20-INCH PREMIUM TFT-LCD MONITOR



20RTH INSTRUCTION MANUAL



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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.

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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.

INSTRUCTION MANUAL 4

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.

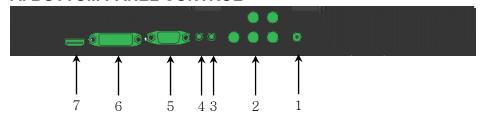
Finally, any changes or modifications to the equipment by the user not expressly approved by the grantee or manufacturer could void the users authority to operate such equipment.

▶ 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

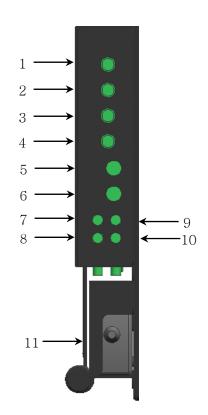
A. BOTTOM PANEL CONTROL



- 1. DC 15V (12V) IN
- 2. COMPONENT Y,Pb,Pr & SOUND L,R
- 3. AUDIO OUT
- 4. PC STEREO IN
- 5. D-SUB IN
- 6. DVI IN
- 7. HDMI IN

B. SIDE PANEL CONTROL

- 1. VIDEO 1(AV1) IN
- 2. VIDEO 1(AV1) OUT
- 3. VIDEO 2(AV2) IN
- 4. VIDEO 2(AV2) OUT
- 5. S-VIDEO (Y/C) IN
- 6. S-VIDEO (Y/C) OUT
- 7. AV1, S-VIDEO AUDIO IN
- 8. AV1, S-VIDEO AUDIO OUT
- 9. AV2 AUDIO IN
- 10. AV2 AUDIO OUT
- 11. DC15V(12V) ADAPTOR



REMOTE FUNCTIONS

C. 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/DVI/PC) sources.

3. AUTO

Auto geometry adjustment in PC Source.

4. MUTE

Mute the sound.

5. MENU

Activates and exits the On Screen Display.

6. EXIT

Exit the On Screen Display.

7. VOL(**▼**▶)

Increases or decreases the level of audio volume.

8. UP/DOWN

Move to OSD menu.

9. ENTER

Accepts your selection or displays the current mode.

10. INFO

Input mode information Display.

11. STILL

Pause the picture.

12. PIP (Picture In Picture)

Activates PIP mode.

13. P.INPUT

Select PC or video source.

14. P.POS

Move the position of sub picture for PIP mode.

15. P.SIZE

Change the size of sub and main picture for PIP mode.

16. SWAP

Alternates between main and sub picture.

17. ARC (Aspect Ratio Control)

Select screen ratio.

18. APC (Auto Picture Control)

Select picture mode.

19. ACC (Auto Color Control)

Select Colour mode.

20. S.SET

Select Sound mode main input or sub input

21. PC

Select PC mode(PC,DVI)

22. AV

Select AV mode.(AV1,AV2,S-VIDEO)

23. COMP

Select COMPONENT mode.



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D. FRONT KEY CONTROL



1. MENU

Activates and exits the On Screen Display.

2. SOURCE

Select PC or video source.

Select On Screen Display menu

3 / 4. ▼ / ▲

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

5 / 6. ◀ VOL ▶

Adjust the volume / Adjust menu settings.

7. IR Sensor

Remote controller sensor.

8. 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.

9. POWER ON/OFF($^{\circlearrowleft}$)

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

INSTRUCTION MANUAL 8

A: CUSTOM MENU (Only PC mode)



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

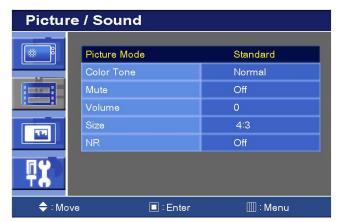


Press the $up(\blacktriangle) / down(\blacktriangledown)$ button to select Custom sub menu.

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



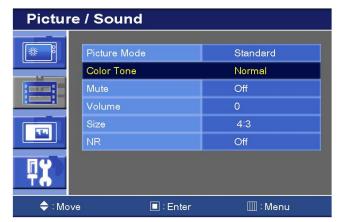
Press the up(▲) / down(▼) button to select the Picture Mode.

Press the right(\triangleright) or ENTER button and then press up(\triangle) / down(\blacktriangledown) button to select the desire

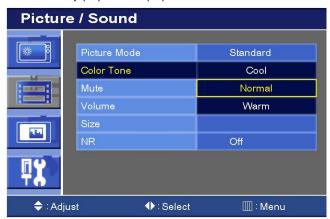
Picture Mode.

Press the MENU button to save.

2. Color Tone



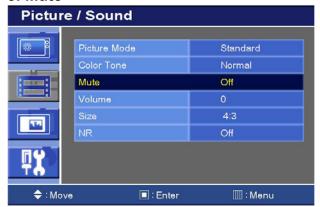
Press the $up(\triangle) / down(\nabla)$ button to select the Color Tone.



Press the (▶) or ENTER button and then up(▲)/down(▼) button to select the desired color tone.

Press the MENU button to save.

3. Mute



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

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

5. Size



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



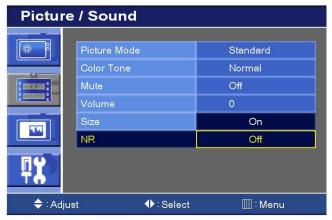
Press the (\blacktriangleright) or ENTER button and then $up(\blacktriangle)/down(\blacktriangledown)$ button to select the desired Size. Press the MENU button to save.

6. NR



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

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Press the (\triangleright) or ENTER button and then up(\blacktriangle) / down(\blacktriangledown) button to select on or off.

Press the MENU button to save

6. PC (Only PC mode)



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

Press the ▶ or ENTER button



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. PIP MENU



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

Press the right(▶) or ENTER button.

1. PIP

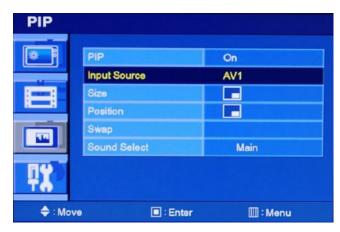


Press the $up(\triangle) / down(\nabla)$ button to select the PIP.

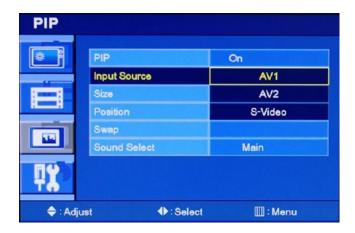
Press the right(\blacktriangleright) or ENTER button and then press up(\blacktriangle) / down(\blacktriangledown) button to select the On or Off.

Press the MENU button to save.

2. Input Source



Press the $up(\blacktriangle) / down(\blacktriangledown)$ button to select the Input Source.



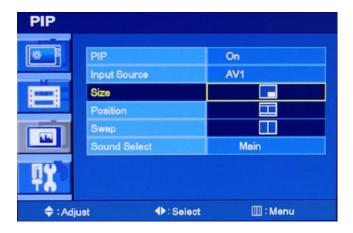
Press the right(▶) or ENTER button and then press up(♠) / down(▼) button to select the desire Input Source.

Press the MENU button to save.

3. Size



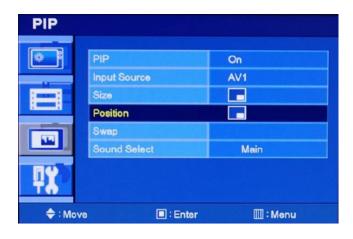
Press the $up(\blacktriangle) / down(\blacktriangledown)$ button to select the Size.



Press the right(\triangleright) or ENTER button and then press up(\triangle) / down(\blacktriangledown) button to select the desire Size.

Press the MENU button to save.

4. Position



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



Press the right(▶) or ENTER button and then press up(♠) / down(▼) button to select the desire Position.

Press the MENU button to save.

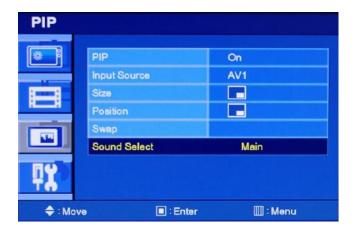
5. Swap



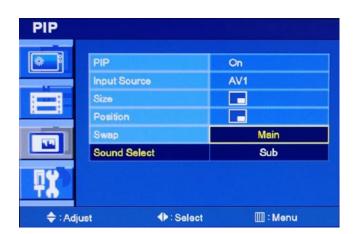
Press the $up(\triangle) / down(\nabla)$ button to select the Swap.

Press the right(▶) or ENTER button

5. Sound Select



Press the $up(\blacktriangle) / down(\blacktriangledown)$ button to select the Sound Select.



Press the right(\triangleright) or ENTER button and then press up(\triangle) / down(\blacktriangledown) button to select the desire Sound Select.

Press the MENU button to save.

D. SETUP MENU



Press the MENU button and then $up(\blacktriangle) / down(\blacktriangledown)$ 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.

2. Language



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

Press the right(▶) or ENTER button.



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

Press the MENU button to save.

3. OSD Tone



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

Press the right(▶) or ENTER button



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



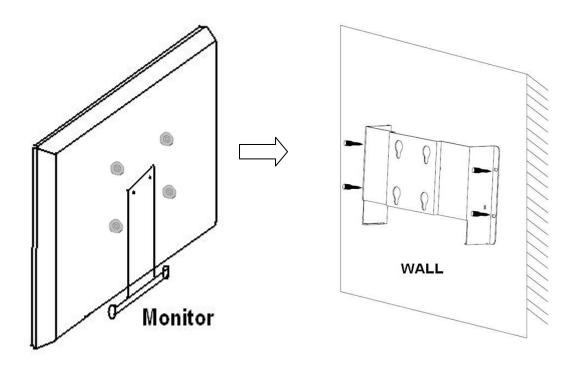
Press the up(▲) / down(▼) button to select on or off Press the MENU button to save.

MOUNTING GUIDE

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

Wall-mount Installation

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



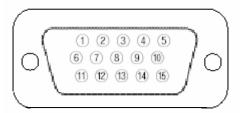
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D-SUB CONNECTOR PIN ASSIGNMENTS

▶ 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: 70W

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

	20"		
	20.1" Diagonal AM-TFT(Active-Matrix)		
LCD- Type	Pixel pitch(mm) : 0.255(H) x 0.255(V)		
	BRIGHTNESS: 300cd/m²(Typical)		
	CONTRAST RATIO: 800:1(Typical)		
	VIEWING ANGLE: 178°/178°(H/V)		
	RESPONSE TIME: 16msec(Typical)		
RESOLUTION (H x V)	1600X1200 @60Hz		
FREQUENCY	HORIZONTAL: 31- 80KHz VERTICAL: 56-75Hz		
	VIDEO(2ch input 1.0Vp-p, 75Ω terminated, loop-through out)		
	S-VIDEO(1ch input (Y/C) , loop-through out)		
	COMPONENT(Y,Pb,Pr, Sound L/R)		
INPUT SIGNAL	DVI D(Digital Video Interface)		
IN OT SIGNAL	HDMI(High Definition Multimedia Interface)		
	PC RGB		
	AV(composite) Sound in/Out		
	PC Stereo in		
	Audio Out		
ACTIVE DISPLAY AREA (W x H)	408 mm x 306 mm		
PACKING DIMENSIONS (W x D xH)	DIMENSIONS SSSIIIII X 175IIIIII X460 IIIIII (21.07 X 6.69 X 16.90)		
WEIGHT	Net Weight : 8.12Kg (17.9 lbs)		
WEIGHT	Gross Weight: 9.72Kg (21.4 lbs)		
ELECTRICAL DC 12V/ 5 A			

▶ 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.

