Cyber**View** ™

dedicated KVM switch and rackmount screen technology

User Manual   17" / 19" LED-backlit LCD

RP-717 / RP-819
Rackmount Display Panel

Options :
- **SDI / MCS**
- **AV / DVI-D / Audio**
- **Touchscreen / DC power**
- **MIL-type or lockable connector**

FC   CE   UK CA   TAA COMPLIANT   RoHS   REACH

751

Designed and manufactured by Austin Hughes

Legal Information

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 labelled 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 A digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in business, industrial and commercial environments.

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

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

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

Contents

Before Installation

■ It is very important to mount the equipment in a suitable cabinet or on a stable surface.

■ Make sure the place has a good ventilation, is out of direct sunlight, away from sources of excessive dust, dirt, heat, water, moisture and vibration.

Unpacking

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

How To Clean Your LCD Monitor

⚠ Caution :

■ To avoid the risk of electric shock, make sure your hands are dry before unplugging your monitor from or plugging your monitor into an electrical outlet.

■ When you clean your monitor, do not press down on the LCD screen. Pressing down on the screen can scratch or damage your display. Pressure damage is not covered under warranty.

■ Use only cleansers made specifically for cleaning monitors and monitor screens. Cleansers not made to clean monitors and monitor screens can scratch the LCD display or strip off the finish.

■ Do not spray any kind of liquid directly onto the screen or case of your monitor. Spraying liquids directly onto the screen or case can cause damage which is not covered under warranty.

■ Do not use paper towels or abrasive pads to clean your monitor. Using an abrasive pad or any wood based paper product such as paper towels can scratch your LCD screen.

Cleaning Your Monitor

To clean your LCD safely, please follow these steps :

① Disconnect the power cord.

② Gently wipe the surface using a clean, dry microfiber cloth. Use as little pressure as possible.

Cleaning Tough Marks and Smudges

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

① Disconnect the power cord.

② Spray a small amount of non-abrasive cleanser on a microfiber cloth.

⚠ **Caution : Do not spray or apply any liquids directly onto the monitor. Always apply the solution to your microfiber cloth first, not directly on the parts you are cleaning.**
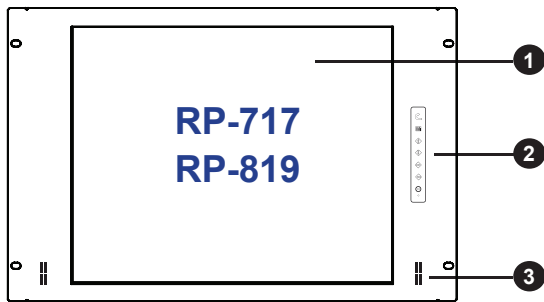
③ Gently wipe the surface. Use as little pressure as possible.

④ Wait until your monitor is completely dry before plugging it in and powering it up.

< 1.1 > Package Content

RP-717 or RP-819 X 1
6ft VGA cable X 1
Power adapter X 1
Power cord X 1

< 1.2 > Structure Diagram

Front view

RP-717
RP-819

① ② ③

① LCD panel
② LCD membrane
③ Audio speaker (optional)
④ Power adapter basket

Rear view

Power adapter

④

Power cord

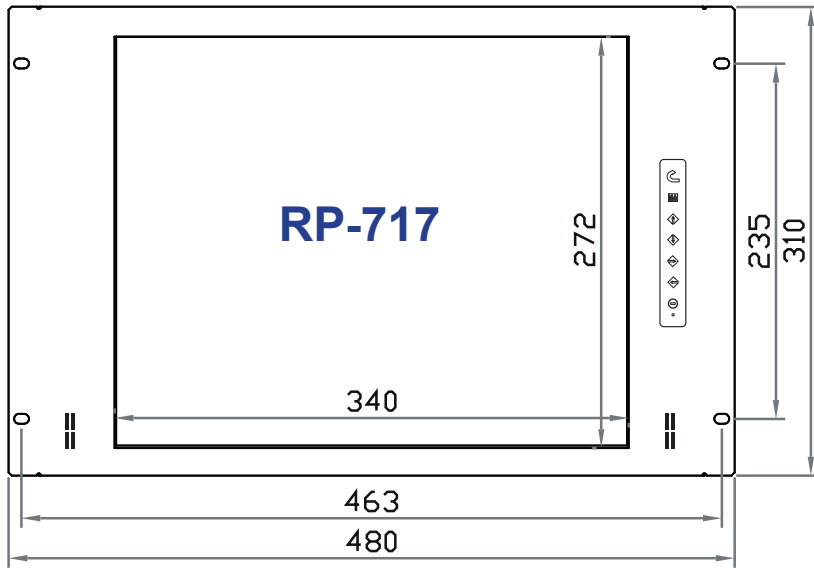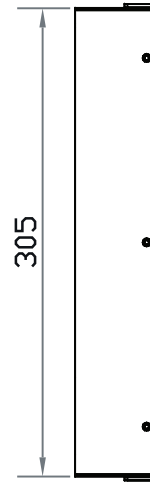| DVI-D	Audio	Power	BNC	VGA	HDMI
	out - in - in				
	Video PC				
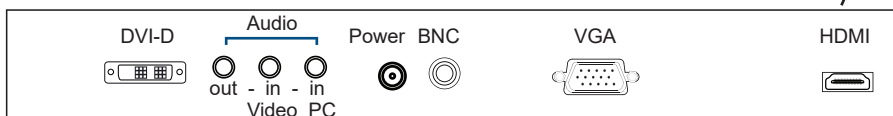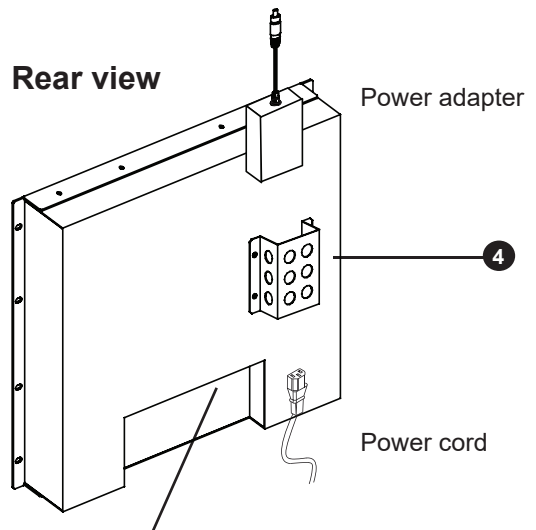
Basic I/O   : HDMI + VGA
Speaker   : HDMI + VGA + Speaker
BNC   : HDMI + VGA + BNC + Audio input
DVI-D   : HDMI + VGA + DVI-D   + Audio input & output   + Speaker
Options   : SDI, USB for touchscreen & DC power

< 1.2 > Dimension - RP-717

Front View

Side View

RP-717

272

235

310

340

463

480

305

Bottom View

UNIT : mm
1mm = 0.03937 inch

480

54,2

440

Model	Product Dimension (W x D x H)	Packing Dimension (W x D x H)	Net Weight	Gross Weight
RP-717	480 x 54.2 x 310 mm 18.9 x 2.1 x 12.2 inch	529 x 124 x 495 mm 20.8 x 4.9 x 19.5 inch	6.1 kg 13.4 lb	8.2 kg 18 lb

Front View

Side View

RP-819

303

379

279,4

354,8

349,8

463

480

UNIT : mm
1mm = 0.03937 inch

Bottom View

480

53,3

440,6
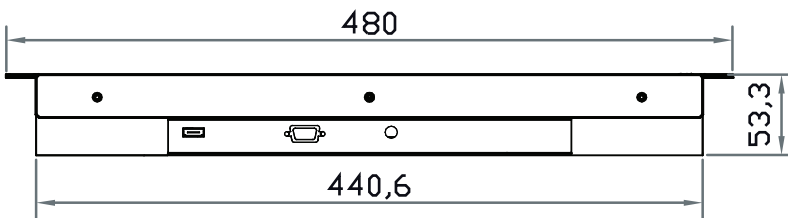
Model	Product Dimension (W x D x H)	Packing Dimension (W x D x H)	Net Weight	Gross Weight
RP-819	480 x 53.3 x 354.8 mm 18.9 x 2.1 x 14 inch	539 x 129 x 529 mm 21.2 x 5.1 x 20.8 inch	5.7 kg 12.5 lb	8 kg 17.6 lb

< 1.3 > Installation
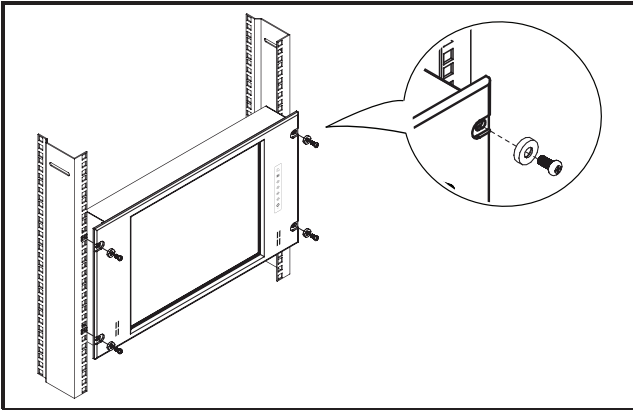
Step **1**

■ Mount the display panel with M6 screw set.

■ M6 screw x 4 pcs required (Left & right side).

M6 screw sets are not provided.
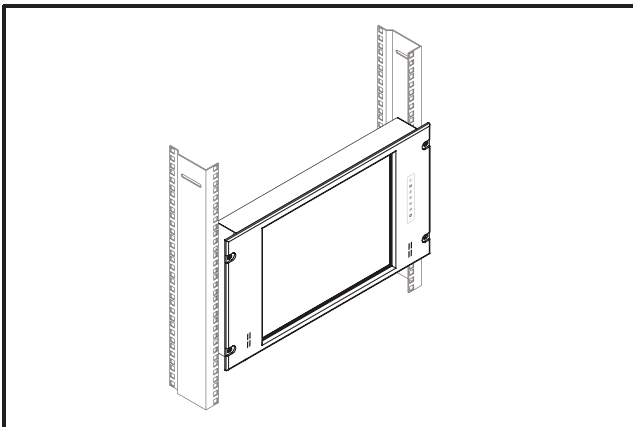
Step **2**

■ Fix the LCD into the rack.

Intentionally Left Blank

< 2.1 > Product Specifications - RP-717 / RP-819

LED-backlit LCD Panel		RP-717	RP-819
	Manufacturer	AUO	AUO
	Panel Size (diagonal)	17-inch TFT color LED-backlit LCD	19-inch TFT color LED-backlit LCD
	Display pixel (dots x lines)	1280 x 1024	1280 x 1024
	Brightness (typ.)	250	250
	Contrast Ratio (typ.)	1000:1	1000:1
	Color	16.7 M	16.7 M
	Viewing Angle (L/R/U/D)	85/85/80/80	85/85/80/80
	Response Time (ms)	5	5
	Dot pitch (mm)	0.264	0.294
	Display Area (mm)	337.92H x 270.33V	376.32H x 301.06V
	Surface treatment	Haze 25%, Hard-coating	
	Surface hardness	3H	3H
	Backlight Type	LED	LED
	MTBF (hrs)	30,000	30,000

Video Connectivity			
	Digital	HDMI	HDMI 1.4, HDCP 1.4
		DVI	DVI-D, TMDS single link
	Analog	VGA	Analog 0.7Vp-p
		Composite (BNC)	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	Dual Stereo Speaker	2W x 2

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

Power			
	Power Supply	Range	Auto-sensing 100 to 240VAC, 50 / 60Hz
	Power Consumption	Screen ON	Max. 22W
		Power saving mode	Max. 2W
		Power button OFF	Max. 1W

Compliance		
	EMC	FCC & CE
	Safety	CE / LVD & UKCA
	Environmental	RoHS3 & REACH / WEEE

Environmental Conditions	Operating	Temperature	0 to 55°C degree
		Humidity	10~90%, non-condensing
		Altitude	16,000 ft
	Storage / Non-operating	Temperature	-20 to 60°C degree
		Humidity	5~90%, non-condensing
		Altitude	40,000 ft
		Shock	10G acceleration (11ms duration)
		Vibration	10~300Hz 0.5G RMS random

Physical Specification		**RP-717**	**RP-819**
	Product (W x D x H)	480 x 54.2 x 310 mm	480 x 53.3 x 354.8 mm
		18.9 x 2.1 x 12.2 inch	18.9 x 2.1 x 14 inch
	Packing (W x D x H)	529 x 124 x 495 mm	539 x 129 x 529 mm
		20.8 x 4.9 x 19.5 inch	21.2 x 5.1 x 20.8 inch
	Net Weight	6.1 kg / 13.4 lb	5.7 kg / 12 lb
	Gross Weight	8.2 kg / 18 lb	8 kg / 17.6 lb

* All dimensions stated are subject to change if options are selected / integrated to base model part codes

Applicable Format	DVI-D / VGA Input	PC Signal	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	720p : 50 / 60Hz
			480p : 60Hz
			576p : 50Hz
		Audio Signal	2ch Linear PCM (32 / 44.1 / 48 KHz)

< 2.2 > On-screen Display Operation (OSD)

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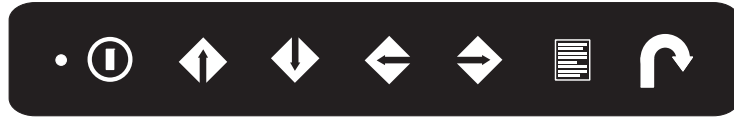
Membrane Switch	Function
⊖	Power on / off LCD
▤	Display the OSD menu
◈ ◈ ◈ ◈	Scrolls through menu options and adjusts the displayed control (To auto adjustment by pressing the button ◈ for 5 seconds)
↰	Exit the OSD screen Toggle analog, digital & video connection (DVI-D and video options only)

Select another video input (only available for models with multiple video input) :

(a) Press the button ↰ to call up the on-screen video mode on top right corner.

(b) Use up/down arrow ◈ ◈ to the select the video input

(c) Press the button ▤ to confirm the selection

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

```
                    PICTURE
                              HDMI 1920x1080@60.0Hz
PICTURE  BRIGHTNESS          ━━━━━━━      70 >
POSITION CONTRAST            ━━━━━━━      50 >
         BLACK LEVEL         ━━━━━━━      50 >
COLOR    ECO                       STANDARD >

OSD SET

RESET

MISC
         ▲/▼ : UP / DOWN   ◀/▶ : − / +   MENU : EXIT
                                         M52LW170DVI701IN
```
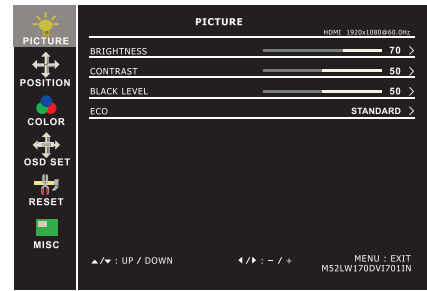
② Position

H-Position   : To adjust the horizontal position of the video

V-Position   : To adjust the vertical position of the video

Clock   : To auto adjust H. Size of the screen

Phase   : To fine tune the screen.

Picture size   : FULL SCREEEN / 4:3 / 5:4 / 16:10

```
                    POSITION
                              HDMI 1920x1080@60.0Hz
PICTURE  H-POSITION          ━━━━━━━      70 >
POSITION V-POSITION          ━━━━━━━      50 >
         CLOCK               ━━━━━━━      50 >
COLOR    PHASE               ━━━━━━━      50 >
         PICTURE SIZE              OFF    >
OSD SET

RESET

MISC
         ▲/▼ : UP / DOWN   ◀/▶ : − / +   MENU : EXIT
                                         M52LW170DVI701IN
```
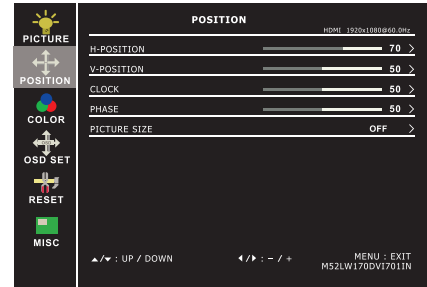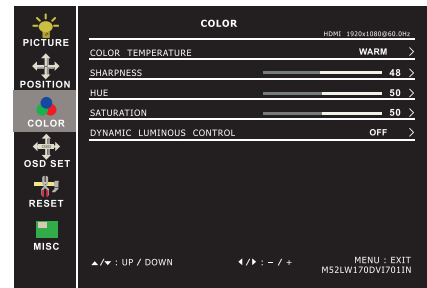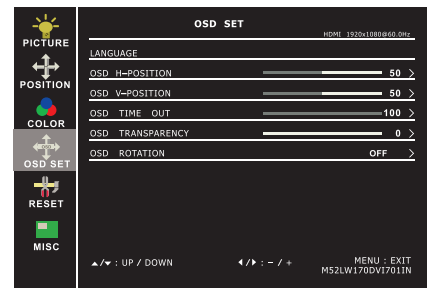
③ Color

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

```
                    COLOR
                              HDMI 1920x1080@60.0Hz
PICTURE  COLOR  TEMPERATURE         WARM   >
POSITION SHARPNESS           ━━━━━━━      48 >
         HUE                 ━━━━━━━      50 >
COLOR    SATURATION          ━━━━━━━      50 >
         DYNAMIC  LUMINOUS  CONTROL   OFF  >
OSD SET

RESET

MISC
         ▲/▼ : UP / DOWN   ◀/▶ : − / +   MENU : EXIT
                                         M52LW170DVI701IN
```

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
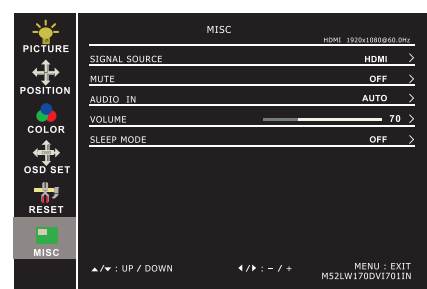
OSD rotation   : Rotate the screen - 90° / 180° / 270°

```
                    OSD SET
                              HDMI 1920x1080@60.0Hz
PICTURE  LANGUAGE
POSITION OSD H-POSITION       ━━━━━━━      50 >
         OSD V-POSITION       ━━━━━━━      50 >
COLOR    OSD  TIME  OUT       ━━━━━━━     100 >
         OSD  TRANSPARENCY    ━━━━━━━       0 >
OSD SET  OSD  ROTATION             OFF    >

RESET

MISC
         ▲/▼ : UP / DOWN   ◀/▶ : − / +   MENU : EXIT
                                         M52LW170DVI701IN
```

⑤ Reset

Reset   : Return the adjustment back to factory setting

```
                    RESET
                              HDMI 1920x1080@60.0Hz
PICTURE  IMAGE AUTO ADJUST
POSITION COLOR AUTO ADJUST
         RESET
COLOR

OSD SET

RESET

MISC
         ▲/▼ : UP / DOWN   ◀/▶ : − / +   MENU : EXIT
                                         M52LW170DVI701IN
```

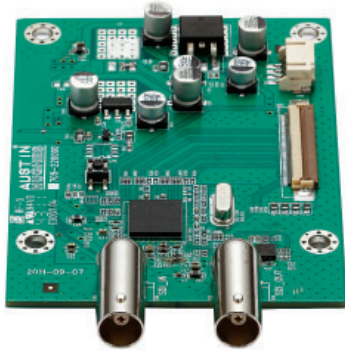### ⑥ MISC

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

```
                    MISC
                              HDMI 1920x1080@60.0Hz
PICTURE  SIGNAL SOURCE             HDMI   >
POSITION MUTE                      OFF    >
         AUDIO IN                  AUTO   >
COLOR    VOLUME             ━━━━━━━      70 >
         SLEEP MODE               OFF    >
OSD SET

RESET

MISC
         ▲/▼ : UP / DOWN   ◀/▶ : − / +   MENU : EXIT
                                         M52LW170DVI701IN
```

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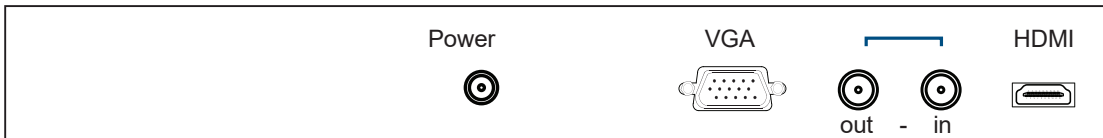## < 3.1 > Options : 3G / HD / SD-SDI input

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.

* SDI option comes with speakers.

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

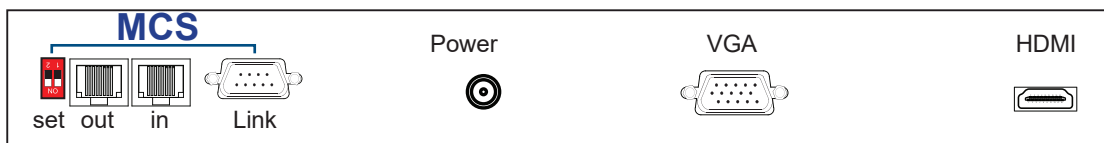|		
Max. Transmission Distance 75 ohm coaxial cable	3G-SDI	150m at 2.97Gb/s
	HD-SDI	250m at 1.485Gb/s
	SD-SDI	480m at 270Mb/s
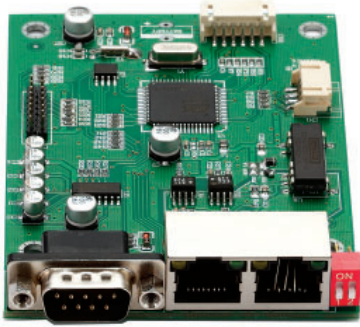
More control is always good. Especially when it is necessary and easy. Austin Hughes provides MCS solution to control the **OSD** of various CyberView LCD display up to 64 units.
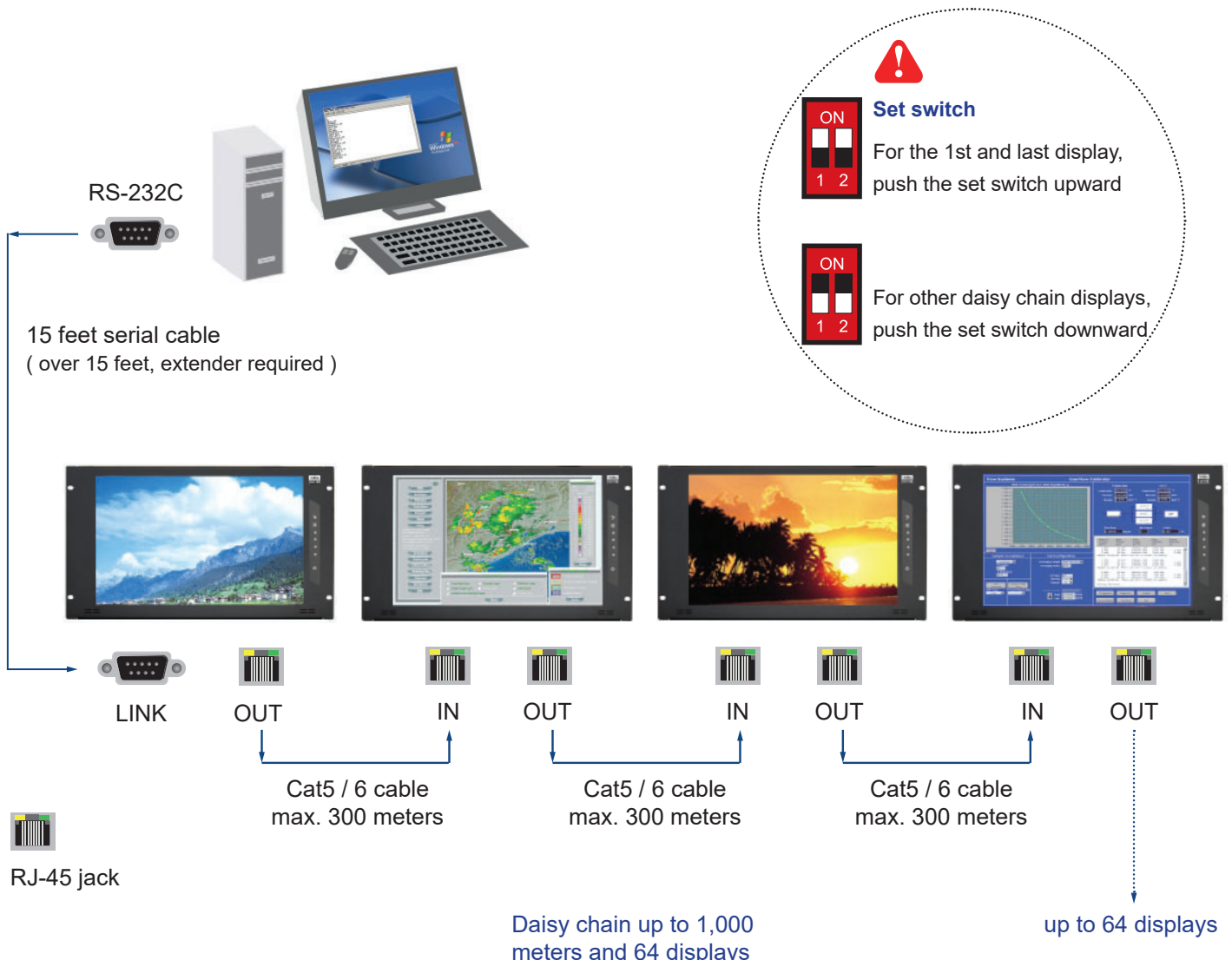
The RS-232C is used for the communication between the PC and the first display via a 15 feet serial cable while the CAN bus is used for the various LCD displays cascade together via CAT 5/6 cable, and daisy chain up to 1,000 meters.

Designed for use with CyberView LCD displays, Austin Hughes provides a MCS input module without using additional space or power and it comes standard with a 2-year warranty.
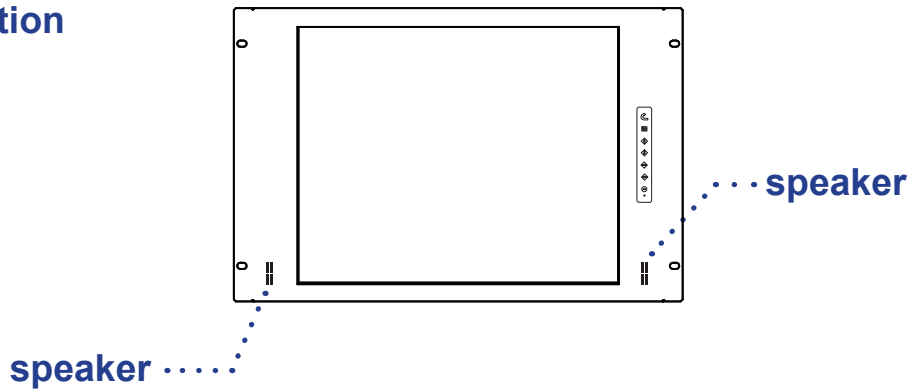

MCS				Power	VGA	HDMI
set	out	in	Link			

*** Please download the protocol of MCS control at :
http://www.austin-hughes.com/support/usermanual/cyberview/UM-CV-MCS.pdf

*** For **MCS** option, casing depth will be changed.

Set switch

For the 1st and last display, push the set switch upward

For other daisy chain displays, push the set switch downward

RS-232C

15 feet serial cable
(over 15 feet, extender required)

LINK   OUT   IN   OUT   IN   OUT   IN   OUT

Cat5 / 6 cable
max. 300 meters

Cat5 / 6 cable
max. 300 meters

Cat5 / 6 cable
max. 300 meters

RJ-45 jack

Daisy chain up to 1,000 meters and 64 displays

up to 64 displays

< 3.3 > Options : Speaker, DVI-D, BNC

Speaker Option

speaker

speaker

DVI-D Option
- **DVI-D** (DVI-D, TMDS single link)
- **Audio input & output**
- **Speaker**

DVI-D	Audio	Power	VGA	HDMI
	out - in - in			
	Video PC			
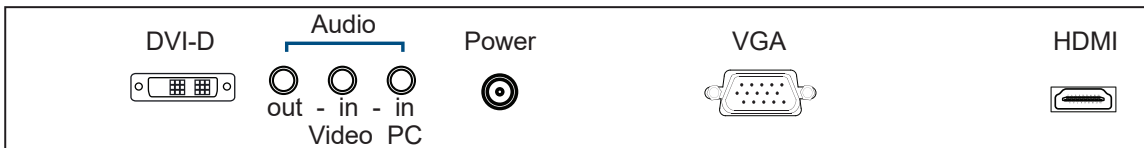
BNC Option
- **BNC** (Composite, BNC)
- **Audio IN**
- **Speaker**

	Audio	Power	BNC	VGA	HDMI
	in - in				
	Video PC				
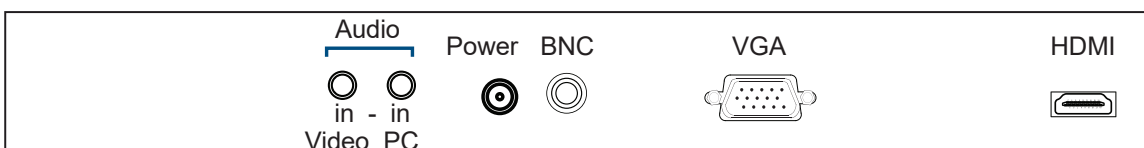
Projected Capacitive 10-pt Touch screen Specification

	RP-717
Model	**TPC-10** Multi-touch
Technology	Projected Capacitive
Touch Point	10
Input Type	Finger or Capacitive Stylus
Resolution	4096 x 4096
Touch Point Accuracy	± 2 mm
Response Speed	< 5 ms
Activation Force	< 5 g
Surface Hardness	6H
Light Transmission	> 85%
Haze	3% ↓
Durability	50 million touches
Top Layer	1.8 mm Glass
Bottom Layer	0.7 mm Sensor Glass
Thickness	2.7 ± 0.1 mm
Connector	USB
Compatibility	Linux / Android / Windows / Mac

Resistive 1-pt / Capacitive 1-pt Touchscreen Specification

Model	RP-717	RP-819	RP-717	RP-819
	TRB e-Resistive		**TCB** e-Capacitive	
Technology	5-Wire Resistive		Capacitive	
Touch Point	Single		Single	
Method	Stylus or Finger		Finger	
Activation Force	≤ 50g / Stylus=R0.8		≤ 50g	
Durability	35 million touches		300 million touches	
Response Time	15 ms		20 ms	
Optical Transmittance	80% ± 3%		93% ±2%	
Surface Hardness	3H		9H	
Haze	8% ± 3%		7%	
Glass	1.4 ±0.2 mm	3.2 ±0.2 mm	2.8 mm ±10%	2.8 mm ±10%
Connector	USB Type A		USB Type A	
Compatibility	Windows 7 / XP / Vista, Linux		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

■ Extra 1U chassis height will be increased after integration.

< 3.4 > Touchscreen & driver

USB Touchscreen

	Power	VGA	HDMI
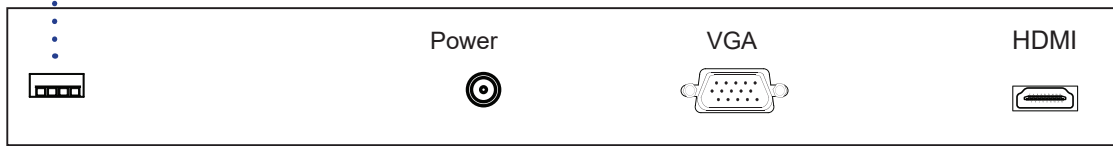
TPC-10 Driver

⚠️ Connect the USB cable from the USB port on the LCD to a computer. The touch screen supports easy Plug-and-Play operations. There is no need to install additional drivers on the computer.

TRB & TCB 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 :
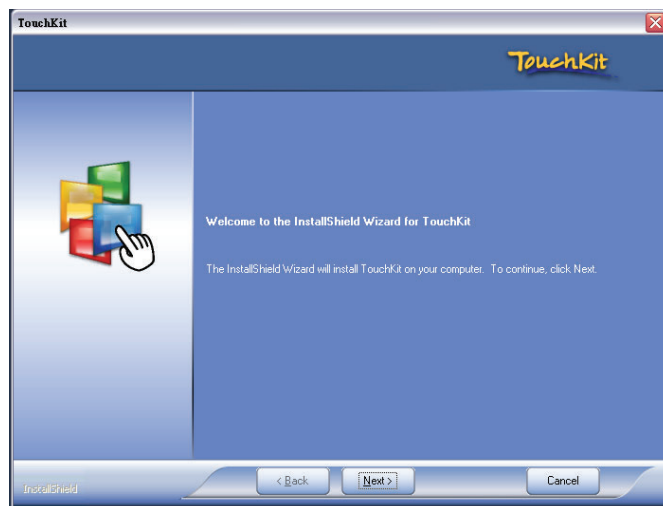http://www.austin-hughes.com/resources/driver/rackmount-display

Step 2. Double click the Setup.exe

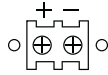**Step 3.** Follow the installation instruction to finish the setup

Step 4. After installation, run the TouchKit program & the "4 point calibration"

⚠️ Please do the initial calibration after the first setup

TouchKit

TouchKit

Welcome to the InstallShield Wizard for TouchKit

The InstallShield Wizard will install TouchKit on your computer. To continue, click Next.

InstallShield   < Back   Next >   Cancel

Model	12V	24V	48V	125V	250V
Input rating					
Input voltage:	12-Volt	24-Volt	48-Volt	110-Volt	300-Volt
Input range:	9 ~ 18V	18 ~ 36V	36 ~ 75V	66 ~ 160V	180 ~ 425V
Input current					
- No load	50 mA	50 mA	50 mA	35 mA	10 mA
- Full load	4950 mA	2450 mA	1220 mA	749 mA	600 mA
Output rating					
Output voltage:	12-Volt	12-Volt	12-Volt	12-Volt	12-Volt
Output current:	4.16A	4.16A	4.16A	6.25A	12.5A
Efficiency	84%	85%	85%	91%	86%

***   **For DC power option :**

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

< 3.6 > MIL-type or Lockable Connector

	Input	Part no.		MIL Standard
MIL - type Connector	DC Power *** (Male)	MS3470W8-33P		MIL - DTL - 26482
	VGA *** (Male)	MS3470W14-15P		MIL - DTL - 26482

*** There are several additional MIL DC and VGA connector types with varying design characteristics to meet cost considerations and to provide users with the most design flexibility possible. For more information, please contact us.

	Input	Part no.		Standard
Lockable Connector	DC Power (Male)	YM-Ext-461CP001		D-type 3W3
	USB	LUSB - A111 - 00		-

*** MIL - type or Lockable connectors above can be integrated with our LCD displays. Sale service just for connectors not provided.

< 3.7 > IP65 front protection (IP65)

IP65 protection (IP65) on the front bazel