## INSTRUCTION MANUAL

# Security Color LED Monitor



27.0" / 32.0" Color LED Monitor.

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

# 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 PARTY RESPONSIBLE FOR COMPLIANCE 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.

## Warnings and Cautions

### WARNING

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE.DO NOT INSERT ANY METALLIC OBJECT THROUGH VENTILATION GRILLS. **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) instruction 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.

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

The unit is not designed to 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 benzine as they might damage the finish of the unit

# **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 manufacturer'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 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. 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 avoid 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 moisture, does not operate normally, or has been dropped.

15. 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

### QRE QUALIFIED TO DO SO.

16. Use satisfy clause 2.5 of IEC60950-1/UL60950-1 or Certified/Listed Class 2 power source only.

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## 1. Features

- High Quality Advanced CCTV LED Monitor
- Incredible Resolution with 650TVL
- De-Interlace technology Efficiently Eliminates Shaky and blurry image Progressive Scan
- 3D Comb Filter Function Clear image
- Superior Color Reproduction
- VESA Wall & Ceiling mount Compatible
- Noise Reductions
- Multi window activate the PIP function. (PIP→PBP 4:3→PBP FULL)
   PIP (Main / Sub) Example: CVBS1 / CVBS2, CVBS1 / S-VIDEO etc.
- Single control operated On-Screen Display user interface
- Energy Saving mode (27" only)
- Anti-burn pixel Protection
- Narrow Bezel

## 2. Operating instruction

#### Front Panel



- 1. IR Sensor
- 2. Controls
- 3. Speakers

#### Controls



#### 1. LED

A green indicator lights when the power is ON and input signal.

A green indicator blink when the power is ON and Input No signal

A red indicator lights when the power is OFF

#### 2. Power On/Off

When power is applied, the monitor will come ON. This button then turns the monitor on and OFF.

#### 3. Menu / Exit

This button is used to bring up or disappear the controls menu.

Exits from the OSD system and the selected function.

#### 4. Down / Brightness (▼/ 🍄 )

Moves down the menu lists in the OSD / Selected Brightness.

#### 5. UP / VOL. (▲/ VOL. )

Moves up the menu lists in the OSD / Selected Volume.

#### 6. LEFT / SOURCE ( ◀ / SOURCE )

Selected MENU decreases the value / while in the normal active (Not MENU DISPLAY) mode, this button is used to bring up Sources select Menu (CVBS1,CVBS2,SVIDEO,RGB,DVR,DVI,HDMI)

#### 7. ► (Select) 🔆 (Freeze) / AUTO

This ▶ button to choose on the menu then pushes the button & Selected MENU increases the value:

While in the CVBS, S-Video mode, press this button to FREEZE ( 3 ) the picture for display. Press again to exit the FREEZE image. While in the RGB mode, press this button to **AUTO** adjust the H/V POS, H/V SIZE, and phase.

#### **REAR** connection





#### [32" Monitor]

#### 1. DC JACK

Connect the adapter jack to the DC power connector on the back of the monitor. (27" monitor : DC12V, 32" monitor : DC24V)

#### 2. Alarm INPUT

This is input for the alarm level (Max 5Vdc) of sensor.

#### 3. S-Video INPUT

Used to connect a S-Video signal from a Camera or DVR.

#### 4. HDMI INPUT

Used to connect a HDMI signal from a PC, Mega pixel Camera or DVR.

#### 5. DVI INPUT

Connect DVI video signal to this connector using the supplied video cable.

#### 6. RGB INPUT

Connect to the video output port on your PC or DVR.

#### 7. CVBS INPUT/OUTPUT (CVBS2)

Used to connect a BNC Video signal from a camera or DVR.

#### 8. CVBS INPUT/OUTPUT (CVBS1)

Used to connect a BNC Video signal from a camera or DVR.

#### 9. AUDIO1 INPUT

Connect RCA audio cable to the audio output jacks of CVBS1, CVBS2, S-Video.

#### 10. AUDIO2 INPUT

Used to connect a Stereo signal from a RGB, DVR, DVI.

## 3. Connections

To make a normal connection to the monitor, bring a cord from a camera or other video source to one of the BNC jacks or from a PC to the PC jack on the back of the monitor.

Either the left or right BNC jack can be used for input. The other jack may be optionally connected to another user of the same signal. **Auto Termination** The input circuit of the monitor normally terminates the incoming cable in 75  $\Omega$ , but these BNCs jack are autoterminating. When two cables are connected, the internal termination is switched out, letting the final destination equipment provide the end termination.

This arrangement is also specially offered for the Y/C (S-Video) jacks.



Optional Loop-out to another video device

\* Supplied item

LED monitor

Power supply unit / Power cord

VGA cable

Operating instructions manual

#### 4.1. RGB (& DVR) Mode

RGB Mode: General PC input mode

DVR Mode: The optimized format to synchronize a monitor and a DVR for the best resolution.

NTSC: 640x480 (60Hz), 672x480 (60Hz)

PAL: 672x580(50Hz), 800x600 (75Hz)

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

#### RGB Menu

RGB Volume Contrast Brightness		Select one of the options using ▲ or ▼. Adjust the chosen item using ◀ or ► Exit from item by pressing menu.
Advanced AUTO Adjustment	>	

#### Volume

Controls the output of the internal speakers.

#### Contrast, Brightness

Change the contrast & brightness according to personal preference.

#### - Advanced Menu (pull-down menu)

Advanced	
H Position V Position Phase	
Clock	

H Position is used to adjust the horizontal position of the image on the screen.V Position is used to adjust the vertical position of the image on the screen.Phase is adjust the focus of screen's image.

 $\ensuremath{\textbf{Clock}}$  is adjust the horizontal size of screen's image.

#### • AUTO Adjustment.

Choose automatically the proper horizontal position and vertical position & size of the screen image.

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

#### Advanced

Advanced			
Color Temp	>		
Alarm	>		
Energy Saving	<	OFF	>
3D NR		MID	>
Anti Burn	<	OFF	>
Recall	>		
Source	<	RGB	>
Panel scale	<	Full	>

• Color Temp is used to control color temperature. (User, Normal, Warm, Cool)

• Alarm is input for the alarm level (Max 5 Vdc) of sensor or any alarm device.

#### - Alarm menu (pull-down menu)

Alarm	
Enable	< On >
Source	< CVBS1 >
Time	< 10 >
Option	< N.O. >
Buzzer	< OFF >
Volume	40
Display Type	< FULL >

Enable is used ON or OFF the alarm function.
Source select the input source the alarm screen.
Time is used to adjust the alarm view time.
Option selects the N.O. or N.C. mode.
Buzzer is used ON or OFF the alarm sound function.
Volume is used to adjust the buzzer value.
Display Type change the Alarm display type. (Full or PIP&Full Mode)
Note: Alarm that fit the N.O. or N.C. case an endless loop.

- Energy Saving change the Display Backlight. (OFF, Medium, Maximum) (27" only) When decreasing the backlight, the brightness of the black becomes darker without any loss in video signal and the power consumption is reduced.
- 3D NR disable.
- Anti Burn disable.
- **Recall** the monitor original factory setting.
- Source selects between the CVBS (Composite INPUT), S-Video (Super Video INPUT), RGB (PC INPUT), DVR, DVI or HDMI to be displayed.

• OSD	Menu
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OSD Menu	
Language H Position V Position Blending Time	< English >

- Language change the OSD language according to personal preference.
- H Position is used to adjust the horizontal position of the Menu window on the screen.
- V Position is used to adjust the vertical position of the Menu window on the screen.
- Blending is used adjust the opaqueness of the background of the OSD.
- Time is used to adjust the OSD view time.

#### •PIP Menu

PIP	
Multi Window	OFF >
Sub Source	< CVBS1 >
Size	Small >
Position	< U_L >

- Multi Window is change the display type. (PIP / PBP 4:3 / PBP Full)
- Sub Source select the input source the sub screen.
- Size select the PIP sub screen display size. (Small / Middle / Large)
- $\bullet$  Position adjust the PIP sub screen display position. (U\_L / D\_L / D\_R / U\_R)

*	PIP /	PBP	working	condition
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Main Sub	CVBS1	CVBS2	S-Video	RGB	DVR	DVI	HDMI
CVBS1	0	0	0	0	0	×	×
CVBS2	0	0	0	0	0	×	×
S-Video	0	0	0	0	0	×	×
RGB	×	×	×	×	×	×	×
DVR	×	×	×	×	×	×	×
DVI	×	×	×	×	×	×	×
HDMI	×	×	×	×	×	×	×

\* note : RGB / DVR mode is not supported on PBP 4:3.

## 4.2. CVBS (& S-Video) Mode

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

#### VIDEO menu

Video	
Volume	
Contrast	
Brightness	
Sharpness	
Color	
Tint	
Under Scan	< OFF >

#### Volume

Controls the output of the internal speakers.

Contrast, Brightness

Change the contrast & brightness according to personal preference.

Sharpness

Sets the desired sharpening enhancement to the picture.

Color

Used to minutely adjust color.

• Tint

Adjusts all the colors on the screen, but is most noticeable to the eye in reds and yellows,

And is also usually set for pleasing face tones. (Appears in NTSC mode only)

Under Scan

```
Adjusts the image size. (ON / OFF/ 1:1 / 16:9)
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#### Advanced Menu

Advanced	
Color Temp	>
Alarm	>
Energy Saving	< 0FF >
3D NR	MID >
Anti Burn	< 0FF >
Recall	>
Source	< CVBS1 >
Panel scale	< Full >

- Color Temp is used to control color temperature. (User, Normal, Warm, Cool)
- Alarm is input for the alarm level (Max 5Vdc) of sensor or any alarm device.
- Energy Saving change the Display Backlight. (OFF, Medium, Maximum) (27" only) When decreasing the backlight, the brightness of the black becomes darker without any loss in video signal and the power consumption is reduced.
- 3D NR reduce the noise in the picture due to poor reception or poor picture quality. (Off/Low/Middle/High)
- Anti Burn: This is to prevent the pixel burn on LCD after the use of display for a long time.

You can turn it on in normal mode or under scan mode.

- ON in normal mode: 55minutes (normal screen) -> 5minutes (under scan screen) -> 55minutes (normal screen).
   Automatically being iterating.
- ON in under scan mode: 55minutes (under scan screen) -> 5minutes (normal screen) -> 55minutes (under scan screen).
   Automatically being iterating.
- Recall the monitor original factory setting.
- Source selects between the CVBS (Composite INPUT), S-Video (Super Video INPUT), RGB (PC INPUT), DVR, DVI or HDMI to be displayed.

#### Panel Scale

Change the scale. (4:3, Full)

Note: When viewing a fixed screen for an extended period of time, Residual image or blurriness may appear.

#### 4.3. HDMI (& DVI) Mode

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

#### • HDMI menu

НОМІ	
Volume	
Contrast	
Brightness	
Tint	
Color	
Sharpness	

#### Volume

Controls the output of the internal speakers.

#### Contrast, Brightness

Change the contrast & brightness according to personal preference.

#### • Tint

Adjusts all the colors on the screen, but is most noticeable to the eye in reds and yellows,

And is also usually set for pleasing face tones. (Appears in NTSC mode only)

#### Color

Used to minutely adjust color.

#### Sharpness

Sets the desired sharpening enhancement to the picture.

#### Advanced Menu

Advanced			
Color Temp	>		
Alarm	>		
Energy Saving	<	OFF	>
3D NR		MID	>
Anti Burn	<	OFF	>
Recall	>		
Source	<	HDMI	>
Panel scale	<	Full	>

• Color Temp is used to control color temperature. (User, Normal, Warm, Cool)

- Alarm is input for the alarm level (Max 5Vdc) of sensor or any alarm device.
- 3D NR reduce the noise in the picture due to poor reception or poor picture quality. (Off/Low/Middle/High)
- Anti Burn disable.
- Energy Saving change the Display Backlight. (OFF, Medium, Maximum) (27" only)

When decreasing the backlight, the brightness of the black becomes darker without any loss in video signal and the power consumption is reduced.

- Recall the monitor original factory setting.
- Source selects between the CVBS (Composite INPUT), S-Video (Super Video INPUT), RGB (PC INPUT), DVR, DVI or HDMI to be displayed.
- Panel Scale

Change the scale. (4:3, Full)

#### Note: Not support HDCP (High-bandwidth Digital Content Protection) compliance.

## 5. Specification

#### 27.0" Color LED Monitor

27.0	27.0" Color LED Monitor				
NO.	ITEM			SPECIFICATION	
1		LED Panel		27.0" LED Panel	
2		Active Display Area (Diagona	I)	27.0 inches	
3		Pixel Format		1920(H) x 1080(V), RGB Vertical Stripe	
4		Pixel Pitch		0.31125mm x 0.31125mm	
5	LED	Color Depths		16.7M Colors	
6		D Contrast Ratio		5000 : 1 (Typical)	
7		Brightness		300 cd/m <sup>2</sup>	
8	3	Viewing Angles (Left/Right/Up/Down)		89°/ 89°/ 89°/ 89°	
9		Light source / Lifetime		LED 4 Strings x 18 Pcs / 30,000 Hours (Minimum)	
10		Response Time (Tr/Td)		12ms	
11		Video Mode		NTSC/PAL (Auto Selection)	
12		Video Input Signal	Composite	1.0Vp-p, 75Ω	
13			S-Video	0.7Vp-p(Luminance), 0.3Vp-p(Chrominance), 75Ω	
14	Video		Composite	BNC x 2	
15		Video Input Connector	S-Video	4Pin Mini Din x 1	
16		Termination		75Ω, Auto Termination	
17		Resolution		More than NTSC / PAL 650TVL	
18		Input Signal		Analog RGB (0.714Vp-p, 75Ω), H&V Sync(TTL)	
19	-	Input Connector		15 pin D-sub	
20	-			VGA 640 x 480 60~75Hz	
21	PC			SVGA 800 x 600 56~75Hz	
22	(RGB)	Input Resolution		XGA 1024 x 768 60~75Hz	
23				SXGA 1280 x 1024 60~75Hz	
24	-			Full HD 1920 x 1080 60Hz	
25	-	Plug & Play		DDC 1/2B	
26	DVI	Input Signal DVI		Input Connector DVI-D	
27		Input Signal HDMI		Input Connector 19 pin HDMI (Digital)	
28	HDMI	Input Resolution		Max 1920 x 1080, 60Hz	
29	Alarm Input	Alarm Input		Max 5Vdc (N.O. / N.C.)	
30		Input		Stereo Jackx1, 2-Teminal RCAx1	
31	Audio	Output		2x 5W	
32	Dia		Net	635.5 x 395.7 x 42.0mm	
33	Dimensions (W x H x D)		Packing	750 x 515 x 220mm	
34	Weight (Net/Packing)			7.2 / 10.2 Kg	
35	Operating Temperature			0 ~ 40 °C	
36	Storage Temperature			0 ~ 50 °C	
37	DC Power			12VDC ±5% @ 5A	
38	Power Consumption			50W	
39	User Controls			Brightness, Contrast, Tint, Color, Sharpness, PIP etc.	
40	OSD Language			English/German/French/Spanish/Italian/Polish/Czech	
41	Case Material			Metal	
42	Accessories			AC Adaptor, Power Cord, VGA Cable, Manual	
43	Option			IR Remote Controller	
-					

#### 32.0" Color LED Monitor

NO					
NO.	ITEM			SPECIFICATION	
1		LED Panel	<u>``</u>	32" LED Panel	
2	Active Display Area (Diagona		)	32.0 inches	
3		Pixel Format		1920(H) x 1080(V), RGB Vertical Stripe	
4		Pixel Pitch		0.36375mm x 0.36375mm	
5	LED	Color Depths		16.7M Colors	
6	Contrast Ratio			3000 : 1 (Typical)	
7		Brightness		350 cd/m <sup>2</sup>	
8		Viewing Angles (Left/Right/Up/Down)		89°/ 89°/ 89°/ 89°	
9		Light source / Lifetime		LED / 30,000 Hours (Minimum)	
10		Response Time (Tr/Td)		6.5ms	
11		Video Mode		NTSC/PAL (Auto Selection)	
12		Video Input Signal	Composite	1.0Vp-p, 75Ω	
13			S-Video	0.7Vp-p(Luminance), 0.3Vp-p(Chrominance), 75Ω	
14	Video	Video Input Connector	Composite	BNC x 2	
15		Video Input Connector	S-Video	4Pin Mini Din x 1	
16		Termination		75Ω, Auto Termination	
17		Resolution		More than NTSC / PAL 650TVL	
18		Input Signal		Analog RGB (0.714Vp-p, 75Ω), H&V Sync(TTL)	
19		Input Connector		15 pin D-sub	
20				VGA 640 x 480 60~75Hz	
21	PC			SVGA 800 x 600 56~75Hz	
22	(RGB)	Input Resolution		XGA 1024 x 768 60~75Hz	
23				SXGA 1280 x 1024 60~75Hz	
24				Full HD 1920 x 1080 60Hz	
25		Plug & Play		DDC 1/2B	
26	DVI	Input Signal DVI		Input Connector DVI-D	
27		Input Signal HDMI		Input Connector 19 pin HDMI (Digital)	
28	HDMI	Input Resolution		Max 1920 x 1080, 60Hz	
29	Alarm Input			Max 5Vdc (N.O. / N.C.)	
30		Input		Stereo Jackx1, 2-Teminal RCAx1	
31	Audio	Output		2x 5W	
32	<b>D</b>		Net	734.4 x 458.0 x 54.0mm	
33	Dimensions (W x H x D)		Packing	855 x 575 x 215mm	
34	Weight (Net/Packing)			10.4 / 13.7 Kg	
35	Operating Temperature			0 ~ 40 °C	
36	Storage Temperature			0 ~ 50 °C	
37	DC Power			24VDC ±5% @ 2.7A	
38	Power Consumption			65W	
39	User Controls			Brightness, Contrast, Tint, Color, Sharpness, PIP etc.	
40	OSD Language			English/German/French/Spanish/Italian/Polish/Czech	
41	Case Material			Metal	
42	Accessories			AC Adaptor, Power Cord, VGA Cable, Manual	
42	Option			IR Remote Controller	
43	Option				

## 7. REMOTE CONTROL



1. Mute Cuts off the sound 2. Power Power on / off 3. Panel Scale Change the scale. 4. Display Display the screen information 5. Freeze Freezes the screen temporarily 6. PIP Multi window activate or cancel the PIP function 7. Exit Exit the OSD menu 8. Auto Auto adjust the H/V POS, H/V SIZE, Phase 9. Left / Right Keys Decreases / increases the chosen item 10. Up Key Moves up the menu lists in the OSD / Selected Volume. 11. Menu Turns the OSD menu on / off 12. Down Key / Brightness Moves down the menu lists in the OSD / Selected brightness 13. Under Scan Adjust the image size 14. Source Select the sources 15. Not used



Security Color LED Monitor

