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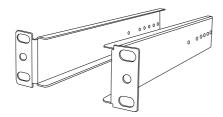
# LCD1U17-35

17.3" Full HD LED Backlight Single Rail Console with Modular KVM Switch User Manual

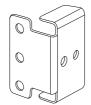
# **Packing List**

The complete LCD1U17-35 17.3" Full HD single rail console with modular KVM switch package consist of :

- One 1U 19" rack mount console
- Two rails with front and rear bracket
- Two extended brackets



Two Short brackets



Two bracket attachments



LCD1U17-35 bracket attachment

- One 1.8 m KVM cable (HDDB-15 / VGA + PS/2 x 2)
- One USB cable
- One DC power adapter
- One power cord
- One user manual CD
- One quick installation guide
- Two keys
- Six flat screws (for rail mount to console body)
- Six screws (for replace extended bracket)

Check to make sure that the unit was not damaged in shipping. If you encounter a problem, contact your dealer.

Please read this manual thoroughly, and follow the installation and operation procedures carefully to prevent any damage to the product, and / or any of the devices that connect to it.

# **Safety Instructions**

- 1. Please read these safety instructions carefully.
- 2. Please keep this User's Manual for later reference.
- Please disconnect this equipment from AC outlet before cleaning. Don't use liquid or sprayed detergent for cleaning. Use moisture sheet or clothe for cleaning.
- 4. For pluggable equipment, the socked-outlet shall be installed near the equipment and shall be easily accessible.
- 5. Please keep this equipment from humidity.
- 6. Lay this equipment on a reliable surface when install. A drop or fall could cause injury.
- 7. Do not leave this equipment in an environment unconditioned, storage temperature above 60 °C, it may damage the equipment.
- 8. The opening on the enclosure is for air convection hence the equipment from overheating. DO NOT COVER THE OPENING.
- 9. Make sure the voltage of the power source connect the equipment to the power outlet.
- 10. Please keep the power cord such a way that people can not step on it. Do not place anything over power cord. The power cord must rate for the voltage and current marked on the product's electrical ratings label. The voltage and current rating of the cord should be greater than the voltage and the current rating marked on the product.
- 11. All cautions and warning on the equipment should be noted.
- 12. If the equipment is not in use for long time, disconnect the equipment from mains to avoid being damaged by transient over-voltage.
- 13. Never pour any liquid into ventilation openings; this could cause fire or electrical shock.
- 14. Never open the equipment. For safety reason, qualified service personnel should only open the equipment.
- 15. If one of the following situations arises, get the equipment checked by service personnel.
  - The Power Cord or plug is damaged.
  - Liquid has penetrated into the equipment.
  - The equipment has been exposed to moisture.
  - The equipment has not worked well or you can not get it work according to User's Manual.

- The equipment has dropped and damaged.
- If the equipment has obvious signs or breakage.

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#### 1. General Information

LCD1U17-35 Full-HD Patented Single Rail console industrial level input solution to optimize your space utilization by controlling your systems in just 1U. With the unique modular design, you can easily integrate more than 24 models of KVM switches with different functions and expand the connections up to 8 levels of the KVM switches.

#### 1.1 Feature

- Support 1920 x 1080 Full HD resolution
- Provide front USB port to easy data access (optional)
- Easy to install, single rail design.
- Support Sun native resolution
- Support 18 various keyboard languages (increasing)
- Bright Active TFT display
- OSD function for LCD display and KVM switch
- Durable keyboard with touchpad
- Sun keys (optional)
- Front USB HUB port (optional)
- Finger Print Scanner (optional)
- With our fully modular IP & CAT5 modules, our customers can create 21 models of KVM Switch from 7 basic models.

#### 1.2 Benefits

- 1. Cost effective solution: With our unique design and all the options, you can easily suffice the demand for your customer at reasonable cost.
- 2. Time to serve your customer: With the modular KVM, you can easily turn single port console into 8 / 16 / 32 ports console to serve your customer well.
- 3. Keep low inventory: From the 1 models of consoles and 23 models of KVM switches, IP Module and CAT5 Module, you can create total 24 models in this Series. It is the best solution for inventory control.
- 4. Easy to maintain: Once the defective comes from the KVM switch, you can just swap the KVM switch module without asking your customer to send the whole console back to you.

5. Save freight cost: Since you have to keep only 1 models of consoles and generate new models by yourself, you can ship all the goods by sea instead of by air. In case, you run out of the KVM switch stock, it is much cheaper to ship the KVM switch modules by air.

# 1.3 Advantage

#### Easy to install:

With the unique separate rail design. One man can install the LCD1U17-35 console easily. In case you need to maintain the console, you can easily uninstall without effecting the server above or below.

#### Modular KVM switches:

The user can use LCD1U17-35 console as single port console or through some simple action and few screws to be 8 / 16 even 32 ports KVM consoles.

# Various keyboard language support:

to fit the demand of each individual countries.

# 1.4 Product Specification

# 1.4.1 LCD1U17-35

Model name	LCD1U17-35
Number of ports	1
Dimension	582 x 436.4 x 44.0 mm / 20.8 x 17.2 x 1.7 inches
Net Weight	13 Kg / 28.7 lbs
Display Size	17.3 inches Full HD
Panel Type	TFT LCD
Resolution Capabilities	Maximum Resolution up to 1920 x 1080 (Full HD)
Pixel Pitch	Supports 0.198 mm x 0.198 mm
Viewing Angle (CR>10)	Right-Left view 140°(Typ)
	Up-Down View 120°(Typ)
Contrast Ratio	650 : 1
Brightness	White 300 cd/ m <sup>2</sup>
Back Light	DualLamps for Back Light
Supported Colors	16.7M Colors (8-bit with FRC)
Response Time	Rising Time 2 ms, Decay Time 6 ms
Operating System	Dos, Unix, Linux, OSX, Windows (XP, 7, 8, Server 2012 R2)
Multi Platform	Support PS/2 and USB
System Cables	VGA + PS/2 x 2 or VGA + USB x 1 cable
Keyboard Mouse	106 key PS/2 keyboard with touch pad
Sync	45 ~ 80 KHz
Power Source	100 ~ 240 VAC input
Power Consumption	10.2W for Panel
Temperature	Operate 0 ~ 50°C / 32 ~ 122°F
	Storage -20 ~ 60°C / -4 ~ 140°F
Humidity	10% ~ 90% RH
Chassis Construction	Heavy duty steel materials
Keyboard Language	US, UK, German, French, Spanish, Italian, Dutch, Portuguese,
	Swiss, Belgium, Swedish, Norwegian, Danish, Russian, Hebrew,
	Arabic, Japanese, Mandarin

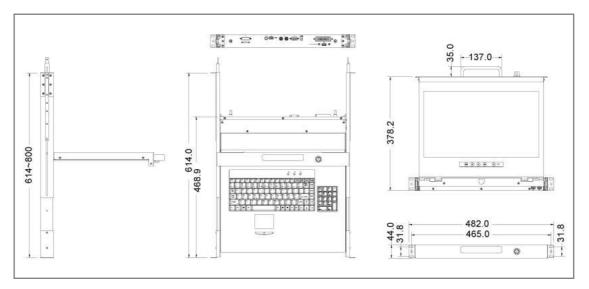


Figure 1-2. LCD1U17-35 Dimension

# 1.4.2 LCD1U17-35 I/O Diagram



Figure 1-3. LCD1U17-35 Front View

#### **Share and Store Function**

- A. Front USB port 1 (optional)
- B. Front USB port 2 (optional)



Figure 1-4. LCD1U17-35 Rear View

- 1. KVM dock (Only for Combo-free / CAT5 series KVM Switch use.)
- 2. USB 2.0 HUB port (optional)
- 3. DC in
- 4. VGA port
- 5. PS/2 keyboard
- 6. PS/2 mouse

- 7. PS/2-USB select
- 8. USB Keyboard Mouse port
- 9. Audio line in (optional)
- 10. DVI port (optional)
- 11.HDMI port (optional)

# 2. Panel Controls and OSD Function

Controls		Description	
(1)	Soft power on/off button. Adjacent LCD is lit when		
	on.		
Ato	Auto-synch	ronize and scale down display to any	
Auto	valid factory preset timings.		
	Press to scroll the function you want to adjust.		
lacksquare	Press to sc	roll the function you want to adjust.	
Menu	To access	the main menu. This button also acts as	
wenu	the "Enter" button.		
	GERRN	ON	
Power	RED	STANDBY	
Indicator	RED	SUSPEND	
	RED	OFF	

**Table 2-1. Panel Controls** 



Figure 2-1. LCD1U17-35 OSD Control Bar

# 2.1 Input Source

- 1. Press the "menu" button.
- 2. Use the "Down" and "Up" button to scroll.

#### **Input Source**

Auto tune.

**Brightness** 

Contrast

Color

Position

Language

Recall

Volume

Exit

3. Press the "menu" button to enter, and you will see:

**VGA** 

DVI

HDMI

**AUTOSERCH** 

- 4. Use the "Down" and "Up" button to select the input source of signal.
- 5. Press the "menu" button to enter

#### 2.2 Auto Tune

Press the "auto tune" button. The panel will adjust the display size automatically and also tune the panel to its best condition.

# 2.3 Brightness

- 1. Press the "menu" button.
- 2. Use the "Down" and "Up" button to scroll.

Input Source

Auto tune.

#### **Brightness**

Contrast

Color

Position

Language

Recall

Volume

Exit

- 3. Press the "menu" button to enter.
- 4. Use the "Down" and "Up" button to adjust the brightness of the display.
- 5. Press the "menu" button to enter.

#### 2.4 Contrast

- 1. Press the "menu" button.
- 2. Use the "Down" and "Up" button to scroll.

Input Source

Auto tune.

Brightness

#### **Contrast**

Color

Position

Language

Recall

Volume

Exit

- 1. Press the "menu" button to enter.
- 2. Use the "Down" and "Up" button to adjust the contrast of the display.
- 3. Press the "menu" button to enter.

#### 2.5 Color

- 1. Press the "menu" button.
- 2. Use the "Down" and "Up" button to scroll.

Input Source

Auto tune.

Brightness

Contrast

#### Color

Position

Language

Recall

Volume

Exit

3. Press the "menu" button to enter. And you will see:

Icon	Description
9300°K	To set CIE coordinates at 9300°K color
7500°K	To set CIE coordinates at 7500°K color
6500°K	To set CIE coordinates at 6500°K color
User	To set user defined CIE
Auto color	To auto adjust color
Return	To exit and return to the previous page

**Table 2-2. Icon Description** 

- 4. Use the "Down" and "Up" button to adjust the color of the display.
- 5. Press "menu" to enter.

#### 2.6 Position

- 1. Press the "menu" button.
- 2. Use the "Down" and "Up" button to scroll.

Input Source

Auto tune.

Brightness

Contrast

Color

#### **Position**

Language

Recall

Volume

Exit

3. Press the "menu" button to enter. And you will see:

Icon	Description
Image Pos	To adjust the position of the image.
OSD Pos	To adjust the position of the OSD.
Return	To exit and return to the previous page

**Table 2-3. Icon Description** 

- 4. Use the "Down" and "Up" button to scroll.
- 5. Press the "menu" button to enter.

#### 2.7 Language

- 1. Press the "menu" button.
- 2. Use the "Down" and "Up" button to scroll.

Input Source

Auto tune.

**Brightness** 

Contrast

Color

Position

#### Language

Recall

Volume

Exit

3. Press the "menu" button to enter. And you will see:

# **English**

Deutsch

Français

Italiano

Espanol

- 4. Use the "Down" and "Up" button to scroll.
- 5. Press the "menu" button to enter.

#### 2.8 Recall

- 1. Press the "menu" button.
- 2. Use the "Down" and "Up" button to scroll.

Input Source

Auto tune.

**Brightness** 

Contrast

Color

Position

Language

#### Recall

Volume

Exit

3. Press the "menu" button to enter, and you will see:

#### Yes/ No

4. Select "Yes" button then 'Menu" button to recall the factory setting. Select "No " to return to the previous page.

# 2.9 Volume

For Audio version use.

# 2.10 Exit

Press the "exit" button to quit OSD menu.

# 3. Installation

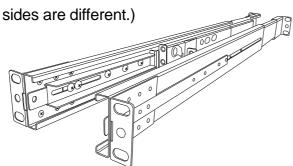
# 3.1 Install LCD1U17-35 into Cabinet

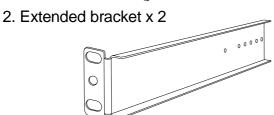
#### 3.1.1 Notes

- 1. Please check all peripherals according the list before installation. To make sure that the whole unit was not damaged and lost during shipping process. If you encounter any problem, please contact your dealer.
- 2. Before installation, make sure all peripherals and computer have been turned off.
- 3. The cabinet depth range must be in 504 ~ 1000 mm for 17.3" Full-HD console. Contact your dealer for deeper cabinet application.
- 4. The cabinet depth is  $614 \sim 800$  mm for 17.3" Full-HD, please refer to "Step A". The cabinet depth is  $504 \sim 614$  mm for 17.3" Full-HD, please refer to "Step B". The cabinet depth is  $800 \sim 1000$  mm, please refer to "Step C".
- 5. Reliable grounding of rack-mounted equipment should be maintained. Particular attention should be given to supply connections other than direct connections to the branch circuit.

#### 3.1.2 Hardware Kits Contents

1. Rail with front and rear bracket x 2 (Please identify the brackets. Right and left sides are different)





3. Short bracket x 2



4. Bracket attachment x 2



LCD1U17-35 bracket attachment

5. Screw (length = 6 mm) x 6



6. Screw x 6

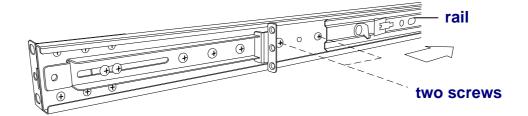


7. Key x 2

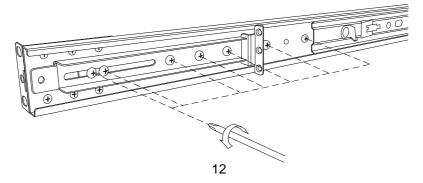


# 3.1.3 Step A (Install Console)

1. Adjust rail until two screws appear.

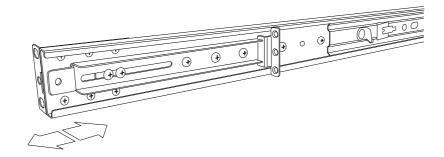


2. Loose (Not remove) seven screws.

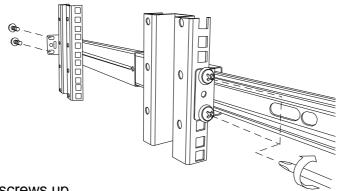


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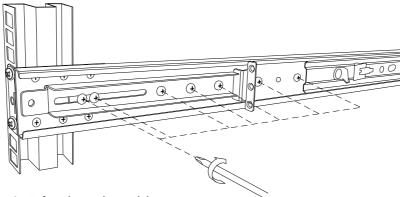
# 3. Adjust rail to fit your cabinet



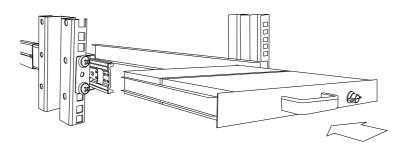
4. Install front and rear bracket on cabinet.



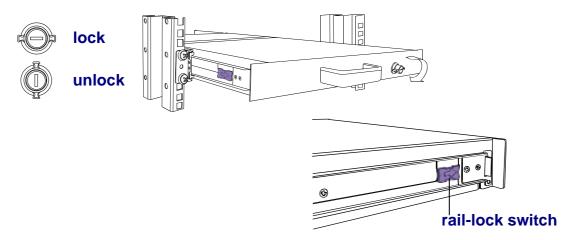
5. Tight seven screws up.



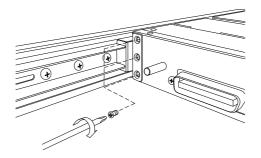
- 6. Repeat step 1~5 for the other side.
- 7. Push console into rails. (Be careful rear box loose when take out console from carton.)



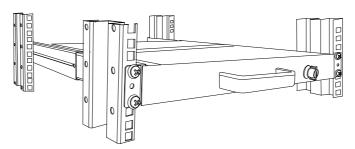
8. Unlock and pull rail—lock switch (left and right at the same time) then push console to the end.



9. Install three screws (length = 6 mm) in rear of the console. (Both sides)

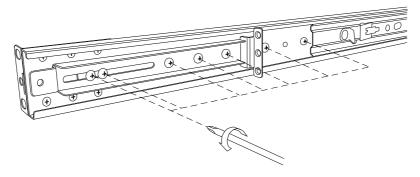


10. Finish installation as below.

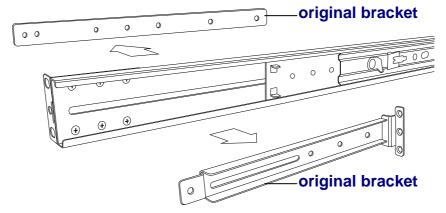


# 3.1.4 Step B (Replace short bracket)

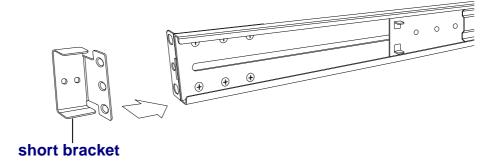
1. Remove seven screws.



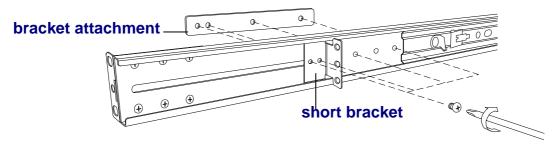
2. Take two original brackets out.



3. Put short bracket to rear of the rail.



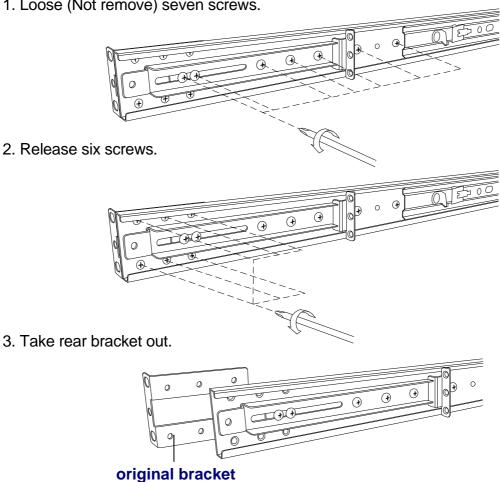
4. Install four screws (don't tight-up) to combine rail, short bracket and bracket attachment.



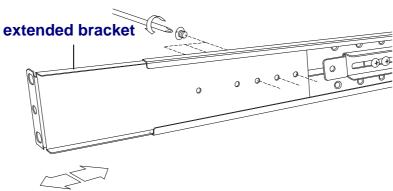
- 5. Repeat step  $1 \sim 4$  for the other side.
- 6. Repeat step  $3 \sim 10$  of step A to finish the installation.

# 3.1.5 Step C (Replace extended bracket):

1. Loose (Not remove) seven screws.



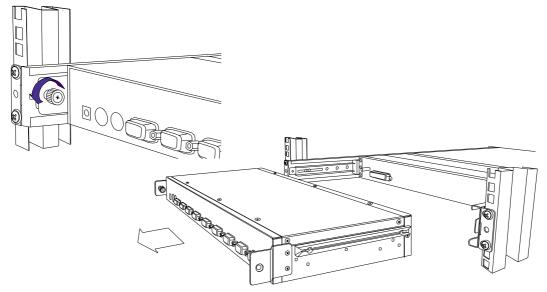
4. Adjust rail and input extended bracket to rear of the rail then adjust extended bracket to fit your cabinet. Install unless 2~3 screws (don't tight-up) upon the length you need. One is forbidden.



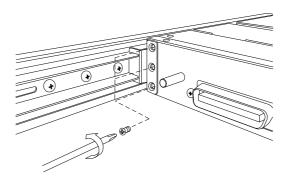
- 5. Repeat step 1 ~ 4 for the other side.
- 6. Repeat step  $3 \sim 10$  of step A to finish the installation.

# 3.1.6 Unload Steps

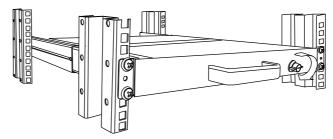
- 1. Make sure the console has locked and turned off.
- 2. Loose two thumb screws and pull modular KVM switch out.



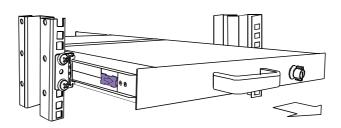
3. Release three screws in rear of the console. (Both sides)



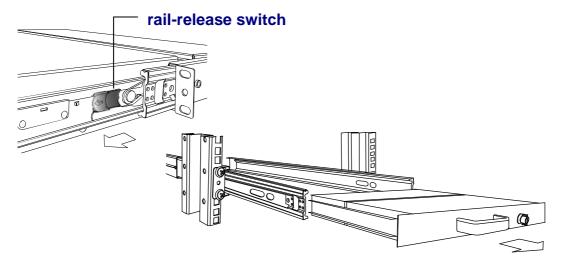
4. Unlock.



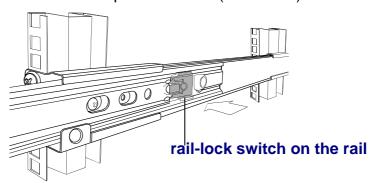
5. Pull console out until console lock.



6. Pull rail-release switch and pull console out.(Both sides. Be careful when pull out console.)



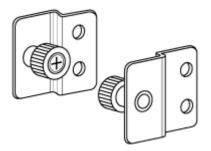
7. Push rail-lock switch on the rail and push rail back. (Both sides)



# 3.3 Install Modular KVM Switch

# 3.3.1 Hardware Kits Contents

1. Bracket with thumb screw x 2

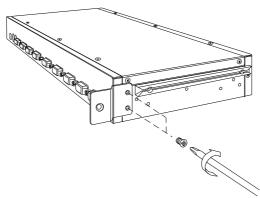


2. Screw (length = 6 mm) x 4

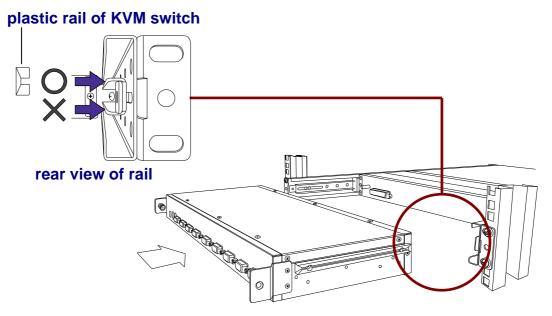


# 3.3.2 Install Modular KVM Switch Step

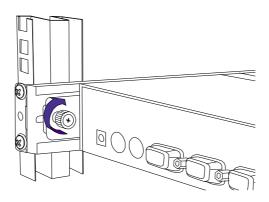
1. Install two screws (length = 6 mm) to combine bracket and KVM switch. (Both sides)



2. Push KVM switch into the rails from rear of cabinet.



3. Tight thumb screw of bracket up to fix KVM switch in console and finish installation. (Both sides)



#### 3.4 Installing the Video Card and Video Driver

Before connecting the LCD console, make sure your computer has a video card already installed for the panel. After you connect the console, install the video software driver. The video driver is supplied by the video card manufacturer and may be found on the CD-ROM that came with your computer. If you need information on installing a video card or video driver, refer to the manual that came with your video card.

#### 3.4.1 Configuring the Display Settings

After connecting the console and turning on your computer, you may need to configure one or more of the following display settings:

- Display mode (also called desktop area or video resolution)
- Refresh rate (also called vertical scan rate or vertical sync)
- Color depth (also called color palette or number of colors)

Each video card has several controls that let you adjust the display settings. However, the software and driver for each video card is unique. In most cases, you adjust these settings by using a program or utility provided by the manufacturer of the video card. Most video cards use the Windows Display Properties control panel to configure the display. To open the Windows Display Properties, click the right mouse button in a blank area of the Windows desktop and then select **Properties.** The Settings tab usually lets you change the Color Palette and the Desktop Area (*x by y* pixel resolution).

Some video cards integrate additional features into the Windows Display Properties control panel to give you an exceptional setup that is flexible and easy to use. For example, the control panel may include an Advanced Properties button, an Adjustment tab, or a Refresh tab for changing other settings. Other video cards have a separate utility for setting display properties.

Whenever you change the resolution, color, or refresh rate, the image size, position, or shape may change. This behavior is normal. You can readjust the image using the panel on-screen controls. For more information on the panel on-screen controls, refer to Chapter 2. For more information on configuring the display settings, refer to the manual that came with your video card.

#### 3.4.2 Connecting the Console

To connect an LCD console to a computer, perform the following steps



Figure 3-1. The Rear View of LCD Console

- 1. Turn off your computer. You should always turn off your computer before connecting or disconnecting a device.
- 2. Connect the video (VGA) connector of the KVM cable to the video card connector on the rear panel of your computer.
- 3. Identify and connect the PS/2 mouse and PS/2 keyboard connector to the correct PS/2 ports on the rear panel of your computer. Or you can use USB interface to connect your computer. ( Use PS/2-USB switch to select your interface. The switch has to be on PS/2 side when you use PS/2 interface connector.)
- 4. Connect the AC to DC power adapter to the power inlet on the console and then to a power outlet.

#### With USB Hub:



Figure 3-2. The rear view of console (USB Hub)

- Turn off your computer. You should always turn off your computer before connecting or disconnecting a device.
- 2. Connect the video (VGA / DVI / HDMI) connector of the KVM cable (DVI / HDMI) to the video card connector on the rear panel of your computer.
- 3. Identify and connect the PS/2 mouse and PS/2 keyboard connector to the correct

PS/2 ports on the rear panel of your computer. Or you can use USB interface to connect your computer. ( Use PS/2-USB switch to select your interface. The switch has to be on PS/2 side when you use PS/2 interface connector.)

- 4. Use USB A-A cable connect USB HUB port and USB port of system.
- 5. Connect the AC to DC power adapter to the power inlet on the console and then to a power outlet.

# 3.5 Fingerprint Scanner

Please install the driver from website or folder "Driver" in CD.

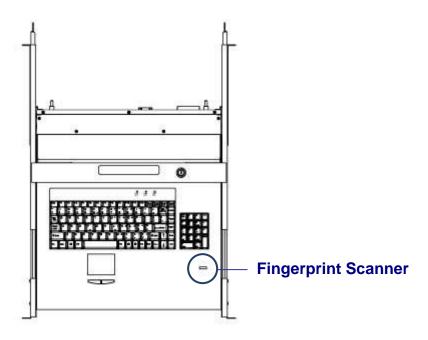


Figure 3-3. Fingerprint Scanner

# 3.6 Turning on the Console

Make sure all cables and the AC to DC power adapter are connected properly. Be sure to tighten all connector screws. Grab the front handle. Pull the console all the way out then lift the panel up. This will disengage the momentary on/off switch and the unit should power on. The LCD on the left or underneath of the panel will be green light.

# 3.7 Testing the Console

To test that the console is working properly, perform the following steps:

- 1. Power up the console, and then turn on your computer.
- 2. Make sure the video image is centered within the screen area. Use the OSD controls to adjust the image (see note below) or press the Auto button on the left or underneath of the panel.



If the unit does not power on when the panel is pulled up, try to push the power on/off button underneath or on the left of the LCD panel to power up the unit.



You can adjust the horizontal and vertical position, contrast, and brightness to better suit your video card and your personal preference. Refer to Chapter 2 for more information on using the on-screen menu to adjust the video display.

Before you begin, make sure that powers to all the devices you will be connecting up have been turned off. To prevent damage to your installation due to ground potential difference, make sure that all the devices on the installation are properly grounded. Consult your direct vendor for any technical issues if necessary.

#### 4. KVM Switch

For the KVM switch user manual, please go back to the main menu and select "KVM Switch".