# 15 INCH PREMIUM TFT-LCD CCTV MONITOR



#### **15RTC**

**INSTRUCTION MANUAL** 



#### TOA ELECTRONICS, INC.

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Please read this manual thoroughly before use, and keep it handy for future reference.

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This Monitor was Manufactured by ISO 9001 Certified Factory

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### SAFETY INSTRUCTION

#### **Important Safety Instructions**

- 1). Read these instructions
- 2). Keep these instructions..
- 3). Heed all warnings.
- 4). Follow all instructions.
- 5). Do not use this apparatus near water.
- 6). Clean only with dry cloth.
- 7). Do not block any ventilation openings. Install in accordance with the maufacturer's instructions.
- 8). Do not install near any heat sources such as radiators, heat registers, stoves or other apparatus (including amplifiers) that produce heat.
- 9). Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the prong. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safely. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- 10). Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- 11). Only use attachments/accessories specified by the manufacturer.
- 12). Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avid injury from tip-over.



- 13). Unplug this apparatus during lightning storms or when unused for long periods of time.
- 14) Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

### SAFETY INSTRUCTION

- The apparatus shall not be exposed to dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on the apparatus.
- Minimum distances(e.g. 10cm) around the apparatus for sufficient ventilation.

"WARNING - To reduce the risk of fire or electric shock, do not expose the apparatus to rain or moisture."

"The apparatus shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases, shall be placed on the apparatus."



#### **CAUTION**

RISK OF ELECTRIC SHOCK DO NOT OPEN



CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK. DO NOT REMOVE REAR COVER, NO USER SERVICEABLE PARTS INSIDE, REFER TO QUALIFIED SERVICE PERSONNEL.



This symbol is intended to alert the user to the presence of uninsulated :dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute arisk of electric shock to persons.



This symbol is intended to alert the user to the presence of important operating and maintenance(servicing) instructions in the literature accompanying the appliance.

### **CAUTIONS**

#### **CAUTION**

The power supply cord is used as the main disconnect device, ensure that the socket-outlet is located/installed near the equipment and is easily accessible.

#### **ATTENTION**

Le cordon d'alimentation est utillsé comme interrupteur général. La prise de courant doit être située ou installée à proximité du matériel et être facile d'accès

#### CAUTION TO SERVICE PERSONNEL

POWER SUPPLY CORD IS USED AS MAIN POWER DISCONNECT DEVICE IN THIS PRODUCT. UNPLUG THIS PRODUCT FROM THE WALL OUTLET BEFORE REMOVING THE BACK COVER AND SERVICING

#### ► NEVER REMOVE THE BACK COVER

Removal of the back cover should be carried out only by qualified personnel.

#### **▶** DO NOT USE IN HOSTILE ENVIRONMENTS

To prevent shock or fire hazard, do not expose the unit to rain or moisture.

This unit is designed to be used in the office or home. Do not subject the unit to vibrations, dust of corrosive gases.

#### **▶** KEEP IN A WELL VENTILATED PLACE

Ventilation holes are provided on the cabinet to prevent the temperature from rising. Do not cover the unit or place anything on the top of unit.

#### **AVOID HEAT**

Avoid placing the unit in direct sunshine or near a heating appliance.

#### **▶** TO ELIMINATE EYE FATIGUE

Do not use the unit against a bright back ground and where sunlight or other light sources will shine directly on the monitor.

#### **▶** BE CAREFUL OF HEAVY OBJECT

Neither the monitor itself nor any other heavy object should rest on the power cord.

Damage to a power cord can cause fire or electrical shock.

# FCC RF INTERFERENCE STATEMENT

#### NOTE

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.

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.

- Reorient 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.
- Consult the dealer or an experienced radio, TV technician for help.
- Only shielded interface cable should be used.

Finally, any changes or modifications to the equipment by the user not expressly approved by the grantee or manufacturer could void the users authority to operate such equipment.

#### **▶ DOC COMPLIANCE NOTICE**

This digital apparatus does not exceed the Class A limits for radio noise emissions from digital apparatus set out in the radio interference regulation of Canadian Department of communications.

# **CONNECTING WITH EXTERNAL EQUIPMENT**

#### A. SIDE PANEL CONTROL

- 1. DC 12V IN
- 2. D-SUB IN

PC Signal Input

3. VIDEO 1(AV1) IN

Composite signal Input for AV1

4. VIDEO 1(AV1) OUT

Video looping output for AV1

5. VIDEO 2(AV2) IN

Composite signal Input for AV2

6. VIDEO 2(AV2) OUT

Video looping output for AV2

7. AUDIO 1 IN

Stereo Audio Signal Input, This input is for AV1, S-VIDEO

8. AUDIO 2 IN

Stereo Audio Signal Input, This input is for AV2

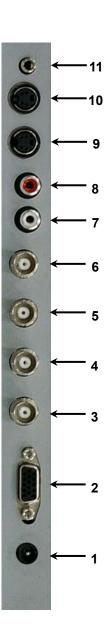
9. S-VIDEO (Y/C) IN

Y/C separated signal input

10. S-VIDEO (Y/C) OUT

Y/C separated signal looping output

11. PC STEREO IN



### REMOTE FUNCTIONS

#### **B. REMOTE CONTROLLER**

#### 1. POWER( (b)

Turns the power ON or OFF. There will be a few seconds delay before the display appears.

#### 2. SOURCE

Select pc or video( AV1 / AV2 / S-Video / PC ) sources.

#### 3. APC (Auto Picture Control)

Select picture mode.

#### 4. ACC (Auto Colour Control)

Select Colour mode.

#### 5. AV1

Select AV1 mode

#### 6. AV2

Select AV2 mode

#### 7. S-VIDEO

Select S-VODEO mode

#### 8. PC

Select PC mode

#### 9. AUTO

Auto geometry adjustment in PC Source.

#### **10. MUTE**

Mute the sound.

#### **11. MENU**

Activates and exits the On Screen Display.

#### **12. EXIT**

Exit the On Screen Display.

#### 13. VOL(**▼**▶)

Increases or decreases the level of audio volume.

#### 14. UP/DOWN

Move to OSD menu.

#### 15. ENTER

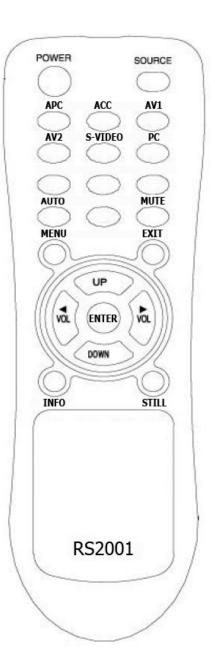
Accepts your selection or displays the current mode.

#### 16. INFO

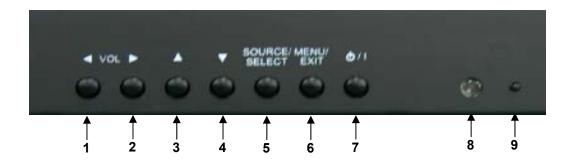
Input mode information Display.

#### **17. STILL**

Pause the picture.



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#### 1 / 2. ◀ VOL ▶

Adjust the volume / Adjust menu settings.

#### 3/4. ▲ / ▼

This button allows user to enter the sub-menu of the activated function

#### 5. SOURCE/SELECT

Select PC or video source.

Select On Screen Display menu

#### 6. MENU / EXIT

Activates and exits the On Screen Display.

#### 7. POWER ON/OFF( (b))

Turns the power ON or OFF. There will be a few seconds delay before the display appears.

#### 8. IR Sensor

Remote controller sensor.

#### 9. POWER LED

The power LED(next to the power switch) lights with green when the power is turned ON.

The power is turned off by pressing the power switch again and the power LED goes Red.

#### **OSD MENU DESCRIPTION**

A: CUSTOM MENU (Only Video mode)



Press the MENU button and then up(▲) / down(▼) button to select the Custom menu.



Press the  $up(\blacktriangle) / down(\blacktriangledown)$  button to select Custom sub menu.

Press the left(◀) /right(▶) button to adjust picture setting.

Press the MENU button to save.

Brightness: Increase or decrease the intensity of the image.

Contrast: Increase or decrease the intensity (lightness or dimness) of the image.

**Color:** Increase or decrease the colour of the picture. **Tint:** Increase or decrease the tint of the picture.

**Sharpness:** Increase or decrease the sharpness of the picture.

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#### A: CUSTOM MENU (Only PC mode)



Press the MENU button and then up(▲) / down(▼) button to select the Custom menu.



Press the  $up(\blacktriangle) / down(\blacktriangledown)$  button to select Custom sub menu.

Press (◀) /right(▶) button to adjust picture setting.

Press the MENU button to save.

#### B. Picture / Sound Menu(Only Video mode)



Press the MENU button and then  $up(\blacktriangle) / down(\blacktriangledown)$  button to select the Picture / Sound. Press the right( $\blacktriangleright$ ) or ENTER button.

#### 1. Picture Mode



Press the  $up(\blacktriangle) / down(\blacktriangledown)$  button to select the Picture Mode.

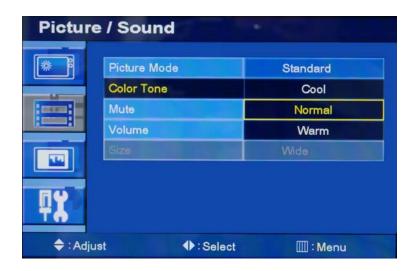
Press the right( $\blacktriangleright$ ) or ENTER button and then press up( $\blacktriangle$ ) / down( $\blacktriangledown$ ) button to select the desire Picture Mode.

Press the MENU button to save.

#### 2. Color Tone



Press the up(▲) / down(▼) button to select the Color Tone.

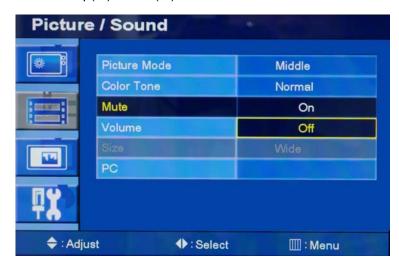


Press the  $(\triangleright)$  or ENTER button and then  $up(\blacktriangle)/down(\blacktriangledown)$  button to select the desired color tone. Press the MENU button to save.

#### 3. Mute



Press the up(▲) / down(▼) button to select the Mute.



Press the  $(\blacktriangleright)$  or ENTER button and then  $up(\blacktriangle)/down(\blacktriangledown)$  button to select the desired Mute. Press the MENU button to save.

#### 4. Volume



Press the  $up(\triangle) / down(\nabla)$  button to select the Volume.

Press (◀) /right(▶) button to adjust Volume.

Press the MENU button to save.

#### 5. PC (Only PC mode)



Press the up(▲) / down(▼) button to select the PC

Press the ▶ or ENTER button

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Press the up(▲) / down(▼) button to select PC sub menu

Press the right(▶) or ENTER button and then left (◄) /right(▶) button to adjust PC setting.

Press the MENU button to save.

Auto Adjust: Auto geometry adjustment

Phase: Adjust the number of horizontal picture elements.H. position: Move image horizontally on screen right or left.V. position: Move image vertically on screen up or down.Frequency: Adjust the vertical noise of screen image.

#### C. SETUP MENU



Press the MENU button and then up(▲) / down(▼) button to select the Setup menu.

Press the right(▶) or ENTER button.

#### 1.Reset



Press ENTER button to select the reset

**Reset**: Select to reset all setting to the factory default values.

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#### 2. Language



Press the  $up(\blacktriangle) / down(\blacktriangledown)$  button to select the Language menu. Press the  $right(\blacktriangleright)$  or ENTER button.



Press the up(▲) / down(▼) button to select language.

Press the MENU button to save.

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#### 3. OSD Tone



Press the  $up(\blacktriangle) / down(\blacktriangledown)$  button to select the OSD tone menu.



Press the up(▲) / down(▼) button to select the desire OSD Tone.

Press the MENU button to save.

#### 4. Blue Screen



Press the  $up(\blacktriangle) / down(\blacktriangledown)$  button to select the blue screen.

Press the right(▶) or ENTER button.



Press the  $up(\blacktriangle) / down(\blacktriangledown)$  button to select on or off.

Press the MENU button to save.

#### 5. Key Lock



Press the  $up(\blacktriangle) / down(\blacktriangledown)$  button to select the key lock menu. Press the right(▶) or ENTER button



Press the up(▲) / down(▼) button select on or off

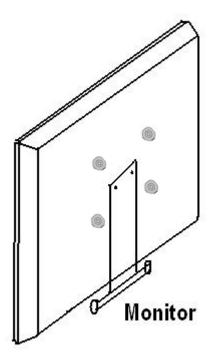
Press the MENU button to save.

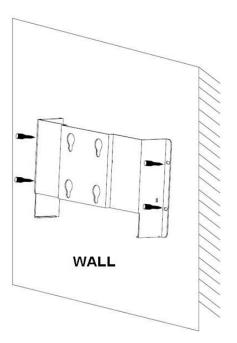
# **MOUNTING GUIDE**

Use the VESA standard mount design and the 100mm hole pattern on the back panel to install the LCD monitor to the mounting bracket using the (optional) mounting bracket sold separately.

#### **Wall-mount Installation**

- 1.Remove the monitor stand bracket assembled with monitor.
- 2.Install the mounting bracket to the monitor using the screws provided with the mounting bracket.



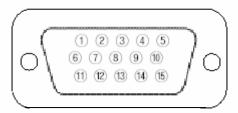


# **D-SUB CONNECTOR PIN ASSIGNMENTS**

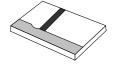
#### **▶ PIN ASSIGNMENTS**

Pin 1	RED VIDEO	9	
2	GREEN VIDEO	10	SIGNAL CABLE DETECT
3	BLUE VIDEO	11	GROUND
4	GROUND	12	SDA(for DDC)
5	GROUND	13	H-SYNC.(or H+V SYNC.)
6	RED GROUND	14	V-SYNC.
7	GREEN GROUND	15	SCL(for DDC)
8	BLUE GROUND		

#### D-SUB



#### **▶ ACCESSORY**



1. User's Manual



2. Power Cord



3. Remote Control Unit And Battery



4. VGA Cable

### **POWER MANAGEMENT**

This monitor features a power management system to "power down" upon receipt of the VESA DPMS(The display power management signaling) from a VESA DPMS video card. The VESA DPMS-compliant video card performs this signaling system through not sending horizontal, vertical, or sync signal.

This monitor enters an appropriate mode through identifying each of the three modes of the signaling system.

#### **POWER CONSUMPTION**

MODE	POWER CONSUMPTION
ON	< 36W
STANDBY	< 11W
SUSPEND	< 11W
ACTIV OFF	< 8.5W

#### **LED INDICATOR**

The power management feature of the monitor is comprised of four stages: On(Green), Standby, Suspend, Active off(Red on/off 1 sec) and Unsupported mode(Green).

MODE	LED COLOR	MONITOR OPERATION	
ON	GREEN	Normal Operation	
STANDBY		Screen blanks after preset idle time	
SUSPEND	RED ON/OFF 1 SEC	And some electronic circuits or all Circuitry in the monitor shut down.	
ACTIV OFF			
UNSUPPORTES GREEN		Normal operation but the on screen Display will show error massage	
POWER OFF	RED	Not Operation	

# **SPECIFICATIONS**

LCD- Type	15" Diagonal AM-TFT(Active-Matrix)
102 . 1, 1, 10	,
	Pixel pitch(mm) : 0.297(H) X 0.297(V)
	BRIGHTNESS: 250cd/m² (Typical)
RESOLUTION (H x V)	CONTRAST RATIO: 700:1(Typical)
(n x v)	RESPONSE TIME: 8 msec(Typical)
	1024X768 @60Hz
FREQUENCY	HORIZONTAL: 31- 48KHz
FREQUENCT	VERTICAL: 56-75Hz
INPUT SIGNAL	VIDEO(2ch input 1.0Vp-p,
INFOT SIGNAL	75Ω terminated, loop-through out)
ACTIVE DISPLAY AREA (W x H)	SYNC(Separate TTL Level)
	S-VIDEO(1ch input (Y/C) , loop-through out)
	AV(composite) Sound in
	PC Stereo in
	304.1 mm x 228.1 mm
PACKING DIMENSIONS (W x D x H)	440mm X 160mm X 390mm (17.3"x 6.3"x 15.4')
WEIGHT	Net Weight : 4.8Kg (10.6lbs)
POWER SUPPLY	Gross Weight : 6.26Kg (10.6lbs)
(Electrical Ratings)	DC 12V/ 3A (AC110~220V,50~60HZ for Auto switching)

#### ▶► NOTE:

Technical specifications are subject to change without notice.

# TROUBLESHOOTING GUIDE

TROUBLE	TROUBLESHOOTING TIP
No image on display screen	Check that power cord of the Monitor have been connected securely into wall outlet or grounded extension cable or strip.
	Power switch should be in the ON position and LED is lit.
	Check that the Brightness and/or the Contrast adjustments of the Display have not been turned down to minimum levels.
"Going to Sleep" message on screen	The signal cable should be completely connected to the video card/computer.
	The video card should be completely seated in its slot and the computer is switched ON.
Display image is not centered, too small or too large in PC mode	Push the down key in front side or Auto key in remocon.
Vertical or Horizontal noise is present in the picture	Adjust Clock and Phase in the OSD.

### **WEEE Symbols**

# Correct Disposal of This Product (Waste Electrical &Electronic Equipment)

(Applicable in the European Union and other European countries with separate collection systems)

This marking shown on the product or its literature,indicates that it should not be disposed with

other household wastes at the end of its working life.To prevent possible harm to the

environment or human health from uncontrolled waste disposal, please separate this from other

types of wastes and recycle it responsibly to promote the sustainable reuse of material resources.

Household users should contact either the retailer where they purchased this product, or their

local government office, for details of where and how they can take this item for environmentally safe recycling.

Business users should contact their supplier and check the terms and conditions of the purchase contract. This product should not be mixed with other commercial wastes for disposal.

