# User's Manual

### **CCTV COLOR MONITOR**

LCM15AA LCM17AA



#### FCC Information

This device complies with Part 15 of the FCC Results. Operation is subject to the following two conditions:

- (1) This Device may not cause harmful interface, and
- (2) This device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for CLASS B digital device, pursuant to Part 15 of 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 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 correct the interference by one or more of the following measures:

- 1.1. Reorient or relocate the receiving antenna.
- 1.2. Increase the separation between the equipment and receiver.
- 1.3. Connect the equipment into an outlet on a circuit different from that to which receiver is connected.
- 1.4. Consult the dealer or experienced radio/TV technician for help.

#### WARNING

Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

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Thank you for purchasing our product.

Before using it, please read this user's manual carefully and apply it correctly and safely. Please keep this manual close to you so you can refer to it anytime after reading it. Also, for the transportation of the product, please attach this manual without fail. Please observe the notes below.

Use at the rated power voltage.

Use of non-rated voltage may cause fire, electric shock and breakdown.

Do not open the cabinet and external cover.

The high voltage inside of this product may cause the electric shock.

**3.** Do not remodel or disassemble this product.

Remodeling or disassembling in wrong method may cause fire, electric shock or breakdown.

Do not insert or drop any foreign substance such as metals or flammable object inside from the air hole.

It may cause fire, electric shock or breakdown.

If any foreign substance is inserted inside of this product, turn off the power, pull the plug out of the socket and contact the sales department. Do not use the product with the foreign substance in.

Do not place any vase, potted plant, cup, medicine and any container with water on this product.

If the liquid is spilt, it may cause the fire, electric shock or breakdown.

**6.** Do not place this product with water nor moisten it.

If water flows in it, it may cause the fire, electric shock or breakdown.

If there is water inside of the product, turn off the power immediately, pull the plug out of the socket and contact the sales department.

Do not use the product with water in it.

7. Never touch the antenna lie or power plug if it stars to thunder.

It may cause the electric shock.

- 8. If any impact is applied, the parts inside of the product may be fallen out or broken to be the cause of fire, electric shock or breakdown.
- Clean the dust on the power plug periodically.

The dusty power plug may cause the poor insulation due to the moisture to be the reason of fire.

- 10. Do not destroy, process, make closer to heating device, bend or twist forcibly, place any heavy object on nor bind the power cord or power plug. If it is used in the broken condition, it may cause fire or electric shock.
- **11.** Do not touch the power plug with wet hands.

If you pull in or out the power plug with wet hands, it may cause electric shocks.

**12.** Put the power plug in firmly.

Putting the plug incompletely may cause the electric shock or fire by the generation of heat.

- 13. Do not use any non-rated power socket with numerous devices jointed on one power socket or cable device. The wire of non-designated capacity may cause the fire due to the generation of heat.
- 14. In case of malfunction, turn off the power switch immediately and pull out the power pluq.

If this product is used in the abnormal condition such as damage to it, foreign substance inside of the product, generation of joints, smelling, smoking, overheating and non production of signal, it may cause fire, electric shock or breakdown. Turn off the power switch immediately, pull the power plug out of the socket and contact to the sales store..

**15.** Leave space 10 cm or more from the wall for the installation of the device.

Do not install it close to the wall nor block the ventilation of the air.

Insufficient ventilation or accumulated heat inside of the product may cause the fire.

**16.** Do not install it at the unstable location such as on the bouncing prop or tilted place.

It may be tipped over as it loses balance or damaged as it is fallen down.



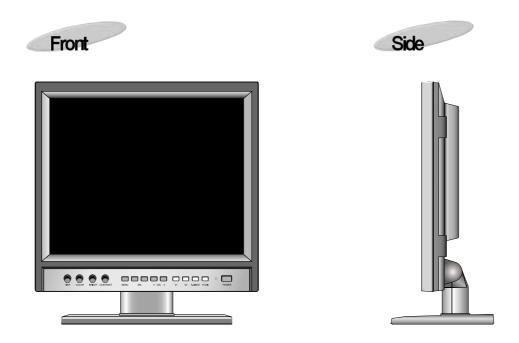
- **17.** Do not install at the place with moisture or dust. It may cause the fire or the electric shock
- **18.** Do not install it at the place with poisonous gas. It may cause the fire.
- **19.** Do not install it at the location with continuous vibration. It may be tipped over as it loses balance or damaged as it is fallen down.
- 20. Do not install it at the place on the strong magnetic field or current field. It may cause fire, electric shock or break down. This equipment may be observed deterioration of the picture by electromagnetic radiation in electromagnetic environment.
- **21.** Fasten the wheel of the product or shelf with wheels when installing this product. If it moves or is tipped over, it may be damaged.
- **22.** Do not leave it in the car under the burning sun for a long time.

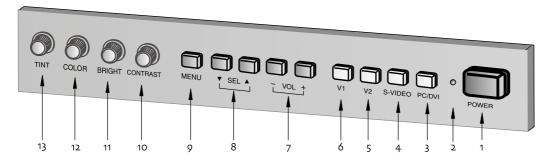
  The high temperature may distort the cabinet or the parts inside may be broken down or heated.

  If you use this product in this condition, it may cause the fire, electric shock or breakdown due to the short circuit or poor insulation.
- **23.** Do not place any fire source such as candlelight close to this product or place it on this product. If it is tipped over or fallen down, it may cause damage or fire.
- **24.** Do not sprinkle water drops or water on this product. It may cause the fire, the electric shock or breakdown.
- **25.** Do not place heavy objects on this product. It may be tipped over as it loses balance or damaged as it is fallen down.
- **26.** Do not transport it with the power cord or the connection cable connected. If you move this product with the power cord or the connection cable connected, the damaged power cord, connection cable or connection terminal may cause the fire, the electric shock or breakdown.
- **27.** Pull the power cord out while holding the plug portion. If you pull the power cord out by force, the cord may the fire or the electric shock.
- **2.8.** Do not use it outdoor.

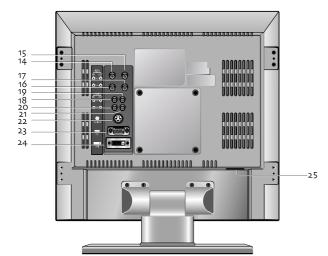
  Dust or rainstorm may cause the fire, electric shock or breakdown.
- **29.** Do not climb on this product. If you climb on it, it may damage or hurt it.
- **30.** 2 persons or more shall transport the device, which is heavier than 18 kg. If you drop or tip over the device, it may damage it. The weight is indicated on the user's manual.
- **31.** Use the attached power cord and connection cable, or those, which are indicated on the user's manual. If you do not use the designated power cord and connection cable, it may cause the electric shock or breakdown.
- **32.** Turn off the power switch when connecting the power cord or connection cable. If you not turn off when connecting it, it may cause the electric shock or breakdown.
- **33.** Do not use any chemical such as the paint thinner or benzine to clean the cabinet. It may scratch the surface or disappear the indication to cause wrong operation, which can be the reason for disorder.
- **34.** Clean the cabinet with 5~6 time diluted neutral detergent water on smooth cloth as stirring to remove the contamination. After that, clean it with dry cloth to remove any stain.

# **LOCATION CONTROLS**









- 1. ON/OFF
- 2. POWER LED LAMP (STAND BY)
- 3. PC/DVI
- 4. S-VIDEO
- 5. VIDEO 2
- 6. VIDEO 1
- 7. VOLUME DOWN/UP
- 8. SELECT
- 9. MENU
- 10. CONTRAST
- 11. BRIGHT
- 12. COLOR
- 13. TINT

- 14. VIDEO IN (CH1)
- 15. VIDEO OUT (CH1)
- 16. VIDEO IN (CH2)
- 17. VIDEO OUT (CH2)
- 18. AUDIO IN (CH1)
- 19. AUDIO OUT (CH1)
- 20. AUDIO IN (CH2)
- 21. AUDIO OUT (CH2)
- 22. S-VIDEO
- 23. PC
- 24. DVI
- 25. ACINLET

### **FUNCTIONS AND CONTROL METHODS**

#### 1. ON/OFF BUTTON

: When you press this ON/OFF BUTTON, the power is turned on and the screen appears. When you press this button again, the screen disappears.

#### 2. POWER LED LAMP

: When SET is normally operated, a green lamp is turned on. The green lamp flickers in the status of STAND-BY. STAND BY: ON/OFF BUTTON is off

#### 3. PC/DVI BUTTON

: When you press this button, PC or DVI mode is selected.

#### 4. S-VIDEO BUTTON

: When you press this button, S-VIDEO mode is selected.

If you want to see a clean and clear video through S-VIDEO input, select this.

#### 5. V2 BUTTON

: When you press this button, VIDEO2 mode is selected. Select this button to insert the camera input or video input into VIDEO CH2 terminal.

#### 6. V1 BUTTON

: When you press this button, VIDEO1 mode is selected. Select this button to insert the camera input or video input into VIDEO CH1 terminal.

#### 7. VOLUME +, - BUTTON

: Adjust the volume up and down.

#### 8. SEL BUTTON

: When you want to select the desired item in menu, press this button to move.

#### 9. MENU BUTTON

: When you press this button, the menu window appears. When you press this button again, the menu window disappears.

#### 10. CONTRAST

: Adjust the screen's contrast. (Operate in VIDEO1 mode, VIDEO2 mode, and S-VIDEO mode)

#### 11. BRIGHT

: Adjust the screen's brightness. (Operate in VIDEO1 mode, VIDEO2 mode, and S-VIDEO mode)

#### 12 COLOR

: Adjust the screen's color. (Operate in VIDEO1 mode, VIDEO2 mode, and S-VIDEO mode)

#### 13. TINT

: Adjust the screen's tint. (Operate in VIDEO1 mode, VIDEO2 mode, and S-VIDEO mode)

#### 14. 15. 16. 17 VIDEO IN/OUT

: This is the terminal to receive the video from the camera. It is used to connect the video, to connect & record the video, or to connect many monitors.

#### 18. 19. 20. 21 AUDIO IN/OUTPUT

: It is the terminal to receive the audio from the camera. It can be used by connecting the external audio equipment.

#### 22. S-VIDEO JACK

- : When you want to see a high definition S-VIDEO, use the S-VIDEO input of this monitor. You can enjoy the clean and clear video.
- 23. PC JACK: When you use this monitor as PC monitor, you can use it by connecting the PC Cable to PC Jack of this monitor.
- 24. DVI JACK: It is the terminal to receive DVI Input. You can use it by connecting DVI Input.

#### 25. POWER INLET

: Inlet the AC power (AC100~240V, 50/60Hz)



### **FUNCTIONS AND CONTROL METHODS**

#### **MENU Operation**

- (1) When you press the MENU button, the MENU window appears on screen.
- ② Press SEL BUTTON to move to the desired item.
- ③ Press VIO+ key to select the desired item.
- (4) To shut down the MENU window, wait for time when the MENU window disappears or press the MENU button again.

#### MENU in VIDEO1, VIDEO2, and S-VIDEO

It shows the MOVE button, SEL button, and EXIT button on a bottom of MENU window.

#### MAIN MENU

COLOR TEMP UTILITY OSD LANGUAGE

▲▼:MOVE +:SEL. :EXIT

#### **COLOR TEMP**

9300/6500

→ You can select a temperature of desired color. (9300°K / 6500°K)

#### **UTILITY**

ALL BLUE: OFF/ON

→ When you select ON of ALL BLUE, a full screen is blue.

OVER SCAN: 0%, 5%, 10%

→ You can select 0% (original screen), 5% (zoom-in screen), or 10% (zoom-in screen) by selecting OVER SCAN.

#### OSD

#### **OSD TIMEOUT**

→ You can select the time when OSD window appears on screen in 5 seconds unit up to 5~60 seconds.

#### **OSD TRANSPARENCY**

→ You can select the OSD Transparency in the unit of 20% up to MIN ~ MAX.

#### **LANGUAGE**

ENGLISH, FRANÇAIS, DEUTSCH, ESPAÑOL, DANISH, ITALIANO

→ The above six languages are offered. You can select one of above languages

### **FUNCTIONS AND CONTROL METHODS**

#### MENU in PC / DV1

When you press the MENU Button, the MENU screen appears.

It shows a resolution, vertical and horizontal frequency of current monitor on the bottom of MENU Window.

#### MAIN MENU

AUTO ADJUST
SCREEN
COLOR
UTILITY
OSD
LANGUAGE

\*\*MOVE +:SEL. \*\* :EXIT

#### **AUTO ADJUST**

Adjust the screen's status in PC mode automatically.

#### **SCREEN**

BRIGHTNESS → Adjust the screen's brightness

CONTRAST → Adjust the screen's contrast

H.POSITION → Adjust the screen's horizontal positionV.POSITION → Adjust the screen's vertical position

PHASE ADJUST → Adjust the screen's phase

CLOCK ADJUST → Adjust the screen's horizontal size through a increase/decrease in the number of Pixel.

COLOR

COLOR TEMP → Select the temperature of desired color

(USER / 9300° K / 6500° K)

RED → Adjust the red tint of screen

GREEN → Adjust the green tint of screen

BLUE → Adjust the blue tint of screen

UTILITY

RECALL → Go back to a basic default to be delivered from a factory

FULL AUTO  $\longrightarrow$  Optimize the screen status in PC mode automatically and set the color

value by re-measuring it

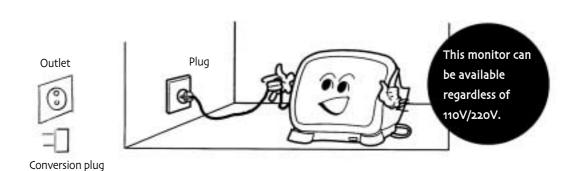
#### <u>OSD</u>

Same as the operation in VIDEO1, VIDEO2, and S-VIDEO

#### **LANGUAGE**

Same as the operation in VIDEO1, VIDEO2, and S-VIDEO

## TO CONNECT THE POWER



### Be sure to connect the conversion plug to the power plug by the outlet!

- This monitor can be available both in AC 110V / 220V 60Hz
- Various input voltage (within a range of AC90~250V) can be available. (Do not use it in the voltage higher than a rated voltage)
- 110V/220V selector switch is not necessary. This monitor can be operated directly without a special operation.

### CAUTION

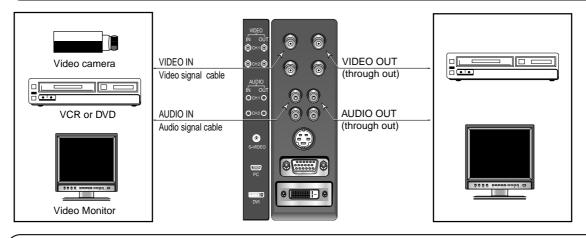


- Make sure to operate this monitor in the rated voltage described in the user's manual or the monitor. (When the voltage higher than the rated voltage is supplied, it may give damage to a receiver.
- If you do not use the monitor for a long time, you must pull out the power plug from the inlet for safety.

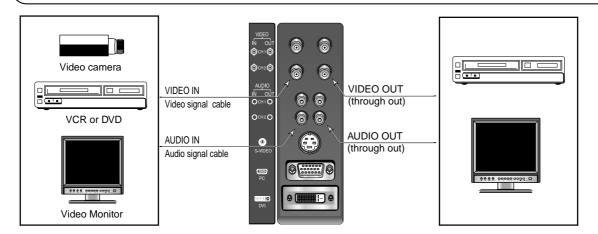
### **POSSIBLE CONNECTIONS**

- Read the installation/operation manual thoroughly before connecting equipment.
- Turn off the power source before connecting the monitor and external equipment.

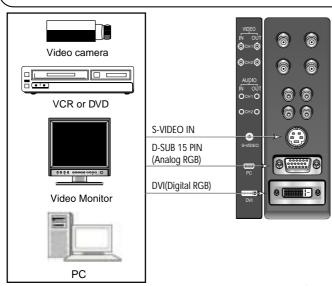
### **VIDEO 1 Connection (Select input VIDEO 1 button)**



### VIDEO 2 Connection (Select input VIDEO 2 button)



### S-VIDEO / D-SUB 15PIN / DVI connection (Select input S-VIDEO,PC/DVI button)



# **CHECKLISTS**

If your monitor is out of order, check up the below problems firstly.

Problems	Checkup	Troubleshoot
The screen doesn't appear and the sound is not heard.	<ul> <li>Is the power cord pulled out?</li> <li>Is the power turned off?</li> <li>Is this monitor connected with the external equipment erroneously?</li> </ul>	Connect the power cord correctly     Press the power button.     Check the cord and then connect it correctly.
The sound is heard but the video doesn't appear.	<ul> <li>Is the contrast and brightness wrongly controlled?</li> <li>Is this monitor connected with the external equipment erroneously?</li> </ul>	<ul> <li>Adjust the contrast and brightness correctly.</li> <li>Check the cord and then connect it correctly.</li> </ul>
The video appears but it is interrupted by static.	Is the external equipment correctly connected?	Check the cord and then connect it correctly.
Not the sound is heard.	<ul><li> Is the volume turned down?</li><li> Is this monitor connected with the external equipment erroneously?</li></ul>	Adjust the volume.     Check the cord and then connect it correctly.
The screen color is not clear and clean.	Is the tint and color correctly adjusted?	Adjust the contrast and brightness correctly.
The screen is shaken and is affected by static.	Is the external equipment correctly connected?	Check the cord and then connect it correctly.

# **SPECIFICATIONS**

	17" LCD CCTV MONITOR	15" LCD CCTV MONITOR
PICTURE TUBE	0.264 PIXEL PITCH	0.297 PIXEL PITCH
RESOLUTION	SXGA (1280 x 1024)	XGA (1024 x 768)
SOUND OUTPUT	0.5W	0.5W
SPEAKER	AX 2W, 8 ohm 30x70mm	AX 2W, 8 ohm 30x70mm
POWER SOURCE	AC 100~240V 50/60Hz	AC 100~240V 50/60Hz
POWER CONSUMPTION	33±3 [W]	28±3 [W]
BRIGHTNESS	300cd/m²	450cd/m²
DIMENSIONS(WxHxD)	390 x 180 x 425 [mm]	365 x 180 x 389 [mm]
WEIGHT	6.0 Kg	5.6 Kg
TERMINALS	VIDEO CH1, 2 IN/OUT	VIDEO CH1, 2 IN/OUT
	AUDIO CH1, 2 IN/OUT	AUDIO CH1, 2 IN/OUT
	S-VIDEO IN	S-VIDEO IN
	PC IN	PC IN
	DVI IN	DVI IN



This monitor has received the EMI (Electromagnetic interference) test for the business. Accordingly, a seller or user needs to know about it. If you purchase the erroneous monitor, be sure to exchange it into non-business monitor in the shop where you buy it.