User Manual

Combo Cat6
IP 2-console KVM

Cat5-IP08 / Cat5-IP16 / Cat5-IP32

c UL FC CE

Combo Cat6
2-console KVM

Cat5-08R / Cat5-16R / Cat5-32R

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Combo Cat6 KVM

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Legal Information

First English printing, October 2002

Information in this document has been carefully checked for accuracy; however, no guarantee is given to the correctness of the contents. The information in this document is subject to change without notice. We are not liable for any injury or loss that results from the use of this equipment.

Safety Instructions
Please read all of these instructions carefully before you use the device. Save this manual for future reference.

- Unplug equipment before cleaning. Don't use liquid or spray detergent; use a moist cloth.
- Keep equipment away from excessive humidity and heat. Preferably, keep it in an air-conditioned environment with temperatures not exceeding 40º Celsius (104º Fahrenheit).
- When installing, place the equipment on a sturdy, level surface to prevent it from accidentally falling and causing damage to other equipment or injury to persons nearby.
- When the equipment is in an open position, do not cover, block or in any way obstruct the gap between it and the power supply. Proper air convection is necessary to keep it from overheating.
- Arrange the equipment's power cord in such a way that others won't trip or fall over it.
- If you are using a power cord that didn't ship with the equipment, ensure that it is rated for the voltage and current labeled on the equipment's electrical ratings label. The voltage rating on the cord should be higher than the one listed on the equipment's ratings label.
- Observe all precautions and warnings attached to the equipment.
- If you don't intend on using the equipment for a long time, disconnect it from the power outlet to prevent being damaged by transient over-voltage.
- Keep all liquids away from the equipment to minimize the risk of accidental spillage. Liquid spilled on to the power supply or on other hardware may cause damage, fire or electrical shock.
- Only qualified service personnel should open the chassis. Opening it yourself could damage the equipment and invalidate its warranty.
- If any part of the equipment becomes damaged or stops functioning, have it checked by qualified service personnel.

What the warranty does not cover

- Any product, on which the serial number has been defaced, modified or removed.
- Damage, deterioration or malfunction resulting from:
  - ☐ Accident, misuse, neglect, fire, water, lightning, or other acts of nature, unauthorized product modification, or failure to follow instructions supplied with the product.
  - ☐ Repair or attempted repair by anyone not authorized by us.
  - ☐ Any damage of the product due to shipment.
  - ☐ Removal or installation of the product.
  - ☐ Causes external to the product, such as electric power fluctuation or failure.
  - ☐ Use of supplies or parts not meeting our specifications.
  - ☐ Normal wear and tear.
  - ☐ Any other causes which does not relate to a product defect.
- Removal, installation, and set-up service charges.

Regulatory Notices Federal Communications Commission (FCC)

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

Any changes or modifications made to this equipment may void the user's authority to operate this equipment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Re-position or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

Contents

Before Installation

■ It is very important to mount the equipment in a suitable cabinet or on a stable surface.

■ Make sure the place has a good ventilation, is out of direct sunlight, away from sources of excessive dust, dirt, heat, water, moisture and vibration.

Unpacking

The equipment comes with the standard parts shown in package content. Check and make sure they are included and in good condition. If anything is missing, or damaged, contact the supplier immediately.

Installation for standalone KVM
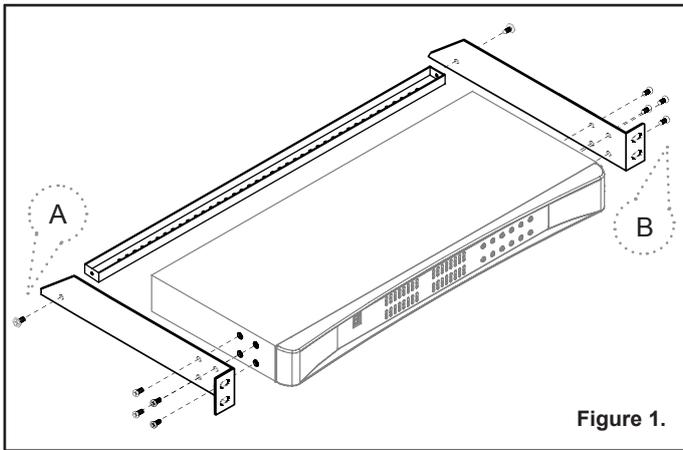
Figure 1.

Screw A: 2 pcs

M3.2 x 4.5 mm

Screw B: 8 pcs

M4 x 10 mm

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

■ Fix the KVM into the rack
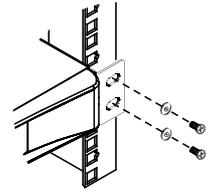
Cat5-08 / Cat5-16 / Cat5-32
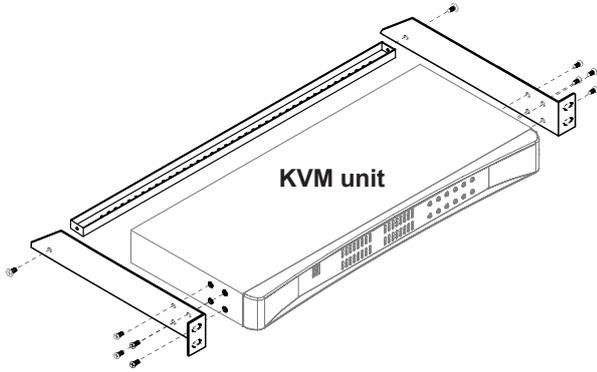
KVM unit

- Cat5-08 or Cat5-16 or Cat5-32 KVM unit x 1
- Mounting set w/ bracket & screws x 1
- Power cord (for KVM) x 1

Cat5-08

Local Console

Power   Cascade
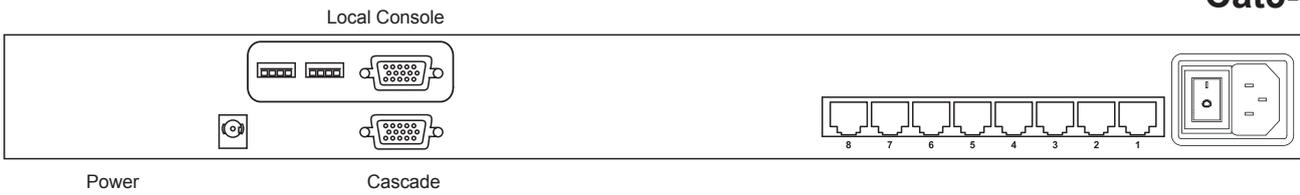
Cat5-16
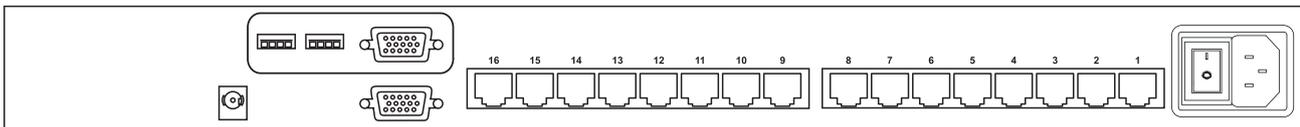
Cat5-32
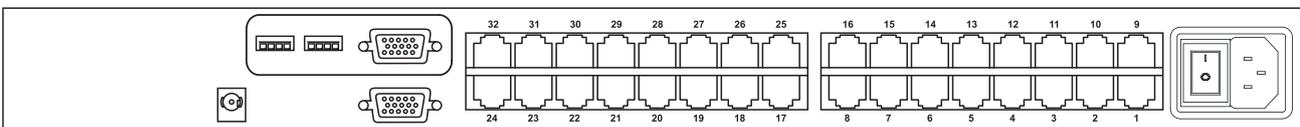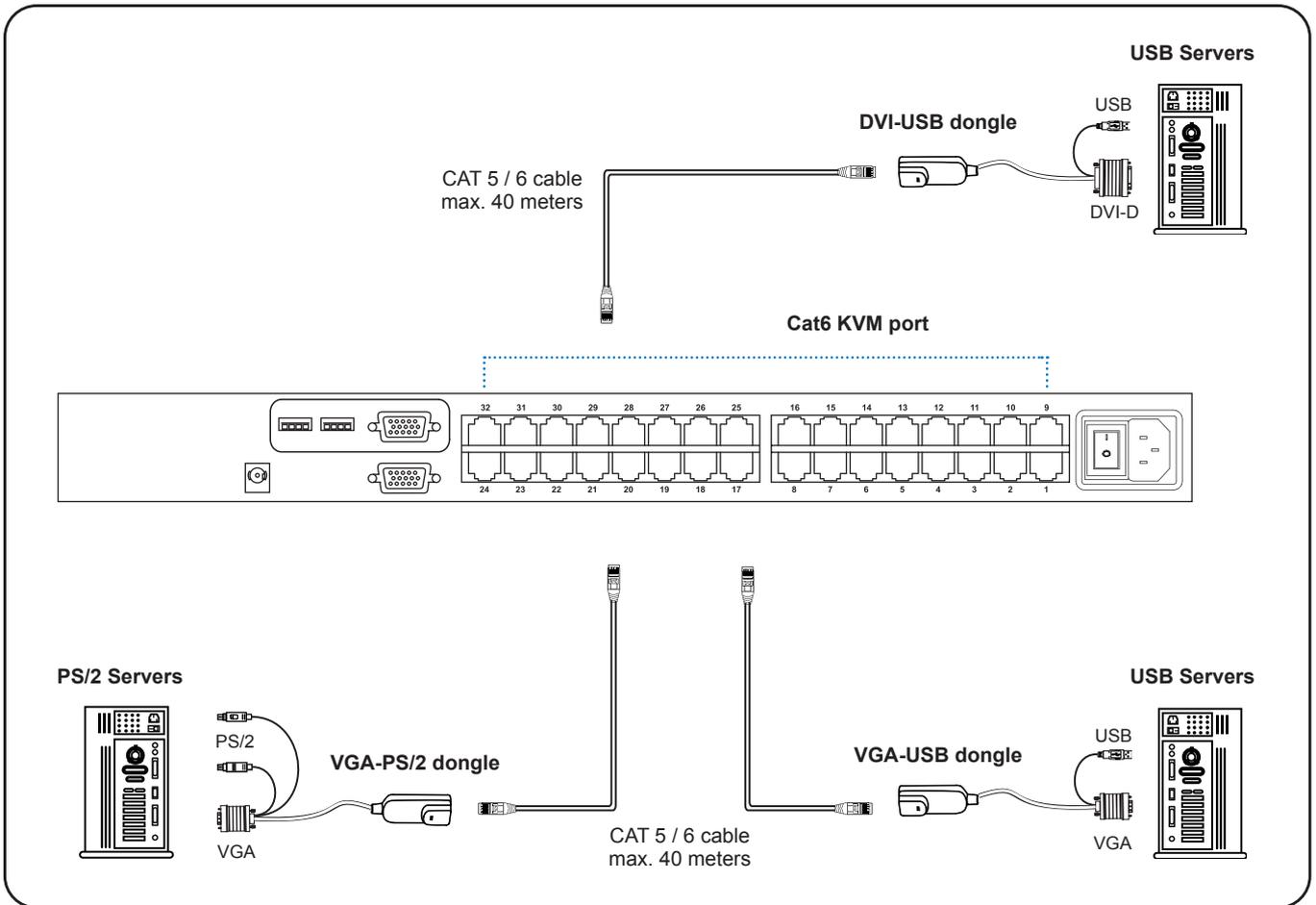
Cat5 Dongle USB/DVI

- ■ To connect DVI-D connector to the computer's video card
- ■ To connect USB connector to the computer's USB port

Cat5 Dongle USB

- ■ To connect DB-15 connector to the computer's video card
- ■ To connect USB connector to the computer's USB port

Cat5 Dongle PS/2

- ■ To connect DB-15 connector to the computer's video card
- ■ To connect PS/2 keyboard connector to the computer's keyboard port
- ■ To connect PS/2 mouse connector to the computer's mouse port

< 3.3 > KVM Cascade

- Cascade up to 8 levels, 256 servers
- Cascading multiple KVM with CBC-6 cascade cable.

⚠ **Cascaded KVMs from level 2 to 8 must be the models of Cat5-08 / Cat5-16 / Cat5-32.**

⚠ **When multiple combo Cat6 KVMs cascade together, the master KVM at level 1 will take all control of other slave KVM switches (e.g. level 2 to 8).**
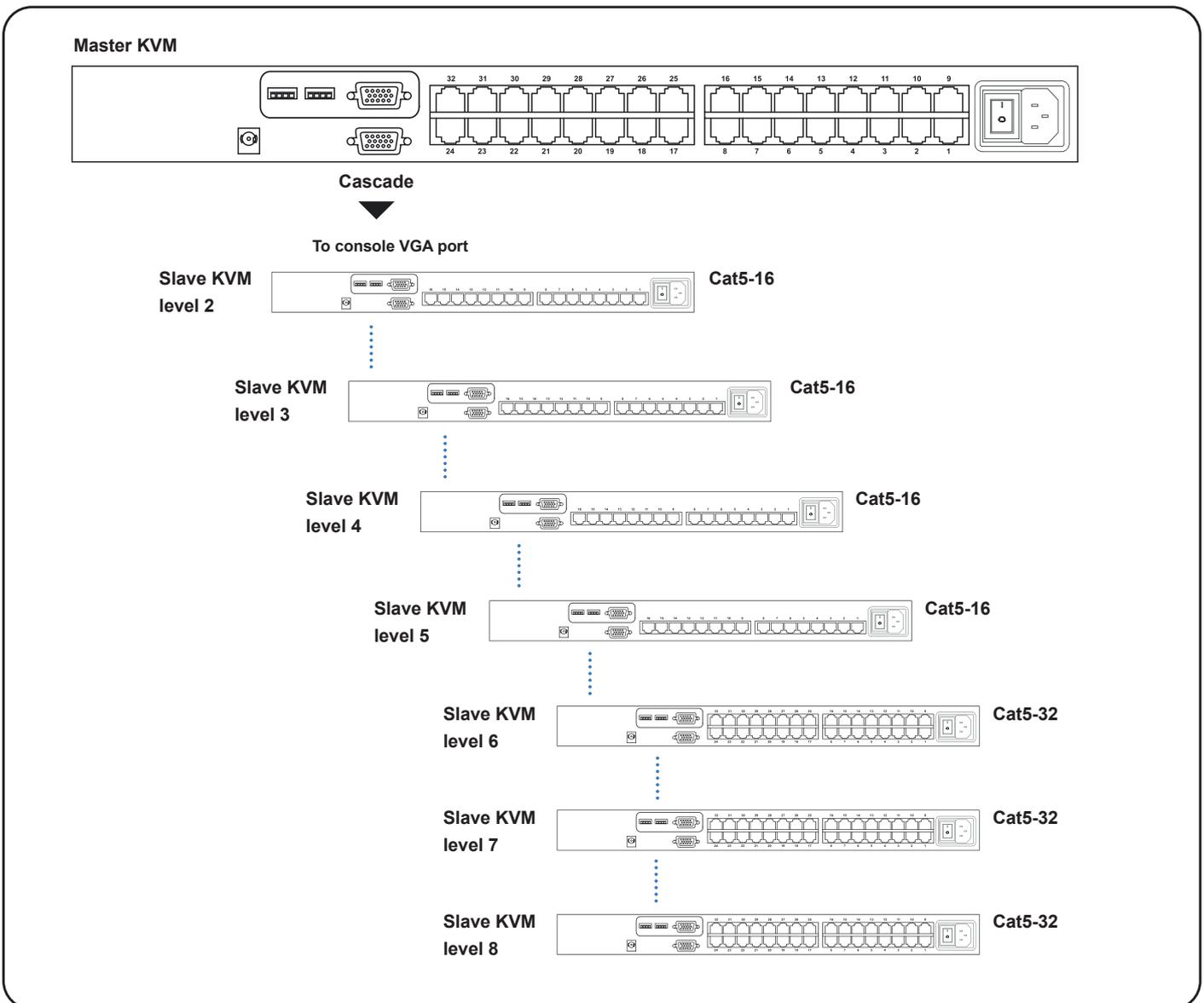
Cascade Cat5/USB
- 6ft Combo KVM cascade cable

	Cat5-08	Cat5-16	Cat5-32
■ **KVM Port**			
Number of ports:	8, 16 or 32		
Connector:	RJ-45		
Connectivity:	DVI-D / VGA connector dongle up to 40 meters (132 feet) via Cat6 / Cat5 cable		
■ **Local Console**			
Graphic connector:	1 x DB-15 VGA		
Resolution:	Up to 1600 x 1200		
Input device:	2 x USB type A for keyboard & mouse		
■ **Management**			
Multilingual OSD:	English, France, German, Spanish, Italian, Russian, Simplified Chinese, Japanese		
Hotkey combination:	Scroll-lock, Cap-lock, Num-lock, Alt, Ctrl & Win		
Security:	Password enable & disable, up to 8 users profile for port access		
PC Selection:	Front button, OSD menu & hotkey		
■ **Expansion:**	Up to 256 servers by 8-level cascade		
■ **Compatibility**			
Multi-platform:	Mix PCs, SUN and Mac G3 / G4 Mac / iMac		
Support:	Windows 7 / Vista / 2003 / XP, Linux, Unix		
■ **Power**			
Input:	100 or 240V AC at 50 or 60 Hz via IEC type cord OR AC / DC power adapter 12V@3.3A (optional)		
Option DC:	12V / 24V / 48V DC input		
Consumption:	Max. 24 Watt, Standby 5 Watt		
■ **Regulatory Approval:**	cUL, FCC, CE		
■ **Environmental**			
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)		
■ **Product Information**			
Dimension (W x D x H):	443 x 171 x 43.6 mm / 17.4 x 6.7 x 1.72 inch		
Net weight:	3 kg / 6.5 lb		
■ **Packing Information**			
Dimension (W x D x H):	500 x 400 x 90 mm / 19.7 x 15.7 x 3.5 inch		
Gross weight:	5 kg / 11 lb		

4.1   KVM Button

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

| Bank no. | PC port LEDs | Channel button | Bank button |
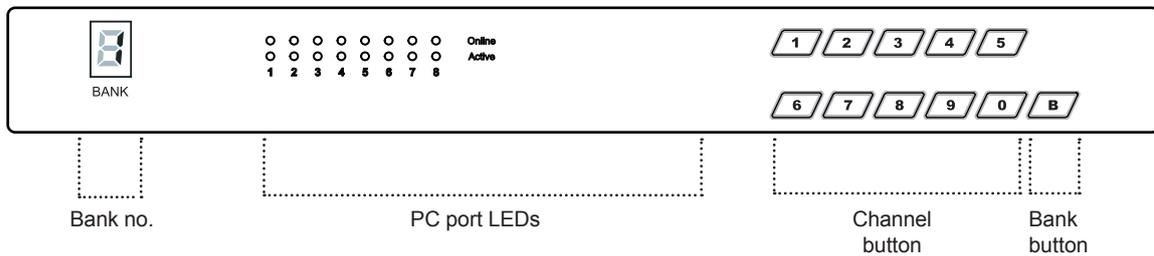
16 ports
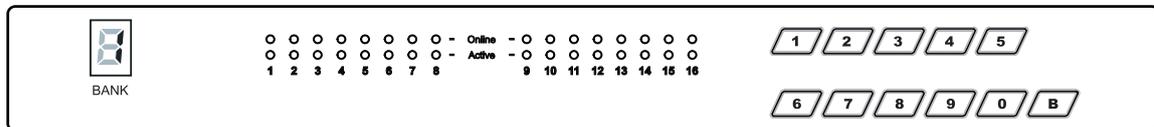
32 ports
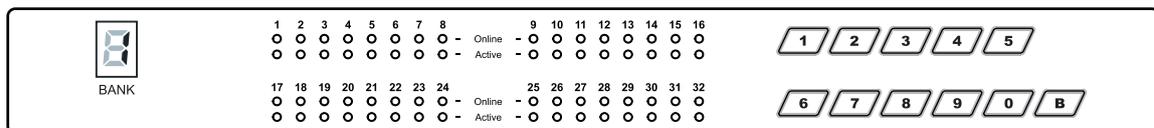
Bank no.	7-Segment BANK LED indication
PC port LEDs	*Online* : **Blue** LED on indicating a PC is connecting to the port
	Active : **Green** LED on indicating a selected channel
Channel button	Press to select channel from 01 to 32
Bank button	Select the bank from 1 to 8

The password is enabled by default, the default password is "00000000" eight zeros **(Do not use "0" on number pad)**

■ **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, while SPACE doesn't have
       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, while SPACE doesn't have
       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

OSD Menu

```
PORT   NAME

BANK : 1                          F1 : MENU
01☼  SYSTEM      01☞            F2 : LOGOUT
02☼  SYSTEM      02             F3 : PREV
03☼  SYSTEM      03             ESC : QUIT
04☼  SYSTEM      04             ENTER : COMPLETE
05☼  SYSTEM      05             ⬆/⬇ : SELECT
06☼  SYSTEM      06             PgUp/PgDn :
07☼  SYSTEM      07             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
F1		Access F1 MAIN MENU
F2		Logout the OSD menu
F3		Previous menu
Esc		Cancel / Quit
Enter		Complete / Switch to selected port
⬆/⬇		Switch to previous or next port
PgUp/PgDn		Switch to previous bank or next bank
1 / 2 / 3 / 4		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

4.4 KVM Hotkey & Remote Console Hotkey Combo Cat6 KVM Usage

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

Advance hotkeys (for Supervisor login only)

Scroll Lock + **Scroll Lock** + **S**	Activate auto-scan mode for connected servers *Press any key to exit the auto-scan mode
Scroll Lock + **Scroll Lock** + **R**	Reset all the KVM settings to factory default *Except User Security settings
Scroll Lock + **Scroll Lock** + **U**	Disable and enable password security *Default security is ON
Scroll Lock + **Scroll Lock** + **L**	To enable / disable the screen saving function and 10 minutes auto-logout *Default the screen saving is OFF

Remarks:
- Example of "**Scroll Lock** + **Scroll Lock** + Bank no. + Port no."
  - Bank No. : 1 to 8
  - Port No. : 01 to 32
  - 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

Remote Console Hotkey	Function
Scroll Lock + **Scroll Lock** + **C**	Toggle switch between remote & local port
Scroll Lock + **Scroll Lock** + **Q**	Turn the buzzer ON & OFF *Default the buzzer is ON
Scroll Lock + **Scroll Lock** + **S**	Activate auto-scan mode for remote & local port *The scan time interval is 5 seconds
Scroll Lock + **Scroll Lock** + **A**	Auto-adjust the video signal

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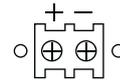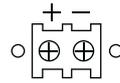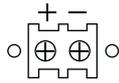
Model	12V	24V	48V
Input rating			
Input voltage:	12-Volt	24-Volt	48-Volt
Input range:	9 ~ 18V	18 ~ 36V	36 ~ 75V
Input current			
- No load	50 mA	50 mA	50 mA
- Full load	4950 mA	2450 mA	1220 mA
Output rating			
Output voltage:	12-Volt	12-Volt	12-Volt
Output current:	4.16A	4.16A	4.16A
Efficiency	84%	85%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

Remarks:
■   Package does not include power cord