

User Manual

Widescreen LCD Display - 19", 22" size



Rackmount display: RP-W822 RP-W719



1U Display drawer : RP-W119

4:3 LCD Display - 15", 17", 19", 20" size



Rackmount display:

RP-615 / RP-717 / RP-819 / RP-920 SP-717 / SP-819 / SP-920



1U Display drawer:

RP-115 / RP-117 / RP-119 / RP-120 RP-1415 / RP-1417 / RP-1419 (short-depth)



1U Display drawer:

SP-117 / SP-119 / SP-120 (designed for SUN Solaris)

Options:

- BNC + S-Video- DVI- DC power- Audio- Quad Display

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Part 2 4:3 LCD Display

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1.1 Important Safeguards

Chapter 1

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

What the warranty does not cover

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

1.2 Regulatory Notice

Chapter 1

Legal Information

First English printing, October 2002

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

Safety Instructions

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

Regulatory Notices Federal Communications Commission (FCC)

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

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

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

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

1.3 Before Installation

Chapter 1

- It is very important to locate the Rackmount LCD Drawer / Display in a suitable environment.
- The surface for placing and fixing the Rackmount LCD Drawer / Display should be stable and level or mounted into a suitable cabinet.
- Make sure the place has good ventilation, is out of direct sunlight, away from sources of excessive dust, dirt, heat, water, moisture and vibration.
- Convenience for connecting the Rackmount LCD Drawer / Display to the related facilities should be well considered too

1.4 Unpacking

The Rackmount LCD Drawer / Display comes with the standard parts shown on the package contents. Check and make sure they are included and in good condition. If anything is missing, or damage, contact the supplier immediately.

1.5 Optional Accessories

1. Power Cord

- 1.1 IEC power cord
- 1.2 NEMA 5-15 power cord (US)
- 1.3 BS 1363 power cord (UK)
- 1.4 CEE 7/4 power cord (German)
- 1.5 AS 3112 power cord (Australia)



1.6 Peripheral Products

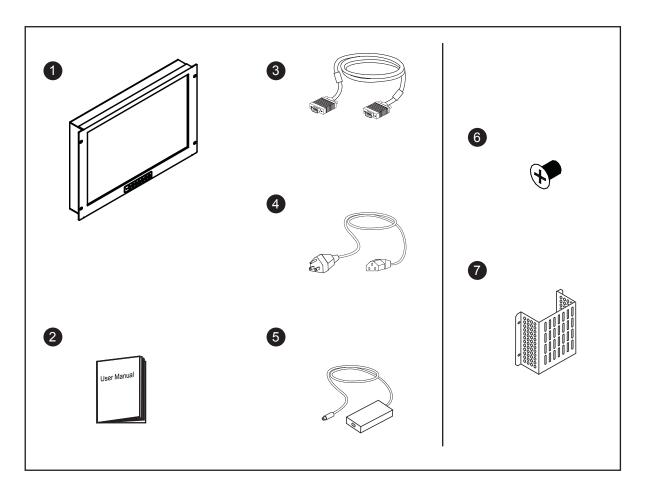
Chapter 1

Item	Model No.	Description	
Matrix Cat6 KVM	MU-1602 / MU-1603 / MU-1604 MU-IP1613 / MU-IP1614 / MU-IP1624 MU-3202 / MU-3203 / MU-3204 MU-IP3213 / MU-IP3214 / MU-IP3224	Matrix Cat6 16 port KVM Matrix IP Cat6 16 port KVM Matrix Cat6 32 port KVM Matrix IP Cat6 32 port KVM	
Matrix DB-15 KVM	M-802 / M-803 / M-804 M-IP813 / M-IP814 / M-IP824 M-1602 / M-1603 / M-1604 M-IP1613 / M-IP1614 / M-IP1624	Matrix DB-15 8 port KVM Matrix IP DB-15 8 port KVM Matrix DB-15 16 port KVM Matrix IP DB-15 16 port KVM	
Combo Cat6 KVM	U-801 / U-802 / U-IP802 U-1601 / U-1602 / U-IP1602 U-3201 / U-3202 / U-IP3202	Combo Cat6 8 port KVM Combo Cat6 16 port KVM Combo Cat6 32 port KVM	
Combo DB-15 KVM	CV-S801 / CV-802 / IP-802 CV-S1601 / CV-1602 / IP-1602	Combo DB-15 8 port KVM Combo DB-15 16 port KVM	
PS/2 DB-15 KVM CV-401 / CV-801 / CV-1601		4 / 8 / 16 port PS/2 DB-15 KVM	
Keyboard Drawer	RK-1 RK-2	Rackmount keyboard drawer (with KVM options) Rackmount keyboard drawer (short depth version)	

2.1 Package Contents

Chapter 2

RP-W719 & RP-W822

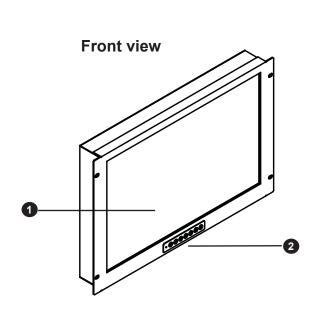


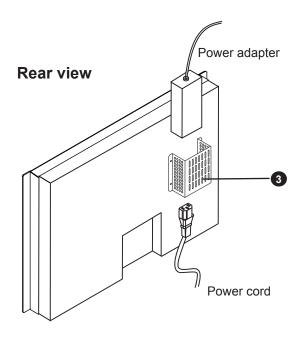
- 1 Rackmount LCD display x 1 pc
- ② User manual x 1 pc
- 3 6' VGA cable (male to male) x 1 pc
- 4 Power cord x 1 pc
- **(5)** Auto switch power adapter x 1 pc
- **6** M3.2*4.5mm screw x 4 pcs
- 7 Power adapter bracket x 1 pc

2.2 Structure Diagram

Chapter 2

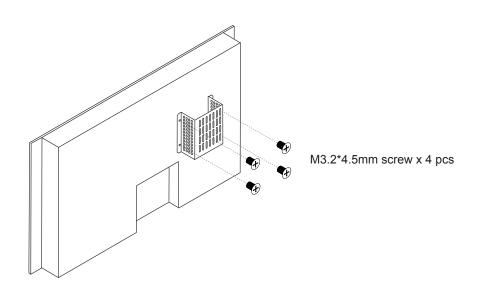
RP-W719 & RP-W822





- 1 LCD interchangeable module kit
- 2 LCD membrane
- 3 Power adapter bracket

Power adapter bracket installation



2.3 Installation

Chapter 2

RP-W719

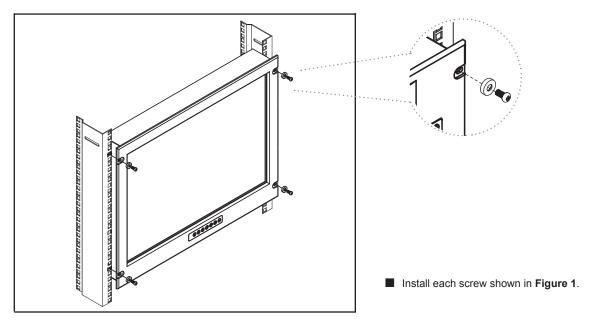


Figure 1.

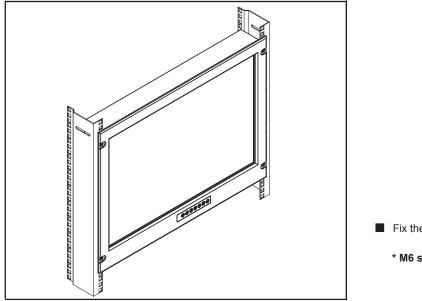


Figure 2.

Fix the LCD into the rack.

* M6 screws are not provided.

2.3 Installation Chapter 2

RP-W822

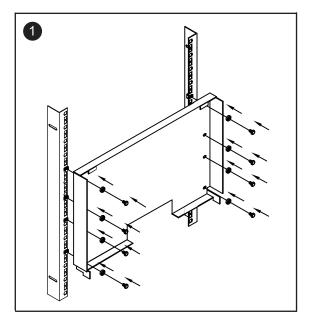


Figure 3.

- Install each screw shown in Figure 3.
 - * M6 screws are not provided.

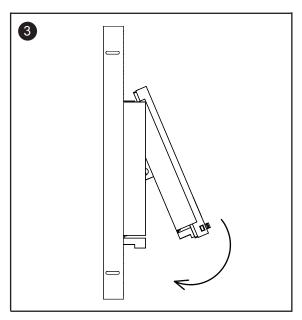


Figure 5.

■ Push the lower part of the LCD into the rack.

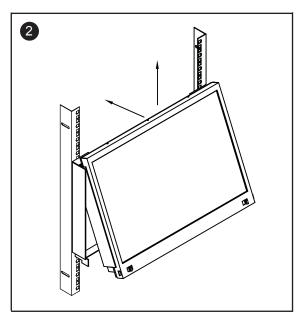


Figure 4.

■ Insert the upper part of the LCD display to the rack shown in **Figure 4**.

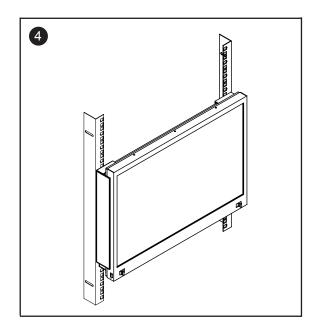
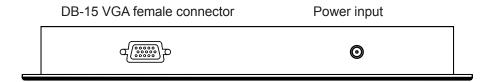


Figure 6.

Installation completed.

2.4 Connection Chapter 2

RP-W719 & RP-W822



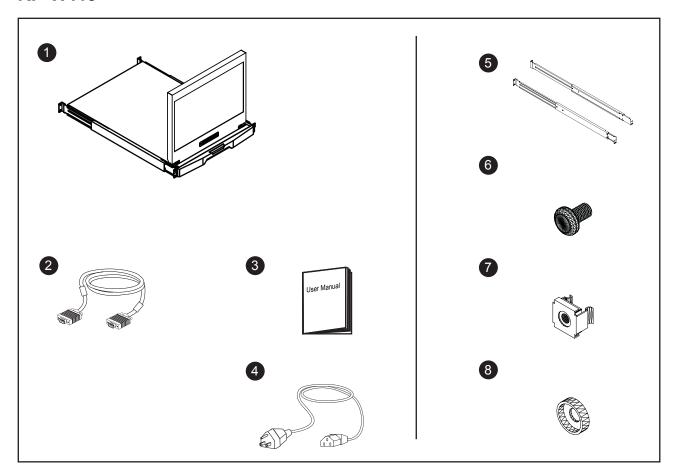


Caution: The Rackmount LCD Drawer & Display are hot-pluggable, but components of connected devices, such as the servers and KVM switch, may not be hot-pluggable. Plugging and unplugging cables while servers and KVM are powered on may cause irreversible damage of the servers, KVM and Rackmount LCD Drawer. Before attempting to connect anything to the Rackmount LCD Drawer, we suggest turning off power to all devices before connecting them. Apply power to connected devices again only after the Rackmount LCD Drawer is receiving power. The company is not responsible for damage caused in this way.

3.1 Package Contents

Chapter 3

RP-W119

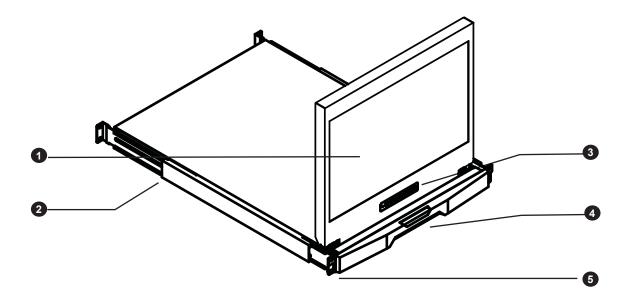


- ① LCD drawer x 1 pc
- 2 6' VGA cable (male to male) x 1 pc
- 3 User manual x 1 pc
- 4 Power cord x 1 pc
- **(5)** Mounting bracket x 2 pcs
- 6 M6*15mm screw x 8 pcs
- 7 M6 cage nut x 6 pcs
- **8** Cup washer x 8 pcs

3.2 Structure Diagram

Chapter 3

RP-W119



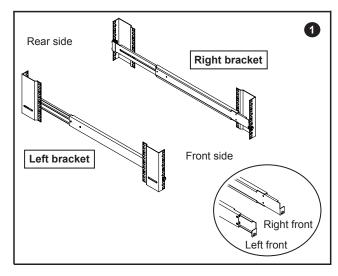
- 1 LCD interchangeable module kit
- ② "One Man" Installation Slide
- 3 LCD membrane

- 4 Carry handle to release the 2-pt lock
- **5** 2-point lock

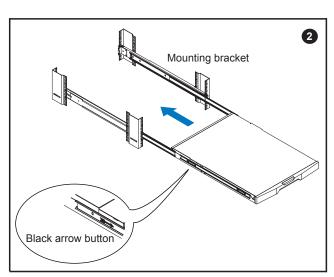
3.3 How to Install "One Man" Installation Slides

Chapter 3

Install into rack



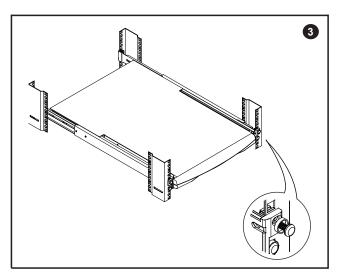
- Attach the left and right mounting bracket to rack 19" mounting rails.
- Adjust the rear mouting bracket to fit your rack.
- M6 screw and cup washer x 6 pcs included.
- Caution: Leaving the screws slightly loose, until you complete the installation in step 4



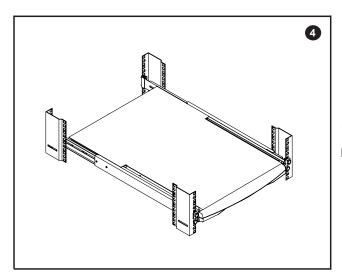
- Pick up the LCD drawer.
- Insert the LCD drawer into the mounting bracket.
- Pull and hold the left & right black arrow buttons on the rails.
- Return the LCD drawer to park position.

3.3 How to Install "One Man" Installation Slides

Chapter 3



- Attach front left and right mounting ears of the LCD drawer to vertical mounting rails.
- M6 screw and cup washer x 2 pcs included.



Complete the installation

■ Tighten all 8 pcs of M6 screw to complete the installation.

3.4 How to Use the Slides

Chapter 3

RP-W119

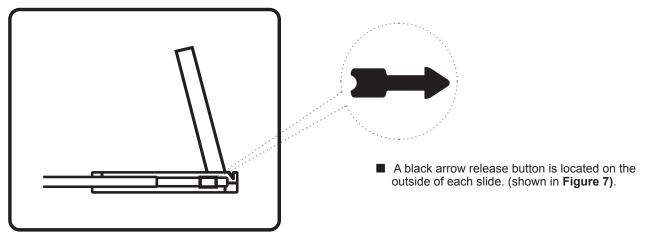


Figure 7.

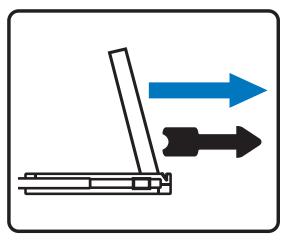


Figure 8.

■ Pull and hold the black arrow button on either side of the LCD drawer to unlock. (shown in **Figure 8**).

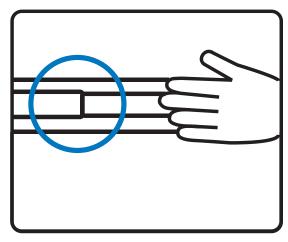
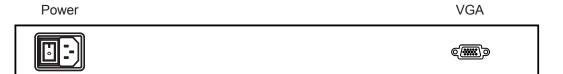


Figure 9.

■ Push the LCD drawer into the rack. (shown in **Figure 9**).

Caution: Keep your fingers away from the slide stop

RP-W119



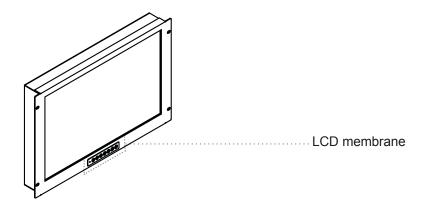


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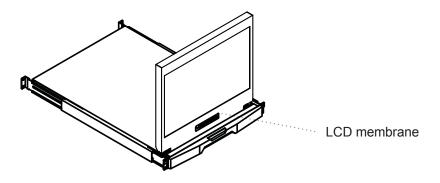
Chapter 4

4.1 On-screen Display Operation

RP-W719 & RP-W822



RP-W119

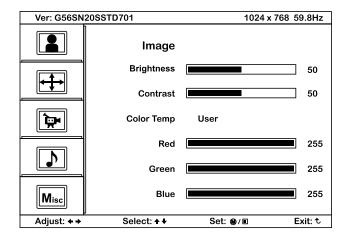


Membrane Switch	Function	
0	Power light Green = On Orange = Power saving	
	Power on / off LCD	
M	Display the OSD menu	
$\diamondsuit \diamondsuit \diamondsuit \diamondsuit$	Scrolls through menu options and adjusts the displayed control (To auto adjustment by pressing the button \Leftrightarrow for 5 seconds)	
P	Exit the OSD screen Toggle analog, digital & video connection (DVI-D and video options only)	

4.2 On-screen Menu

Chapter 4

RP-W719, RP-W822 & RP-W119



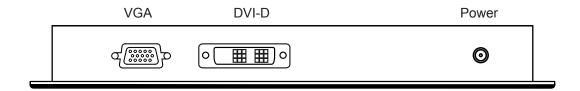
OSD Configuration Page

	Image: To enter into the brightness, contrast, color temp, red, green, and blue
	Geometry: To enter into the auto adjust, H position, V position, phase and clock
	Video: To enter into the colour, tint, sharpness, noise reduction, DCDi and TV Setup
	Audio: To enter into volume, bass, treble, balance, AVL and mute
Misc	Misc: To enter into the language, OSD position, graphic mode, ratio, reset and timer

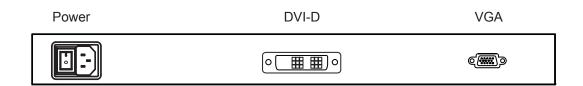
5.1 DVI-D Option

Chapter 5

RP-W719 & RP-W822



RP-W119



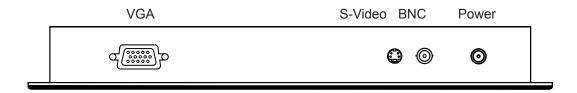
Remarks

■ Package includes 1 x 6ft DVI-D cable

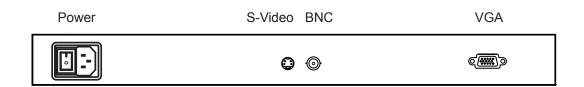
Chapter 5

5.2 BNC + S-Video Option

RP-W719 & RP-W822



RP-W119



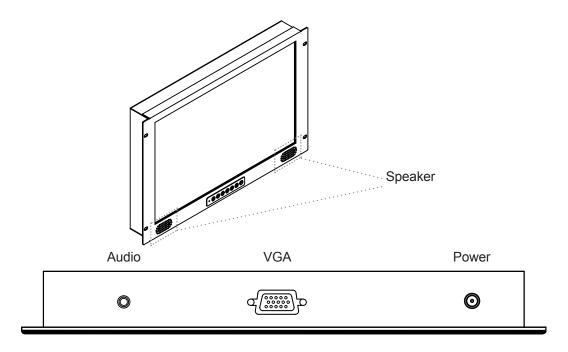
Remarks

■ Package includes 1 x 6ft S-Video cable

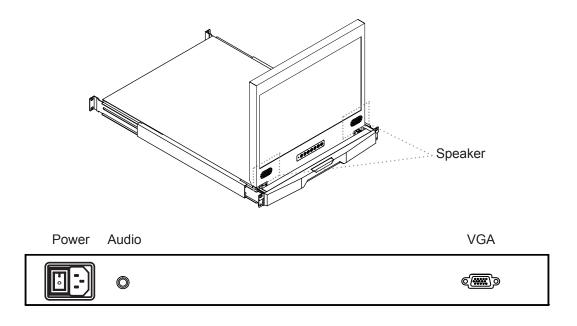
5.3 Audio Option

Chapter 5

RP-W719 & RP-W822



RP-W119



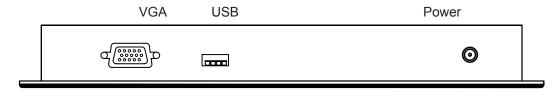
Remarks:

- Audio input is 35mm audio plug
- The speaker is sharing the same power with LCD.

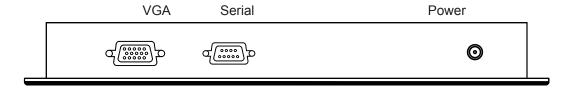
5.4 Touchscreen Options

RP-W719 & RP-W822

USB interface



Serial interface





e-Resistive

Model	-19WTRB / -19WTRS	-22WTRB / -22WTRS	
Screen size	19" wide	22" wide	
Interface	USB / serial		
Optical transmittance	80% ± 3%		
Surface hardness	≥3H (JIS K5400)		
Operating system	Windows 98 / 2000 / ME / XP / NT / CE, DOS, Linux		

e-Capacitive

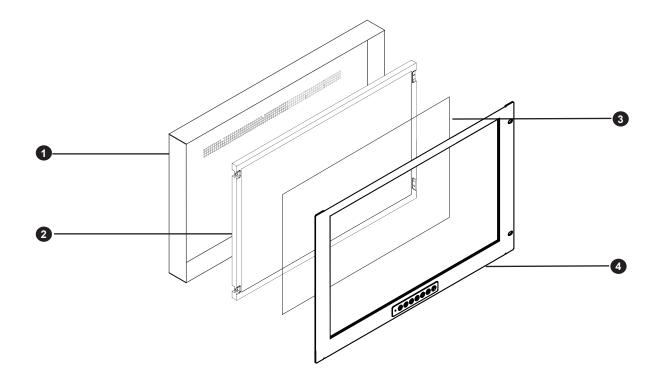
Model	-19WTCB / -19WTCS	-22WTCB / -22WTCS
Screen size	19" wide	22" wide
Interface	USB / serial	
Optical transmittance	93% ± 2%	
Surface hardness	>9H Surface hardness, withstand over 300 million touches	
Operating system	Windows 98 / 2000 / ME / XP / NT / CE, DOS, Linux	

Remarks

- USB touchscreen package includes 1 x 6ft USB cable, quick reference guideline and CD disc
- Serial touchscreen package includes 1 x 6ft serial cable, quick reference guideline and CD disc
- For detailed information, please refer to the attached CD disc
- As the touchscreen unit is not made of toughened glass, please handle it carefully
- Touchscreen in other brands are available on request

5.5 Front NEMA 4 / IP65 Option

RP-W719 & RP-W822



- 1 Rear case
- 2 LCD panel
- 3 4mm protective glass (Front NEMA 4 / IP65 protection)
- 4 Aluminum front panel

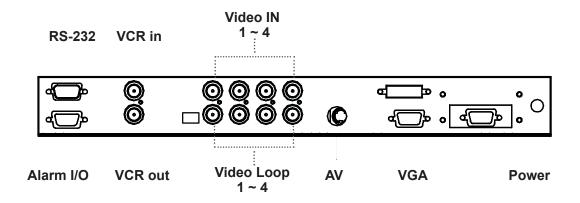
Remarks

■ 4mm thickness of protective glass is not toughened one, please handle it carefully.

Chapter 5

5.6 Quad Display Option

Specifications



	Item	Desci	ription	
Model Number		QD (NTSC)	QD (PAL)	
Number of Col	or	16.7 M	16.7 M	
Imaging Syster	n	NTSC	PAL	
Resolution		1024 x 525	1024 x 625	
Refresh Rate		60	50	
Video Input	Camera Input	1.0 Vpp, 7	'5 Ohm x 4	
video iriput	VCR Input	1.0 Vpp, 7	'5 Ohm x 1	
	Live Monitor	1.0 Vpp, 75 Ohm x 1		
Video Output	Loop Through Out	1.0 Vpp, 75 Ohm x 4		
	VCR Output	1.0 Vpp, 7	'5 Ohm x 1	
Auto Gain Con	trol	Yes		
Time / Date		Yes		
On Screen Dis	play	Yes		
Camera Title		8 Chara	cter Title	
	2 x Zoom On Playback	Y	es	
Display Format	QUAD	Yes		
F - 7	FULL	Yes		
	SEQUENCY	Yes		
Dwell Time		0 to 99 Sec Adjustable		
Built-in Buzzer		Yes		
Key Lock		Y	es	

Remarks

■ For more details, please refer to Quad Display User Manual.

Chapter 5

5.7 DC Power Options



RP-W719 & RP-W822



RP-W119

DC Power input VGA



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

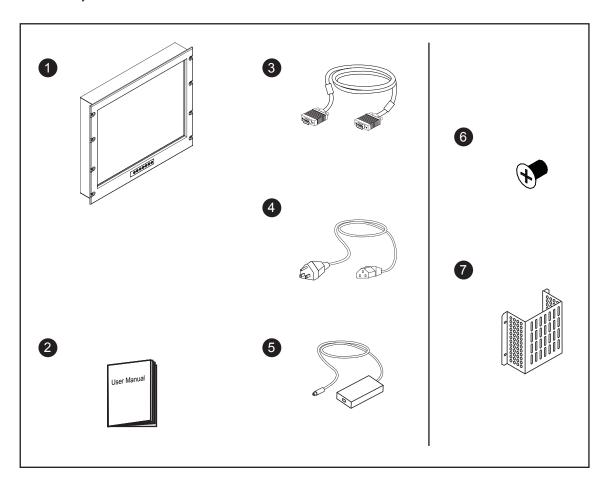
Remarks

■ Package does not include power cord and AC power adapter

6.1 Package Contents

Chapter 6

RP-615, RP-717, RP-819 & RP-920 SP-717, SP-819 & SP-920

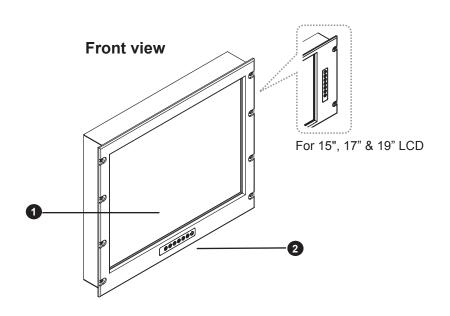


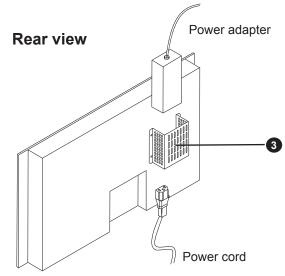
- 1 Rackmount LCD display x 1 pc
- 2 User manual x 1 pc
- 3 6' VGA cable (male to male) x 1 pc
- 4 Power cord x 1 pc
- **(5)** Auto switch power adapter x 1 pc
- **6** M3.2*4.5mm screw x 4 pcs
- 7 Power adapter bracket x 1 pc

6.2 Structure Diagram

Chapter 6

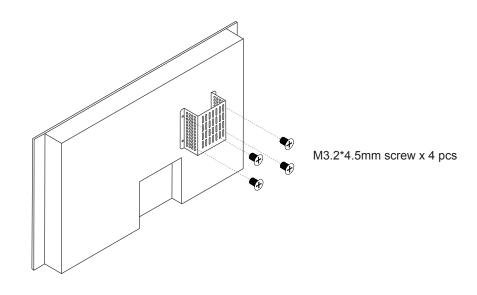
RP-615, RP-717, RP-819 & RP-920 SP-717, SP-819 & SP-920





- 1 LCD interchangeable module kit
- 2 LCD membrane
- 3 Power adapter bracket

Power adapter bracket installation



6.3 Installation Chapter 6

RP-615, RP-717 & RP-819 SP-717 & SP-819

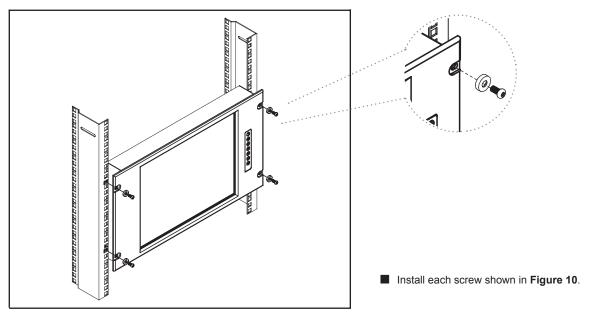


Figure 10.

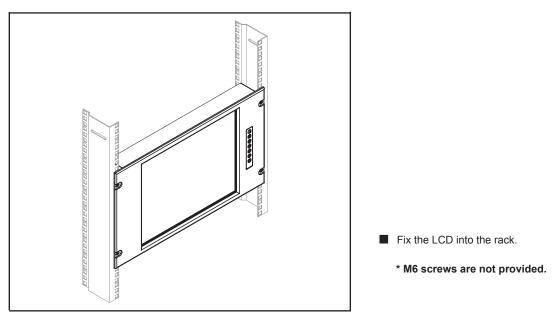


Figure 11.

6.3 Installation

Chapter 6

RP-920 & SP-920

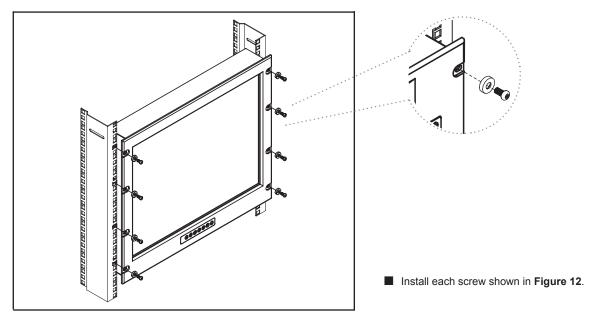


Figure 12.

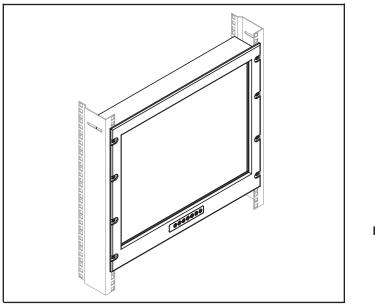


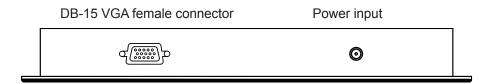
Figure 13.

Fix the LCD into the rack.

* M6 screws are not provided.

6.4 Connection Chapter 6

RP-615, RP-717, RP-819 & RP-920 SP-717, SP-819 & SP-920



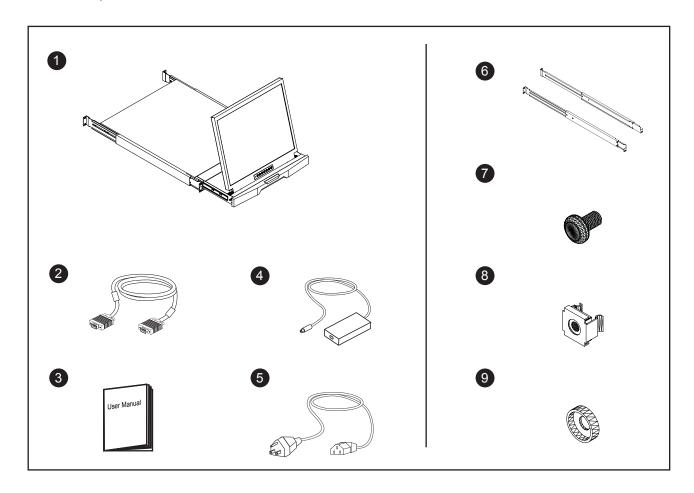


Caution: The Rackmount LCD Drawer & Display are hot-pluggable, but components of connected devices, such as the servers and KVM switch, may not be hot-pluggable. Plugging and unplugging cables while servers and KVM are powered on may cause irreversible damage of the servers, KVM and Rackmount LCD Drawer. Before attempting to connect anything to the Rackmount LCD Drawer, we suggest turning off power to all devices before connecting them. Apply power to connected devices again only after the Rackmount LCD Drawer is receiving power. The company is not responsible for damage caused in this way.

7.1 Package Contents

Chapter 7

RP-120 & SP-120 RP-115, RP-117, RP-119, SP-117 & SP-119 RP-1415, RP-1417 & RP-1419

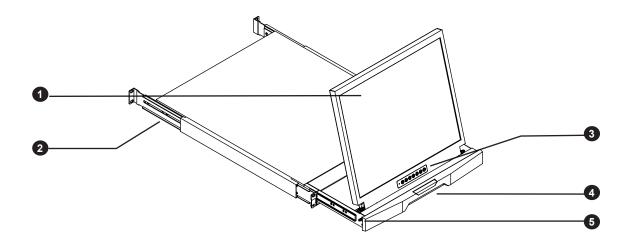


- (1) LCD drawer x 1 pc
- 2 6' VGA cable (male to male) x 1 pc
- 3 User manual x 1 pc
- 4 Auto switch power adapter (for external power version) x 1 pc
- (5) Power cord x 1 pc
- 6 Mounting bracket x 2 pcs
- 7 M6*15mm screw x 8 pcs
- 8 M6 cage nut x 6 pcs
- 9 Cup washer x 8 pcs

7.2 Structure Diagram

Chapter 7

RP-120 & SP-120 RP-115, RP-117, RP-119, SP-117 & SP-119 RP-1415, RP-1417 & RP-1419



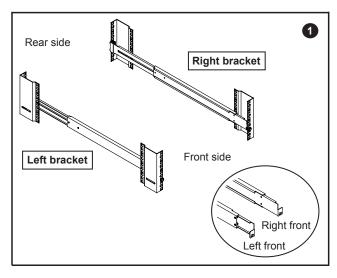
- 1 LCD interchangeable module kit
- ② "One Man" Installation Slide
- 3 LCD membrane

- 4 Carry handle to release the 2-pt lock
- 5 2-point lock

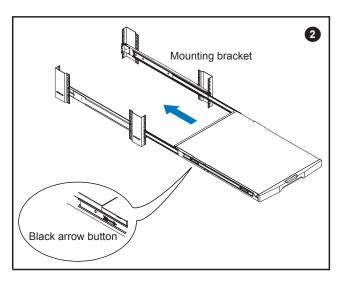
7.3 How to Install "One Man" Installation Slides

Chapter 7

Install into rack



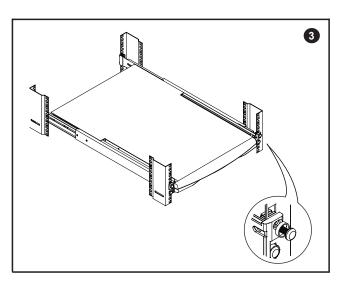
- Attach the left and right mounting bracket to rack 19" mounting rails.
- Adjust the rear mouting bracket to fit your rack.
- M6 screw and cup washer x 6 pcs included.
- Caution: Leaving the screws slightly loose, until you complete the installation in step 4



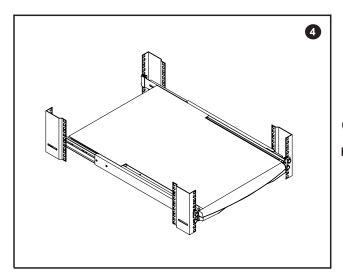
- Pick up the LCD drawer.
- Insert the LCD drawer into the mounting bracket.
- Pull and hold the left & right black arrow buttons on the rails.
- Return the LCD drawer to park position.

7.3 How to Install "One Man" Installation Slides

Chapter 7



- Attach front left and right mounting ears of the LCD keyboard drawer to vertical mounting rails.
- M6 screw and cup washer x 2 pcs included.



Complete the installation

■ Tighten all 8 pcs of M6 screw to complete the installation.

7.4 How to Use the Slides

Chapter 7

RP-120 & SP-120 RP-115, RP-117, RP-119, SP-117 & SP-119 RP-1415, RP-1417 & RP-1419

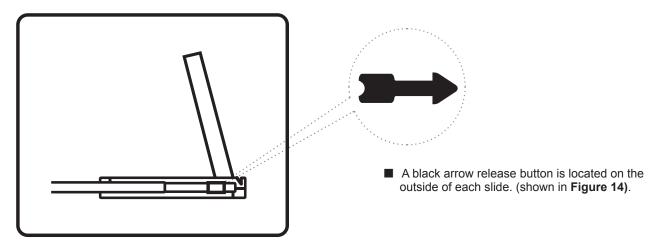


Figure 14.

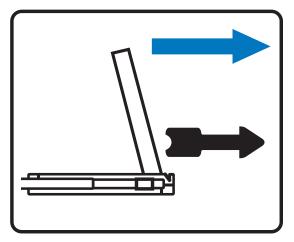
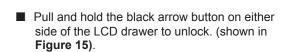


Figure 15.



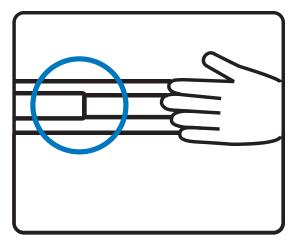


Figure 16.

■ Push the LCD drawer into the rack. (shown in **Figure 16**).

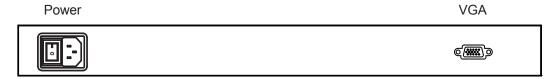


Caution: Keep your fingers away from the slide stop

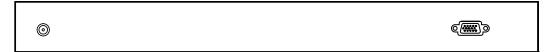
7.5 Connection Chapter 7

RP-120 & SP-120 RP-115, RP-117, RP-119, SP-117 & SP-119 RP-1415, RP-1417 & RP-1419

Internal power version



External power version (For short depth version - RP-1415 / 1417 / 1419)

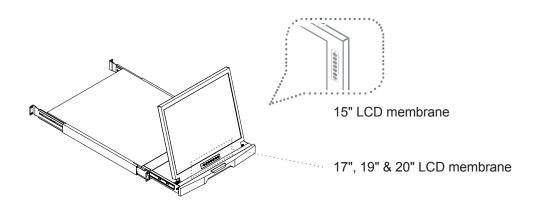




Caution: The Rackmount LCD Drawer & Display are hot-pluggable, but components of connected devices, such as the servers and KVM switch, may not be hot-pluggable. Plugging and unplugging cables while servers and KVM are powered on may cause irreversible damage of the servers, KVM and Rackmount LCD Drawer. Before attempting to connect anything to the Rackmount LCD Drawer, we suggest that turn off power to all devices before connecting them. Apply power to connected devices again only after the Rackmount LCD Drawer receiving power. The company is not responsible for damage caused in this way.

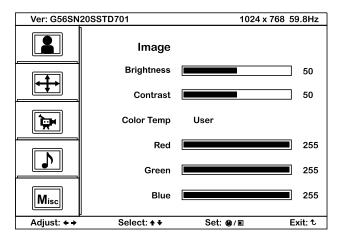
8.1 On-screen Display Operation

RP-120 & SP-120 RP-115, RP-117, RP-119, SP-117 & SP-119 RP-1415, RP-1417 & RP-1419



Membrane Switch	Function			
0	Power light			
•	Green = On Orange = Power saving			
	Power on / off LCD			
M	Display the OSD menu			
$\diamondsuit \diamondsuit \Leftrightarrow \diamondsuit$	Scrolls through menu options and adjusts the displayed control (To auto adjustment by pressing the button \Leftrightarrow for 5 seconds)			
P	Exit the OSD screen Toggle analog, digital & video connection (DVI-D and video options only)			
·				

RP-120 & SP-120 RP-115, RP-117, RP-119, SP-117 & SP-119 RP-1415, RP-1417 & RP-1419



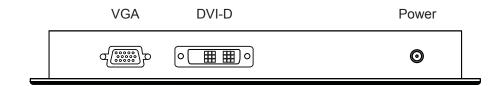
OSD Configuration Page

	Image: To enter into the brightness, contrast, color temp, red, green, and blue
	Geometry: To enter into the auto adjust, H position, V position, phase and clock
	Video: To enter into the colour, tint, sharpness, noise reduction, DCDi and TV Setup
	Audio: To enter into volume, bass, treble, balance, AVL and mute
Misc	Misc: To enter into the language, OSD position, graphic mode, ratio, reset and timer

9.1 DVI-D Option

Chapter 9

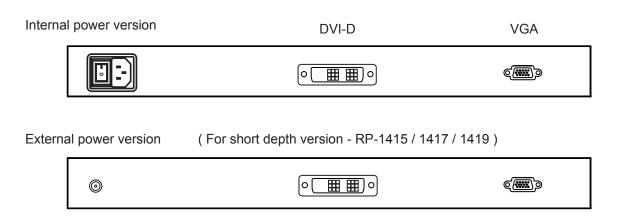
RP-615, RP-717, RP-819 & RP-920 SP-717, SP-819 & SP-920



Remarks

■ Package includes 1 x 6ft DVI-D cable

RP-120 & SP-120 RP-115, RP-117, RP-119, SP-117 & SP-119 RP-1415, RP-1417 & RP-1419

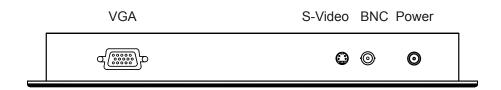


- Package includes 1 x 6ft DVI-D cable
- The depth of RP-1415 / 1417 / 1419 will be extended from 480mm (18.9") to 530mm (20.9")

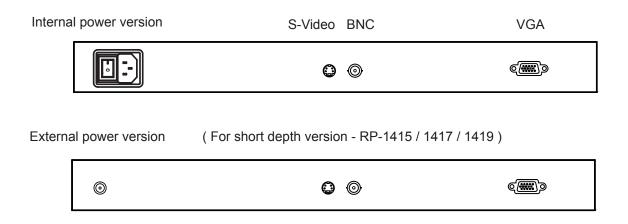
9.2 BNC + S-Video Option

Chapter 9

RP-615, RP-717, RP-819 & RP-920



RP-120 RP-115, RP-117 & RP-119 RP-1415, RP-1417 & RP-1419



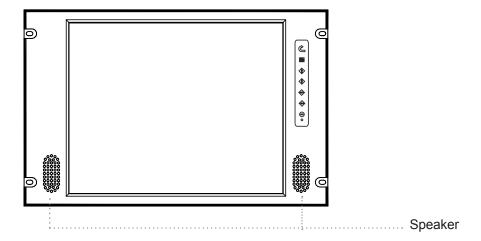
Remarks

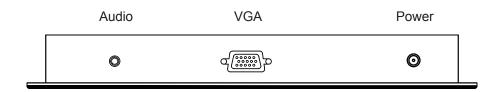
■ Package includes 1 x 6ft S-Video cable

9.3 Audio Option

Chapter 9

RP-615, RP-717, RP-819 & RP-920



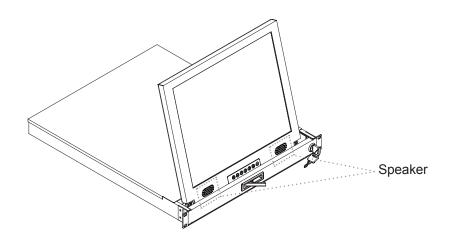


- Audio input is 35mm audio plug
- The speaker is sharing the same power with LCD.

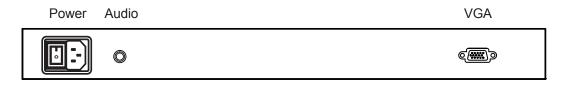
9.3 Audio Option

Chapter 9

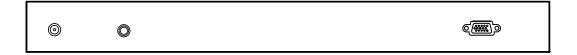
RP-120 RP-115, RP-117 & RP-119 RP-1415, RP-1417 & RP-1419



Internal power version



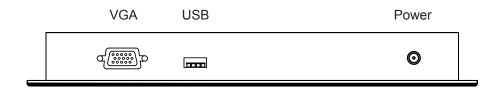
External power version (For short depth version - RP-1415 / 1417 / 1419)



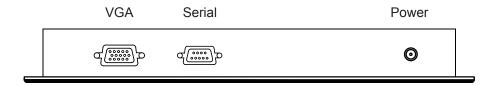
- Audio input is 35mm audio plug
- The speaker is sharing the same power with LCD.



USB interface

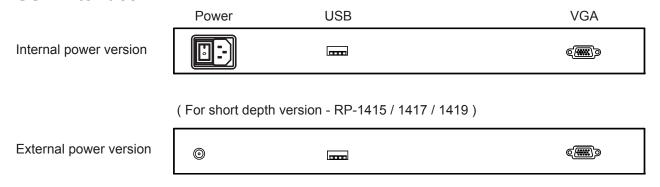


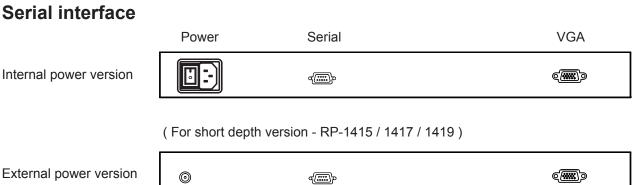
Serial interface

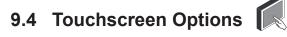


RP-120 RP-115, RP-117 & RP-119 RP-1415, RP-1417 & RP-1419

USB interface









e-Resistive

Model	-15TRB / -15TRS	-17TRB / -17TRS	-19TRB / -19TRS	-20TRB / -20TRS
Screen size	15"	17"	19"	20"
Interface	USB / serial			
Optical transmittance	80% ± 3%			
Surface hardness	≥3H (JIS K5400)			
Operating system	Windows 98 / 2000 / ME / XP / NT / CE, DOS, Linux			

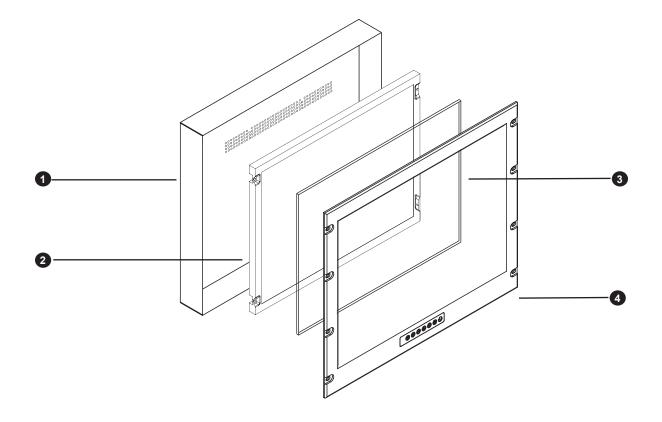
e-Capacitive

Model	-15TCB / -15TCS	-17TCB / -17TCS	-19TCB / -19TCS	-20TCB / -20TCS
Screen size	15"	17"	19"	22"
Interface	USB / serial			
Optical transmittance	93% ± 2%			
Surface hardness	>9H Surface hardness, withstand over 300 million touches			
Operating system	Windows 98 / 2000 / ME / XP / NT / CE, DOS, Linux			

- USB touchscreen package includes 1 x 6ft USB cable, quick reference guideline and CD disc
- Serial touchscreen package includes 1 x 6ft serial cable, quick reference guideline and CD disc
- For detailed information, please refer to the attached CD disc
- As the touchscreen unit is not made of toughened glass, please handle it carefully
- Touchscreen in other brands are available on request

9.5 Front NEMA 4 / IP65 Option

RP-615, RP-717, RP-819 & RP-920



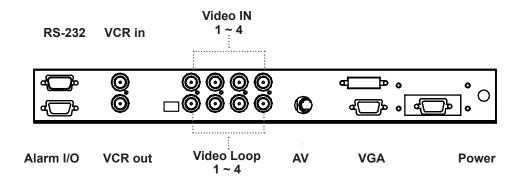
- 1 Rear case
- 2 LCD panel
- 3 4mm protective glass (Front NEMA 4 / IP65 protection)
- 4 Aluminum front panel

Remarks

■ 4mm thickness of protective glass is not toughened one, please handle it carefully.

9.6 Quad Display Option

Specifications

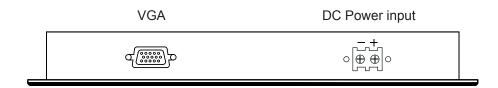


Item		Descr	iption	
Model Number		QD (NTSC)	QD (PAL)	
Number of Cold	or	16.7 M		
Imaging Syster	n	NTSC	PAL	
Resolution		1024 x 525	1024 x 625	
Refresh Rate		60	50	
Video Input	Camera Input	1.0 Vpp, 7	5 Ohm x 4	
video iriput	VCR Input	1.0 Vpp, 7	5 Ohm x 1	
	Live Monitor	1.0 Vpp, 7	5 Ohm x 1	
Video Output	Loop Through Out	1.0 Vpp, 7	5 Ohm x 4	
	VCR Output	1.0 Vpp, 7	5 Ohm x 1	
Auto Gain Control		Yes		
Time / Date	/ Date Yes		es	
On Screen Display		Ye	es	
Camera Title 8 Character Title		cter Title		
	2 x Zoom On Playback	Ye	es	
Display Format	QUAD	Yes		
	FULL	Yes		
	SEQUENCY	Yes		
Dwell Time		0 to 99 Sec Adjustable		
Built-in Buzzer		Yes		
Key Lock		Yes		

- For more details, please refer to Quad Display User Manual.
- Quad display input is not applicable for SP series.

9.7 DC Power Options

RP-615, RP-717, RP-819 & RP-920 SP-717, SP-819 & SP-920



RP-120 & SP-120 RP-115, RP-117, RP-119, SP-117 & SP-119 RP-1415, RP-1417 & RP-1419

DC Power input VGA

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

- Package does not include power cord and AC power adapter
- The depth of RP-1415 / 1417 / 1419 will be extended from 480mm (18.9") to 530mm (20.9")

10.1 LCD Specifications

RP-W719, RP-W822 & RP-W119

Item	Description				
LCD Manufacturer	SAMSUNG				
	RP-W119	RP-W119 RP-W719 RP-W822			
Diagonal Size	Wide 19" TFT	Wide 19" TFT	Wide 22" TFT		
Max. Resolution	1440 x 990	1440 x 990	1680 x 1050		
Brightness (cd/m²)	300	300	300		
Color Support	16.7 M	16.7 M	16.7 M		
Contrast Ratio (typ.)	1000:1	1000:1	1000:1		
Viewing Angle (H/V)	160° x 160°	160° x 160°	160° x 160°		
Display Area (mm)	408 x 255	408 x 255	474 x 296		
Tr Response Time (ms)	1.3 1.3 3.6				
LCD Panel MTBF (hrs)	50,000	50,000	50,000		
VGA Signal Input	Analog RGB, 0.7Vp-p				
Sync. Type	Separate H/V, Composite, SOG				
	720 x 400, 70 Hz				
	640 x 480, 60/ 70/ 72/ 75 Hz				
		800 x 600, 60/ 70/ 72/ 75 Hz			
Resolution	1024 x 768, 60/ 70/ 75 Hz				
Resolution					
	1280 x 720,	60/ 70/ 75 Hz	1280 x 720, 60/ 75 Hz		
	1280 x 1024, 60/ 70/ 75 Hz		1280 x 1024, 60/ 75 Hz		
	1440 x 900, 60 Hz 1680 x 1050, 60 Hz				
Plug & Play DDC	EDID 1.3				
Connector	DB-15 connector				
Power Input	Auto-sensing 100 to 240VAC, 50 / 60Hz				
Power Consumption	Max. 48 Watt, Standby 5 Watt				
Compatibility	Multi-platform - Mix PCs, SUNs, IBMs, HPs & DELLs.				

Options

Graphic Input	DVI-D, BNC, S-Video & Quad display input		
DC Power	DC power input with 12V, 24V, 48V selection		
Touchscreen	- Resistive & capacitive		
AU	35mm audio plug		
NEMA 4 / IP65	4mm thickness of protective glass		

Environmental

Operation	0° to 50°C Degree	
Storage	-5° to 60°C Degree	
Relative Humidity	5~90%, non-condensing	
Shock	10G acceleration (11ms duration)	
Vibration	5~500Hz 1G RMS random vibration	

10.1 LCD Specifications

RP-120 RP-1415, RP-1417 & RP-1419

RP-115, RP-117, RP-119 RP-615, RP-717, RP-819 & RP-920

Item		Description		
LCD Manufacturer	-	SAMSUNG		LG LG
Diagonal Size	15" TFT	17" TFT	19" TFT	20" TFT
Max. Resolution	1024 x 768	1280 x 1024	1280 x 1024	1600 x 1200
Brightness (cd/m²)	250	250	250	300
Color Support	16.2 M	16.7 M	16.7 M	16.7 M
Contrast Ratio (typ.)	700:1	1000:1	1000:1	800:1
Viewing Angle (H/V)	160° x 130°	160° x 160°	160° x 160°	178° x 178°
Display Area (mm)	304 x 228	338 x 270	376 x 301	408 x 306
Tr Response Time (ms)	5.7	1.3	1.3	7
LCD Panel MTBF (hrs)	30,000	50,000	50,000	45,000
VGA Signal Input	Analog RGB, 0.7Vp-p			
Sync. Type		Separate H/V, Co	omposite, SOG	
Resolution	1024 x 768, 60/ 70/ 72/ 75 Hz	720 x 400 640 x 480, 60/ 800 x 600, 60/ 1280 x 720,	70/ 72/ 75 Hz 70/ 72/ 75 Hz 1024 x 768, 60/ 70/ 1152 x 864, 60/ 70/	/ 75 Hz / 75 Hz / 75 Hz 1280 x 720, 60/ 75 Hz 1280 x 1024, 60/ 70/ 75 Hz 1400 x 1050, 60 Hz
Plug & Play DDC		- <u>1600 x 1200, 60 Hz</u> EDID 1.3		
Connector		DB-15 connector		
Power Input		Auto-sensing 100 to 240VAC, 50 / 60Hz		
Power Consumption		Max. 48 Watt, Standby 5 Watt		
Compatibility	Multi-	platform - Mix PCs, St		LLs.
Regulation Approval		FCC, CE		

Options

Graphic Input	DVI-D, BNC, S-Video & Quad display input		
DC Power	DC power input with 12V, 24V, 48V selection		
Touchscreen	Resistive & capacitive		
AU	35mm audio plug		
NEMA 4 / IP65	4mm thickness of protective glass		

Environmental

Operation	0° to 50°C Degree		
Storage	-5° to 60°C Degree		
Relative Humidity	5~90%, non-condensing		
Shock	10G acceleration (11ms duration)		
Vibration	5~500Hz 1G RMS random vibration		

10.1 LCD Specifications

SP-117 & SP-119

Chapter 10

SP-120 SP-717, SP-819 & SP-920

Item	Description				
Form Factor	1U rack mounting on slide-out rails				
Diagonal Size	17" TFT	17" TFT 19" TFT			
Resolution	1152 x 900 (Direct)	1152 x 900 (Direct)	1152 x 900 (Direct)		
Resolution	1280 x 1024 (Native)	1280 x 1024 (Native)	1600 x 1200 (Native)		
Brightness (cd/m²)	250	250	300		
Color Support	16.7 M	16.7 M	16.7 M		
Contrast Ratio (typ.)	1000:1	1000:1	800:1		
Viewing Angle (H/V)	160° x 160°	160° x 160°	178° x 178°		
Display Area (mm)	338 x 270	376 x 301	408 x 306		
Tr Response Time (ms)	1.3	1.3	7		
LCD Panel MTBF (hrs)	50,000	50,000	45,000		
VGA Signal Input	Analog RGB, 0.7Vp-p				
Sync. Type	Separate H/V, Composite, SOG				
	720 x 400, 70 Hz				
	640 x 480, 60 /70 /72 /75 Hz				
	800 x 600, 60 /70 /72 /75 Hz				
	1024 x 768, 60 /70 /75 Hz				
Resolution	1152 x 864, 60 /70 /75 Hz				
	1280 x 720,	1280 x 720, 60 /75 Hz			
	1280 x 1024, 60 /70 /72 /75 Hz		1280 x 1024, 60 /70 /75 Hz		
	-		1400 x 1050, 60 Hz		
		-	1600 x 1200, 60 Hz		
Plug & Play DDC	EDID 1.3				
Connector	DB-15 connector				
Power Input	Auto-sensing 100 to 240VAC, 50 / 60Hz				
Power Consumption	Max. 48 Watt, Standby 5 Watt				
Compatibility	Multi-platform - Mix PCs, SUNs, IBMs, HPs & DELLs.				
Regulation Approval	FCC, CE				

Options

Graphic Input	DVI-D input	
DC Power	DC power input with 12V, 24V, 48V selection	

Environmental

Operation	0° to 50°C Degree		
Storage	-5° to 60°C Degree		
Relative Humidity	5~90%, non-condensing		
Shock	10G acceleration (11ms duration)		
Vibration	5~500Hz 1G RMS random vibration		

11.1 Troubleshooting

Chapter 11

1. How do I adjust the resolution?

To change monitor resolution, click Start -> Control Panel -> Display. Select Setting tab to adjust the monitor resolution in Desktop Area. The available resolutions, "640 x 480", "800 x 600", "1024 x 768", "1152 x 864", "1280 x 1024", are determined by the display card in your computer.

2. Is interference signal appeared on LCD normal when shutting down the computer?

In rare cases, interference may appear on the monitor. This may be caused by signal rate of VGA card and is considered normal. The image quality can be improved by adjusting the phase or pixel rate automatically or manually.

3. The membrane power light is not ON

Press the power On / Off on LCD membrane to check if the monitor is in the ON mode. Check the power cord is properly connected to the LCD keyboard drawer and power outlet.

4. Screen image is not centered or sized properly

Press the houtton for two seconds to automatically adjust the image. Adjust the H-position and V-position settings via On-screen menu.

For SP series LCD Drawer

1. How can I adjust the monitor resolution to 1152 x 900 for SUN Micro system?

The S solution LCD drawer will automatically detect the 1152 x 900 resolution, so no user configuration should be necessary.

2. How do I adjust the resolution in MS Windows operation system?

To change monitor resolution, click Start -> Control Panel -> Display. Select Setting tab to adjust the monitor resolution in Desktop Area. The available resolutions, "640 x 480", "800 x 600", "1024 x 768", "1152 x 864", "1280 x 1024", are determined by the display card in your computer.

6. Is the LCD drawer hot-pluggable?

The LCD drawer is hot-pluggable, but components of connected devices, such as the servers and KVMs, may not be hot-pluggable. We suggest turning off the power to all devices before connecting them. Apply power to connected devices again only after the LCD receives power.

12.1 Dimensions Chapter 12

RP-W719, RP-W822 & RP-W119 RP-615, RP-717, RP-819 & RP-920 SP-717, SP-819 & SP-920

Model	Product Dimension (W x D x H)		Packing Dimension (W x D x H)	Net Weight	Gross Weight
RP-W719	480 x 57.5 mm 18.9 x 2.3"	7U	565 x 495 x 156 mm 22.2 x 19.5 x 6.1"	8 kg 18 lb	10 kg 22 lb
RP-W822	500.4 x 59.1 mm 19.7 x 2.3"	8U	565 x 539 x 156 mm 22.2 x 21.2 x 6.1"	12 kg 26 lb	15 kg 33 lb
RP-W119	442 x 650 x 44 mm 17.4 x 25.6 x 1.73"		581 x 755 x 172 mm 22.9 x 29.7 x 6.8"	13 kg 29 lb	18 kg 40 lb
RP-615 series	480 x 52 mm 18.9 x 2"	6U	565 x 406 x 156 mm 22.2 x 16 x 6.1"	6 kg 13 lb	8 kg 18 lb
RP-717 series	480 x 54 mm 18.9 x 2.1"	7U	565 x 450 x 156 mm 22.2 x 17.7 x 6.1"	7 kg 15 lb	8.5 kg 19 lb
RP-819 series	480 x 53 mm 18.9 x 2.1"	8U	565 x 495 x 156 mm 22.2 x 19.5 x 6.1"	8 kg 18 lb	10 kg 22 lb
RP-920 series	480 x 64 mm 18.9 x 2.5"	9U	565 x 539 x 156 mm 22.2 x 21.2 x 6.1"	12 kg 26 lb	15 kg 33 lb
SP-717 series	480 x 57 mm 18.9 x 2.2"	7U	565 x 450 x 156 mm 22.2 x 17.7 x 6.1"	7 kg 15 lb	8.5 kg 19 lb
SP-819 series	480 x 57 mm 18.9 x 2.2"	8U	565 x 495 x 156 mm 22.2 x 19.5 x 6.1"	8 kg 18 lb	10 kg 22 lb
SP-920 series	480 x 67 mm 18.9 x 2.6"	9U	565 x 539 x 156 mm 22.2 x 21.2 x 6.1"	12 kg 26 lb	15 kg 33 lb

12.1 Dimensions Chapter 12

RP-120 SP-120 RP-115, RP-117, RP-119 SP-117 & SP-119 RP-1415, RP-1417 & RP-1419

Model	Product Dimension (W x D x H)	Packing Dimension (W x D x H)	Net Weight	Gross Weight
RP-120 series	442 x 650 x 44 mm	581 x 755 x 172 mm	14 kg	19 kg
	17.4 x 25.6 x 1.73"	22.9 x 29.7 x 6.8"	31 lb	42 lb
SP-120 series	442 x 650 x 44 mm	581 x 755 x 172 mm	14 kg	19 kg
	17.4 x 25.6 x 1.73"	22.9 x 29.7 x 6.8"	31 lb	42 lb
RP115 series	442 x 550 x 44 mm	581 x 705 x 175 mm	10 kg	15 kg
	17.4 x 21.6 x 1.73"	22.9 x 27.8 x 6.9"	22 lb	33 lb
RP-117 series	446 x 600 x 44 mm	581 x 755 x 172 mm	12 kg	17 kg
	17.6 x 23.6 x 1.73"	22.9 x 29.7 x 6.8"	26 lb	37 lb
RP-119 series	446 x 600 x 44 mm	581 x 755 x 172 mm	13 kg	18 kg
	17.6 x 23.6 x 1.73"	22.9 x 29.7 x 6.8"	29 lb	40 lb
SP-117 series	446 x 600 x 44 mm	581 x 755 x 172 mm	12 kg	17 kg
	17.6 x 23.6 x 1.73"	22.9 x 29.7 x 6.8"	26 lb	37 lb
SP-119 series	442 x 600 x 44 mm	581 x 755 x 172 mm	13 kg	18 kg
	17.4 x 23.6 x 1.73"	22.9 x 29.7 x 6.8"	29 lb	40 lb
RP-1415 series	442 x 440 x 44 mm	584 x 601 x 169 mm	10 kg	15 kg
	17.4 x 17.3 x 1.73"	23 x 23.7 x 6.7"	22 lb	33 lb
RP-1417 series	446 x 480 x 44 mm	584 x 641 x 169 mm	12 kg	17 kg
	17.6 x 18.9 x 1.73"	23 x 25.2 x 6.7"	26 lb	37 lb
RP-1419 series	446 x 480 x 44 mm	584 x 641 x 169 mm	13 kg	18 kg
	17.6 x 18.9 x 1.73"	23 x 25.2 x 6.7"	29 lb	40 lb

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