User Manual

nVent
SCHROFF

1080p Full HD

1U Ultra short depth LCD Console Drawer

**Ultra short depth
400mm / 15.7"**

Options :
- SDI
- HDMI
- DC power

FC CE RoHS REACH

Item Number 60118-599

Legal Information

First English printing, March 2019

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 40º Celsius (104º 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.
  - 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.

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.

Contents

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

⚠️ **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.

Package Content

- CX-6 6ft DVI-D console cable X 1
  (Alternative : CB-6 6ft VGA console cable)
- 2.5A Power adapter & Power cord X 1
- M6 screw, cage nut & cup washer X 8

Structure Diagram
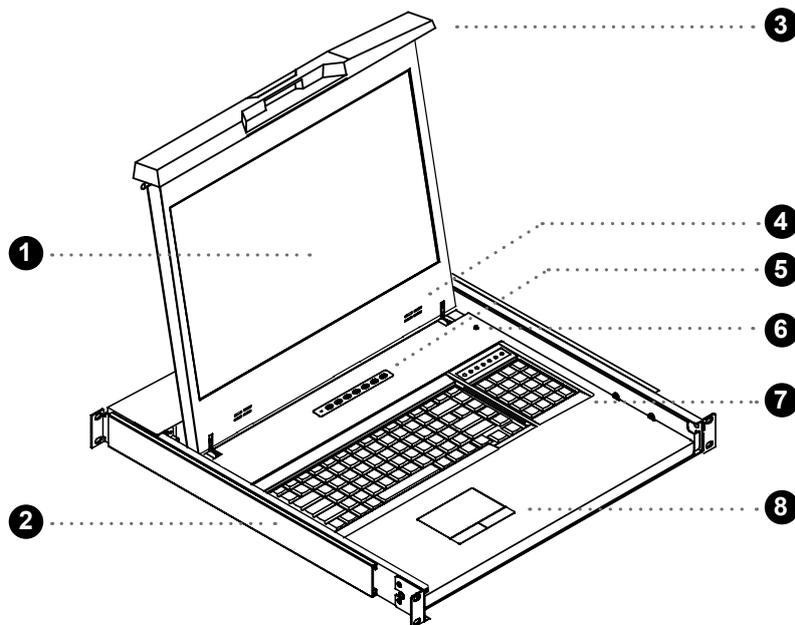
① LCD interchangeable module kit	⑤ LCD membrane
② Installation Slides	⑥ Micro switch for screen auto power off
③ Molded front handle	⑦ Keyboard interchangeable module kit
④ Audio speaker (for SDI or HDMI option)	⑧ Mouse interchangeable module kit

⚠ **The above package content is only for the single console models.**
**It varies with options such as KVM, SDI, HDMI, Touchscreen & DC power.**

Dimension

Front View

1U

441.6
19"Rackmount

Rear View

DVI-D   VGA   Power

UNIT : mm
1mm = 0.03937 inch

Side View

21.4

1U

400

Top View

441.6

400
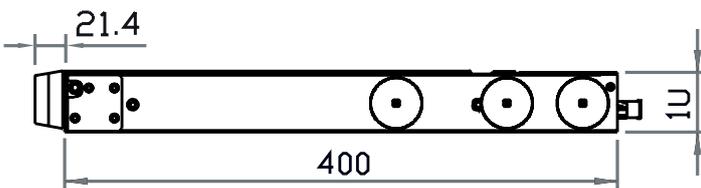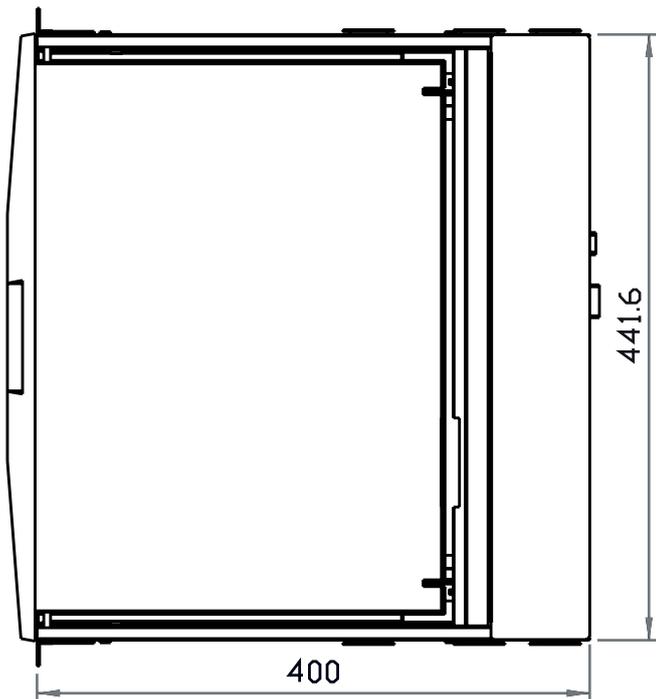
| Model	Product Dimension (W x D x H)	Packing Dimension (W x D x H)	Net Weight	Gross Weight
60118583 60118584 60118585	441.6 x 400 x 44 mm 17.4 x 15.7 x 1.73"	590 x 622 x 140 mm 23.2 x 24.5 x 5.5"	8.6 kg 18.9 lb	13.6 kg 29.9 lb

⚠️ **The weight is only for the single console models. It varies with accessories & options such as KVM, SDI, HDMI & DC power.**

Installation - Installation Slides
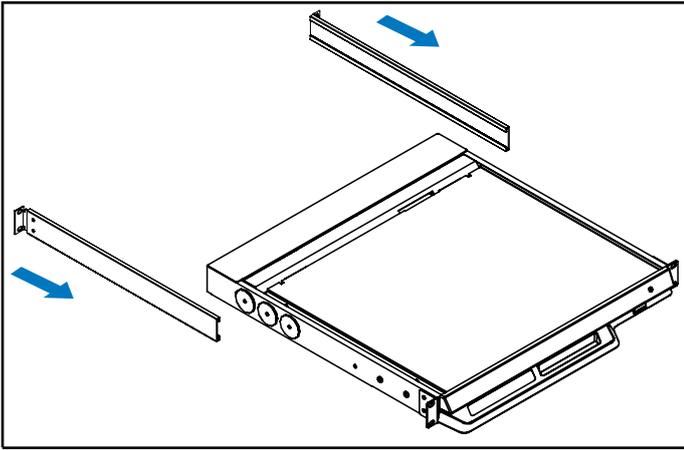

Step 1
- **Insert the left and right rear mounting brackets into the LCD console drawer.**
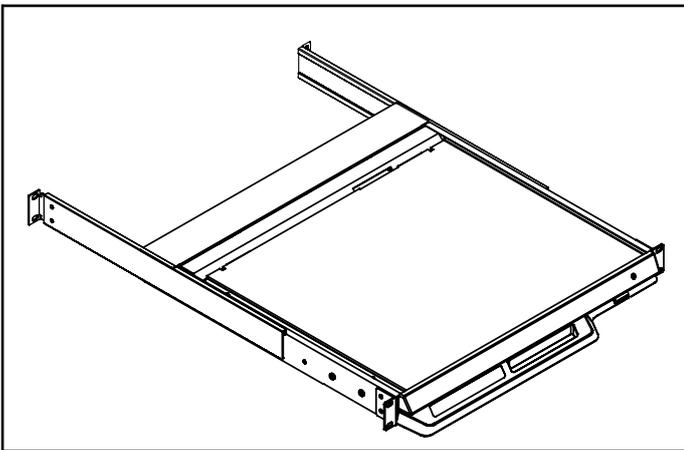
Step 2

- **Measure the depth of the front and rear mounting rails.**
- **Align each rear mounting bracket to a suitable length.**
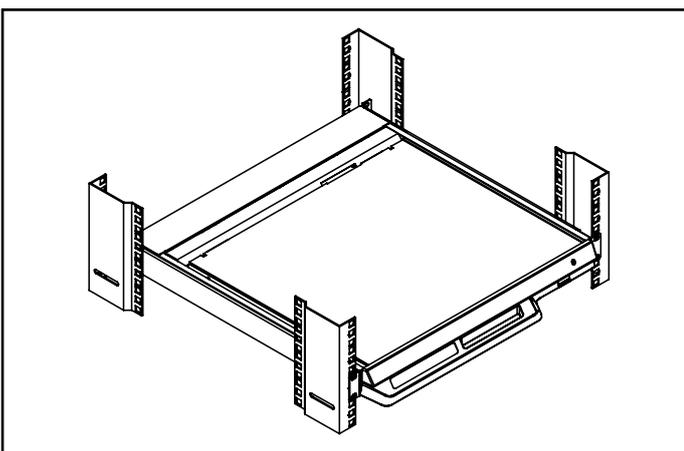
Step 3

Complete the installation

- **Fix the LCD console drawer into the rack.**

⚠️ **M6 screw, cage nut & cup washer x 8 are provided.**

Installation - How to use the drawer



- • **Press the handle button and gently slide out the drawer.**


- • **Flip up the LCD to a suitable angle.**
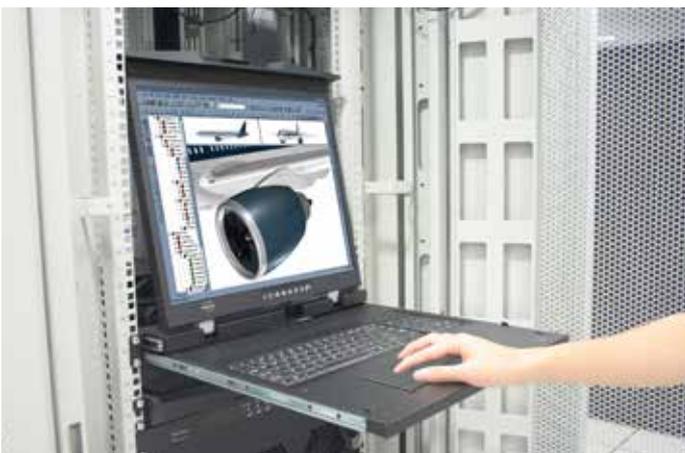
- • **Operate the LCD console drawer.**

Connection to USB Server via CX-6 cable

LCD Console Drawer

Power   KVM   DVI-D

CX-6 DVI-D console cable

USB   **DVI-D**

USB server
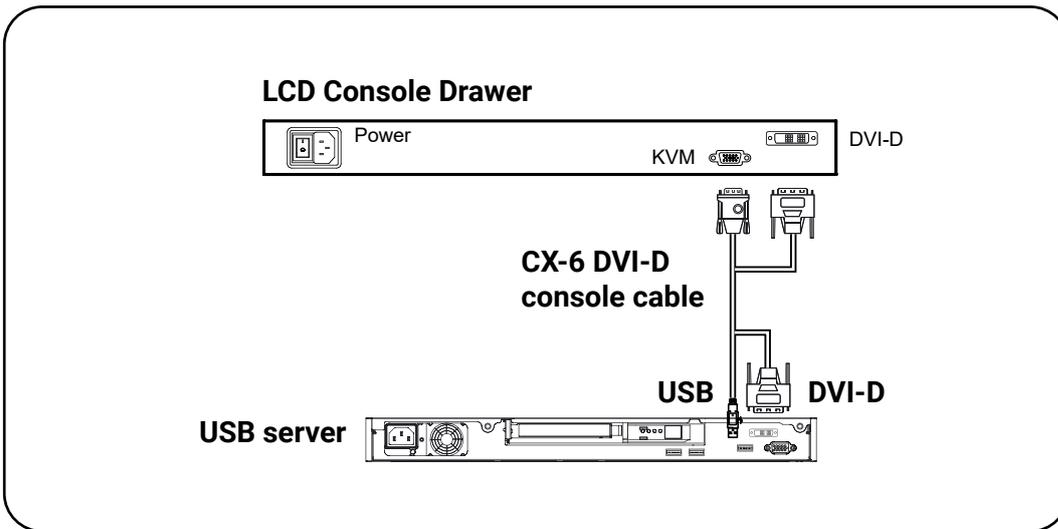
*Monitor keyboard screen in external power

Connection to external KVM via CX-6 cable
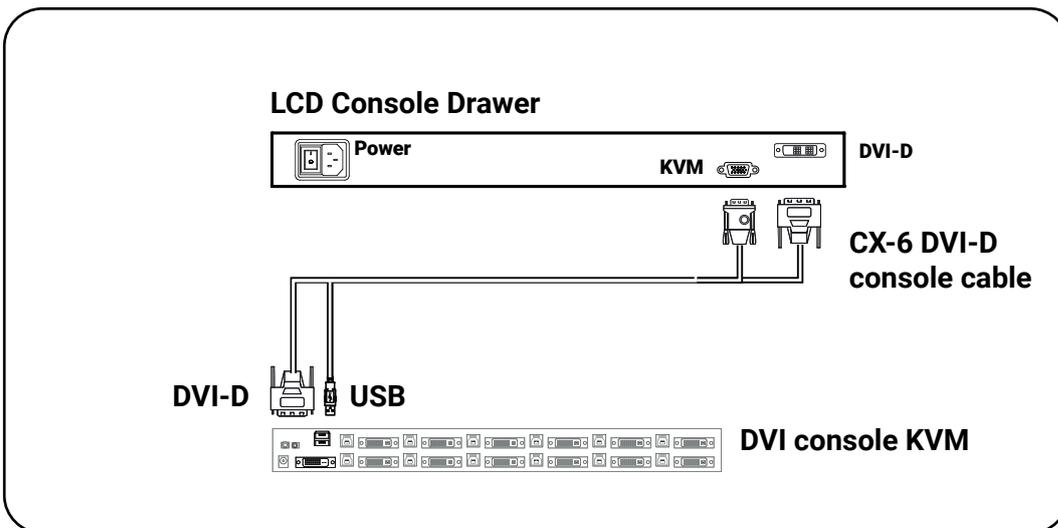
LCD Console Drawer

Power   **KVM**   **DVI-D**

CX-6 DVI-D console cable

DVI-D   **USB**

DVI console KVM

*Monitor keyboard screen in external power

Caution : The LCD console drawer is 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 to the servers, KVM and LCD console drawer. Before attempting to connect anything to the LCD console drawer, we suggest turning off the power to all devices. Apply power to connected devices again only after the LCD console drawer is receiving power. The company is not responsible for damage caused in this way.

Connection to USB Server via CB-6 cable

LCD Console Drawer

KVM   DVI-D

**CB-6 VGA
console cable**

USB   **VGA**

USB server
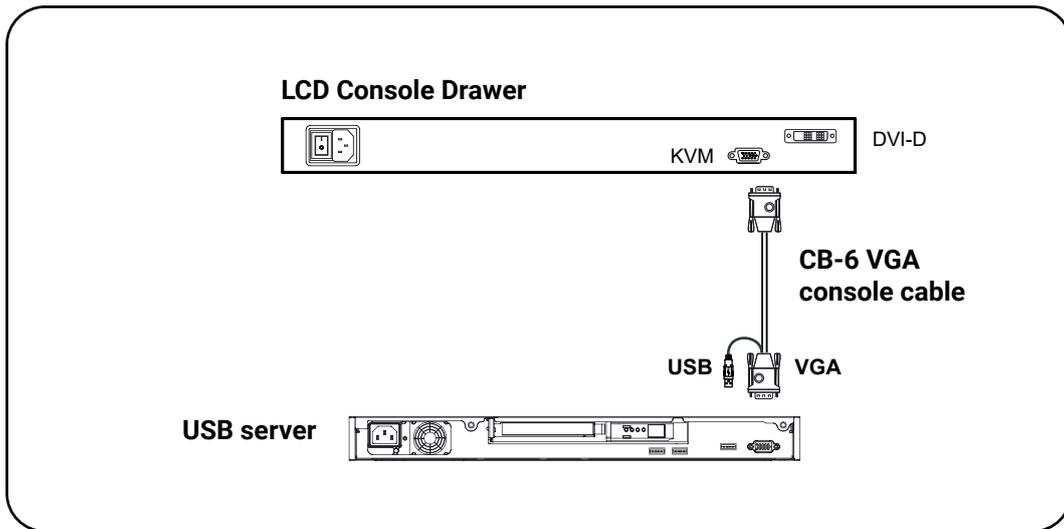
*Monitor keyboard screen in external power

Connection to external KVM via CB-6 cable
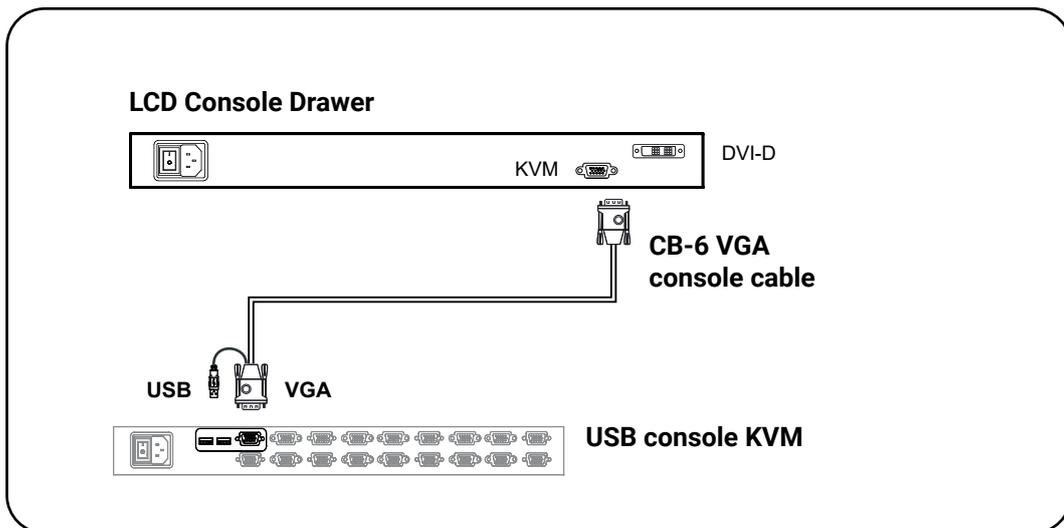
LCD Console Drawer

KVM   DVI-D

**CB-6 VGA
console cable**

USB   **VGA**

USB console KVM

*Monitor keyboard screen in external power

Caution : **The LCD console drawer is 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 to the servers, KVM and LCD console drawer. Before attempting to connect anything to the LCD console drawer, we suggest turning off the power to all devices. Apply power to connected devices again only after the LCD console drawer is receiving power. The company is not responsible for damage caused in this way.**

Product Specifications

LCD Panel		60118583, 60118584, 60118585
	Native Resolution	1920 x 1080
	Panel Size (diagonal)	17.3"
	Brightness (cd/m²)	400
	Contrast Ratio (typ.)	600:1
	Colors	16.7 M, 8-bit
	Viewing Angle (L/R/U/D)	80/80/60/80
	Response Time (ms)	5.5
	Dot pitch (mm)	0.1989
	Display Area (mm)	381.888H x 214.812V
	Surface treatment	Anti-glare, Hard-coating
	Surface hardness	3H
	Backlight Type	LED
	MTBF (hrs)	50,000

Video			
	Digital	HDMI	HDMI 1.4 / HDCP 1.4
		DVI-D	DVI-D, TMDS single link
	Analog	VGA	Analog 0.7Vp-p
	Plug & Play	DVI / VGA	VESA EDID structure 1.3
	Synchronization	VGA	Separate, Composite & SOG

Power			
	Power Supply	Range	Auto-sensing 100 to 240VAC, 50 / 60Hz
	Power Consumption for Single Console	Screen ON	Max. 25W
		Power saving mode	Max. 4W
		Power button OFF	Max. 1W
	Power Consumption with KVM integration	Screen ON	Max. 55W
		Power saving mode	Max. 34W

*For details, please refer to our KVM rear kit user manuals

Compliance		
	EMC	FCC & CE certified
	Safety	CE / LVD certified
	Environment	RoHS2 & 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

Physical Specification		60118583, 60118584, 60118585
	Product (W x D x H)	441.6 x 400 x 44 mm
		17.4 x 15.7 x 1.73 inch
	Packing (W x D x H)	590 x 622 x 140 mm
		23.2 x 24.5 x 5.5 inch
	Net Weight	8.6 kg / 18.9 lb
	Gross Weight	13.6 kg / 29.9 lb

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
		Audio Signal	2ch Linear PCM
	HDMI Input	PC Signal	Same as VGA
		HDMI 1.4	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
or video and audio signals, the LCD may dsplay incorectly on a full screen.
If so, please adjust the display card setting on display size to fix the issue.

Standard Keyboard / Mouse Specifications

Ge	G keyboard integrated with touchpad
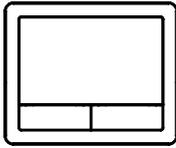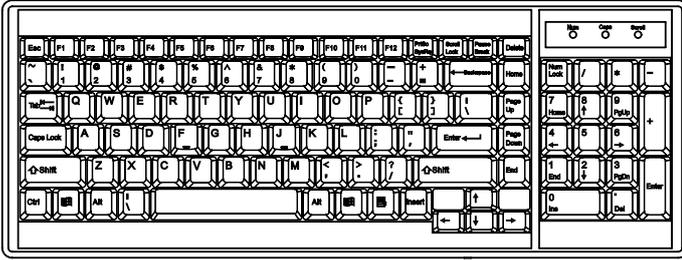
Gb	G keyboard integrated with trackball
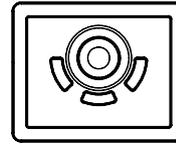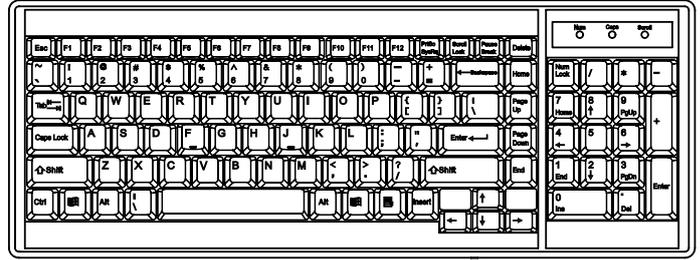
Key force	55 ± 5g
Travelling distance	3 ± 0.3mm
Switch life	> 10 million life cycle time
OS support	Windows / Linux / Unix / Mac OS

Supporting layouts

America				
United States				

EMEA				
United Kingdom	Germany	France	Spain	Norway
Italy	Russia	Switzerland	Netherlands	Portugal

Asia				
China	Japan	Korea	Arabia	Turkey

*English, German and French as standard. Other layouts on request.

MAC Keyboard/Mouse Options

**Me**   **MAC keyboard integrated with touchpad**
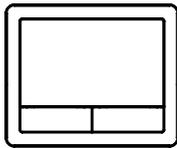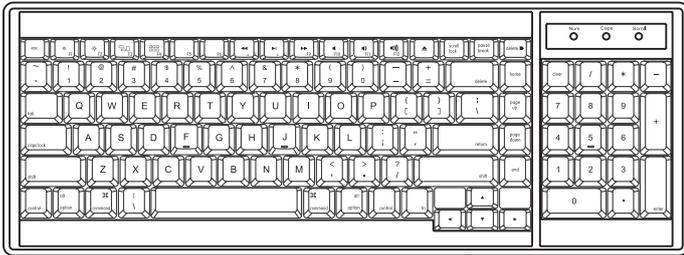
Mb   **MAC keyboard integrated with trackball**
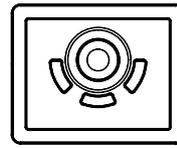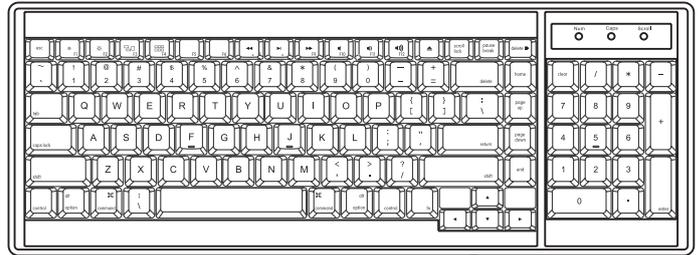
Supporting layouts

America

United States

English, German and French as standard. Other layouts on request.

How to Use "MAC" Keyboard

Keyboard Features

F1
Decrease display brightness
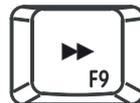
F9
Fast-forward

F2
Increase display brightness

F10
Mute sound
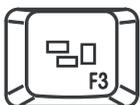
F3
Mission control
* Only works with OS X Lion
  default Keyboard Shortcuts.

F11
Decrease volume

F4
Dashboard

F12
Increase volume

F7
Rewind
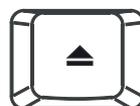
Eject disc

F8
Play / Pause

Command

SUN Keyboard/Mouse Options

| Se | S keyboard integrated with touchpad | Sb | S keyboard integrated with trackball |
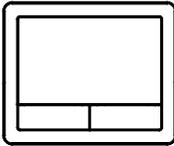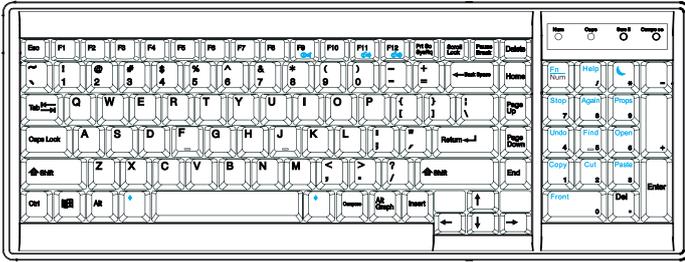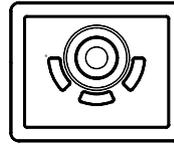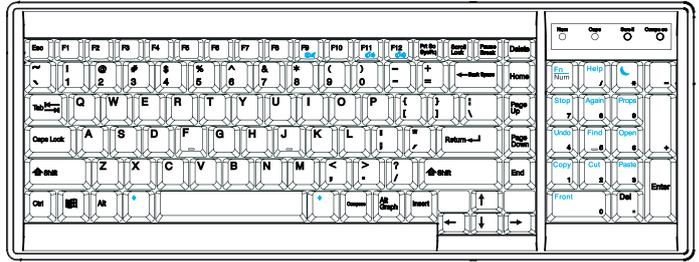
S keyboard integrated with touchpad / trackball

- ■ Incorporates SUN keys, including Stop, Cut, Paste, Compose, Copy and Help
- ■ 104 key notepad keyboard with full numerical pad and SUN function
- ■ USB interface
- ■ US layout only

How to Use "S" Keyboard
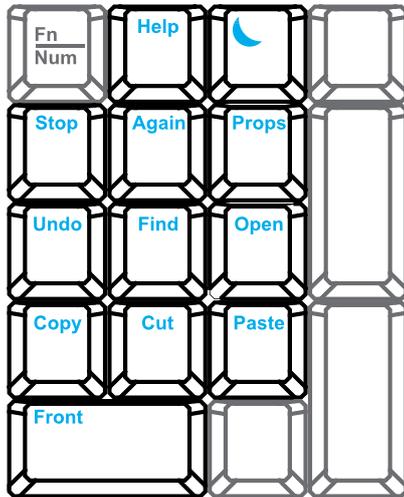
Num LED in Off mode
Key pad behaves as a SUN Solar system administration command mode
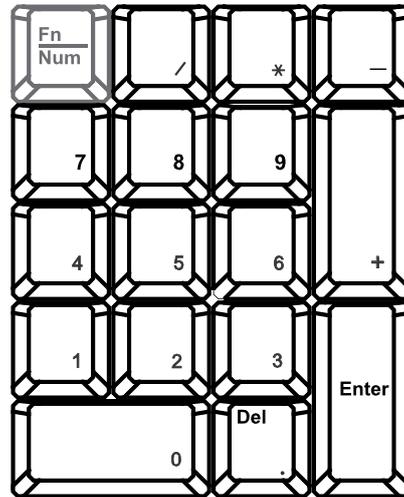
Num LED in Green mode
Key pad behaves as a normal key pad mode

Audio / Display Keys   * Please ask your supplier for full details
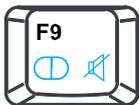
**F9**
Audio : Mute
Display : Degauss

F11
Audio : Decrease volume
Display : Decrease contrast

F12
Audio : Increase volume
Display : Increase contrast

On-screen Display Operation (OSD)

○ Power light
● Green = On
● Orange = Power saving
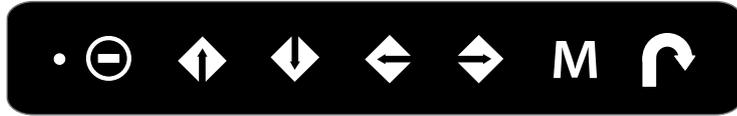
Membrane Switch	Function
⊖	Power on / off LCD
M	Display the OSD menu
⬆ ⬇ ⬅ ➡	Scrolls through menu options and adjusts the displayed control (To auto adjustment by pressing the button ⬆ for 5 seconds)
↱	Exit the OSD screen Toggle analog, digital & video connection (DVI-D and video options only)

On-screen Display Operation (OSD)

① Picture

Picture mode :	Standard / Vivid / Soft / User mode to choose
Brightness :	Adjust background black level of the screen image
Contrast :	Adjust the difference between the image background (black level) and the foreground (white level)
Hue:	Adjust the screen hue value
Saturation :	Adjust the saturation of the image color
Picture size :	Adjust the image size
Color temp :	Standard / Cool / Warm / User to choose
Noise reduce :	Reduce the noise of the image
Sharpness :	Adjust the image from weak to sharp

Picture

Picture mode
Brightness
Contrast
Hue
Saturation
Picture size
Color temp
Noise reduce
Sharpness
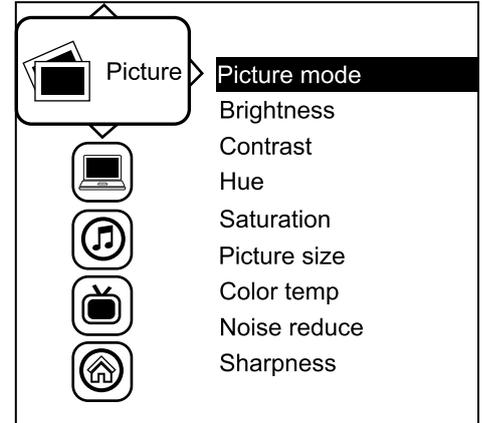
② PC

|	
Auto adjust :	Automatically adjust sizes, centers and fine tunes the video signal to eliminate waviness and distortion.
Clock :	Adjust the clock value
Phase :	Adjust the phase value
H. Position :	Align the screen image left or right
V. Position :	Align the screen image up or down

PC

Auto adjust
Clock
Phase
H positive
V positive
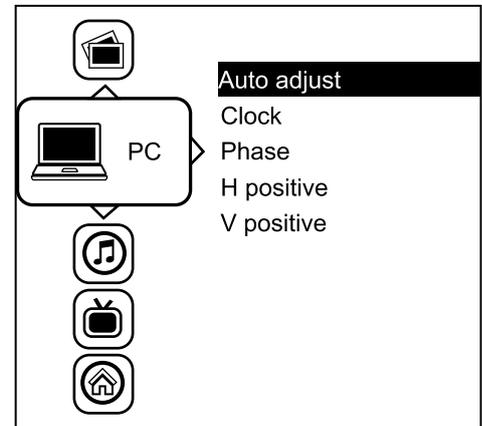
③ Audio

|	
Audio mode :	Movie / Voice / Normal / Music mode to choose
Volume :	Adjust the volume of sound
Bass :	Set the value of bass sound
Treble :	Set the value of treble sound
Balance :	Set the balance value of treble and bass sound
Analog TV audio :	Set the value of analog TV audio sound
Mute :	Turn off the surrounding sound

Audio

Audio mode
Volume
Audio track
Bass
Treble
Balance
Analog TV audio
Mute
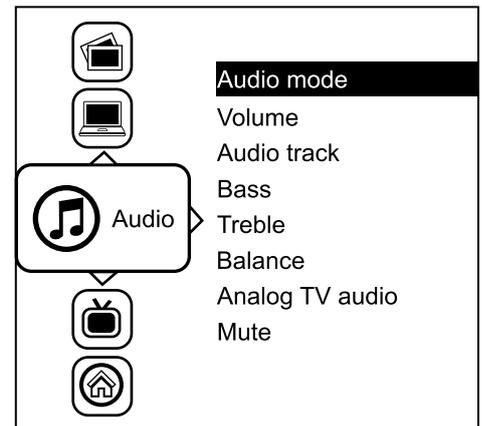
④ MISC

|	
Language :	Select the language in which the OSD menu is displayed - English
Sleep timer :	Set the off time
PIP mode :	Adjust picture in picture setting
PIP position :	Enter into PIP position
PIP source :	Enter into the Sub source and sound source
System reset :	Return the adjustment back to factory setting
Information :	Select for Help

MISC

Language
Sleep timer
PIP mode
PIP position
PIP source
System reset
Information
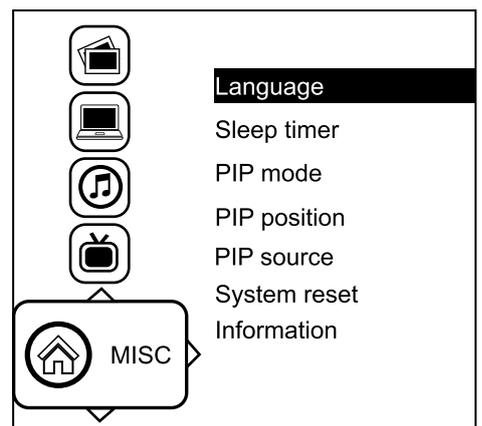
Options:

- HDMI 1.4   (HDCP 1.4)

⚠️

(1) 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.

HDMI   🔲   Power

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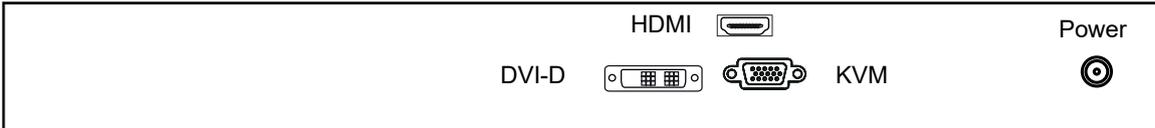
Options : DC Power
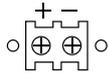
| Model	12V	24V	48V	125V
Input rating				
Input voltage:	12-Volt	24-Volt	48-Volt	110-Volt
Input range:	9 ~ 18V	18 ~ 36V	36 ~ 75V	66 ~ 160V
Input current				
- No load	50 mA	50 mA	50 mA	35 mA
- Full load	4950 mA	2450 mA	1220 mA	749 mA
Output rating				
Output voltage:	12-Volt	12-Volt	12-Volt	12-Volt
Output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

DC power

DVI-D   KVM
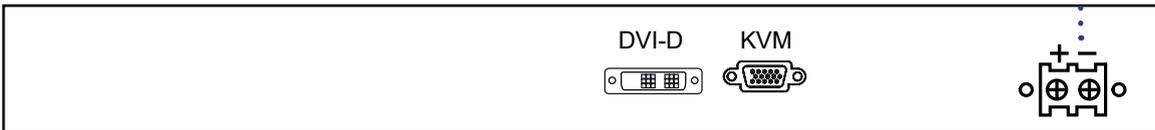
*** **For DC power option :**

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

(2) DC option excludes AC power adapter and power cord.

**(3) F1417 chassis extension in depth to 490mm (19.3")**

## Options: ORB-2.1 - 2-Post Rack Mounting Brackets
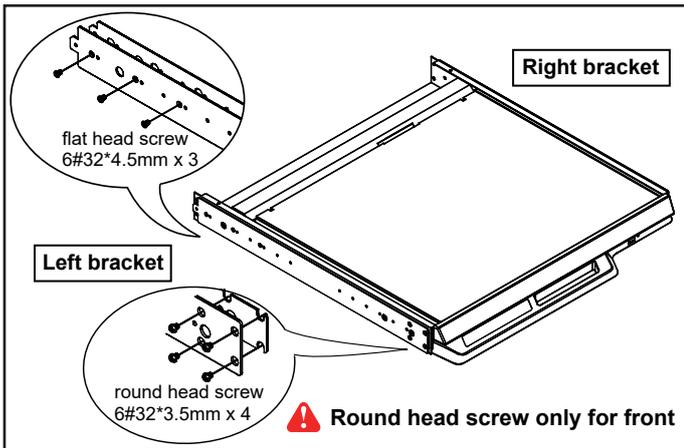
Step 1

- Before apply 2-post rack brackets, please release front mounting ears and rear mounting wheels.

- Attach | left and right mounting brackets | to the drawer with the screws below :

   6#32*3.5 mm screw x 8 (only for front)
   6#32*4.5 mm screw x 6 (only for rear)
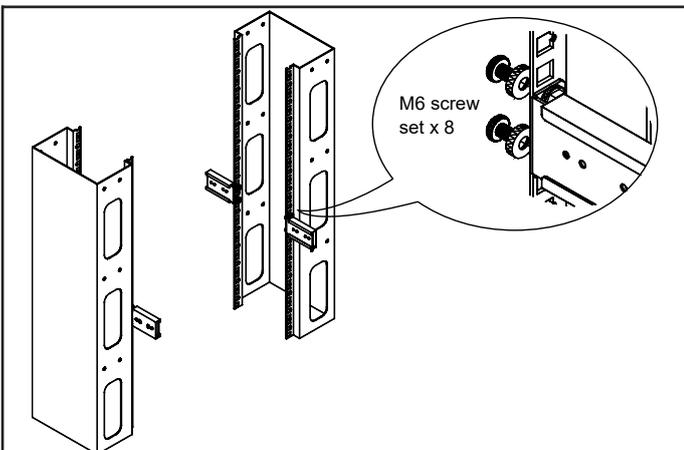
Step 2

- Attach the set of 4 mini brackets to the 2-post rack.

- M6 screw set is not provided.
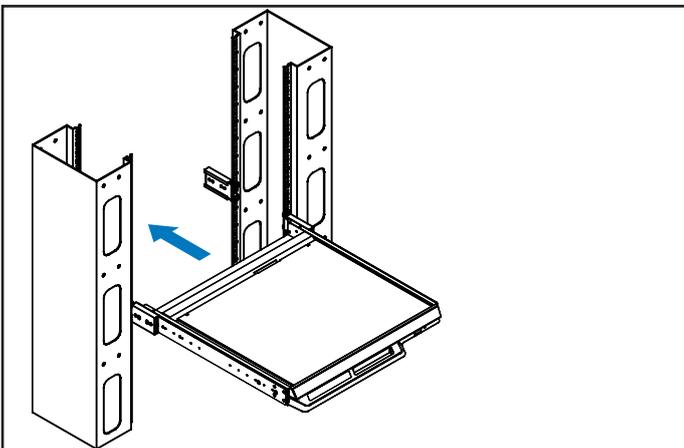
Step 3

- Insert the drawer into the mini brackets.
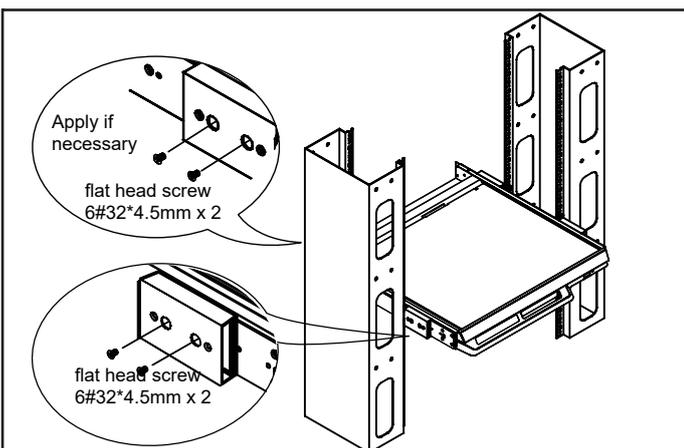
Step 4

- Fix the LCD console drawer to the mini brackets with 6#32*4.5 mm screw x 8.

- Installation completed

⚠ **This step is necessary for front.**
Failure to complete this will cause damage.

Notes

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