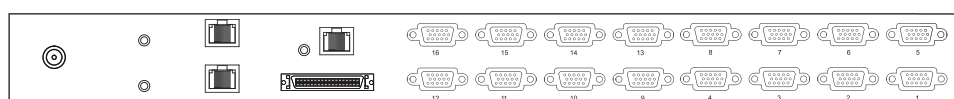


## User Manual - Integrated Multi-User Matrix KVM for LCD Console Drawer

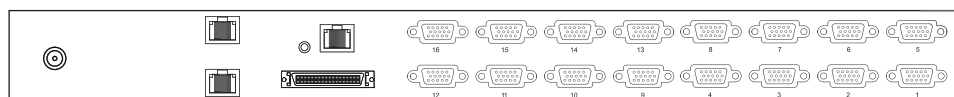
**Matrix DB-15  KVM**

**8-M3X-IP, M4X-IP  
16-M3X-IP, M4X-IP**



**Matrix DB-15 KVM**

**8-M2X, M3X, M4X  
16-M2X, M3X, M4X**



Designed/Manufactured by Austin Hughes and Distributed by Eclipse Rackmount, Inc.

## 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 40° Celsius (104° 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

## < Part 1 > Matrix DB-15 KVM Kit

Ending in: 8-M3X-IP, M4X-IP, M4X-2IP

Ending in: 16-M3X-IP, M4X-IP, M4X-2IP

|     |                                 |       |
|-----|---------------------------------|-------|
| 1.1 | Package Contents                | P.4   |
| 1.2 | KVM Port Connections            | P.5   |
| 1.3 | IP & Remote Console Connections | P.6-7 |
| 1.4 | IP Console Settings             | P.8   |
| 1.5 | KVM Cascade                     | P.9   |
| 1.6 | Specifications                  | P.10  |

## < Part 2 > Matrix DB-15 KVM Kit

Ending in: 8-M2X, M3X, M4X

Ending in: 16-M2X, M3X, M4X

|     |                            |         |
|-----|----------------------------|---------|
| 2.1 | Package Contents           | P.11-12 |
| 2.2 | KVM Port Connections       | P.13    |
| 2.3 | Remote Console Connections | P.14-15 |
| 2.4 | KVM Cascade                | P.16    |
| 2.5 | Specifications             | P.17    |

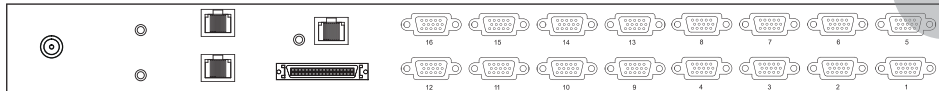
## < Part 3 > Using the KVM

|     |                              |      |
|-----|------------------------------|------|
| 3.1 | KVM Buttons                  | P.18 |
| 3.2 | Password                     | P.19 |
| 3.3 | KVM OSD                      | P.20 |
| 3.4 | KVM & Remote Console Hotkeys | P.21 |

**8-M3X-IP / 16-M3X-IP**  
**8-M4X-2IP / 16-M4X-2IP**

- Receiver box for remote console x 1
- Power adapter w/ power cord ( for receiver ) x 1
- CAE-6 6ft Combo KVM cable for receiver box x 1

### KVM Rear Kit

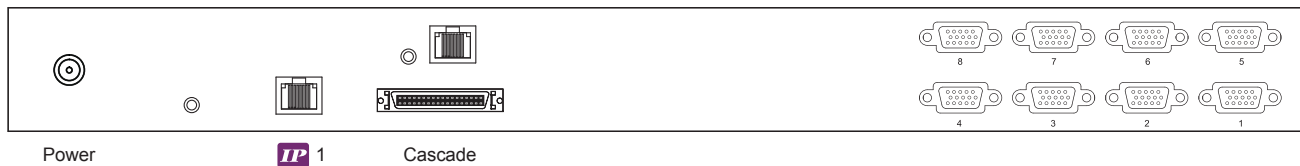


Rear

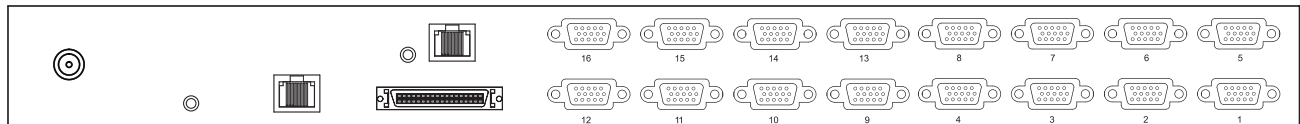


### 8-M3X-IP

Remote Console 1



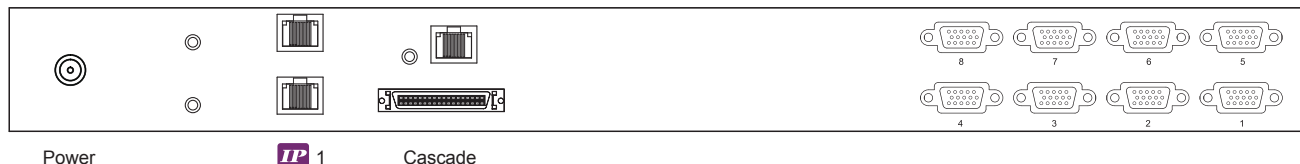
### 16-M3X-IP



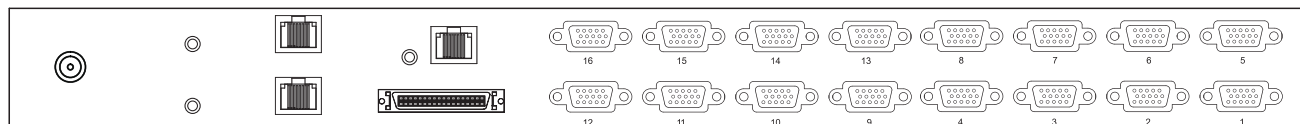
### 8-M4X-2IP

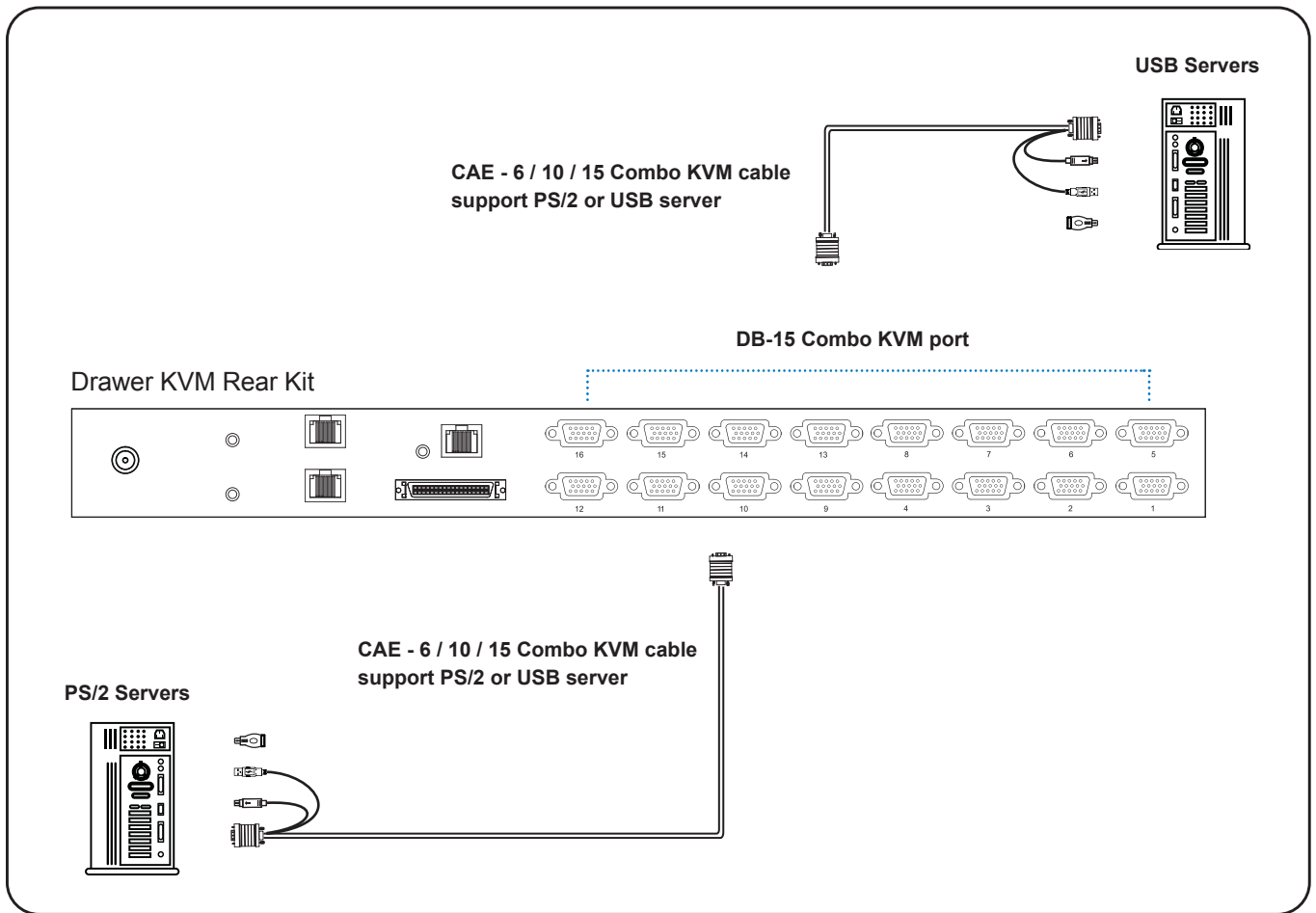
**IP** 2

Remote Console 1



### 16-M4X-2IP

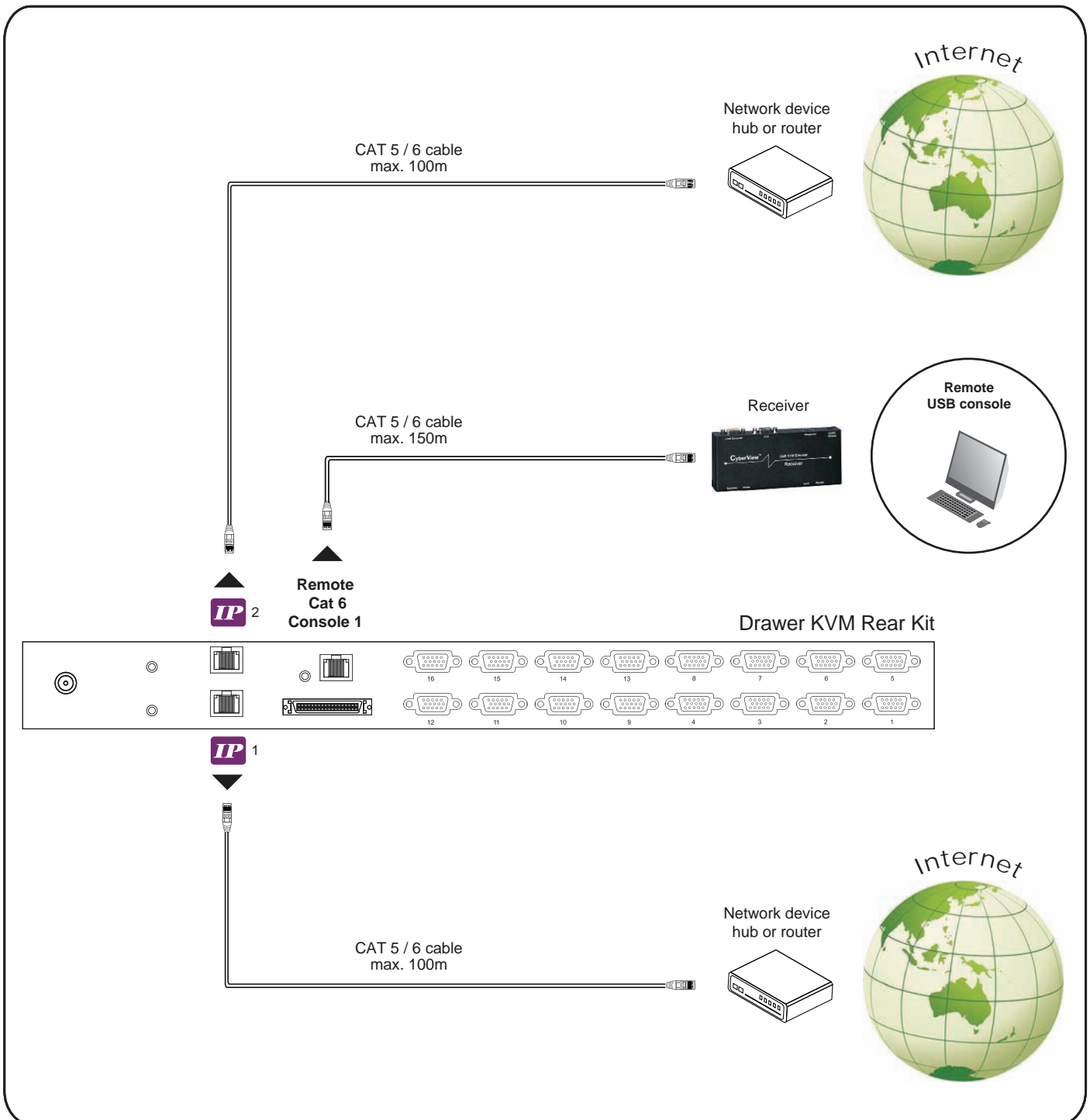




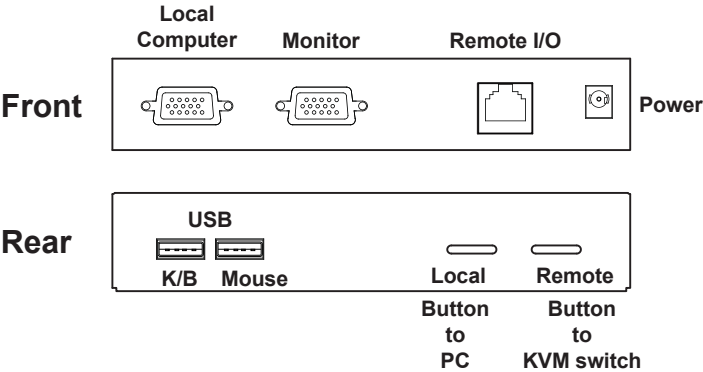
### CAE-6 / CAE-10 / CAE-15

- 6 / 10 / 15 ft Combo KVM cable
- Support PS/2 or USB server

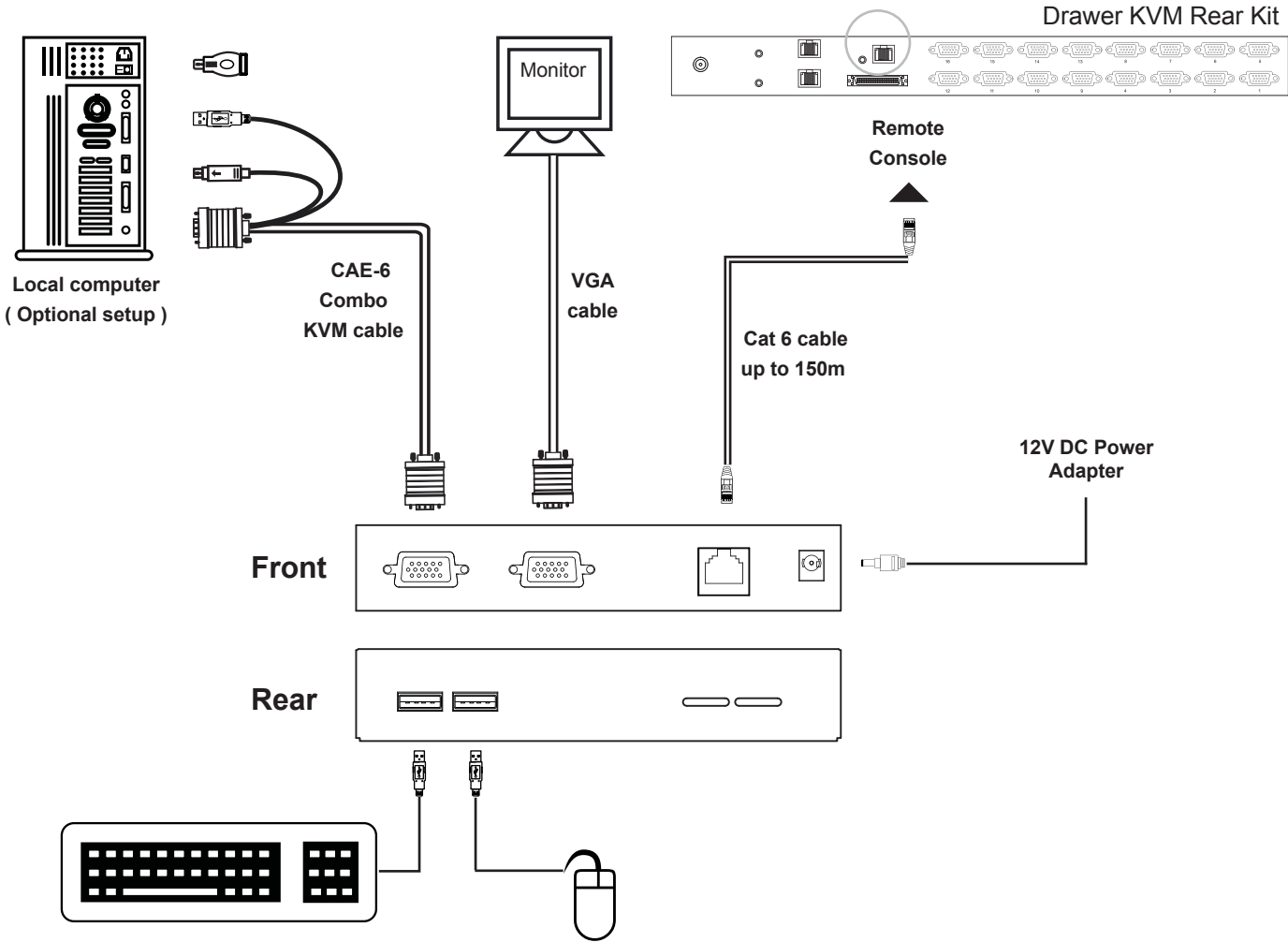




Receiver



The receiver allows for hotkey functions (listed on page 21).



After the cable connection, please take the following steps to configure the IP KVM :

1. Download **IPKVMsetup.exe** from the link:

[www.austin-hughes.com/support/utilities/cyberview/IPKVMsetup.exe](http://www.austin-hughes.com/support/utilities/cyberview/IPKVMsetup.exe)

2. Double click **IPKVMsetup.exe** to configure the IP KVM by device setup as below.

3. Click **Refresh Device** to search the connected IP KVM
4. Select the M.A.C. address, which you want to setup, then click **Query Device**
5. Enter Super user login. **The default is super**
6. Enter Super user password. **The default is pass**
7. Enter the new super user password
8. Re-enter the new password
9. Change the desired IP address / Subnet mask / Gateway, then click **Setup Device** to confirm the setting to IP KVM
10. The default address is as below:--
  - The single IP KVM model, such as M-IP1613 - http://192.168.1.22
  - The dual IP KVM model, such as M-IP1624 - http://192.168.1.22 (for 1st IP)  
http://192.168.1.23 (for 2nd IP)
11. Open Internet Explorer ( I.E. ), version 6.0 or above
12. Enter the IP KVM address into the address bar
  - For Single IP - http://192.168.1.22
  - For Dual IP - http://192.168.1.22 ( for 1st IP )  
http://192.168.1.23 ( for 2nd IP )
13. Enter username ( default is super )  
Password ( default is pass )

14. After successful login to IP KVM, the user will enter the main page of IP KVM



**The settings pertain to intranet.**

**If the users access KVM GUI via internet, please ask MIS for assistance and download IP KVM user manual. Contact your supplier for details.**

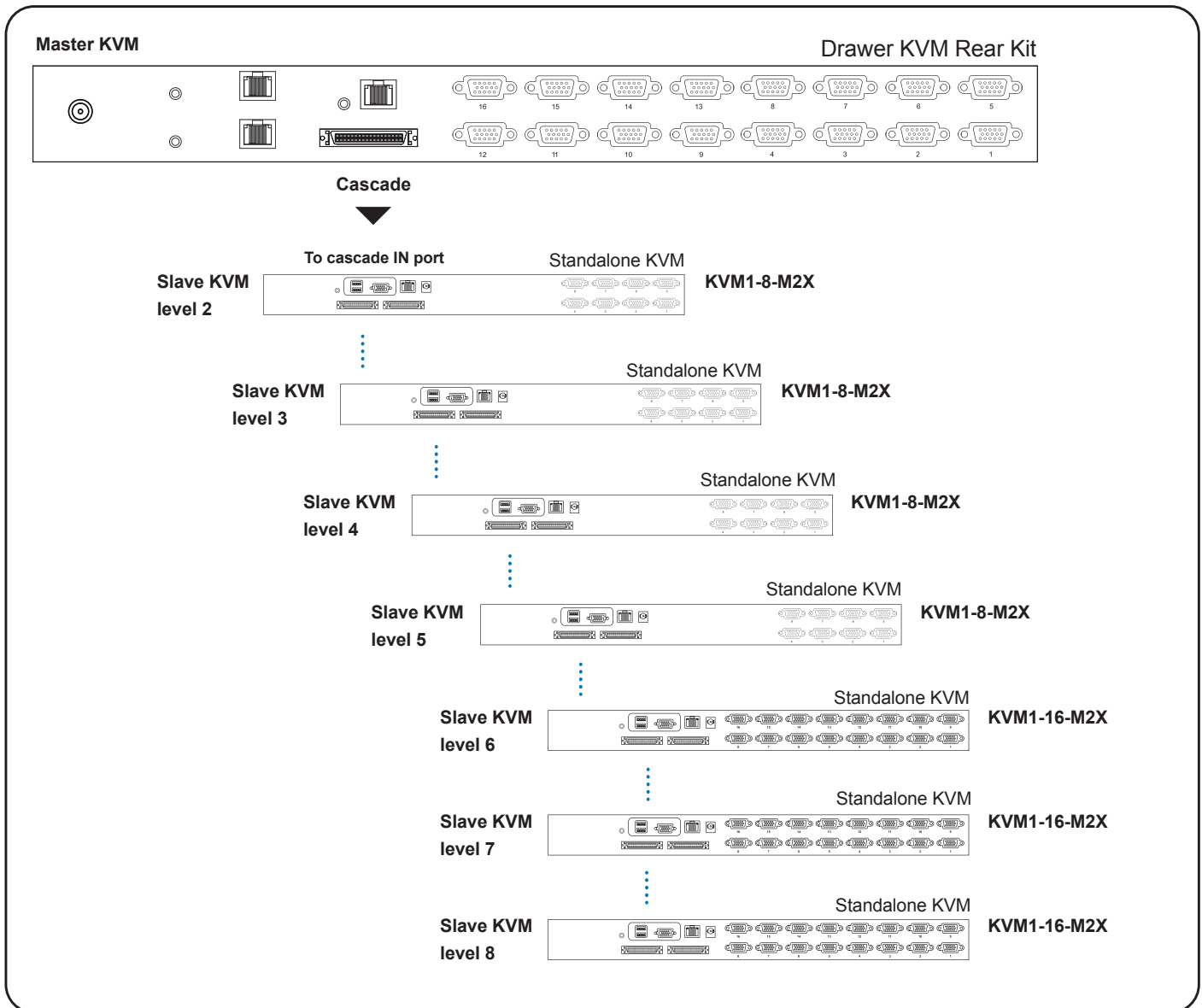


## < 1.5 > KVM Cascade

## Matrix DB-15 IP KVM

- Cascade up to 8 levels, 240 servers
- Cascading multiple KVM with CMC-8 cascade cable.

- ⚠ **Cascaded KVMs from level 2 to 8 must be models such as KVM1-8-M2X or 16-M2X**
- ⚠ **When multiple matrix KVMs cascade together, the master KVM at level 1 will take all control of other slave KVM switches (e.g. level 2 to 8).**
- ⚠ **The slave matrix KVM(s) will simply expand the ports of the master matrix KVM, and the original remote console of the slave KVM will be disabled.**



### CMC-8

- 8ft Matrix KVM cascade cable

| Ending in 8-M3X-IP, 8-M4X-2IP<br>Ending in 16-M3X-IP, 16-M4X-2IP |  |
|--|--|
| ■ <b>KVM Port</b>  | Number of ports: 8 or 16<br>Connector: DB-15 combo connector<br>Connectivity: Combo 4-in-1 KVM cable<br>up to 6, 10 & 15 feet  |
| ■ <b>Local Console</b>   | LCD console drawer version ( up to 1920 x 1080 / 1920 x 1200 )   |
| ■ <b>Cat6 Remote Console</b>                                     | Number of remote port: 1<br>Monitor port: DB15-pin VGA, up to 1600 x 1200<br>Keyboard & mouse port: 2 x USB type connector for keyboard & mouse<br>Remote I/O: RJ45 via Cat 5 / Cat 5e / Cat 6 cable up to 500 feet  |
| ■ <b>IP Remote Console</b>                                       | Number of IP console: 1 for M-IP813 / M-IP1613<br>2 for M-IP824 / M-IP1624<br>User management: 15-user login, 1 x active user<br>Browser: Internet Explorer, Firefox, Safari<br>Security: SSL v3, RSA, AES, HTTP / HTTPS, CSR<br>IP Access: RJ45 Ethernet per IP console |
| ■ <b>Expansion:</b>  | Up to 240 servers by 8-level cascade   |
| ■ <b>Compatibility</b>   | Multi-platform: Mix PCs, SUN and Mac G3 / G4 Mac / iMac<br>Support: Windows 7 / Vista / 2003 / XP, Linux, Unix   |
| ■ <b>Power</b>   | Input: AC power adapter<br>Consumption: Max. 48 Watt, Standby 5 Watt   |
| ■ <b>Regulatory Approval:</b>                                    | FCC, CE, RoHS  |
| ■ <b>Environmental</b>   | Operating: 0 to 50°C<br>Storage: -5 to 60°C<br>Relative humidity: 90%, non-condensing<br>Shock: 50G peak acceleration (11ms, half-sine wave)<br>Vibration: 58~100Hz / 0.98G (11ms / cycle)   |

## < Part 2 > Matrix Cat 6 KVM

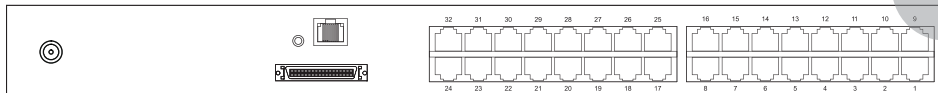
### < 2.1 > Package Contents

#### Matrix DB-15 KVM

##### 8-M2X / 16-M2X

- Receiver box for remote console x 1
- Power adapter w/ power cord ( for receiver ) x 1
- CAE-6 6ft Combo KVM cable for receiver box x 1

##### KVM Rear Kit



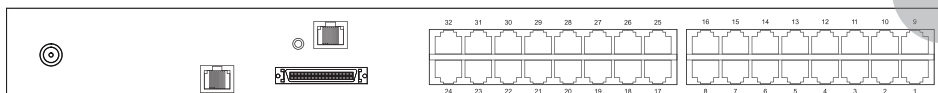
Rear



##### 8-M3X / 16-M3X

- Receiver box for remote console x 2
- Power adapter w/ power cord ( for receiver ) x 2
- CAE-6 6ft Combo KVM cable for receiver box x 2

##### KVM Rear Kit



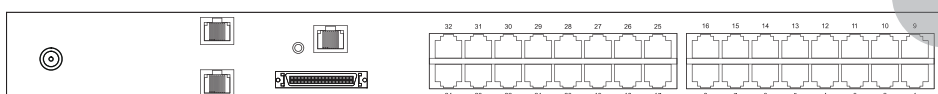
Rear



##### 8-M4X / 16-M4X

- Receiver box for remote console x 3
- Power adapter w/ power cord ( for receiver ) x 3
- CAE-6 6ft Combo KVM cable for receiver box x 3

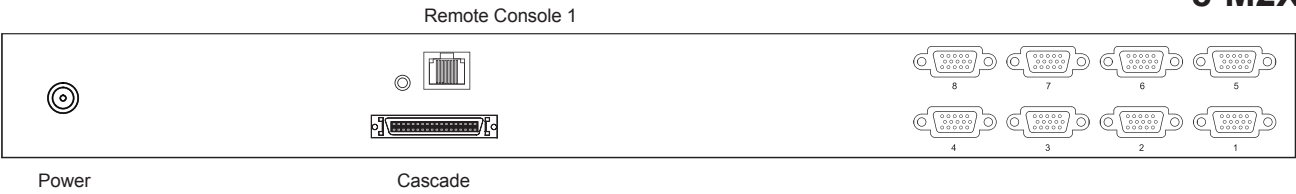
##### KVM Rear Kit



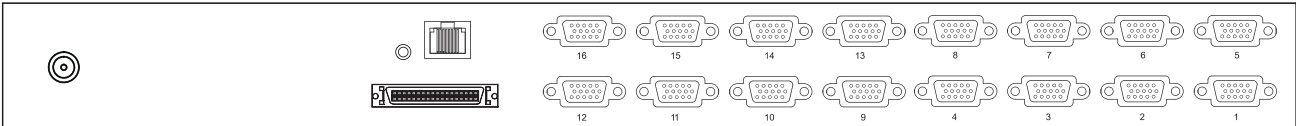
Rear



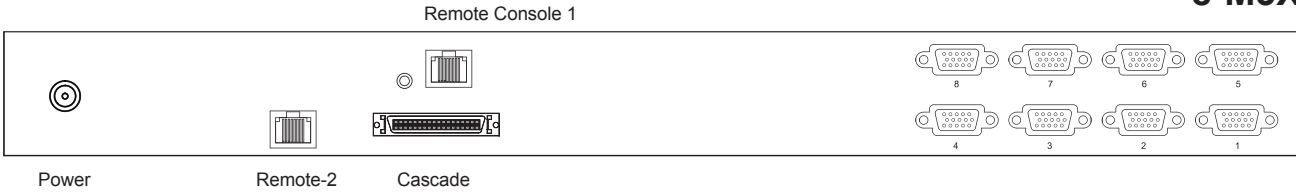
8-M2X



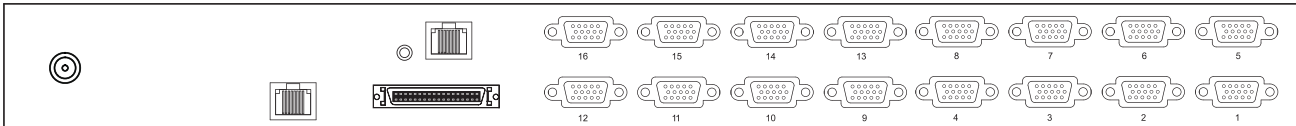
16-M2X



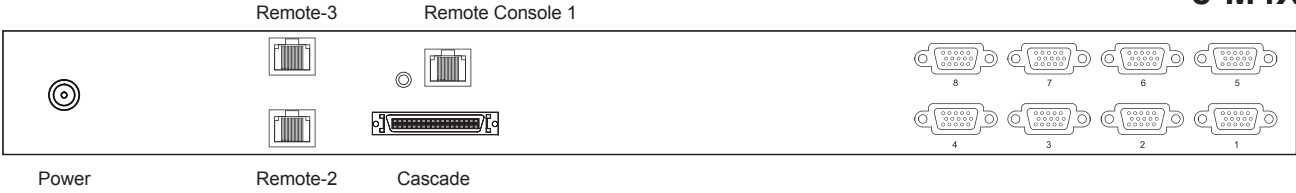
8-M3X



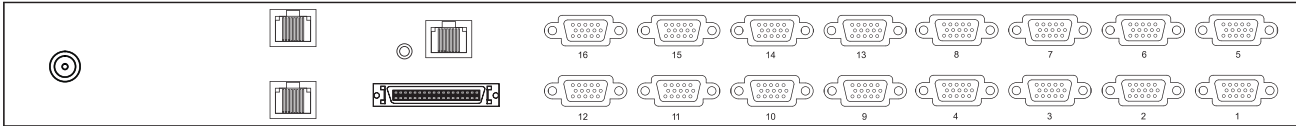
16-M3X

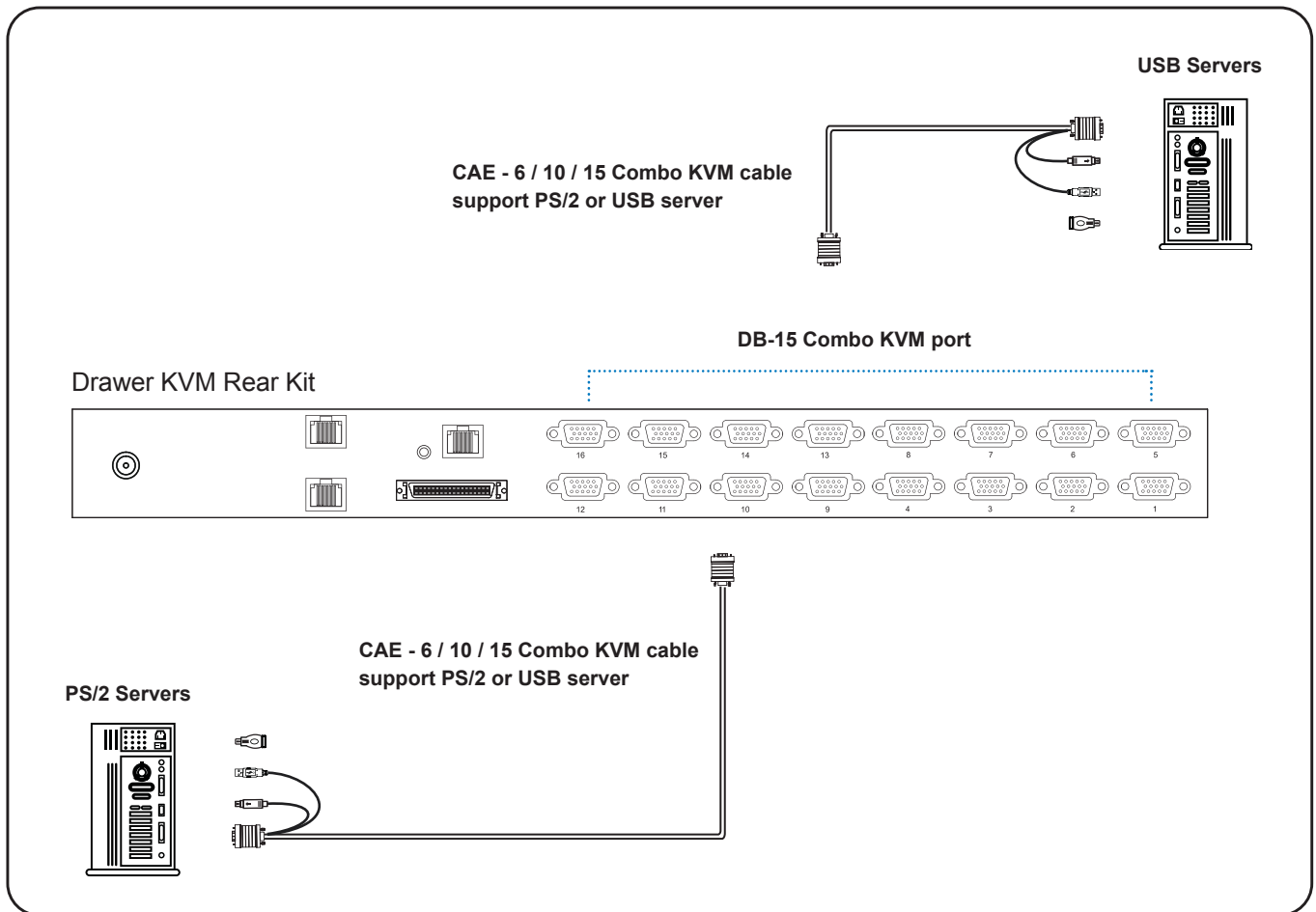


8-M4X



16-M4X

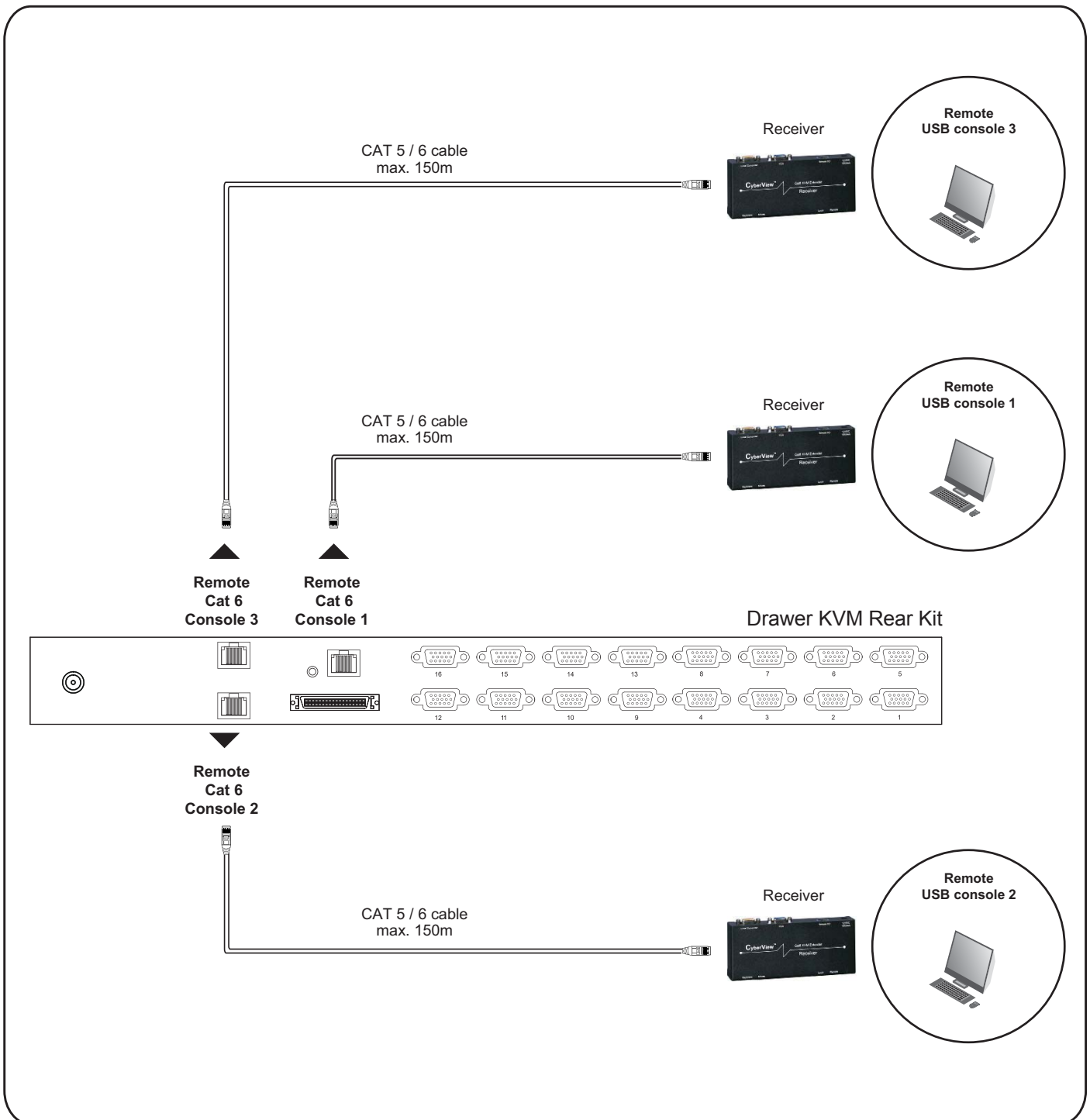




### CAE-6 / CAE-10 / CAE-15

- 6 / 10 / 15 ft Combo KVM cable
- Support PS/2 or USB server

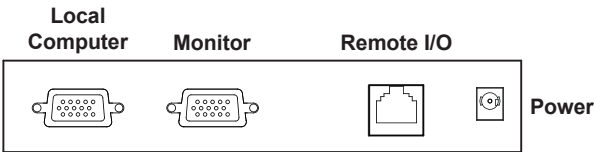




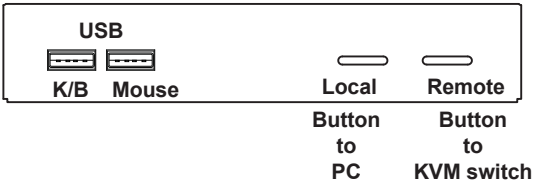
Receiver



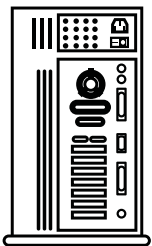
Front



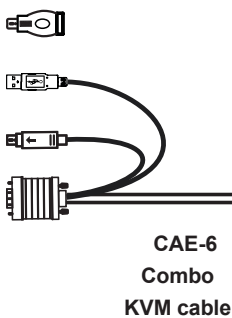
Rear



The receiver allows for hotkey functions (listed on page 21).



Local computer  
( Optional setup )



Remote Console

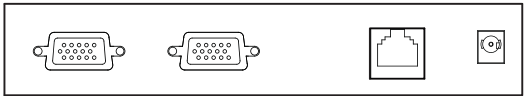
Cat 6 cable  
up to 150m



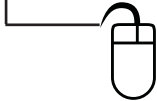
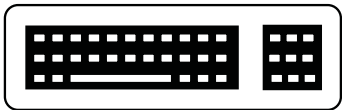
12V DC Power Adapter



Front



Rear

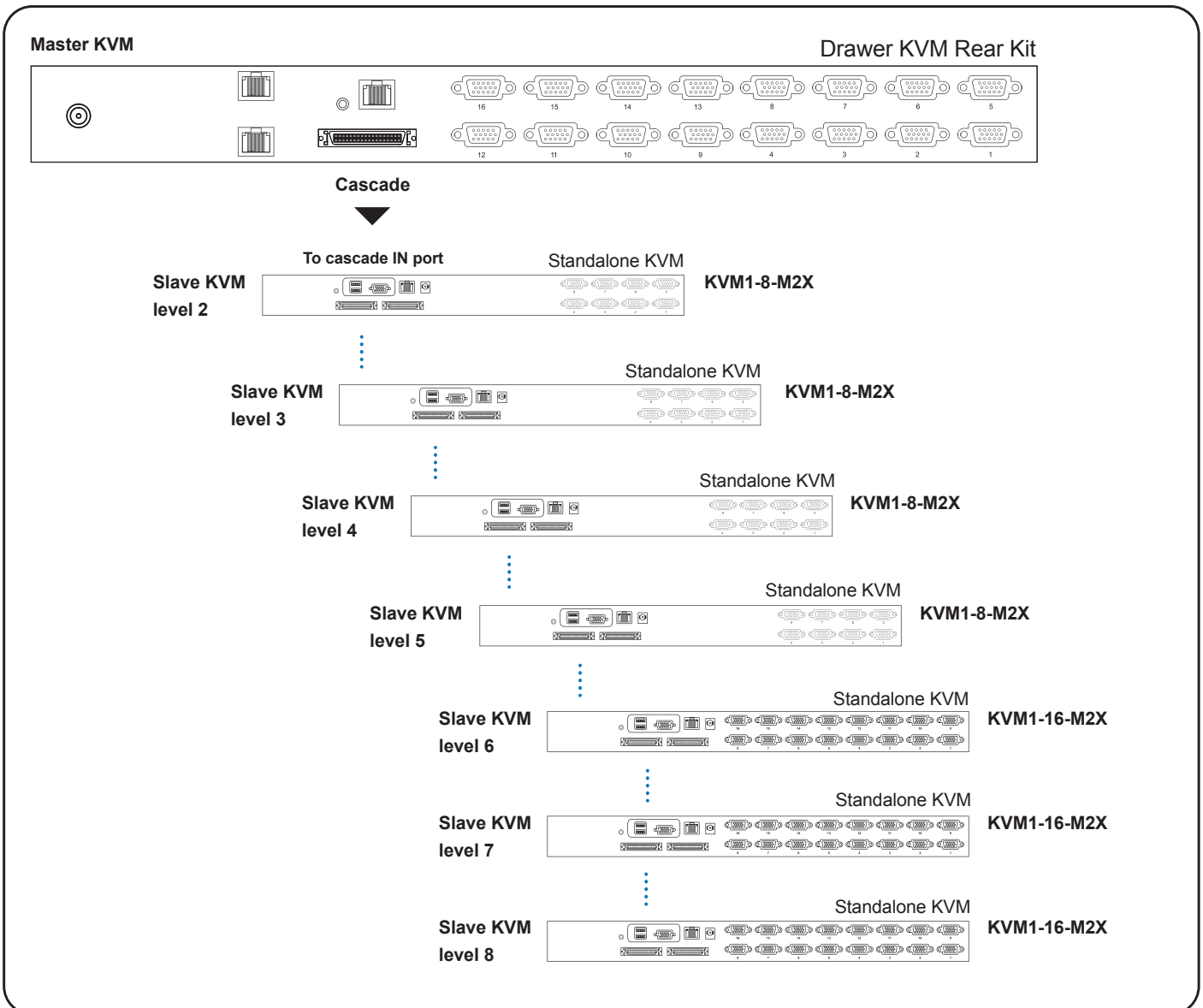


## < 2.4 > KVM Cascade

## Matrix DB-15 KVM

- Cascade up to 8 levels, 240 servers
- Cascading multiple KVM with CMC-8 cascade cable.

- ⚠ **Cascaded KVMs from level 2 to 8 must be models such as KVM1-8-M2X or 16-M2X.**
- ⚠ **When multiple matrix KVMs cascade together, the master KVM at level 1 will take all control of other slave KVM switches (e.g. level 2 to 8).**
- ⚠ **The slave matrix KVM(s) will simply expand the ports of the master matrix KVM, and the original remote console of the slave KVM will be disabled.**



### CMC-8

- 8ft Matrix KVM cascade cable



| Ending in 8-M2X, 8-M3X, 8-M4X<br>Ending in 16-M2X, 16-M3X, 16-M4X |   |
|---|---|
| ■ <b>KVM</b>  | Number of ports: 8 or 16<br>Connector: DB-15 combo connector<br>Connectivity: Combo 4-in-1 KVM cable<br>up to 6, 10 & 15 feet   |
| ■ <b>Local Console</b>  | LCD console drawer version ( up to 1920 x 1080 / 1920 x 1200 )  |
| ■ <b>Cat6 Remote Console</b>                                      | Number of remote port: 1 for 8-M2X, 16-M2X<br>2 for 8-M3X, 16-M3X<br>3 for 8-M4X, 16-M4X<br>Monitor port: DB15-pin VGA, up to 1600 x 1200<br>Keyboard & mouse port: 2 x USB type connector for keyboard & mouse<br>Remote I/O: RJ45 via Cat 5 / Cat 5e / Cat 6 cable up to 500 feet |
| ■ <b>Expansion:</b>   | Up to 240 servers by 8-level cascade  |
| ■ <b>Compatibility</b>  | Multi-platform: Mix PCs, SUN and Mac G3 / G4 Mac / iMac<br>Support: Windows 7 / Vista / 2003 / XP, Linux, Unix  |
| ■ <b>Power</b>  | Input: AC power adapter<br>Consumption: Max. 48 Watt, Standby 5 Watt  |
| ■ <b>Regulatory Approval:</b>                                     | FCC, CE, RoHS   |
| ■ <b>Environmental</b>  | Operating: 0 to 50°C<br>Storage: -5 to 60°C<br>Relative humidity: 90%, non-condensing<br>Shock: 50G peak acceleration (11ms, half-sine wave)<br>Vibration: 58~100Hz / 0.98G (11ms / cycle)  |

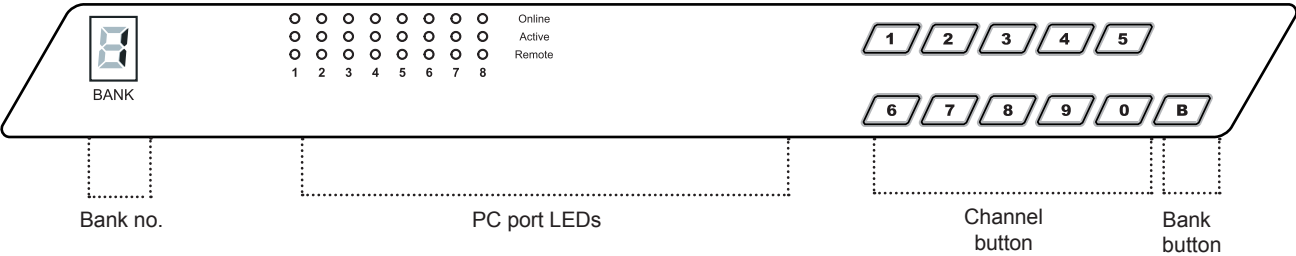
3.1 KVM Buttons

Power ON

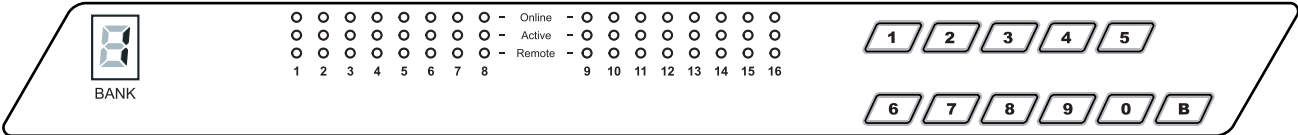
- Turn off all servers and KVM switches
- Make sure all cables / connectors are properly connected
- Recommend Power ON sequence is monitor, KVM switch and finally the computer

Front Panel - Port LED Indications

8 ports



16 ports



|                |   |
|----------------|---|
| Bank no.       | 7-Segment BANK LED indication   |
| PC port LEDs   | <b>Online</b> : <b>Blue</b> LED on indicating a PC is connecting to the port<br><b>Active</b> : <b>Green</b> LED on indicating a selected channel<br><b>Remote</b> : <b>Orange</b> LED on indicating the port is selecting by IP / remote console |
| Channel button | Press to select channel from 01 to 16   |
| 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



Note:

- 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                                  |
| <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            |

| Local Console Hotkeys                                  | 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<br>* 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 |

#### Advanced hotkeys (for Supervisor login only)

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

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

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