

## User Manual **19" Widescreen LCD 1440 x 900**



### **RM-111-19WH**

#### **1U LCD Console Drawer**

**Includes :**

- 1, 6' USB/VGA Cable (Part# KVM-B-6A)
- 1, 6' USB/DVI Cable (Part# KVM-X-6A)
- 1, 6' IEC Power Cord
- Mounting Brackets & Hardware



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## 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 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.
  - ☐ 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.

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## Package Contents

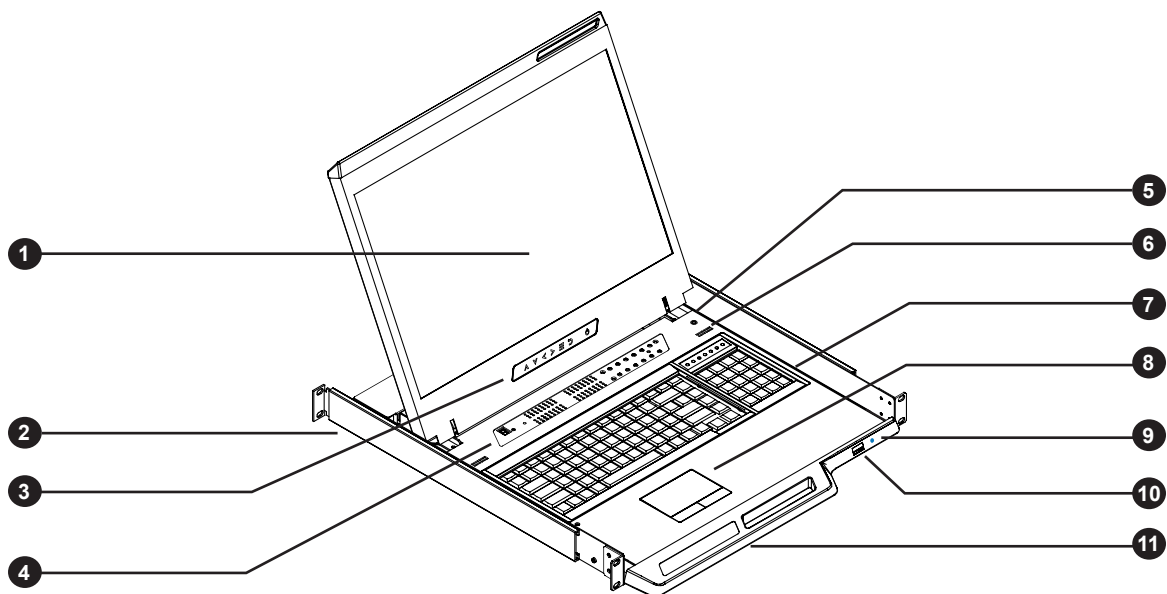



### RM-111-19WH unit X 1

- 1 - DVI-6 6ft DVI-D/USB console cable X 1
- 1 - KVM-B-6 6ft VGA/USB console cable X 1
- 1 - 6ft IEC Power cord
- 1 - Set of adjustable mounting brackets
- 8 - M6 screw, cage nut & cup washer

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

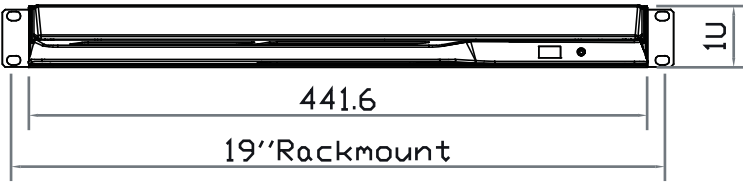
## < 1.2 > Structure Diagram



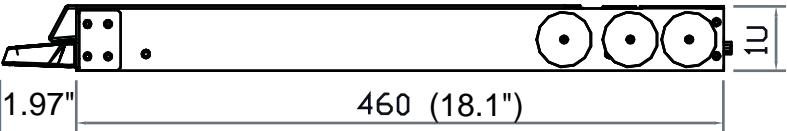
- |  |   |
|--|---|
| ① LCD interchangeable module kit   | ⑦ Keyboard interchangeable module kit                   |
| ② Installation Slides  | ⑧ Mouse interchangeable module kit                      |
| ③ LCD membrane  | ⑨ Blue Power LED  |
| ④ Membrane switch (KVM option)   | ⑩ Front USB port for device access ( USB Hub KVM only ) |
| ⑤ Micro switch for screen auto power off   | ⑪ Ruggedized front handle                               |
| ⑥ Audio speaker ( for HDMI or Audio option )   |   |

< 1.2 > Dimension

Front View

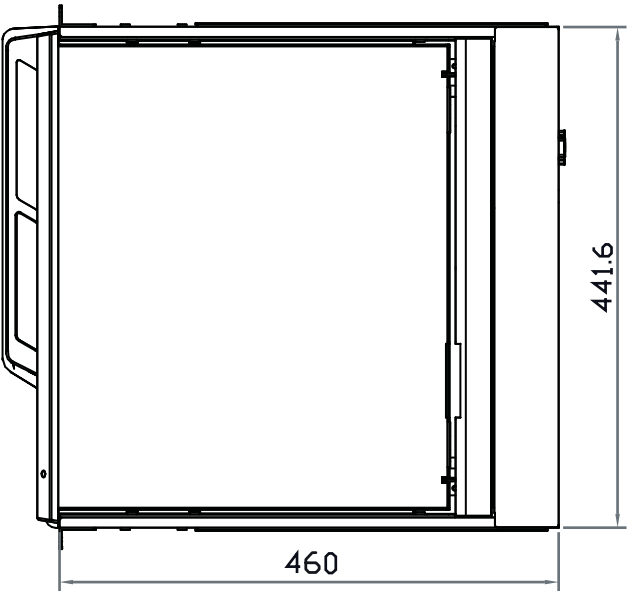


Side View




UNIT : mm  
1mm = 0.03937 inch

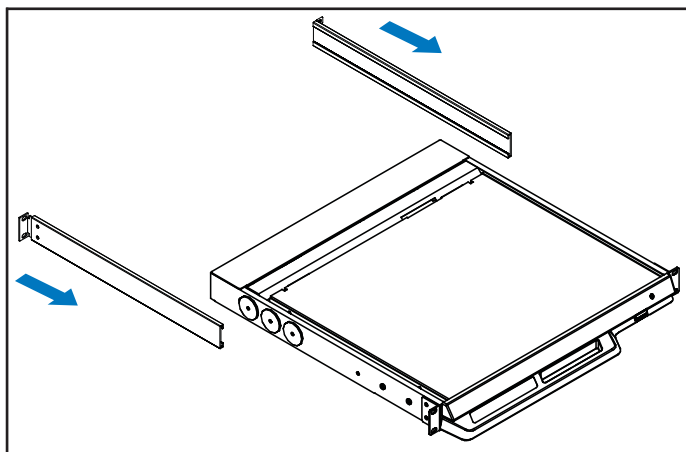
Top View



Model	Product Dimension (W x D x H)	Packing Dimension (W x D x H)	Net Weight	Gross Weight
RM-111-19WH	441.6 x 460 x 44 mm 17.4 x 18.1 x 1.73"	590 x 823 x 140 mm 23.2 x 32.4 x 5.5"	11.5 kg 25 lb	16.5 kg 36 lb

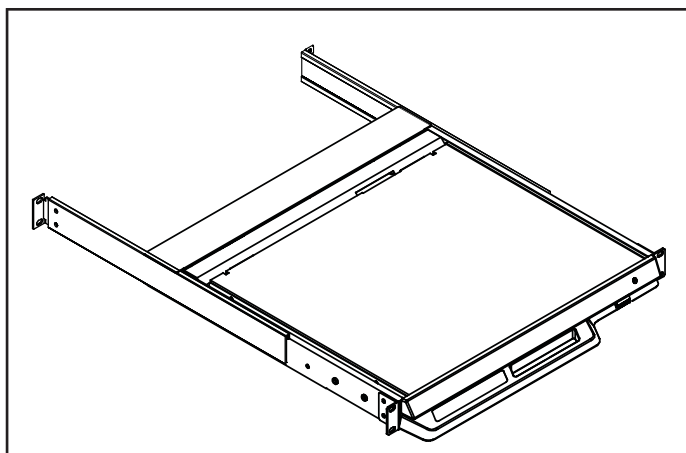
 The weight is only for the single console models. It varies with accessories & options such as KVM, SDI, HDMI, AV, audio & DC power.

## < 1.3 > Installation - How to install Installation Slides



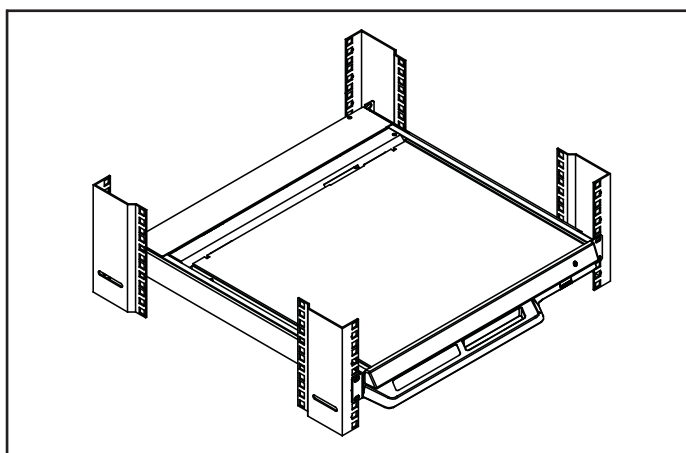
### Step 1

- 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 display drawer into the rack.



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

## < 1.3 > Installation - How to install

### 2 post rack brackets

#### Step 1

- Insert the left and right rear mounting brackets into the LCD console drawer in the reverse direction.

Option  
Model : MB-751-12

#### Step 2

- Align each rear mounting bracket to a suitable length.

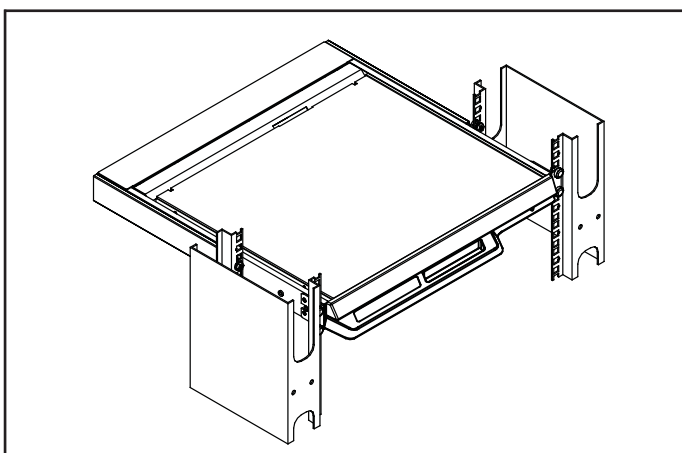
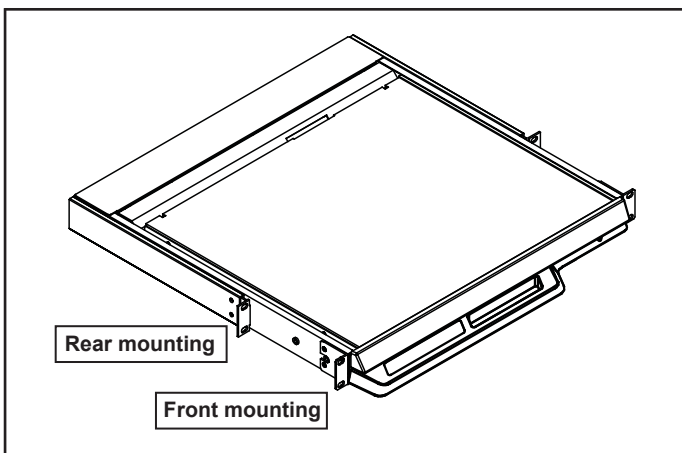
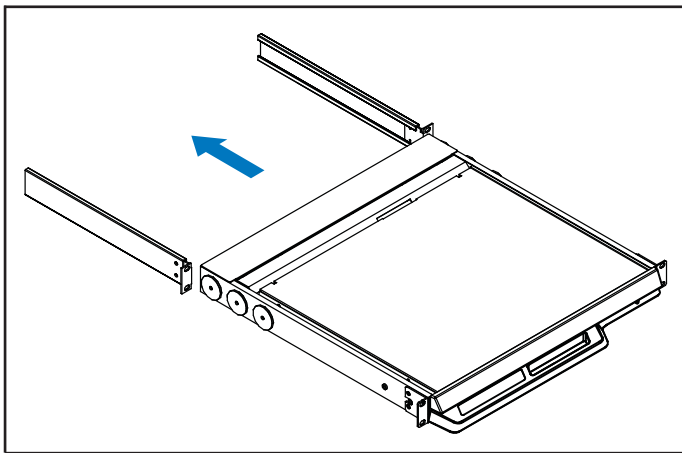
#### Step 3

##### 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- How to use the drawer



- Hold the handle and slide the drawer out

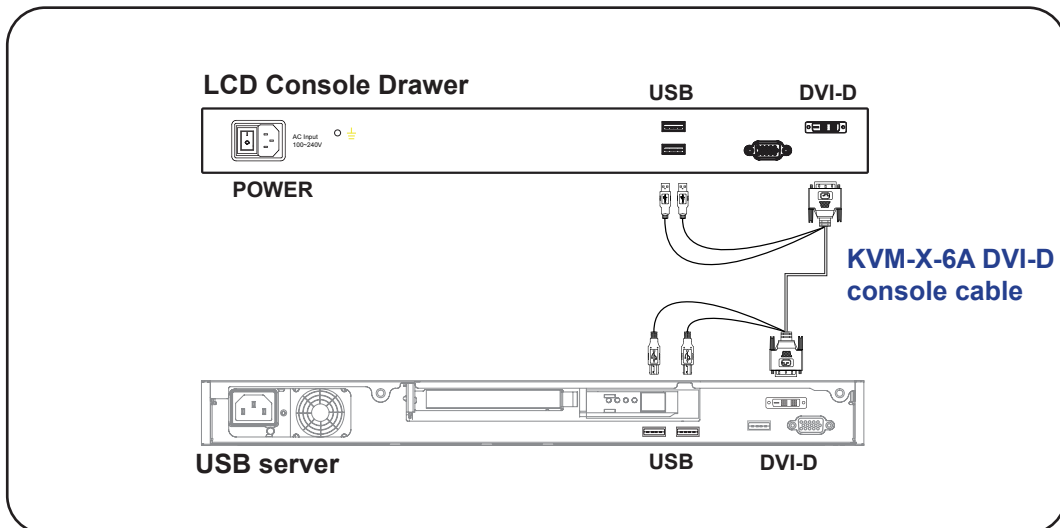


- Flip up the LCD to a suitable angle.

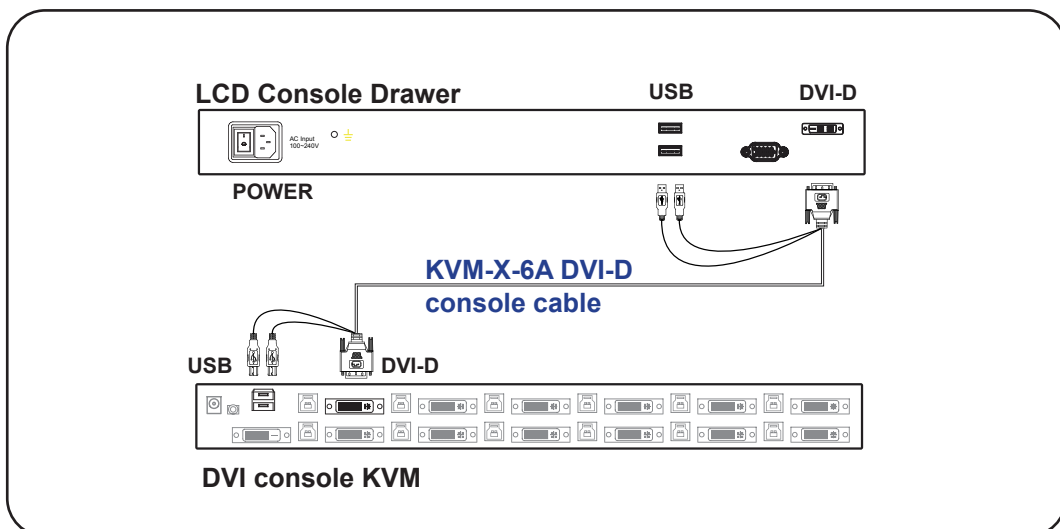


- Operate the LCD console drawer.

## < 1.4 > Connection to **USB Server** via KVM-X-6A cable

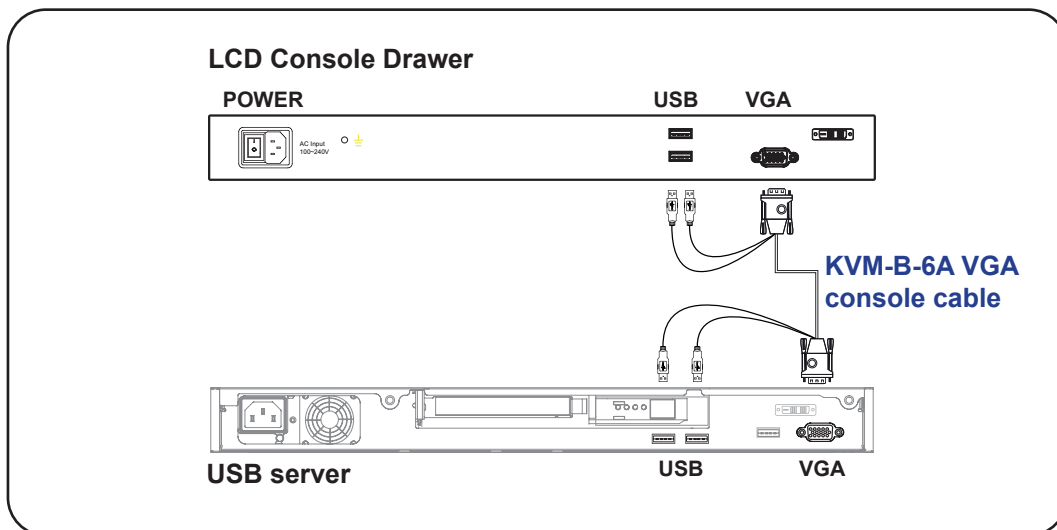


## < 1.4 > Connection to **external KVM** via KVM-X-6A cable

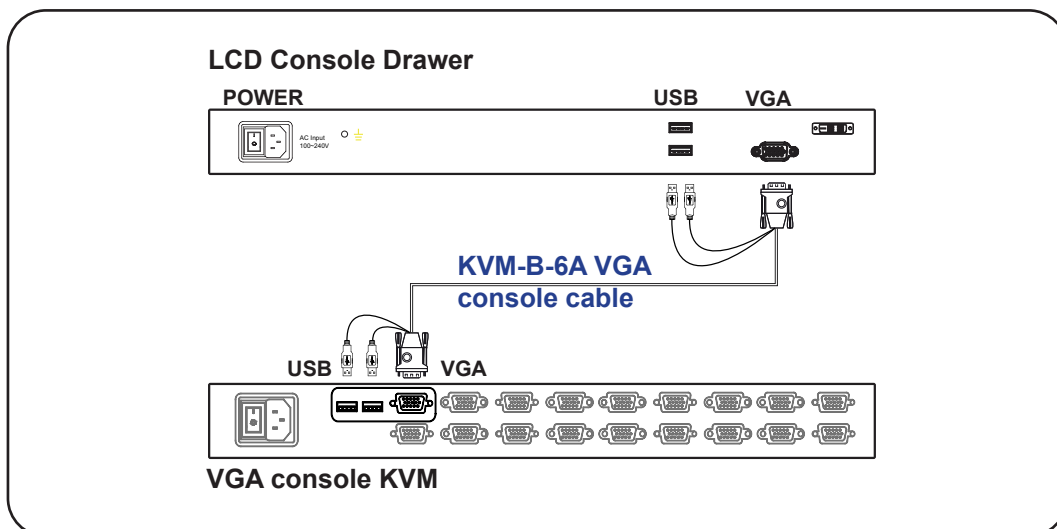


**Caution :** The LCD console drawer is hot-pluggable, but components of connected devices, such as the servers and KVM switch, may not be hot-pluggable. Plugging and unplugging cables while servers and KVM are powered on may cause irreversible damage to the servers, KVM and LCD console drawer. Before 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.

## < 1.4 > Connection to **USB Server** via KVM-B-6A cable



## < 1.4 > Connection to **external KVM** via KVM-B-6A cable



**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.

LCD Panel	Manufacturer	
	Panel Size ( diagonal )	19-inch Widescreen TFT color LCD
	Display pixel ( dots x lines )	1440 x 900
	Brightness ( typ. )	250
	Contrast Ratio ( typ. )	1000:1
	Color	16.7 M
	Viewing Angle ( L/R/U/D )	80/80/80/80
	Response Time ( ms )	5
	Dot pitch ( mm )	0.2835
	Display Area ( mm )	408.24H x 255.15V
	Surface treatment	Haze 25%, Hard-coating
	Surface hardness	3H
	Backlight Type	LED
	MTBF ( hrs )	30,000

Video Connectivity	Digital	HDMI	HDMI 1.1, CEA-861-D
		DVI	DVI-D, TMDS single link
	Analog	VGA	Analog 0.7Vp-p
		Composite ( BNC )	NTSC & PAL
		S-Video ( 4-pin )	NTSC & PAL
	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	25W or less
		Power saving mode	4W or less
		Power button OFF	1W or less

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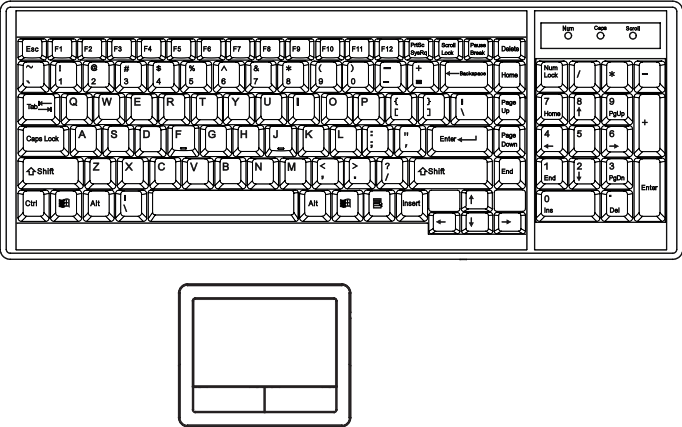
Environmental Conditions	Operating	Temp rature	0 to 50°C degree
		Humidity	20~90%, non-condensing
	Storage	Temperature	-5 to 60°C degree
		Humidity	5~90%, non-condensing
		Shock	10G acceleration (11ms duration)
		Vibration	5~500Hz 1G RMS random

Physical Specification	Product ( W x D x H )	441.6 x 460 x 44 mm 17.4 x 18.1 x 1.73 inch
	Packing ( W x D x H )	590 x 823 x 140 mm 23.2 x 32.4 x 5.5 inch
	Net Weight	11.5 kgs / 25 lbs
	Gross Weight	16.5 kgs / 36 lbs

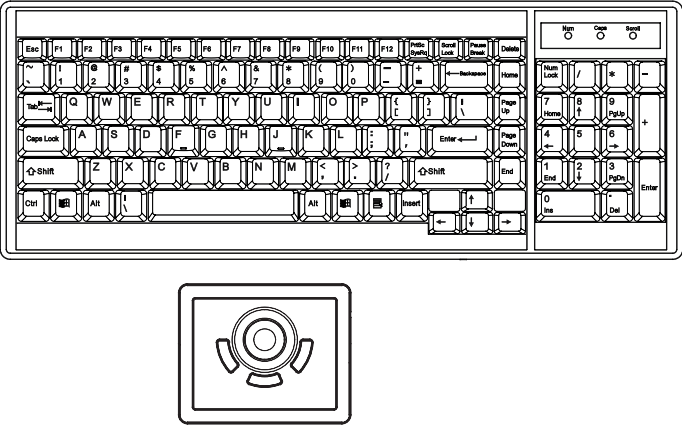
Applicable Format	DVI-D / VGA Input	PC Signal	1440 x 900 x 60Hz
			1280 x 1024 x 60 / 75Hz
			1280 x 960 x 60Hz
			1280 x 760 x 60 / 75Hz
			1152 x 864 x 75Hz
			1024 x 768 x 60 / 70 / 75Hz
			848 x 480 x 60Hz
			800 x 600 x 60 / 72 / 75Hz
			720 x 400 x 70Hz
			640 x 480 x 60 / 72 / 75Hz
			640 x 400 x 70Hz
			640 x 350 x 70Hz

< 2.2 > Keyboard / Mouse Specifications

**tp** keyboard integrated with touchpad



**tb** keyboard integrated with trackball



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



## < 2.3 > On-screen Display Operation ( OSD )



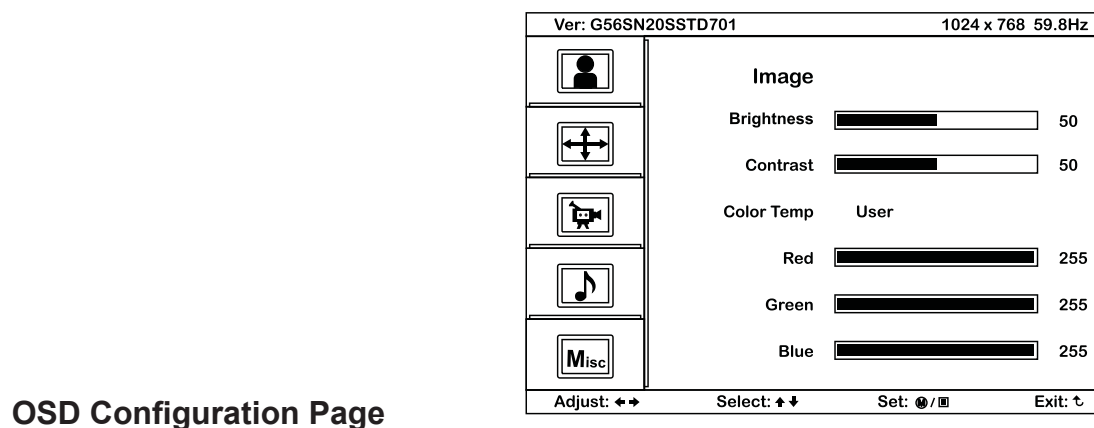
Membrane Switch	Function
	Turn the monitor on or off
	Display the OSD menu Act as an Enter key to select screen setting options
   	Scroll through menu options and adjust the displayed control
	Exit the OSD screen Go back to the previous on-screen sub-menu or main menu

Remark : All LED touch buttons in **WHITE** light.

The LED of **Power**  touch button will flash continuously when there is no signal input.

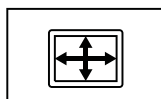
- ① All the LED touch buttons will automatically turn off after 10 minutes of idle status ( except the **Power**  ).
- ② Light up all membrane buttons, please press any button for 1 - 2 seconds ( except the **Power**  ).

## < 2.3 > On-screen Display Operation ( OSD )



### **Image:**

for the brightness, contrast, color temp, red, green, and blue



### **Geometry:**

for the auto adjust, H position, V position, phase and clock



### **Video:**

for the colour, tint, sharpness, noise reduction, DCDi and TV Setup



### **Audio:**

for volume, bass, treble, balance, AVL and mute



### **Misc:**

for the language, OSD position, graphic mode, ratio, reset and timer

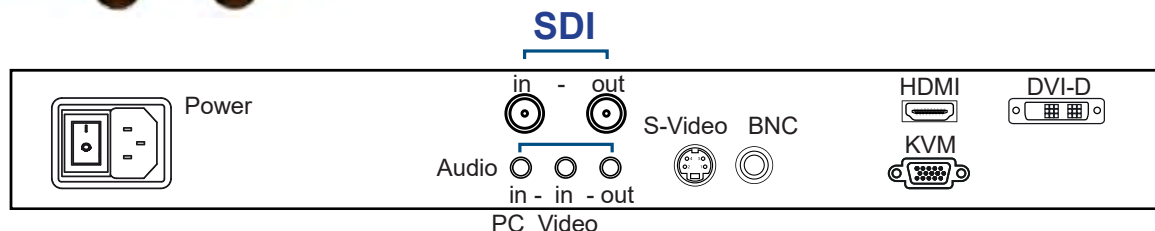
## < Part 3 >

### < 3.1 > Options : 3G / HD / SD-SDI input



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

Designed for use with CIT Full HD 1080p and ultra high resolution 1920 x 1200 LCD displays, Crystal Image provides a 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" )**

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

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

<b>Compatible Video Format</b>	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

<b>Compatible Audio Format</b>	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

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

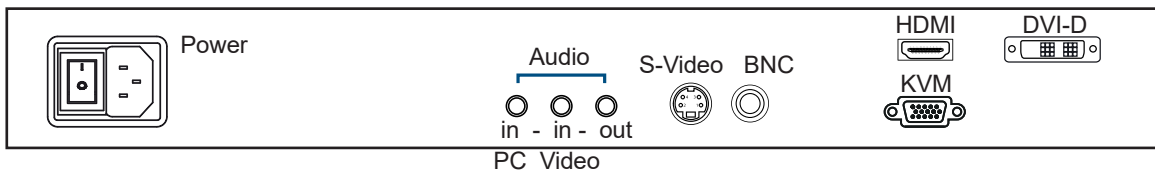
### < 3.2 > Options :

- **HDMI** ( HDMI 1.1, CEA-861-D )
- **AV** ( S-Video + Composite, BNC )
- **Audio** ( 3.5mm audio jacks for audio in & out, and 2W + 2W speakers )

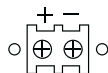


( 1 ) For AV2.2 upgrade, either HDMI or DVI-D is provided.

( 2 ) For the above options, casing depth will be extended from 460mm ( 18.1" ) to 530mm ( 20.9" )

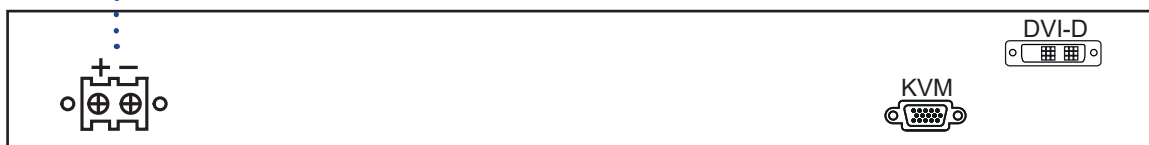


### < 3.3 > Options : DC Power



Model	12V	24V	48V
<b>Input rating</b>			
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
<b>Output rating</b>			
Output voltage:	12-Volt	12-Volt	12-Volt
Output current:	4.16A	4.16A	4.16A
<b>Efficiency</b>	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 460mm ( 18.1" ) to 530mm ( 20.9" )

The company reserves the right to modify product specifications without prior notice and assumes no responsibility for any error which may appear in this publication.