CyberView™

ECLIPSE RACKMOUNT
INDUSTRIAL RACKMOUNT PROFESSIONALS

User Manual

ERFS Series
1U Sun-Specific 1080p 17" LCD KBD Drawer

Options Available:
- SDI
- Audio
- DC Power

1080p Full HD

FC CE

Designed/Manufactured by Austin Hughes and Distributed by Eclipse Rackmount, Inc.

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
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, f re or electrical shock.
- Only qualif ed 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 qualif ed service personnel.

What the warranty does not cover

- Any product, on which the serial number has been defaced, modif ed or removed.
- Damage, deterioration or malfunction resulting from:
  - ☐ Accident, misuse, neglect, f re, water, lightning, or other acts of nature, unauthorized product modif cation, 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 f uctuation or failure.
  - ☐ Use of supplies or parts not meeting our specif cations.
  - ☐ 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 modif cations 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

Contents

< Part. 4 > Integrated KVM

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 specif cally for cleaning monitors and monitor screens. Cleansers not made to clean monitors and monitor screens can scratch the LCD display or strip off the f nish.

■ 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 microf ber 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 microf ber cloth.

⚠️ **Caution : Do not spray or apply any liquids directly onto the monitor. Always apply the solution to your microf ber cloth f rst, 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 >
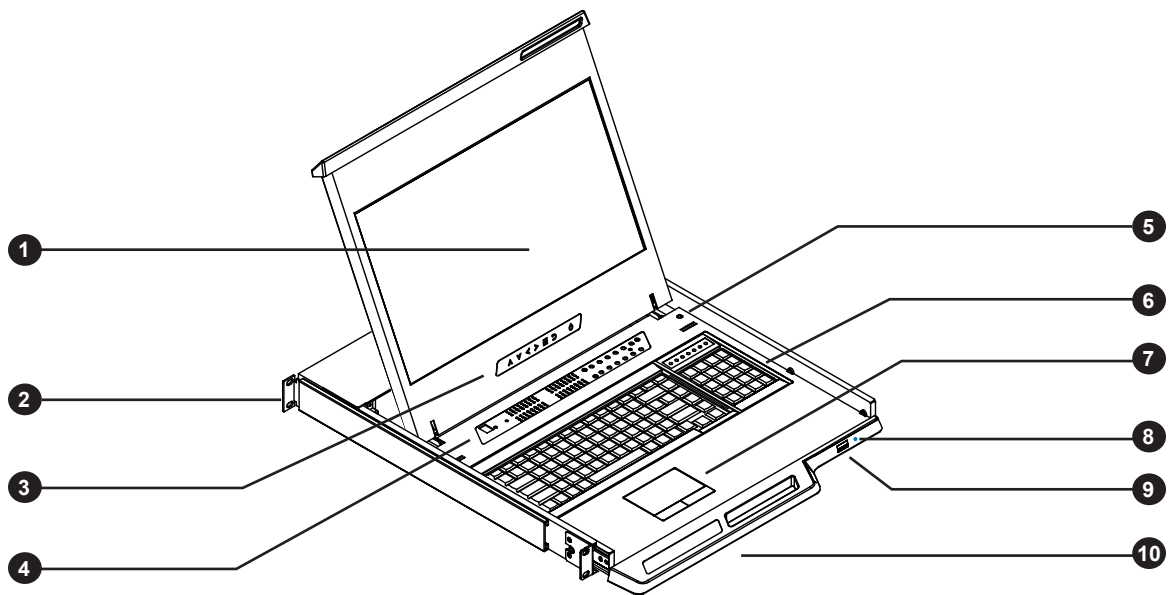## < 1.1 > Package Contents

ERFS-17 unit X 1
- CAX-6 6ft DVI-D console cable X 1
   (Alternative : CAU-6 6ft VGA console cable)
- Power cord X 1
- M6 screw, cage nut & cup washer X 8

⚠️

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

< 1.2 > Structure Diagram

① LCD interchangeable module kit

② Installation Slides

③ LCD membrane   `∧ ∨ < > ⊞ ↺   ⏻`

④ Membrane switch (KVM option)

⑤ Micro switch for screen auto power off
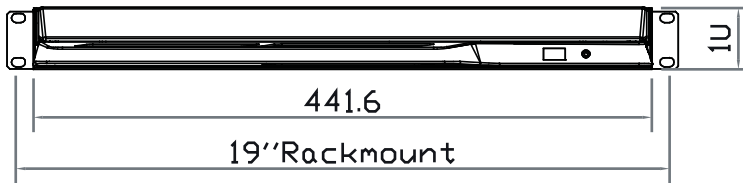
⑥ Keyboard interchangeable module kit

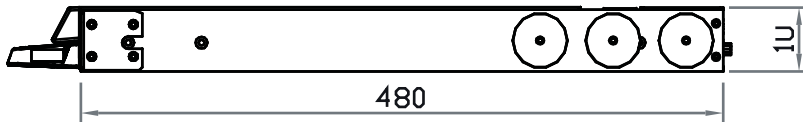⑦ Mouse interchangeable module kit

⑧ Blue Power LED

⑨ Front USB port for device access (USB Hub KVM only)
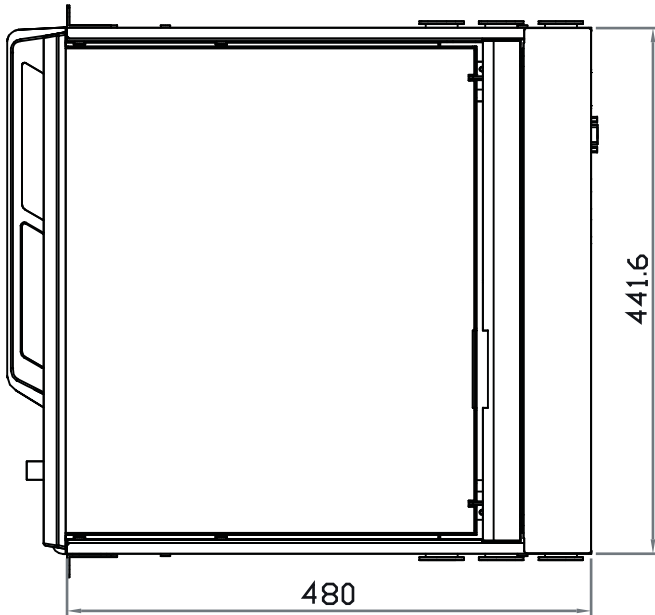
⑩ Molded front handle

< 1.2 > Dimensions

Front View

441.6

19"Rackmount

1U

Side View

UNIT : mm
1mm = 0.03937 inch

480

1U

Top View

441.6

480

| Model	Product Dimension (W x D x H)	Packing Dimension (W x D x H)	Net Weight	Gross Weight
ERFS-17	441.6 x 480 x 44 mm 17.4 x 18.9 x 1.73"	590 x 768 x 140 mm 23.2 x 30.2 x 5.5"	10.8 kg 23.8 lb	15.8 kg 34.8 lb

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

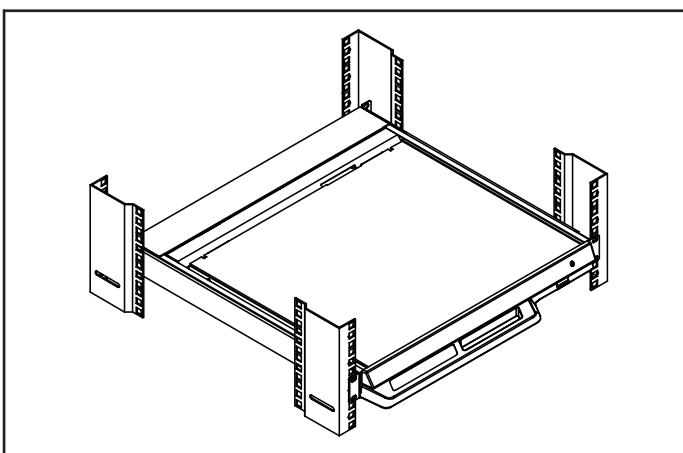## < 1.3 > Installation - How to install │ Installation Slides
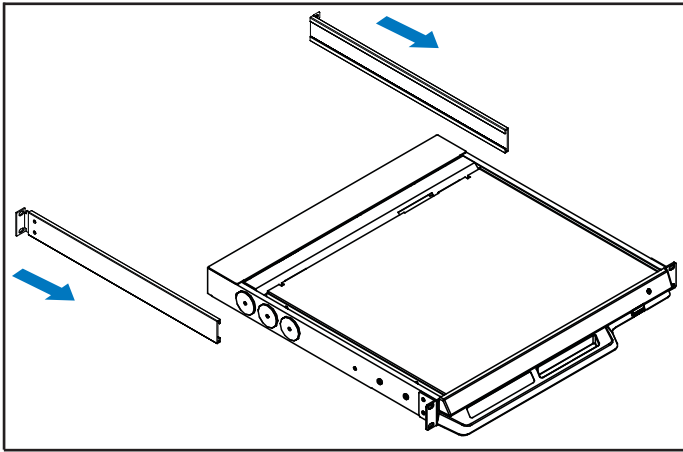
Step **1**

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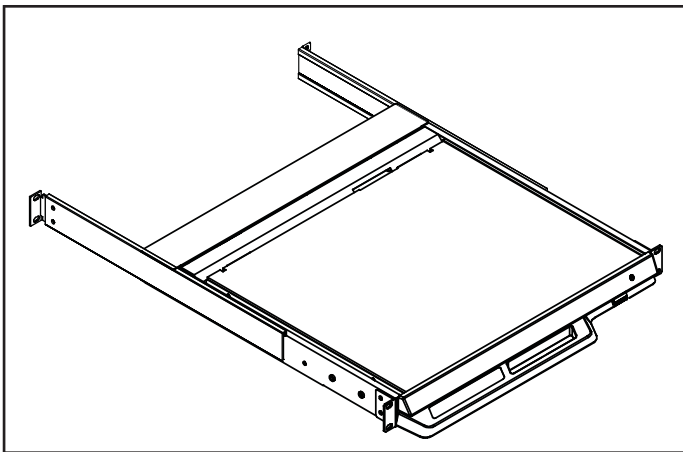
Step **2**

■ Measure the depth of the front and rear mounting rails.

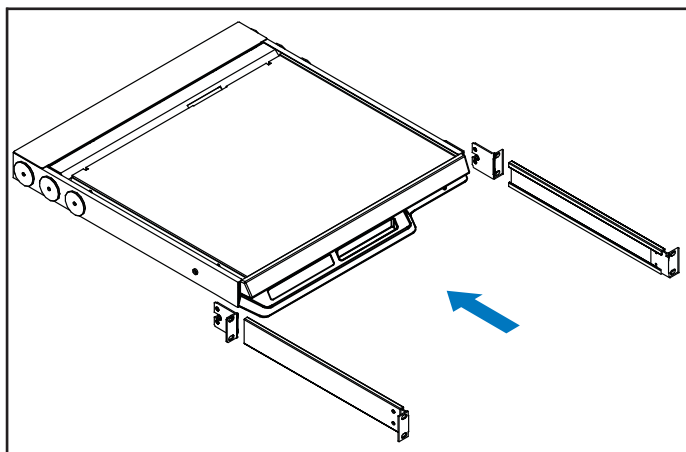■ Align each rear mounting bracket to a suitable length.

Step **3**

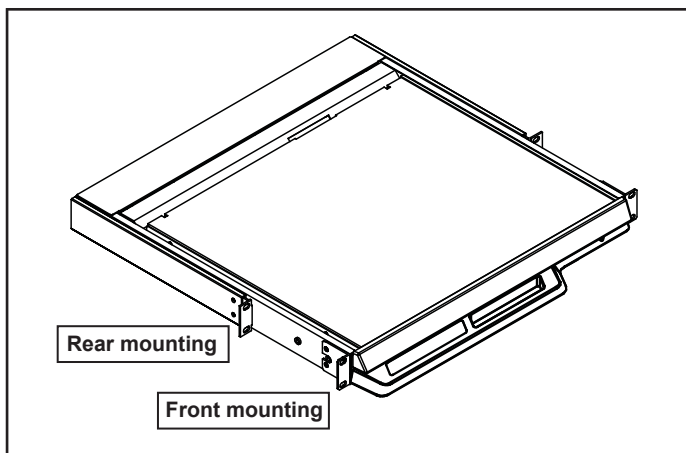**Complete the installation**

■ Fix the LCD console drawer into the rack.

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

< 1.3 > Installation - How to install 2 Post Brackets*

ERFS-17

Step 1

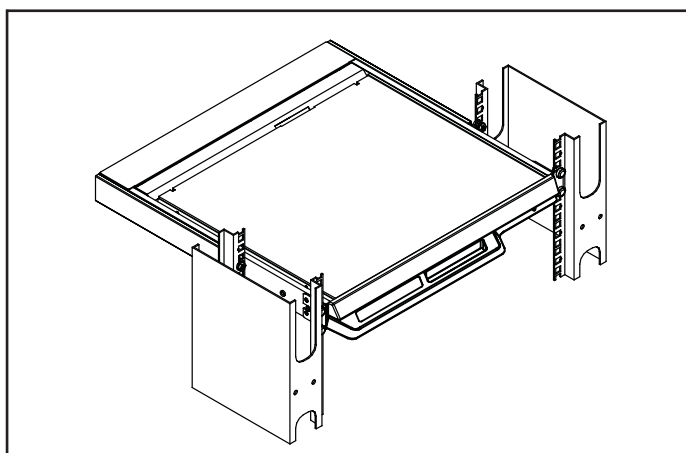- ■ Release front mounting ears before applying 2 post rack brackets.

- ■ Insert rear mounting brackets into the LCD console drawer.

* Requires Part #: MB-751-12

Step 2

- ■ Align each rear mounting bracket to a suitable length.

Rear mounting

Front mounting

Step 3

Complete the installation

- ■ Fix the LCD console drawer into the 2 post rack.

⚠ **M6 screw, cage nut & cup washer x 8 are not provided.**
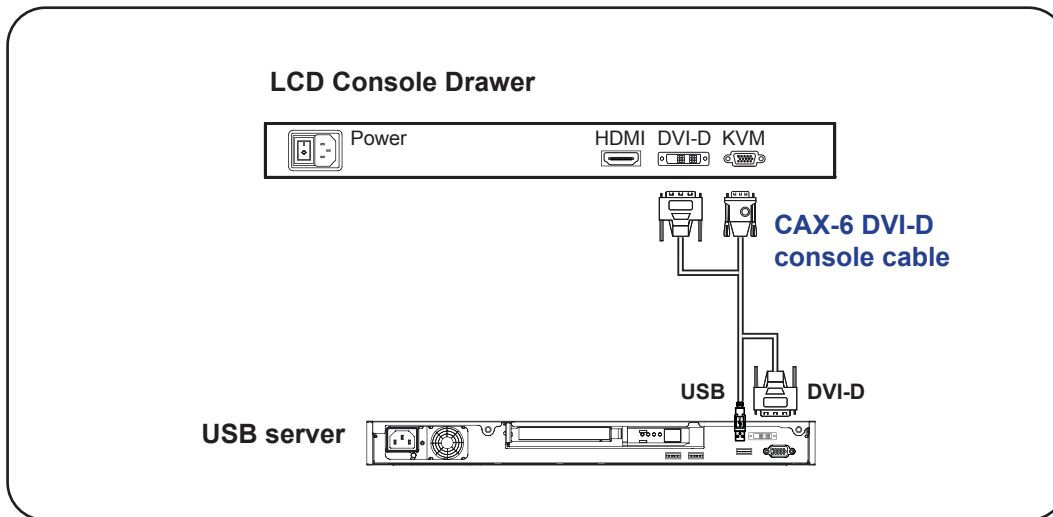
< 1.3 > Installation - Using the Drawer
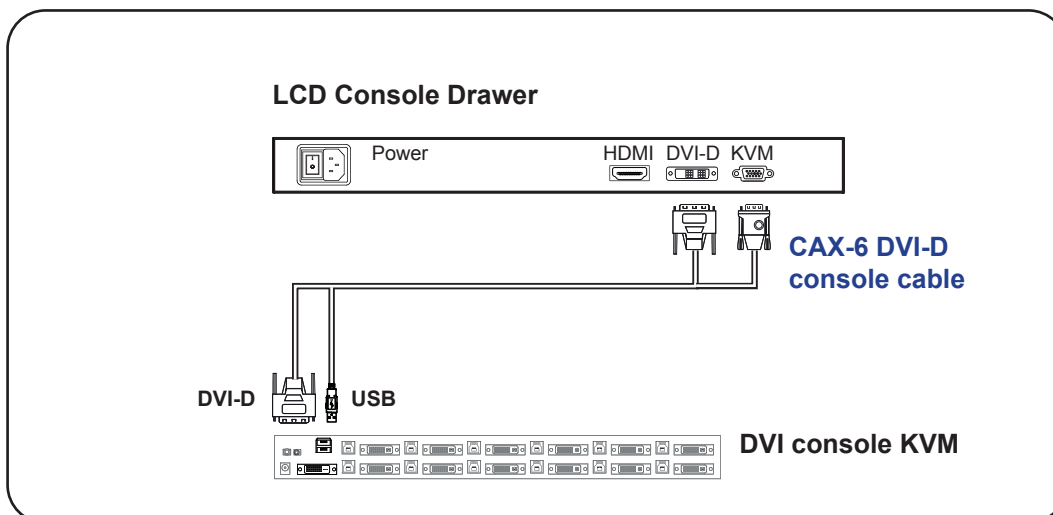
■ Hold the handle and slide out the drawer.

■ Lift the LCD to a suitable angle.

■ Operate the LCD console drawer.

< 1.4 > Connection to USB Server via CAX-6 cable

LCD Console Drawer

Power　　　HDMI　DVI-D　KVM

**CAX-6 DVI-D
console cable**

USB　　　DVI-D

USB server

< 1.4 > Connection to External KVM via CAX-6 cable

LCD Console Drawer

Power　　　HDMI　DVI-D　KVM

**CAX-6 DVI-D
console cable**
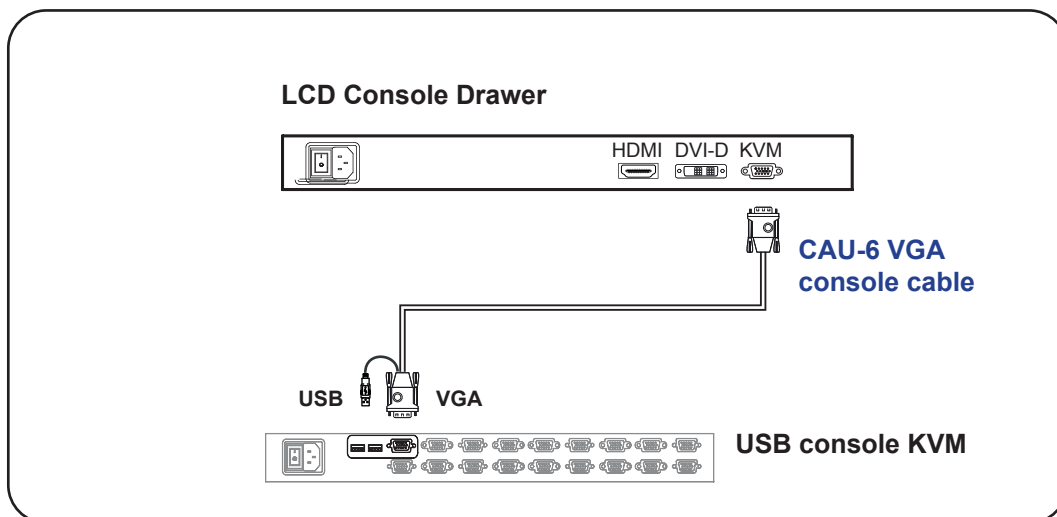
DVI-D　USB

DVI console KVM

⚠️

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. ERI is not responsible for damage caused in this way

< 1.4 > Connection to USB Server via CAU-6 cable

LCD Console Drawer

HDMI DVI-D KVM

CAU-6 VGA console cable

USB VGA

USB server
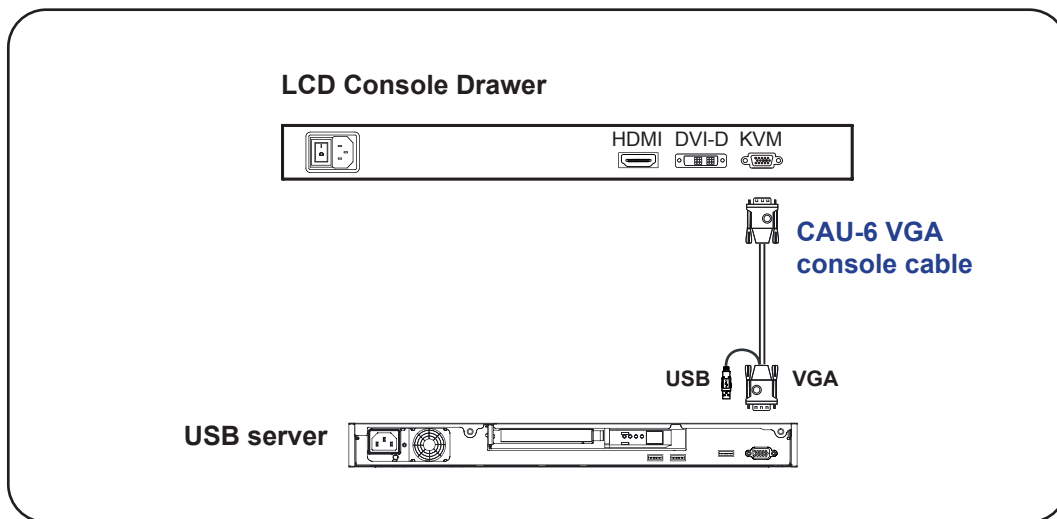
< 1.4 > Connection to External KVM via CAU-6 cable

LCD Console Drawer

HDMI DVI-D KVM

CAU-6 VGA console cable

USB VGA

USB console KVM

⚠️

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. ERI is not responsible for damage caused in this way
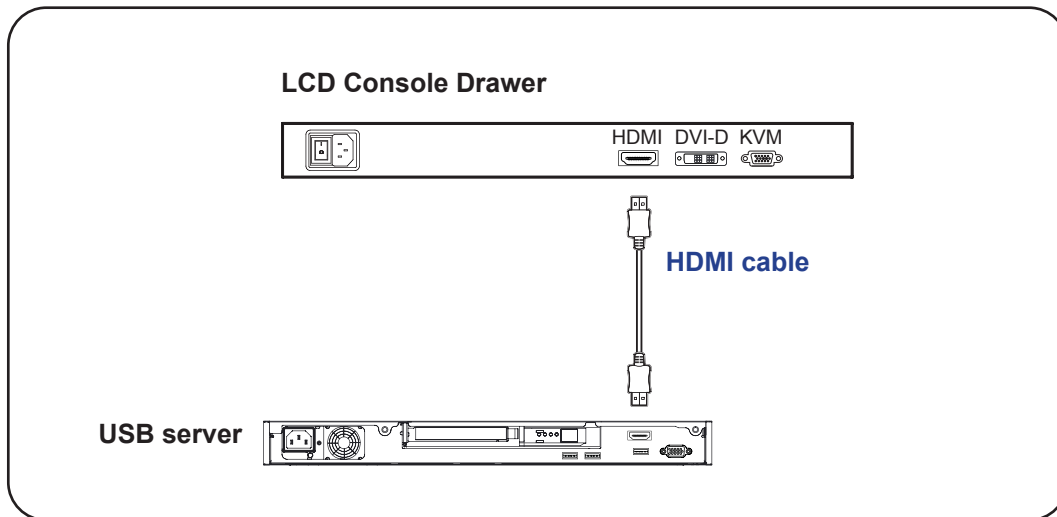
LCD Console Drawer

HDMI DVI-D KVM

HDMI cable

USB server

* HDMI cable is not provided.

⚠️

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. ERI is not responsible for damage caused in this way

< Part 2 >

< 2.1 > Product Specifications

LCD Panel		
	Panel Size (diagonal)	17.3-inch Widescreen TFT color LCD
	Display pixel (dots x lines)	1920 x 1080
	Brightness (typ.)	300
	Contrast Ratio (typ.)	600:1
	Color	1.07 Billion, 10-bit
	Viewing Angle (L/R/U/D)	89/89/89/89
	Response Time (ms)	35
	Dot pitch (mm)	0.199
	Display Area (mm)	381.9H x 214.8V
	Surface treatment	Anti-glare, Hard-coating
	Surface hardness	3H
	Backlight Type	LED
	MTBF (hrs)	20,000

Video Connectivity			
	Digital	HDMI	HDMI 1.1, CEA-861-D
		DVI	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

Audio Connectivity			
	Audio Input	Connector	3.5mm stereo jack
		Impedance / Power level	30kΩ / 750mV
	Audio Output	Connector	3.5mm stereo jack
		Resistance / Power level	30kΩ / 2.8V
	Speaker Output	Power	2 x 2W

*When the audio output is connected, speaker output is OFF

Power			
	Power Supply	Range	Auto-sensing 100 to 240VAC, 50 / 60Hz
	Power Consumption	Screen display ON	34W or less
		Power saving mode	4W or less
		Power button OFF	1W or less

Regulatory		
	Safety Approval	FCC & CE

Environmental Conditions	Operating	Temperature	0 to 50°C degree
		Humidity	20~90%, non-condensing
	Storage	Temperature	-5 to 60°C degree
		Humidity	5~90%, non-condensing
		Shock	10G acceleration (11ms duration)
		Vibration	5~500Hz 1G RMS random

Physical Specification	Product (W x D x H)	441.6 x 480 x 44 mm
		17.4 x 18.9 x 1.73 inch
	Packing (W x D x H)	590 x 768 x 140 mm
		23.2 x 30.2 x 5.5 inch
	Net Weight	10.8 kgs / 23.8 lbs
	Gross Weight	15.8 kgs / 34.8 lbs

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
		Video Signal	1080p : 60Hz
			720p : 50 / 60Hz
			480p : 60Hz
			576p : 50Hz
		Audio Signal	2ch Linear PCM (32 / 44.1 / 48 KHz)

< 2.2 > Standard Keyboard / Mouse Specifications

Gn G keyboard integrated with touch pad
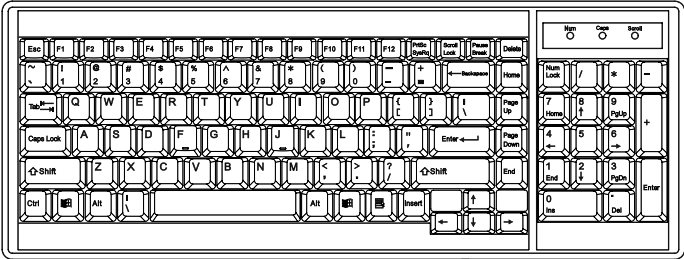
Gb G keyboard integrated with track ball
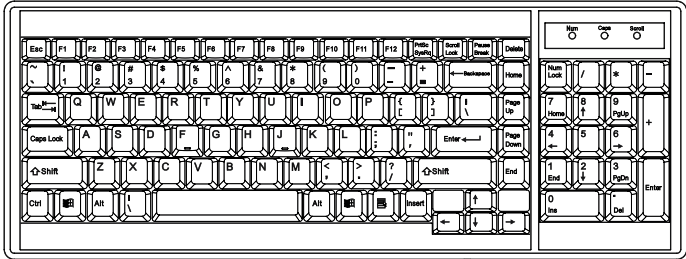
Key force	55 ± 5g
Travelling distance	3 ± 0.3mm
Switch life	> 10 million life cycle time
Software support	MS Windows 7 / 2008 / 2003 / 2000 / XP / ME / 98 / DOC Linux / Mac

Supporting layouts

America

United States

EMEA

United Kingdom	Germany	France	Spain	Norway

Italy	Russia	Switzerland	Netherlands	Portugal

Asia

China	Japan	Korea	Arabia	Turkey

Mn MAC keyboard integrated with touch pad
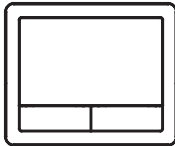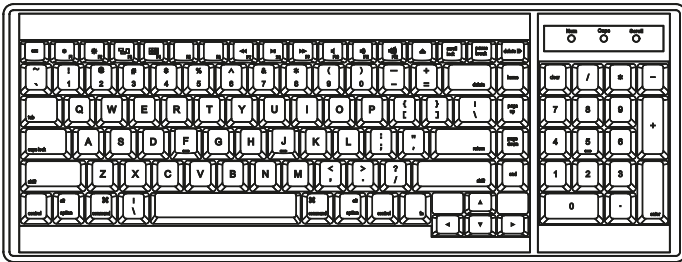
Mb MAC keyboard integrated with track ball
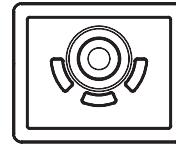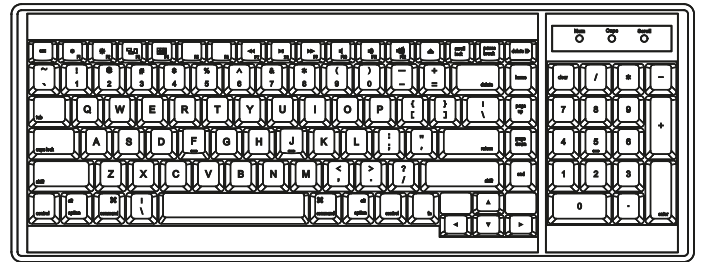
Supporting layouts

America

United States

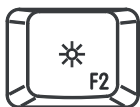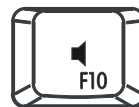## How to Use "MAC" Keyboard

Keyboard Features

☀ F1	**F1** Decrease display brightness	
☀ F2	**F2** Increase display brightness	
⌗ F3	**F3** Mission control * Only works with OS X Lion default Keyboard Shortcuts.	
⬚ F4	**F4** Dashboard	
◀◀ F7	**F7** Rewind	
▶‖ F8	**F8** Play / Pause	
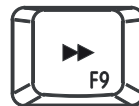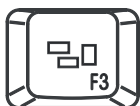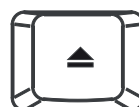
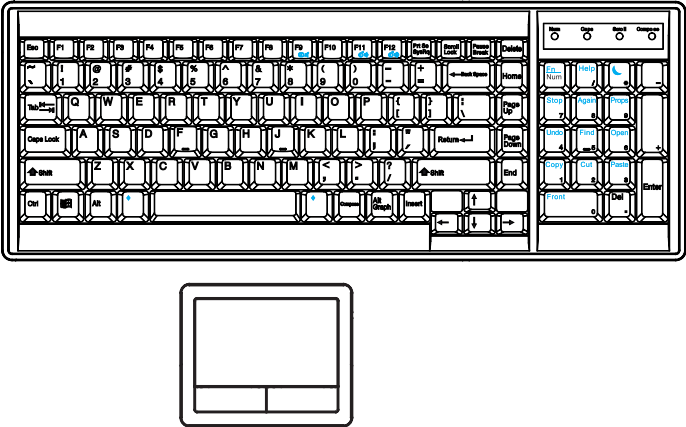|	
▶▶ F9	**F9** Fast-forward
◀ F10	**F10** Mute sound
◀) F11	**F11** Decrease volume
◀)) F12	**F12** Increase volume
▲	**Eject disc**
⌘ command	**Command**

< 2.2 > SUN Keyboard / Mouse Options

Sn S keyboard integrated with touch pad

Sb S keyboard integrated with track ball
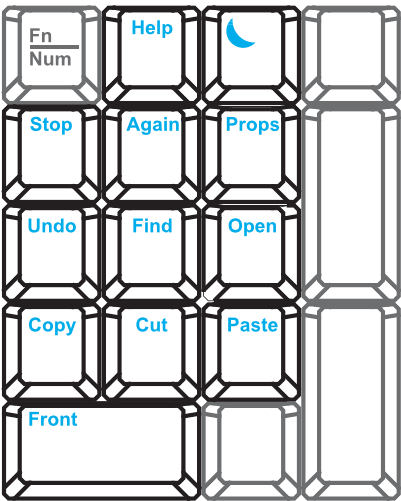

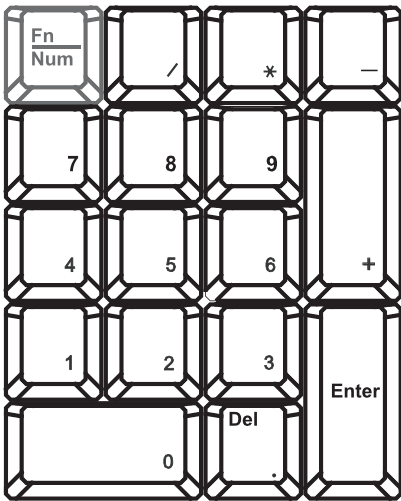
S keyboard integrated with touch pad / track ball

■ Incorporates SUN keys, including Stop, Cut, Paste, Compose, Copy and Help

■ 104 key notepad keyboard with full numerical keypad and SUN function

■ USB interface

■ US layout only

How to Use "S" Keyboard

Num LED in Off mode

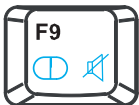Keypad behaves as a SUN Solaris
system administration command mode

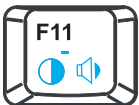**Num LED in Green mode**

Keypad behaves as a normal keypad

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

Membrane Switch	Function
⏻	Turn the monitor on or off
☰	Display the OSD menu Act as an Enter key to select screen setting options
∧ ∨ < >	Scroll through menu options and adjust the displayed control
↰	Exit the OSD screen Go back to the previous on-screen sub-menu or main menu

Remark : All LED touch buttons in **WHITE** light.
The LED of **Power** ⏻ touch button will f ash continuously when there is no signal input.

① All the LED touch buttons will automatically turn off after 10 minutes of idle status (except the **Power** ⏻).

② Light up all membrane buttons, please press any button for 1 - 2 seconds (except the **Power** ⏻).

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
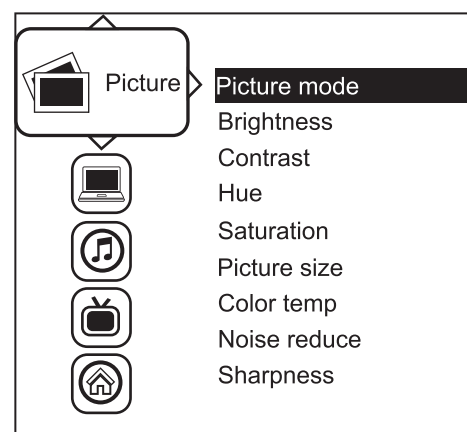
< 2.3 > On-Screen Display Operation (OSD)

② **PC**

Auto adjust :	Automatically adjust sizes, centers and f ne 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
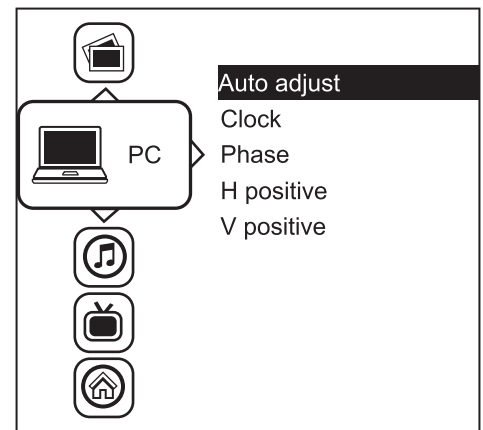
③ **Audio**

|	
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
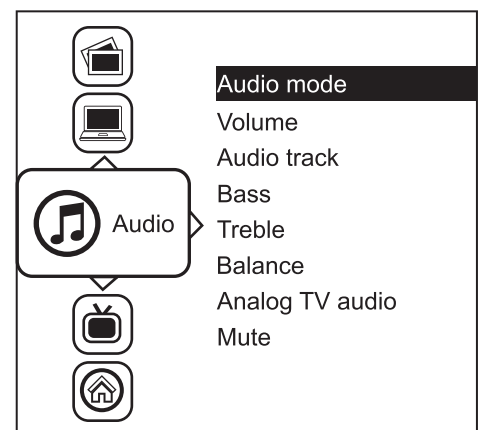
④ **MISC**

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
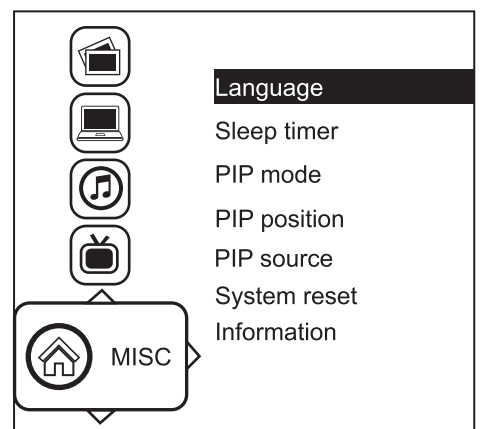
< 2.4 > How to Use Picture In Picture (PIP) / Picture By Picture (PBP)

< 2.4.1 > Picture in Picture (PIP)

Mode

Display the Sub screen in the Main screen.

OSD Menu → MISC → PIP Mode → Large / Small / OFF
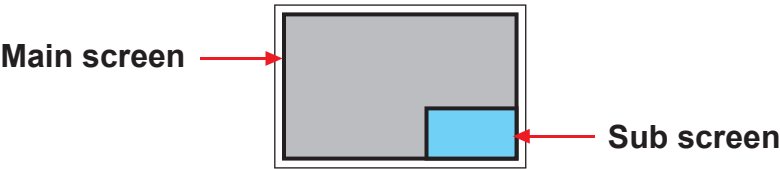

Main screen

Sub screen

Position

Adjust the position of the Sub screen (top left, bottom left, top right, bottom right)

OSD Menu → MISC → PIP Position → top left / top right / bottom left / bottom right
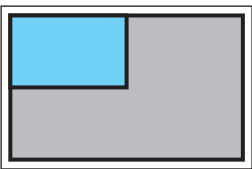
top left
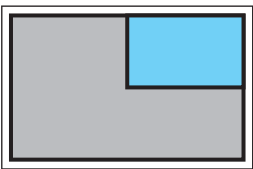
top right
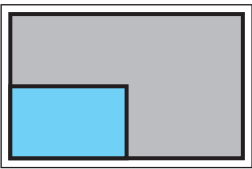
bottom left
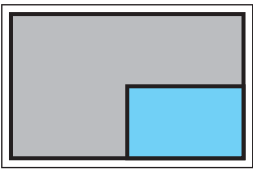
bottom right

Size

Adjust the size of the Sub screen (Large / Small)

OSD Menu → MISC → PIP Mode → Large / Small

Size of Sub screen

LCD Monitor	Large Sub screen	Small Sub screen
1920 x 1200	552 x 414	480 x 360
1920 x 1080	552 x 414	480 x 360
1440 x 900	414 x 310	360 x 270
1366 x 768	392 x 294	340 x 254
1280 x 1024	368 x 276	320 x 240

< 2.4.2 > Picture By Picture (PBP)

Mode
Display the Sub screen next to the Main screen.

OSD Menu → MISC → PIP Mode → PBP

Main screen ⟶   ⟵ Sub screen

Size

LCD Monitor	Main / Sub screen
1920 x 1200	955 x 716
1920 x 1080	955 x 716
1440 x 900	715 x 536
1366 x 768	678 x 508
1280 x 1024	635 x 476

< 2.4.3 > PIP / PBP Source

To select an input signal for PIP / PBP Sub screen.

OSD Menu → MISC → PIP Source → VGA / S-Video / Composite / DVI / HDMI / SDI / YPbPr / TV

The PIP / PBP is operable in the following table :

| Main \ Sub	VGA	S-Video	Composite	DVI-D	HDMI	SDI	YPbPr	TV
VGA	X	O	O	O	O	O	O	O
S-Video	O	X	X	O	O	O	O	X
Composite	O	X	X	O	O	O	O	X
DVI	O	O	O	X	X	O	O	O
HDMI	O	O	O	X	X	O	O	O
SDI	O	O	O	O	O	X	X	O
YPbPr	O	O	O	O	O	X	X	O
TV	O	X	X	O	O	O	O	X

< 3.1 > Options : 3G / HD / SD-SDI input   **ERFS-17**

The SDI input is an ideal solution for the broadcast-grade video and high resolution CCTV market.

Designed for use with CyberV iew Full HD 1080p and ultra high resolution 1920 x 1200 LCD displays, the board provides an SDI input module without using additional space or power and it comes standard with a 2-year warranty.
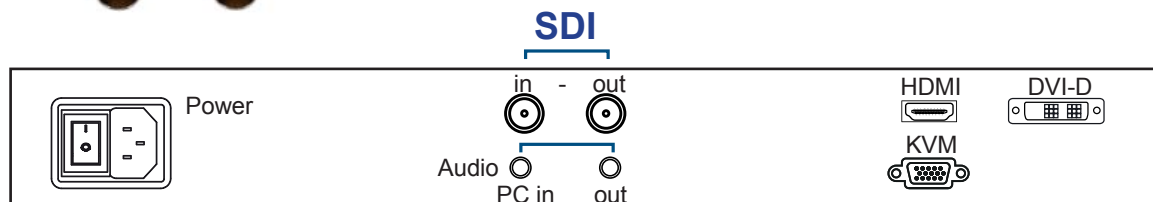
*** For **SDI** option, **casing depth will be changed from 480mm (18.9") to 530mm (20.9")**

INPUT	3G-SDI IN	BNC x 1 / 0.8Vp-p (75 ohm)
	3G-SDI OUT	BNC x 1 / Active through, equalized & relocked

Standard Compliance	Video	SMPTE 425M / 274M / 296M / 125M ITU-R BT.656
	Audio	SMPTE 299M / 272M-C

Compatible Video Format	3G-SDI	1080p	@60 / 50Hz, 4:2:2
		1080p	@30 / 25 / 24Hz, 4:4:4
		1080i	@60 / 50Hz, 4:4:4
		720p	@60 / 50Hz, 4:4:4
	HD-SDI	1080p	@30 / 25 / 24Hz, 4:2:2
		1080i	@60 / 50Hz, 4:2:2
		720p	@60 / 50Hz, 4:2:2
	SD-SDI	480i	@60Hz, 4:2:2
	ITU-R BT.656	576i	@50Hz, 4:2:2

Compatible Audio Format	3G-SDI	48kHz, 16 / 20 / 24 bit, 2 CH, Synchronized Video
	HD-SDI	48kHz, 16 / 20 / 24 bit, 2 CH, Synchronized Video
	SD-SDI	48kHz, 16 / 20 / 24 bit, 2 CH, Synchronized / Asynchronized Video

Max. Transmission Distance 75 ohm coaxial cable	3G-SDI	150m at 2.97Gb/s
	HD-SDI	250m at 1.485Gb/s
	SD-SDI	480m at 270Mb/s

< 3.2 > Options :

- Audio (3.5mm audio jacks for audio in & out, and 2W + 2W speakers)

⚠️

For audio option, casing depth will be changed from 480mm (18.9") to 530mm (20.9")
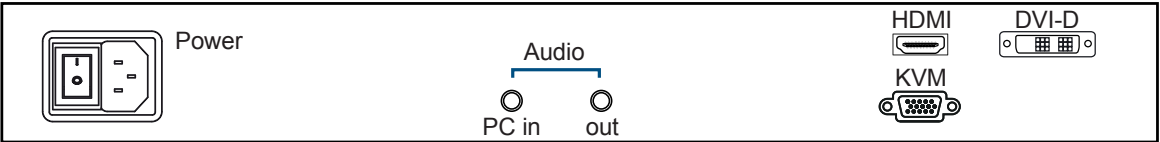
< 3.3 > Options : DC Power

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%

DC power

*** For DC power option :

   (1) Option excludes 1 x power cord and 1 x AC power adapter.

   (2) Casing depth will be extended from 480mm (18.9") to 530mm (20.9")

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