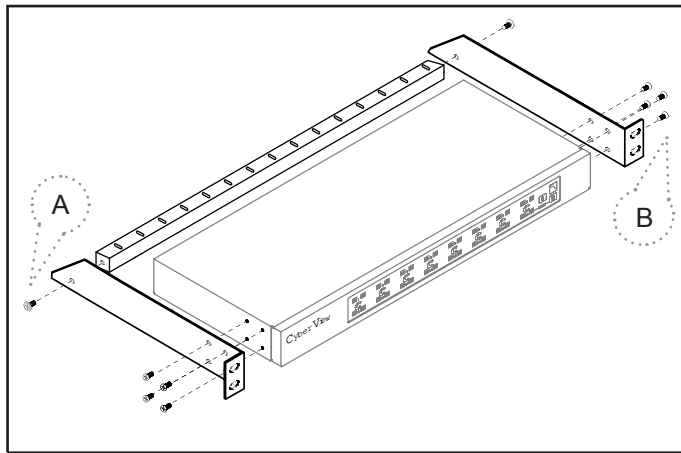


# IP-802 / IP-1602 IP DB-15 KVM

## Installation



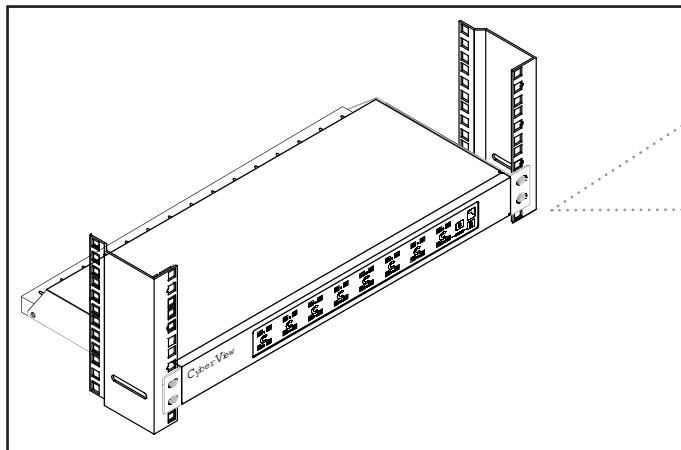
screw A: M3.2 x 4.5 mm



screw B: M4 x 10 mm

- Install each bracket using screws provided shown in **Figure 1**.

Figure 1. Installing the bracket to the KVM.



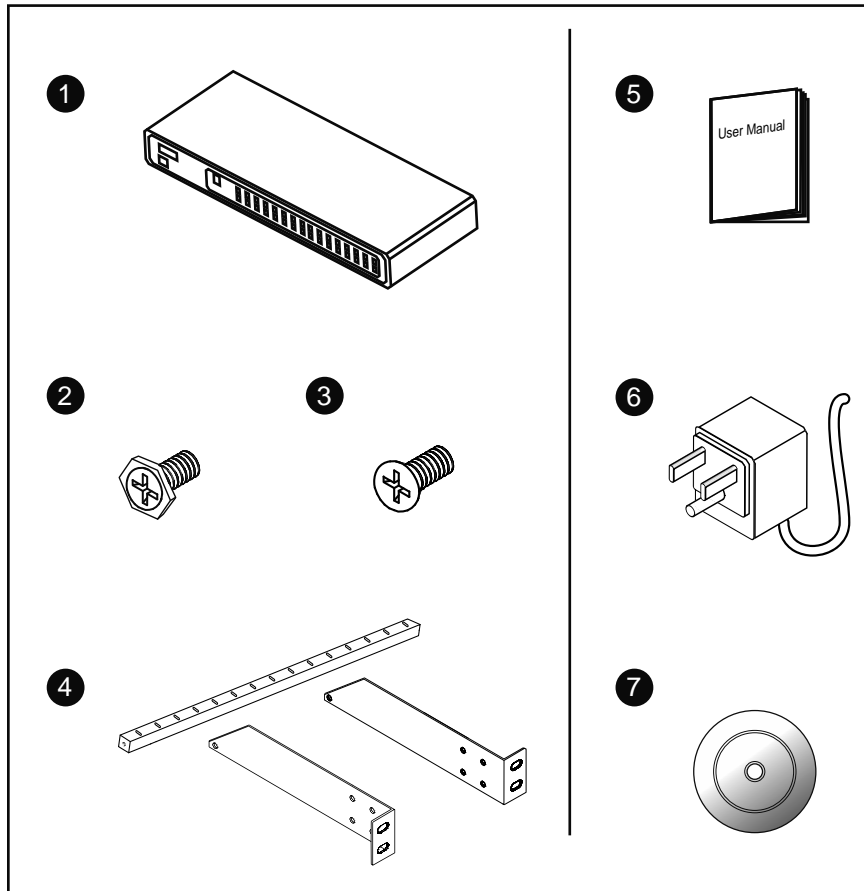
- Fix the KVM into the rack

\* Hardware for fixing the mounting bracket to the rack is not provided

Figure 2. Fixing the KVM into the rack.

# IP-802 / IP-1602 IP DB-15 KVM

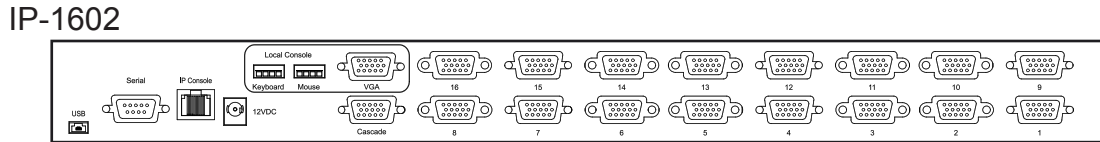
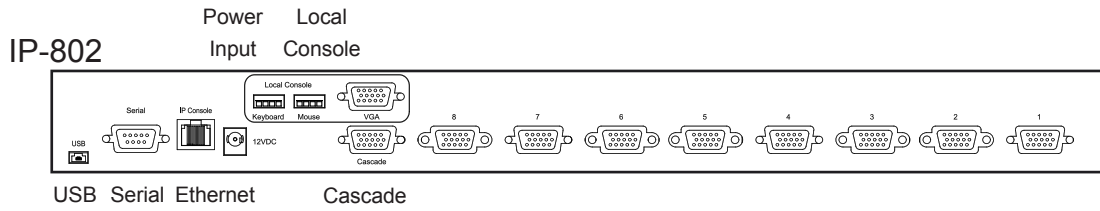
## Package Content (only for rackmount KVM)



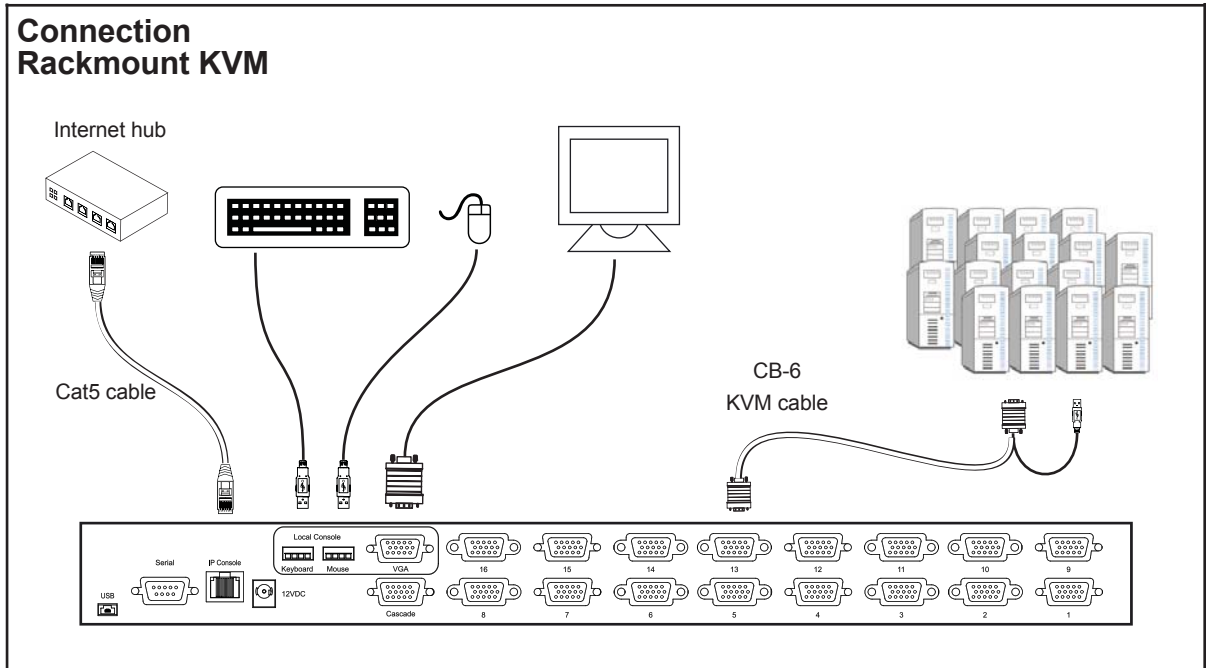
- ① KVM switch x 1 pc
- ② Screw M3.2 x 4.5mm x 4 pcs
- ③ Screw M4 x 10mm x 8 pcs
- ④ Bracket x 1 set
- ⑤ User manual x 2 pcs
- ⑥ Power adapter x 1 pc
- ⑦ CD disc x 1 pc (for IP KVM setup)

# IP-802 / IP-1602 IP DB-15 KVM

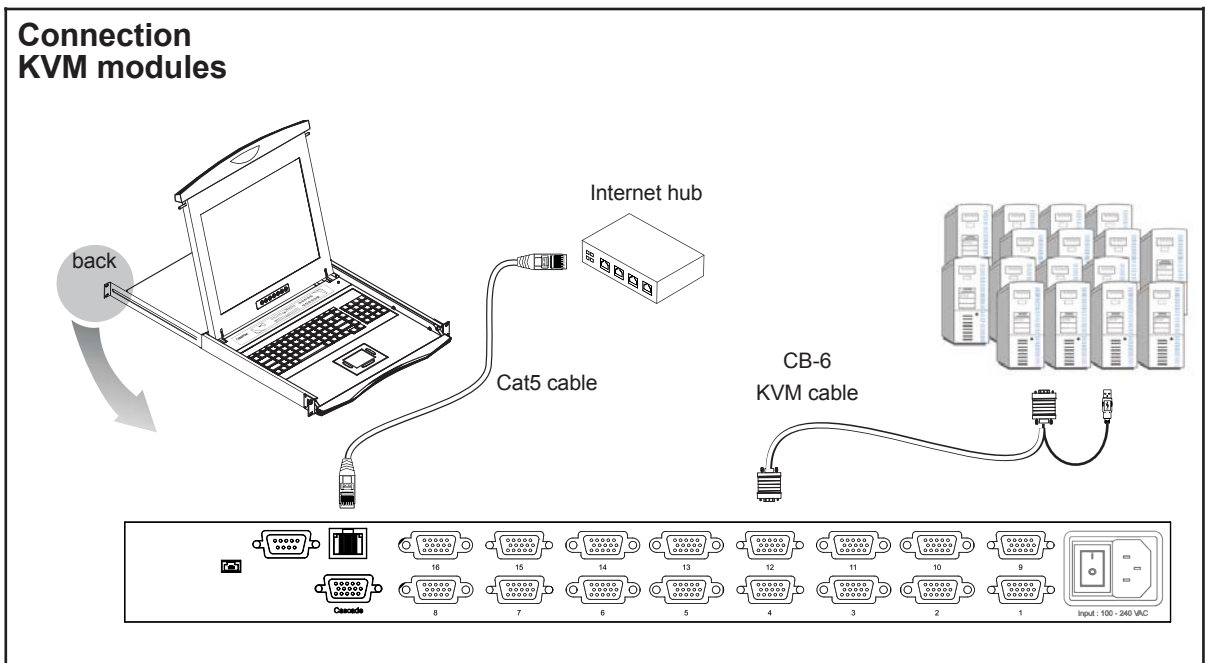
## Connection



## Connection Rackmount KVM



## Connection KVM modules

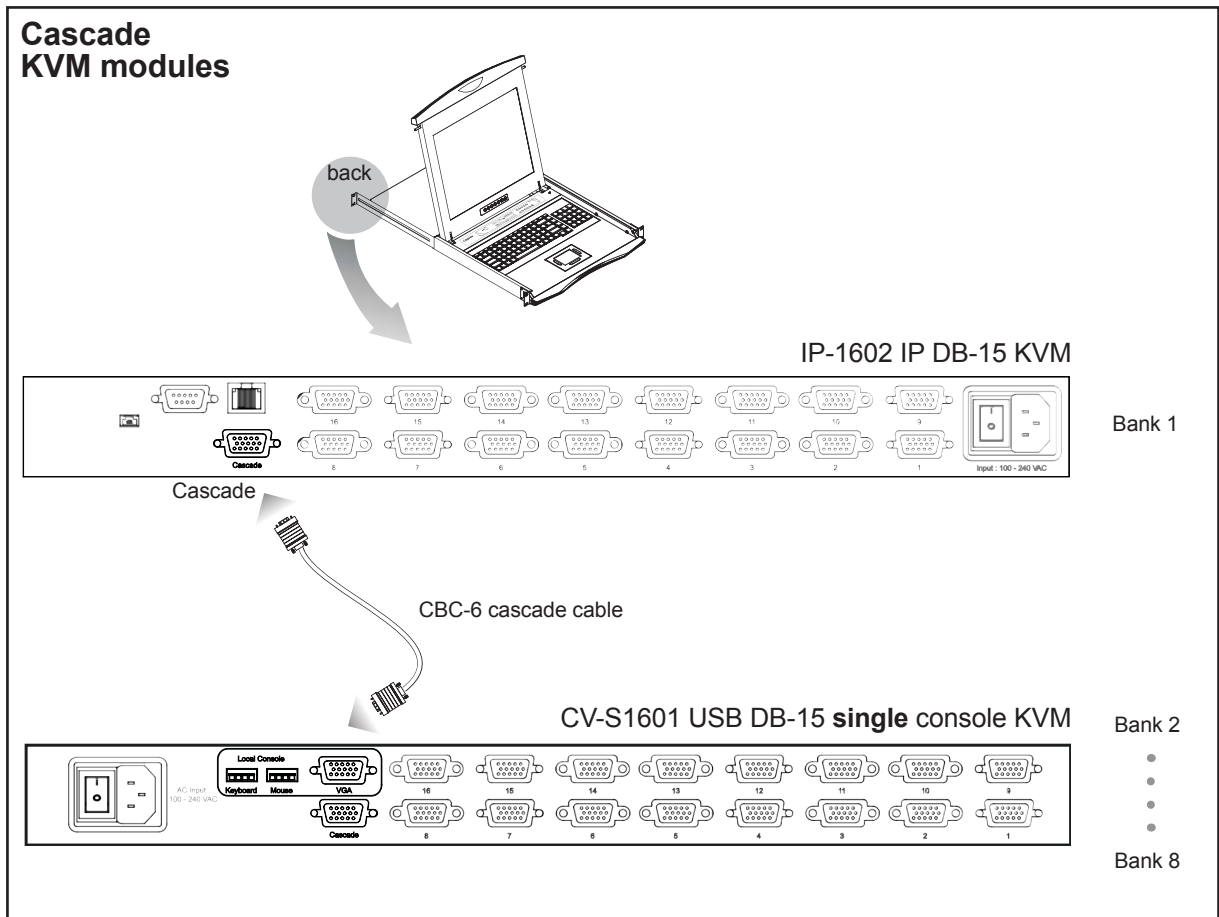
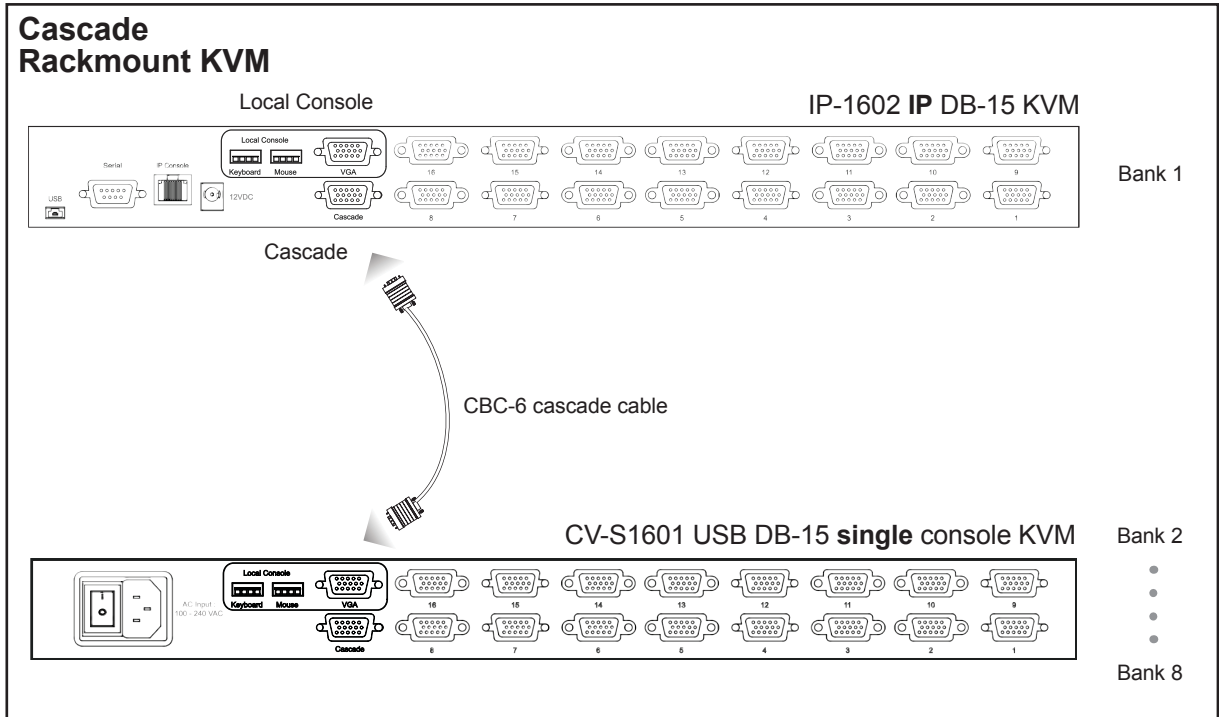


■ For USB & serial connection, please refer to the attached IP KVM user manual

# IP-802 / IP-1602 IP DB-15 KVM

## Cascade

- Cascaded KVM ( Bank 2 to 8 ) must be single console USB KVM - CV-S801 / CV-S1601
- With the IP-802 cascade up to 120 servers. With the IP-1602 cascade up to 128 servers.
- Cascading multiple KVM by CBC-6 cable



# KVM Membranes

## Power ON

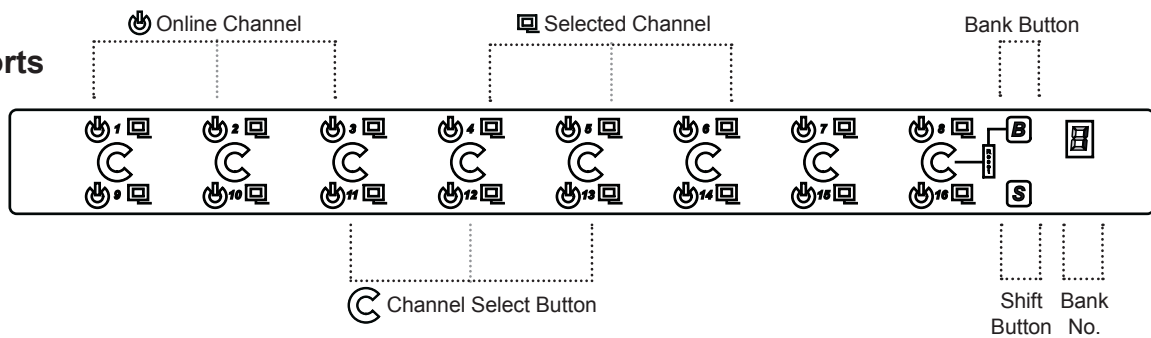
- Turn off all servers and KVM switches
- Make sure all cables / connectors are properly connected
- Recommend Power ON sequence is monitor, KVM switch finally computer

## Front Panel - Port LED Indications

### 8 ports



### 16 ports



Online Channel	<b>Green</b> LED on indicating a PC is connecting to the port
Selected Channel	<b>RED</b> LED on indicating a selected channel
Bank Button	Select the bank from 1 to 8
Channel Select Button	Press to select channel from 1 to 8
Shift Button	Press & hold follow with a channel button to select channel from 9 to 16
Bank No.	7-Segment BANK LED indication

# Password

## Password for IP-802 / IP-1602

The password is disabled by default (i.e. There is no password required when you power on the KVM switch for the first time)

### ■ Enable password

1. Press the KVM hotkey **Scroll Lock + Scroll Lock + U**
2. Logout the KVM by pressing the hotkey **Scroll Lock + Scroll Lock + P**
3. In SUPERVISOR level, enter "00000000" eight zeros in user name & password field  
**(Do not use "0" on number pad)**
4. In USER level, press **Space bar + Enter** in user name & password field

Remark: Automatic logout after 10 minutes of inactivity

### ■ Set your own user name & password

1. Login the KVM in SUPERVISOR level by pressing "00000000" eight zeros in user name & password field
2. Call KVM OSD menu by pressing the KVM hotkey **Scroll Lock + Scroll Lock + Space Bar**
3. Press **F1** to the MAIN MENU
4. Select "USER SECURITY"
5. Set password in SUPERVISOR & USER level
  - a. In the left-top row "S" (SUPERVISOR), press **Enter** to set your own user name & password
  - b. In the row 1 to 8 (USER), press **Enter** to set your own user name & password
6. Press **Enter** to save the setting or press **Esc** to cancel the editing without any change

Remark: a. Blank has underscore. SPACE does not have underscore.

- b. Press any alphanumeric key to move to next input item. SPACE is treated as a valid character

### ■ Change your password

1. Login the KVM in SUPERVISOR level by pressing your own user name & password
2. Call KVM OSD menu by pressing the KVM hotkey **Scroll Lock + Scroll Lock + Space Bar**
3. Press **F1** to the MAIN MENU
4. Select "USER SECURITY"
5. Change password in SUPERVISOR & USER level
  - a. In the left-top row "S" (SUPERVISOR), press **Enter** to change your user name & password
  - b. In the row 1 to 8 (USER), press **Enter** to change your user name & password
6. Press **Enter** to save the setting or press **Esc** to cancel the editing without any change

Remark: a. Blank has underscore. SPACE does not have underscore.

- b. Press any alphanumeric key to move to next input item. SPACE is treated as a valid character

### ■ Disable your password

1. Press the KVM hotkey **Scroll Lock + Scroll Lock + U**
2. Logout the KVM by pressing the KVM hotkey **Scroll Lock + Scroll Lock + P**
3. You don't need user name & password to access the KVM OSD menu

### ■ Forget your password


Please contact your supplier for further support

Remark:



- You must press the KVM hotkey within 2 seconds
- A beep sound will be heard for successful entering KVM hotkey

# KVM OSD


## OSD Menu

PORT NAME	
BANK : 1	
01☀ SYSTEM 01 	F1 : MENU
02☀ SYSTEM 02	F2 : LOGOUT
03☀ SYSTEM 03	F3 : PREV
04☀ SYSTEM 04	ESC : QUIT
05☀ SYSTEM 05	ENTER : COMPLETE
06☀ SYSTEM 06	↑/↓ : SELECT
07☀ SYSTEM 07	PgUp/PgDn : BANK SELECT
08☀ SYSTEM 08	
	USER : SUPERVISOR
	SCAN TIME : 10 SEC FW1V3

### OSD operation

 next to the system name	The PC is powered on
 next to the system name	The PC is selected
<b>F1</b>	Access F1 MAIN MENU
<b>F2</b>	Logout the OSD menu
<b>F3</b>	Previous menu
<b>Esc</b>	Cancel / Quit
<b>Enter</b>	Complete / Switch to selected port
<b>↑/↓</b>	Switch to previous or next port
<b>PgUp/PgDn</b>	Switch to previous bank or next bank
<b>1 / 2 / 3 / 4</b>	Display port 01 ~ 08 / 09 ~ 16 / 17 ~ 24 / 25 ~ 32 Remark: Display port 17 ~ 32 for 32 port model only

## F1 Main Menu

MAIN MENU  X	
SELECT OPTION :	
01 LANGUAGE	
02 PORT NAME EDIT	
03 PORT SEARCH	
04 USER SECURITY	
05 ACCESS LIST	
06 HOTKEY	
07 TIME SETTINGS	
08 OSD MOUSE	

01 LANGUAGE	OSD language change
02 PORT NAME EDIT	Define port name
03 PORT SEARCH	Quick searching by port name
04 USER SECURITY	Change password
05 ACCESS LIST	Define user access authority
06 HOTKEY	Change hotkey
07 TIME SETTINGS	Modify scan display time interval
08 OSD MOUSE	Modify OSD mouse speed

# KVM Hotkey

## Local Console Hotkey for IP-802 / IP-1602

Hotkey	Function
<b>Scroll Lock + Scroll Lock + Space Bar</b>	Calling OSD menu
<b>Right-button mouse + Esc</b>	Calling OSD menu
<b>Scroll Lock + Scroll Lock + ↑</b>	Switch to previous port
<b>Scroll Lock + Scroll Lock + ↓</b>	Switch to next port
<b>Scroll Lock + Scroll Lock + PgUp / PgDn</b>	Switch to previous bank or next bank
<b>Scroll Lock + Scroll Lock + Bank no. + Port no.</b>	Switch to specific port
<b>Scroll Lock + Scroll Lock + B</b>	Turn the buzzer ON and OFF * Default the buzzer is ON
<b>Scroll Lock + Scroll Lock + P</b>	Logout the KVM if password security is ON. Show up the status windows

### Advance hotkeys (for Supervisor login only)

<b>Scroll Lock + Scroll Lock + S</b>	Activate auto-scan mode for connected servers *Press any key to exit the auto-scan mode
<b>Scroll Lock + Scroll Lock + R</b>	Reset all the KVM settings to factory default *Except User Security settings
<b>Scroll Lock + Scroll Lock + U</b>	Disable and enable password security *Default security is OFF

#### Remarks:

- Example of “**Scroll Lock + Scroll Lock + Bank no. + Port no.**”
  - Bank No. : 1 to 8
  - Port No. : 01 to 16
  - e.g. Bank 1 Port 4 : **Scroll Lock + Scroll Lock + 1 + 0 + 4**
  - e.g. Bank 2 Port 16 : **Scroll Lock + Scroll Lock + 2 + 1 + 6**
- You must press the hotkey within 2 seconds
- A beep sound will be heard for successful entering
- The numeric keypad is not supported, while in OSD screen, the arrow keys, PgUp, PgDn, and Enter keys are supports

# IP-802 / IP-1602 IP Remote Setup

## Quick Installation Guide of IP KVM for remote access

Please perform the follow steps

1. Power off all KVM hardware and connected devices.
2. Connect the power supply to IP KVM
3. Connect the monitor, keyboard & mouse to console port of IP KVM (not applicable to integrated LCD drawer version )
4. Connect the KVM cable to IP KVM and target servers
5. Use an Ethernet cable to connect your local area network (LAN) to the IP console port on the KVM

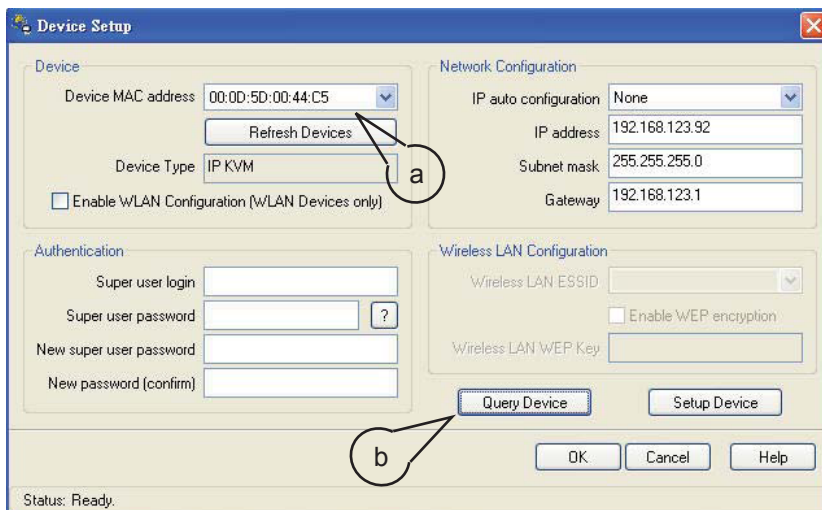
## Initial IP configuration

The factory default, DHCP mode is disable (IP auto con?guration = None), and the preset default address as below :

**IP address :** 192.168.1.22 (default)  
**Subnet-mask :** 255.255.255.0  
**Default Gateway:** None

Install the "PSetup.exe" program from the provided CD-disc to a computer which networked with IP KVM switch, then press Refresh Devices the look for the IP-KVM.

- a. Select the MAC address from label on bottom of IP-KVM switch
- b. Click Query Device



### 1. Configure the IP KVM with fixed address

- a. Setup "IP auto configuration" as "None"; setup IP address and Subnet mask
- b. Enter Super user login and password for Authentication (default : super/pass)
- c. Setup Device. If super login was authenticated, it'll show "Successfully configured device". Otherwise it'll show "Permission Denied".

### 2. Configure the IP KVM with DHCP

- a. Setup "IP auto configuration" as "DHCP"
- b. Enter Super user login and password for Authentication (default : super/pass)
- c. Setup Device. If super login was authenticated, it'll show "Successfully configured device". Otherwise it'll show "Permission Denied".

### 3. Install JVM on Client system

The IP-KVM switch was remote accessed by a standard JAVA enabled web browser. The client system must install Sun JVM 1.4.2 or above for remote access the IP KVM.

Remark:

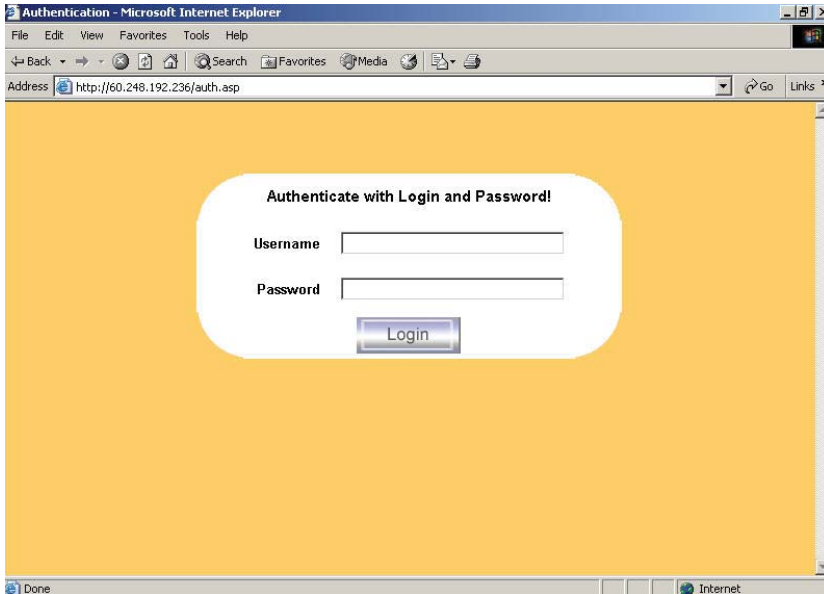
- At a minimum, you must have Internet Explorer 6.0 or Netscape 7.0 or Molliza 1.6 (and above) installed on your client computer.

# IP-802 / IP-1602 IP Remote Setup

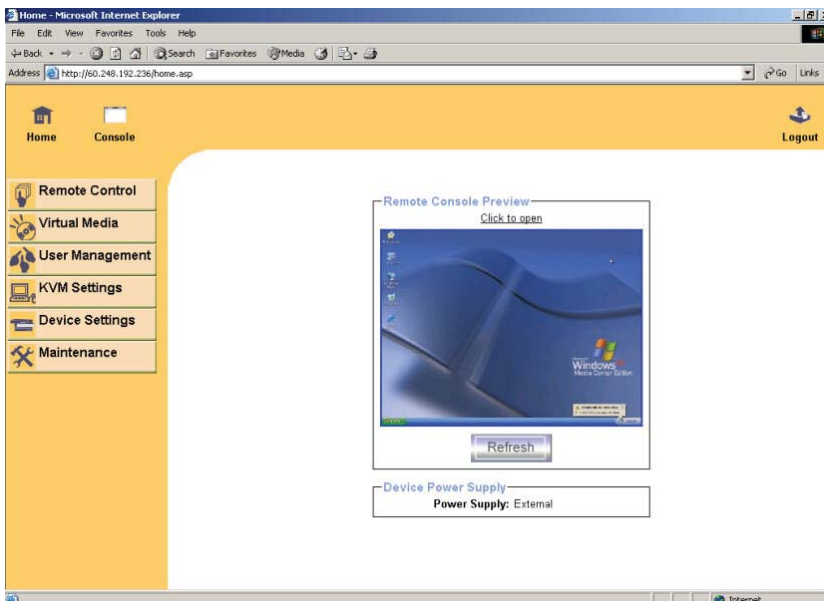
## 4. Remote access the IP-KVM switch via Web

Using the HTTP protocol or a secure encrypted connection via HTTPS and entering the configured IP address of IP KVM switch into the web browser to remote access the IP KVM switch.

With successful connection to IP KVM, the login page will show as below, then key in the default user name & password



## 5. After successful login to IP KVM, you will enter the main page of IP KVM as below :



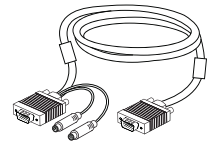
### Remark:

- We strongly recommend the user changes the default username and password to user specific values
- Please refer to the "IP KVM User Manual" for more detailed information about IP KVM switch.

## Optional Accessories

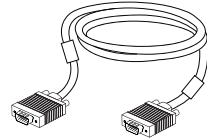
### 1. PS/2 3-in-1 KVM cable

- 1.1 CD-6 6 feet
- 1.2 CD-10 10 feet
- 1.3 CD-15 15 feet
- 1.4 CD-33 33 feet



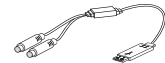
### 2. USB KVM cascade cable

- 2.1 CBC-6 6 feet



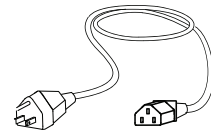
### 3. SUN / iMAC USB to PS/2 adapter

- 3.1 SUN-31 kit

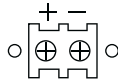


### 5. Power cord

- 4.1 IEC power cord
- 4.2 NEMA 5-15 power cord (US)
- 4.3 BS 1363 power cord (UK)
- 4.4 CEE 7/4 power cord (German)
- 4.5 AS 3112 power cord (Australia)



## DC Power 12V, 24V, 48V Input




Model	12V	24V	48V
<b>Input rating</b>			
Input voltage:	12-Volt	24-Volt	48-Volt
Input range:	9 ~ 18V	18 ~ 36V	36 ~ 75V
Input current			
- No load	50 mA	50 mA	50 mA
- Full load	4950 mA	2450 mA	1220 mA
<b>Output rating</b>			
Output voltage:	12-Volt	12-Volt	12-Volt
Output current:	4.16A	4.16A	4.16A
<b>Efficiency</b>	84%	85%	85%

### Remarks:

- Package does not include power cord

# Specification

<b>IP-802 / IP-1602</b> <i>IP</i> 	
<b>■ KVM Port</b>	
Number of ports:	8 or 16
Connector:	HDDDB 15-pin
Connectivity:	CD-6 / 10 / 15 / 33 6' / 10' / 15' / 33' 3-in-1 PS/2 KVM cable
<b>■ Local Console</b>	
Graphic connector:	HDDDB15-pin VGA
Resolution:	Up to 1920 x 1440
Input device:	2 x USB type A for keyboard & mouse
<b>■ IP Remote Console</b>	
Connector:	RJ45 Ethernet
User management:	15-user login, 1 x active user
Network protocol:	DHCP / BOOTP / DNS
Security:	SSL v3, RSA, AES, HTTP / HTTPS, CSR
Resolution:	Up to 1600 x 1200
Browser:	IE, Firefox, Safari, Netscape
Others:	Serial port, virtual media via USB
<b>■ Expansion:</b>	Up to 128 servers by 8-level cascade
<b>■ Compatibility</b>	
Multi-platform:	Mix PCs, SUNs, IBMs, HPs, DELLs Server
Support:	Windows Vista / 2003 / XP / 2000, Linux, Netware, Unix, DOS
<b>■ Power</b>	
Input:	100 or 240V AC at 50 or 60 Hz via AC adapter
Option DC:	12V / 24V / 48V DC input
<b>■ Regulatory Approval:</b>	FCC, CE
<b>■ Environmental</b>	
Operating:	0 to 50°C
Storage:	-5 to 60°C
Relative humidity:	90%, non-condensing
Shock:	50G peak acceleration (11ms, half-sine wave)
Vibration:	58~100Hz / 0.98G (11ms / cycle)
<b>■ Product Information</b>	
Dimension (W x D x H):	443 x 180 x 44 mm / 17.3 x 7.1 x 1.73 inch
Net weight:	IP-802 : 4.5 kg / 10 lb IP-1602 : 5 kg / 11 lb
<b>■ Packing Information</b>	
Dimension (W x D x H):	510 x 400 x 77 mm / 20.1 x 15.7 x 3 inch
Gross weight:	IP-802 : 5.5 kg / 12 lb IP-1602 : 6 kg / 13 lb

# FAQ

## General

- 1. How do the KVM switches allow the user to switch ports?**  
There are two ways to switch ports. One is the membrane buttons on the front and the other way is with Hot-key commands.
- 2. What operating systems do the KVMs support?**  
The KVMs support multi-platform support allows you to control Windows-based computers, Sun Solaris systems, Linux, or even Macs by a single KVM switch. The KVM switches support multi-platform operating systems including but not limited to DOS, Windows 95/98/ME/NT/2000/XP, Linux, Solaris and Mac OS.
- 3. Do I have to power down the KVMs to add a new server ?**  
The KVMs are hot-pluggable and allows servers or devices to be added or removed without powering down the switch, but components of connected devices, such as the servers, may not be hot-pluggable. We suggest that turn off power to all devices before connecting them.
- 4. Why I can't login with default password on KVM switch**  
The default username and password for the KVM switch is eight zeros - "00000000". Please check

  - i. The "Num lock" is not turned on. (for notebook type keyboard)
  - ii. The numeric (number) keys on the number pad are not accepted by KVM, only the main number keys.
- 5. Can I disable the KVM password ?**  
Yes, for Cat5 KVM, USB KVM, two console PS/2 KVM & IP PS/2 KVM, user can disable/ enable the KVM password by hotkey.  
No, for PS/2 KVM, user can't disable the KVM password.
- 6. What do I do if I forget the password?**  
If the user change the default password and lose the password, pls contact the supplier for further support.
- 7. How many levels of KVM cascade are supported?**  
8 levels are supported.
- 8. Can I cascade the different types KVM switches together ?**  
No, only same type KVM can cascade together. (e.g. PS/2 to PS/2, USB to USB,..)
- 9. Why am I getting ghosting images or shadowing?**

  - i. Check that all video cables are inserted properly.
  - ii. Check whether the KVM supports the resolution and refresh-rate on your servers.
  - iii. Check whether the graphics card you are using supports the resolution and refreshrate on your server or not.
  - iv. Connect the monitor directly into the servers you are having trouble with to see if problem still appears.

## FAQ

### 10. **The server VGA resolution does not match the resolution of monitor ?**

The KVM supports DDC function which will dynamically detect and the DDC data.

The problem may come from the power on sequence.

- For KVM switch  
The recommended power on sequence is - monitor, KVM switch and then servers.
- For remote console box  
It supports DDC function but does not support hot-plug, the recommend power on sequence is – monitor, remote console box and then servers.

## Two console KVM

### **What is the resolution support on remote console ?**

The remote console can support up to 1,000 feet at 1024 x 768, and up to 500 feet at 1600 x 1200.

### **Why am I getting ghosting images or shadowing on remote console ?**

Press “Scroll lock + Scroll lock + A” on the keyboard connected to remote console box to force auto-adjusting the video signal to optimize.

# Troubleshooting

## 1. There is no LED display on KVM membrane switch

- i. Make sure the power adapter plugged into the KVM Switch, if the LED's still off, perform soft reset to KVM switch.
- ii. Power cycle KVM switch.

## 2. I can power on the KVM, but I am not getting any picture at all, how can I solve this?

Switching to another port and checking if this port has the same problem

- a. If you switch to another port, please check the screen resolution is the same.
- b. Check the OSD menu is available on the hot keys "Scroll lock + Scroll lock + space bar". If the problems persist, please make sure the cables are inserted properly and the boot up sequence is followed.

## 3. The screen is on but the keyboard and mouse don't work

- i. Check the server by using a different keyboard and mouse.
- ii. For PS/2 servers  
The keyboard and mouse are not hot pluggable.
- iii. For USB servers  
Unplug and plug allowing a few seconds for the bus emulation process to complete.
- iv. Do not press any keys on the keyboard whilst the server is booting up. This can cause a keyboard error or cause the keyboard not to detect the KVM switch.
- v. Try a different keyboard, but use only 101/102/104-key keyboard
- vi. Avoid moving the mouse whilst switching the KVM ports.

## 4. There is no LED display on the Cat5 dongle

The LED on the Cat5 dongle will flash when plugged into the USB or USB server. The light will then become steady when the KVM switch has connected. If the LED light is on and not flashing when plugged into server, please unplug the USB or PS/2 and try again. Or try another good Cat5 dongle to verify if problem still appears. If the problem persists, please contact your supplier.