



**KVM-8901**

**19" Widescreen LCD KVM Rack Console**

*User Manual*

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# 1. Information

## 1.1 Overview

The LCD drawer, a modularized design, has a 19"-wide screen TFT LCD panel, a 105-key keyboard, and a touchpad.

"KVM-8901" is the 3-in-1 model (LCD, Keyboard, and Touchpad), while "KCM-0832" and "KCM-1632" is the 4-in-1 model (LCD, keyboard, Touchpad and KVM). The power source of all the models is +12V DC-in from an external power adapter.

	Model Name	Description
1	KVM-8901	19" Widescreen LCD KVM Rack Console
2	KCM-0832	8-Port KVM Module
3	KCM-1632	16-Port KVM Module

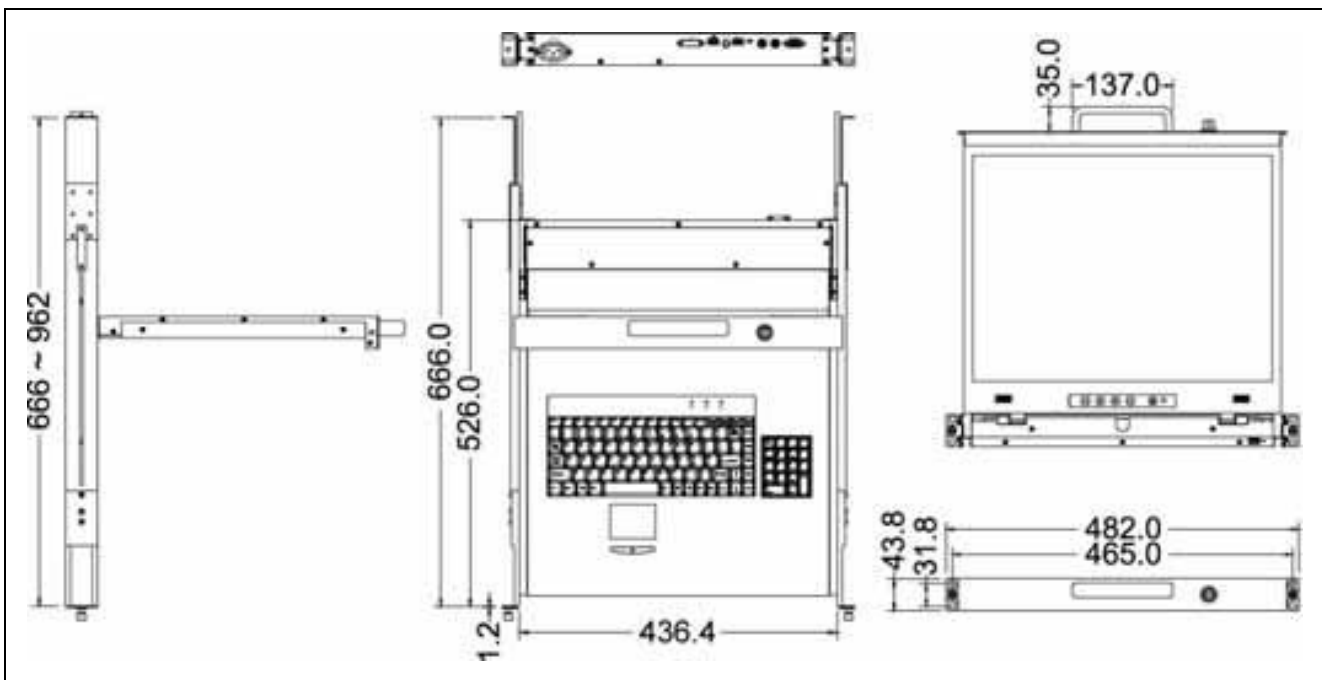


FIG. the LCD drawer (KVM-8901)


## 1.2 Features

- 1U-19" rack mount size design
- 19 inches wide screen LCD with on screen display (OSD) setting
- Touch-pad (compatible with PS/2 mouse interface)
- Standard 105 keyboard plus 18 push-buttons (hotkeys)
- KVM functions
  - Hot Plug - add PCs or remove connected PCs for maintenance without powering down the KVM switch or PCs
  - Very high video quality - up to 1920X1440, bandwidth: 200MHz (it might be limited by the monitor resolution)
  - No software required - easy PC selection via KVM-OSD manual, push buttons, or hot Keys
  - Support eight characters password protection and search PC server name
  - Auto Scan Mode for monitoring PCs and flexible Scan time from 5~99 seconds
  - Keyboard status restored when switching PCs
  - Buzzer sound for switching port confirmation
  - Support DOS, Win3.X, Win95/98/98SE/2000/ME/XP, WinNT, Netware, Unix, Linux
  - Support iMAC, Power MAC and Sun Microsystems with USB port
- Easy-Installation

### 1.3 Product Specifications

<b>Model Name</b>		KVM-8901	KCM-0832	KCM-1632
<b>Numbers of Ports</b>		1	8	16
<b>Dimension (W x L x H), in mm</b>		482 x 610 x 44		
<b>Net Weight</b>		20 KGS		
<b>Gross Weight</b>		24 KGS		
<b>LCD</b>	<b>Display Size</b>	19 inch Wide Screen		
	<b>Panel Type</b>	TFT		
	<b>Resolution</b>	1440 x 900 / 1366x 768 (16:10 / 16:9)		
	<b>View Angle</b>	H 85 / 85 V 85 / 85		
	<b>Contrast</b>	500		
	<b>Brightness</b>	250cd/m <sup>2</sup>		
	<b>Back light</b>	lifetime: 50,000 hrs		
	<b>Support Colors</b>	16.7M		
<b>Connectors</b>	<b>PC port</b>	1x HDB15 Female (Combo)	8x HDB15 Female (Combo)	16x HDB15 Female (Combo)
	<b>Daisy-chain port</b>	-	1x HDB15 Female (Combo)	1x HDB15 Female (Combo)
	<b>Console port</b>	-	1x USB (KB) 1x USB (MS) 1x HDB15 Female (VGA)	1x USB (KB) 1x USB (MS) 1x HDB15 Female (VGA)
	<b>Power-In</b>	DC12V		
<b>Keyboard</b>		105 key Keyboard, compatible to IBM PC/AT, PS/2 keyboard, supports Language: Germany, English, French, Italian, Spanish, Japanese, Chinese, and UK.		
<b>Touch pad</b>		Microsoft mouse compatible with PS/2 mouse interface		
<b>Power Adapter</b>		Universal <u>100~240V AC</u> input, 12V DC output power adapter Module (UL/cUL/TUV/CE/FCC/CCC)		
<b>ENV Condition</b>	<b>Operation Temperature</b>	0~50°C		
	<b>Storage Temperature</b>	-20 ~ 60°C		
	<b>Humidity</b>	10~90%		

## 2. Panel Control and OSD Function

	<p>LCD OSD Menu-Tree</p> <ul style="list-style-type: none"><li>1. Color<ul style="list-style-type: none"><li>a. Contrast</li><li>b. Brightness</li><li>c. Color Adjust</li><li>d. Color Temp</li></ul></li><li>2. Image Setting<ul style="list-style-type: none"><li>a. Clock</li><li>b. Phase</li><li>c. Sharpness</li><li>d. H.Position</li><li>e. V.Position</li></ul></li><li>3. OSD Menu<ul style="list-style-type: none"><li>a. OSD H.Pos.</li><li>b. OSD V.Pos.</li><li>c. OSD Timer</li><li>d. Language</li></ul></li></ul>
<p><b>Auto-Tune (A):</b> [1] Auto setting [2] Exit</p> <p><b>Menu (M) :</b> [1] Activate OSD menu [2] Select the item</p> <p><b>Up / Left (-):</b> [1] Scroll up the menu bar [2] Decrease setting</p> <p><b>Down / Right (+):</b> [1] Scroll down the menu bar [2] Increase setting</p> <p><b>Power:</b> Turn on or off the LCD</p>	

### 2.1 Auto-Tune

Press the “Auto Tune” button. The panel will adjust the display size automatically and also tune the panel to its best condition.

### 2.2 Contrast

- (1) Press the “Menu” button.
- (2) Use the “Up” or “Down” button to scroll to the item “Color”.
- (3) Press the “Menu” button to enter.
- (4) Use the “Up” or “Down” button to scroll to the item “Contrast”.

#### Contrast

Brightness

Color Adjust

Color Temp

- (5) Use the “Up” or “Down” button to adjust the contrast of the display.
- (6) Press the “Menu” button to save and finish this setting.

### 2.3 Brightness

- (1) Press the “Menu” button.
- (2) Use the “Up” or “Down” button to scroll to the item “Color”.
- (3) Press the “Menu” button to enter.
- (4) Use the “Up” or “Down” button to scroll to the item “Brightness”.

Contrast

Brightness

Color Adjust

Color Temp

- (5) Press the “Menu” button to enter.
- (6) Use the “Up” or “Down” button to adjust the brightness of the display.
- (7) Press the “Menu” button to save and finish this setting.

### 2.4 Color Adjust

- (1) Press the “Menu” button.
- (2) Use the “Up” or “Down” button to scroll to the item “Color”.
- (3) Press the “Menu” button to enter
- (4) Use the “Up” or “Down” button to scroll to the item “Color Adjust”

Contrast

Brightness

Color Adjust

Color Temp

- (5) Press the “Menu” button to enter.
- (6) Use the “Up” or “Down” button to adjust the Color of the display.
- (7) Press the “Menu” button to save and finish the setting.

### 2.5 Color Temperature

- (1) Press the “Menu” button.
- (2) Use the “Up” or “Down” button to scroll to the item “Color”.

- (3) Press the “Menu” button to enter
- (4) Use the “Up” or “Down” button to scroll to the item “Color Temp”

Contrast  
Brightness  
Color Adjust  
**Color Temp**

- (5) Press the “Menu” button to enter.
- (6) Use the “Down” and “Up” button to adjust the Color Temp of the display.
- (7) Press the “Menu” button to save and finish the setting.

## 2.6 Language

The LCD\_OSD support 7 languages, English, French, German, Spanish, Tradition Chinese, Simple Chinese and Japanese by selecting the item in the menu by the item “English”, “Français”, “Deutsch”, “Español”, “繁體中文”, “简体中文”, and “日本語”, respectively.

- (1) Press the “Menu” button.
- (2) Use the “Up” or “Down” button to scroll to the item “OSD Menu”.
- (3) Press the “Menu” button to enter
- (4) Use the “Up” or “Down” button to scroll to the item “Language”
- (5) Press the “Menu” button to enter
- (6) Use the “Up” or “Down” button to scroll to the desired OSD-language, below shows the language “Deutsch” (German) is selected.

English  
Français  
**Deutsch**  
Español  
繁體中文  
简体中文  
日本語

- (7) Press the “Menu” button to save and finish the setting.


< Other OSD functions will be operated as the steps above >




### 3. Touch Pad


#### FUNCTION

##### Basic Function


	<b>Cursor Move</b> This function is enabled when the finger moving on touchpad device.
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##### Scroll Function


	<b>Vertical Scroll</b> vertical scrolling is enabled when tap right side of touchpad then move finger.
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	<b>Horizontal Scroll</b> horizontal scrolling is enabled when tap down side of touchpad then move finger.
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##### Multiple Finger

	<b>1 Finger (Left Button)</b> It's same as the left button of mouse. And it could be setup as the function as selected. for example: Click/Select, Content Menu, Run ...etc.
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	<b>2 Finger (Middle Button)</b> It's same as the middle button of mouse. And it could be setup as the function as selected but expect Click/Select. for example: Content Menu, Run, Zoom in ...etc.
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	<b>3 Finger (Right Button)</b> It's same as the right button of mouse. And it could be setup as the function as selected. for example: Click/Select, Content Menu, Run ...etc.
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# 4. KVM Module

## 4.1 Introduction

The 4-in-1 LCD drawer includes KVM module which provides efficient way to control many computers. Powerful model-detection design will enable all connected PCs to identify KVM model correctly to meet server versatility and reach optimum setup. Stackable function (by daisy-chain) enables to link other KVM switches at any time to expand connected computers. With the on-screen display (OSD), you can view all computer situation and able to name and set password for each computer.

FIG. the 16-port KVM module

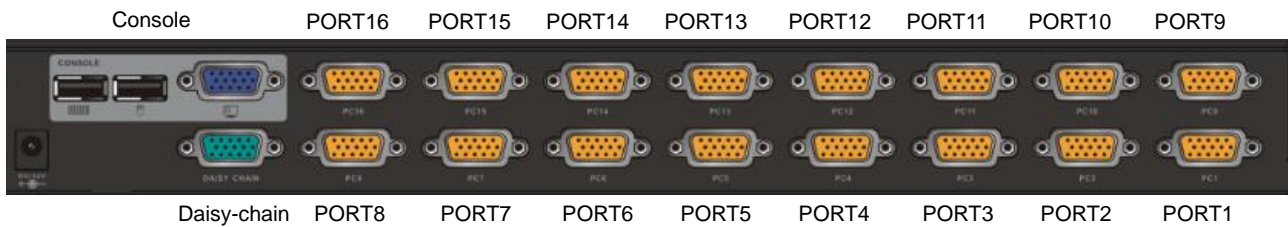
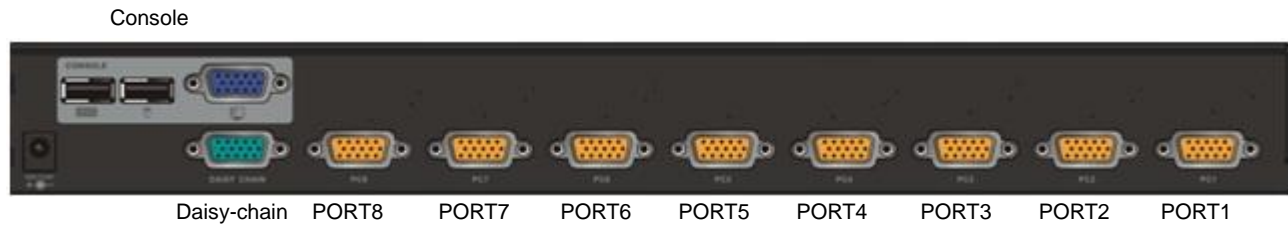


FIG. the 8-port KVM module



## 4.2 KVM Features

- Use One KVM Console to control 8/16 PCs
- Scan Interval: 5-99 Seconds
- Automatic KVM signal simulation, able to boot-up PC simultaneously
- Support advanced function of Logitech and Microsoft mouse
- Support Plug & Play, Software free
- Support DDC2B, correct Monitor type detection for each port at any time
- Compatible with MS-DOS, Windows, Linux, Unix, FreeBSD
- VGA resolution up to 1920x1440 (it might be limited by the resolution of the display)
- Front panel, hot-key, and full-function OSD menu for PC selection
- Daisy chain to expand the connected PCs
- Keyboard/Video Monitor/Mouse signal RESET function
- Automatic KVM type detection for optimum setup
- Integrated HD15 3-in-1 KVM cable, easy connect and save space

## 4.3 KVM's Switch Operation

### (1) Switch Ports by Hotkey Commands

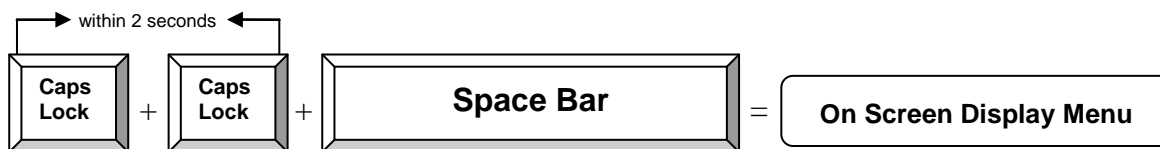
You can conveniently command KVM Switch via a simple hotkey sequence. To send commands to KVM Switch, you must press the hotkey (default is **Caps Lock**) twice within 2 seconds. You will hear a beep sound confirming you are in the hotkey mode. If you do not press any key during hotkey mode over 2 seconds the hotkey mode will be terminated and back to normal state.

The default hotkey is **Caps Lock** but you can change hotkey as your application convenience. If you prefer to use other hotkey, please go to OSD menu and change the default hotkey to the other. The table below lists all the supported hotkey commands.

Command	Function
Space Bar	Bring up the OSD screen
↑ or ↓	Move selection up or down
1~8 Bank 01~16 Port	The first digit is bank number starting with "1". The first KVM Switch on the daisy chain line is bank 1 (the Master). A standalone KVM Switch is fixed in bank 1. The second and the third digits indicate the port number from 01 to16.
PgUp	Back to previous bank.
PgDn	Go to next bank.
B	To enable/disable <b>beep sound</b> function.
L	To enable/disable the <b>Screen Saving</b> function and 10min auto-logout function. This default function is <b>OFF</b> .
S	For supervisor to activate the <b>Auto-scan</b> function.
U	For supervisor to enable/disable <b>Security</b> function. If the Security is off, you can access the KVM system without user name & password. This default function is <b>OFF</b> .
P	To <b>login to the OSD</b> . If Security is enabled it will display the Login window waiting for username and password. If Security is disabled it will display the Status window.
R	For supervisor to reset the OSD back <b>to factory default value</b> (except User Security settings).

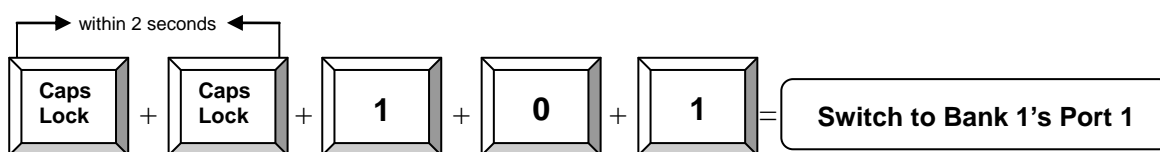
### Example 1:

To bring up the OSD by hotkey, press “Caps Lock”, “Caps Lock” and the “Space Bar”. Immediately, the OSD overlay screen will appear. The superimposed menu screen is generated by the KVM Switch, and does not affect your computers or software function in any way.



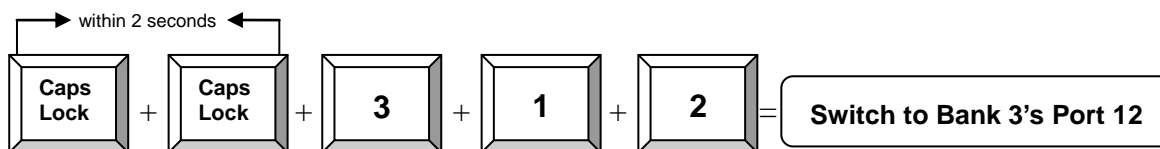
### Example 2:

To switch to Bank 1 Port1, press “Caps Lock”, “Caps Lock”, and “1”, “0”, “1”.



### Example 3:

To switch to Bank 3 Port12, press “Caps Lock”, “Caps Lock”, and “3”, “1”, “2”.



## (2) Switch Ports by KVM-OSD

Press the button “M” = To activate KVM-OSD menu

Use the up / down arrow to select the desired port.

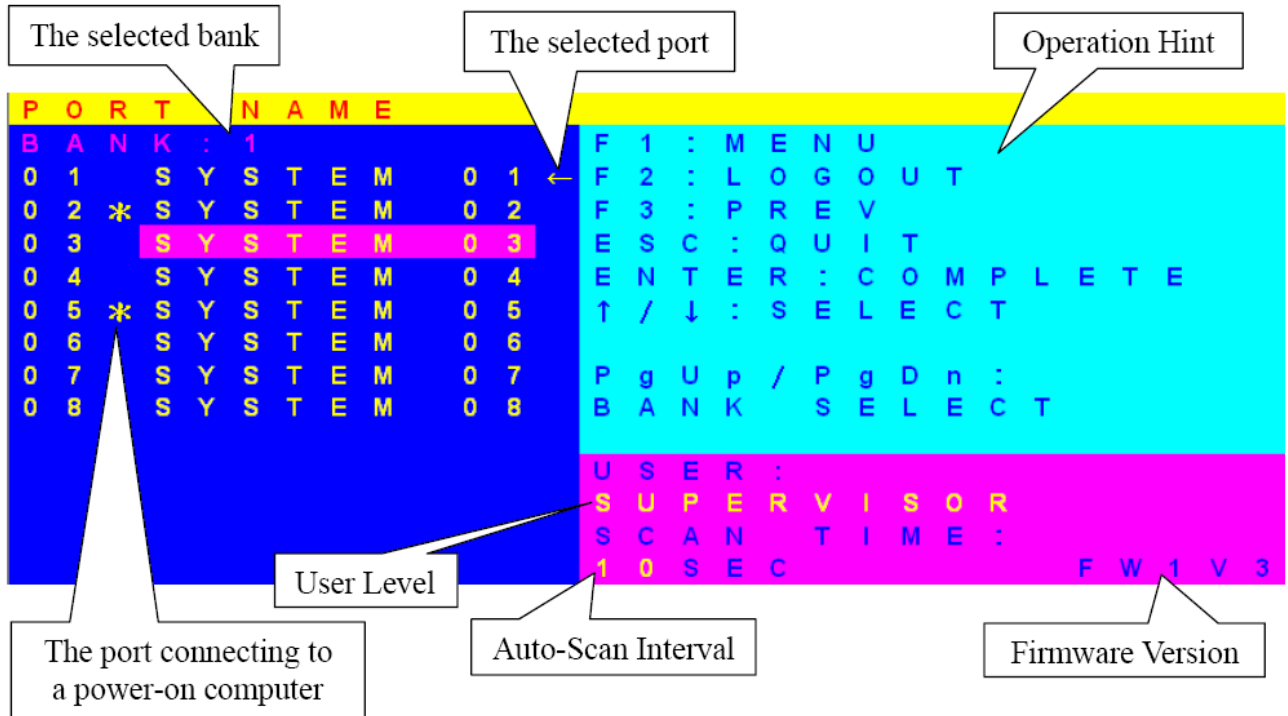


Figure KVM-OSD Menu of KVM Switch

### 4.4 Remarks

- (1) Please plug KVM switch adapter and use high quality 3-in-1 KVM cable for optimum operation.
- (2) To prevent potential power damage, please don't use 2-wire extension cord and ensure AC outlets at PCs and monitors are on the same phase and have correct grounding.
- (3) Limited Warranty:
  - A. In no events shall the direct vendor's liability for direct or indirect, special, incidental or consequential damages, loss of profit, loss of business, or financial loss which may be caused by the use of the product exceeds the price paid for the product.
  - B. The direct vendor makes no warranty or representation, expressed or implied with respect to the contents or use of this documentation, and especially disclaims its quality, performance, merchantability, or fitness for any particular purpose.
  - C. The direct vendor also reserves the right to revise or update the product or documentation without obligation to notify any user of such revisions or updates. For further information, please contact your direct vendor.

## 5. Installation

### 5.1 Cabinet Installation

Below is the steps to install the LCD drawer with the standard 19-inch cabinet.

#### Step 1:

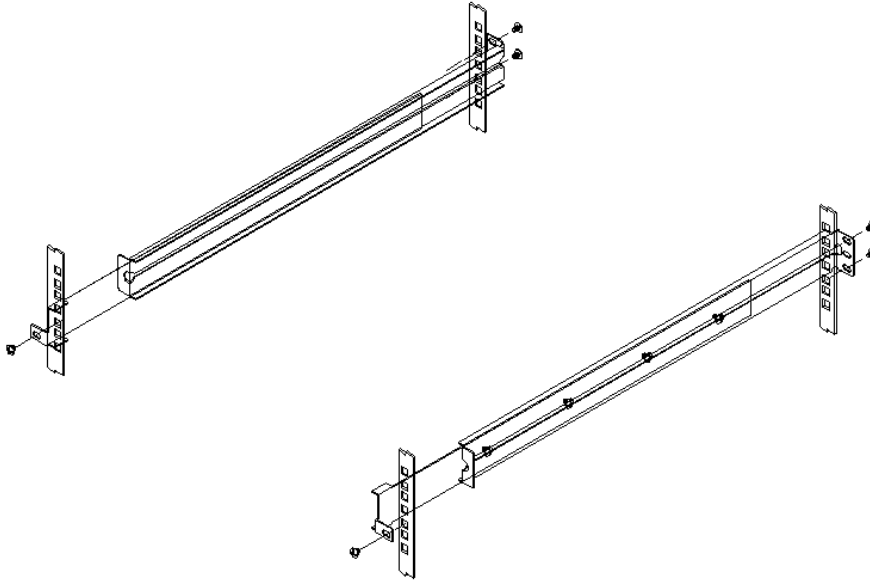


Figure 1: Attach the left and right mounting rails to the rack

#### Step 2:

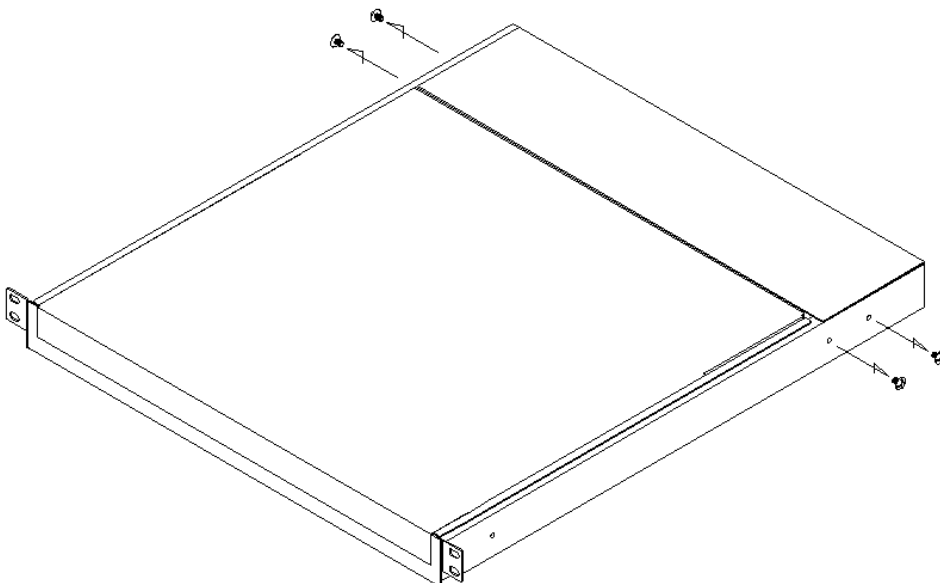


Figure 2: Remove the screws

**Step 3:**

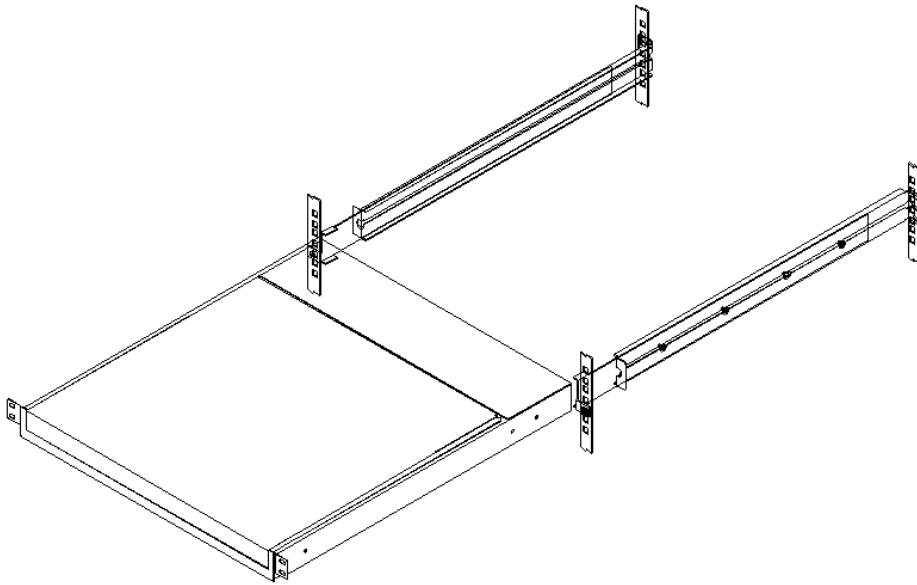


Figure 3: Let the LCD drawer slide-in the rack mount bracket

**Step 4:**

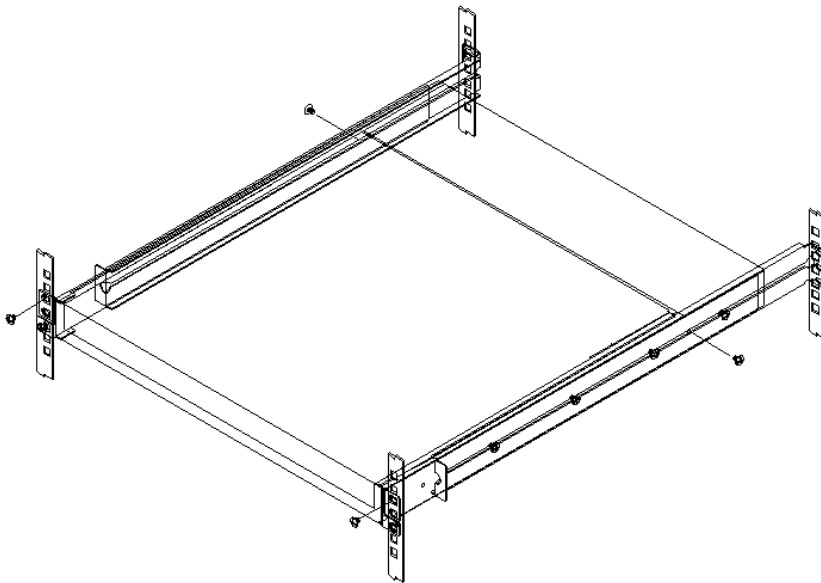


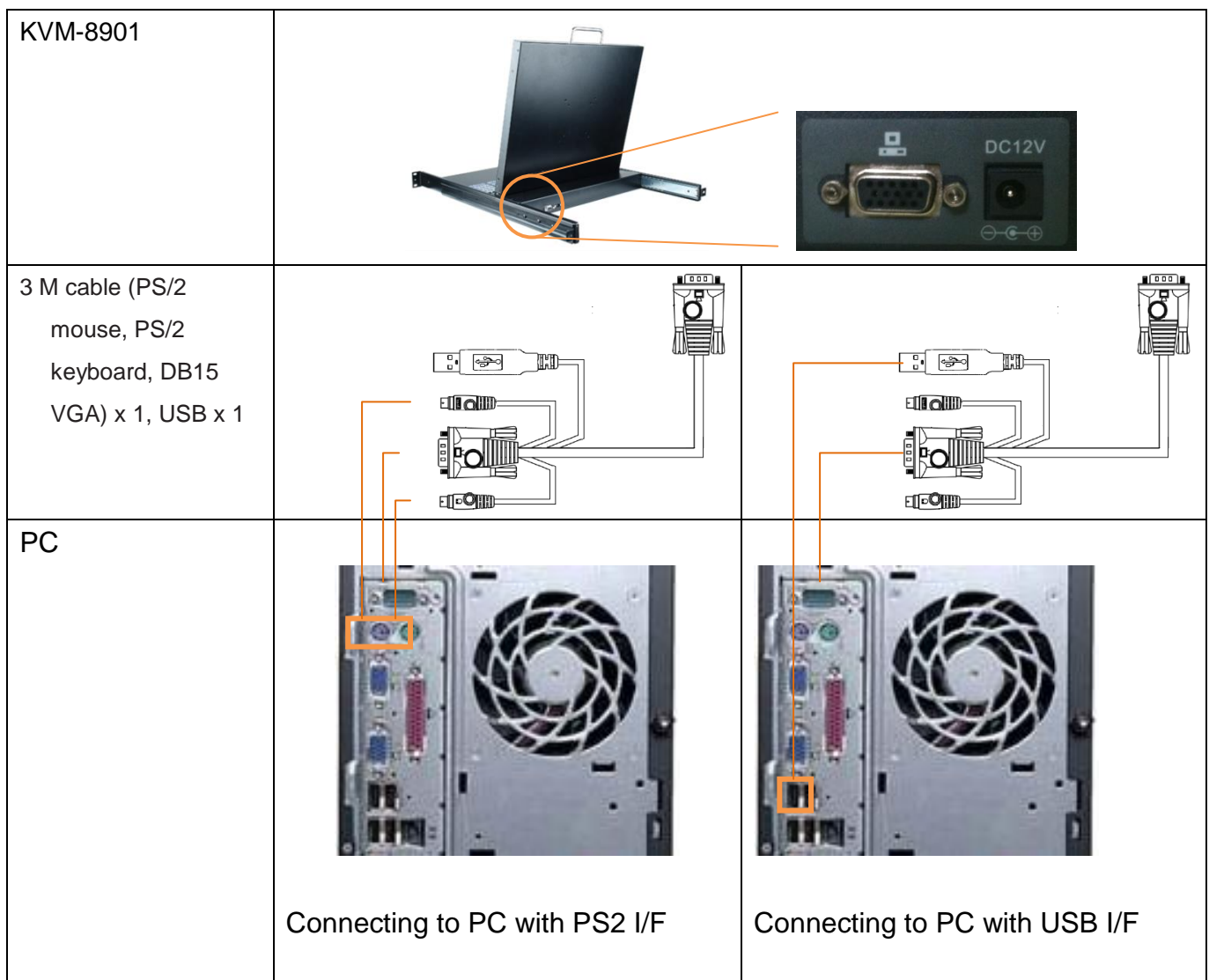
Figure 4: Screw-in the LCD drawer at the left/right position



## 5.2 Connection Diagrams

- For 3-in-1 LCD Drawer
- Plug the DC12V to the drawer.
- Plug HDB-15 end of the KVM cable to the drawer and plug the other end of the cable (with the sequence mouse, keyboard, then video) to PC's ports.

FIG.1 Single Console Connection between drawer and PC

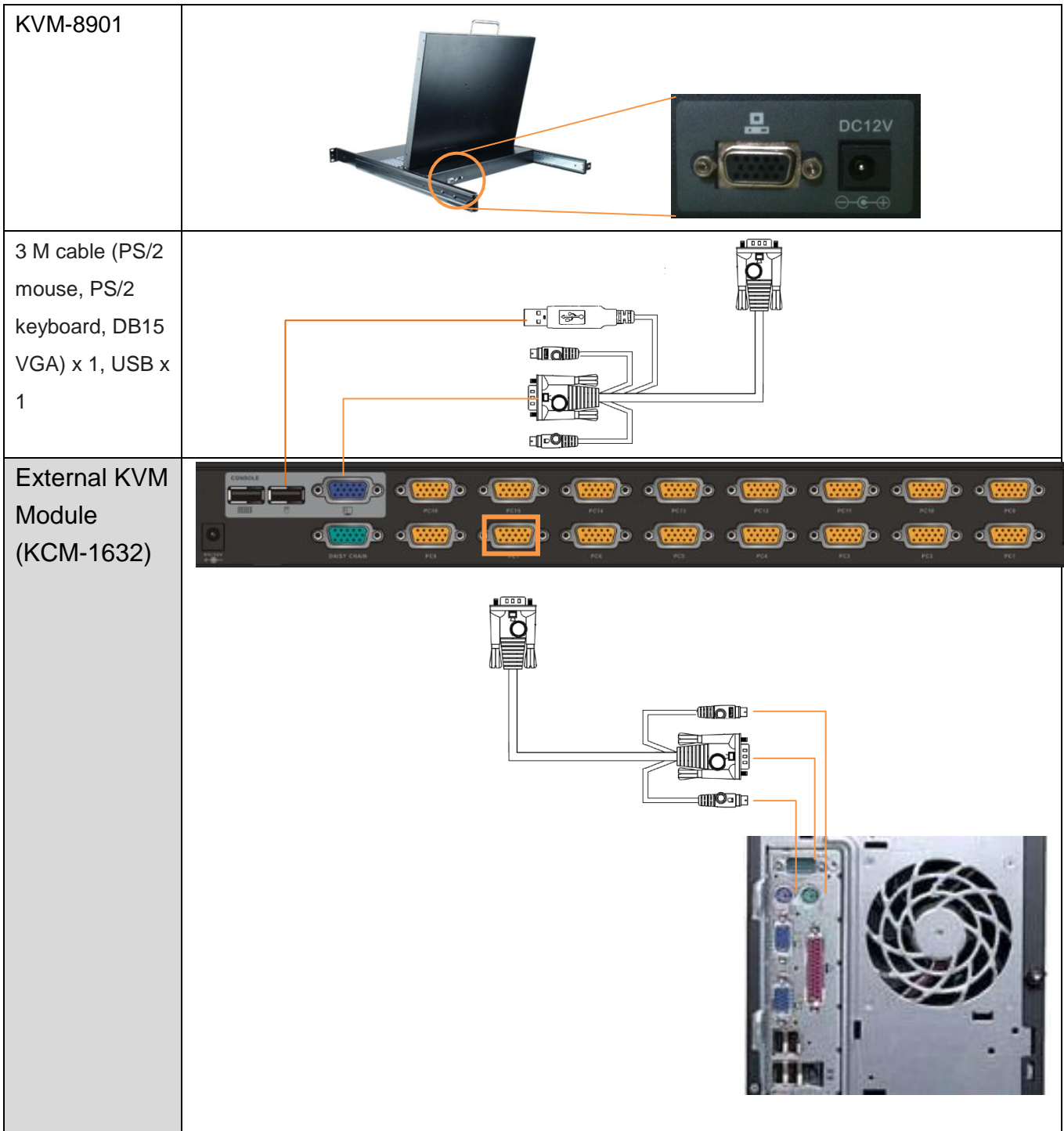


\*The cable has 'converter' function, which converts the PS2 to USB.

- For 3-in-1 LCD Drawer to external KVM Box

- Plug the DC12V to the drawer.
- Plug HDB-15 end of the KVM cable to the drawer and plug the other end of the cable (with the USB and video) to the external KVM box's console.

**FIG.2 Single Console Connection between the drawer and the external KVM Module**



- For 4-in-1 LCD Drawer
  - Plug the DC-power adapter to the drawer.
  - Plug HDB-15 end of the KVM cable to a selected switch channel and plug the other end of the cable (with mouse/keyboard/video) to PC's ports.

**FIG.3 Connection between 4-in-1 drawer and PC**



- Cascade additional KVM-Switch: plug HDB-15 end of the cable to the “cascade port” and the other end to the second KVM’s user console.

**FIG.4 Cascade Connection**



## 6. Package Contents

	KVM-8901	KCM-0832	KCM-1632
Control Center LCD drawer	1 PCS	1 PCS	1 PCS
User's manual	1 PCS	1 PCS	1 PCS
AC to DC Power Adapter	1 PCS	1 PCS	1 PCS
Rack Mount Kit *	1 SET	1 SET	1 SET
3 M cable	1 SET	No	No

## 7. Certifications

### FCC

This equipment has been tested and found to comply with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference
- (2) This device must accept any interference received.

### CE – Certificate

This equipment is in compliance with the requirements of the following regulations: EN 55 022:  
CLASS B



## APPENDIX-1 Notes on 3-in-1 LCD Drawer

1. Ensure that all cables are well seated. Label all of cables with the number for each respective computer to avoid confusion.
2. The recommended VGA cable distance is 5 meters maximum without ghosting and degradation. Normally, the cable length is based on driver capacity of your VGA card. If you need longer VGA cable, please use VGA extender (Model No. VGA-100, MAX. 100) to accomplish your applications.
3. The recommended PS2 cable distance is 5 meters maximum. Normally, the cable length is based on driver capacity of your motherboard PS2 port. If you need longer PS2 cable, please use PS2 extender (Model No. PS-100, MAX. 100 feet ) to accomplish your applications.
4. Don't press any keys on the keyboard while the selected computer is booting up. Otherwise, it might cause the keyboard error or keyboard is not detected at PC side.
5. If forgetting the password you typed, please contact your supplier.

### Trouble Shooting

The computer boot up fine, but keyboard doesn't work	<ul style="list-style-type: none"> <li>● Make sure the keyboard works when directly plugged into the computer.</li> <li>● Try a different keyboard, but use only 101, 102 or 104-key keyboard.</li> </ul>
The Mouse is not detected during PC boot up	<ul style="list-style-type: none"> <li>● Make sure the mouse works when directly plugged into the computer.</li> <li>● Make sure the mouse is a true PS/2 mouse. A combo mouse will work just as long as it is set for PS/2 mode with the correct adapter. Try a different mouse.</li> <li>● Avoiding moving the mouse or pressing the mouse buttons when switching ports.</li> <li>● Avoiding switching ports during shutting down the PC process.</li> <li>● When you switch one PC port to another PC port, the best scan time setting need to be set to 5 sec. or more. Normally, the VGA monitor change one resolution mode to another will take one or two seconds. So, the scan time is not recommended to below 5 seconds.</li> </ul>
The power switch is off, but the switch still works fine or power adapter is unplugged from the switch, but the switch still works fine.	<ul style="list-style-type: none"> <li>● KVM Switch unit draws the power source from power adapter and all PC's PS2 port. Some PC's PS2 port can support enough power for the switch, but some PC's PS2 port (like laptop, notebook computer...etc.) is unable to supply enough power for the switch. In order to make sure the system can work steadily, please do not set power switch to off state or remove the power adapter from the switch.</li> <li>● Although the PCs connected to KVM Switch unit are able to support enough power to the stand alone switch, KVM Switch unit still needs a power adapter for daisy chain more banks.</li> </ul>