

# Toll Free: 1-888-865-6888 Tel: 510-226-8368 Fax: 510-226-8968 Email: sales@RackmountMart.com

## User Manual 21.5" Full HD 1920 x 1080 LCD



## LCDR9U21-01 9U Rackmount Display Panel



Options : - DC power



#### Legal Information

First English printing, November 2020

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

#### Safety Instructions

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

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

#### What the warranty does not cover

- Any product, on which the serial number has been defaced, modified or removed.
- Damage, deterioration or malfunction resulting from:
  - Accident, misuse, neglect, fire, water, lightning, or other acts of nature, unauthorized product modification, or failure to follow instructions supplied with the product.
  - $\hfill\square$  Repair or attempted repair by anyone not authorized by us.
  - □ Any damage of the product due to shipment.
  - □ Removal or installation of the product.
  - $\hfill\square$  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.
  - $\hfill\square$  Any other causes which does not relate to a product defect.
- Removal, installation, and set-up service charges.

#### **Regulatory Notices Federal Communications Commission (FCC)**

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

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

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

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

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### **Before Installation**

- It is very important to mount the equipment in a suitable cabinet or on a stable surface.
- Make sure the place has a good ventilation, is out of direct sunlight, away from sources of excessive dust, dirt, heat, water, moisture and vibration.

#### Unpacking

The equipment comes with the standard parts shown in package content. Check and make sure they are included and in good condition. If anything is missing, or damaged, contact the supplier immediately.

#### How To Clean Your LCD Monitor

## A Caution :

- To avoid the risk of electric shock, make sure your hands are dry before unplugging your monitor from or plugging your monitor into an electrical outlet.
- When you clean your monitor, do not press down on the LCD screen. Pressing down on the screen can scratch or damage your display. Pressure damage is not covered under warranty.
- Use only cleansers made specifically for cleaning monitors and monitor screens. Cleansers not made to clean monitors and monitor screens can scratch the LCD display or strip off the finish.
- Do not spray any kind of liquid directly onto the screen or case of your monitor. Spraying liquids directly onto the screen or case can cause damage which is not covered under warranty.
- Do not use paper towels or abrasive pads to clean your monitor. Using an abrasive pad or any wood based paper product such as paper towels can scratch your LCD screen.

#### **Cleaning Your Monitor**

To clean your LCD safely, please follow these steps :

- ① Disconnect the power cord.
- ② Gently wipe the surface using a clean, dry microfiber cloth. Use as little pressure as possible.

#### **Cleaning Tough Marks and Smudges**

To remove tough marks and smudges, please follow these steps :

- ① Disconnect the power cord.
- 2 Spray a small amount of non-abrasive cleanser on a microfiber cloth.

Caution : Do not spray or apply any liquids directly onto the monitor. Always apply the solution to your microfiber cloth first, not directly on the parts you are cleaning.

- ③ Gently wipe the surface. Use as little pressure as possible.
- ④ Wait until your monitor is completely dry before plugging it in and powering it up.

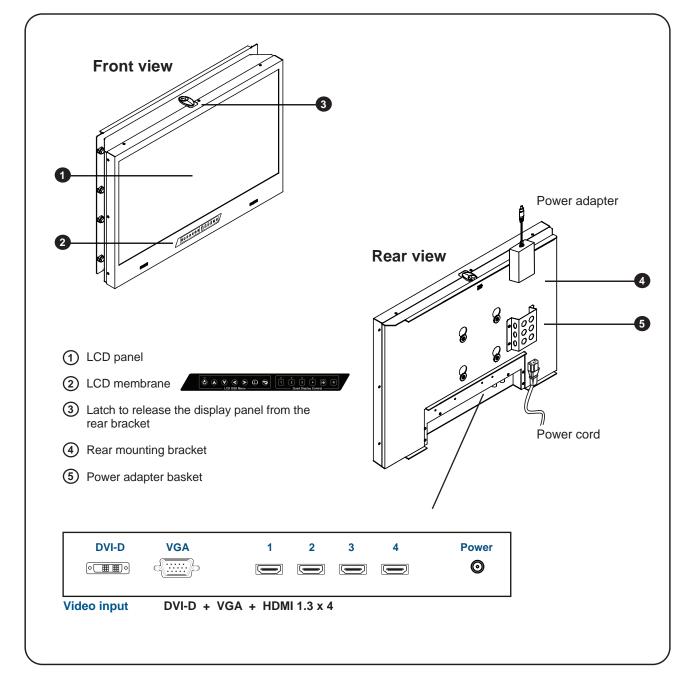
## < Part 1 > LCDR9U21-01 < 1.1 > Package Content



#### LCDR9U21-01 unit X 1

- 6ft VGA cable X 1
- Power adapter X 1
- Power cord X1
- Fastener screw for rear bracket x 2

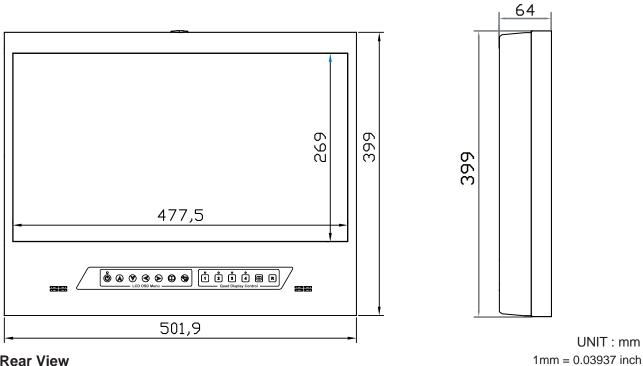
#### < 1.2 > Structure Diagram



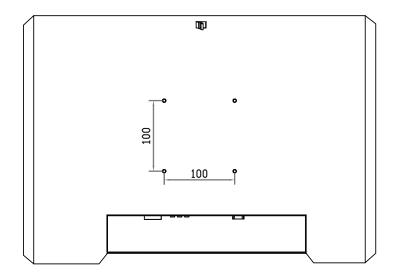
## < 1.2 > Dimension

#### **Front View**

**Side View** 



**Rear View** 

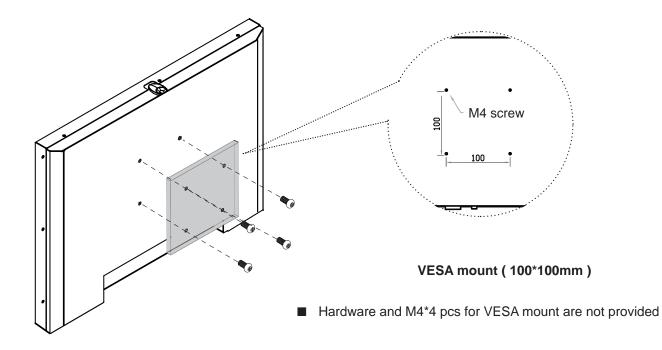


#### **Bottom View**

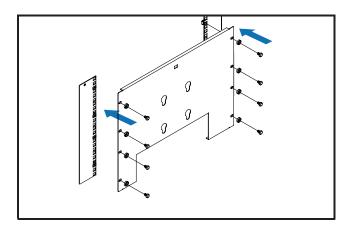


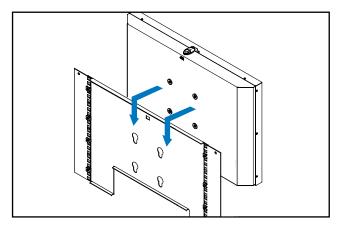
Model	Model Product Dimension (W x D x H)	
LCDR9U21-01	501.9 x 64 x 399 mm 19.8 x 2.5 x 15.7 inch	9.5 kg 20.9 lb

## < 1.3 > VESA mount Installation



## < 1.3 > Rear Mounting Bracket Installation





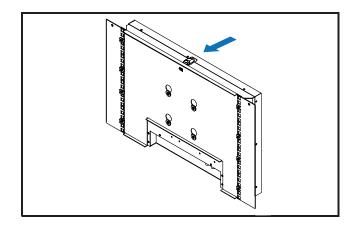


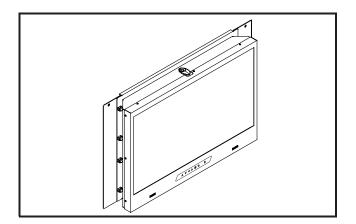
- Mount the rear bracket with M6 screw set.
- 8 x M6 screw set are required.

M6 screw sets are not provided.



Insert the RP-F821 display panel into the rear bracket.







■ Fix the unit to the bracket with the top latch.



## < Part 2 > Specifications / OSD / Remote Controller

## < 2.1 > Product Specifications

LCD Panel	
Panel Size ( diagonal )	21.5-inch Widescreen TFT color LCD
Native resolution	1920 x 1080
Brightness ( cd/m <sup>2</sup> )	250
Contrast Ratio ( typ. )	1000:1
Colors	16.7 M
Viewing Angle(L/R/U/D)	85/85/80/80
Response Time ( ms )	5
Dot pitch ( mm )	0.248
Display Area (mm)	476.64H x 268.11V
Surface treatment	Haze 25%, Hard-coating
Surface hardness	3H
Backlight Type	LED
MTBF(hrs)	30,000

Video	
VGA	Analog 0.7Vp-p
DVI	DVI-D single link
HDMI x 4	HDMI 1.3, CEA-861-D

Mounting	
Rackmount	9U
VSEA mount	100 x 100 mm

Power	Standard
Input	Auto-sensing 100 to 240VAC, 50 / 60Hz
Consumption:	
Screen ON	Max. 28W
Power saving mode	Max. 2W
Power button OFF	Max. 1W

Compliance	
EMC	FCC & CE certified
Safety	CE / LVD certified
Environment	RoHS3 & REACH compliant

Environmental Conditions			
Operating	Temperature	0 to 55°C degree	
	Humidity	20~90%, non-condensing	
	Altitude	16,000 ft	
Storage / Non-operating	Temperature	-20 to 60°C degree	
	Humidity	5~90%, non-condensing	
	Altitude	40,000 ft	
	Shock	10G acceleration (11ms duration)	
	Vibration	10~300Hz 0.5G RMS random vibration	

Physical Specification	
Product(W x D x H)	
   mm	501.9 x 64 x 399 mm
inch	19.8 x 2.5 x 15.7 inch
Net Weight	9.5 kg / 20.9 lb

\* All dimensions stated are subject to change if options are selected / integrated to base model part codes

Applicable Format				
DVI-D / VGA Input	PC Signal	1920 x 1080 x 60Hz		
		1360 x 768 x 60Hz		
		1280 x 1024 x 60 / 75Hz		
		1280 x 960 x 60Hz		
		1280 x 768 x 60 / 75Hz		
		1152 x 864 x 75Hz		
		1024 x 768 x 60 / 70 / 75Hz		
		848 x 480 x 60Hz		
		800 x 600 x 60 / 72 / 75Hz		
		720 x 400 x 70Hz		
		640 x 480 x 60 / 72 / 75Hz		
		640 x 400 x 70Hz		
		640 x 350 x 70Hz		
HDMI Input *	PC Signal	Same as VGA		
	HDMI 1.3	1920 x 1080 x 50 / 60Hz ( 1080p )		
		1920 x 1080 x 25 / 30Hz ( 1080i )		
		1280 x 720 x 50 / 60Hz ( 720p )		
		720 x 480 x 50 / 60Hz ( 576p / 480p )		
	Audio Signal	2ch Linear PCM		

\* In some circumstances, if the user connects the LCD to PC via HDMI port for video and audio signals, the LCD may display incorrectly on a full screen. If so, please adjust the display card setting on display size to fix the issue.

## < Part 3 > Quad Display Connection & Operation < 3.1 > LQD-1080 Operation

			) () Menu		° ° ° ° 1 2 3 4 Quad Display Cor	ntrol R
					<u>(</u> )	23
1	1	2	3	4	Press this button to full screen	o select specific input to be displayed in

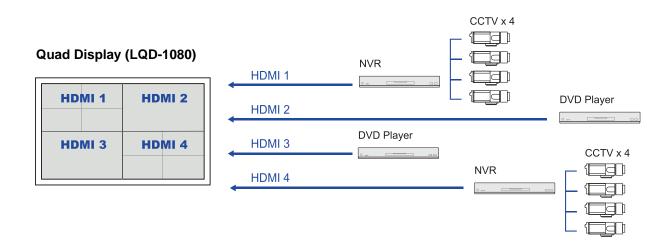
Press this button to switch between Quad/ Full Screen display mode

**R** Press this button to select the HDMI output resolution

2

3

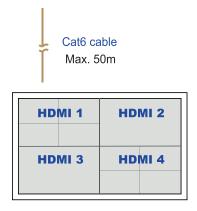
### < 3.2 > LQD-1080 Connection



Quad Display (LQD-1080)

	Quad Display			
Extend	4	3	2	1
				()))))))))))))))))))))))))))))))))))))
	HDMI 4	HDMI 3	HDMI 2	HDMI 1

#### Extension Module (LQD-E1080)



Extension Module (LQD-E1080)

## < 3.3 > LQD-1080 Specification

ltem		Description			
Video Bandwith		2.25 Gbps			
Input Port		HDMI x 4			
Output Port		HDMI x 1			
Output Port Option		UTP x 1			
Input Resolution		480i 60Hz,	1080i 50/60Hz,		
		480p 60Hz,	800x600 @60,		
		576i 50Hz,	1024x768 @60,		
		576p 50Hz,	1280x720 @60,		
		720p 50/60Hz,	1920x1080 @60;		
		1080p 24/30/50/60Hz			
Output Resolution		1080p	1024x768		
		1080i	1360x768		
		720p			
Audio Output		PCM2, 5.1, 7.1CH, Dolby 5.1, DTS5.1			
ESD Protection	Human Body model	±8 kV (air-gap discharge) ±4 kV (contact discharge)			

## < Part 4 > Options < 4.1 > Options : DC Power



Model	12V	24V	48V	125V
Input rating				
Input voltage:	12-Volt	24-Volt	48-Volt	110-Volt
Input range:	9 ~ 18V	18 ~ 36V	36 ~ 75V	66 ~ 160V
Input current				
- No load	50 mA	50 mA	50 mA	35 mA
- Full load	4950 mA	2450 mA	1220 mA	749 mA
Output rating				
Output voltage:	12-Volt	12-Volt	12-Volt	12-Volt
Output current:	4.16A	4.16A	4.16A	6.25A
Efficiency	84%	85%	85%	91%

#### **\*\*\*** For DC power option :

(1) If the unit with LCD, earthing may be required



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