



# OWNER'S MANUAL

## KVM SOLUTIONS



IP-BASED KVM

## TABLE OF CONTENTS

<b>1. PRODUCT OVERVIEW .....</b>	<b>3</b>
1.1 INTRODUCTION .....	3
1.2 FEATURES .....	3
1.3 APPEARANCE .....	4
<b>2. INSTALLATION &amp; START-UP .....</b>	<b>6</b>
2.1 RACK MOUNTING .....	6
2.2 INSTALL KVM COMPONENTS .....	7
2.3 OPENING THE CONSOLE .....	7
2.4 CLOSING THE CONSOLE .....	8
<b>3. LED OPERATION .....</b>	<b>9</b>
3.1 LED FUNCTIONS .....	9
3.2 OPERATING THE MONITOR .....	9
3.3 KEY COMBINATION FUNCTION .....	10
<b>4. USER INTERFACE OPERATION .....</b>	<b>11</b>
4.1 USER .....	11
4.2 SYSTEM .....	14
4.3 SECURITY .....	16
4.4 MAINTENANCE.....	17
<b>5. REMOTE CONTROL .....</b>	<b>18</b>
5.1 CONFIGURE THE TARGET SERVER .....	18
5.2 REMOTE WEB INTERFACE SETTING .....	19
5.3 LOGIN .....	21
5.4 VIDEO CONTROL INTERFACE MENU .....	22
<b>6. IP MENU OPTION .....</b>	<b>25</b>
6.1 USER MANAGEMENT .....	25
6.2 SYSTEM SETTINGS .....	28
6.3 SAFETY MANAGEMENT .....	29
6.4 SYSTEM MAINTENANCE .....	30
<b>7. APPENDIX .....</b>	<b>32</b>
7.1 SPECIFICATIONS (17") .....	32
7.2 SPECIFICATIONS (19") .....	33

## 1. PRODUCT OVERVIEW

### 1.1 INTRODUCTION

The IP-based KVM (IP-KVM) redirects the local keyboard, mouse and video data to a remote management console. The operator can safely manage one or many computers locally at the server site or remotely via a standard internet browser. Securely gain BIOS level access to systems for maintenance, support or failure recovery over the internet.

The IP-KVM console integrates multiple KVM switches in a 1U height console. It can control multiple computers with a set of devices including monitor, keyboard and mouse; saving cost and space by consolidating the hardware to a single device.

The IP-KVM console is fast and easy to install. Simply connect corresponding cables to the correct ports of the KVM and its module without software configuration. Connect multiple computers with compact RJ-45 connectors and CAT5e/6/7 cables, transmitting distance is up to 100M.

### 1.2 FEATURES

#### Hardware

- 17" & 19" TFT LCD monitor, high definition and high resolution
- Rack-mountable in a 1U EIA system rack
- Full size keyboard with integrated number pad
- Trackball eliminates the need for a separate, external mouse
- Dual power supply

#### Local Console

- Control up to 8 / 16/ 24 / 32 computers
- Support 1 local user and 1 remote user, port share mode allows local and remote users to gain access to a server simultaneously
- Easy-to-use switching by browser-based UI interface, hotkeys and pushbuttons
- Support servers with VGA port
- Multiplatform client support (Windows, Linux, Unix, Mac, Solaris (Sun), Redhat, Ubuntu)
- Supports a graphical interface for intuitive and convenient human-computer interaction- local resolution is up to 1280 x 1024@60Hz
- Supports mouse synchronization mode-automatically synchronizes the local and remote mouse movements
- Video synchronization with local console - EDID information for local console display can be stored in the host module for video resolution optimization
- Keyboard and mouse emulation to ensure the normal booting
- Auto scan feature for monitoring user-selected computer
- Hot pluggable – add or remove computers without having to power down the switch

#### Remote Console

- Adaptive 10 / 100 / 1000 Mbps network
- WEB browser-based remote management
- BIOS-level access
- Video quality and video tolerance can be adjusted to optimize data transfer speed, up to 30 FPS
- Full screen or scalable video display
- Remote users and local users can control the same server synchronously
- Support AES / DES / 3DES encryption
- Support audit function-allows the administrator to audit the device through the system log and operation log
- Exit Macros support
- Configurable user and group permissions for server access and control
- Supports firmware upgrade

1.3 APPEARANCE

Front View

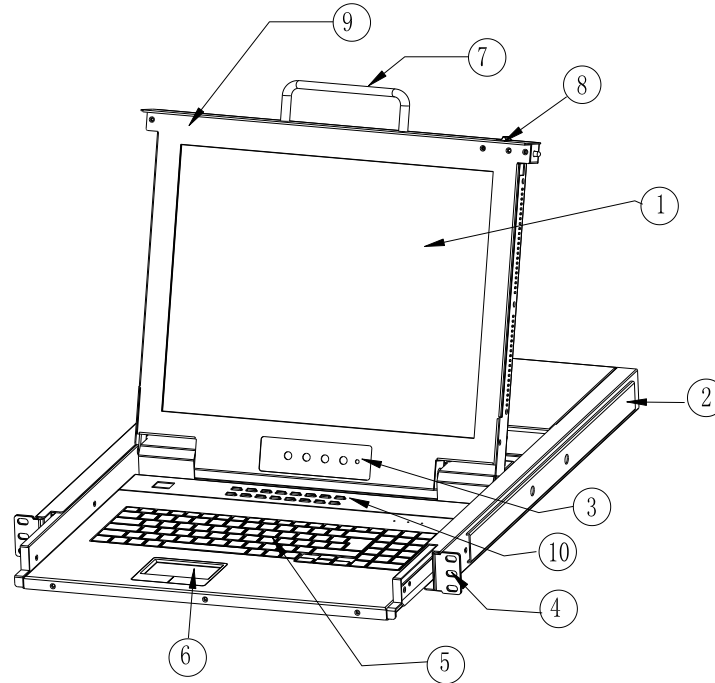


Figure 1.1 Front view

- |                  |                      |                     |
|------------------|----------------------|---------------------|
| 1. LED Monitor   | 2. Rear Bracket Slot | 3. LED OSD Controls |
| 4. Front Bracket | 5. Keyboard          | 6. Touchpad         |
| 7. Handle        | 8. Release Catch     | 9. Display Panel    |
| 10. Switch LED   |                      |                     |

Rear View

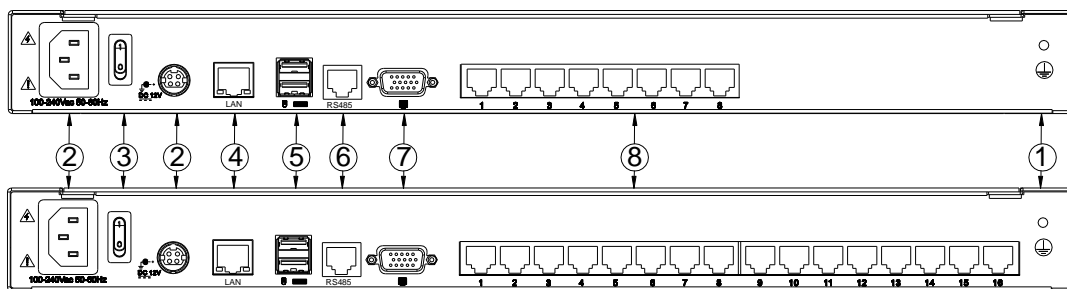


Figure 1.2 Rear view

- |                 |                        |                 |
|-----------------|------------------------|-----------------|
| 1. Ground Screw | 2. Power Input (AC/DC) | 3. Power Switch |
| 4. LAN Port     | 5. USB Port            | 6. RS485 Port   |
| 7. Monitor Port | 8. PC Connecting Port  |                 |

Structure and Size (17" & 19" )

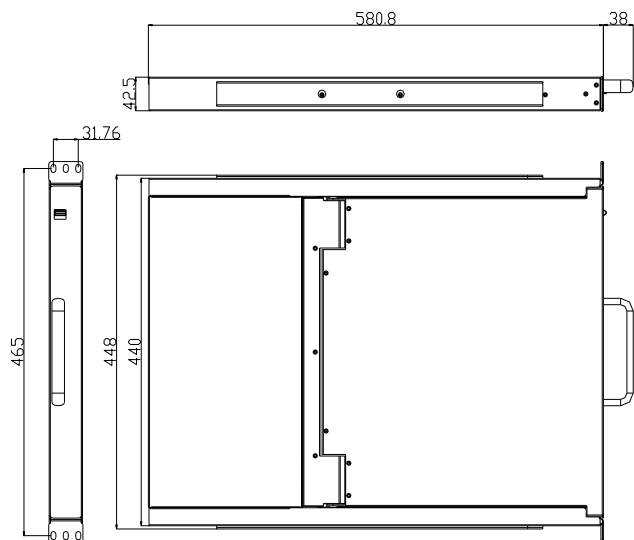


Figure 1.3 17" console size dimensions

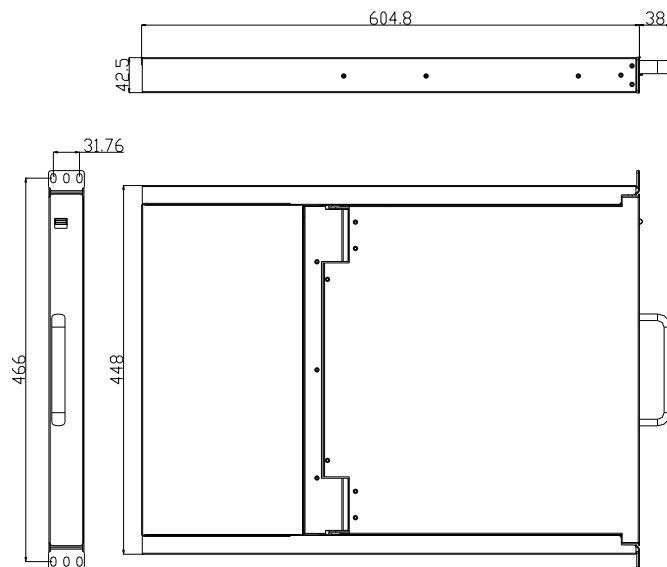


Figure 1.4 19" console size dimensions

## 2. INSTALLATION & START-UP

### 2.1 RACK MOUNTING

A standard rack mounting kit is provided to mount the switch in a depth of 600-850mm (17"), 700-820mm (19") in a standard 19" rack. For other mounting distances, the rear brackets need to be customized accordingly. With one person hold the switch in place, the other person slides the L bracket into the switch's side mounting brackets from the front to the back, then screws the brackets to the rack (see below installation drawing).

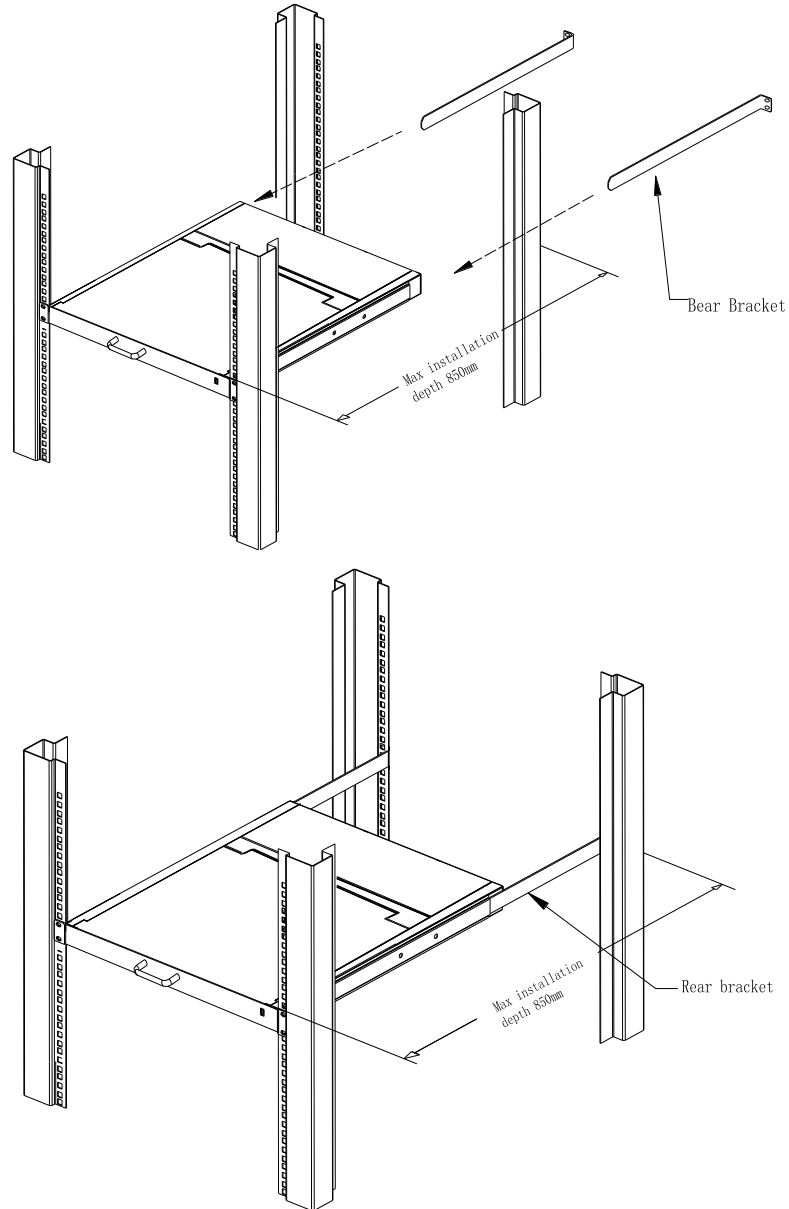


Figure 2.1 Rack Installation Diagram

## 2.2 INSTALL KVM COMPONENTS

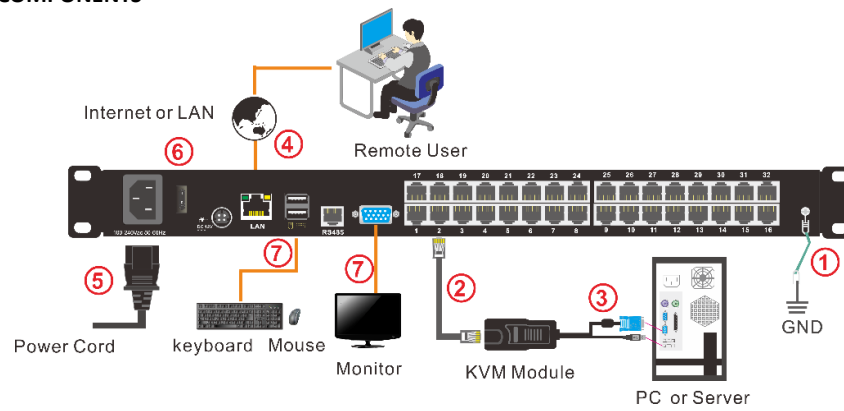


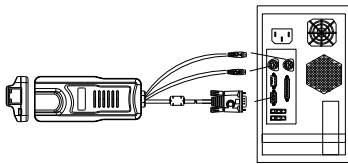
Figure 2.2 Installation diagram

### Installation Steps:

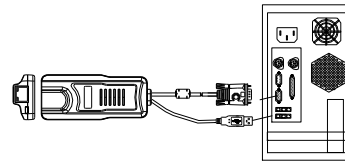
1. Make sure the KVM console has been connected to the ground.
2. Connect the KVM adapter to the PC or Server.
3. Connect the KVM adapter to the KVM port with a CAT5 cable.
4. You can remote control the KVM switch via IP.
5. Use the power adapter to connect the KVM into 220V AC power supply.
6. Power on the switch
7. Connect the external keyboard, mouse and monitor (optional)

### Module Explanation

#### PS/2 CPU module



#### USB CPU module



Components	Functions
Green	indicates that the KVM has connected to its corresponding computer and power on.
Orange	indicates that the computer attached to its corresponding port is up and running.

## 2.3 OPENING THE CONSOLE

1. Disengage the release catch

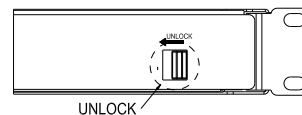
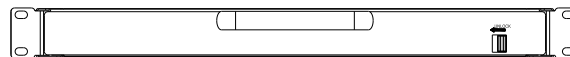


Figure 2.4 Unlocking

*Note: The release lock can only do horizontal locking, it doesn't bear any load.*

2. Pull the KVM console all the way out until it clicks into place.
3. Rotate the LED module all the way back to expose the LED screen; the LED module can be rotated up to 108°.

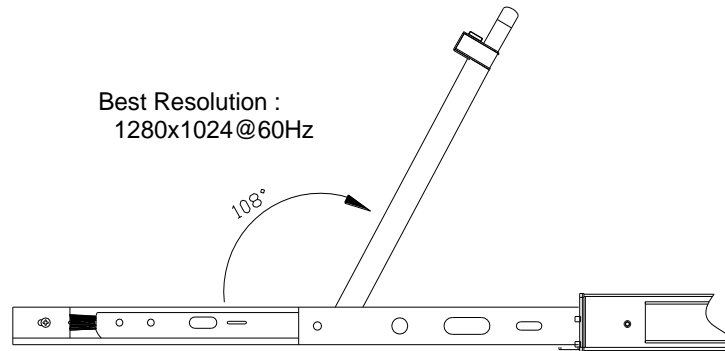
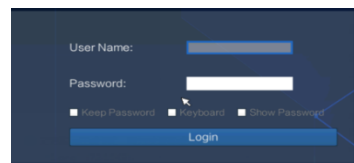


Figure 2.5 Open angle of the console

- The KVM makes two “beep” sounds after power on, the orange light keeps flashing and an UI window appears for you to input user name and password.



User Name:	admin
Password:	admin

- LED panel is powered on when the power LED is green.
- Power on the computer or server after power on the KVM.

## 2.4 CLOSING THE CONSOLE

- Close the LED display panel and the power automatically shut down.
- Push the release catch in the direction of the arrow; push the LED panel all the way in until it automatically locks up.

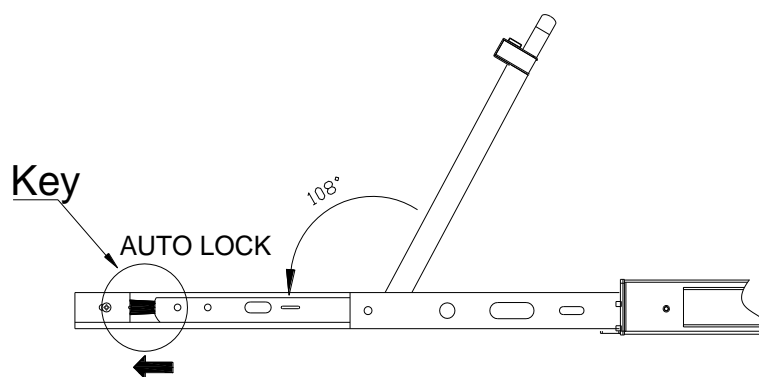


Figure 2.6 Unlocking the console



### 3. LED OPERATION

#### 3.1 LED FUNCTIONS

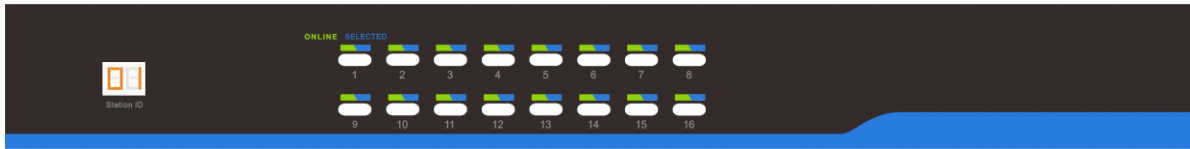


Figure 3.1 16 Port LED front views

#### 3.2 OPERATING THE MONITOR





No.	Components	Function
1	1-16	Switching freely from port 1 to port 16
	Reset	Press <b>【1】</b> and <b>【2】</b> at the same time for three seconds resets the keyboard and mouse
	Scan	Press <b>【7】</b> and <b>【8】</b> at the same time for three seconds enters the auto scan mode.
	Brightness 	Press <b>【3】</b> for three seconds enters brightness adjusting mode. 33 flashing on the LED. Then press <b>【5】</b> , <b>【6】</b> to adjust. Press <b>【3】</b> exits or waits for five seconds and it will auto-exit.
	Definition 	Press <b>【4】</b> for three seconds enters definition adjusting mode. 44 flashing on the LED. Then press <b>【5】</b> , <b>【6】</b> to adjust. Press <b>【4】</b> exits or waits for five seconds and it will auto-exit
Initialize  	Press <b>【6】</b> for three seconds will initialize the brightness and definition of each port.	
2	Port Selection Buttons & LEDs	Indicator LEDs are built into the switches, the online LED light is on the left and the selected LED light is on the right. 1. An online LED light (green) indicates that the KVM has connected to its corresponding computer and power on. 2. A selected LED light (orange) indicates that the computer attached to its corresponding port is up and running.
3	Station ID	Display the current port



Figure 3.4 Monitor adjust menu buttons

The LED OSD allows you to set up and configure the LED display.

Buttons	Functions
MENU SELECT	Brings up the main menu.
EXIT/AUTO	Exits the current menu and returns to the previous menu or exits the LED OSD. Press AUTO for automatic configuration.
SL-/SL+	Moves the menu to make corresponding adjustment.
LED state	Green: Running Red: Power off or access non standard VESA signal Flashing green: Energy saving mode or no signal

Press AUTO if the screen migrates after power on, then the screen auto-configures to its best display state.

Note:

- It may not be adjusted to its best state if part of the display mode is not standard VESA mode. if so, return back to OSD menu to RESET, then it will revert back to normal.
- It is recommended to set up the display mode at 1280x1024, refresh rate at 60Hz.

### 3.3 KEY COMBINATION FUNCTION

If you want to set other hotkeys to pop up the UI interface or key combination switch, set up the via the local console, **【System Settings】** > **【Device info】**

Pop up the UI interface	Double click <b>【L_Ctrl】</b> Double click <b>【L_Alt】</b> Double click <b>【Scroll Lock】</b> Double click <b>【Caps Lock】</b>
Hot key	<b>【L_Alt】</b> + <b>【L_Ctrl】</b> <b>【L_Win】</b> + <b>【L_Ctrl】</b> <b>【L_Alt】</b> + <b>【L_Win】</b>

Hotkey commands are as follows:

Hot key + the corresponding function key

Function	Operating	Function description
Port switch	+Number	Skip ports from 1~16
	+ <b>【↑】</b> / <b>【←】</b>	Skip to previous port
	+ <b>【↓】</b> / <b>【→】</b>	Skip to next port
Brightness	+ <b>【+】</b>	+
	+ <b>【-】</b>	-
definition	+ <b>【&gt;】</b>	-
	+ <b>【&lt;】</b>	-
Reset Video	+ <b>【R】</b>	Reset the video
Lock KVM	+ <b>【L】</b>	Lock KVM and a user login window appears

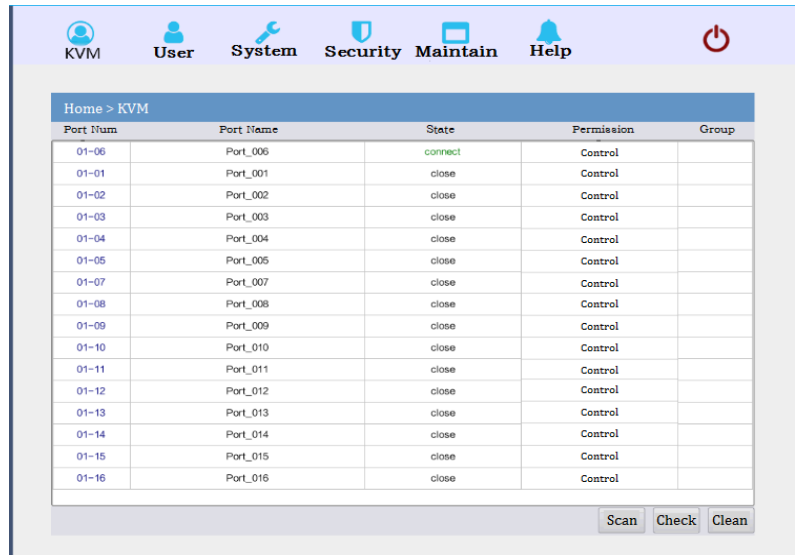
## 4. USER INTERFACE OPERATION

login UI control menu

User Name: admin

Password: admin

After logging in the device, you can see the connection status of the device port.



The screenshot shows the KVM user interface with a navigation bar at the top containing icons for KVM, User, System, Security, Maintain, Help, and a power button. Below the navigation bar is a breadcrumb trail: Home > KVM. The main content area displays a table with the following columns: Port Num, Port Name, State, Permission, and Group. The table lists 16 ports, with the first port (01-06) in a 'connect' state and the others in a 'close' state. At the bottom right of the table are three buttons: Scan, Check, and Clean.

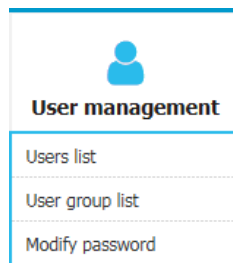
Port Num	Port Name	State	Permission	Group
01-06	Port_006	connect	Control	
01-01	Port_001	close	Control	
01-02	Port_002	close	Control	
01-03	Port_003	close	Control	
01-04	Port_004	close	Control	
01-05	Port_005	close	Control	
01-07	Port_007	close	Control	
01-08	Port_008	close	Control	
01-09	Port_009	close	Control	
01-10	Port_010	close	Control	
01-11	Port_011	close	Control	
01-12	Port_012	close	Control	
01-13	Port_013	close	Control	
01-14	Port_014	close	Control	
01-15	Port_015	close	Control	
01-16	Port_016	close	Control	

In the port list,

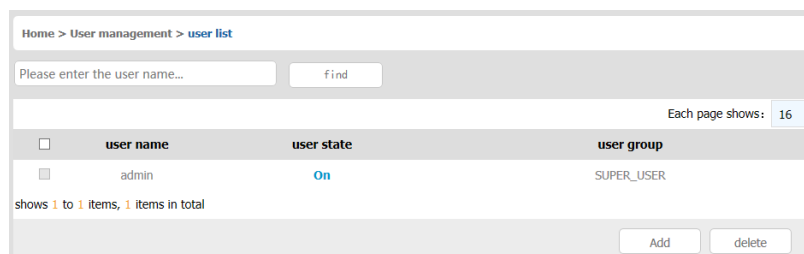
1. Click the "Connect" to enter the host screen;
2. In the host screen, press the [L\_Ctrl] key on the keyboard twice.
3. Return to the UI interface.

### 4.1 USER

User management mainly set up for user& user group adding, delete and modifying, user password modification, user group permissions and so on. If the user do not have user management authority, the user cannot access to user management interface. The user in this section is who have the user management authority.



*User List*

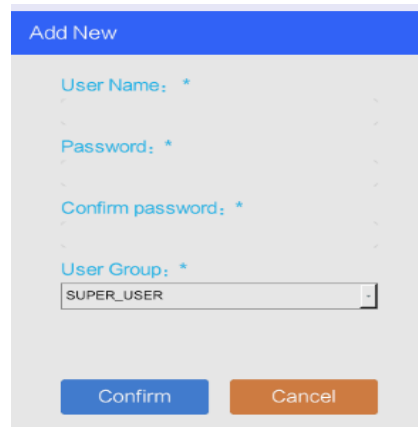


The screenshot shows the "User List" interface. It has a breadcrumb trail: Home > User management > user list. There is a search bar with the text "Please enter the user name..." and a "find" button. Below the search bar is a table with columns for user name, user state, and user group. The table shows one user: "admin" with state "On" and group "SUPER\_USER". At the bottom right are "Add" and "delete" buttons. The text "shows 1 to 1 items, 1 items in total" is displayed at the bottom left.

<input type="checkbox"/>	user name	user state	user group
<input type="checkbox"/>	admin	On	SUPER_USER

User list interface: List all registered users, you can see more by page turning

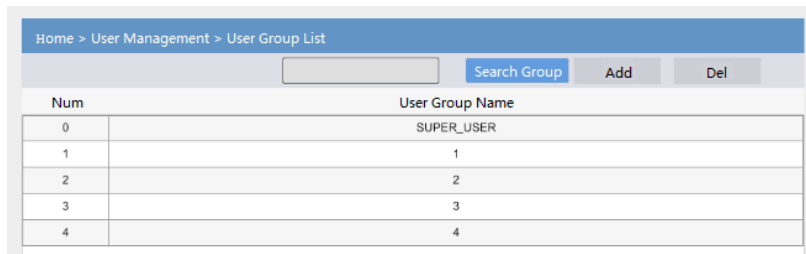
- User name or full user name search  
Input user name, it shows related users which make it convenient when you have a large number of users
- Add user  
Click **【add】** button, the window below appears:



*Note: In this window, "\*" is required content*

1. User name: user name can contains only low case letters, number and “\_”
2. Enter password: without strong password protection, the password can only compose of 1-16 letters, numbers or special characters(-@.\$! \_); With strong password protection, the password should be filled in according to the rules of strong password protection. More details please check “security management—>security setting—>strong password”
3. User group: Select the corresponding user group

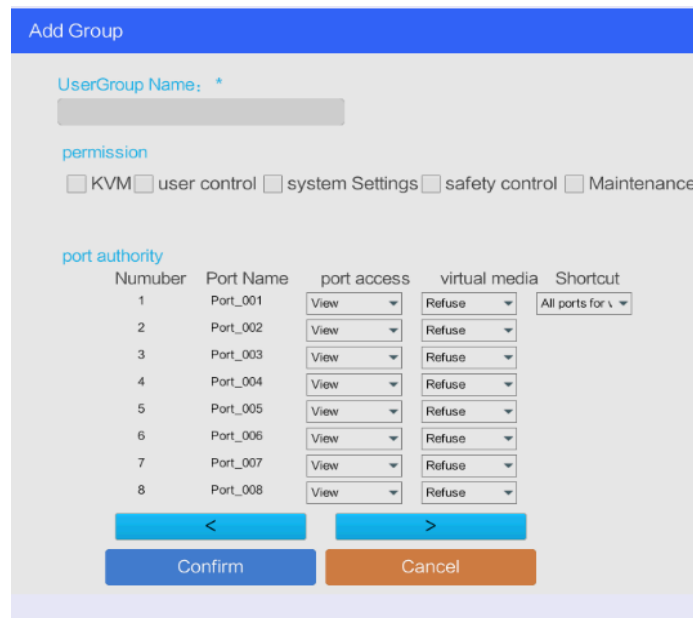
### User group list



Num	User Group Name
0	SUPER_USER
1	1
2	2
3	3
4	4

User group list interface: List all registered users, you can see more by page turning

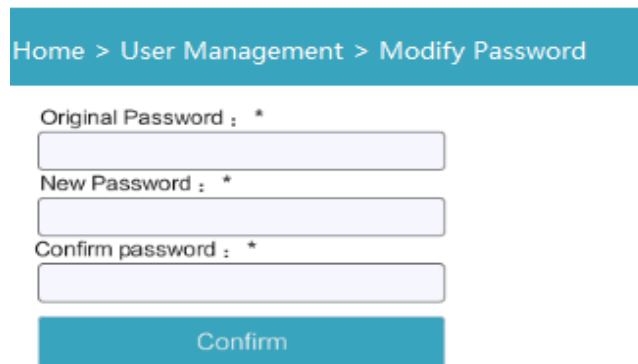
- User group name search  
Input user group name, it shows related user groups which make it convenient when you have a large number of users
- Add user group  
Click **【add】** button, the window below appears



1. User group name: it contains only low case letter, number and “\_”
2. Authority: mainly refers to management authority and operation authority, click show more, authority menu appears (shown in picture above), click show less, authority menu disappears
  - Port Access: Authority to access KVM, and control target server
  - User Management: user management authority
  - Device Setting: KVM device management authority
  - Security Management: security management authority
  - System Maintenance: system maintenance authority
3. Port authority: Set up access and operating authority for each port

### Change password

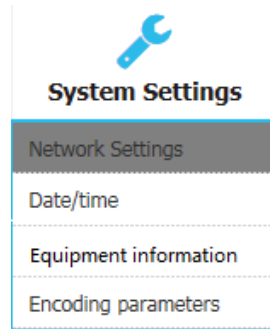
The passwords which is using for logged user



*Note: In this window, “\*” is required content*

1. User name: user name can contains only low case letter, number and “\_”
2. Enter password: without strong password protection, the password can only compose of 1-16 letters, numbers or special characters (-@.\$! \_); With strong password protection, the password should be filled in according to the rules of strong password protection. More details please check “security management—>security setting—>strong password
3. User group: Select the corresponding user group

## 4.2 SYSTEM



### Network settings

A screenshot of the 'Network Settings' configuration page. The page title is 'Network Settings' with a breadcrumb 'System Settings > Network Settings'. The page is divided into two sections: 'Network Settings' and 'DCSG Settings'.  
Under 'Network Settings':  
- IP Address : 192.168.2.167  
- Subnet Mask : 255.255.255.0  
- Gateway : 192.168.1.1  
- MAC : 00:4a:b5:3c:6f:58  
Under 'DCSG Settings':  
- DCSG IP : 192.168.1.100  
- DCSG Port : 5500  
At the bottom is a blue 'confirm' button.

#### IPv4 address setting:

- IP address: preset IP address
- Subnet mask: Generally, it should be consistent with other devices in the network.
- Default gateway: Generally, it should be consistent with other devices in the network.
- MAC address: physical address
- DCSG IP: the IP address should be the same with the Authentication Server IP address
- DCSG Port: the Port should be the same with the Authentication Server Port.

## Date time

**Date Settings** System Settings > Date Settings

Date Settings

**User setting time**

Date Settings:

Time Setting:

**Synchronize with the NTP server:**

Time server:

Select time zone:

### System time setting:

- Customized time: manual setting
- Synchronize with the NTP server: the system automatically updates the time according to the time

## Equipment information

Technology KVM Over IP management system

KVM User System Security Maintain Help

Home > System Settings > Equipment information

Device name

KVM Hot-key

Function Hot-Key

Setting Module EDID

Function key table

1,2,3...n	Switch the port
+	VGA Bright +
-	VGA Bright -
>	VGA Gain +
<	VGA Gain -
↓	Switch Next port
↑	Switch Previous port
→	Switch Next port
←	Switch Previous port
L	Logout
R	Reset VGA

## Encoding parameters

**Encoding parameter** System Settings > Encoding parameters

Video Formats: PAL

Stream type: Major Stream

Frame Rate: 25

IP Ratio: 25

Rate Limit:

## 4.3 SECURITY



### Security Settings

 A screenshot of the 'Security Settings' configuration page. The breadcrumb trail is 'Home > safety management > Security Settings'. The page is divided into four main sections:
 

- login restric:** Includes checkboxes for 'Restrict single sign-on.', 'password expiration' (set to 50 Day), and 'Cancellation user' (set to 36, 1-365minutes).
- Login lock:** Includes radio buttons for 'Disable lock', 'Account lock' (try 60), and 'Timed lock' (try 60, Locking 2, 1-1440minutes).
- Strong:** Includes checkboxes for 'Enable password', 'Contain lowercase', 'Contain uppercase', and 'Contain Number'. It also has 'password depth' (set to 3) and 'Min/max length' (set to 1 - 16).
- Encryption s:** Includes dropdowns for 'Local info encryption mode' (set to No ENCRYPTION) and 'Local device reset mode' (set to Enable Local Factor). There is also a checkbox for 'Encryption mode is applied to KVM and virtual'.

 At the bottom are 'Confirm' and 'Cancel' buttons.

#### *Login restriction: user name login restriction*

- Single sign on restriction: if one user name is logged in, it can no longer log in with this user name, if it is selected, you can log in with the user name
- Enable passwords expiration: current password use days, ranges from 1-365 days, if it is selected, the default is 50 days
- Free user log off: If user do not have operations after logging in a set time, the user will be logged off automatically

#### *Login lockout*

- Lockout forbidden: when it is selected, lockout will be canceled
- Account lockout: account setting for login attempts failed
- Time lockout: when account logging attempts over the setting times, the time for lockout

#### *Strong password*

- Enable password strength rules: when it is selected, the original password will be forced to be tighten
- Password history depth: new password cannot be the same as the latest 3 (default) password, this number can be changed, it ranges from 1-10
- Strong passwords is at least 1 bit and maximum is 16 bits

#### *Encryption scheme*

- Local information encryption scheme: DES, AES128, AES256 three encryption schemes and one un-encryption scheme
- Encryption scheme is applied to KVM and virtual media (applied when selected)

### Audit log

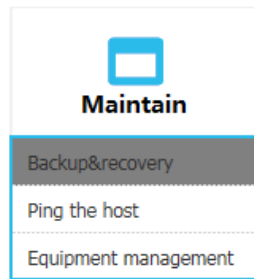
 A screenshot of the 'Audit log' page. The breadcrumb trail is 'Home > Security Management > Audit log'. At the top, there are filters for 'Date' (1970-01-14 00:00:00 to 1970-01-14 13:49:28), 'Main type' (ALL), and 'subtypes' (ALL), along with a 'Search' button. Below the filters is a table with the following columns: 'Num', 'Date', 'Event', and 'Instructions'. The table contains 16 rows, numbered 01-01 to 01-16. At the bottom of the table are navigation arrows.
 

Num	Date	Event	Instructions
01-01			
01-02			
01-03			
01-04			
01-05			
01-06			
01-07			
01-08			
01-09			
01-10			
01-11			
01-12			
01-13			
01-14			
01-15			
01-16			

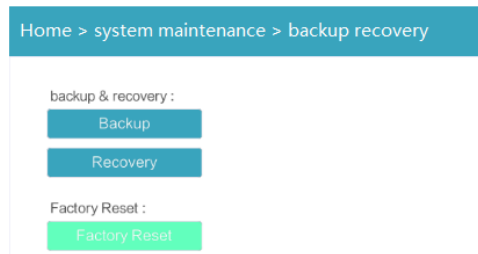


## 4.4 MAINTENANCE

Provide system maintenance tools such as test tools, data backup and restart



### Backup & Restore

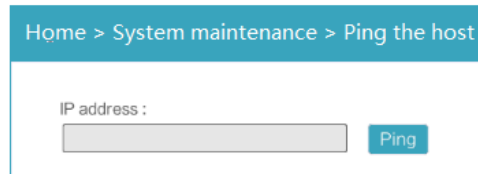


**Backup:** backup current system settings

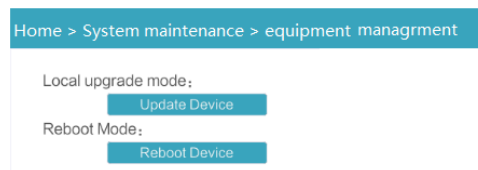
**Restore:** restore the last backup of system

**Factory reset:** Restore to factory state (KVM must be restarted to take effect)

### Ping



### Update



## 5. REMOTE CONTROL

### 5.1 CONFIGURE THE TARGET SERVER

Before installing and using the IP-KVM Switch, connect and configure the target server first.

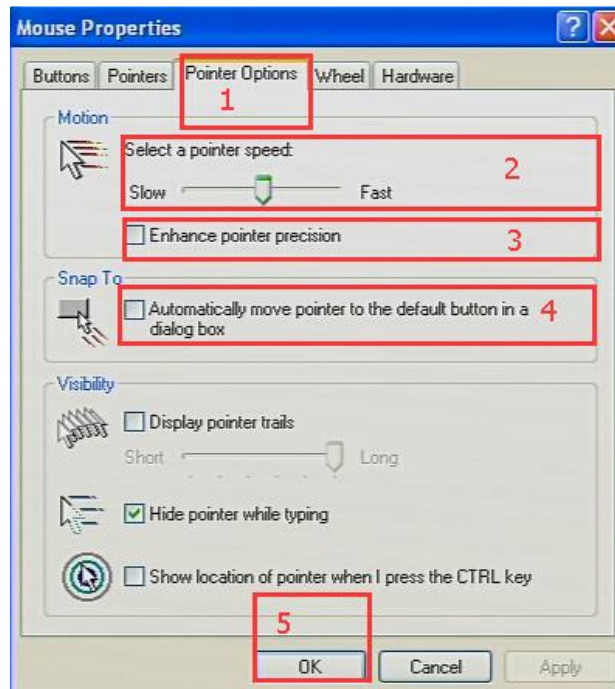
The digital KVM switch supports multiple mouse modes:

- Absolute mouse mode
- Relative mouse
- Intelligent mouse mode

Mouse configuration is different by operating system (Windows Server 2003 and later versions, Windows XP and later versions)

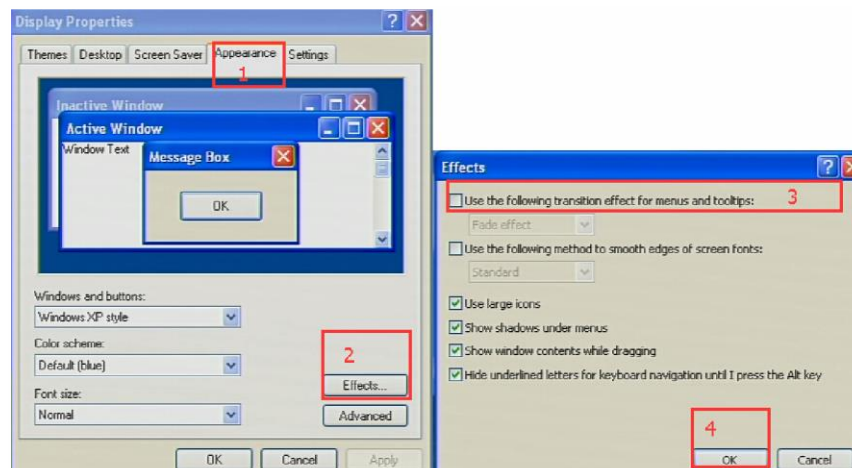
**Operating systems:** Windows server 2003, Windows server 2005, Windows server 2008, Windows server 2012; Windows XP, Windows 7, Windows 8, Windows 10

- Set Mouse Precision  
Start—>Control Panel—> [Hardware]—>Mouse



Please follow the steps above to finish the setting.

- Set up the display of the target server under Windows XP, Windows 2003, Windows 2008  
Start—>Control Panel—> [Hardware]—>Display



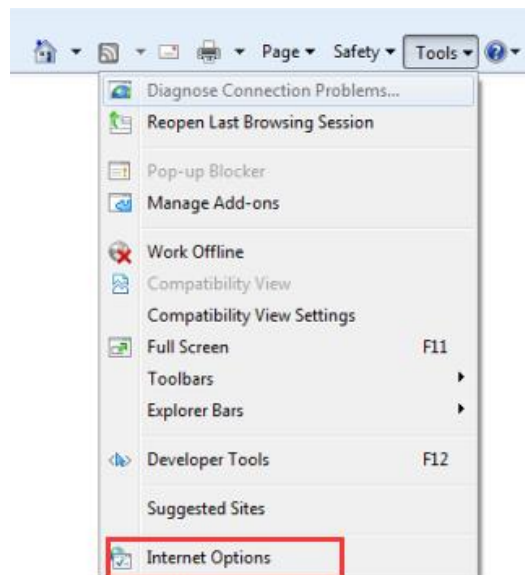
Please follow the steps above to finish the setting.

- Configure the mouse under Linux (ubuntu 10)
- Input "set m 1 1" in the Linux command line terminal and press Enter to finish the mouse setting, as shown below.

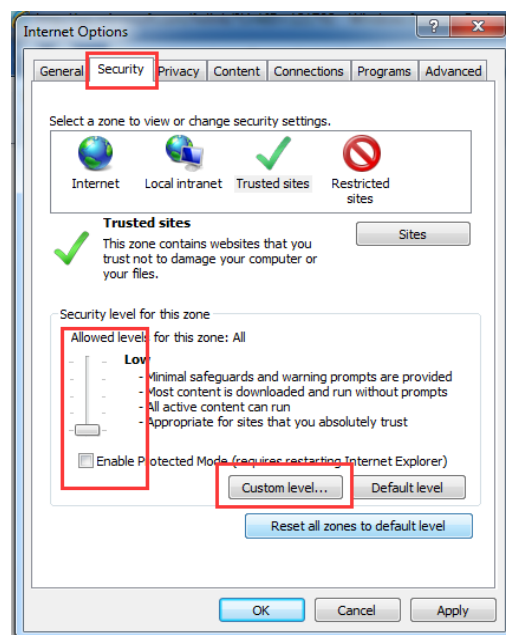
```
File Edit View Search Terminal Help
ADMIN@ubuntu:~$ xset m 1 1
ADMIN@ubuntu:~$
```

## 5.2 REMOTE WEB INTERFACE SETTINGS

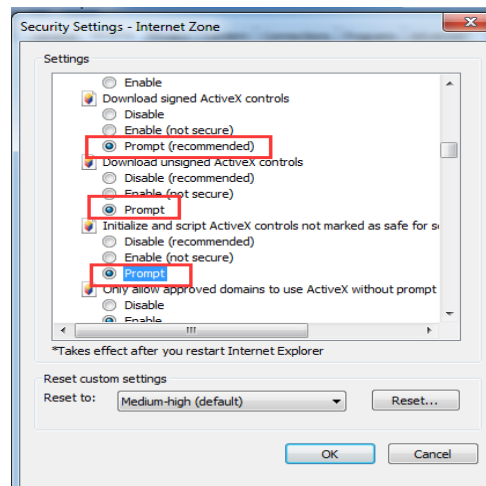
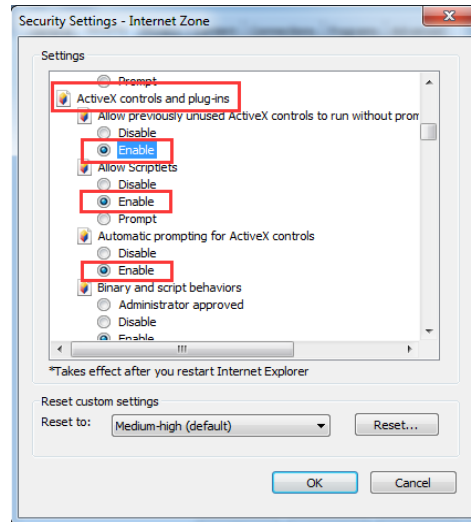
Install and open IE browser, click top-right settings → **Internet Options**



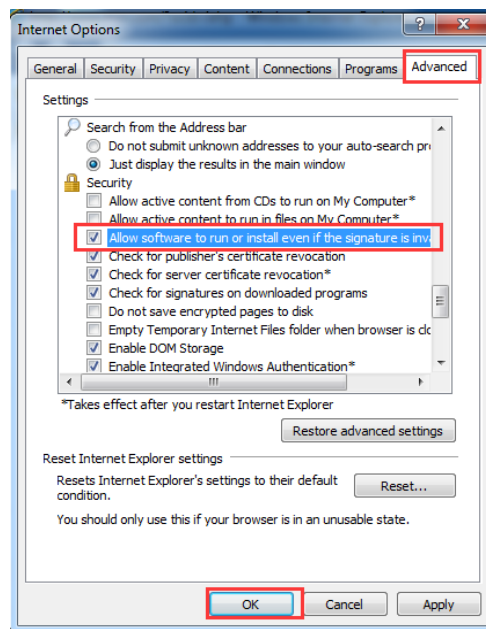
Click **Security** → **Custom Level**



## 【ActiveX controls and plugins】



Click 【Advanced】 , find 【Allow software to run or install even if the signature is invalid】 and select it.



### 5.3 LOG IN

Default Items	Default Value
User name	admin
Password	admin
IP address	192.168.1.167
<i>Notice: For security, please change the password after the first login. Differentiate between capital and lowercase letters.</i>	

After connecting the device, open the web browser: `http:// 192.168.1.167`

USERNAME: admin  
 PASSWORD: [masked]  
 LOGIN

User Name: admin  
 Password: admin

After logging in for the first time, a prompt for loading the ActiveX will appear below the browser. Clicking **Allow** will bring up the Download Video Plugin dialog box. Click OK to use the video plugin.

Number	Port name	State	Port permission
3	Port_003	connect	control
1	Port_001	close	control
2	Port_002	close	control
4	Port_004	close	control
5	Port_005	close	control
6	Port_006	close	control
7	Port_007	close	control

Access status of the KVM ports, three connection status:

1. Busy
2. Connect
3. Close

- “Connect” shows the target KVM is connected to the KVM port; users can access to the target anytime.
- “Close” shows that the KVM is not connected to the KIM adapter or the target server, or the target server is not boot up.
- “Busy” shows that port is access by local or remote users.

**Edit Port Name:**

Home > System Settings > Configure port

**Configure Port\_3**

Name :  
 Port\_003

confirm cancel

## 5.4 VIDEO CONTROL INTERFACE MENU



- 【Hide or Show Toolbar】
- 【Setting Option】
- 【Send Ctrl+Alt+Del】
- 【Mouse Synchronization】
- 【Single Mouse】
- 【Adaptive Window】
- 【Source Video params】
- 【Full Screen】

### 1. Hide or Show Toolbar

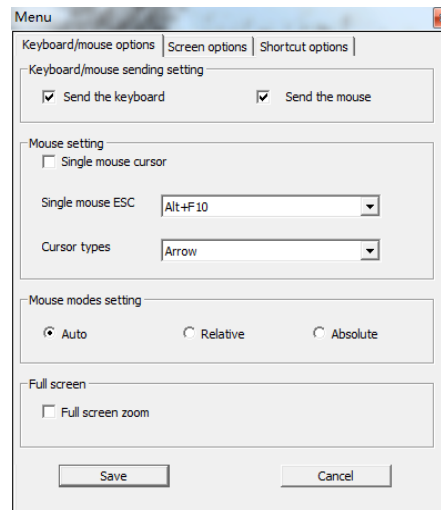


When the video window starts, the toolbar is always displayed by default. Click the iron toolbar will automatically hide. When the mouse move out (into) from the toolbar, it hides shows).

### 2. Setting Options

## Keyboard & Mouse Options

When user has the authority



### Keyboard/mouse sending setting

- Send keyboard: keyboard data can be sent to the target server through the video window so that it can control the target server's keyboard.
- Send mouse: mouse data can be sent to the target server through the video window so that it can control the target server's mouse.

### Mouse Setting

- Single mouse cursor: when single mouse chosen, target server's mouse will show and remote user's mouse will hide
- Single mouse ESC: press the keyboard shortcuts and it changes into double mouse mode
- Cursor types: it can set remote user's mouse cursor type in double mouse mode

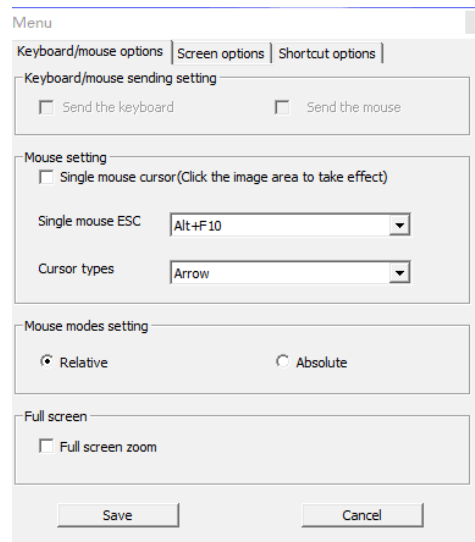
### Mouse Mode

- Relative and absolute modes, latest version only support absolute mode

### Full Screen Setting

Full Screen Zoom: When unselected, the video window will spread the video screen full of the remote computer screen in the full screen state; when selected, if the target server's resolution is different from the remote user computer's resolution (the resolution of the general target server is less than the resolution of the remote user computer), the video plug-in will display the screen in the middle of the screen according to the resolution of the target server.

When users only have authority to view, remote users can only view the video window and cannot control it, as shown below.



### Display Option

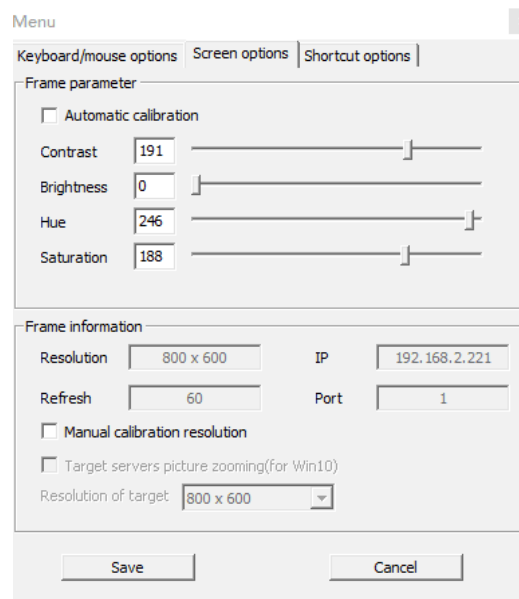
Display option dialogue shows screen parameters and screen information.

#### Screen Parameter

- Automatic calibration: The video window will automatically adjust the screen parameters of the target server to the default best effect.
- Contrast, brightness, hue and saturation: When automatic calibration canceled, users can customize screen parameters of target server.

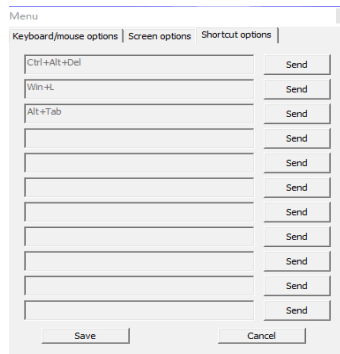
#### Frame information

- Resolution: it shows the resolution of the target server. When the target server's platform is win10, it shows the resolution of video
- IP address: KXT III switch's IP address
- Refresh Rate: Video refresh rate
- Port number: Video port number
- Manual calibration resolution: When the resolution of the target server is not consistent with the resolution of the video window, it can manually calibrate the resolution after calibration
- Target server resolution: Resolution selection of manual calibration
- Target server's picture zooming: Under the win10 system, if the resolution is not the best resolution, the win10 system will zoom the video screen, and the video window cannot automatically identify whether the video source picture is zooming or not, then the user needs to select the option by its own.

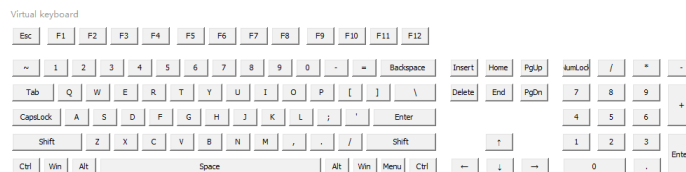


## Keyboard Shortcuts

Supports 11 keyboard shortcuts, each with a maximum of 6 keys. It can save shortcut keys and can be directly used when logging in next time.



Click blank input box, virtual keyboards appears, and the key clicked on the virtual keyboard will be displayed in the input box.



## Send [send Ctrl+Alt+Del]

Keyboard Macro: click this button, the target server will receive shortcut key. Send Ctrl+Alt+Del. Bring up the task manager of target server (Windows operating system)

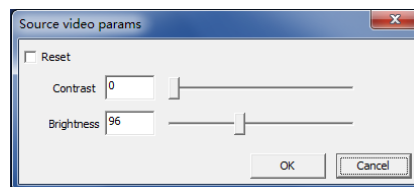
## Mouse Synchronization

In double mouse mode, click this button to automatically collate the current mouse, and synchronize the external mouse and internal mouse to the origin of the left corner of the video window.

## Single mouse

In the video window, it will hide the remote user's mouse, and only show the target server's mouse.

## Source video params



## Optimum size

The initialization size of the video window is 1024x768, when click this button, the video window will adjust the size of the window according to the resolution of the target server.

## Full Screen

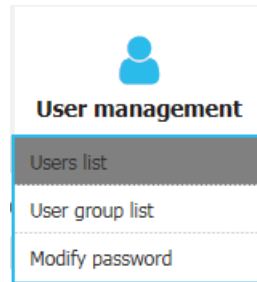
The video window enter full screen mode



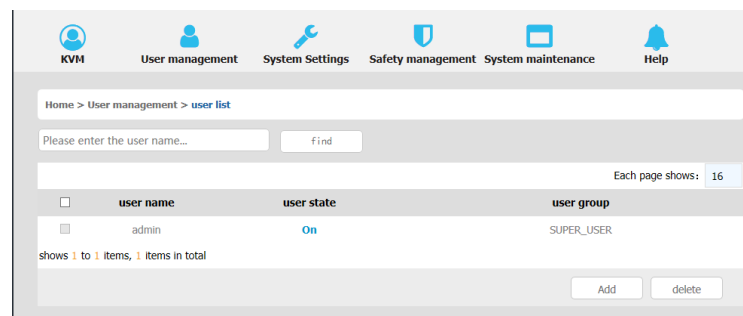
## 6. IP MENU OPTION

### 6.1 USER MANAGEMENT

User management mainly set up for user & user group adding, delete and modifying, user name password modification, user group permissions and so on. If the user do not have user management authority, the user cannot access to user management interface. The user in this section is who have the user management authority.



#### User List



User list interface: list all registered users, you can see more by page turning

- User name or full user name search  
Input user name, it shows related users which make it convenient when you have a large number of users
- Add User  
Click **add** button, the window below appears:

 A screenshot of the "Add user" form. The breadcrumb trail is "Home > User management > Add user". The form has the title "Add user" and four required fields: "username \*" with a text input, "Set password \*" with a text input, "Confirm password: \*" with a text input, and "User groups \*" with a dropdown menu showing "SUPER\_USER". At the bottom are "confirm" and "cancel" buttons.

*Note: In this window, "\*" is required content*

1. User name: user name can contains only low case letter, number and "\_"
2. Enter password: Strong password protection, the password can only compose of 1-16 letters, numbers or special characters (-@.\$!\_). For more details please check "security management → security setting → strong password"
3. User group: Select the corresponding user group

## Delete User

Select the user you want to delete, click **【delete】**

Home > User management > user list

Please enter the user name... find

Each page shows: 16

<input type="checkbox"/>	user name	user state	user group
<input type="checkbox"/>	admin	On	SUPER_USER
<input checked="" type="checkbox"/>	user1	Off	SUPER_USER

shows 1 to 2 items, 2 items in total

Add delete

**1** points to the checkbox for user1. **2** points to the delete button.

*Note: admin cannot be deleted, other users can be deleted, even if they are online.*

## Edit user

Click **【A1】**, edit user window pop up

Home > User management > user list

Please enter the user name... find

Each page shows: 16

<input type="checkbox"/>	user name	user state	user group
<input type="checkbox"/>	admin	On	SUPER_USER
<input checked="" type="checkbox"/>	user1	Off	SUPER_USER

shows 1 to 2 items, 2 items in total

Add delete

**Click to edit the user** points to the checked checkbox for user1.

Home > User management > Edit user

**Edit user**

username \*  
user1

Original password: \*  
Please enter the original password

New password: \*  
by1-16letters, Numbers, or special symbols c

Confirm password: \*  
Please confirm the password

User groups \*  
SUPER\_USER

## User group list

Home > User management > user group list

Please enter the user group name... find

Each page shows: 16

<input type="checkbox"/>	group id	user group name
<input type="checkbox"/>	0	SUPER_USER
<input type="checkbox"/>	1	usergroup1

shows 1 to 2 items, 2 items in total

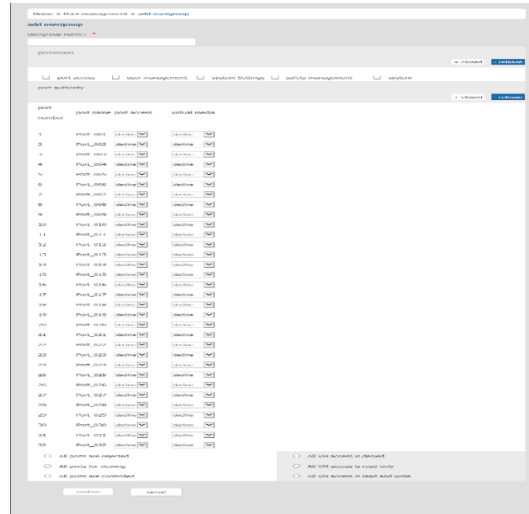
Add delete

User group list interface: list all registered users, you can see more by page turning

- User group name search
- Input user group name, it shows related user groups which make it convenient when you have a large number of users

## Add user group

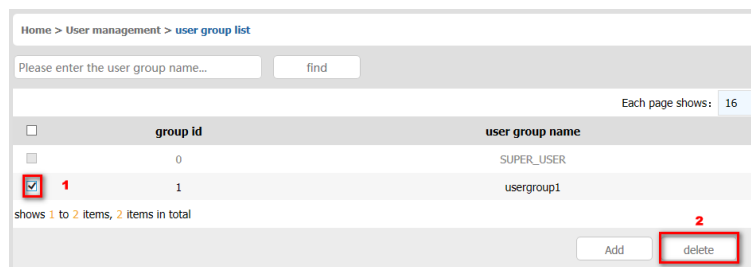
Click **add** button, the window below appears



1. User group name: it contains only low case letter, number and “\_”
2. Authority: mainly refers to management authority and operation authority, click show more, authority menu appears (shown in picture above), click show less, authority menu disappears
  - Port Access: Authority to access KVM, and control target server
  - User Management: user management authority
  - Device Setting: KVM device management authority
  - Security Management: security management authority
  - System Maintenance: system maintenance authority
3. Port authority: Set up access and operating authority for each port

## Delete User Group

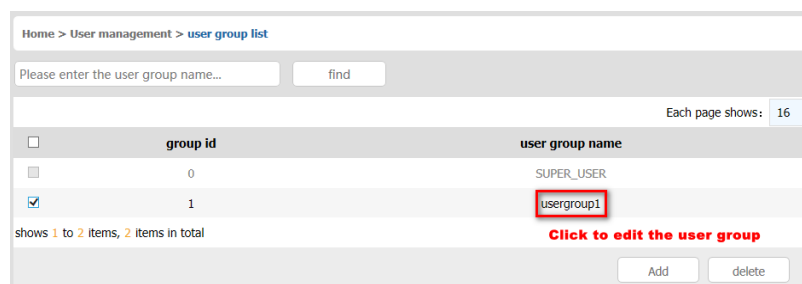
Select the user group you want to delete, click **delete**



*Note: SUPER\_USER is system allocated which cannot be deleted*

## Edit user group

Click **1** edit user group window pop up; for specific operation, please check “add user group”



## Change Password

The passwords which is using for logged user

Home > User management > **Modify password**

**Modify password**

original password: \*

Please enter the original password

new password: \*

Please enter the new password

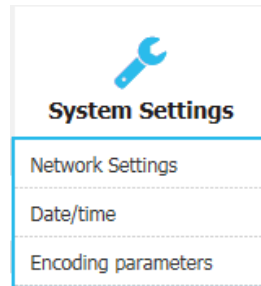
Confirm password: \*

Please enter your new password again

confirm cancel

1. Old passwords: The passwords you are using
2. New passwords: Strong password protection, the password can only compose of 1-16 letters, numbers or special characters (-@.\$! \_). For more details please check “security management → security setting → strong password”

## 6.2 SYSTEM SETTINGS



### Network Setting

Home > System Settings > **Network Settings**

**Network Settings**

Nic set

IPv4 address:  
192.168.0.168

Subnet mask:  
255.255.255.0

default gateway:  
192.168.1.1

mac address:  
00:4a:b6:68:9a:31

DCSG Ip:  
192.168.1.100

DCSG Port :  
5500

confirm cancel

#### IPv4 Address Setting:

- IP address: preset IP address
- Subnet mask: Generally, it should be consistent with other devices in the network.
- Default gateway: Generally, it should be consistent with other devices in the network.
- MAC address: physical address
- DCSG IP: the IP address should be the same with the Authentication Server IP address
- DCSG Port: the Port should be the same with the Authentication Server Port.

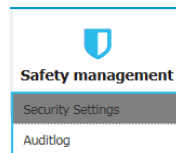
## Date /Time Setting

### System Time Setting:

- Customized time: manual setting
- Synchronize with the NTP server: The system automatically updates the time according to the time server
- Time zone setting: choose time zone

### Encoding Parameters

## 6.3 SAFETY MANAGEMENT



### Security Settings

**Login Restriction:** User name login restriction

- Single sign on restriction: If one user name is logged in, it can no longer log in with this user name, if it is selected, you can log in with the user name
- Enable passwords expiration: Current password use days, ranges from 1-365 days, if it is selected, the default is 50 days
- Free user log off: If user do not have operations after logging in a set time, the user will be logged off automatically

**Login lockout**

- Lockout forbidden: When it is selected, lockout will be canceled
- Account lockout: Account setting for login attempts failed
- Time lockout: When account logging attempts over the setting times, the time for lockout

**Strong password**

- Enable password strength rules: when it is selected, the original password will be forced to be tighten
- Password history depth: new password cannot be the same as the latest 3 (default) password, this number can be changed, it ranges from 1-10
- Strong passwords is at least 1 bit and maximum is 16 bits

**Encryption scheme**

- Local information encryption scheme: three encryption schemes and one un-encryption scheme
- Encryption scheme is applied to KVM as virtual media: applied when it is selected

**Audit Log**

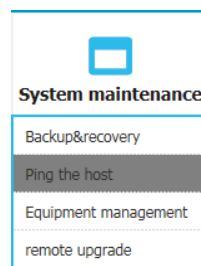
Home> security management > auditlog

maintype: all subtypes: all date selection: 2019-03-09 00:00:00 to 2019-03-09 10:23:29

search

Each page shows: 16

number	date	maintype	subtype	description
1	2019-03-09 08:00:07	operations	system boot	The user 'admin' 'system boot' on the host IP is '127.0.0.1'
2	2019-03-09 08:00:11	view	get config.	The user 'admin' 'get config.' on the host IP is '192.168.0.168'
3	2019-03-09 08:00:11	view	get config.	The user 'admin' 'get config.' on the host IP is '192.168.0.168'
4	2019-03-09 08:00:11	view	get config.	The user 'admin' 'get config.' on the host IP is '192.168.0.168'
5	2019-03-09 08:00:12	view	get config.	The user 'admin' 'get config.' on the host IP is '192.168.0.168'
6	2019-03-09 08:00:12	view	get config.	The user 'admin' 'get config.' on the host IP is '192.168.0.168'

**6.4 SYSTEM MAINTENANCE**

Provide system maintenance tools such as test tools, data backup and restart

**Backup & Restore**

Home > system maintenance > backup recovery

**backup recovery**

backup configuration file

confirm

recovery

restore backup recovery : recovery

factory reset

factory reset : restore factory Settings may take up to two minutes

- Backup: Backup current system settings
- Restore: Restore the last backup of system
- Factory Reset: Restore to factory state (KVM must be restarted to take effect)

## Ping Host

*Test network connection state to target server*

Input IP address and click **【ping】** button , if network is smooth, result returns to “IP is active”; if not, it returns to “no response from IP” (IP is tested target server’s IP).

## Equipment Management

## Remote Upgrade

Provide users with better upgrade experience and continuous technical support

### Upgrade Method:

Click **【browse】** and select upgrade file, upload the file to the device, then Click **【upgrade】** to finish upgrade

## 7. APPENDIX

### 7.1 SPECIFICATIONS (17" SCREEN)

Model		8 Port	16 Port	24 Port	32 Port
Computer Connections	Direct	8	16	24	32
	Max	8	16	24	32
Port Selection	Keyboard, Mouse	Button, UI, Web			
LED Monitor	Model	SXGA TFT			
	View Area	17 "			
	Optimum Resolution	1280×1024@60Hz			
	Color	16.7 M			
	Brightness	250 cd/m <sup>2</sup>			
	Contrast Ratio	1000 : 1			
	Pixel Pitch(mm)	0.264(H) × 0.264(W)			
Mouse	X/Y Resolution	>1000 points / inch, ( < 40 points/mm )			
	Scroll Wheel	Supports Scroll Wheel function			
Keyboard		99 keys (82 keyboard + 17 number pad)			
Remote	Remote Control	KVM Control (ActiveX)			
	Management	Web			
	Security	DES Encrypted			
	Resolution	1920×1080@60Hz			
Power Input	100V- 240Vac , 50-60Hz , <1.5A				
Power Consumption	23W	23W	24W	25W	
Operating Temperature	0 — 40 °C				
Store Temperature	-20 —60 °C				
Humidity	0~80% RH, non-condensing				
Net Weight	13kg	13kg	13.2kg	13.2kg	
Product Dimension (W × D × H)	448mm × 581mm × 42.5mm				
Package Dimension (W × D × H)	765mm × 615mm × 185mm				



## 7.2 SPECIFICAITONS (19" SCREEN)

Model		8 Port	16 Port	24 Port	32 Port
Computer Connections	Direct	8	16	24	32
	Max	8	16	24	32
Port Selection	Keyboard, Mouse	Button, UI, Web			
LED Monitor	Model	SXGA TFT			
	View Area	19 "			
	Optimum Resolution	1280×1024@60Hz			
	Color	16.7 M			
	Brightness	250 cd/m <sup>2</sup>			
	Contrast Ratio	1000 : 1			
Mouse	Pixel Pitch(mm)	0.294(H) × 0.294(W)			
	X/Y Resolution	>1000 points / inch, (40 points/mm)			
	Scroll Wheel	Supports Scroll Wheel function			
Keyboard		99 keys (82 keyboard + 17 number pad)			
Remote	Remote Control	KVM Control (ActiveX)			
	Management	Web			
	Security	DES Encrypted			
	Resolution	1920×1080@60Hz			
Power Input	100V- 240Vac , 50-60Hz , <1.5A				
Power Consumption	23W	23W	24W	25W	
Operating Temperature	0 — 40 °C				
Store Temperature	-20 — 60 °C				
Humidity	0~80% RH, non-condensing				
Net Weight	13.4kg	13.4kg	13.6kg	13.6kg	
Product Dimension (W × D × H)	448mm × 605mm × 42.5mm				
Package Dimension (W × D × H)	765mm × 615mm × 185mm				

