

# User Manual 10 17" 4K LCD Console Drawer



Designed and manufactured by Austin Hughes

**751** 

### Legal Information

First English printing, January 2018

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

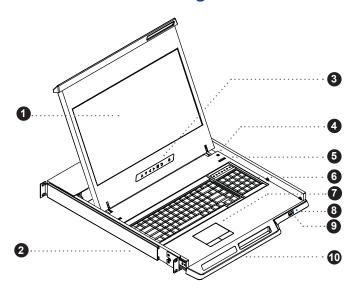
### < Part 1 >

### < 1.1 > Package Content



- EKC-2 6ft USB keyboard mouse cable X 1
- Power cord X 1
- M6 screw, cage nut & cup washer X8

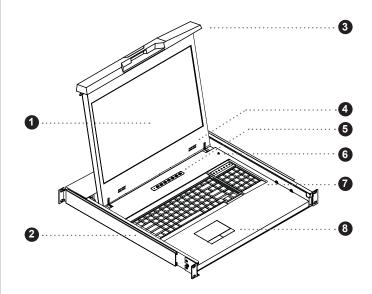
### < 1.2 > Structure Diagram



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



- EKC-2 6ft USB keyboard mouse cable X 1
- 4A Power adapter & Power cord X 1
- M6 screw, cage nut & cup washer X8



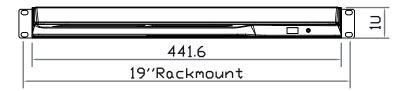
- 1 LCD interchangeable module kit
- 2 Installation Slides
- (3) Molded front handle
- 4 Audio speaker ( for SDI or HDMI option )
- 6 Micro switch for screen auto power off
- (7) Keyboard interchangeable module kit
- 8 Mouse interchangeable module kit



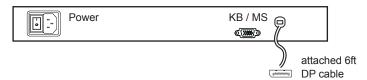
The above package content is only for the single console models. It varies with options such as SDI, HDMI, Touchscreen & DC power.

# < 1.2 > Dimension - K117

### **Front View**

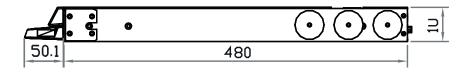


### **Rear View**

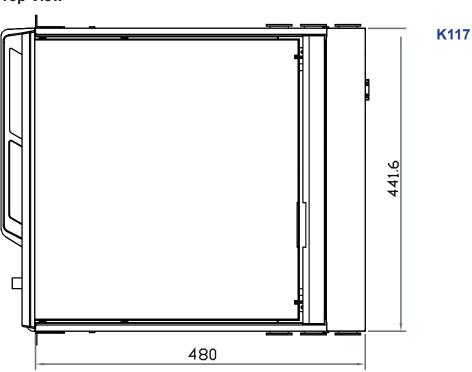


UNIT : mm 1mm = 0.03937 inch

### **Side View**



### **Top View**



Model	Model Product Dimension (W x D x H)		Net Weight	Gross Weight
<b>K117</b> 441.6 x 480 x 44 mm 17.4 x 18.9 x 1.73"		590 x 808 x 140 mm	10.9 kg	15.8 kg
		23.2 x 31.8 x 5.5"	24 lb	34.8 lb



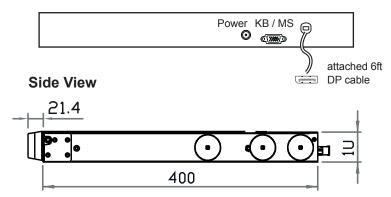
The weight is only for the single console models. It varies with accessories & options such as SDI, HDMI, Touchscreen & DC power.

### < 1.2 > Dimension - K1417

### **Front View**

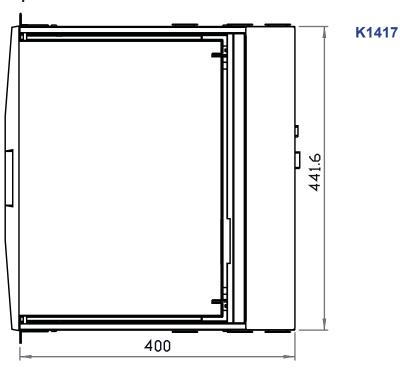


### **Rear View**



UNIT : mm 1mm = 0.03937 inch

### **Top View**

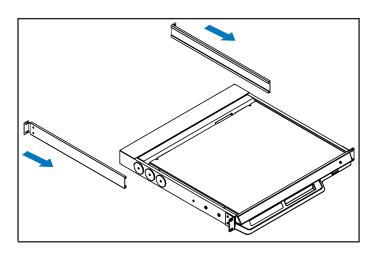


Model	Product Dimension	Packing Dimension	Net	Gross
	(W x D x H)	(W x D x H)	Weight	Weight
K1417	441.6 x 400 x 44 mm	590 x 622 x 140 mm	8.7 kg	13.7 kg
	17.4 x 15.7 x 1.73"	23.2 x 24.5 x 5.5"	19.1 lb	30.2 lb



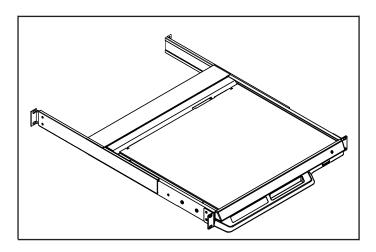
The weight is only for the single console models. It varies with accessories & options such as SDI, HDMI & DC power.

# < 1.3 > Installation - Installation Slides



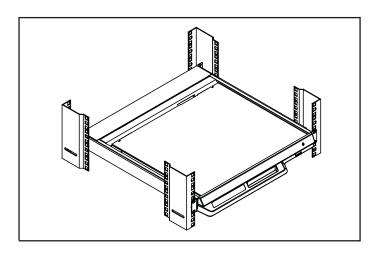
# Step 1

■ 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.

### < 1.3 > Installation - How to use the K117 drawer



■ Hold the handle and slide out the drawer.



■ Flip up the LCD to a suitable angle.



■ Operate the LCD console drawer.

# < 1.3 > Installation - How to use the K1417 drawer



■ Press the handle button and gently slide out the drawer.



■ Flip up the LCD to a suitable angle.

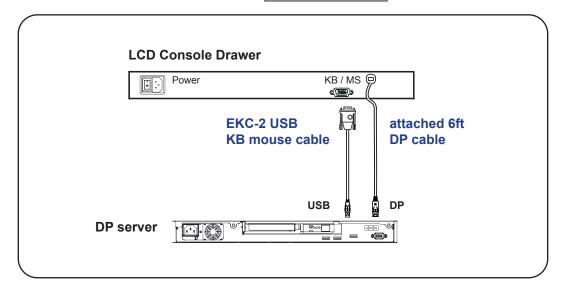


■ Operate the LCD console drawer.

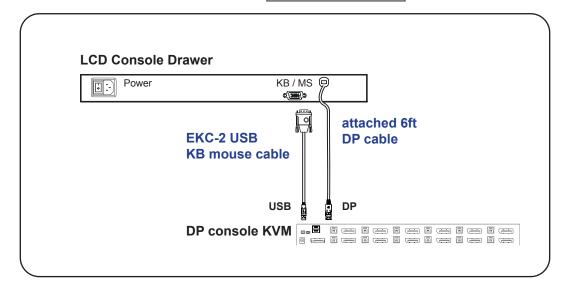
# Intentionally Left Blank

### < 1.4 > K117 Connection to





### < 1.4 > K117 Connection to external KVM

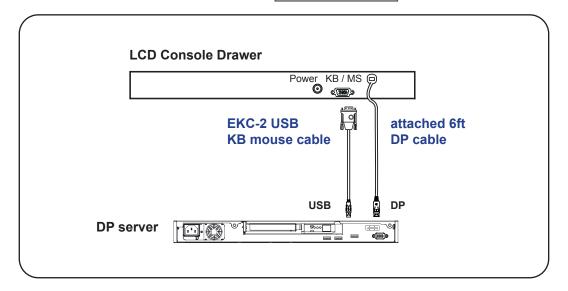




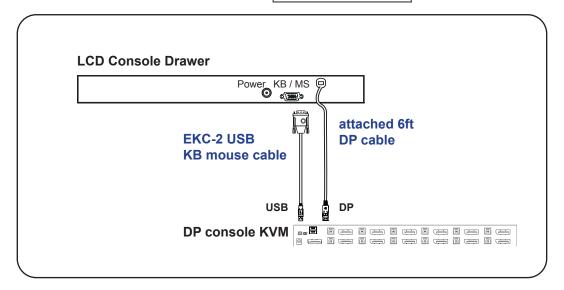
Caution: The LCD console drawer is hot-pluggable, but components of connected devices, such as the servers and KVM switch, may not be hot-pluggable. Plugging and unplugging cables while servers and KVM are powered on may cause irreversible damage to the servers, KVM and LCD console drawer. Before attempting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

### < 1.4 > K1417 Connection to

**DP Server** 



# < 1.4 > K1417 Connection to external 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. The company is not responsible for damage caused in this way.

# < 2.1 > Product Specifications

LCD		K117 / K1417
Panel	Native Resolution	3840 x 2160
	Panel Size ( diagonal )	17.3-inch TFT color LCD
	Brightness ( cd/m² )	300
	Contrast Ratio ( typ. )	1000:1
	Colors	16.7 M, 8-bit
	Viewing Angle ( L/R/U/D )	89/89/89
	Response Time ( ms )	Max. 30
	Dot pitch ( mm )	0.0995
	Display Area ( mm )	382.12H x 214.94V
	Surface treatment	Anti-glare
	Surface hardness	3H
	Backlight Type	LED
	MTBF ( hrs )	20,000

Video	Package	DP 1.2 / HDCP 1.3
	Option	HDMI 2.0 / HDCP 2.2

Power	Power Supply	•	Auto-sensing 100 to 240VAC, 50 / 60Hz
	Power Consumption for	Screen ON	Max. 29W
Powe	Single Console	Power saving mode	Max. 9W
		Power button OFF	Max. 2W
	Power Consumption	Screen ON	Max. 38W
	with KVM integration	Power saving mode	Max. 18W

<sup>\*</sup>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	Operating	Temperature	0 to 55°C degree
Conditions		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	5~500Hz 1G RMS random

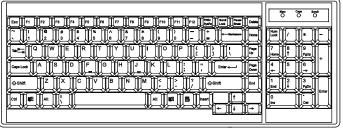
Physical		K117	K1417
Specification	Product (WxDxH)	441.6 x 480 x 44 mm	441.6 x 400 x 44 mm
		17.4 x 18.9 x 1.73 inch	17.4 x 15.7 x 1.73 inch
	Packing (WxDxH)	590 x 808 x 140 mm	590 x 622 x 140 mm
		23.2 x 31.8 x 5.5 inch	23.2 x 24.5 x 5.5 inch
	Net Weight	10.9 kg / 24 lb	8.7 kg / 19.1 lb
	Gross Weight	15.8 kg / 34.8 lb	13.7 kg / 30.2 lb

Applicable	Display Port Input	PC Signal	3840 x 2160 x 60Hz
Format	p		1920 x 1080 x 60Hz
			1600 x 1200 x 60Hz
			1360 x 768 x 60Hz
			1280 x 1024 x 60 / 75Hz
			1280 x 768 x 60Hz
			1024 x 768 x 60 / 70 / 75Hz
			800 x 600 x 60 / 72 / 75Hz
			720 x 400 x 70Hz
			640 x 480 x 60 / 72 / 75Hz
		Audio Signal	2ch Linear PCM
	HDMI Input	HDMI 2.0	3840 x 2160 x 60Hz
		HDMI 2.0 / 1.4	3840 x 2160 x 30Hz
			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

<sup>\*</sup>In some circumstances, if the user connects the LCD to PC via HDMI port or 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.

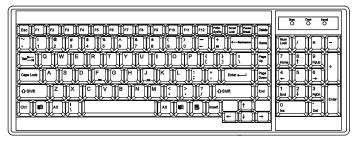
# < 2.2 > Standard Keyboard / Mouse Specifications

Ge G keyboard integrated with touchpad











Key force	55 ± 5g	
Travelling distance	± 0.3mm	
Switch life	> 10 million life cycle time	
OS support Windows / Linux / Unix / Mac OS		

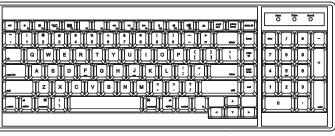
### **Supporting layouts**



America	United States				
ГМГА	United Kingdom	Germany	France	Spain	Norway
EMEA	Italy	Russia	Switzerland	Netherlands	Portugal
Asia	* China	Japan	Korea	Arabia	<b>C</b> * Turkey

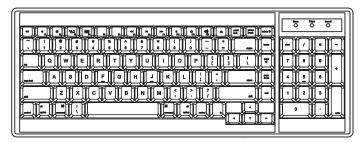
### < 2.2 > MAC Keyboard / Mouse Options

Me MAC keyboard integrated with touchpad





MAC keyboard integrated with trackball



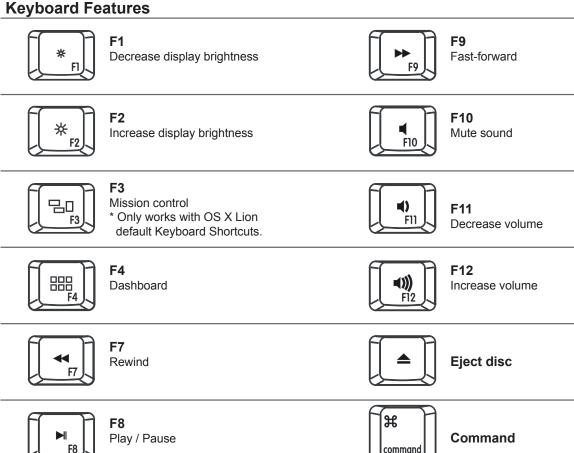


### **Supporting layouts**

**America** 



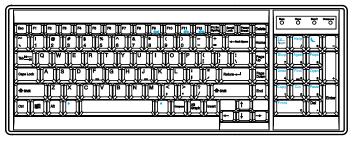
# How to Use "MAC" Keyboard



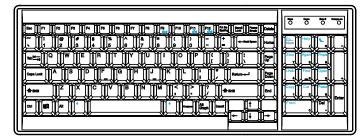
### < 2.2 > SUN Keyboard / Mouse Options

Se

S keyboard integrated with touchpad









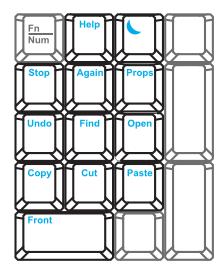




### S keyboard integrated with touchpad / trackball

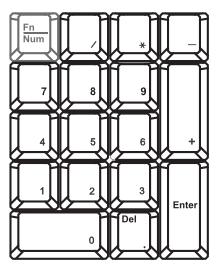
- Incorporates SUN keys, including Stop, Cut, Paste, Compose, Copy and Help
- 104 key notepad keyboard with full numerical pad and SUN function
- USB interface
- US layout only

### 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

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

### K117



Membrane Switch	Function
<b>\Psi</b>	Turn the monitor on or off
	Display the OSD menu Act as an Enter key to select screen setting options
$\wedge                   $	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** (b) 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** 🖔 ).

### K1417

- Power light
- Green = On
- Orange = Power saving



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

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

### 1 Picture

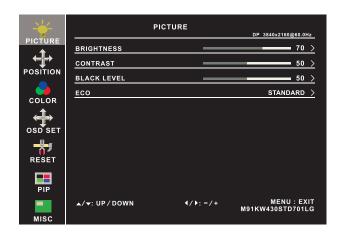
Brightness: Adjust the screen brightness

Contrast : Adjust the difference between the image background

(black level) and the foreground (white level)

Black level: Adjust background black level of the screen

Eco : Screen in power saving mode

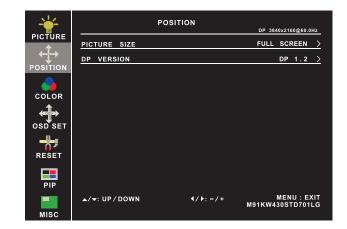


### (2) Position

Picture size: Adjust the image size

- Full Screen / 4:3 / 5:4 / Pixel to Pixel

DP version: Select the DP version



### 3 Color

Color temperature: User / Warm / Cool / 5400k mode and

Red / Green / Blue color balance

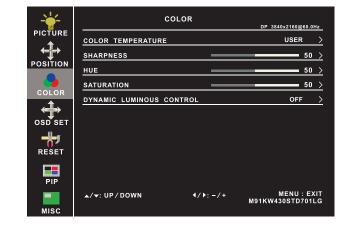
Sharpness : Adjust the image from weak to sharp

Hue : Adjust the screen hue value

Saturation : Adjust the saturation of the image color

Dynamic

luminous control : Control the dynamic brightness



### 4 OSD Set

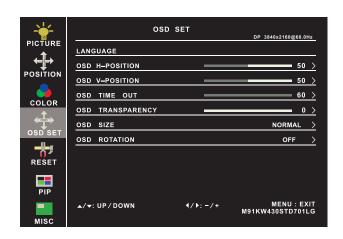
Language : Select the language in which the OSD menu is

displayed - English

OSD H-Position : Align the screen image left or right
OSD V-Position : Align the screen image up or down

OSD time out : Adjust the screen timeout
OSD transparency : Adjust the screen transparency

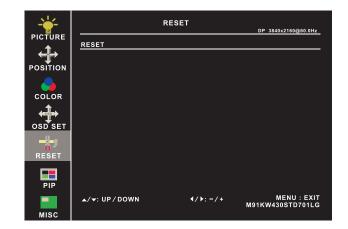
OSD size : Adjust the screen size - Normal / Small
OSD rotation : Rotate the screen - 90° / 180° / 270°



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

### 5 Reset

Reset : Return the adjustment back to factory setting



### 6 PIP

PIP mode : Enter into PIP / PBP setting - PIP MODE /

PBP 2WIN ( Main screen + 1 sub screen ) / PBP 3WIN ( Main screen + 2 sub screen ) / PBP 4WIN ( Main screen + 3 sub screen ) Select the signal input of each sub screen

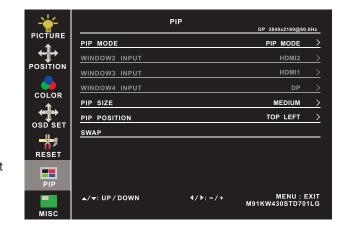
PIP size : Adjust the size of the Sub screen

- Small / Medium / Large / Huge

PIP position : Adjust the position of the Sub screen

- Top Left / Top Right / Bottom Left / Bottom Right

Swap : Swap the input signal of PIP / PBP sub screen



### 7 MISC

Signal source : Select the signal source - DP / HDMI1 / HDMI2

Mute : Turn off the surrounding sound

Audio in : Auto / Line in / DP

Volume : Adjust the volume of sound

Sleep mode : Set the off time - 10 min / 20 min / 30 min /

50 min / 60 min / 120 min / 240 min

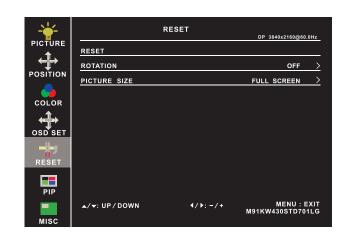


### Options on Reset page

Rotation : Rotate the image in Full screen or 1:1

- 90° / 180° / 270°

Picture size: Adjust the image size in Full screen or 1:1

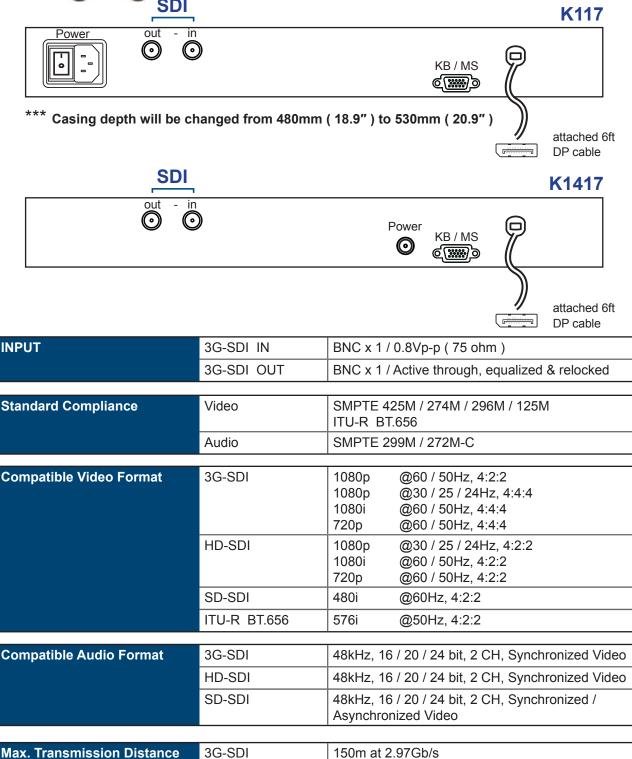


### < 3.1 > Options : 3G / HD / SD-SDI input



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

Designed for use with CyberView displays, a SDI input module can support up to 1080p @60Hz resolution without using additional space or power and it comes standard with a 2-year warranty.



HD-SDI SD-SDI 250m at 1.485Gb/s

480m at 270Mb/s

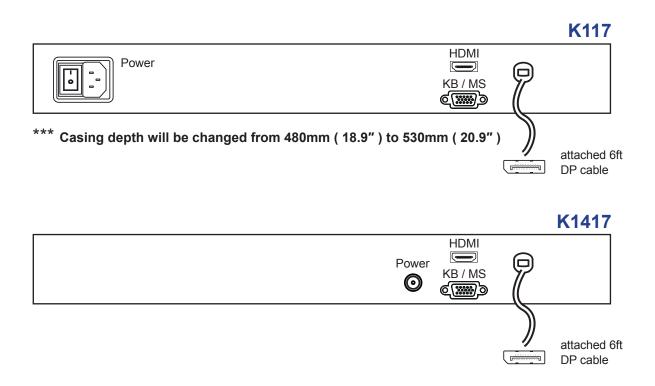
75 ohm coaxial cable

### < 3.2 > Options : HDMI

# - **HDMI 2.0** (HDCP 2.2)



(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.



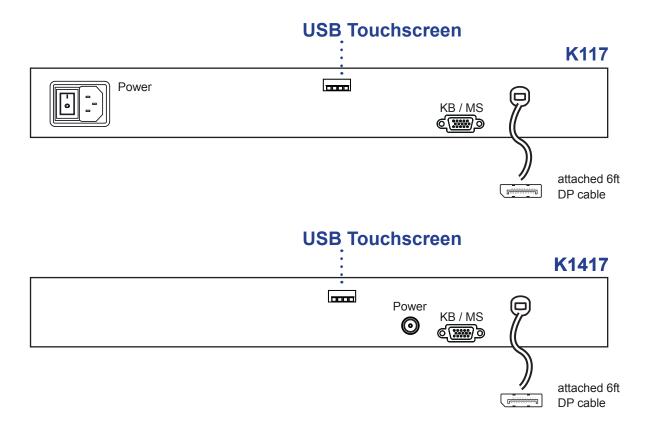
# < 3.3 > Options : Touchscreen & driver



### K17" USB Touchscreen Specification

Model	TRB e-Resistive		
Technology	5-Wire Resistive		
Touch Point	Single		
Input Type	Finger or Stylus		
Resolution	2048 x 2048		
Response Speed	15 ms		
<b>Activation Force</b>	≤ 50 g		
Surface Hardness	3H		
<b>Light Transmission</b>	80% ± 3%		
Haze	8% ± 3%		
Durability	10 million touches		
Top Layer	ITO Film		
Bottom Layer	ITO Glass		
Thickness	2.2 ± 0.2 mm		
Connector	USB Type A		
Compatibility	Windows 7 / XP / Vista, Linux		

- USB touchscreen package includes 1 x 6ft USB cable, quick reference guideline and CD disc
- For detailed information, please refer to the attached CD disc
- As the touchscreen unit is not made of toughened glass, please handle it carefully



# < 3.3 > Options : Touchscreen & driver



### **TRB Driver**

### Please follow the below steps to setup the touch screen:-

- **Step 1.** Run the bundled CD disc or download the driver from the link below : http://www.austin-hughes.com/resources/lcd-console-drawer/software
- Step 2. Double click the Setup.exe
- Step 3. Follow the installation instruction to finish the setup
- **Step 4.** After installation, run the TouchKit program & the "4 point calibration"



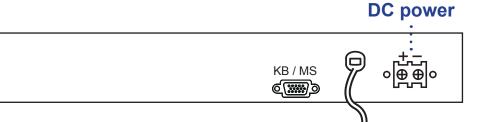
Please do the initial calibration after the first setup



# < 3.4 > Options : DC Power



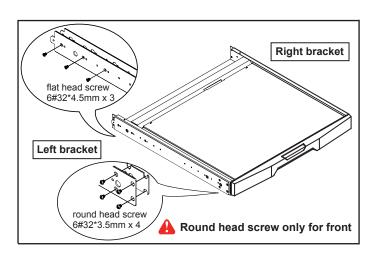
Model	12V	24V	48V	125V	
Input rating					
Input voltage:	12-Volt	24-Volt	48-Volt	110-Volt	
Input range:	9 ~ 18V	18 ~ 36V	36 ~ 75V	66 ~ 160V	
Input current					
- No load	50 mA	50 mA	50 mA	35 mA	
- Full load	4950 mA	2450 mA	1220 mA	460 mA	
Output rating					
Output voltage:	12-Volt	12-Volt	12-Volt	12-Volt	
Output current:	4.16A	4.16A	4.16A	4.16A	
Efficiency	84%	88%	90%	89%	



\*\*\* For DC power option :

- (1) If the unit with LCD, earthing may be required
- A
- attached 6ft
  DP cable
- (2) DC option excludes AC power adapter and power cord.
- ( 3 ) K117 casing depth will be extended from 480mm (  $18.9^{\prime\prime}$  ) to 530mm (  $20.9^{\prime\prime}$  )

# < 3.5 > K1417 Options : ORB-2.1 2-Post Rack Mounting Brackets

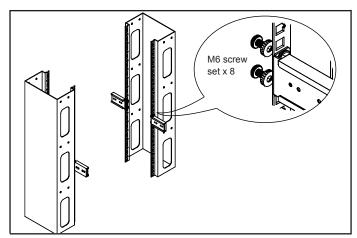


### Step 1



- 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:

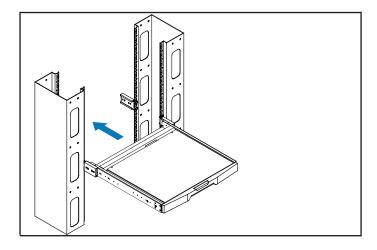
6#32\*3.5 mm screw x 8 (only for front) 6#32\*4.5 mm screw x 6 (only for rear)



### Step 2



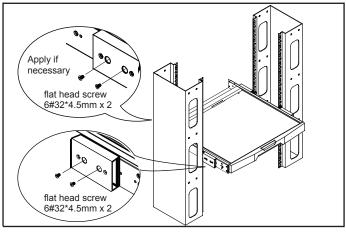
- Attach the set of 4 mini brackets to the 2-post rack.
- M6 screw set is not provided.



### 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.

### < Part 4 >

# < 4.1 > K117 KVM Integration

DP KVM		IP	Remote	12-port
		0	0	K117 - 1201P

Model	Product Dimension (W x D x H)	Packing Dimension (W x D x H)	Net Weight	Gross Weight
K117 with KVM	441.6 x 580 x 44 mm	590 x 808 x 140 mm	12.1 kg	18.1 kg
	17.4 x 22.8 x 1.73"	23.2 x 31.8 x 5.5"	26.6 lb	39.8 lb

# < 4.2 > K1417 KVM Integration

DP KVM		IP	Remote	12-port
<u> </u>		0	0	K1417 - 1201P

Model	Product Dimension (W x D x H)	Packing Dimension (W x D x H)	Net Weight	Gross Weight
K1417 with KVM	441.6 x 580 x 44 mm	590 x 622 x 140 mm	9.5 kg	15.4 kg
	17.4 x 22.8 x 1.73"	23.2 x 24.5 x 5.5"	20.9 lb	33.9 lb

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.

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