Synergy Global Technology Inc
www.RackmountMart.com

LCD1U15-16
LCD1U17-22 / LCD1U17-23
LCD1U19-18 / LCD1U19-19
LCD1U20-01 / LCD1U20-04

Single Rail LCD Console with KVM Switch
User Manual

Toll Free: 1-888-865-6888

Tel: 510-226-8368 Fax: 510-226-8968

Email: sales@RackmountMart.com

Packing List

The complete LCD1U15-16 / 17-22 / 17-23 / 19-18 / 19-19 package consist of:

- One 1U 19” rack mount console
- Two rails with front and rear bracket
- Two long brackets. (Needed for rack depth 828 ~ 1000mm)
- One 1.8M signal cable
- One power cord
- One user manual CD (downloadable from each product webpage)
- One quick installation guide (downloadable from each product webpage)
- Two key
- Six flat screws. (for rail mount to console body)
- Six screws. (for replace long bracket)

The complete LCD1U20-01 / 20-04 package consist of:

- One 1U 19” rack mount console
- Two rails with front and rear bracket
- One 1.8M signal cable
- Two 1.8M USB cable
- One 1.8M DVI cable
- One Audio cable
- One power cord
- One user manual CD (downloadable from each product webpage)
- One quick installation guide (downloadable from each product webpage)
- Two key
- Six flat screws. (for rail mount to console body)

The complete LCD1U20-01 / 20-04 with 8/16 KVM package consist of:

- One 1U 19” rack mount console
- Two rails with front and rear bracket
- One 1.8M signal cable
- One power cord
- One user manual CD (downloadable from each product webpage)
- One quick installation guide (downloadable from each product webpage)
- Two key
- Six flat screws. (for rail mount to console body)

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.
3. 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 60^0 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.

Index of Contents

1. General Information

1.1 Overview

The KVM console is an ideal solution for network administration with multiple servers / platforms. Their 15 / 17 / 19 / 20.1-inch large size TFT LCD color display and ultra-low-profile compact industrial keyboard / touchpad provide the user-friendliest and most reliable environment for network administrators. All these functions are integrated in a 19-inch 1U space with rugged construction design to achieve ultra space saving and high reliability for high quality industrial network applications.

The KVM console provide superior picture quality and state-of-the-art features mounted in an industrial grade, rack mount console. The console forms a rugged enclosure that protects the panel from industrial hazards and permits easy access to panel controls.

The KVM console panels provide flicker-free color images at optimal resolutions. The panels' 0.297 x 0.297 mm pixel pitch – 15 inch (0.264 x 0.264 mm pixel pitch – 17 inch, 0.098 x 0.294 mm pixel pitch – 19 inch, 0.255 x 0.255mm pixel pitch – 20.1 inch) ensures crisp images with clear definition, even at high resolutions. The KVM console panels are intelligent, microprocessor-based, and have an ergonomically designed display.

The KVM console panels employ the latest in active matrix thin film transistor (TFT) technology, providing crisp screen images and wide viewing angles. Unlike CRT panels, LCD panels are inherently immune to the magnetic fields commonly found on the plant floor or communications centers. LCDs are also typically brighter than conventional CRT technology, making them ideal for the high ambient lighting conditions found in many of today's factory environments. On-screen menus allow for display adjustments. In addition, the panels' Plug-n-Play+ features support Windows 95/98,NT and XP, while a universal power supply ensures global applicability.

The KVM console panels are compatible with most analog RGB (red, green, blue) display standards, including PS/2, optional for Sun Micro System, Apple Macintosh Centris, Quadra, and Macintosh II family signals. The LCD panel is capable of displaying crisp and vibrant color graphics with VGA, S2GA, XGA (non-interlaced), SXGA, UXGA, and most Macintosh compatible color video cards.

1.2 Product Specification

1.2.1 LCD1U15-16 / 15-16-8KVM / 15-16-16KVM Specification

Model name	LCD1U15-16	
Number of ports	1	
Dimension	482 x 447.5 x 44 mm / 19.0 x 17.6 x 1.7 inches	
Net Weight	11.0 Kg / 24.3 lbs	
Display Size	15 inches	
Panel Type	Active Matrix TFT LCD	
Resolution Capabilities	Maximum Resolution up to 1024 x 768 (XGA)	
Pixel Pitch	Supports 0.297 mm x 0.297 mm	
Viewing Angle (CR>10)	Right-Left View 130°(Typ) Up-Down View 100°(Typ)	
Contrast Ratio	400:1	
Brightness	White 250 cd/m² (Center 1 point Typ)	
Back Light	Dual Lamps for Back Light	
Supported Colors	16M Colors (8-bit with FRC)	
Response Time	Rising Time 5 ms, Decay Time 11 ms	
Operating System	Dos, Windows (3.1, 9x, 2000, NT4, ME, XP, 2003 Server) Linux, Novell 3.12-6, HP UX, SUN	
Connectors	PC Port / Daisy Chain Connectors	1 x VGA HDDB 15-pin 2 x PS/2 Mini Din 6-pin 1 x USB
	Power Connector	1 x AC Inlet
Signal Cable	6-ft VGA & PS2 3-to-3 Cable	
Keyboard Mouse	106 key PS/2 keyboard with touch pad	
Sync	45 ~ 80 KHz	
Power Source	100 ~ 240 VAC input	
Power Consumption	16W, 10.41W 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, Portuguese, Dutch, Swiss, Belgium, Swedish, Hebrew, Norwegian, Danish, Japanese, Mandarin, Russian, Arabic	
Certification	CE / FCC, UL / CUL / C-Tick	

Table 1-1. LCD1U15-16 Specification

Model name	LCD1U15-16-8KVM	
Number of ports	8	
Dimension	592 x 447.5 x 44 mm / 23.3 x 17.6 x 1.7 inches	
Net Weight	12.0 Kg / 26.5 lbs	
Display Size	15 inches	
Panel Type	Active Matrix TFT LCD	
Resolution Capabilities	Maximum Resolution up to 1024 x 768 (XGA)	
Pixel Pitch	Supports 0.297 mm x 0.297 mm	
Viewing Angle (CR>10)	Right-Left View 130°(Typ) Up-Down View 100°(Typ)	
Contrast Ratio	400:1	
Brightness	White 250 cd/m² (Center 1 point Typ)	
Back Light	Dual Lamps for Back Light	
Supported Colors	16M Colors (8-bit with FRC)	
Response Time	Rising Time 5 ms, Decay Time 11 ms	
Operating System	DOS, Win3.x, Win95 / 98 / 98SE / 2000 / ME / XP / Vista, WinNT, Netware, HP Unix, Linux	
Connectors	PC Port Connectors	8 x HDDB 15-pin
	Daisy Chain Connectors	1 x HDDB 15-pin
	Power Connector	1 x AC Inlet
Signal Cable	LCD-A4001	
Keyboard Mouse	106 key PS/2 keyboard with touch pad	
Sync	45 ~ 80 KHz	
Power Source	100 ~ 240 VAC input	
Power Consumption	16W, 10.41W 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, Portuguese, Dutch, Swiss, Belgium, Swedish, Hebrew, Norwegian, Danish, Japanese, Mandarin, Russian, Arabic	

Table 1-2. LCD1U15-16-8KVM Specification

Model name	LCD1U15-16-16KVM	
Number of ports	16	
Dimension	592 x 447.5 x 44 mm / 23.3 x 17.6 x 1.7 inches	
Net Weight	12.5 Kg / 27.6 lbs	
Display Size	15 inches	
Panel Type	Active Matrix TFT LCD	
Resolution Capabilities	Maximum Resolution up to 1024 x 768 (XGA)	
Pixel Pitch	Supports 0.297 mm x 0.297 mm	
Viewing Angle (CR>10)	Right-Left View 130°(Typ) Up-Down View 100°(Typ)	
Contrast Ratio	400:1	
Brightness	White 250 cd/m² (Center 1 point Typ)	
Back Light	Dual Lamps for Back Light	
Supported Colors	16M Colors (8-bit with FRC)	
Response Time	Rising Time 5 ms, Decay Time 11 ms	
Operating System	DOS, Win3.x, Win95 / 98 / 98SE / 2000 / ME / XP / Vista, WinNT, Netware, HP Unix, Linux	
Connectors	PC Port Connectors	16 x HDDB 15-pin
	Daisy Chain Connectors	1 x HDDB 15-pin
	Power Connector	1 x AC Inlet
Signal Cable	LCD-A4001	
Keyboard Mouse	106 key PS/2 keyboard with touch pad	
Sync	45 ~ 80 KHz	
Power Source	100 ~ 240 VAC input	
Power Consumption	16W, 10.41W 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, Portuguese, Dutch, Swiss, Belgium, Swedish, Hebrew, Norwegian, Danish, Japanese, Mandarin, Russian, Arabic	

Table 1-3. LCD1U15-16-16KVM Specification

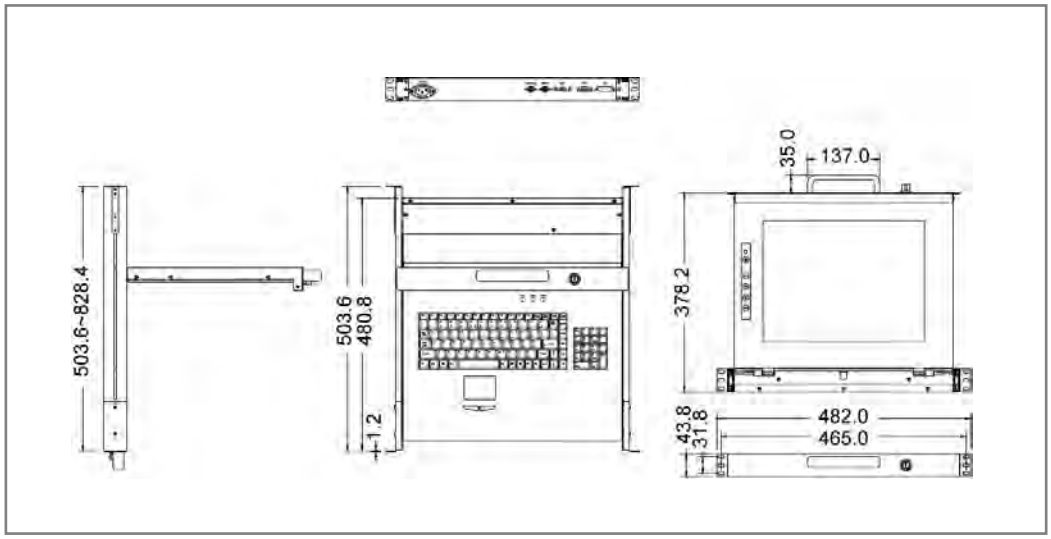


Figure 1-1. LCD1U15-16 Dimension

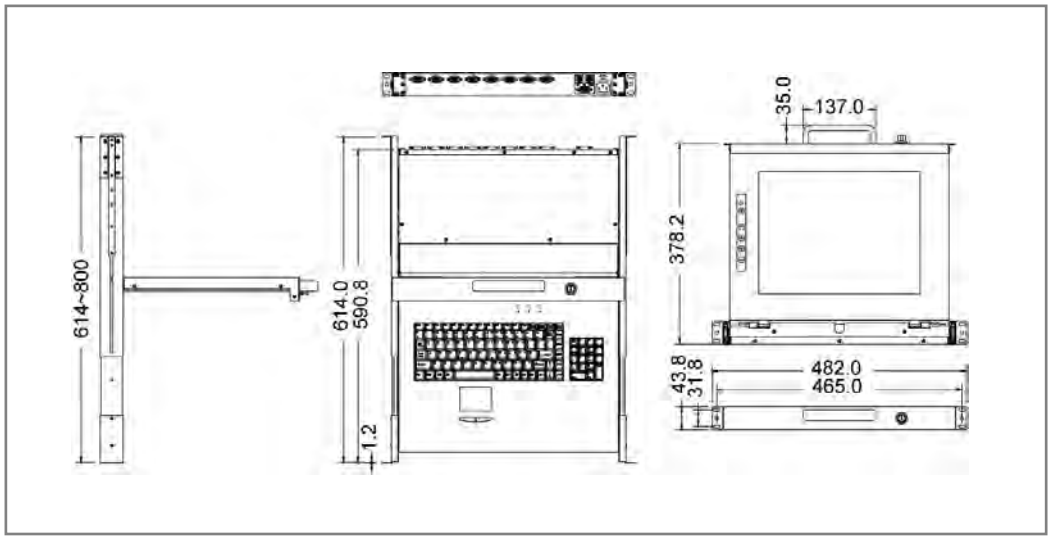


Figure 1-2. LCD1U15-16-8KVM Dimension

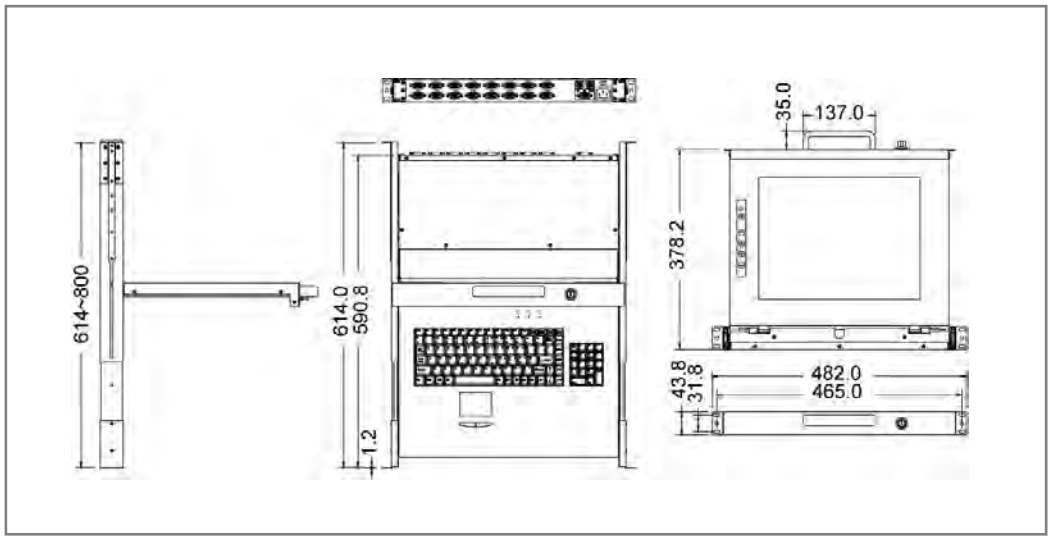


Figure 1-3. LCD1U15-16-16KVM Dimension

1.2.2 LCD1U17-22 / 17-23 / -8KVM / -16KVM Specification

Model name	LCD1U17-22 / 17-23	
Number of ports	1	
Dimension	482 x 447.5 x 44 mm / 19.0 x 17.6 x 1.7 inches	
Net Weight	12.0 Kg / 26.5 lbs	
Display Size	17 inches	
Panel Type	Active Matrix TFT LCD	
Resolution Capabilities	Max Resolution up to 1280 x 1024 (SXGA) ; Or 1152 x 900 @ 66/76 Hz for LCD1U17-23 Series	
Pixel Pitch	Supports 0.264 mm x 0.264 mm	
Viewing Angle (CR>10)	Right-Left View 170°(Typ) Up-Down View 160°(Typ)	
Contrast Ratio	1000:1	
Brightness	White 250 cd/m² (Center 1 point Typ)	
Back Light	Dual Lamps for Back Light	
Supported Colors	16.7M Colors (8-bit with FRC)	
Response Time	Rising Time 1.2 ms, Decay Time 3.8 ms	
Operating System	Dos, Windows (3.1, 9x, 2000, NT4, ME, XP, 2003 Server) Linux, Novell 3.12-6, HP UX, SUN	
Connectors	PC Port / Daisy Chain Connectors	1 x VGA HDDB 15-pin 2 x PS/2 Mini Din 6-pin 1 x USB
	Power Connector	1 x AC Inlet
Signal Cable	6-ft VGA & PS2 3-to-3 Cable	
Keyboard Mouse	106 key PS/2 keyboard with touch pad	
Sync	45 ~ 80 KHz	
Power Source	100 ~ 240 VAC input	
Power Consumption	13.35 W 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, Portuguese, Dutch, Swiss, Belgium, Swedish, Hebrew,Norwegian, Danish, Japanese, Mandarin, Russian, Arabic	
Certification	CE / FCC, UL / CUL / C-Tick	

Table 1-4. LCD1U17-22 / 17-23 Specification

Model name	LCD1U17-22-8KVM / 17-23-8KVM	
Number of ports	8	
Dimension	592 x 447.5 x 44 mm / 23.3 x 17.6 x 1.7 inches	
Net Weight	13.0 Kg / 28.7 lbs	
Display Size	17 inches	
Panel Type	Active Matrix TFT LCD	
Resolution Capabilities	Max Resolution up to 1280 x 1024 (SXGA) ;	
	Or 1152 x 900 @ 66/76 Hz for LCD1U17-23 Series	
Pixel Pitch	Supports 0.264 mm x 0.264 mm	
Viewing Angle (CR>10)	Right-Left View 170°(Typ)	
	Up-Down View 160°(Typ)	
Contrast Ratio	1000:1	
Brightness	White 250 cd/m² (Center 1 point Typ)	
Back Light	Dual Lamps for Back Light	
Supported Colors	16.7M Colors (8-bit with FRC)	
Response Time	Rising Time 1.2 ms, Decay Time 3.8 ms	
Operating System	DOS, Win3.x, Win95 / 98 / 98SE / 2000 / ME / XP / Vista, WinNT,	
	Netware, HP Unix, Linux	
Connectors	PC Port Connectors	8 x HDDB 15-pin
	Daisy Chain Connectors	1 x HDDB 15-pin
	Power Connector	1 x AC Inlet
Signal Cable	LCD-A4001	
Keyboard Mouse	106 key PS/2 keyboard with touch pad	
Sync	45 ~ 80 KHz	
Power Source	100 ~ 240 VAC input	
Power Consumption	13.35 W 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, Portuguese, Dutch,	
	Swiss, Belgium, Swedish, Hebrew,Norwegian, Danish, Japanese,	
	Mandarin, Russian, Arabic	

Table 1-5. LCD1U17-22-8KVM / 17-23-8KVM Specification

Model name	LCD1U17-22-16KVM / 17-23-16KVM	
Number of ports	16	
Dimension	592 x 447.5 x 44 mm / 23.3 x 17.6 x 1.7 inches	
Net Weight	13.5 Kg / 29.8 lbs	
Display Size	17 inches	
Panel Type	Active Matrix TFT LCD	
Resolution Capabilities	Max Resolution up to 1280 x 1024 (SXGA) ; Or 1152 x 900 @ 66/76 Hz for LCD1U17-23 Series	
Pixel Pitch	Supports 0.264 mm x 0.264 mm	
Viewing Angle (CR>10)	Right-Left View 170°(Typ) Up-Down View 160°(Typ)	
Contrast Ratio	1000:1	
Brightness	White 250 cd/m² (Center 1 point Typ)	
Back Light	Dual Lamps for Back Light	
Supported Colors	16.7M Colors (8-bit with FRC)	
Response Time	Rising Time 1.2 ms, Decay Time 3.8 ms	
Operating System	DOS, Win3.x, Win95 / 98 / 98SE / 2000 / ME / XP / Vista, WinNT, Netware, HP Unix, Linux	
Connectors	PC Port Connectors	16 x HDDB 15-pin
	Daisy Chain Connectors	1 x HDDB 15-pin
	Power Connector	1 x AC Inlet
Signal Cable	LCD-A4001	
Keyboard Mouse	106 key PS/2 keyboard with touch pad	
Sync	45 ~ 80 KHz	
Power Source	100 ~ 240 VAC input	
Power Consumption	13.35 W 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, Portuguese, Dutch, Swiss, Belgium, Swedish, Hebrew, Norwegian, Danish, Japanese, Mandarin, Russian, Arabic	

Table 1-6. LCD1U17-22-16KVM / 17-23-16KVM Specification

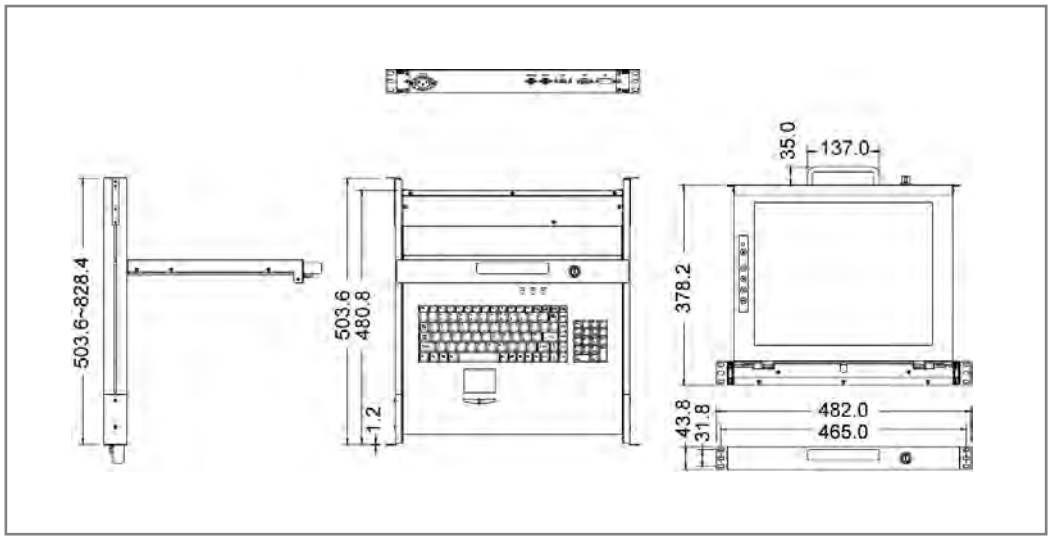


Figure 1-4. LCD1U17-22 / 17-23 Dimension

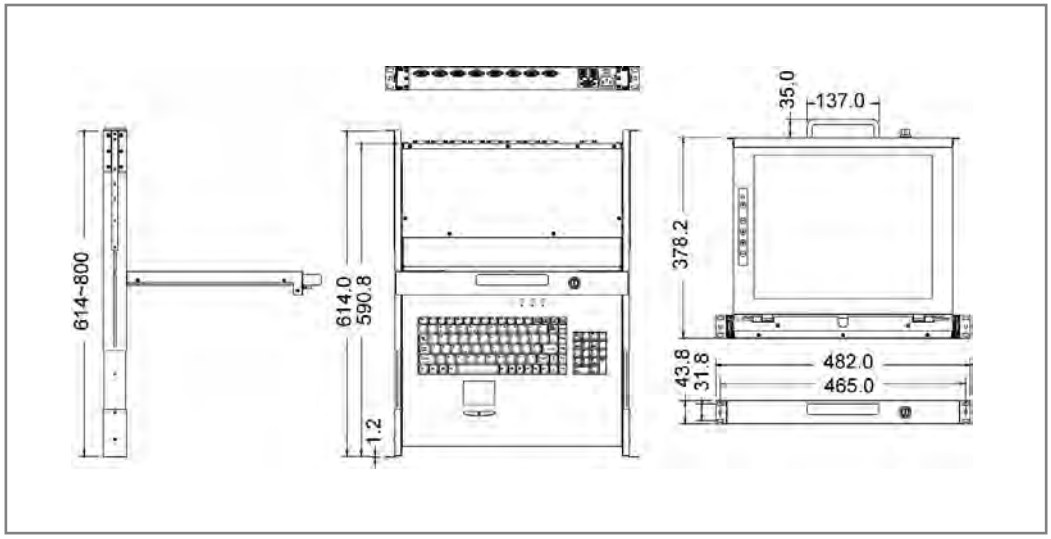


Figure 1-5. LCD1U17-22-8KVM / 17-23-8KVM Dimension

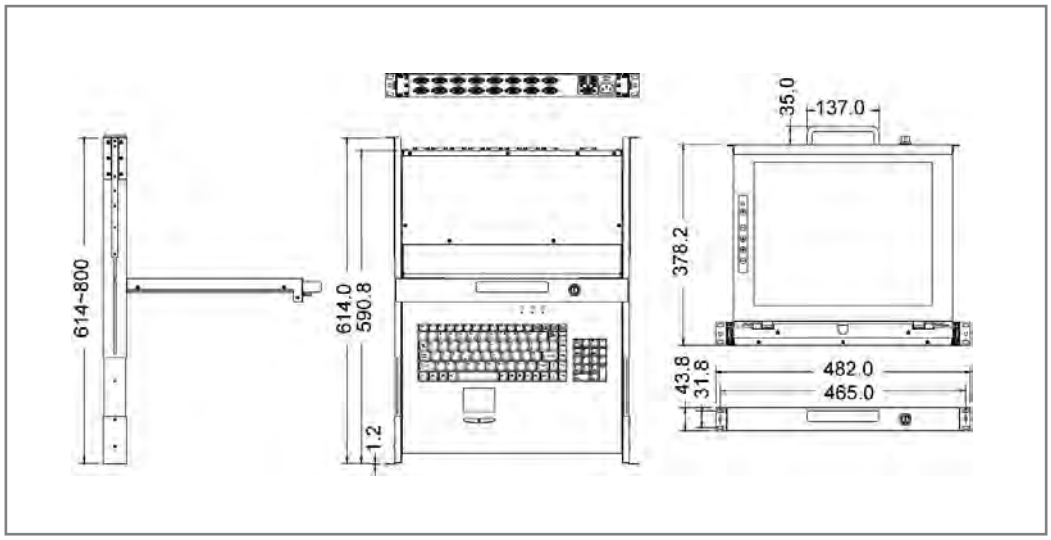


Figure 1-6. LCD1U17-22-16KVM / 17-23-16KVM Dimension

1.2.3 LCD1U19-18 / 19-19 / -8KVM / -16KVM Specification

Model name	LCD1U19-18 / 19-19	
Number of ports	1	
Dimension	532 x 447.5 x 44 mm / 20.9 x 17.6 x 1.7 inches	
Net Weight	12.5 Kg / 27.6 lbs	
Display Size	19 inches	
Panel Type	Active Matrix TFT LCD	
Resolution Capabilities	Max Resolution up to 1280 x 1024 (SXGA) ; Or 1152 x 900 @ 66/76 Hz for LCD1U19-19 Series	
Pixel Pitch	Supports 0.098 mm x 0.294 mm	
Viewing Angle (CR>10)	Right-Left View 170°(Typ) Up-Down View 160°(Typ)	
Contrast Ratio	1000:1	
Brightness	White 250 cd/m² (Center 1 point Typ)	
Back Light	Dual Lamps for Back Light	
Supported Colors	16.7M Colors (8-bit with FRC)	
Response Time	Rising Time 1.3 ms, Decay Time 3.7 ms	
Operating System	Dos, Windows (3.1, 9x, 2000, NT4, ME, XP, 2003 Server) Linux, Novell 3.12-6, HP UX, SUN	
Connectors	PC Port / Daisy Chain Connectors	1 x VGA HDDB 15-pin 2 x PS/2 Mini Din 6-pin 1 x USB
	Power Connector	1 x AC Inlet
Signal Cable	6-ft VGA & PS2 3-to-3 Cable	
Keyboard Mouse	106 key PS/2 keyboard with touch pad	
Sync	45 ~ 80 KHz	
Power Source	100 ~ 240 VAC input	
Power Consumption	13.6 W 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, Portuguese, Dutch, Swiss, Belgium, Swedish, Hebrew, Norwegian, Danish, Japanese, Mandarin, Russian, Arabic	
Certification	CE / FCC, UL / CUL / C-Tick	

Table 1-7. LCD1U19-18 / 19-19 Specification

Model name	LCD1U19-18-8KVM / 19-19-8KVM	
Number of ports	8	
Dimension	642 x 447.5 x 44 mm / 22.4 x 17.6 x 1.7 inches	
Net Weight	14.0 Kg / 30.9 lbs	
Display Size	19 inches	
Panel Type	Active Matrix TFT LCD	
Resolution Capabilities	Max Resolution up to 1280 x 1024 (SXGA) ; Or 1152 x 900 @ 66/76 Hz for LCD1U19-19 Series	
Pixel Pitch	Supports 0.098 mm x 0.294 mm	
Viewing Angle (CR>10)	Right-Left View 170°(Typ) Up-Down View 160°(Typ)	
Contrast Ratio	1000:1	
Brightness	White 250 cd/m² (Center 1 point Typ)	
Back Light	Dual Lamps for Back Light	
Supported Colors	16.7M Colors (8-bit with FRC)	
Response Time	Rising Time 1.3 ms, Decay Time 3.7 ms	
Operating System	DOS, Win3.x, Win95 / 98 / 98SE / 2000 / ME / XP / Vista, WinNT, Netware, HP Unix, Linux	
Connectors	PC Port Connectors	8 x HDDB 15-pin
	Daisy Chain Connectors	1 x HDDB 15-pin
	Power Connector	1 x AC Inlet
Signal Cable	LCD-A4001	
Keyboard Mouse	106 key PS/2 keyboard with touch pad	
Sync	45 ~ 80 KHz	
Power Source	100 ~ 240 VAC input	
Power Consumption	13.6 W 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, Portuguese, Dutch, Swiss, Belgium, Swedish, Hebrew, Norwegian, Danish, Japanese, Mandarin, Russian, Arabic	

Table 1-8. LCD1U19-18-8KVM / 19-19-8KVM Specification

Model name	LCD1U19-18-16KVM / 19-19-16KVM	
Number of ports	16	
Dimension	642 x 447.5 x 44 mm / 22.4 x 17.6 x 1.7 inches	
Net Weight	14.5 Kg / 32.0 lbs	
Display Size	19 inches	
Panel Type	Active Matrix TFT LCD	
Resolution Capabilities	Max Resolution up to 1280 x 1024 (SXGA) ;	
	Or 1152 x 900 @ 66/76 Hz for LCD1U19-19 Series	
Pixel Pitch	Supports 0.098 mm x 0.294 mm	
Viewing Angle (CR>10)	Right-Left View 170°(Typ)	
	Up-Down View 160°(Typ)	
Contrast Ratio	1000:1	
Brightness	White 250 cd/m² (Center 1 point Typ)	
Back Light	Dual Lamps for Back Light	
Supported Colors	16.7M Colors (8-bit with FRC)	
Response Time	Rising Time 1.3 ms, Decay Time 3.7 ms	
Operating System	DOS, Win3.x, Win95 / 98 / 98SE / 2000 / ME / XP / Vista, WinNT,	
	Netware, HP Unix, Linux	
Connectors	PC Port Connectors	16 x HDDB 15-pin
	Daisy Chain Connectors	1 x HDDB 15-pin
	Power Connector	1 x AC Inlet
Signal Cable	LCD-A4001	
Keyboard Mouse	106 key PS/2 keyboard with touch pad	
Sync	45 ~ 80 KHz	
Power Source	100 ~ 240 VAC input	
Power Consumption	13.6 W 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, Portuguese, Dutch,	
	Swiss, Belgium, Swedish, Hebrew, Norwegian, Danish, Japanese,	
	Mandarin, Russian, Arabic	

Table 1-9. LCD1U19-18-16KVM / 19-19-16KVM Specification

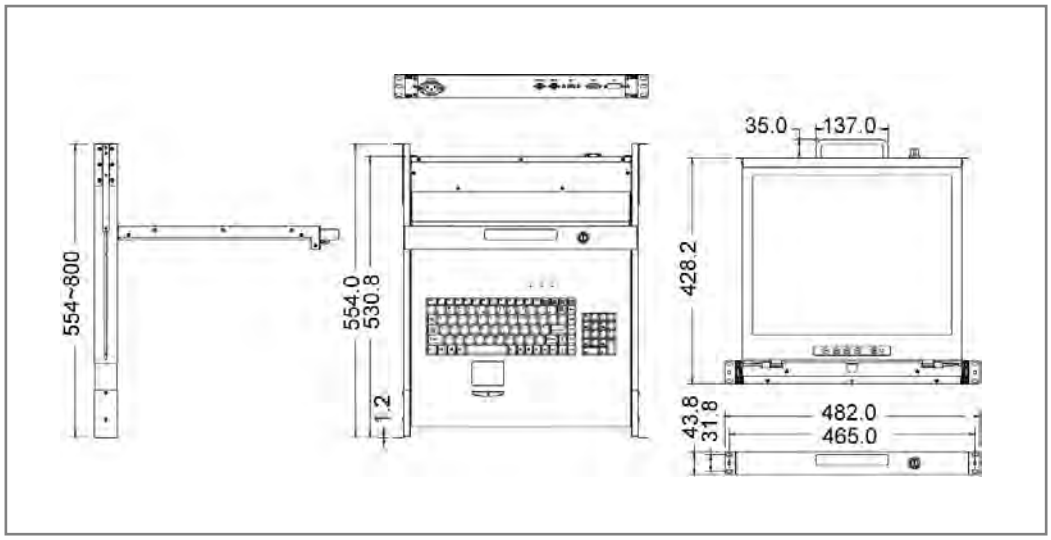


Figure 1-7. LCD1U19-18 / 19-19 Dimension

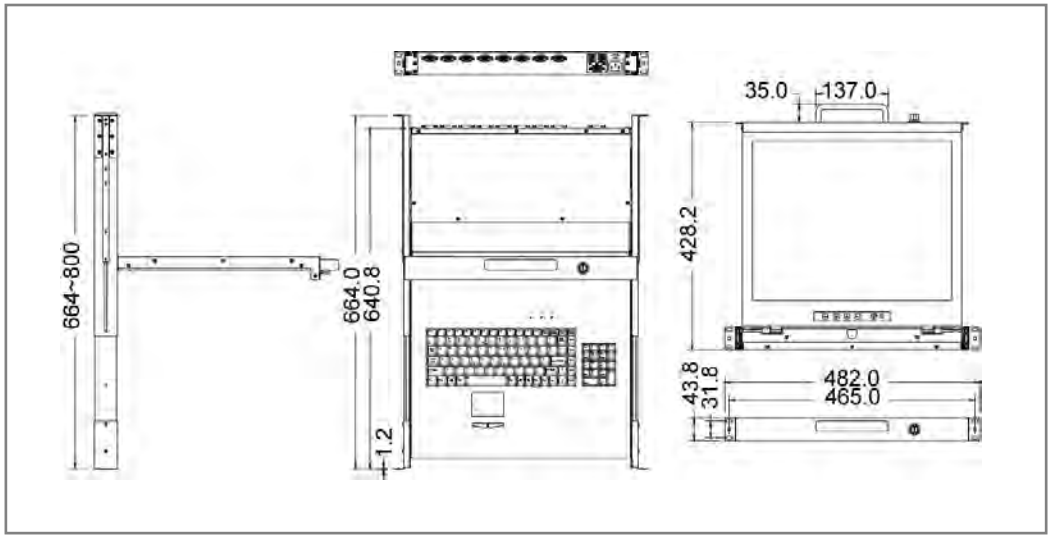


Figure 1-8. LCD1U19-18-8KVM / 19-19-8KVM Dimension

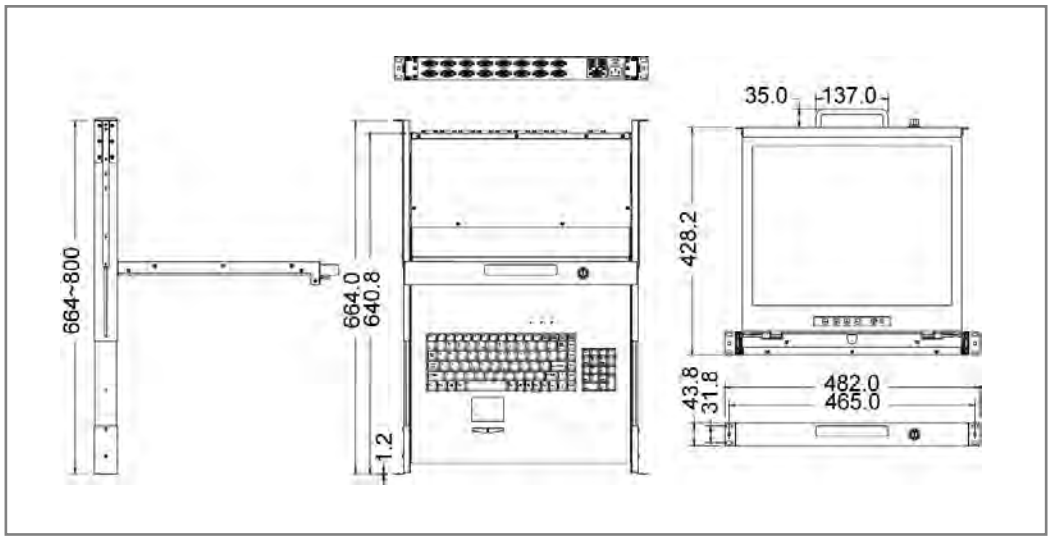


Figure 1-9. LCD1U19-18-16KVM / 19-19-16KVM Dimension

1.2.4 LCD1U20-01 / 20-04 / -8KVM / -16KVM Specification

Model name	LCD1U20-01 / 20-04	
Number of ports	1	
Dimension	673.1 x 448.7 x 43.8 mm / 26.5 x 17.7 x 1.7 inches - LCD1U20-01 527.2 x 436.4 x 43.8 mm / 20.8 x 17.2 x 1.7 inches - LCD1U20-04	
Net Weight	16.5 Kg / 36.4 lbs	
Display Size	20.1 inches	
Panel Type	Active Matrix TFT LCD	
Resolution Capabilities	Maximum Resolution up to 1600 x 1200 (UXGA)	
Pixel Pitch	Supports 0.255 mm x 0.255 mm	
Active Display Area	Horizontal: 408.0 mm, Vertical: 306.0 mm	
Viewing Angle (CR>10)	Right-Left view 178°(Typ), Up-Down View 178°(Typ)	
Contrast Ratio	700 : 1	
Brightness	White 300 cd/m²	
Back Light	Six Lamps for Back Light	
Supported Colors	16.7M Colors (8-bit with FRC)	
Response Time	Rising Time 7 ms, Decay Time 9 ms	
Operating System	Dos, Windows (3.1, 9x, 2000, NT4, ME, XP, 2003 Server) Linux, Novell 3.12-6, HP UX, SUN	
Connectors	PC Port	1 x VGA HDDB 15-pin 2 x PS/2 Mini Din 6-pin 2 x USB 1 x DVI, 1 x Audio line in
	Power Connector	1 x DC jack
Signal Cable	6-ft VGA & PS2 3-to-3 Cable	
Keyboard Mouse	106 key PS/2 keyboard with touch pad	
Sync	45 ~ 80 KHz	
Power Source	100 ~ 240 VAC input	
Power Consumption	35W	
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, Portuguese, Dutch, Swiss, Belgium, Swedish, Hebrew, Norwegian, Danish, Japanese, Mandarin, Russian, Arabic	

Table 1-10.LCD1U20-01 / 20-04 Specification

Model name	LCD1U20-04-8KVM	
Number of ports	8	
Dimension	640.8 x 436.4 x 43.8 mm / 25.2.x 17.2 x 1.7 inches	
Net Weight	18.0 Kg / 39.7 lbs	
Display Size	20.1 inches	
Panel Type	Active Matrix TFT LCD	
Resolution Capabilities	Maximum Resolution up to 1600 x 1200 (UXGA)	
Pixel Pitch	Supports 0.255 mm x 0.255 mm	
Active Display Area	Horizontal: 408.0 mm, Vertical: 306.0 mm	
Viewing Angle (CR>10)	Right-Left view 178°(Typ) Up-Down View 178°(Typ)	
Contrast Ratio	700 : 1	
Brightness	White 300 cd/m²	
Back Light	Six Lamps for Back Light	
Supported Colors	16.7M Colors (8-bit with FRC)	
Response Time	Rising Time 7 ms, Decay Time 9 ms	
Operating System	DOS, Win3.x, Win95 / 98 / 98SE / 2000 / ME / XP / Vista, WinNT, Netware, HP Unix, Linux	
Connectors	PC Port Connectors	8 x HDDB 15-pin
	Daisy Chain Connectors	1 x HDDB 15-pin
	Power Connector	1 x AC Inlet
Signal Cable	LCD-A4001	
Keyboard Mouse	106 key PS/2 keyboard with touch pad	
Sync	45 ~ 80 KHz	
Power Source	100 ~ 240 VAC input	
Power Consumption	35W	
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, Portuguese, Dutch, Swiss, Belgium, Swedish, Hebrew, Norwegian, Danish, Japanese, Mandarin, Russian, Arabic	

Table 1-11. LCD1U20-04-8KVM Specification

Model name	LCD1U20-04-16KVM	
Number of ports	16	
Dimension	640.8 x 436.4 x 43.8 mm / 25.2.x 17.2 x 1.7 inches	
Net Weight	18.5 Kg / 40.8 lbs	
Display Size	20.1 inches	
Panel Type	Active Matrix TFT LCD	
Resolution Capabilities	Maximum Resolution up to 1600 x 1200 (UXGA)	
Pixel Pitch	Supports 0.255 mm x 0.255 mm	
Active Display Area	Horizontal: 408.0 mm, Vertical: 306.0 mm	
Viewing Angle (CR>10)	Right-Left view 178°(Typ) Up-Down View 178°(Typ)	
Contrast Ratio	700 : 1	
Brightness	White 300 cd/m²	
Back Light	Six Lamps for Back Light	
Supported Colors	16.7M Colors (8-bit with FRC)	
Response Time	Rising Time 7 ms, Decay Time 9 ms	
Operating System	DOS, Win3.x, Win95 / 98 / 98SE / 2000 / ME / XP / Vista, WinNT, Netware, HP Unix, Linux	
Connectors	PC Port Connectors	16 x HDDB 15-pin
	Daisy Chain Connectors	1 x HDDB 15-pin
	Power Connector	1 x AC Inlet
Signal Cable	LCD-A4001	
Keyboard Mouse	106 key PS/2 keyboard with touch pad	
Sync	45 ~ 80 KHz	
Power Source	100 ~ 240 VAC input	
Power Consumption	35W	
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, Portuguese, Dutch, Swiss, Belgium, Swedish, Hebrew, Norwegian, Danish, Japanese, Mandarin, Russian, Arabic	

Table 1-12. LCD1U20-04-16KVM Specification

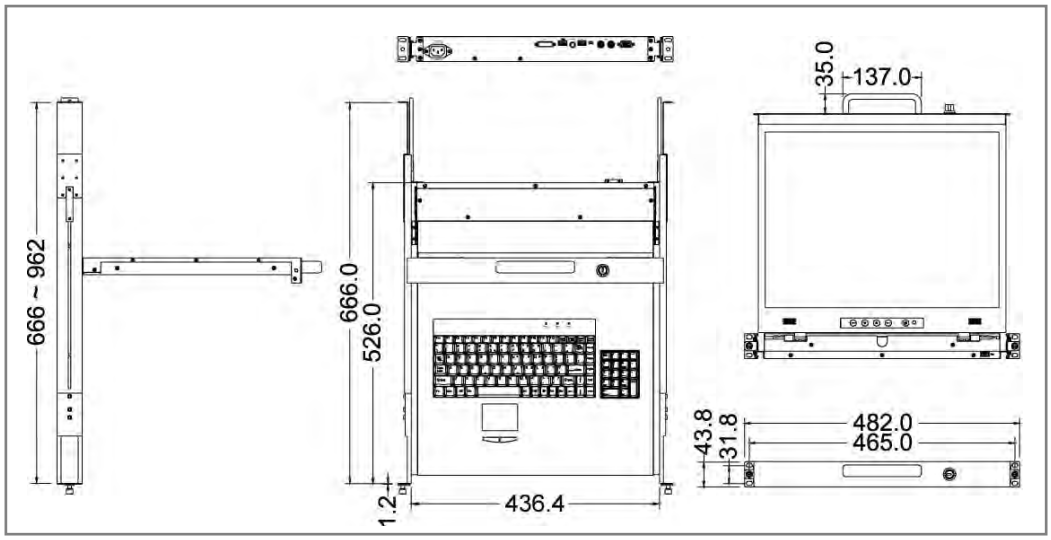


Figure 1-10. LCD1U20-04 Dimension

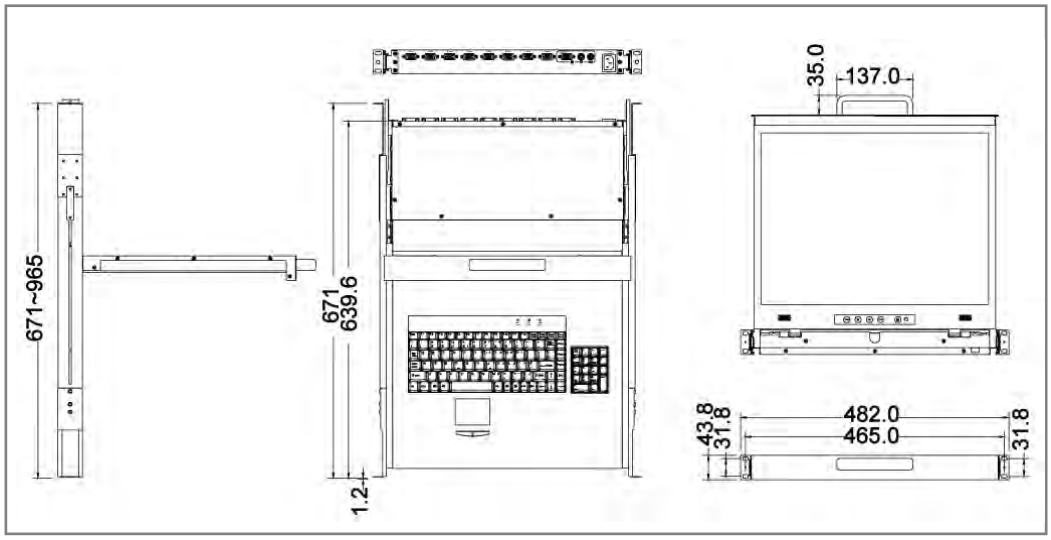


Figure 1-11. LCD1U20-04-8KVM Dimension

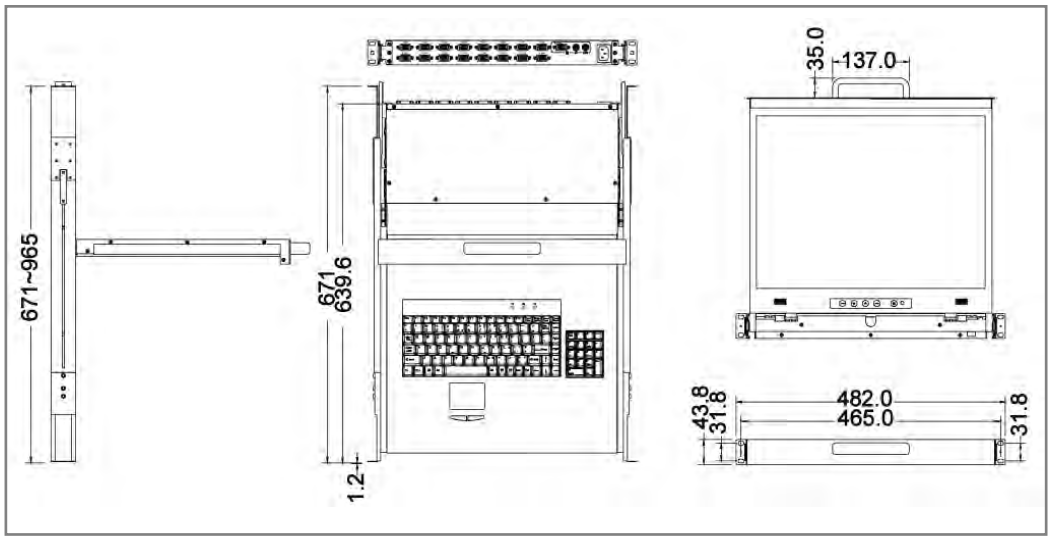


Figure 1-12. LCD1U20-04-16KVM Dimension

2. Panel Controls and OSD Function

Controls	Description
⏻	Soft power on/off button. Adjacent LED is lit when on.
Auto	Auto-synchronize and scale down display to any valid factory preset timings.
▲	Press to scroll the function you want to adjust.
▼	Press to scroll the function you want to adjust.
Menu	To access the main menu. This button also acts as the “Enter” button.

Table 2-1. Panel Controls

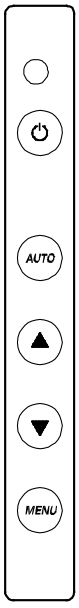


Figure 2-1. LCD1U15-16 / 17-22 / 17-23 OSD Control Bar

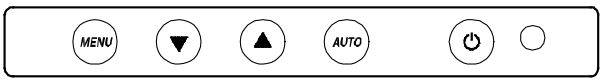


Figure 2-2. LCD1U19-18 / 19-19 / 20-01 / 20-04 OSD Control Bar

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 Input Source

1. Press the “menu” button.
2. Use the “Down” and “Up” button to scroll.

   Auto tune.
   Input Source
   Brightness
   Contrast
   Color
   Position
   Language
   Recall
   Exit

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

   VGA / DVI
4. Use the “Down” and “Up” button to select the input source of signal.
5. Press the “menu” button to enter

2.3 Brightness

1. Press the “menu” button.
2. Use the “Down” and “Up” button to scroll.

   Auto tune.
   Input Source
   Brightness
   Contrast
   Color
   Position
   Language
   Recall
   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.

    Auto tune.
    Input Source
    Brightness
    Contrast
    Color
    Position
    Language
    Recall
    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.

    Auto tune.
    Input Source
    Brightness
    Contrast
    Color
    Position
    Language
    Recall
    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.

   Auto tune.
   Input Source
   Brightness
   Contrast
   Color
   Position
   Language
   Recall
   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.

   Auto tune.
   Input Source
   Brightness
   Contrast
   Color
   Position
   Language
   Recall
   Exit
3. Press the “menu” button to enter. And you will see:

   English
   German
   French
   Italian
   Spanish
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.
   Auto tune.
   Input Source
   Brightness
   Contrast
   Color
   Position
   Language
   Recall
   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 Exit

Press the “exit” button to quit OSD menu.

2.10 Power Indicator

- GREEN ON
- RED STANDBY
- RED SUSPEND
- RED OFF

OSD – On Screen Display

3. Installation

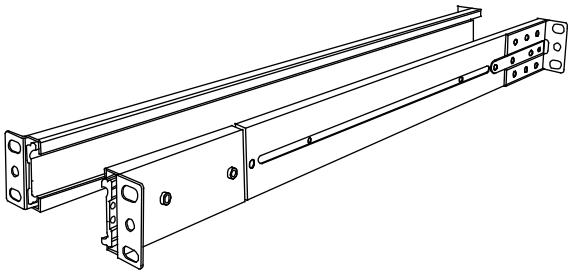
3.1 Install LCD1U15-16 / 17-22 / 17-23 / 19-18 /19-19 into Cabinet

3.1.1 Notes

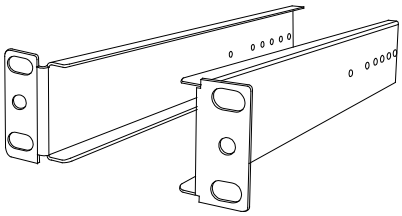
1. Please check all peripherals according the list before installation. To make sure that the whole unit was not damaged and lost during shipping process. If you encounter any problem, please contact your dealer.
2. Before installation, make sure all peripherals and computer have been turned off.
3. The cabinet depth range must be in 504 ~ 1000 mm for LCD1U15-16/17-22/17-23 (554 ~1000 mm for LCD1U19-18/19-19) And the depth range must be 614 ~ 1000 mm for 15" and 17" unit with 8/16-port KVM (664 ~1000 mm for 19" unit with 8/16 KVM). Contact your dealer for deeper cabinet application.
4. 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. For rack depth 504 ~ 828 mm)



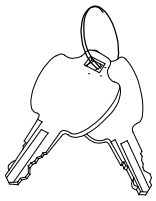
2. Long bracket x 2. (Needed for rack depth 828 ~ 1000mm)



3. Flat screw x 6 (for rail mount to console body)

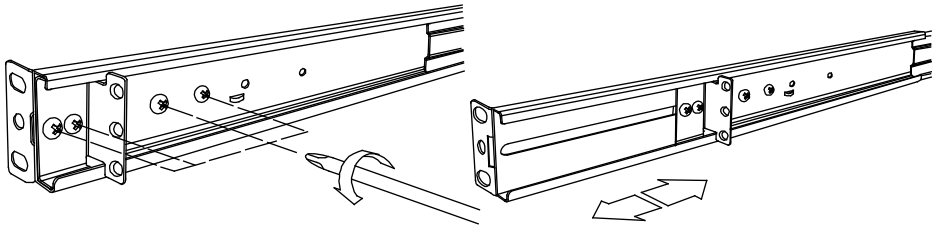
4. Screw x 6

5. Key x 2

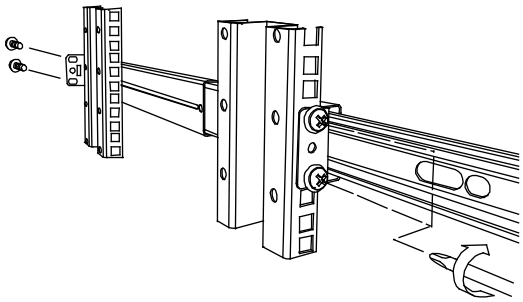


3.1.3 Installation Steps

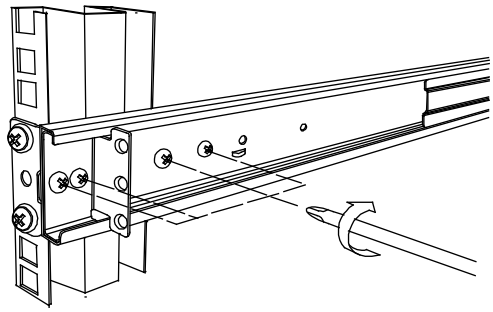
1. Loose (Not release) four rear screws then adjust rear bracket to fit your cabinet.



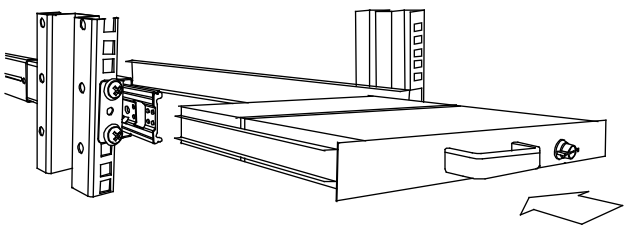
2. Install front and rear bracket on cabinet.



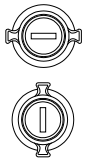
3. Tight-up four rear screws.

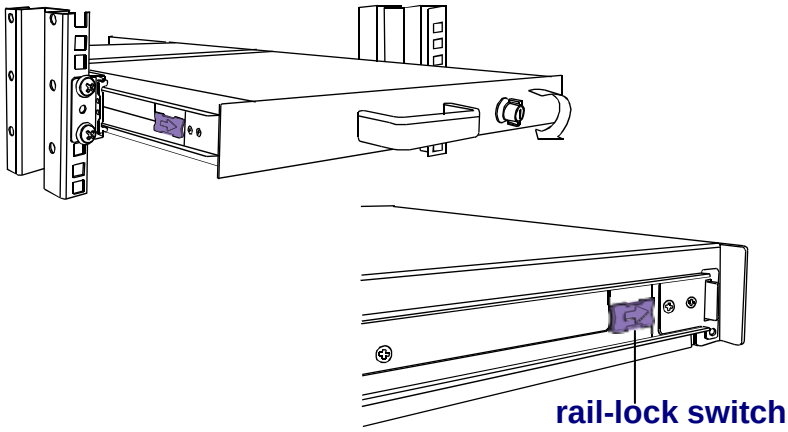


4. Repeat step 1~3 for the other side.
5. Push console into left and right rails. (Be careful when take out console.)

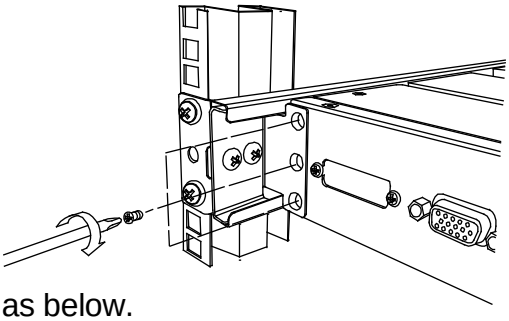


6. Unlock and pull rail–lock switch (left and right at the same time) then push console to the end.

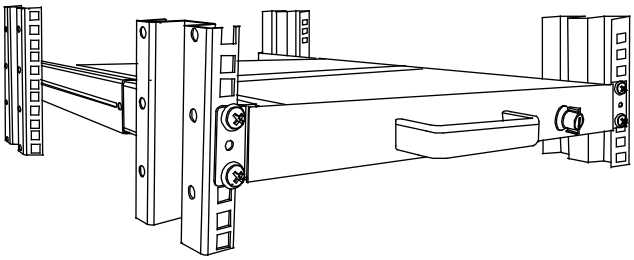




7. Install three screws in rear of the console. (Both sides)

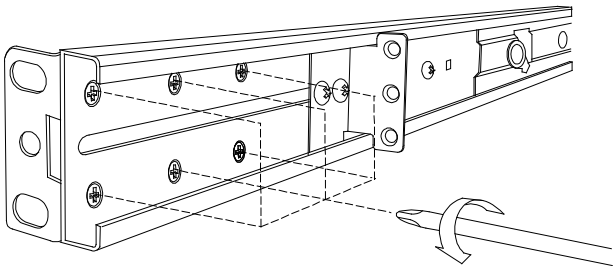


8. Finish installation as below.

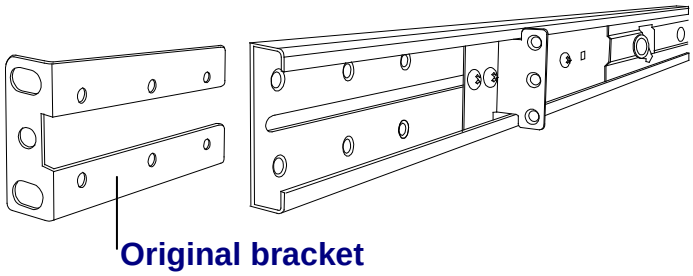


3.1.4 Replace Longer Bracket Steps (For rack depth 828~1000mm)

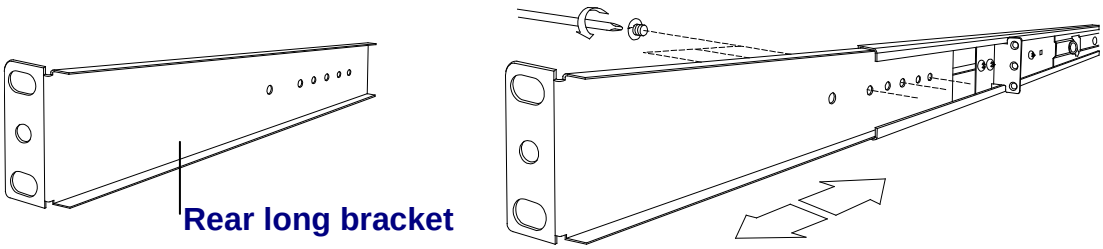
1. Release six screws.



2. Take rear bracket out.



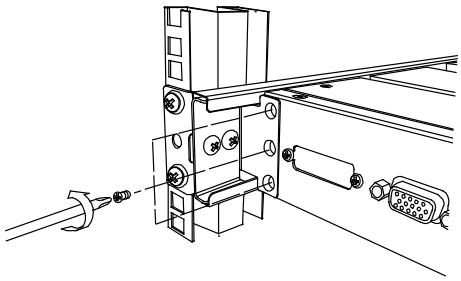
2 Input rear long bracket to rear of the rail then adjust rear bracket to fit your cabinet. Tight-up 2~3 screws upon the length you need. One is forbidden.



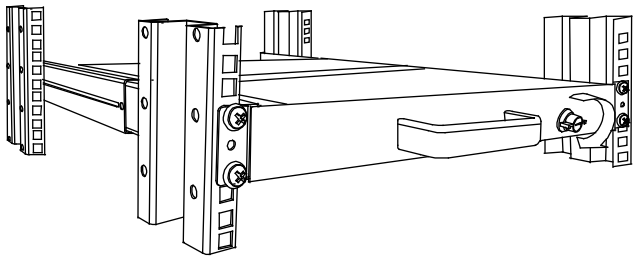
4. Repeat step 1~3 for the other side.
5. Repeat 3.1.3 step to install console.

3.1.5 Unload Steps

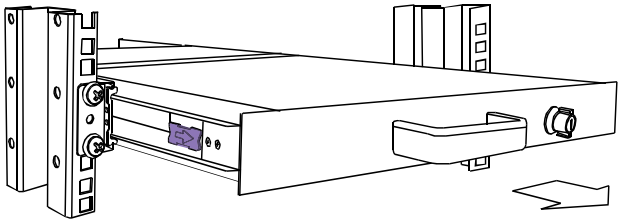
1. Make sure the console is lock.
2. Release three screws in rear of the console. (Both sides)



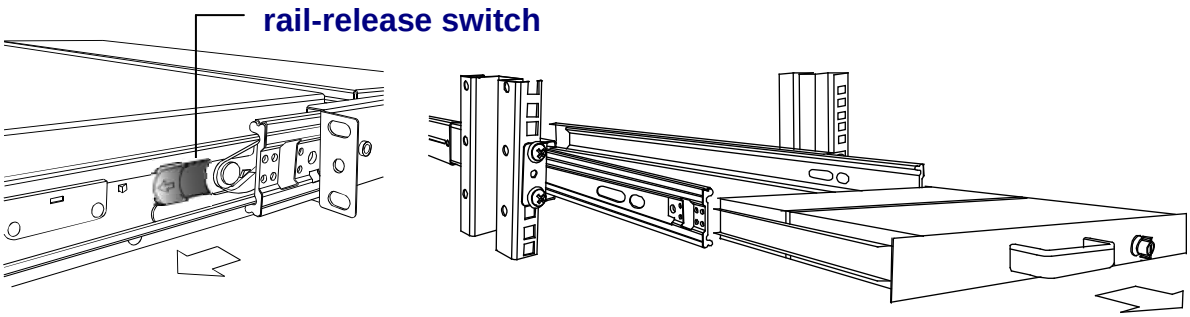
3. Unlock.



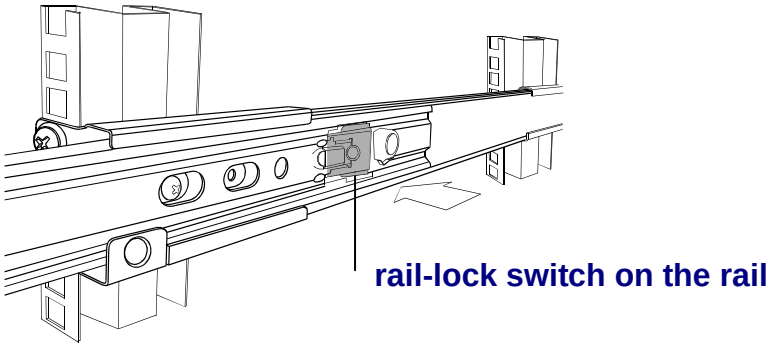
4. Pull console out until console lock.



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



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



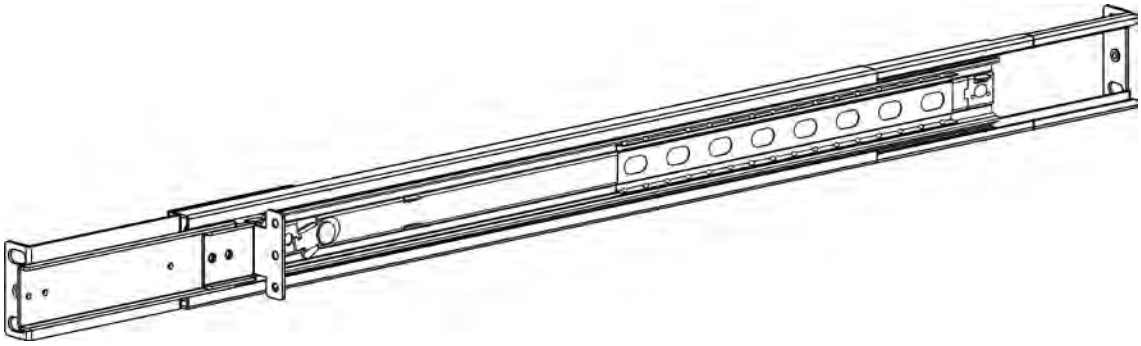
3.2 Install LCD1U20-01 / 20-04 Console into Cabinet

3.2.1 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 673 ~ 962 mm – LCD1U20-04 Series, 762 mm – LCD1U20-01 Series). Contact your dealer for deeper cabinet application.
4. 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.

3.2.2 Hardware Kits Contents

1. Rail with front and rear bracket x 2

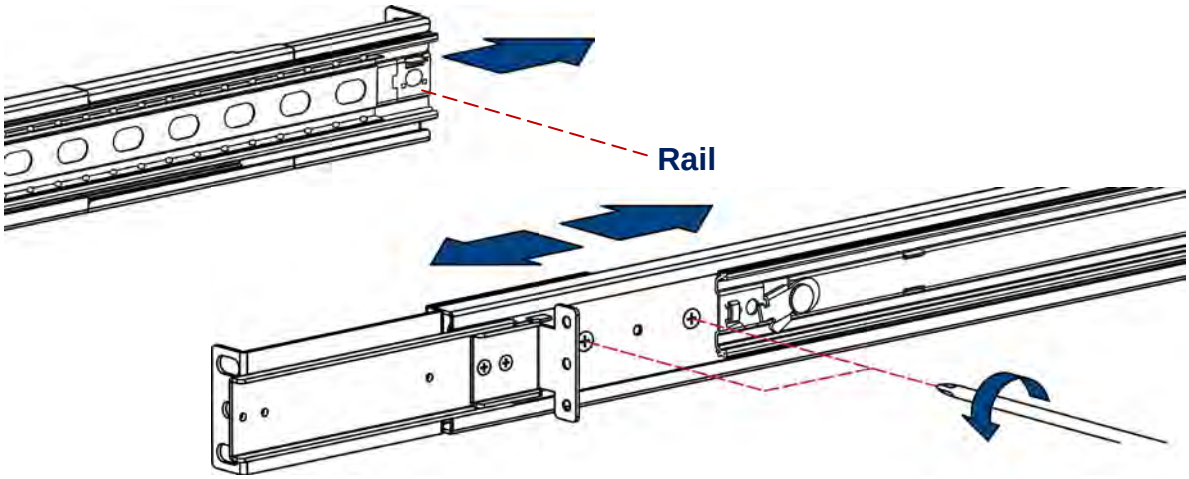


2. Screw (length = 6 mm) x 6

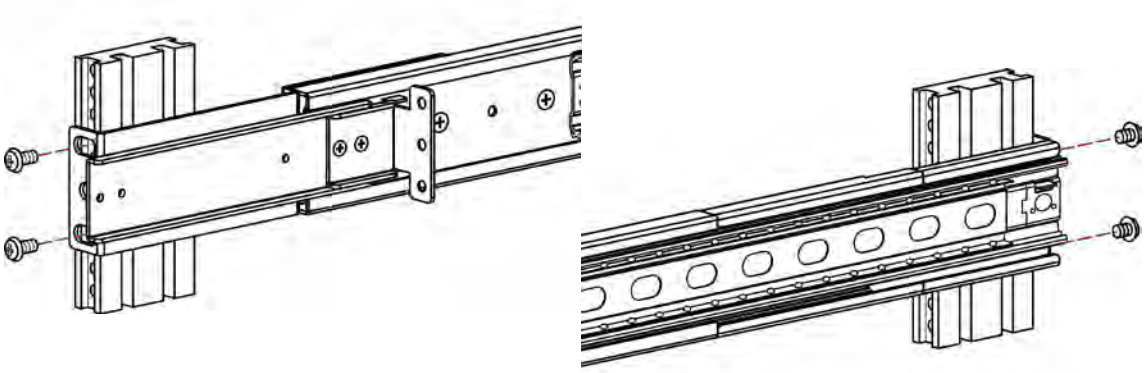
3. Key x 2

3.2.3 Install Console Steps

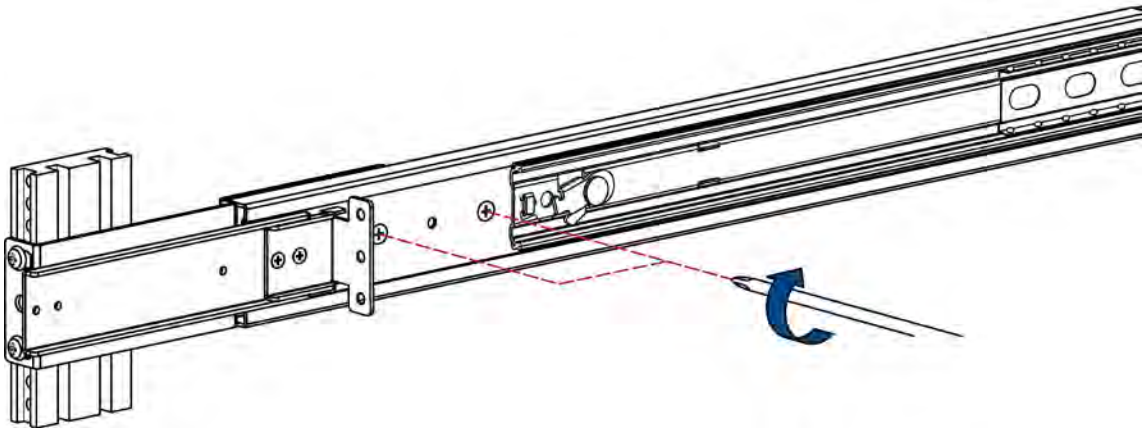
1. Adjust rail until two screws appear. Loose (Not release) two rear screws then adjust rear bracket to fit your cabinet.



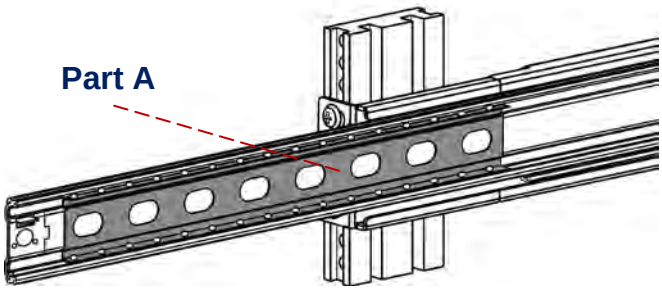
2. Install front and rear bracket on cabinet.



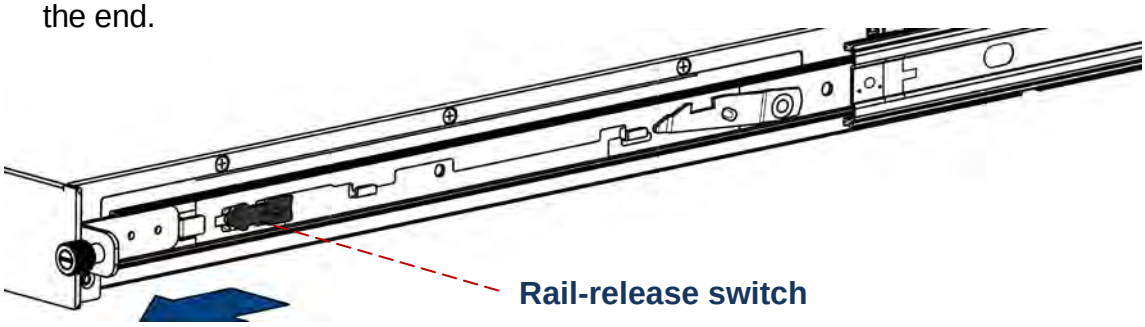
3. Tight-up two rear screws.



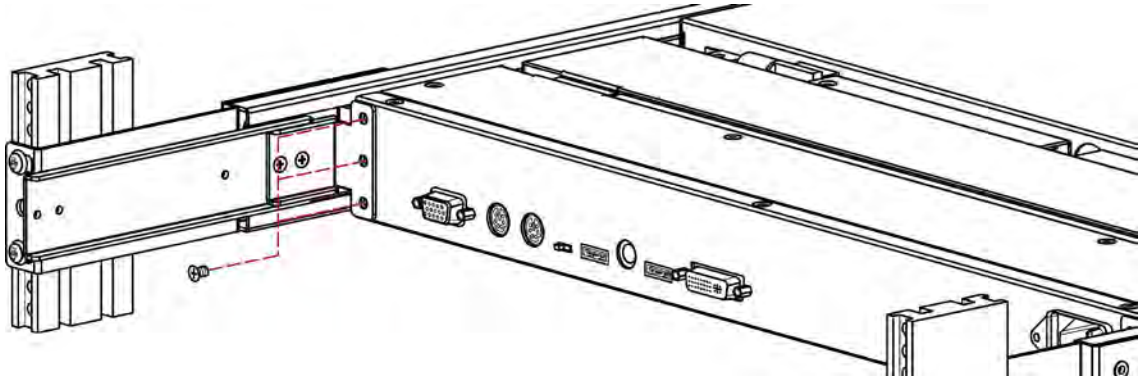
4. Repeat step 1~3 for the other side.
5. Pull rail until it lock and keep the part A in front of the rail (Both sides).Then push console into left and right rails. (Be careful rear box loose when take out console from carton.)



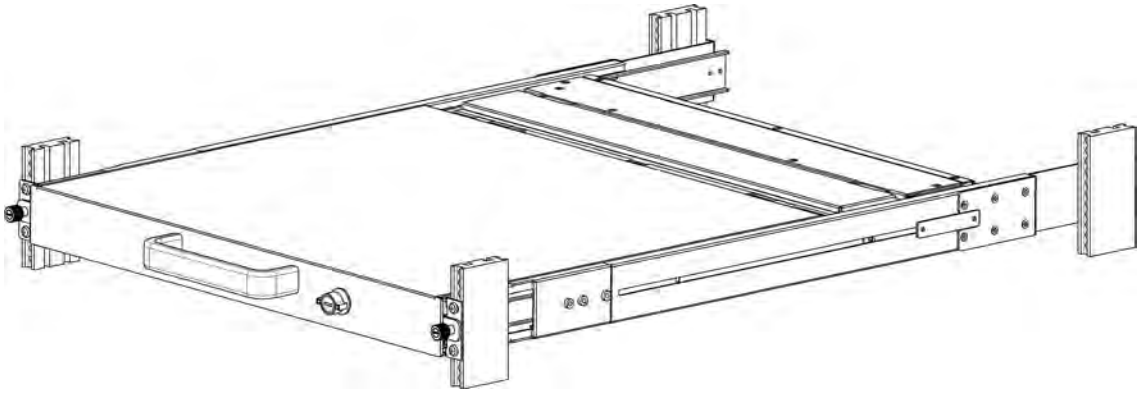
6. Pull rail–release switch (left and right at the same time) then push console to the end.



7. Install three screws in rear of the console (Both sides).



8. Finish installation as below.



3.3 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.

3.3.1 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.

3.3.2 Connecting the Console

15 / 17 / 19 - inch LCD console:

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

Figure 3-1. The Rear View of Single Port LCD Console
(DVI input is free-upgrade in 17/19 single-port console.
Optional for LCD1U15-16 and others bundled with KVM options)

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.
4. Connect the AC power cord to the power inlet on the console and then to a power outlet.

20.1" LCD console:

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

Figure 3-2. The Rear View of Single Port LCD Console

1. VGA port
2. PS/2 keyboard
3. PS/2 mouse
4. PS/2-USB select
5. USB 2.0 port
6. Audio line in
7. USB 2.0 port (for front data entry. Workable with power build-in device only)
8. DVI port
9. AC Inlet

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.)

Please don't plug PS/2 and USB cables at the same time

4. Connect the AC power cord to the power inlet on the console and then to a power outlet.

3.4 Turning on the Console

Make sure all cables and the power cord 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 LED on the left or underneath of the panel will be green light.

3.5 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

4.1 Introduction

This PS2 KVM (Keyboard, Video and Mouse) Switch allows multiple computers (PCs or servers) controlled by one set of keyboard, monitor and mouse. It ensures easy switch by front panel button, Hot-keys or the friendly On Screen Display (OSD) menu with connection up to 128 computers (by chaining 16-port PS2 KVMs). Not only naming for each computer can be done for easy identification, it also protects access by passwords. Additionally with the Auto Scan function it helps you managing all connecting systems at ease.

4.2 Feature

- Software free, easy installation, fully plug-and-play design.
- Compatible with typical PS/2 computers, monitors and keyboards. Supports IntelliMouse, IntelliMouse Explorer, and Logitech Net Mouse… etc.
- Compatible using DOS, Win3.x, Win95 / 98 / 98SE / 2000 / ME / XP / Vista, WinNT, Netware, HP Unix, Linux…etc.
- Supports Hot plug-and-play (if computer and operation system also supports this feature)
- Supports high resolution video at 1024 x 768 – LCD1U15-16 Series(1280 x 1024 – LCD1U17 / 19 Series, 1600 x 1200 – LCD1U20 Series.)with DDC2 monitor compatibility.
- Auto Scan function scans for all connecting computer at intervals between 5~255 seconds.
- Use power adaptor to provide electricity.
- Front panel channel selection button and indication lights.
- By daisy-chaining it can connect up to 64 computers (for all 8-port PS2 KVM connection) or 128 computers (for all 16-port PS2 KVM connection)
- Separate naming for each computer for easy identification.
- Provide password protection and operation level restriction.
- 19” rack mount kit for easy rack installation
- Exclusive port for daisy-chain connection
- Firmware upgrade facility through RS-232 interface
- Dual power input- When primary power connection fails, secondary power automatically initiates to prevent unwanted device shutdown.

4.3 Technical Specifications

Model No.	with 8-port KVM	with 16-port KVM
PC Port	8	16
PC Port Connector (All Female Types)	HDDB 15-pin	
Daisy Chain Port Connector (All Female Types)	1 x HDDB 15-pin special cable	
On Screen Display Control	Yes	
Scan Intervals	5~255 Sec.	
Keyboard Emulation	PS/2	
Mouse Emulation	PS/2	
VGA Resolution	1024 x 768 - LCD1U15-16 Series 1280 x 1024 - LCD1U17-22/17-23/19-18/19-19 1600 x 1200 - LCD1U20-01/20-04	
Bandwidth	200MHz	
Daisy Chain MAX Level	8 levels	

Table 4-1. Technical Specification

4.4 System Requirements

Model No.	with 8-port KVM
Computer side	8 x HDDB 15-pin male to one HDDB 15-pin male with two Mini Din 6-pin male special cable

Table 4-2. System Requirements

Model No.	with 16-port KVM
Computer side	16 x HDDB 15-pin male to one HDDB 15-pin male with two Mini Din 6-pin male special cable

Table 4-3. System Requirements

4.5 Cable Diagrams

PC Port Special Cable:

HDDB 15-pin male to one HDDB 15-pin male (VGA) with two Mini Din 6-pin male (PS/2) special cable

Figure 4-1. HDDB 15-pin / VGA + PS/2 x 1 (1.8M)

Daisy Chain Cable (HDDB 15-pin Cable):

One HDDB 15-pin male to one HDDB 15-pin male

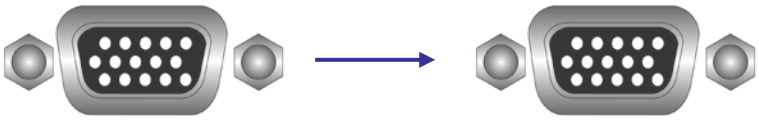


Figure 4-2. Daisy Chain Cable

4.6 Product Details

Rear panel of model with 8-port KVM:

Rear panel of model with 16-port KVM:

Figure 4-3. Rear Panel

4.7 Hardware Installation

Before installation, please make sure all of peripherals and computers have been turned off. This example of installation is based on 8 port console and you also can think that 16 port console have the same installation procedures

Step 1

Each PC port connector is HDDB 15-pin type. Locate your input cable. It will have a HDDB 15-pin male connector at one end. Plug it into any label computer port on the rear of console unit. The other end of input cable will have three connector; a HDDB 15-pin male type for PC video, a Mini Din 6-pin male type for keyboard and Mini Din 6-pin male type for mouse. To plug these three connectors into the respective ports of computer. Repeat the same procedure to all of PCs.

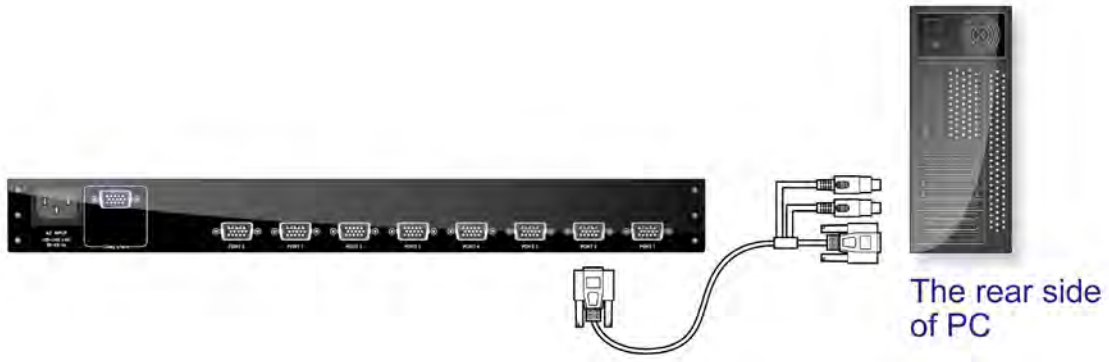


Figure 4-4. Hardware Installation

Step 2

Double-check all of the connections. You can check the color of keyboard and mouse connector to make sure the keyboard and mouse cables connect to the correct ports.

Step 3

Attach the power cord to the console unit and plug the other end into an electrical receptacle. Switch on your monitor. You can see the power LED on, and you can hear a beep.

Step 4 Daisy Chain

If daisy chaining is needed please use the daisy chain cable included with package.

Note

Please do not use other type of cable for daisy chaining PS2 KVMs.

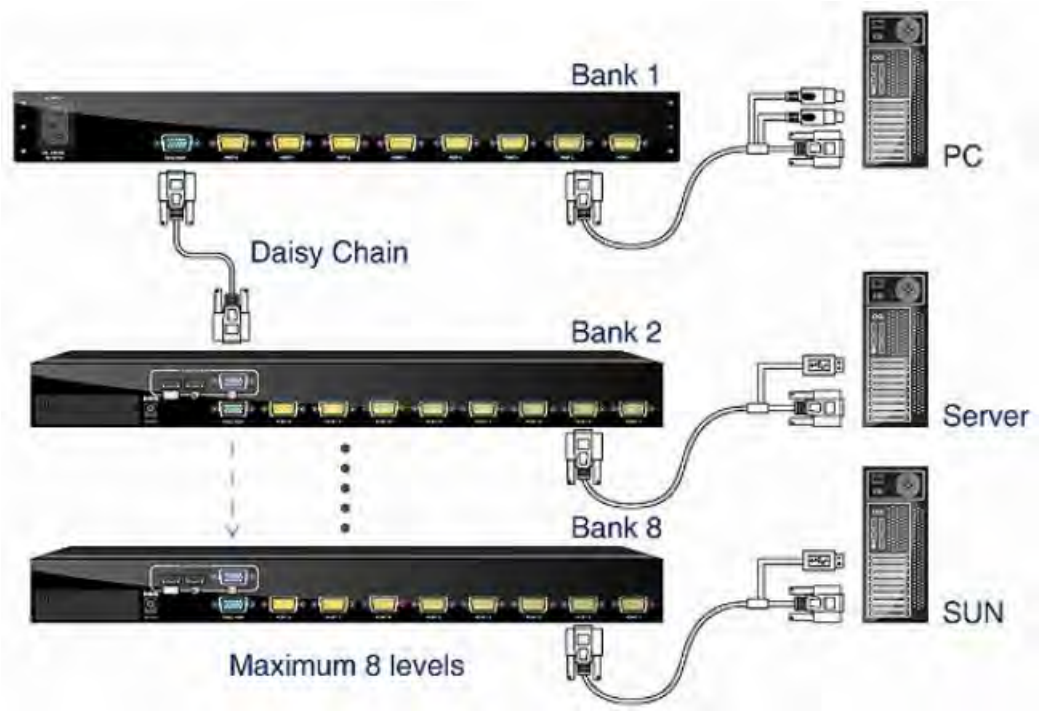


Figure 4-5. Daisy Chain

4.8 Operation & Usage

4.8.1

At factory default the PS2 KVM will not ask for password unless it is set by user. You may press "**Scroll Lock**" twice followed by "**F2**" to bring up password setting menu.

Before you are familiarized with this device, it is strongly recommended to use without password. If password is forgotten, please send PS2 KVM to your distributor for factory reset.

4.8.2

To switch port, you may enter OSD menu to select port, or, use Hot-Key to perform switching. To bring up OSD menu, please press "**Scroll Lock**" twice to activate OSD Main Menu as illustrated below **(Figure4-6)**.

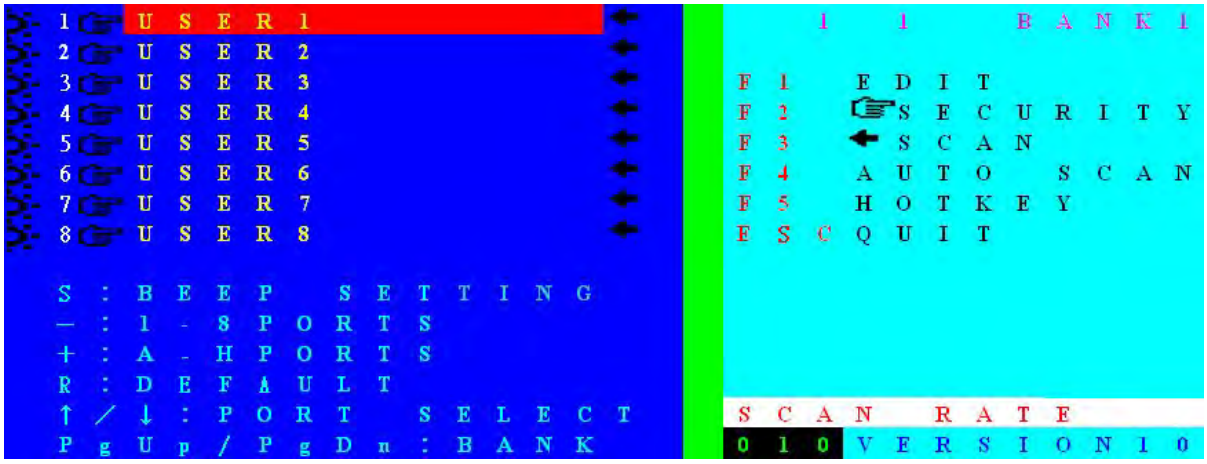


Figure 4-6. OSD Main Menu

4.8.3 OSD Main Screen Headings

	indicates the computer is powered on at selected port
	indicates the computer attached at this port has password protected. All ports at factory default do not have password assigned, therefore no icon present
USER1~8	Port name of corresponding port number. USER 1~8 illustrated as factory default setting.
	indicates the PC port is set for Auto Scan Mode. At factory default all PC port is active for Auto Scan.
S	Every time switching is made PS2 KVM beeps for notification. Please press Scroll Lock twice followed by “S” to turn beeper on or off
_	to select 1~8 computer Ports (1~8 PC Port)
+	to select A~H computer port (9~16 PC Port)
R	to set factory default.  Password will not be erased after this operation
↑	Select computer at previous port
↓	Select computer at next port
PgUp	Select previous bank
PgDn	Select next bank
1 1	Left hand side ”1” indicates current active port, right hand side “1” indicates current active bank.
F1	Edit computer name
F2	Password setting
F3	Select scan port
F4	Auto scan mode
F5	Hot key setting
ESC	Exit OSD
SCAN RATE	Scan rate
VERSION	Firmware version

Use right hand side of OSD commands for adjust settings

Function keys: **F1, F2, F3, F4, F5, ESC and → left arrow key**
First row on right hand window - 1,1,Bank1 : indicates currently PS2 KVM active at Bank 1, computer port 1.
SCAN RATE set at 10 second
Firmware version now at version 1.0

F1 Edit computer name (EDIT)
On the OSD menu, please press F1 to edit PC port name as illustrated below (Figure4-7)

Now please use the secondary function key to **F1(SAVE), F2(ERASE), or ESC(QUIT)**

- Edit the desirable name at cursor position, maximum 12 characters.
- F1- Save port name settings and brings back to OSD main menu
- F2- Erase all texts. To erase individual character, please use Backspace (←)
- ESC to exit EDIT menu

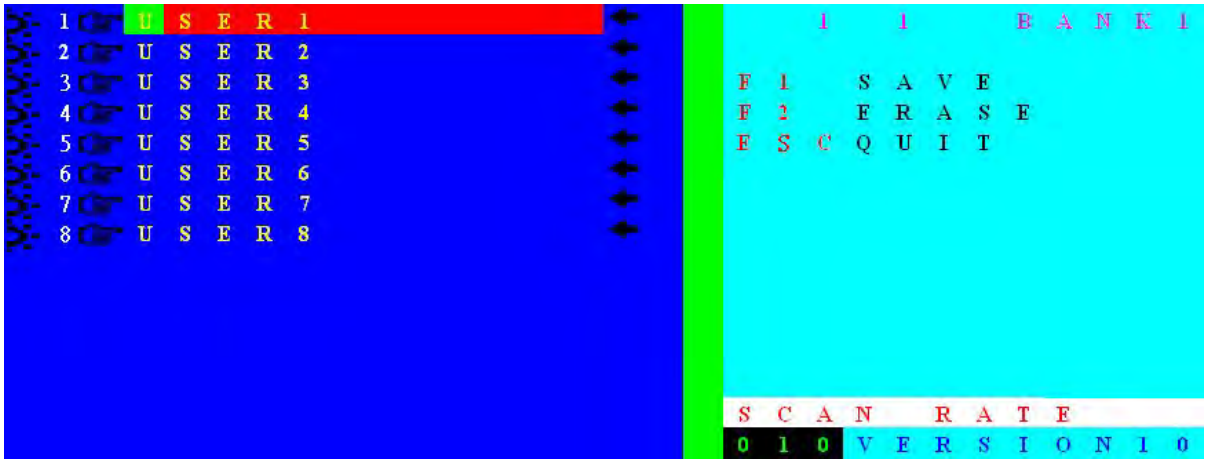


Figure 4-7. Edit PC Port Name Menu

F2- Password setting (SECURITY)

Press F2 at OSD main menu to activate password setting (☞ SECURITY). Password setting menu for “PORT USER” pops up as illustrated below **(Figure4-8)**.

In this screen you may use the secondary OSD function keys: **F1(SUPERUSER), ESC(QUIT), ENTER(Complete).**

- **F1**- To set password please press F1(SUPERUSER) to set SUPERUSER password **(Figure4-10)**.
  No password for SUPERUSER is set at factory default. Please enter password of maximum 8 characters. To remove SUPERUSER password, press ENTER at “New Password” field.
- **ENTER**- Press ENTER to complete settings
- **ESC**- When setting is finished, press ESC return to OSD main menu.

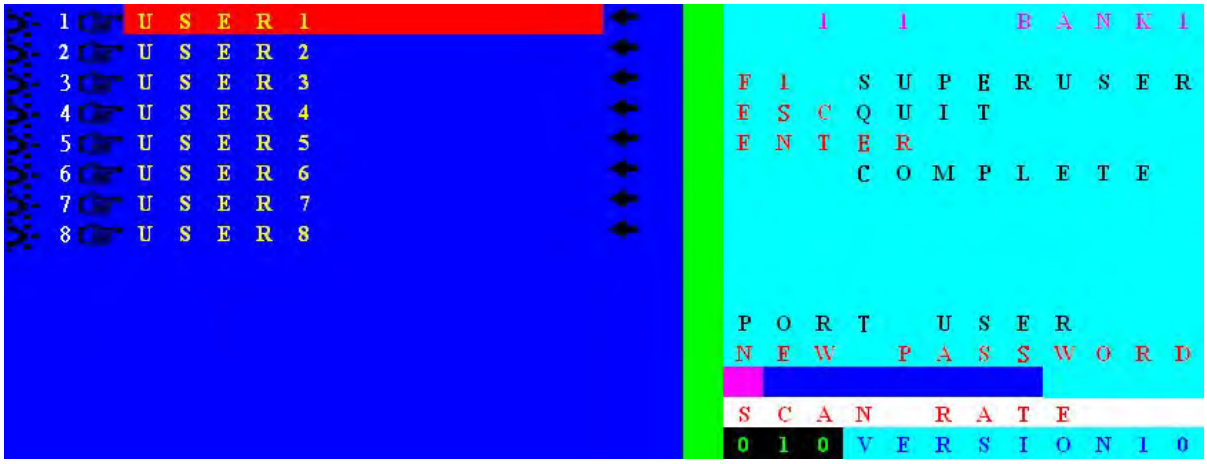


Figure 4-8. Set PC Port Password

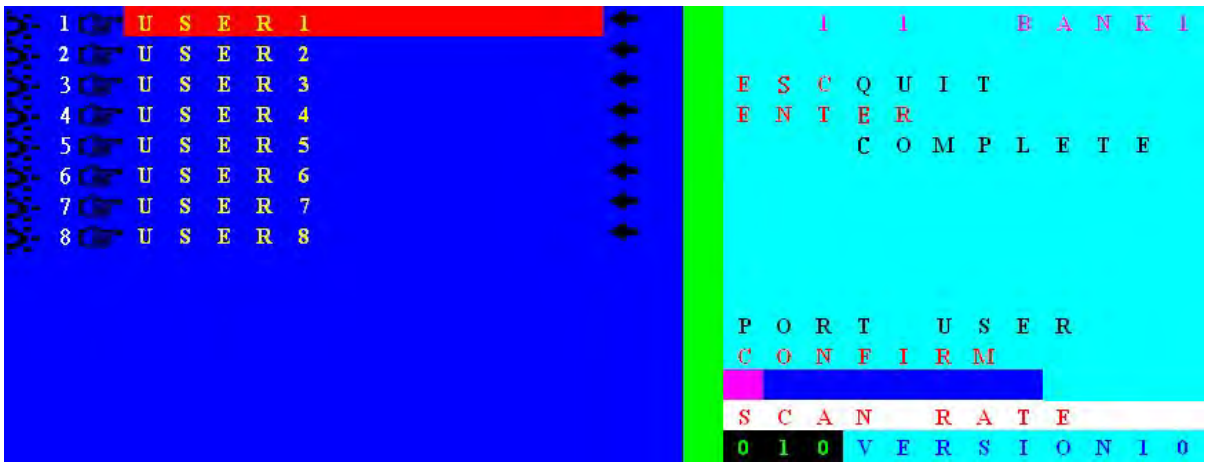


Figure 4-9. Retype Your Password For Verification (CONFIRM)

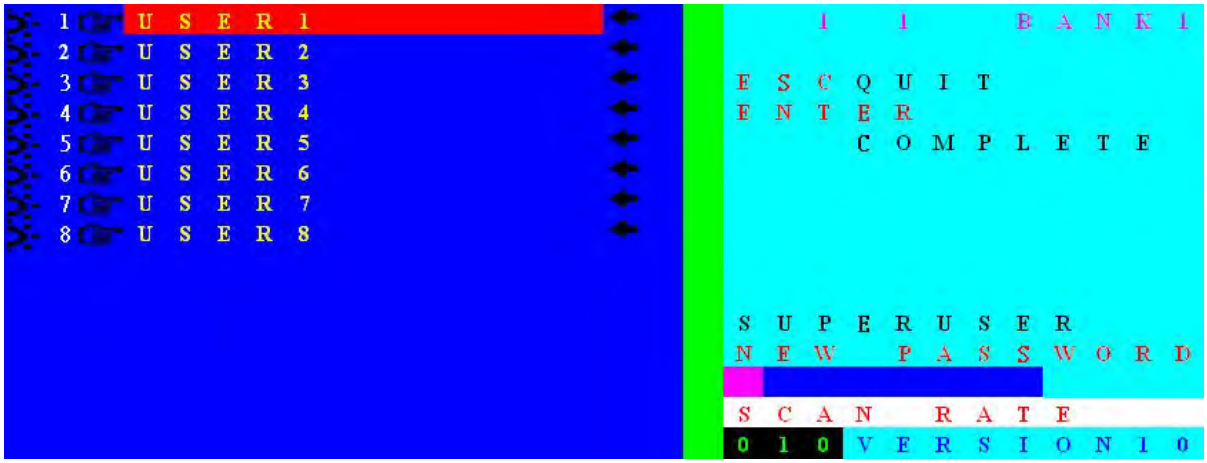


Figure 4-10. Set Super User Password

PC port without Password illustrated below (Figure4-11):

Figure 4-11. PC port without Password

At factory default, no password is set for PS2 KVM Switch as illustrated above. Selected PC port is powered on with indication.
To setup password please open OSD, select SECURITY. Please refer to **(Figure4-8)** and **(Figure4-9)**.

PC port with password illustrated below (Figure4-12):

Figure 4-12. PC port with Password

Password request OSD appears for Port-1 computer with powered on status.
Enter password directly. Password allowable length at 1 to 8 characters only (8 characters max). Press ENTER after password input to commence operation for this PC.

SUPERUSER PASSWORD illustrated below (Figure4-13):

Figure 4-13. SUPERUSER PASSWORD

If SUPERUSER password is set, PS2 KVM Switch will ask for password when KVM is powered on or at RESET. Please enter password follow by ENTER key to continue operation.

F3- SELECT SCAN PORT

Press F3 at OSD main menu to select Auto Scan active port. If a port is selected for Auto Scan, a icon appears, press F3 again, the icon will disappear.

F4- AUTO SCAN

Press F4 at OSD main menu to enter Auto Scan function menu as illustrated below **(Figure4-14)**. The secondary function keys are F1, F2 and F3

- F1- To start complete scanning, please press F1 (BROADCAST). All ports will be scanned regardless whether the port is connected with active computer. The scanning process will be stopped when ESC is pressed. As scan terminates, KVM switch maintains at last scanned PC port OSD.
- F2- To start scanning powered on PC only, please press F2 (POWERED ON PC). To stop scanning, please press ESC button. As scan terminates, KVM switch maintains at last scanned PC port OSD.
- F3- To scan selected PC, please press F3 (SCAN SELECT PC) to commence scanning. To stop scanning, please press ESC button. As scan terminates, KVM switch maintains at last scanned PC port OSD.
- ESC- Press ESC to Exit the Auto Scan menu.

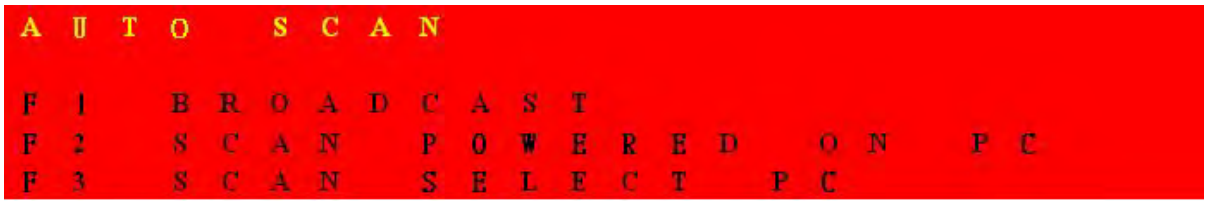


Figure 4-14. AUTO SCAN

F5- HOT-KEY

At OSD main menu, please press F5 to enter HOT-KEY setting menu **(Figure4-15)**. In the HOT KEY setting menu, secondary selection keys are F1, F2, F3, ENTER.

- Press **F1** to select Scroll Lock as Hot-key
- Press **F2** to select Num Lock as Hot-key
- Press **F3** to select Caps Lock as Hot-key
- Press **ENTER** to save setting and exit the Hot-key setting menu

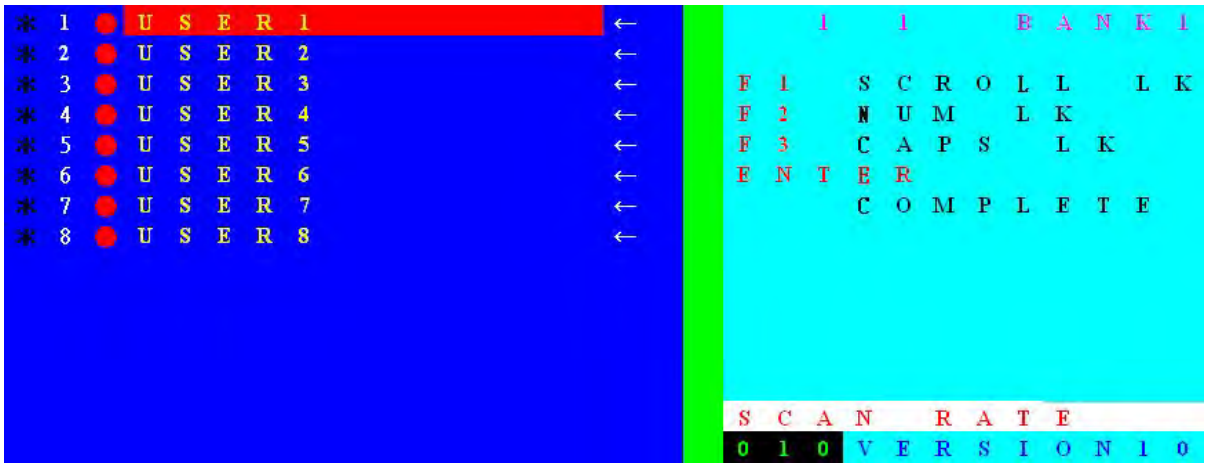


Figure 4-15. HOT KEY

→ OSD RATE / SCAN RATE SETTING ⟶

To set scan rate please press ⟶ button to enter Scan Rate/OSD Rate setting menu as illustrated below **(Figure4-16)**. The secondary menu functions are F1 and ENTER button

SCAN RATE SETTING

Please note that scan rate is set 10 seconds at factory default. Please enter desirable time interval (5~255 seconds) in the cursor and press ENTER to confirm setting.

OSD RATE SETTING

- Press F1 to enter OSD TIME setting screen **(Figure4-17)**. Please enter OSD RATE at bottom right corner (005~255 seconds).
- Press ENTER to complete setting (005~255 seconds) and returns to OSD main menu.
- Please press ESC to clear OSD display if OSD Time is not set. When OSD Time is set, please wait until setting time terminates. Note that ESC button OSD cancellation cannot be used when OSD Time is set.

When entering OSD RATE and SCAN RATE please enter complete three digits. For example, to enter 5 seconds, please input 005; to enter 10 seconds, please input 010.

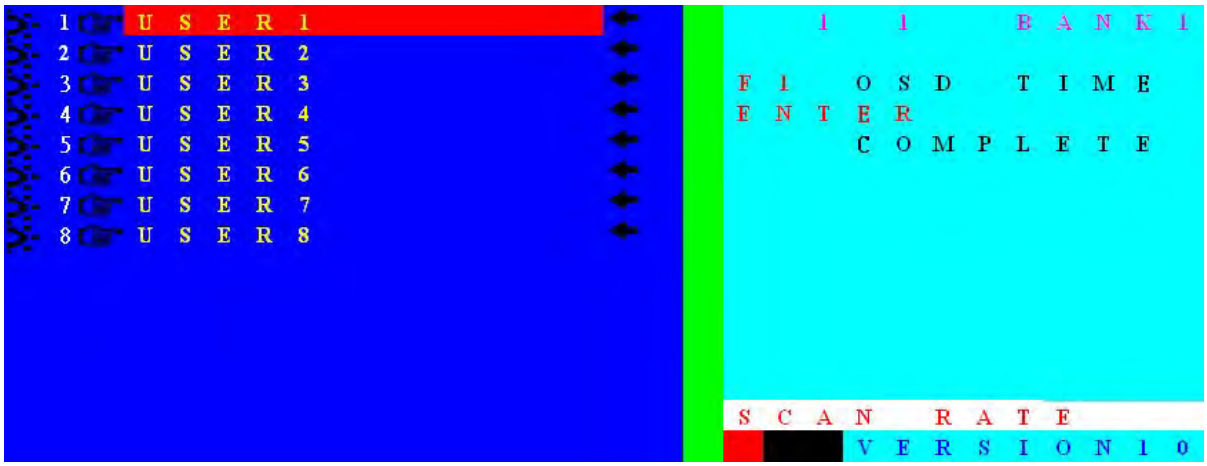


Figure 4-16. Main OSD Scan Rate Setting Menu

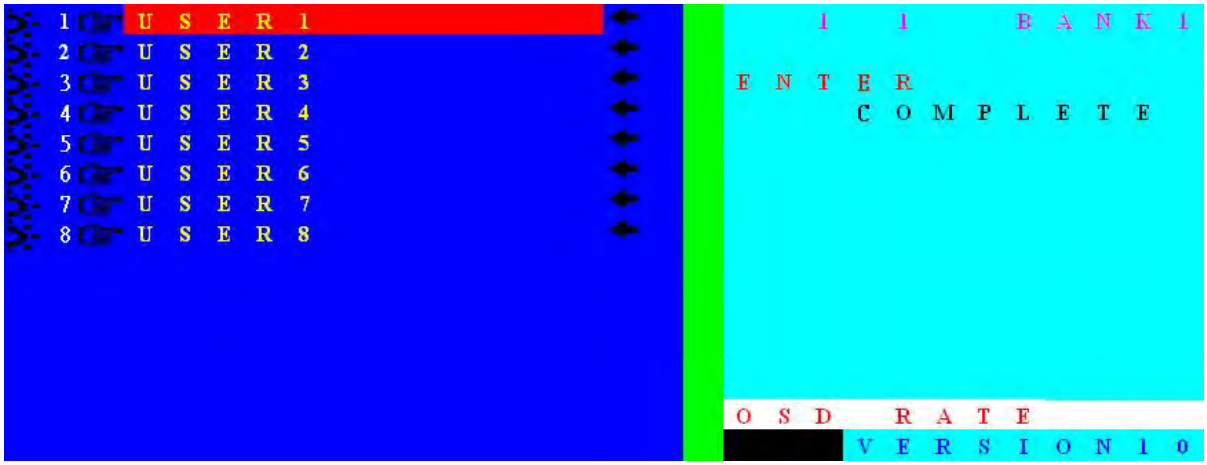


Figure 4-17. OSD time setting menu