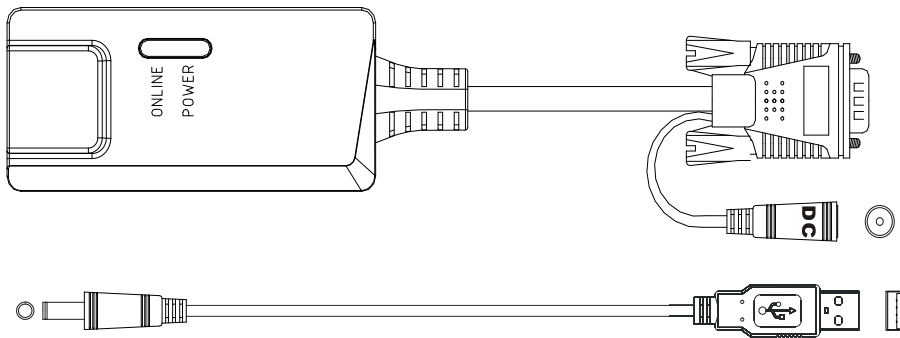
◆ CAT5 Connect to Dongle : DVI + USB(Type A)

◆ CAT5 Connect to Dongle : HDMI + USB(Type A)

Note: The length of the connection cable between the conversion module and the KVM switch will affect the quality of the display screen. Please select CAT 5e/6 line to connect with KVM switch according to the scope of use, and the distance of connecting line should be controlled within the range of ≤ 60 meters.

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 higher
	Sun Solaris	8 or higher
Mac		OS 9.0 to 10.6 (Snow Leopard)
Novell	Netware	6.0 or higher

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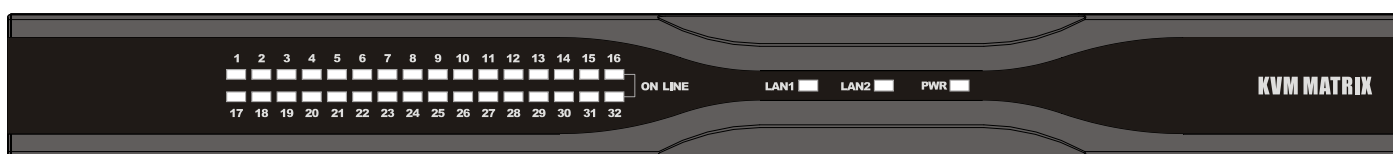
Components

Front View

8 Controlled Port Front Panel
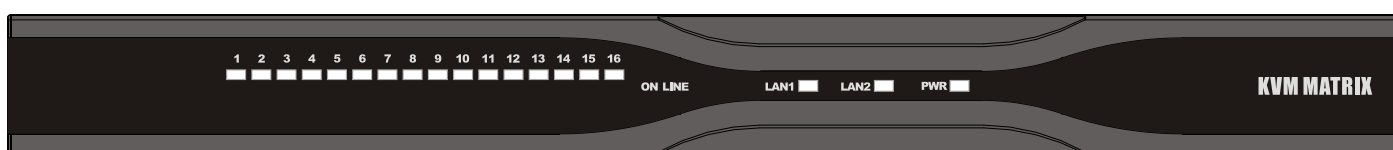
16 Controlled Port Front Panel


32 Controlled Port Front Panel

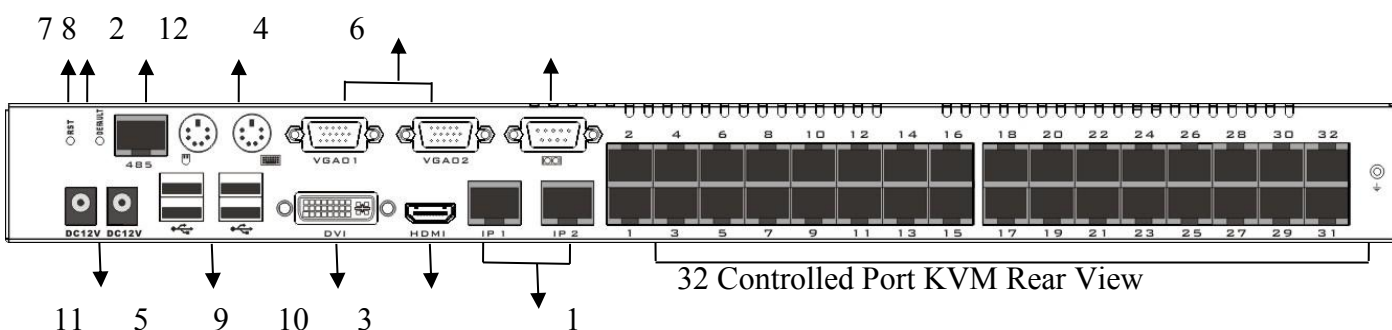| No.	Components	Function Description
1	Controlled port LED indicator	Each number represents the serial number of a controlled port, and an LED indicator is embedded inside. The user can judge the current working condition and usage of the controlled port equipment according to the embedded LED indicator. ● The LED is lit, indicating that the controlled computer with the corresponding serial number is in the connected working state, and the user with permission can select this port for corresponding operation and control. ● The LED lamp goes out, indicating that the computer at the controlled end corresponding to the serial number is disconnected from KVM equipment, or the computer at the controlled end is not powered on.
2	Power indicator	The LED indicator marked 【LAN1】 and 【LAN2】indicates the Gigabit Ethernet operation indicator, and the 【PWR】 LED indicator indicates the power indicator. The equipment operation is that the indicator will be lit.

Rear View
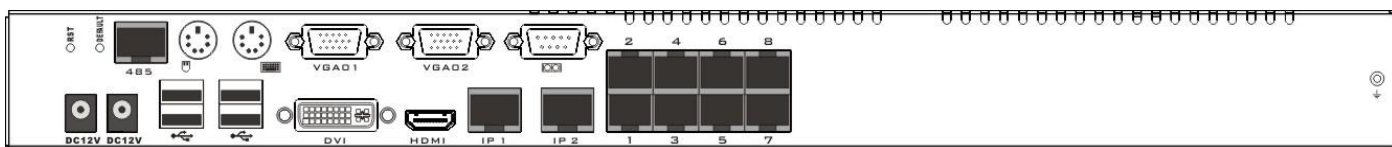
8 Controlled Port KVM Rear View
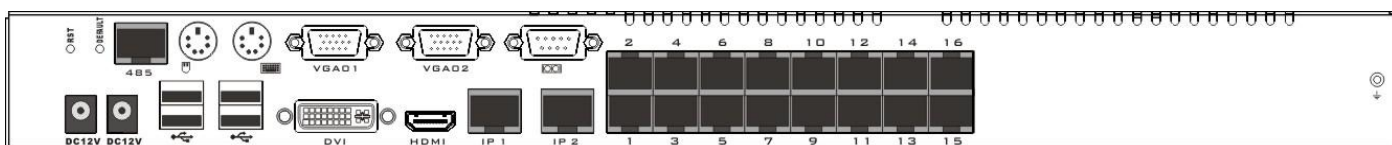
16 Controlled Port KVM Rear View

32 Controlled Port KVM Rear View

No.	Components	Function description
1	KVM Connection Port	Plug the Cat 5e cable connecting the KVM module (to the server) and the switch into this port.
2	485 Extended Port	For connecting 485 control mode equipment, remote control operation can be carried out through the equipment.
3	Gigabit Ethernet Port	Please connect the network cable to this port, with 【IP1】 as the main network interface and 【IP2】 as the backup network interface.
4	VGA Output Port	Connect to a local VGA display with a resolution of up to 1920x1200 @ 60HZ
5	USB keyboard and mouse interface	Connect the local USB keyboard and mouse interface, USB TYPE A type.
6	232 serial port control port	Connect extended 232 serial port control equipment.
7	Reset key	Embedded reset button.
8	Restore Default Settings Key	Embedded key, long press for 5-8 seconds will restore the factory default setting.
9	DVI video output port	Connect to a local DVI display with a resolution of up to 1920x1200 @ 60HZ
10	HDMI video output port	Connect to a local HDMI display with a resolution of up to 1920x1200 @ 60HZ
11	DC Power Interface	The main and standby power supply access mode is adopted, the two power supplies can be switched seamlessly, and AC220V mains supply is connected. Attention should be paid to the need for good grounding.

12	PS2 keyboard and mouse interface	Connect the local PS2 keyboard and mouse interface,

Rear side of LCD KVM Console:

Overall LCD KVM Console 3D picture:

# Chapter 2.Hardware Installation

Stacking and Installation

The KVM switch can be placed on any suitable plane and is sufficient to safely support the equipment 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.
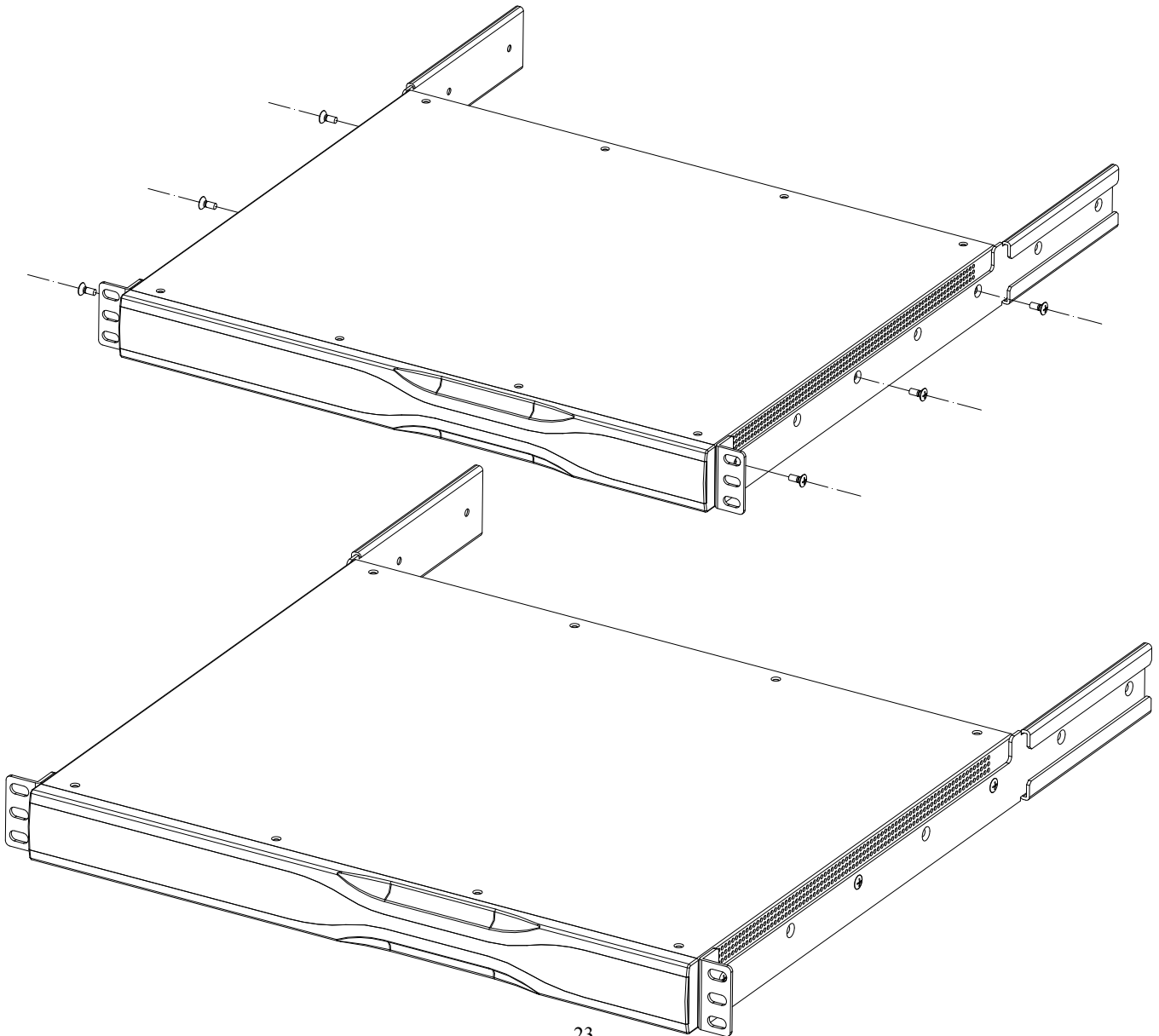

Frame Installation

1、 Remove the three spinning wires on the left and right sides of the front end of the equipment (a total of two groups of spinning wires).
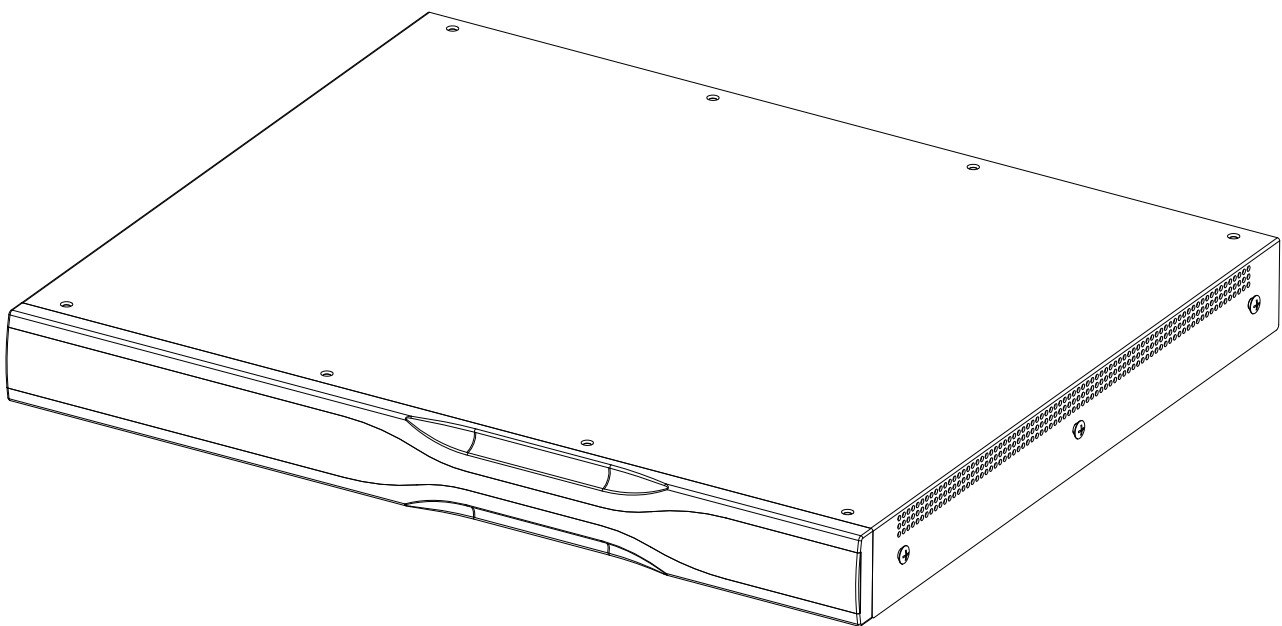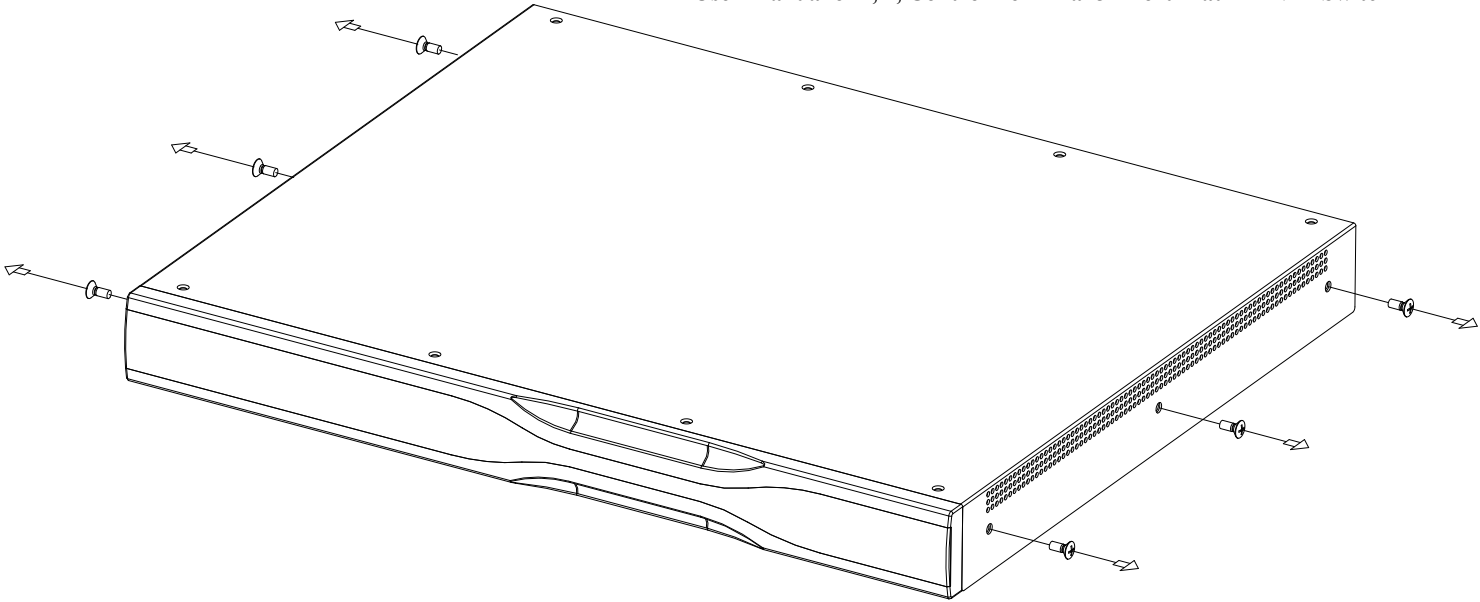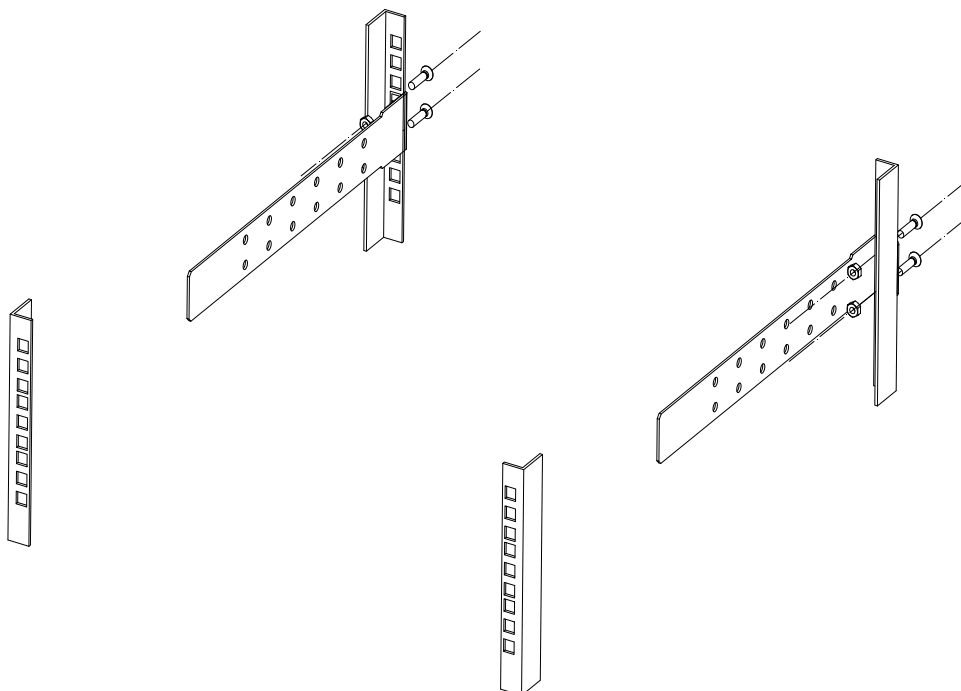
2、 Use the screws provided by the rack mounting accessory package of this package to lock the rack fixing piece on the front end of the equipment.

3、 Install the rear fixing bracket piece at the corresponding position of the cabinet as shown in the following figure.

4、 Firstly, the KVM main machine with the bracket installed is connected with the bracket installed on the frame and installed in the chute of the bracket, then the KVM switch with the fixing piece installed is installed on the frame, the installation hole of the fixing piece is corresponding to the installation hole on the frame, and the frame installation screw in the installation package locks the fixing piece to the front end of the frame.
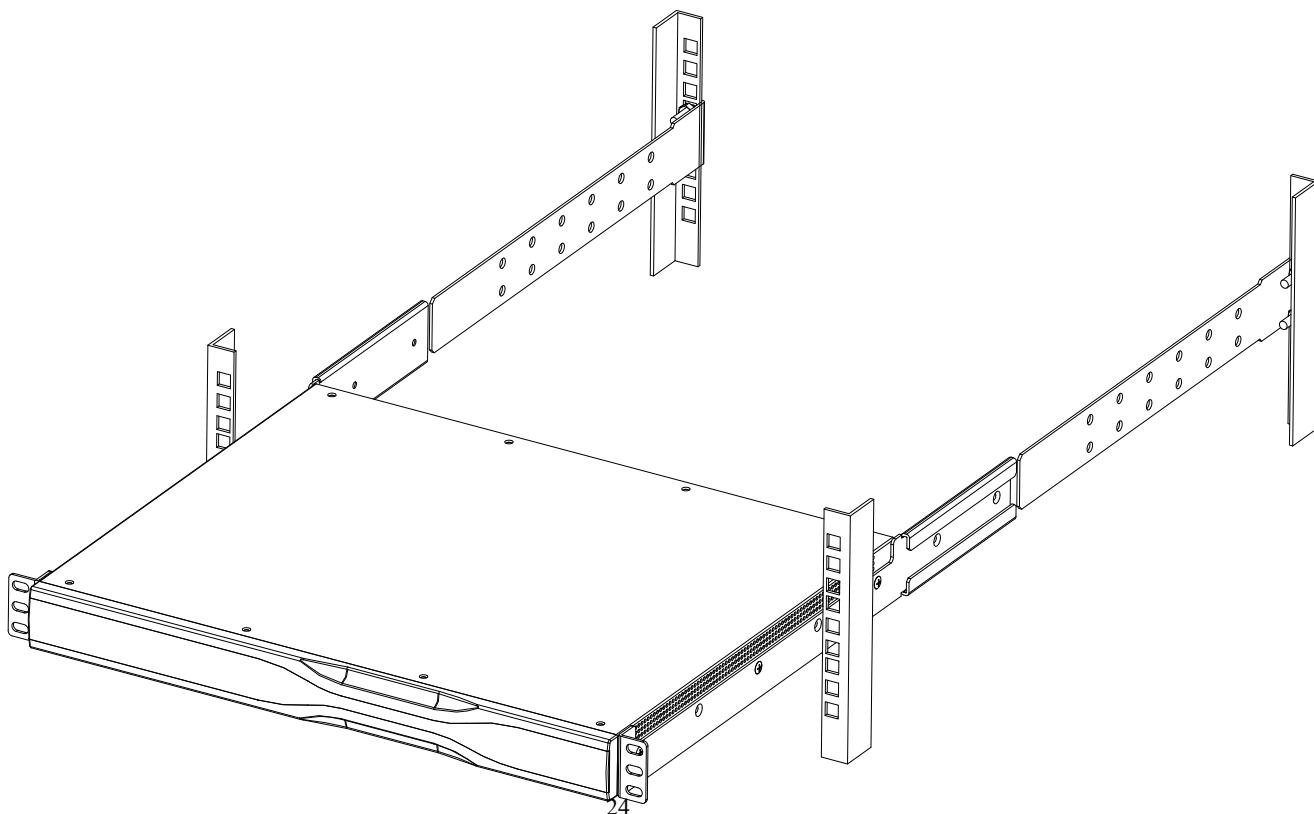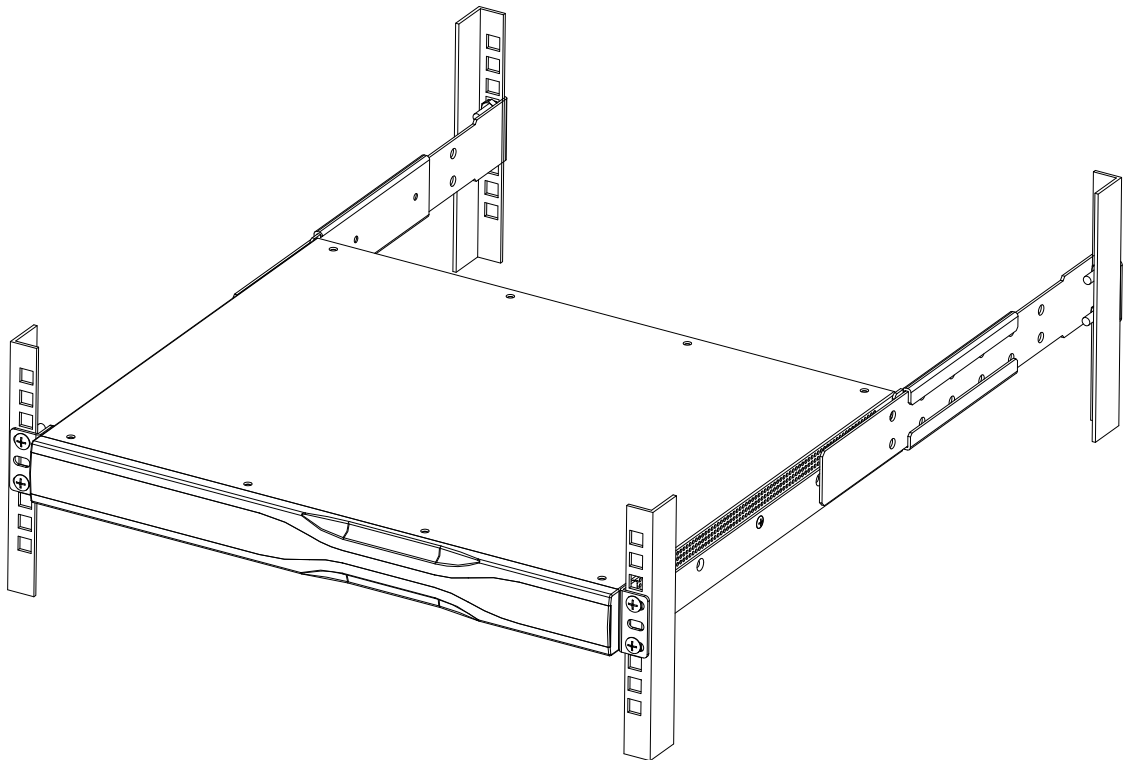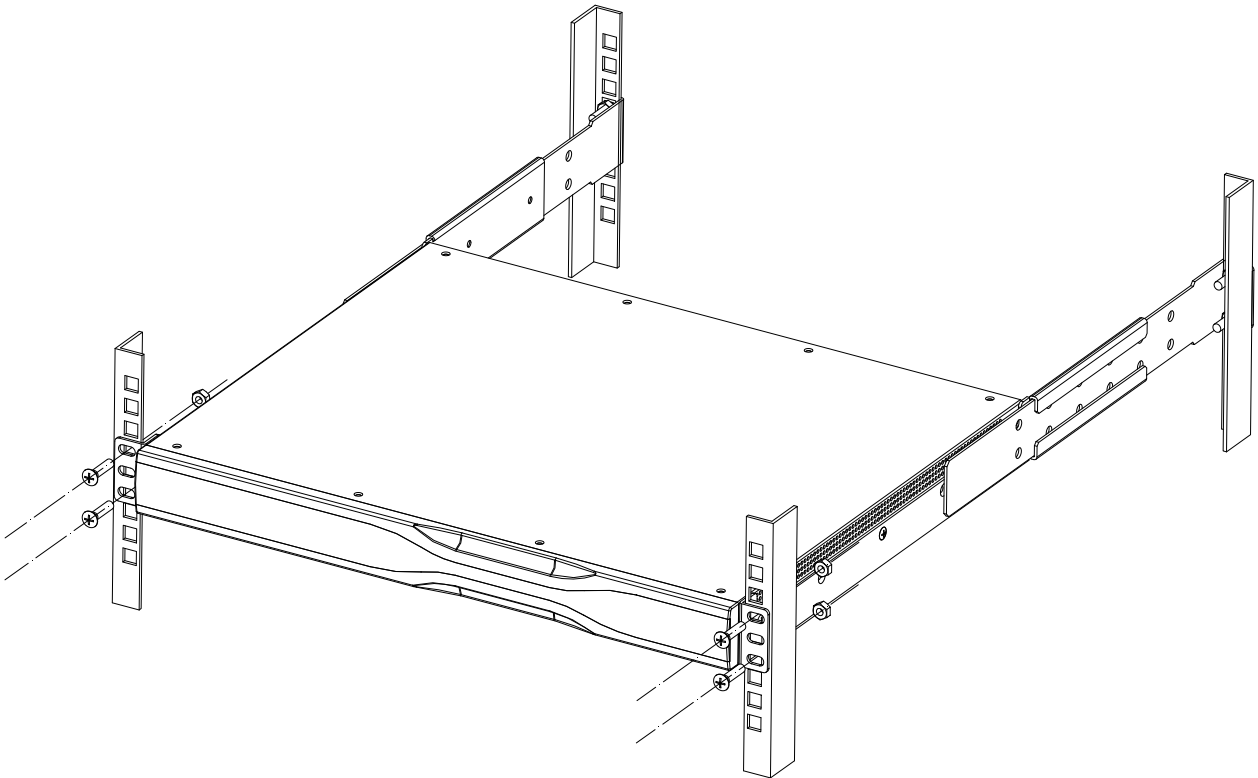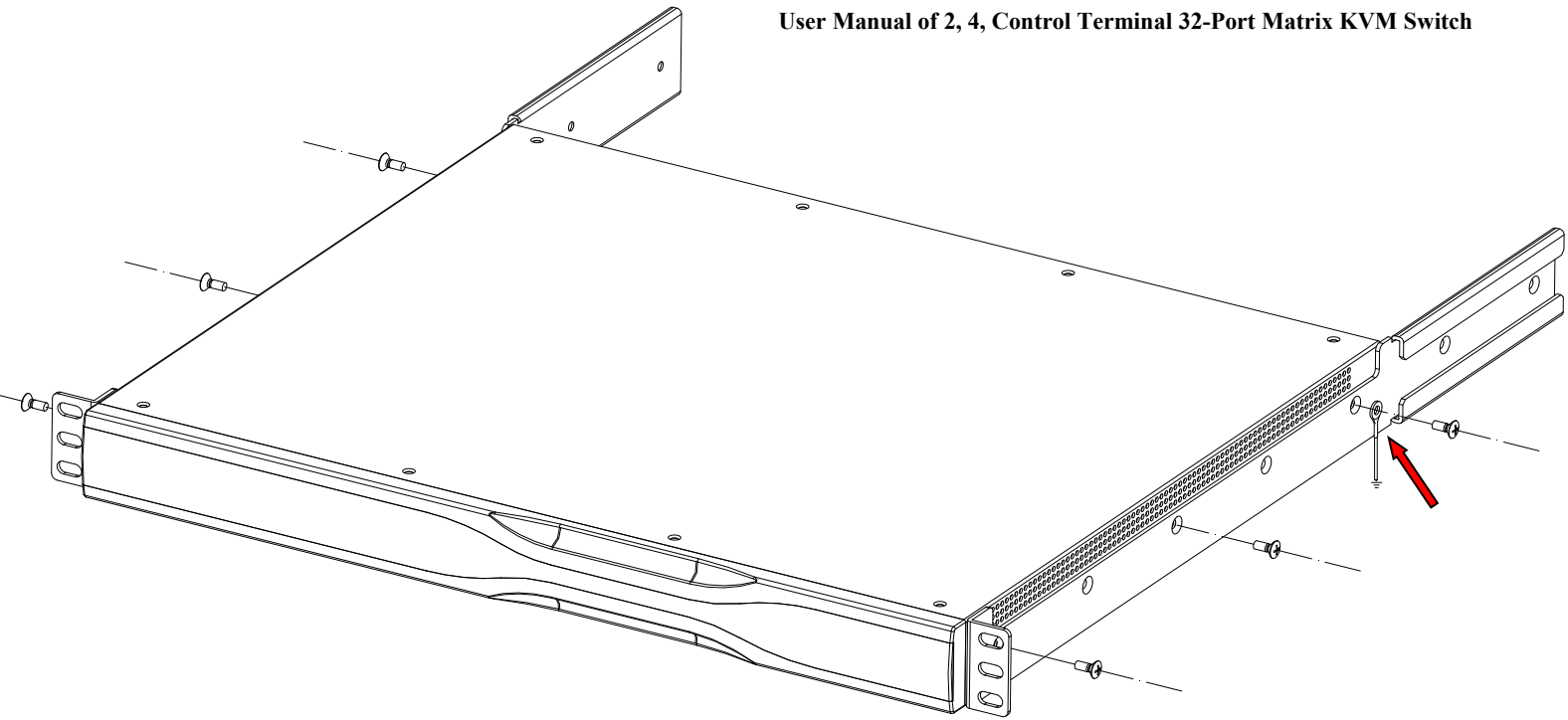
Single Equipment Installation

Note: Please confirm the power-off state of the equipment before installation. In order to prevent the equipment from being damaged during installation, please make sure that all installed equipment has good ground 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. Plug your USB keyboard and mouse into the USB control port on the switch's back panel.
2. Connect the video signal cable of the VGA monitor to the VGA console port and turn on the power.
3. Use a Cat 5e cable to connect any available KVM port to the computer-side module, which needs to be suitable for the server you are installing.
4. Use a set of KVM conversion modules corresponding to this product, connect VGA to the interface of the video card, and connect a USB or PS2 keyboard and mouse to the corresponding interface. (If you are using a serial conversion module, please prepare a DC5V power adapter or a USB DC power conversion cable).
5. Connect the network cable to the network port of RJ45.
6. If using the extended 485 control interface, please connect the 485 line to this interface. (Optional feature)
7. If using the extended 232 serial control interface, connect the 232 DB9 connector to this interface. (Optional feature)
8. Connect one end of the AC power cable to the power jack of the equipment and the other end to the AC power jack or the power jack of the PDU.

Note: 1. This product adopts redundant power supply design to ensure the effective function of the equipment guarantee function. Please connect the two redundant port power supplies to two different power distribution boards or two different PDU power controller lines. To ensure that when one power supply fails, the other power supply can seamlessly switch and provide power supply.

2. If the installation environment of this product requires ground protection, please connect the ground wire to the corresponding screw of the equipment and connect it to a suitable ground signal access terminal to achieve effective electrical protection. (As shown in the red circle below.)

3. When accessing the IP network, please do the corresponding configuration and network debugging before use, and then connect to the network you want to connect to, otherwise the remote control may not work properly due to connection failure. (For the use and debugging method of IP network, please refer to the related chapter of network setting.)
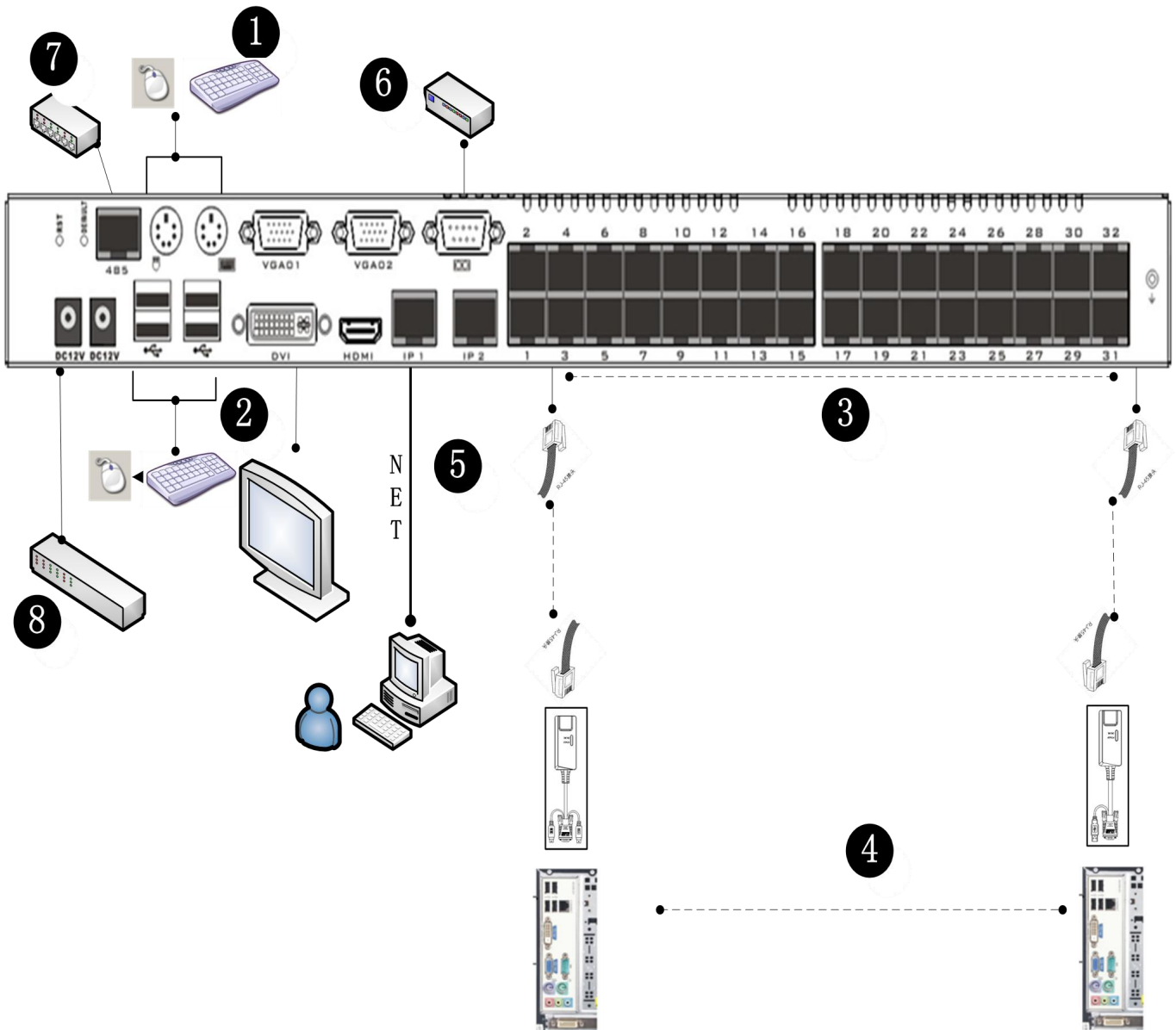
Chapter 3. Basic Operation

Hot Plug

The KVM switch supports hot-plug function. With the switch turned off, you can remove and insert components by unplugging the cables connected to the computer's connection port. To make the hot plug function work properly, please follow the steps below:

Hot-plug Computer Connection Port

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

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

Hot-plug Control Port

This product also provides the hot-plug function of the keyboard, mouse, and monitor on the control terminal. This product provides two types of keyboard and mouse interfaces. Users can select the corresponding equipment connection type according to the use situation and perform corresponding control operations.

Note: If both the USB and PS2 keyboard and mouse equipment are connected at the same time, please do not use both types of equipment at the same time, otherwise, the keyboard and mouse of the controlled computer equipment may respond abnormally.

Connection Port Selection

In use of KVM switch, you can choose two methods to quickly switch to any computer connected to KVM: local OSD menu screen selection, remote user WEB interface selection.
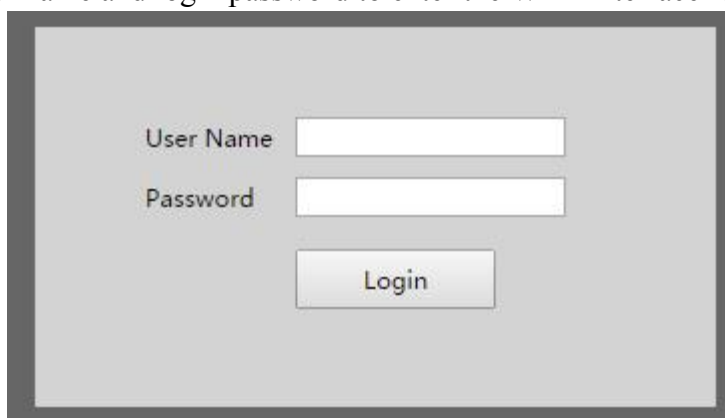
Local OSD Menu Screen Selection

Local users can use the connected USB keyboard hotkey to enable the OSD menu to select and switch ports. The default startup hotkey is 【CTRL】+【CTRL】. Use the keyboard's arrow keys to perform menu cursor

movement operations. (For details, please refer to the relevant sections of the OSD operation.)

Remote User WEB Interface Selection

A remote user can remotely access through a network through a computer connected to this product. Enter the target IP address of the setting and configuration access in the address bar of the browser to perform remote connection. The default IP address is 192.168.0.10. You can also log in to the WEB interface to change the IP address (Please refer to the relevant chapters of Remote WEB Interface Operation for details of operation). After the correct connection, the login window will appear as shown in the following figure. Enter the correct user name and login password to enter the WEB interface for corresponding operations

Power off and Restart

If you need to power off the KVM switch, perform the following operations before turning it on again:
1、 Turn off the power switch connected to the KVM.
2、 Turn off all computers connected to the KVM switch.
3、 Wait about 10 seconds, and then reconnect the power of the KVM switch.
4、 Power on the computer.

Note: If the KVM connection cable of the PS2 you choose is connected to the controlled computer, you must connect the PS2 cable to the controlled computer before restarting, and perform the power on operation, otherwise the keyboard and mouse will not operate normally.
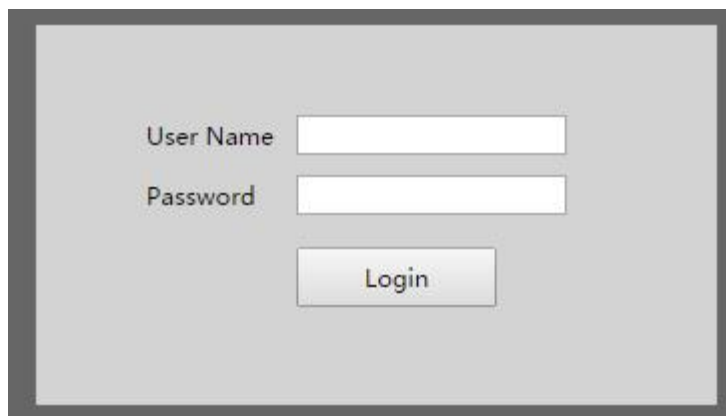
Chapter 4.Remote WEB Operation

Introduction

This chapter explains how users use remote WEB pages to introduce and set up relevant functions of KVM remote operation. Through the content introduction of this chapter, you can know how to set, interact, query status, log query, system setting, permission setting, system maintenance and other application and operation methods for KVM equipment through the GUI interface of embedded WEB.

First Time Setting

After the user installs the KVM equipment, the super administrator must set user operations for the equipment, including network parameter values and changing the default super administrator login, setting the internal date and time, and account permissions for user login. The most convenient way to set it up for the first time is through a local PC and the equipment's network port 【IP1】 to perform connection setting console operations.

The administrator needs to prepare a laptop with a network interface and a network cable that can be connected to the KVM network port. Before connecting, the administrator must set the IP address of the laptop's network card to 192.168.0.X (the IP address cannot be 192.168 .0.10), the gateway address is 192.168.0.1, and it can be connected to the KVM's network port IP1 after setting it up. Open the browser page in the computer, enter the KVM access address 192.168.0.10 in the address bar and connect, you will see Go to the following login interface:

The factory-set user name is admin and the login password is admin. After entering it correctly, you can log in to the main interface for the next operation.
● Please check if the system date and time of this product is correct. You can adjust the required date and time settings.
● If the network you want to connect to is not the default network provided by this product, you can adjust the IP address in the network settings.
● You can also check the firmware version of the product. If you have the latest firmware update version upgrade package, you can also upgrade it during system maintenance.
● If you have restrictions on IP address access, you can also set them in the IP blacklist to restrict access

to restricted IP addresses.
● New products have only one user by default. You can increase the number of users and corresponding permission settings as needed.

The above operations may be the settings to be made when you visit for the first time. We will describe the specific operations in detail in the following introduction.

Main Interface of Web Browser

After the user successfully logs in, the user's operation main page will appear. Depending on the browser you use, the operation main page may be slightly different. The following figure shows the main interface after successful login. The red box indicates different work areas, which are marked with numbers here. We will explain them below.
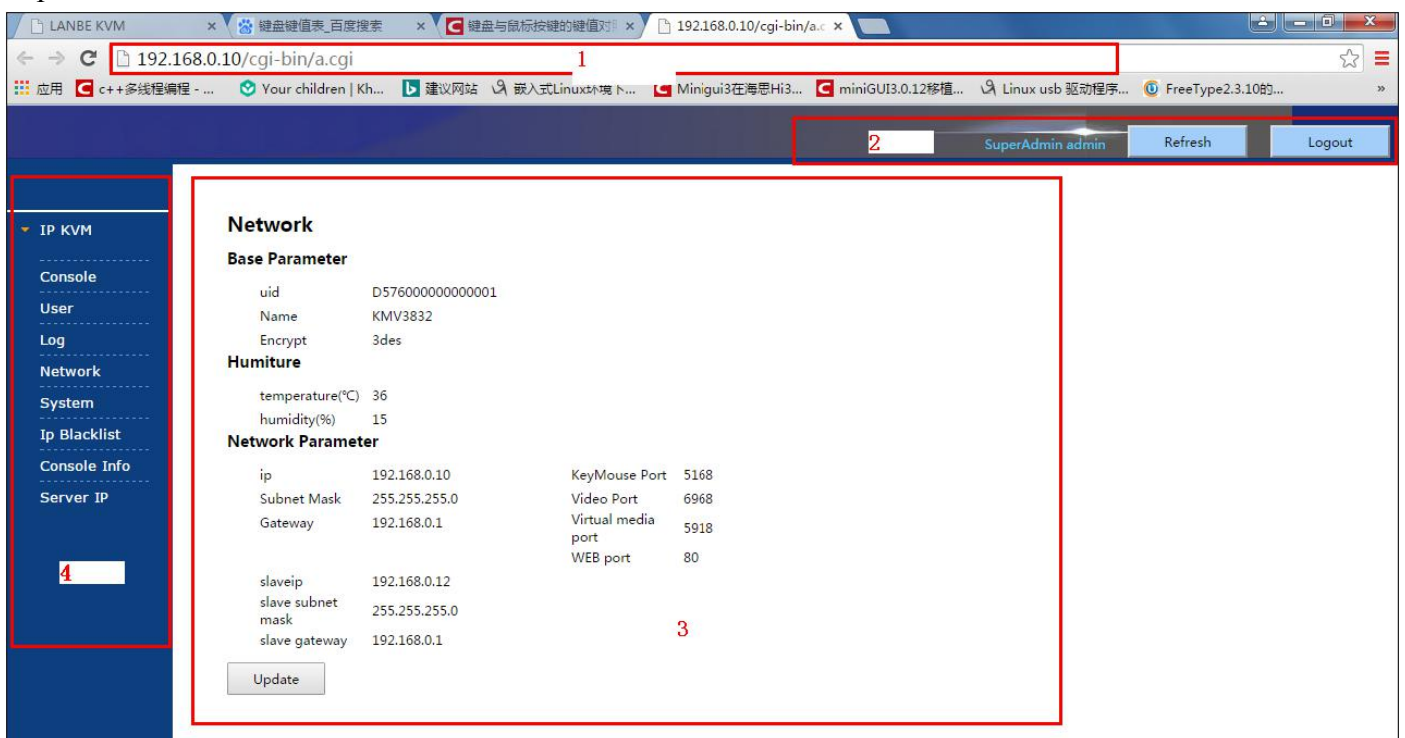
1 **Browser's Address Bar** The user only needs to enter the IP address of the equipment

2.**WEB Page Status Bar** The information of the logged-in user is displayed in the upper right corner of the page. The user can refresh the current page and exit the page through the 【Refresh】 and 【Logout】 buttons.

3. Side Function Option Column The main function column of the equipment's built-in operations. The user can perform the corresponding function execution by clicking the mouse. The operation and display are in the live interactive display area.

4 **Interactive Main Display Area** This area is the main work area, and the content that appears is the content of the function menu column and the operation option content selected by the user.

Feature Option Bar

Function Name	Description
Equipment Management	Display the overall information of the connected controlled equipment. Users can describe and modify the information of the controlled equipment related to the equipment within the operation authority according to their own permissions, and perform the functions of connecting and operating with the controlled equipment.
User Management	The user management page is used to create and manage users and groups. Users can be divided into three levels according to their permissions. Users at different levels can set corresponding permissions.
Log Management	Log management can provide administrators with complete user access and operation log query, which can be classified and searched according to time, type, user, etc., to facilitate administrator's equipment maintenance and management.
System Management	System management provides viewing and modification of system parameters, temperature and humidity parameters, and network configuration parameters. Administrators can change the configuration parameters of the system to suit the hardware equipment settings of the actual equipment according to the requirements of the environment.
System Maintenance	System maintenance allows administrators to update the equipment's firmware version, set the system time, and remotely restart the equipment.
IP Blacklist	The IP blacklist provides administrators with IP address access settings that can be restricted to protect system equipment from logins with special risk IP addresses.
Equipment Maintenance	Equipment maintenance provides administrators with information about the controlled equipment connected to this KVM equipment. It can query the connected equipment or delete useless equipment information according to the application.

The detailed operation and use of each function are introduced in the following sections.

Equipment Management
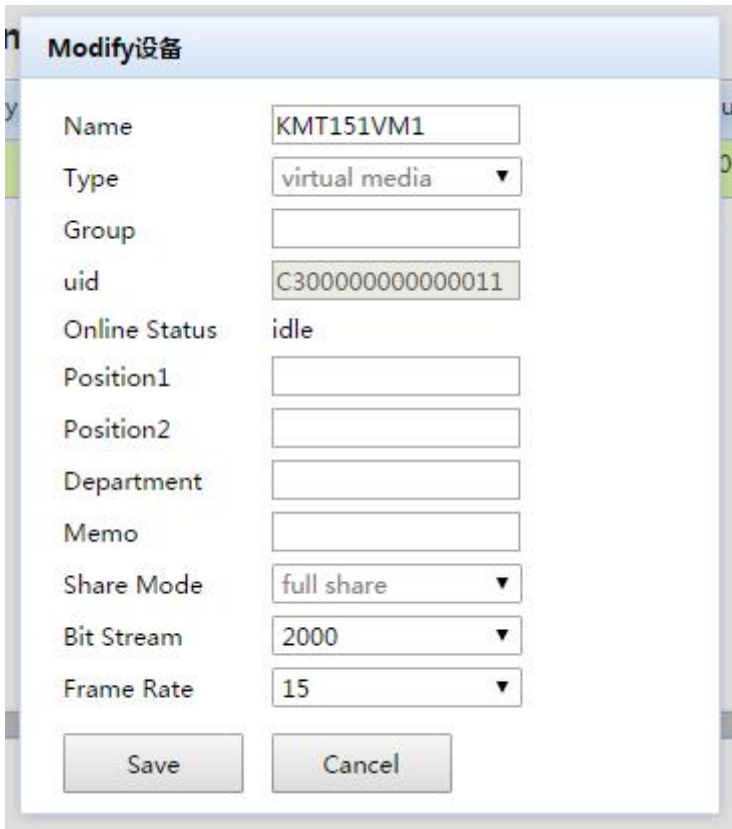
The main interface of the equipment management displays the computers connected to the controlled port in a list. Administrators and users can view the information by name, type status, port number, and geographical location information. For KVM sessions, please The mouse selects the equipment whose status of the corresponding port is "Idle" in the 【Client Operating】column, and clicks the icon " 🖥 " to connect to the KVM session. After the connection is successful, a remote operation client screen will pop up, and the user can perform the corresponding operation. (Please refer to the following chapters for software operation of the client)

Note: Before using a KVM session, you need to install the client's installer on your computer first. For the

installation steps, please refer to the following sections.

The client software currently supports the WINDOWS series operating system. If there is the latest version, please pay attention to the latest software version update of the product.

Users with administrator rights can also modify and modify the relevant information and settings of the port-connected equipment. Clicking on the icon " " with the mouse will bring up the modifying dialog window as shown below.
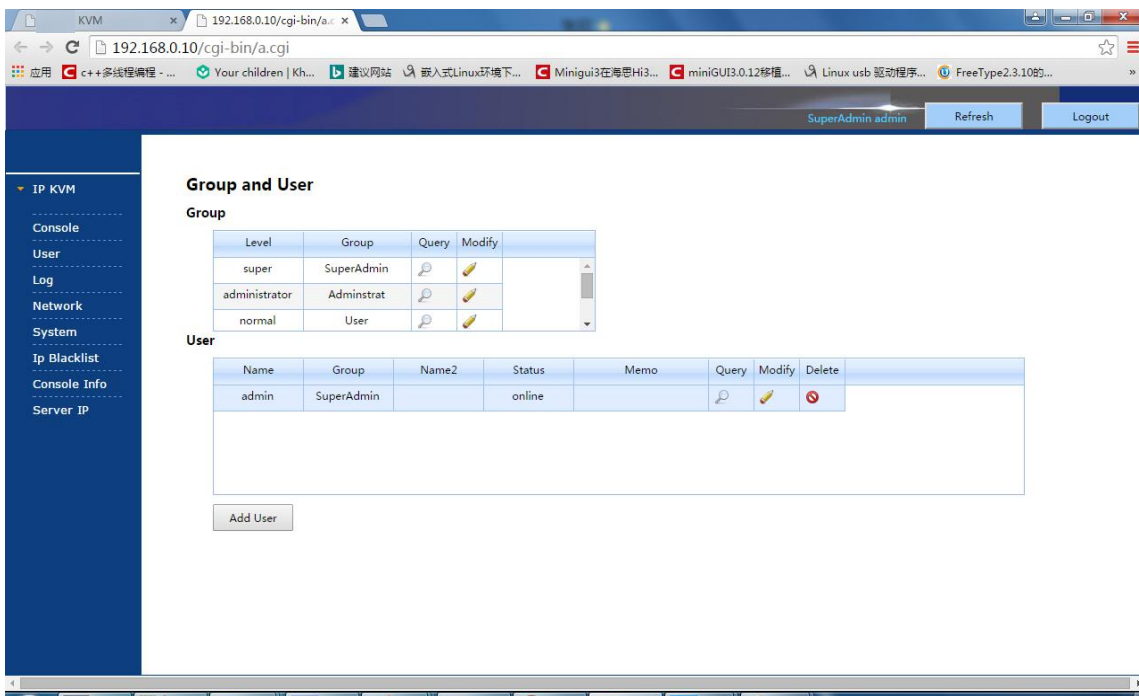
User Management

User management provides administrators with the functions of user group and user division, account creation, modification, and deletion. Administrators can efficiently manage users. User groups are divided into three levels according to different permissions: Super, Admin, and Normal. Among them, the Normal level is divided into three groups. Administrators can be divided into groups according to the settings of ordinary users. After the administrator can set the group permissions, directly Create multiple users, and users in the same group automatically inherit the corresponding permissions of the group. When the administrator adjusts and modifies the permissions, the group members automatically update the corresponding permissions, so that the administrator does not need to modify the permissions of each user, which improves the Management efficiency. Super and Admin administrator groups are unique. Super users can only be unique. They cannot be added or deleted. They have the highest permissions. Admin level users can add multiple.

The administrator can **add new user** information by adding user buttons. Clicking the add user button will pop up a dialog box (as shown in the figure below). The administrator can fill in the **basic information** form according to actual needs, and can also set the operation permissions in the **equipment permissions**.

Log Management

Log management provides administrators with query related records of user operations. Administrators can perform targeted queries based on start and end time, user name, and corresponding types. The query logs are presented in a list. Administrators can view specific log records by user name, time, IP address, and log type. To view specific operations, you can use the mouse to click the " 🔍 " icon in the query list to view the detailed operation records (as shown in the figure below). The administrator can specifically view the changed information records. The system uses red font. Identification for easy identification by administrators.

Query log detail

Name	Old Value	New Value
Name	abc	abc
Memo		
Usergroup	User	User
Virtual media	disable	disable
Name2		eddie
Home addr		
Company addr		
Phone		
email		
Memo2		
abcdefg	read write	read write

Quit

System Management

Network

Base Parameter

uid	D576000000000001
Name	KMV3832
Encrypt	3des

Humiture

temperature(℃)	36
humidity(%)	14

Network Parameter

ip	192.168.0.10	KeyMouse Port	5168
Subnet Mask	255.255.255.0	Video Port	6968
Gateway	192.168.0.1	Virtual media port	5918
		WEB port	80
slaveip	192.168.0.125		
slave subnet mask	255.255.255.0		
slave gateway	192.168.0.1		

Update

System management options provide administrators with the ability to query system-related status and parameters, and query three types of information: Basic parameters, temperature and humidity information, and network configuration parameters. Basic parameters include the UID, equipment name, and encryption method of the matrix KVM equipment. The network parameters include the IP address information of the equipment's network port and the information of different communication ports. The administrator can change the corresponding information according to the network requirements. After the change, the equipment needs to be restarted to make the new configuration take effect.

System Maintenance

System Maintain

Product	IPKVM Series
Version	Vv10112819
Device Daytime	2000-01-02 04:22:08
Set Device Daytime	[ ] [Set]
Restart Device	[Restart]
Update Firmware	[选择文件] 未选...件 [Update]

The system maintenance options include the name of the product, firmware version information, internal date and time information of the matrix system, and also provides the ability to remotely update and upgrade the firmware version.

IP Blacklist

IP black list

ip	Delete	Modify	
192.168.0.50	⊖	✎	

[Add IP]

The IP blacklist provides administrators with the ability to block access to special IP address users. Users with IP addresses in the IP blacklist list will be blocked by the system if they access the equipment. Based on this setting, the administrator can restrict access to malicious IP addresses or special IP addresses.

Equipment Maintenance

Console Maintain

Delete	Name	uid
⊖	abcdefg	C318102217680
⊖	KMT151VM1	C300000000000
⊖	KMT350	C220180131001

The equipment maintenance option provides the administrator with information about all replacement modules (Dongle) connected to the KVM matrix equipment side. Here you can query the equipment names and UIDs of all connected Dongle modules. The administrator can also delete the corresponding Dongle information. Administrators can easily manage the connected equipment through this tool.

Chapter 5. Client KVM Session Operation

Introduction

The client successfully logs in to the WEB user interface, and clicks the KVM session to enter the remote KVM operation client interface. The client operation interface can set related parameters according to the use scenario and requirements. After the operation is completed, the client can directly exit the operation of the client. The interface returns to the selection interface for subsequent operations.

Client Software Installation

You can obtain the client software installation package program in the following ways:
1. Through sales agents
2. Software Installation Instructions CD-ROM
3. Download the latest client software installation package from the website

Please find the software installation package as shown in the figure , double-click the icon to install it, and follow the software prompts to complete the software installation. After installation, you can proceed to the next step.

Note: This software installation package can be installed on Windows system. If you are using WIN7, WIN8, WIN10 or above, please use the administrator to install this software, otherwise the operating system may restrict the execution of the software and cause it to be abnormal Operate the remote session function of KVM.

Client Operating Software

When the user enters the WEB login screen correctly, you can select the "Equipment Management" tab. The user can find the server host with the status "Idle" to start the KVM session. Select the equipment whose port status is "Idle" in the 【Client Operating】 column with the mouse, and click the icon " " to connect to the KVM session. After the connection is successful, the remote operation client screen will pop up, and the user can perform the corresponding remote operation. The client operation interface is shown in the following figure:

Function Option Operation

After entering the main interface of the client, users can make corresponding settings and operations according to the shortcut toolbar on the left.

● Click this [icon] icon to maximize and minimize the picture. Users can also move the mouse to the border of the remote picture and adjust the size of the custom window through the mouse.

● The function of [icon] is the mouse focus calibration operation. After entering the client operation interface, there will be two mouse pointers in the default state. The dotted mouse icon is the local mouse of the operating computer, and the arrow-shaped mouse is the remote mouse icon. The two icons will be separated during normal operation, but it will overlap when stopped. The movement of the remote mouse always "follows" the local mouse. If it is found that the mouse focus cannot be coincided, you can click this icon to calibrate the mouse focus.

● This icon is a special reserved function, which can set the operation permissions of special users. This function is only open to special users.

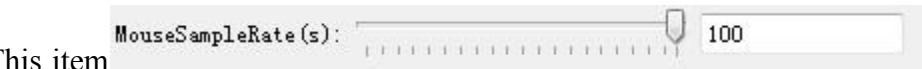● This icon is used to set image related operation functions. Click the icon will pop up the following interface:
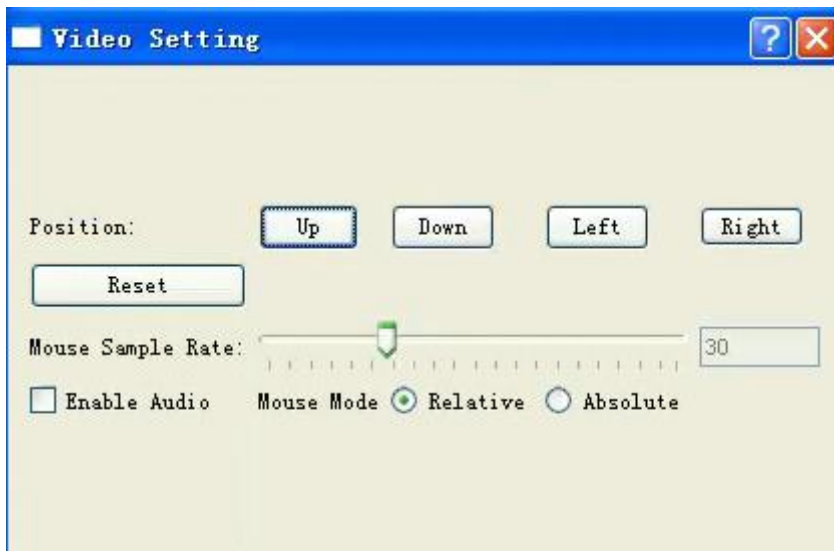
The user can make fine adjustments according to the position of the screen, and move up, down, left, and right in accordance with the icon . After the adjustment, the system will automatically record the user's image settings and save them. To restore the default initial value, click the icon button . This item is to set the sampling follow speed adjustment option of the remote mouse. The user can adjust the speed of remote mouse movement following according to the speed value. The range is 1-100. In the case of poor network quality, in order to ensure the positioning and speed of the mouse, the user can reduce the sampling value of the mouse to adapt to remote user operations.
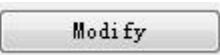
● This icon is a virtual media operation option. After clicking the icon, the following window will pop up:
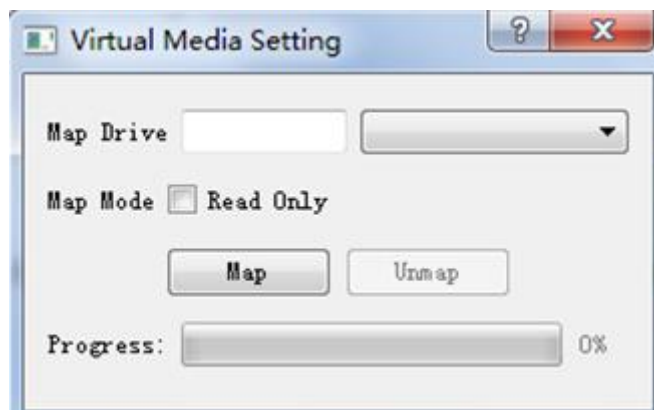
In this operation, the user should first connect the mobile storage U disk to the local computer, and then click the [Map] icon to perform remote virtual media mapping operation. During the operation, users can learn about the remote mapping through the progress bar, as shown in the figure below. If you select a large-capacity storage equipment, this process may take a long time to complete. After the mapping is completed, the user can see a virtual equipment on the remote controlled computer that is the same as the locally connected storage equipment, and the user can move and copy files.
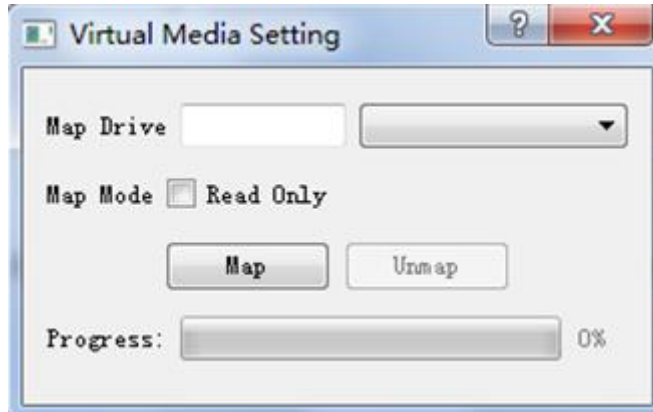
This icon [ ] is for selecting single mouse or double mouse operation options. The default is dual-mouse operation mode. Dual-mouse means that the local mouse pointer and remote mouse pointer exist in the same screen at the same time. The icon option is [ ] display. Single-mouse operation means only the mouse pointer of the remote controlled computer is [ ] displayed. According to the user's habits, you can make corresponding setting choices.

● This icon [ ] is the setting and sending option of the remote hotkey. If you use this option function for the first time, you need to set the remote hotkey first. Click the icon to select the "Set Key" option. A window for setting the remote hotkey will pop up, as shown in the figure below. You can add, clear, modify or delete according to the buttons [Add] [Clear] [Modify] [Delete] at the bottom of the window. The user can fill in the alias of the hotkey in [Mapping Name: RST] for easy selection and set the combined hotkey in [Key String: Control + Alt + Delete] .The user can directly click the hot key to be added on the keyboard, and the system will add it automatically. If you need to modify it, you can clear or delete it and add the hot key again. After the operation is completed, the software will record and store it. The user can send the corresponding combined hot key to the remote controlled computer by clicking the [ ] icon and selecting the added hot key name in the selection bar on the right

Serial Dongle Equipment Operation

Online Console

Modify	port	name	Type	group	uid	Status	Client	position1	position2	department
🖊	2	KMT151VM1	virtual media		C300000000000	idle	🖥			

If you are using a serial dongle equipment, you can query the status of the serial equipment in the equipment type list when you log in to the remote WEB page. If it is in the "idle" state, you can try remote control of the serial equipment. Click the

icon 🖥 with the left mouse button, and the serial interface will pop up as shown below:
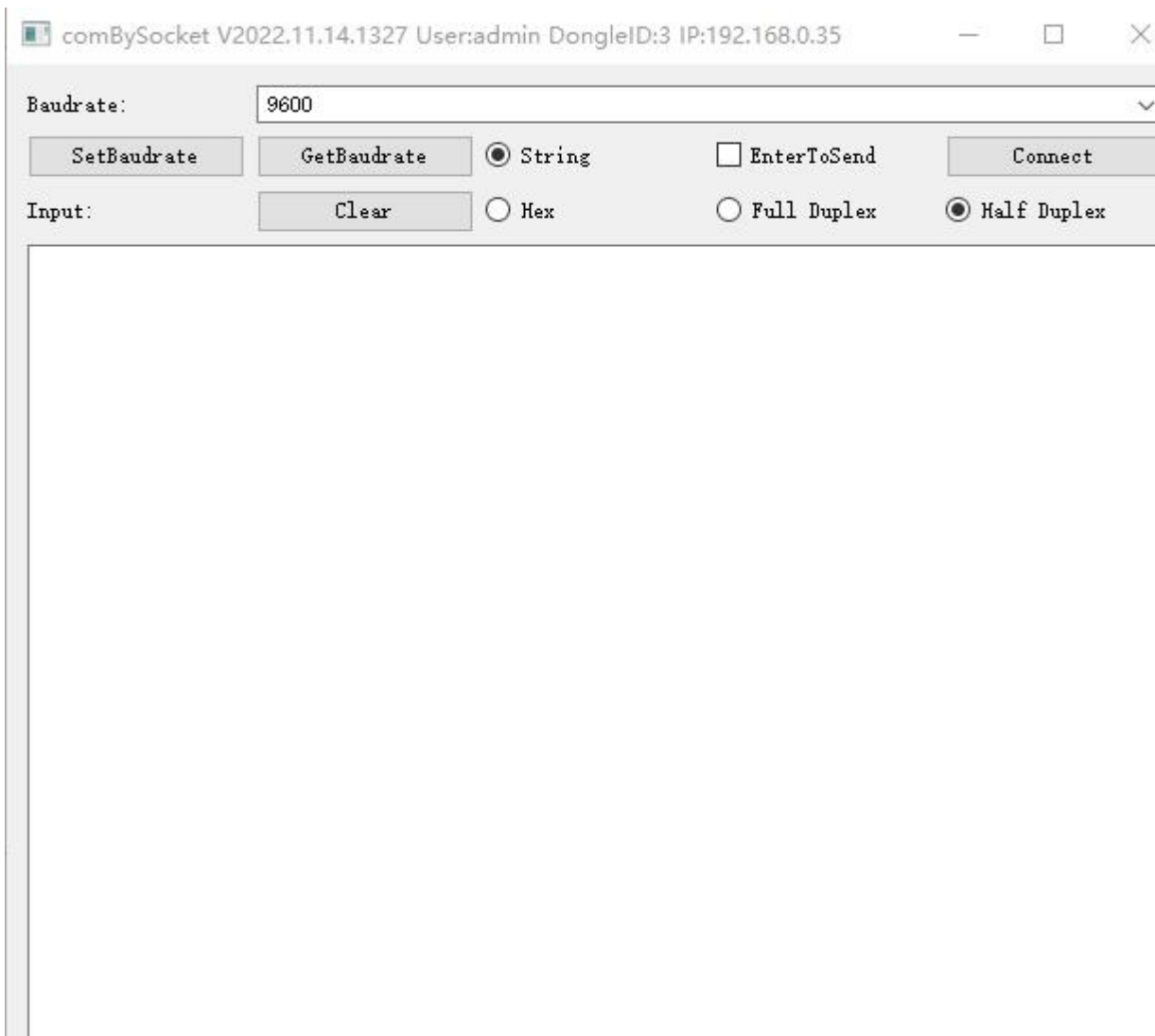
The baud rate setting list on the first line has all the baud rate options supported by this product. You can choose according to the baud rate of the selected serial equipment.

As shown

There are three setting function buttons in the window, and their function definitions are described in the following table:

Button Settings	Function Description
SetBaudrate	Set dongle baud rate
Get Baudrate	Get baud rate information being used by dongle
Send	Want to be controlled serial equipment to send data
Clear	Clear the information data in the corresponding form
HEX	Select port form to send hexadecimal data format

String	Select the data format of the port form sending string
Input	Input display form
Output	Output display form

Chapter 6. OSD Operation

OSD Introduction

OSD on-screen menu functions On-screen menu operation methods are used to set up KVM equipment, switch connected equipment, and other operations. Keyboard control is used to complete equipment control. All programs must start from the OSD main screen.

OSD Login

Before the operation, you need to connect the keyboard, mouse and a VGA interface monitor screen of the USB interface on the local end of the product, and then enable the OSD interactive menu through the keyboard hotkey action, and complete the setting and modification of corresponding functions by monitoring the operation of the screen and keyboard. If you set the user and password to log in, then you need to use the correct user name and login password to enter the screen of the OSD menu. The default OSD user name is: admin Password: admin. The user can modify it in the user modifying options.

OSD Hotkey

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

Note: You can change the keyboard hotkeys activated by the OSD menu according to your needs. This product provides 4 sets of optional OSD menu hotkey combinations. You can select and operate as required (See the detailed description of the setup function of the OSD menu).

OSD Main Menu

When you start the OSD, a screen similar to the one below will appear:
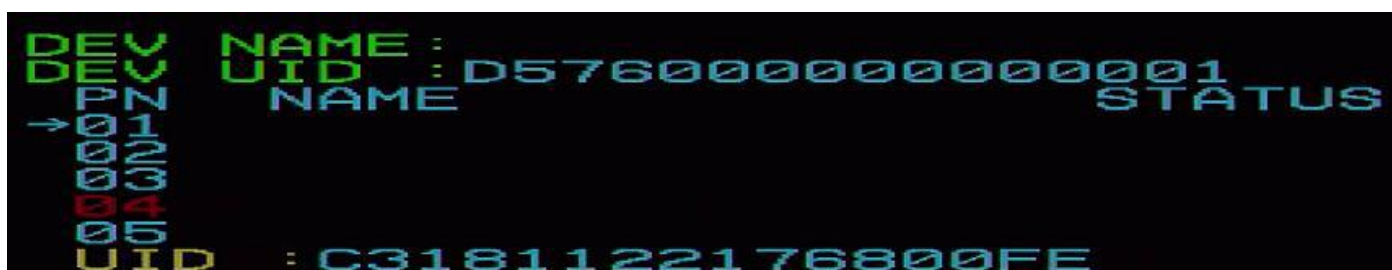
◆ 【F1】, 【F2】, 【F3】and【F4】 at the bottom of the screen are the function settings of the OSD menu. Use the corresponding keys on the keyboard to perform the corresponding function operations and settings.

◆ After entering the OSD main screen, the port number on the light bar in the middle of the screen is the port number of the currently selected controlled computer. You can select the port by using the keyboard 【↑】【↓】. 【Enter】 key to select the switch port.

◆ If you want to exit the OSD menu interface, you can use the keyboard 【Esc】 to perform the exit operation.

◆ To move a line up or down in the list, use the 【↑】【↓】 arrow keys. If the list has more rows than the screen can display, the screen scrolls.

OSD main Menu Title

Title	Description
PN	This column displays the port numbers for all ports. The easiest way to access a specific computer is to move the highlight bar to a certain port, and then press the 【Enter】 key, KVM will switch to the port computer selected by the cursor.
NAME	If the port is named a name, this column displays the port name.
STATUS	If the computer on this port is powered on, a symbol ☼ will be displayed.

OSD Function Key Introduction

The OSD function keys mainly provide settings and control OSD functions. For example, you can quickly switch to any connection port, scan only the selected connection port, build or modify the name of the connection port, or adjust the OSD settings.

To activate the OSD function key functions:

1. Press any function key 【F1】【F2】【F3】【F4】 at the bottom of the main screen to enter the function keys from the keyboard.

2. On the sub-menu that appears, move the selection bar 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 activate the GOTO function. The GOTO function allows you to directly switch to the connected port by typing the port name or its port number.

1. Using the name method, move the cursor to the "NAME" option with the keyboard keys, and then press the 【Enter】 key. The input bar for "NAME" appears at the bottom of the window. You can enter the name of the port to be switched in the bar. Then press the 【Enter】 key, and the KVM switch will directly switch to the corresponding port computer of the entered name.

2. Using the connection port method, use the keyboard keys to move the cursor to the "PN" option, and then press the 【Enter】 key. The "PN" input box appears at the bottom of the window. You can enter the serial number of the port to be switched in the box, and then press the 【Enter】key, the KVM switch will directly switch to the corresponding computer with the port number you entered.

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

2. In the "PN" port input box, only numbers can be entered. If other characters are entered, they are regarded as invalid inputs, and a warning tone can be heard from the equipment.

To return directly to the main menu without making a selection, press the 【Esc】 key.

F2 SETTING：

The SETTING function setting can provide administrators with settings for the OSD menu. Set and modify related functions, such as port naming, display mode, switch hotkey adjustment, etc.

To change settings:

1. Move the light bar to this option and press the 【Enter】 key.

2. After selecting the item, the sub-menu and its further options will appear. If you want to select, you can double-click or move to select this option, and then press the 【Enter】 key, and an icon will appear The option is selected before to indicate that the item has been selected. The settings are described in the following table:

Set Up	Function Description
MODIFY PORT NAME	Modify the name of the port
MODIFY EQUIPMENT NAME	Modify equipment name
CHANNEL DISPLAY MODE	Port display mode selection
CHANNEL DISPLAY DURATION	Select port form to display dwell time settings
CHANNEL DISPLAY POSITION	Select port form display position settings
EXIT PORT TIMEOUT	Port exit dwell time setting
MODIFY USER	Operate user settings
DISABLE AUTO LOGIN	Settings for automatic login
OSD HOTKEY	Hotkey settings for OSD menu
OSD POSITION	OSD menu serial port display position setting
BEEP OFF	OSD menu buzzer sound settings
RESTORE DEFAULT VALUE	Restore factory settings
ABOUT THIS PRODUCT	About product information description

● **MODIFY PORT NAME**

This feature can set or modify a name for a port. Select this function and press 【Enter】 to enter the name at the cursor of the red modify box on the screen. Press 【Enter】 to confirm, and the name is set for this port. The modifyed name will be displayed on the screen.

● **MODIFY EQUIPMENT NAME**

This feature can name KVM equipment. Select this function and press 【Enter】 to enter the name at the cursor of the red modify box on the screen. Press 【Enter】 to confirm, and a new name will be set for this KVM equipment. The modifyed name will be displayed on the screen.

● SCAN DURATION

This function allows you to set the automatic inspection time of the port. The default value is 5 seconds. During the automatic inspection, you need to stay for 5 seconds to switch to the next port.。

● **EXIT PORT TIMEOUT**

```
F2:SET

     EDIT PORT NAME
     EDIT DEVICE NAME
     SCAN DURATION
  →  EXIT PORT TIMEOUT
     EDIT USER

     TIMEOUT[0 - 99 MINUTES]
      ↑    ↓      ESC    ENTER
     UP DOWN  EXIT  ACCEPT
```

This function allows you to set the timeout duration of the port. The value ranges from 0 to 99 minutes. If the value is set to 0, the port does not timeout. The default setting is 5, which means that the occupied port will exit after 5 minutes if no button or mouse operation is performed. After this function is selected, the user can Enter the required time in the edit box behind the menu bar and press 【Enter】 to save the time.

● **MODIFY USER**

This feature is used to modify and modify the name and password of the logged-in user. This operation can only be performed if the original login password is required to be entered correctly. The default initial password is Admin. After this function is selected, a pink password verification modifying window will appear at the bottom of the menu bar. Enter the correct password in the window and press the 【Enter】 key to submit for system verification.

```
F2:SET

     EDIT PORT NAME
     EDIT DEVICE NAME
     SCAN DURATION
     EXIT PORT TIMEOUT
  →  EDIT USER

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

After the password verification is successful, you can enter the name of the new logged-in user in the pink modifying window at the bottom of the menu, and press 【Enter】 to submit after entering.

```
  →  EDIT USER

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

After the user name is submitted successfully, the system will require the input of a new user login password. After the input is completed, press the 【Enter】 key to submit. The system will require the input of a password again. The password entered twice is verified to be consistent and will take effect immediately.

● **DISABLE AUTO LOGIN**

This function can set whether the login password authentication function is required, and use the 【Enter】 key to change to turn on or off this function. After this function is turned on, the user will need to enter the authentication of the user name and password before entering the OSD main menu interface every time the OSD menu is enabled. The default setting does not require the authentication of the user name and password before starting up.

After enabling this function, the startup login interface becomes the interface shown in the following figure. The user can enter the user name, password and password at one time in the pink modify box. After entering, press the 【Enter】 key to submit. After entering correctly, the login interface will directly enter the OSD main menu for subsequent operations. When the user inputs, he uses the 【TAB】 key to switch the input box and the 【ESC】 cancels the operation.

● **OSD HOTKEY**

This feature provides you with four hotkey combinations:

【CTRL】【CTRL】、【SCROLL】【SCROLL】、【ALT】【ALT】、【SHIFT】【SHIFT】 You can use the keyboard 【↑】【↓】 direction key to move the cursor to make a selection as needed, and then press" 【Enter】 key to save and take effect. The initial default is 【CTRL】【CTRL】 as the startup hotkey of OSD menu.

● **BEEP OFF**

This function is used to set the opening and closing function of buzzer sound inside the equipment. Use the 【Enter】 key to change the turn-on or turn-off of this function. After this function is turned on, the system internally determines that the input error is an error input that will prompt the user with a buzzer tone. If this function is turned off, the system will not make any prompt, and the default setting is to turn on the prompt

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tone state.

● NETWORK

This function is used to set network-related configurations for the KVM. Use the [Enter] key to open the function window，

VIDEO PT   6968   Video transfer port, 6968 by default

KM PT 5168   Mouse and key transmission port, 5168 by default

VM PT   5918   Virtual media transfer port. The default value is 5918

WEB PT 80   The port is displayed on the web page. The default port is 80

IP   192.168.000.010   The default primary IP address is 192.168.0.10

GATEWAY 192.168.000.001   IP address of the primary gateway, 192.168.0.1 by default

MASK   255.255.255.000   Indicates the subnet mask of the master. The default value is 255.255.255.0

MAC1   XX-XX-XX-XX-XX-XX   Specifies the MAC address of active network port 1

MAC2   XX-XX-XX-XX-XX-XX   Specifies the MAC address of active network port 2

IP S   192.168.000.012   Slave IP address. The default value is 192.168.0.12

GATEWAY S 192.168.000.001   Secondary gateway address. The default value is 192.168.0.1

MASK S 255.255.255.000   Slave subnet mask. The default value is 255.255.255.0

MAC S1   XX-XX-XX-XX-XX-XX   MAC address of slave network port 1

MAC S2   XX-XX-XX-XX-XX-XX   MAC address of slave network port 2

You can modify and modify parameters based on the device connection environment to meet the network requirements and applications of the environment.

Note: IP network Settings take effect only after the device is restarted.

● MOUSE TYPE

This function sets the mouse control type of the remote controlled Dongle module. That is, relative to mouse and absolute mouse, users can choose and set the use according to their own habits. The default setting is relative to the mouse.

Note: This setting is valid only for the Dongle module connected to the current switch in port. After the setting, you need to power on the Dongle again.

● **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 TO DEFAULT ？（Y/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.

● **ABOUT THIS PRODUCT**

This function displays the information of the model and manufacturer of this equipment, and can return to the OSD main menu interface through the 【Enter】【Esc】 keys of the keyboard.

F3 EXIT PORT：

This function will exit the port monitoring screen selected by the current window, remove the occupation of the port, and provide the application possibility for remote users to operate. A prompt of CONFIRM TO EXIT？"Y/N" will appear at the lower part of the window when executing this function. The keyboard will enter the letter 【Y】 to confirm the operation and 【N】 to cancel the operation.

F4 SCAN：

Port scanning mode: The KVM automatically switches ports based on the port number. You can monitor the working status of the corresponding port. The scanning interval can be set in the options of SCAN DURATION.

During polling, press ESC key screen and switch to the current port. Press space bar screen to switch to the current port by double clicking OSD hot key. If you need to continue polling, press ESC or Enter, press space, and press ESC two or three times to exit the polling function

Chapter 7.

Remote servers mouse configuration

Mouse Settings

 Windows XP, Windows 2003 and Windows 2008 Settings

To configure KVM target servers running Microsoft. Windows XP. operating system, Windows 2003. operating system or Windows 2008. operating systems：

    i.   Choose Start > Control Panel > Mouse
    ii.   Click the Pointer Options tab
    iii.   In the Motion group
    iv.   Set the mouse motion speed setting to exactly the middle speed
    v.   Disable the "Enhance pointer precision" option
    vi.   Disable the Snap To option
    vii. Click OK

 Windows 7 and Windows Vista Settings

    To configure KVM target servers running Windows Vista operating system：

    i.   Choose Start > Settings > Control Panel > Mouse。
    ii.   Select "Advanced system settings" from the left navigation panel. The System Properties dialog opens。
    iii.   Click the Pointer Options tab。
    iv.   In the Motion group：
    v.   Set the mouse motion speed setting to exactly the middle speed。
    vi.   Disable the "Enhanced pointer precision" option。
    vii. Click OK。

 To configure KVM target servers running Windows 7. operating system：

    i.   Choose Start > Control Panel > Hardware and Sound > Mouse。
    ii.   Click the Pointer Options tab。
    iii.   In the Motion group：
    iv.   Set the mouse motion speed setting to exactly the middle speed。
    v.   Disable the "Enhanced pointer precision" option。
    vi.   Click OK。

 Windows 2000 Settings

To configure KVM target servers running Microsoft. Windows 2000. operating system：

    i.   Choose Start > Control Panel > Mouse。
    ii.   Click the Motion tab。
    iii.   Set the acceleration to None。

    iv.   Set the mouse motion speed setting to exactly the middle speed。

    v.   Click OK。

➕ To configure KVM target servers running Linux. (graphical user interface)：
    i.   Choose Main Menu > Preferences > Mouse. The Mouse Preferences dialog appears
    ii.   Click the Motion tab。
    iii.   Within the Speed group, set the Acceleration slider to the exact center
    iv.   Within the Speed group, set the Sensitivity towards low。
    v.   Within the Drag & Drop group, set the Threshold towards small。
    vi.   Close the Mouse Preferences dialog。

Note: If these steps do not work, issue the xset mouse 1 1 command as described in the Linux command line instructions。

➕ To configure KVM target servers running Linux (command line):：
    i.   Set the mouse acceleration to exactly 1 and set the threshold to exactly 1. Enter this command: xset mouse 1 1. This should be set for execution upon login。

➕ To configure Red Hat servers using USB CIMs：
    i.   Locate the configuration file (usually /etc/modules.conf) in your system。

Using the editor of your choice, make sure that the alias usb-controller line in the modules.conf file is as follows：

alias usb-controller usb-uhci

Note: If there is another line using usb-uhci in the /etc/modules.conf file, it needs to be removed or commented out。

    ii.   Save the file。
    iii.   Reboot the system in order for the changes to take effect。

➕ Linux Settings (for Standard Mouse Mode)

Note: The following settings are optimized for Standard Mouse mode only。

To configure KVM target servers running Linux. (graphical user interface)：
    i.   Red Hat 5 users, choose Main Menu > Preferences > Mouse，
            Red Hat 4 users, choose System > Preferences > Mouse. The Mouse Preferences dialog appears。
    ii.   Click on the Motion tab。
    iii.   Within the Speed group, set the Acceleration slider to the exact center
    iv.   Within the Speed group, set the Sensitivity towards low。
    v.   Within the Drag & Drop group, set the Threshold towards small。
    vi.   Close the Mouse Preferences dialog。

Note: If these steps do not work, issue the xset mouse 1 1 command as described in the Linux command line instructions。

➕ SUSE Linux 10.1 Settings

Note: Do not attempt to synchronize the mouse at the SUSE Linux. login prompt. You must be connected to the target server to synchronize the mouse cursors。

To configure the mouse settings：
    i.   Choose Desktop > Control Center. The Desktop Preferences dialog appears。

ii.   Click Mouse. The Mouse Preferences dialog appears。

iii.   Open the Motion tab。

iv.   Within the Speed group, set the Acceleration slider to the exact center position。

v.   der to the exact center position.

vi.   Within the Speed group, set the Sensitivity slider to low。

vii.   Within the Drag & Drop group, set the Threshold slider to small。

viii.   Click Close。

🔸 Sun Solaris Settings

To configure KVM target servers running Sun. Solaris.：

i.   Set the mouse acceleration value to exactly 1 and the threshold to exactly 1. This can be performed from：

The graphical user interface。

To configure the mouse settings (Sun Solaris 10.1)：

ii.   Choose Launcher. Application Manager - Desktop Controls opens。

iii.   Choose Mouse Style Manager. The Style Manager - Mouse dialog appears。

iv.   Set the Acceleration slider to 1.0。

v.   Set the Threshold slider to 1.0。

vi.   Click OK。

🔸 IBM AIX 5.3 Settings

Follow these steps to configure KVM target servers running IBM. AIX. 5.3。

To configure the mouse：

i.   Go to Launcher

ii.   Choose Style Manager。

iii.   Click Mouse. The Style Manager - Mouse dialog appears。

iv.   Use the sliders to set the Mouse acceleration to 1.0 and Threshold to 1.0。

v.   Click OK。

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 cause 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

Functions			KMD-3X32VM
Number of computer connections	Direct		32
	Maximum cascade		512
Port selection			OSD Menu, Remote IP
Connector	Control Port	Display	1 x VGA DB15 blue female head
		Keyboard	1 x USB Type A female head, 1 x PS2 purple female head
		Mouse	1 x USB Type A female, 1 x PS2 green female
	Computer port	Conversion Module	32 x RJ45 port
	Power Supply		2 x DC12V
	IP Network Interface		2 x RJ45（LED）
	485 Control Port		1 x RJ45
Switchover switch	KVM Reset		1 x semi-embedded key
	KVM Restore Factory Settings		1 x semi-embedded key
LED indicator	Computer Online Port		32 x green
	IP Module Network Port		2 x green, 2 x orange
Analog mode	Keyboard and mouse		USB、PS2
Maximum Resolution Video			1920 x 1200 @ 60HZ Local and Remote
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
	Dimensions		440 x 350 x 44 mm
	Weight		4.2KG

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.

The Company will not warrant, express, imply or legally declare the contents and purposes of this document, and specifically deny its quality, performance, marketability or applicability for special purposes.

Distributors reserve the right to modify or upgrade equipment or documents, and are not obliged to notify any individual or individual of the contents of the modification or upgrade. For further enquiries, please contact the distributor.