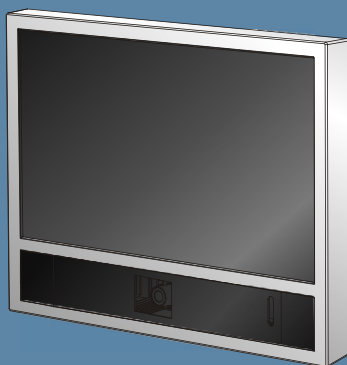


Instruction and Operation M A N U A L

20.1 Inch TFT-LCD Public View Monitor
With An Integrated Camera



COLOR TFT-LCD MONITOR

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

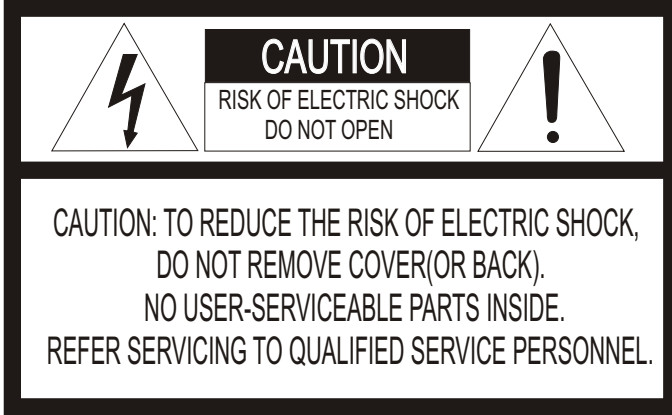
LIMITATION OF LIABILITY

The information in this publication is believed to be accurate in all respects. However, WE cannot assume responsibility for any consequences resulting from the use thereof. The information contained herein is subject to change WITHOUT NOTICE. Revisions or new editions to this publication may be issued to incorporate such changes.

WARNINGS AND CAUTIONS:

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE. DO NOT INSERT ANY METALLIC OBJECTS THROUGH THE VENTILATION GRILLS OR OTHER OPENINGS ON THE EQUIPMENT.

CAUTION:



EXPLANATION OF GRAPHICAL SYMBOLS



The lightning flash with arrowhead symbol, within an equilateral triangle, 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 a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

PRECAUTIONS

Safety -----

Should any liquid or solid object fall into the cabinet, unplug the unit and have it checked by the qualified personnel before operating it any further.

Unplug the unit from the wall outlet if it is not going to be used for several days or more. To disconnect the cord, pull it out by the plug. Never pull the cord itself.

Allow adequate air circulation to prevent internal heat build-up. Do not place the unit on surfaces (rugs, blankets, etc.) or near materials (curtains, draperies) that may block the ventilation holes.

Height and vertical linearity controls located at the rear panel are for special adjustments by qualified personnel only.

Installation -----

Do not install the unit in an extremely hot or humid place or in a place subject to excessive dust, mechanical vibration.

The unit is not designed to be waterproof. Exposure to rain or water may damage the unit.

Cleaning -----

Clean the unit with a slightly damp soft cloth. Use a mild household detergent. Never use strong solvents such as thinner or benzene as they might damage the finish of the unit.

Retain the original carton and packing materials for safe transport of this unit in the future.

FCC COMPLIANCE STATEMENT

FCC INFORMATION : 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 WHEN THE EQUIPMENT IS OPERATED IN A COMMERCIAL ENVIRONMENT. THIS EQUIPMENT GENERATES, USES, AND CAN RADIATE RADIO FREQUENCY ENERGY AND IF NOT INSTALLED AND USED IN ACCORDANCE WITH THE INSTRUCTION MANUAL, MAY CAUSE HARMFUL INTERFERENCE TO RADIO COMMUNICATIONS. OPERATION OF THIS EQUIPMENT IN A RESIDENTIAL AREA IS LIKELY TO CAUSE HARMFUL INTERFERENCE IN WHICH CASE THE USER WILL BE REQUIRED TO CORRECT THE INTERFERENCE AT HIS OWN EXPENSE.

CAUTION : CHANGES OR MODIFICATIONS NOT EXPRESSLY APPROVED BY THE MANUFACTURER COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.

THIS CLASS A DIGITAL APPARATUS COMPLIES WITH CANADIAN ICES-003.

CET APPAREIL NUMÉRIQUE DE LA CLASSE A EST CONFORME À LA NORME NMB-003 DU CANADA.

CE COMPLIANCE STATEMENT

WARNING

THIS IS A CLASS A PRODUCT. IN A DOMESTIC ENVIRONMENT THIS PRODUCT MAY CAUSE RADIO INTERFERENCE IN WHICH CASE THE USER MAY BE REQUIRED TO TAKE ADEQUATE MEASURES.

IMPORTANT SAFEGUARDS

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 manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that product 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 other.
A grounding type plug has two blades and a third grounding prong.
The wide blade or the third prong are provided for your safety.
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. Unplug this apparatus during lightning storms or when unused for long periods of time.
13. 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.
14. **CAUTION - THESE SERVICING INSTRUCTIONS ARE FOR USE BY QUALIFIED SERVICE PERSONNEL ONLY. TO REDUCE THE RISK OF ELECTRIC SHOCK DO NOT PERFORM ANY SERVICING OTHER THAN THAT CONTAINED IN THE OPERATING INSTRUCTIONS UNLESS YOU ARE QUALIFIED TO DO SO.**
15. Use Certified/Listed Class 2 power supply transformer only(only 20.1" PVM).

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CHAPTER 1 - DESCRIPTION

▣ DESCRIPTION

The 20.1 inch Public View LCD Monitor has a built-in high resolution camera. The integrated 3D video processing provides more superior video quality. All programming and operation is accomplished via remote control.

▣ FEATURES

High Brightness and Contrast Color TFT-LCD Monitor
Fully Programmable via remote control
Built-in Light Sensor
Integrated Camera Video Output
DC 12 Volts Output



▣ ACCESSORIES

Please make sure the following items are included with your LCD Monitor. If any items are missing, contact your dealer.

DC Type

			
User Manual	Remote Control	DC Adaptor	Power Cord

AC Type (AC 24V)

	
User Manual	Remote Control

Wires for power connection are not supplied.

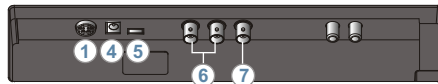
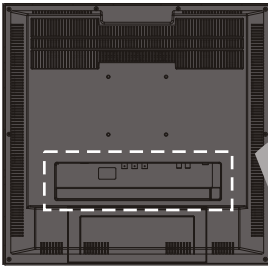
CHAPTER 2 - FRONT AND REAR PANEL

▣ THE FRONT PANEL

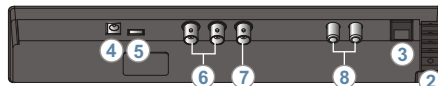


- A. Internal camera
- B. IR Sensor / Light sensor (Detect ambient light)
- C. Internal speakers

▣ THE REAR PANEL



DC type



AC type

Power Connection

-DC Type

1. DC Jack
4. DC12V Output

Connect the adapter jack to the DC power connector on the back of the monitor.
Used to supply DC12V power to an external camera.(DC12V / 500mA)

-AC Type

2. AC24V Input
(CAUTION - Do not use a non-isolated AC 24V power supply.)
3. Power Switch
4. DC12V Output

Supply AC24 volts power to the monitor using two wires.

Switch on to supply AC24V to the monitor.

Used to supply DC12V power to an external camera.(DC12V / 500mA)

Video and Audio Connection

5. Integrated Camera
6. External Camera

The video input of the integrated camera.

Video input connectors of the external camera video sources.

Either left or right BNC can be input or output.

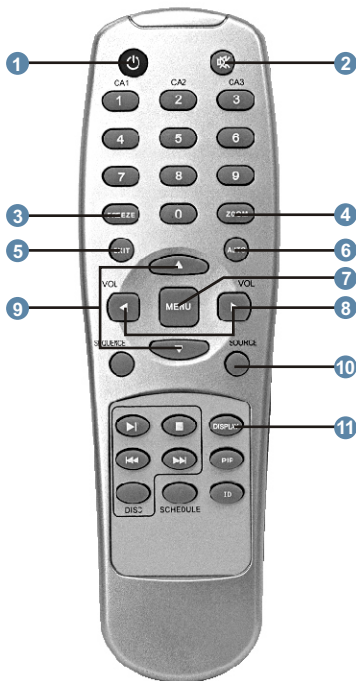
The connectors have auto-termination internal switches.

7. Video Output
8. Audio Input

The video output connector of the integrated camera.

Audio input connector

CHAPTER 3 - REMOTE CONTROL



- 1. POWER**
Turn the monitor on or off.
- 2. MUTE**
Cut off the sound.
- 3. FREEZE**
Not available.
- 4. ZOOM**
Not available
- 5. EXIT**
Exit from the OSD or go to the previous OSD window.
- 6. AUTO**
Not available.
- 7. MENU**
Turn the OSD menu on.
Go to the sub menu of the selected item.
- 8. ◀ (▶)**
Decrease (Increase) the value of the selected item.
Decrease (Increase) the volume of internal speakers.
- 9. ▲ (▼)**
Move up (down) in the menu list.
- 10. SOURCE**
Select the video source.
- 11. DISPLAY**
Display the setup information.

CHAPTER 4 - SETUP MODE

■ OVERVIEW

All functions are controlled via the supplied remote control. Pressing the MENU button places the unit into the programming mode. In the programming mode, the ▲ and ▼ buttons are used to move the cursor up and down in the OSD Setup menu. ◀ and ▶ are used to adjust the chosen item.

■ ADJUSTING THE MONITOR

Press the MENU button to display the setup menu. The follow setup menu will appears.

Image Settings	
Volume	0
Contrast	50
Brightness	50
Sharpness	13
Color	50
Tint	50
Advanced	▶
Under Scan	Off
Source	EXT

Tint is only available in NTSC system.

Select one of the options using ▲ or ▼.
Adjust the chosen item using ◀ or ▶.

Volume

Control the output of internal speakers.

Contrast, Brightness, Sharpness, Color and Tint

Change the contrast, brightness, sharpness, color and tint according to personal preference.

Advanced

Refer to below paragraph.

Under Scan

Adjust the picture size.
There are three options On, Off and Normal.

Source

Select INT. (EXT.) to display the integrated (an external) camera video on the screen.

■ NOISE REDUCTION

This option is used to reduce the picture noise.

Temporal noise reduction is the motion based noise reduction.

MPEG noise reduction is for removing unwanted ringing and block noise from images that have undergone MPEG or JPEG compression and decompression.

Noise Reduction	
Temporal NR	Low
MPEG NR	2

Press the MENU button.

Select Advanced using ▲ or ▼ and then press the MENU button.

Select Noise Reduction and press the MENU button

Select Temporal NR or MPEG NR using ▲ or ▼.

Adjust the option selected using ◀ or ▶.

■ DYNAMIC CONTRAST

Use this option to enhance the contrast of the image.

This feature makes dark colors darker and bright colors brighter.

Advanced	
Noise Reduction	▶
Dynamic Contrast	0
Color Temp	▶
OSD Menu	▶
Photo Input	Off
Recall	No

Press the MENU button.

Select Advanced using ▲ or ▼ and then press the MENU button.

Select Dynamic Contrast using ▲ or ▼.

Change the value using ◀ or ▶.

■ COLOR TEMPERATURE

Use Color Temp to change the screen color standard.

User	
Red	80
Green	80
Blue	80

Press the MENU button.

Select Advanced using ▲ or ▼ and then press the MENU button.

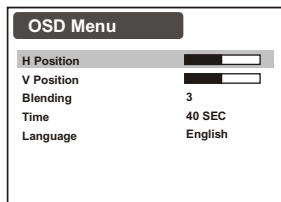
Select Color Temp and press the MENU button

Select one of the options using ▲ or ▼ and adjust it using ◀ or ▶.

OSD

Use OSD Menu to adjust the OSD window.

The OSD position and other options can be adjusted in this setup menu.



Press the MENU button.

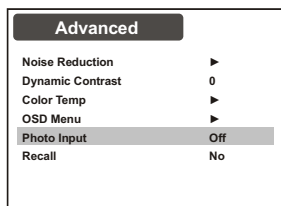
Select Advanced using ▲ or ▼ and then press the Menu button.

Select OSD Menu and press the MENU button

Select one of the options and change its value using ◀ or ▶.

PHOTO INPUT

This monitor can go into power saving mode if there is low ambient light by setting PHOTO INPUT to "ON".



Press the MENU button.

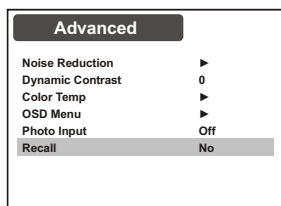
Select Advanced using ▲ or ▼ and then press the MENU button.

Select Photo Input using ▲ or ▼.

Change this option to On or Off using ◀ or ▶.

RECALL

This option allows you to return to the monitor to factory-defined defaults.



Press the MENU button.

Select Advanced using ▲ or ▼ and then press the MENU button.

Select Recall using ▲ or ▼.

Change this option to Yes using ◀ or ▶.

Press the MENU button.

CHAPTER 5 - TROUBLESHOOTING

1. Screen is black and power indicator is green.

- Ensure that the power cord is firmly connected and the LCD monitor is on.
- Check PHOTO INPUT adjustment.

2. No Picture.

- Check the signal connections.

3. The image is too light or too dark.

- Adjust the Brightness and Contrast.

4. Picture is improperly tinted.

- Check color adjustment.

5. Remote control malfunctions.

- Check the battery terminals.
- Replace the remote control batteries.

6. No sound.

- Ensure that the audio cables are firmly connected to both the audio-in ports on your monitor.
- Check the volume level.

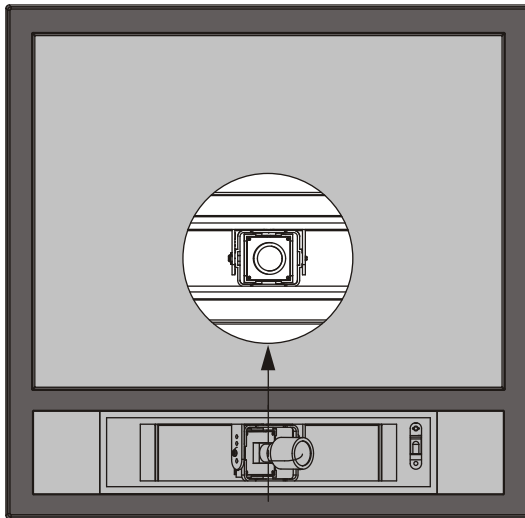
CHAPTER 6 - SPECIFICATION

Items		20.1 inch PVM	
LCD	Size	20.1 inches	
	Pixel Format	640 x 480 x RGB	
	Brightness (Typical)	450 cd/m ²	
	Contrast Ratio (Typical)	800 : 1	
	Viewing Angle H/V (Typical, Cr \geq 10)	178 / 178	
	Color Depth	8bit / 16.7M Colors	
	Light Source / Lifetime	CCFL / 50,000 Hrs	
	Response Time (Typical)	25 ms (Rise + Decay time)	
Composite	System	NTSC / PAL	
		Level	1Vp-p @ 75 ohm
		Input	Internal Camera x 1
	External Camera x 1		
	Output	Internal Camera x 1	
		External Camera x 1	
	3D Combfilter	YES	
	Connector	BNC	
	Audio	Level	Line Level
		Input	2-Terminal RCA x 1
Amplifier		5W x 2	
Video	No. of Camera	1	
	CCD	1/3"	
	Resolution	480 TVL	
	Sensitivity	1 Lux (F2.0, 50 IRE)	
	S/N Ratio	50 dB	
	Auto Iris	Yes	
	AWB	Yes	
	Electronic Shutter	1/60 ~ 1/100,000	
		1/50 ~ 1/100,000	
	VF Lens	4 - 9 mm (F2.0 ~ 2.8)	
WDR	Option		
Light Sensor (Power save mode)		Yes	
Power Requirement		AC24V / DC 12V, 5.0A	
DC Output Connector		x 1 (DC 12V / 0.5A max)	
Power Consumption		60 W	
Operating Temperature		0 ~ 40°C	
Storage Temperature		0 ~ 50°C	
Case Material		Plastic	
Dimension		463.0mm x 453.0mm x 82.0mm (Net)	
		640.0mm x 540.0mm x 190.0mm (Packing)	
Weight		7.6kg	
		11.0kg	
Accessories	AC Type	Manual, Remote Control	
	DC Type	Manual, Remote Control, AC-DC Adaptor, Power Cord	

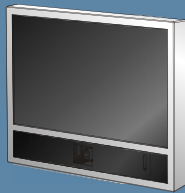
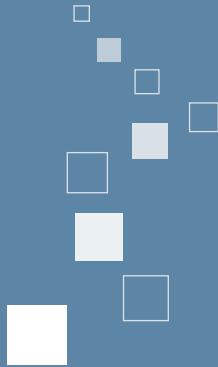
OPTIONAL WDR CAMERA

	Option1	Option2
VF Lens	4 ~ 8mm (F2.0 ~ 360)	2.8 ~ 11mm(F1.4 ~ 360)
CCD	1 / 3"	1 / 3"
Resolution	480 TVL	480 TVL
Sensitivity	1 Lux(F2.0, 50 IRE)	1 Lux(F2.0, 50 IRE)
S/N Ratio	50dB	50dB
Auto Iris	Yes	Yes
AWB	Yes	Yes
Electronic Shutter	1/60 ~ 1/100,000 1/50 ~ 1/100,000	1/60 ~ 1/100,000 1/50 ~ 1/100,000

CAMERA INSTALLATION



Make sure that you should adjust the camera direction correctly before use.



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