

dedicated KVM switch and rackmount screen technology

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



www.rackmountsales.com

www.rackmountsales.com

## Contents

#### < Part. 1 > RMD-151-X17

1.1	Package Content	P.1
1.2	Structure Diagram & Dimension	P.1 - 2
1.3	Installation	P.3

## < Part. 2 > Specifications / OSD

2.1	Product Specifications	P.4 - 5
2.2	On-screen Display Operation ( OSD )	P.6 - 7

## < Part. 3 > Options

3.1	3G / HD / SD- <b>SDI</b> Broadcast-grade input	P.8
3.2	HDMI & Audio	P.9
3.3	X17" Touchscreen : Resistive, Capacitive	P.10
3.4	48V, 24V or 12VDC power	P.11

#### **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.



RMD-151-X17 X 1 6ft VGA cable X 1 Power cord X 1 M6 screw, cage nut & cup washer X 8

The above package content is only for the pure model (VGA and DVI-D only). It varies with options such as SDI, HDMI, audio, touchscreen & DC power.

#### < 1.2 > Structure Diagram



#### < 1.2 > Dimension

#### **Front View**



Side View



**Top View** 



Model	Product Dimension	Packing Dimension	Net	Gross
	(W x D x H)	(W x D x H)	Weight	Weight
RMD-151-X17         441.6 x 460 x 44 mm		590 x 687 x 120 mm	11 kg	15 kg
17.4 x 18.1 x 1.73"         5		23.2 x 27 x 4.7"	24 lb	33 lb

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

UNIT : mm 1mm = 0.03937 inch

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



- Step 1
- Insert the left and right rear mounting bracket into the display 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 display drawer into the rack.



## < Part 2 > Specifications / OSD

## < 2.1 > Product Specifications

LCD	Panel Size ( diagonal )	16.2-inch Widescreen TFT color LCD
Panel	Display pixel ( dots x lines )	1920 x 1200
	Brightness ( typ. )	300
	Contrast Ratio ( typ. )	800:1
	Color	16.7 M, 8-bit
	Viewing Angle ( L/R/U/D )	89/89/89
	Response Time ( ms )	30
	Dot pitch ( mm )	0.191
	Display Area (mm)	343.80H x 214.90V
	Surface treatment	Anti-glare, Hard-coating
	Surface hardness	3Н
	Backlight Type	LED
	MTBF ( hrs )	20,000

Video	Digital	HDMI	HDMI 1.4, CEA-861-E
Connectivity		DVI	DVI-D, TMDS single link
	Analog	VGA	Analog 0.7Vp-p
	Plug & Play	DVI / VGA	VESA EDID structure 1.3
	Synchronization	VGA	Separate, Composite & SOG

Audio	Audio Output	Connector	3.5mm stereo jack
Connectivity		Resistance / Power level	30kΩ / 2.8V
	Speaker	Dual Stereo Speaker	2W x 2

\*When the audio output is connected, speaker output is  $\mathsf{OFF}$ 

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

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

Physical	Product (W x D x H)	441.6 x 480 x 44 mm
Specification		17.4 x 18.9 x 1.73 inch
	Packing (W x D x H)	588 x 758 x 120 mm
		23.1 x 29.8 x 4.7 inch
	Net Weight	11 kg / 24.2 lb
	Gross Weight	15 kg / 33 lb

Applicable	DVI-D / VGA Input	PC Signal	1920 x 1200 x 60Hz
Format			1360 x 768 x 60Hz
			1280 x 1024 x 60 / 75Hz
			1280 x 960 x 60Hz
			1280 x 768 x 60 / 75Hz
			1152 x 864 x 75Hz
			1024 x 768 x 60 / 70 / 75Hz
			848 x 480 x 60Hz
			800 x 600 x 60 / 72 / 75Hz
			720 x 400 x 70Hz
	HDMI Input		640 x 480 x 60 / 72 / 75Hz
			640 x 400 x 70Hz
			640 x 350 x 70Hz
		PC Signal	Same as VGA
		Video Signal	1080p : 60Hz
			720p : 50 / 60Hz
			480p : 60Hz
			576p : 50Hz
		Audio Signal	2ch Linear PCM ( 32 / 44.1 / 48 KHz )

## < 2.2 > On-screen Display Operation ( OSD )

Image: Second Stress       Turn the monitor on or off         Image: Second Stress       Display the OSD menu Act as an Enter key to select screen setting options         Image: Second Stress       Scroll through menu options and adjust the displayed control         Image: Second Stress       Scroll through menu options and adjust the displayed control         Image: Second Stress       Scroll through menu options and adjust the displayed control         Image: Second Stress       Scroll through menu options and adjust the displayed control         Image: Second Stress       Scroll through menu options and adjust the displayed control         Image: Second Stress       Scroll through menu options and adjust the displayed control         Image: Second Stress       Scroll through menu options and adjust the displayed on the screer         Image: Second Stress       Scroll through menu options on screen sub-menu or main menu         Image: Second Stress       Scroll through menu options on the screer         Image: Second Stress       The time is necessarily required for the monitor to load the software for its opeation. During this time period, no picture is displayed on the screer the monitor will not respond to all touch buttons or remote control.         Image: Second Stress       Scroll through buttons or remote control.		Function		
<ul> <li>Display the OSD menu Act as an Enter key to select screen setting options</li> <li>At as an Enter key to select screen setting options</li> <li>Scroll through menu options and adjust the displayed control</li> <li>Exit the OSD screen Go back to the previous on-screen sub-menu or main menu</li> </ul> All LED touch buttons in WHITE light When the monitor is connected to power and first turn on, all LED touch buttons will light on in 6 - 8 seconds. The time is necessarily required for the monitor to load the software for its opeation. During this time period, no picture is displayed on the screer the monitor will not respond to all touch buttons or remote control.	ڻ ا	Turn the monitor on or off		
<ul> <li>Scroll through menu options and adjust the displayed control</li> <li>Exit the OSD screen Go back to the previous on-screen sub-menu or main menu</li> <li>All LED touch buttons in WHITE light</li> <li>When the monitor is connected to power and first turn on, all LED touch buttons will light on in 6 - 8 seconds. The time is necessarily required for the monitor to load the software for its opeation. During this time period, no picture is displayed on the screer the monitor will not respond to all touch buttons or remote control.</li> <li>When the monitor is turned off locate the touch buttons in low ambient light conditions</li> </ul>		Display the OSD menu Act as an Enter key to select screen setting options		
<ul> <li>Exit the OSD screen Go back to the previous on-screen sub-menu or main menu</li> <li>All LED touch buttons in WHITE light</li> <li>When the monitor is connected to power and first turn on, all LED touch buttons will light on in 6 - 8 seconds. The time is necessarily required for the monitor to load the software for its opeation. During this time period, no picture is displayed on the screer the monitor will not respond to all touch buttons or remote control.</li> <li>When the monitor is turned off, locate the touch buttons in low ambient light conditions</li> </ul>	${\Bbb A}  {\Bbb V}  {\Bbb A}  {\Bbb A}$	Scroll through menu options and adjust the displayed control		
<ol> <li>All LED touch buttons in WHITE light</li> <li>When the monitor is connected to power and first turn on, all LED touch buttons will light on in 6 - 8 seconds. The time is necessarily required for the monitor to load the software for its opeation. During this time period, no picture is displayed on the screer the monitor will not respond to all touch buttons or remote control.</li> <li>When the monitor is turned off, locate the touch buttons in low ambient light conditions.</li> </ol>	Exit the OSD screen Go back to the previous on-screen sub-menu or main menu			
by pressing any touch buttons (except the <b>Power</b> (b)) to light up all LED touch button for 2 seconds.	<ol> <li>All LED touch buttons in WHITE</li> <li>When the monitor is connectlight on in 6 - 8 seconds. The software for its opeation. Duthe monitor will not respond</li> <li>When the monitor is turned by pressing any touch buttof for 2 seconds.</li> </ol>	ted to power and first turn on, all LED touch buttons will the time is necessarily required for the monitor to load the uring this time period, no picture is displayed on the screen, it to all touch buttons or remote control. off, locate the touch buttons in low ambient light conditions ons (except the <b>Power</b> (b)) to light up all LED touch buttons		



#### 1 Picture

Picture mode :	Standard / Vivid / Soft / User mode to choose	
Brightness :	Adjust background black level of the screen image	
Contrast :	Adjust the difference between the image background (black level) and the foreground (white level)	
Hue:	Adjust the screen hue value	
Saturation :	Adjust the saturation of the image color	
Picture size :	Adjust the image size	
Color temp :	Standard / Cool / Warm / User to choose	
Noise reduce :	Reduce the noise of the image	
Sharpness :	Adjust the image from weak to sharp	



#### < 2.2 > On-screen Display Operation ( OSD )

#### **RMD-X17**

#### 2 PC

Auto adjust :	Automatically adjust sizes, centers and fine tunes the video signal to eliminate waviness and distortion.
Clock :	Adjust the clock value
Phase :	Adjust the phase value
H. Position :	Align the screen image left or right
V. Position :	Align the screen image up or down



#### 3 Audio

Audio mode :	Movie / Voice / Normal / Music mode to choose
Volume :	Adjust the volume of sound
Bass :	Set the value of bass sound
Treble :	Set the value of treble sound
Balance :	Set the balance value of treble and bass sound
Analog TV audio :	Set the value of analog TV audio sound
Mute :	Turn off the surrounding sound



#### (4) MISC

Select the language in which the OSD menu is displayed - English
Set the off time
Adjust picture in picture setting
Enter into PIP position
Enter into the Sub source and sound source
Return the adjustment back to factory setting
Select for Help



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



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

Designed for use with CyberView Full HD 1080p and ultra high resolution 1920 x 1200 LCD displays, Austin Hughes provides a SDI input module without using additional space or power and it comes standard with a 2-year warranty.

SDI

Au	dio	DVI-D	Power			
Ó	Ó		$\odot$	HDMI ୌ୍ଲ୍ଲ୍ରିଡ	$\odot$	$\odot$
PC in	out		-	VGA	in -	out

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 1080p 1080i 720p	@60 / 50Hz, 4:2:2 @30 / 25 / 24Hz, 4:4:4 @60 / 50Hz, 4:4:4 @60 / 50Hz, 4:4:4
	HD-SDI	1080p 1080i 720p	@30 / 25 / 24Hz, 4:2:2 @60 / 50Hz, 4:2:2 @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	

- HDMI
- Audio



HDMI : HDMI 1.1, CEA-861-D

Audio : 3.5mm audio jacks for audio in & out, and 2W + 2W speakers

## < 3.3 > Options : Touchscreen & driver



#### X17" USB Touchscreen Specification

Model	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	10 million touches	300 million touches	
Response Time	15 ms	20 ms	
Optical Transmittance	80% ± 3%	92% ±2%	
Surface Hardness	3H	9Н	
Haze	8% ± 3%	7%	
Glass	2.2 ±0.2 mm	2.8 mm ±10%	
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

#### **USB** Touchscreen



#### **TRB & TCB Driver**

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

- Step 1. Run the bundled CD disc
- Step 2. Double click the Setup.exe

after the first setup

- Step 3. Follow the installation instruction to finish the setup
- Step 4. After installation, run the TouchKit program & the "4 point calibration"



## < 3.4 > Options : DC Power⊕⊕⊙

Model	12V	24V	48V
Input rating			
Input voltage:	12-Volt	24-Volt	48-Volt
Input range:	9 ~ 18V	18 ~ 36V	36 ~ 75V
Input current			
- No load	50 mA	50 mA	50 mA
- Full load	4950 mA	2450 mA	1220 mA
Output rating			
Output voltage:	12-Volt	12-Volt	12-Volt
Output current:	4.16A	4.16A	4.16A
Efficiency	84%	85%	85%

# DC power DVI-D

\*\*\*

Option excludes 1 x power cord and 1 x AC power adapter

www.rackmountsales.com