# User Manual 17" Ultra High Resolution LCD 1920 x 1200



751

#### Legal Information

First English printing, October 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.
  - $\hfill\square$  Repair or attempted repair by anyone not authorized by us.
  - □ Any damage of the product due to shipment.
  - □ Removal or installation of the product.
  - □ Causes external to the product, such as electric power fluctuation or failure.
  - $\hfill\square$  Use of supplies or parts not meeting our specifications.
  - $\Box$  Normal wear and tear.
  - $\hfill\square$  Any other causes which does not relate to a product defect.
- Removal, installation, and set-up service charges.

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

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

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

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

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

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## **Before Installation**

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

#### Unpacking

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

## How To Clean Your LCD Monitor

## A Caution :

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

#### **Cleaning Your Monitor**

To clean your LCD safely, please follow these steps :

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

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

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

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

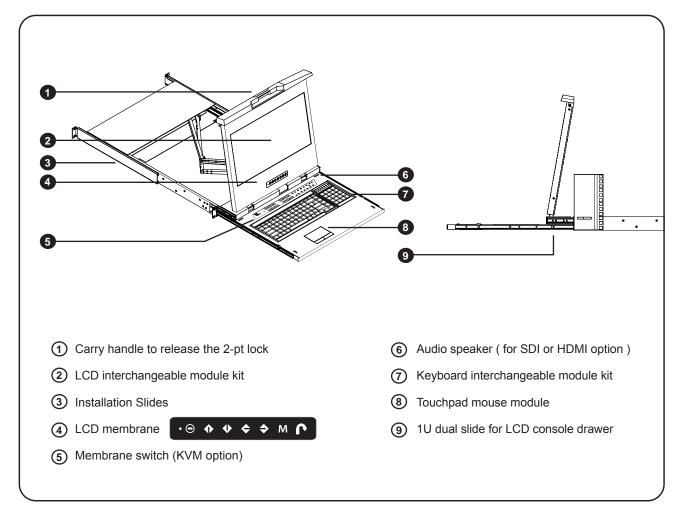
Caution : Do not spray or apply any liquids directly onto the monitor. Always apply the solution to your microfiber cloth first, not directly on the parts you are cleaning.

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

# < Part 1 > < 1.1 > Package Content



## < 1.2 > Structure Diagram

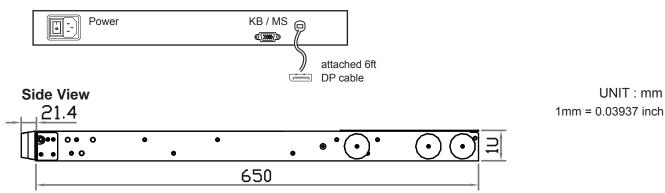


## < 1.2 > Dimension

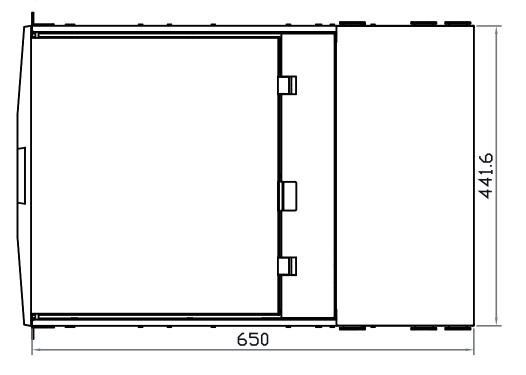
**Front View** 



**Rear View** 



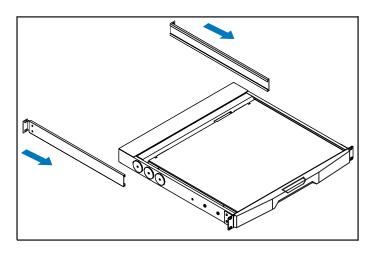
**Top View** 



Model Product Dimension		Packing Dimension	Net	Gross
(W x D x H)		(W x D x H)	Weight	Weight
DK117	441.6 x 650 x 44 mm	595 x 860 x 140 mm	12 kg	18 kg
	17.4 x 25.6 x 1.73"	23.4 x 33.9 x 5.5"	26.4 lb	39.6 lb

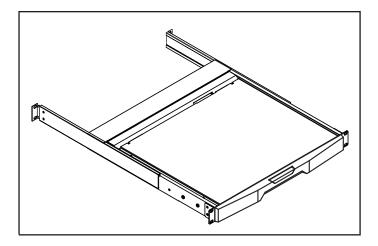
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The weight is only for the single console models. It varies with accessories & options such as KVM, SDI, HDMI & DC power.



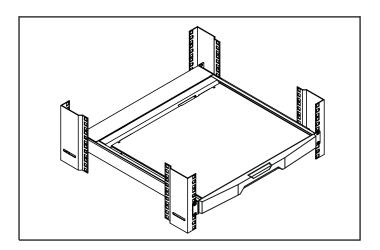


Insert the left and right rear mounting brackets into the LCD console drawer.





- 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.



## < 1.3 > Installation - How to Use the Dual Slides



Press the handle button and gently slide out the drawer.



■ Flip up the LCD to a suitable angle.



■ Operate the LCD console drawer.

## < 1.3 > Installation - How to Use the Dual Slides

**DK117** 



■ Flip down the front panel.



Press the handle button and gently push back the drawer into the rack.

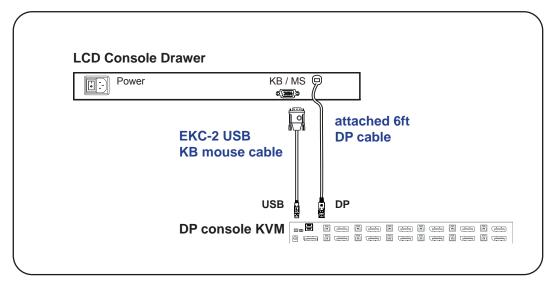


Return the LCD console drawer to park position.

#### < 1.4 > DK117 Connection to DP Server

LCD C	onsole Drawer		
	Power	KB/MS P	
	EKC-2 USB KB mouse cab	ble	attached 6ft DP cable
DP server			DP

## < 1.4 > DK117 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.

## < Part 2 >

## < 2.1 > Product Specifications

LCD	Panel Size ( diagonal )	17.3-inch Widescreen TFT color LCD
Panel	Display pixel ( dots x lines )	3840 x 2160
	Brightness ( typ. )	300
	Contrast Ratio ( typ. )	1000:1
	Color	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	3Н
	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	Range	Auto-sensing 100 to 240VAC, 50 / 60Hz
	Power Consumption for	Screen ON	Max. 29W
	Single Console	Power saving mode	Max. 9W
		Power button OFF	Max. 2W
Power Consumption with KVM integration	Screen ON	Max. 38W	
	with KVM integration	Power saving mode	Max. 18W

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

Regulatory	Safety	FCC & CE certified
	Environmental	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

## < 2.1 > Product Specifications

Physical Specification	Product (W x D x H)	441.6 x 650 x 44 mm 17.4 x 25.6 x 1.73 inch
	Packing (W x D x H)	595 x 860 x 140 mm
		23.4 x 33.9 x 5.5 inch
	Net Weight	12 kgs / 26.4 lbs
	Gross Weight	18 kgs / 39.6 lbs

Applicable	Display Port Input	PC Signal	3840 x 2160 x 60Hz
Format			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

\*In some circumstances, if the user connects the LCD to PC via HDMI port

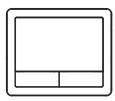
or video and audio signals, the LCD may display incorrectly on a full screen. If so, please adjust the display card setting on display size to fix the issue.

## < 2.2 > Keyboard / Mouse Specifications



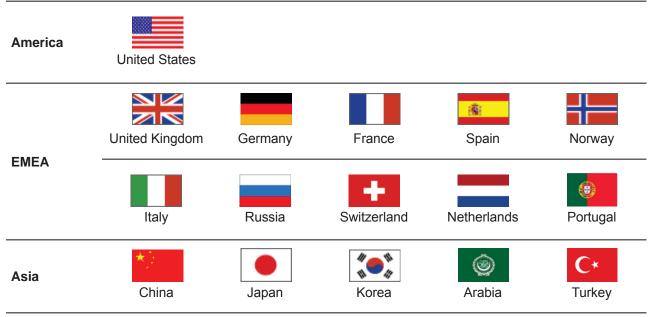
G keyboard integrated with touchpad

		Name         Case         Same           Name         /         *         -           Name         /         *         -           Name         /         *         -           7         1000         8         9           1         5         6         +           1         2         3         Finite           1         2         3         Finite           0         -         -         -           1         -         -         -           0         -         -         -
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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**



## < 2.2 > MAC Keyboard / Mouse Options



MAC keyboard integrated with touchpad



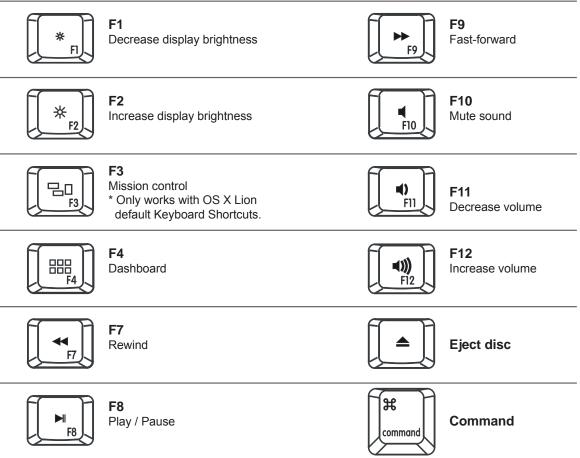
#### **Supporting layouts**

America



## How to Use "MAC" Keyboard

#### **Keyboard Features**



## < 2.2 > SUN Keyboard / Mouse Options



S keyboard integrated with touchpad

<u>  ==   ^    =    =    =    =    =    = </u>
╡╴╬┈╬┈╬┈╗╢┈╗╢╶╗╢╶╗╢╶╗╢╺╢╎╹╢╺╢╵╹╢╺╢╵┓╢╶╢┈╗╴╦┙╧╋╶╬ ┝╴╋┈╣┝╼╢╔┉╢╔┉╢╔╗╢╶╗╢╶╗╢╶╗╢╺╢╵╿╢╺║╵╹╢╺╢╵┑╢╶╗╢╼╖

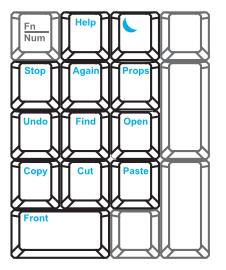


#### S keyboard integrated with touchpad / trackball



- 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

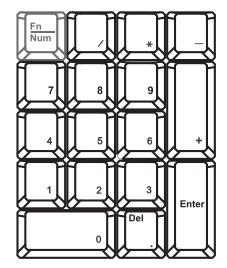


Num LED in Off mode Key pad behaves as a SUN Solar system administration command mode

Audio / Display Keys



**F9** Audio : Mute **Display : Degauss** 



Num LED in Green mode Key pad behaves as a normal key pad mode

\* Please ask your supplier for full details

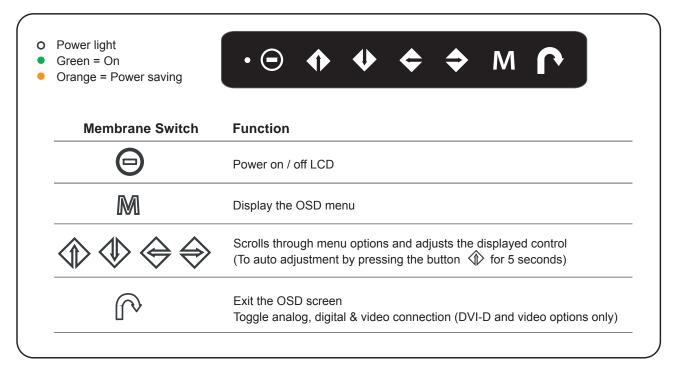


F11 Audio : Decrease volume Display : Decrease contrast



F12 Audio : Increase volume Display : Increase contrast

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



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

#### 1 Picture

(2)

Position

Picture size : Adjust the image size

DP version : Select the DP version

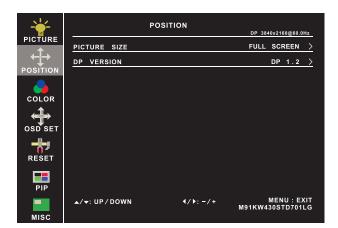
Brightness : Adjust the screen brightness

Contrast : Adjust the difference between the image background ( black level ) and the foreground ( white level )

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

- Black level : Adjust background black level of the screen
- Eco : Screen in power saving mode

#### PICTURE DP 3840x2160@60.0Hz PICTURE BRIGHTNESS **70** > CONTRAST <u>50 ></u> BLACK LEVEL COLOR STANDARD > ECO OSD SET RESET PIP ▲/▼: UP/DOWN MENU : EXIT M91KW430STD701LG MISC



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 Iuminous control	: Control the dynamic brightness

#### COLOR DP 3840x2160@60.0Hz PICTURE COLOR TEMPERATURE USER SHARPNESS 50 > HUE <u>50 ></u> SATURATION **50** > COLOI DYNAMIC LUMINOUS CONTROL OFF > OSD SET RESET PIP MENU : EXIT M91KW430STD701LG ▲/▼: UP/DOWN **∢/**): -/+ MISC

4
4

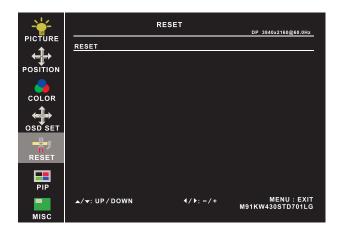
Language	: Select the language in which the OSD menu is displayed - English
OSD H-Position	: Align the screen image left or right
OSD V-Position	: Align the screen image up or down
OSD time out	: Adjust the screen timeout
OSD transparency	: Adjust the screen transparency
OSD size	: Adjust the screen size - Normal / Small
OSD rotation	: Rotate the screen - 90° / 180° / 270°

-\	OSD	SET	DP 3840x2160@60.0Hz
PICTURE	LANGUAGE		
←	OSD H-POSITION		<u> </u>
POSITION	OSD V-POSITION		<u> </u>
COLOR	OSD TIME OUT		60 >
. <b>†</b> .	OSD TRANSPARENCY		<b>0</b> >
	OSD SIZE		NORMAL >
_0_r	OSD ROTATION		OFF >
RESET			
PIP			
MISC	▲/▼: UP/DOWN	<b>∢/</b> ▶: <b>-</b> /+	MENU:EXIT M91KW430STD701LG

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



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

		PIP	DP 3840x2160@60.	0Hz
	PIP MODE		PIP MODE	>
← <b>¦</b> →	WINDOW2 INPUT		HDMI2	>
POSITION	WINDOW3 INPUT		HDMI1	>
	WINDOW4 INPUT		DP	>
COLOR	PIP SIZE		MEDIUM	>
<b>****</b>	PIP POSITION		TOP LEFT	>
OSD SET	SWAP			Γ.
RESET				
PIP				
MISC	▲/★: UP/DOWN	<b>∢/</b> ▶: -/+	MENU:E M91KW430STD701	

## 7 MISC

Signal source	e : Select the signal source - DP / HDMI1 / HDMI2
Mute	: Turn off the surrounding sound
Audio in	: Auto / Line in / DP

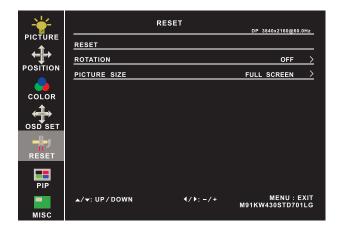
- Volume : Adjust the volume of sound
- Sleep mode : Set the off time 10 min / 20 min / 30 min / 50 min / 60 min / 120 min / 240 min

		MISC	DP 3840x2160@60.0Hz
	SIGNAL SOURCE		DP >
<b>↓</b>	MUTE		OFF
POSITION	AUDIO IN		auto >
- <b>-</b>	VOLUME	_	<b>8</b> >
COLOR	SLEEP MODE		OFF >
OSD SET			
RESET			
PIP			
MISC	▲/▼: UP/DOWN	<b>∢/</b> ▶: <b>-</b> /+	MENU:EXIT M91KW430STD701LG

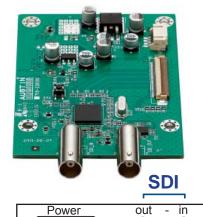
#### Options on Reset page

Rotation : Rotate the image in Full screen or 1:1  $-90^{\circ}$  / 180° / 270°

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



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

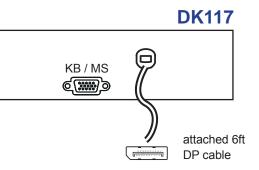


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Austin Hughes' SDI input is an ideal solution for the broadcastgrade video and high resolution CCTV market.

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.



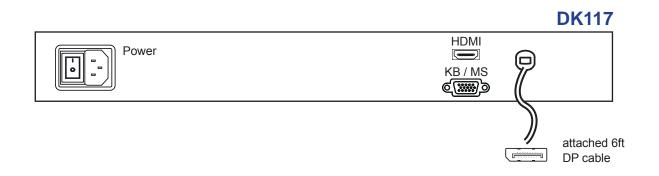
INPUT	3G-SDI IN	BNC x 1 / 0.8Vp-p ( 75 ohm )		
	3G-SDI OUT	BNC x 1 / Active through, equalized & relocked		
Standard Compliance	Video	SMPTE 425M / 274M / 296M / 125M		
Standard Compliance	VILLEO	ITU-R BT.656		
	Audio	SMPTE 299M / 272M-C		
Compatible Video Format	3G-SDI	1080p       @60 / 50Hz, 4:2:2         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 : 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.



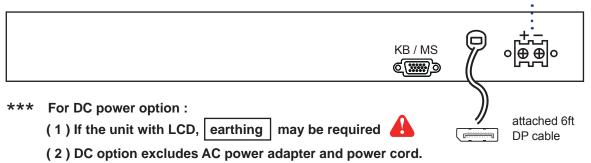
## < 3.3 > Options : DC Power



#### **DK117**

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%	

#### **DC power**



## < Part. 4 > KVM Integration

DP KVM	Local	IP	Remote	12-port
	1	1	0	- IP1202P
	1	0	1	- 1202
	1	0	0	- 1201P

#### www.austin-hughes.com/support/usermanual/cyberview/UM-CV-DPKVM-KIT.pdf

#### www.austin-hughes.com/support/usermanual/cyberview/UM-CV-DVIKVM-KIT.pdf

DVI-D	○ ▋▋▋▋▋ ●	Local	Remote	IP	12-port	-	-
KVM	B	1	0	0	-1201D	-	-

Model	Product Dimension	Packing Dimension	Net	Gross
	(W x D x H)	(W x D x H)	Weight	Weight
DK117 with KVM	441.6 x 650 x 44 mm	595 x 860 x 140 mm	13 kg	19 kg
	17.4 x 25.6 x 1.73"	23.4 x 33.9 x 5.5"	28.6 lb	41.8 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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