

# owner's manual Color Video Camera

Please read this manual carefully before operating your set and retain it for future reference.

MODELS

L6213R-BN L6213R-BP L6213R-DN



### CAUTION RISK OF ELECTRIC SHOCK DO NOT OPEN



CAUTION : TO REDUCE THE RISK OF ELECTRIC SHOCK DO NOT REMOVE COVER (OR BACK) NO USER-SERVICEABLE PARTS INSIDE REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



This 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.

FCC WARNING: This equipment may generate or use radio frequency energy. Changes or modifications to this equipment may cause harmful interference unless the modifications are expressly approved in the instruction manual. The user could lose the authority to operate this equipment if an unauthorized change or modification is made.

#### **Regulatory Notices For U.S.A**

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.

• A suitable conduit entries, knock-outs or glands shall be provided in the cable entries of this product in the end user.

- Caution: Danger of explosion if battery is incorrectly re placed. Replaced only with the same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions.
- Holes in metal, through which insulated wires pass, shall have smooth well rounded surfaces or shall be provided with brushings.

**Warning:** Do not install this equipment in a confined space such as a bookcase or similar unit.

**Warning:** Wiring methods shall be in accordance with the National Electric Code, ANSI/NFPA 70.

**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.

**Warning:** To reduce a risk of fire or electric shock, do not expose this product to rain or moisture.

**Caution:** This installation should be made by a qualified service person and should conform to all local codes.

**Caution:** To avoid electrical shock, do not open the cabinet. Refer servicing to qualified personnel only.

**Caution:** The apparatus should not be exposed to water (dripping or splashing) and no objects filled with liquids, such as vases, should be placed on the apparatus.

#### **Disposal of your old appliance**



- When this crossed-out wheeled bin symbol is attached to a product it means the product is covered by the European Directive 2002/96/EC.
- All electrical and electronic products should be disposed of separately from the municipal waste stream via designated collection facilities appointed by the government or the local authorities.
- The correct disposal of your old appliance will help prevent potential negative consequences for the environment and human health.
- 4. For more detailed information about disposal of your old appliance, please contact your city office, waste disposal service or the shop where you purchased the product.

LG Electronics hereby declares that this/ these product(s) is/are in compliance with the essential requirements and other relevant provisions of Directive 2004/108/EC, 2006/95/EC, and 2009/125/EC

European representative :

LG Electronics Service Europe B.V. Veluwezoom 15, 1327 AE Almere, The Netherlands (Tel : +31-(0)36-547-8888)

## **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 accord ance with the manufacturer's instructions.
- 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.
- 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 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.

## **Cautions for Safe Operation**

### **Power Supply**

#### L6213R-BP/L6213R-BN:

This camera must always be operated a AC 24 V or DC 12 V Certified/Listed, class 2 power supply only.

#### L6213R-DN:

This camera must always be operated a DC 12

### Handling of the unit

Be careful not to spill water or other liquids on the unit. Be cautions not to get combustible or metallic material inside the body. If used with foreign matter inside, the camera is liable to fail or to get cause of fire or electric shock.

- Remove dust or dirt on the surface of the lens with a blower.
- Use a dry soft cloth to clean the body. If it is very dirty, use a cloth dampened with a small quantity of neutral detergent then wipe dry.

 Avoid the use of volatile solvents such as thinners, alcohol, benzene and insecticides. They may damage the surface finish and/or impair the operation of the camera.

### **Operating and storage location**

Avoid viewing a very bright object (such as light fittings) during an extended period. Avoid operating or storing the unit in the following locations.

- Extremely hot or cold places (operating temperature -10 °C to 50 °C, however, we recommend that the unit be used within a temperature range of 0 °C to 45 °C)
- Damp or dust place
- Places exposed to rain
- Places subject to strong vibration
- Close to generators of powerful electromagnetic radia tion such as radio or TV transmitters.

## Contents

Features	8
Part Names and Functions	9
Connections	10
Basic connection	10
Installation	11
Installing the camera on a ceiling or wall	11
Installing the camera on a ceiling or wall with pipeline	12
Adjustment	13
Menu Operation	15
OSD Menu Overview	16
General Operation	18
Setting the USER TITLE	18
Exposure Settings	19
BACKLIGHT setting	19
BRIGHTNESS setting	20
AGC (Automatic Gain Control) setting	21
SHUTTER (Shutter Speed) setting	21
SENS-UP setting	22
White Balance settings	22
3D-DNR Setting	24

Day/Night Setting	24
Privacy Setting	25
Special Menu Settings	26
LANGUAGE Setting	27
Setting the COLOR EFFECT	27
Setting the SHARPNESS effect	28
STABILIZER setting	28
Setting the D-ZOOM (Digital Zoom ) leve	29
Setting the D-EFFECT (Digital effect	29
Motion Detection Setting	30
Factory Reset Setting	31
Specification	32

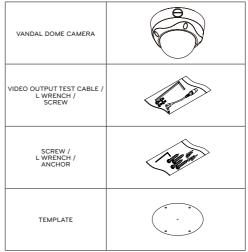
## Features

This Color Video Camera is designed for installation in a video surveillance system.

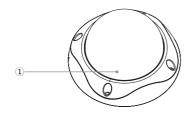
This manual contains instructions on how to install and manage the Color Video Camera in your video surveillance system. Should you require any technical assistance, please contact authorized service center.

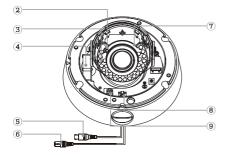
- High resolution and high sensitivity with a 6 mm CCD.
- Day & Night function.
- BLC covers various light conditions.
- Excellent signal-to-noise ratio of 52 dB.
- Weather Proof: IP66 Rating.
- Dome Cover : Vandal -Proof

### Accessories



## **Part Names and Functions**





- 1 Dome Cover
- (2) Photo Cell
- 3 LED(30ea)
- ④ Cooling Fan
- **5** Video Output Jack
- (6) Power Input Jack Supplies AC 24 V or DC 12 V from an external power source.
- (7) LED Cover
- 8 OSD Setup Switch
- 9 Service Video Connector

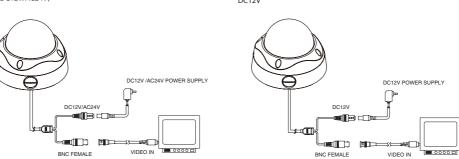
Use this jack for checking the picture with portable monitor when install the camera.

## Connections

#### **Basic connection**

The peripheral devices (DVR, monitor, etc.), AC/DC adapter and cables are not supplied.

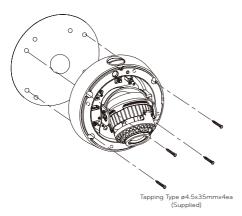
DUAL(DC12V/AC24V)



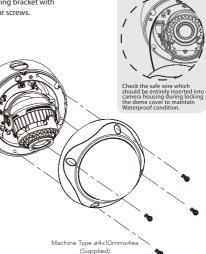
DC12V

#### Installing the camera on a ceiling or wall

- 1. Affix the mounting template(supplied) to the mounting surface.
- (2). Secure the camera mounting bracket to the position where the camera should be mounted with the supplied four screws.





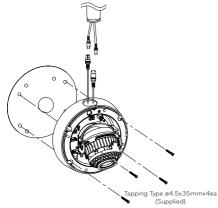


NOTE

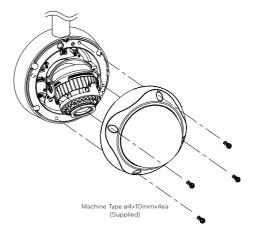
11

#### Installing the camera on a ceiling or wall with pipeline

- (1). Affix the mounting template(supplied) to the mounting surface.
- (2). Connect power input and video output cables with the each cable from pipeline.
- (3). Secure the camera mounting bracket to the position where the camera should be mounted with the supplied four screws.



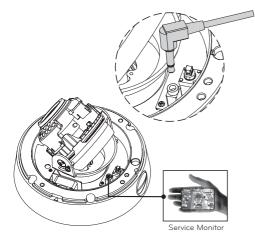
(4). Secure the camera on its mounting bracket with the four screws.



## Adjustment

#### Service Video connector

Connect a portable monitor to the video jack.



#### Having a better view , adjust the camera

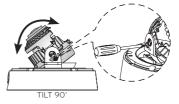
- Rotate angle : 360°
- Panning angle : 360°
- Tilting angle : 90°
- (Viewable operation tilt angle 60°)





ROTATE 360°

PAN 360

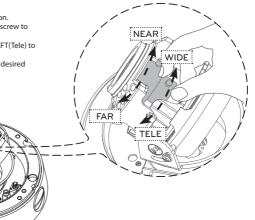


CAUTION : panning the bracket in excess of 3 rotations in one direction may cause damage to the cable.

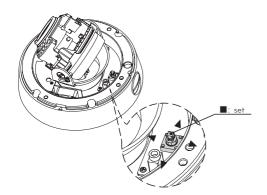
## Follow the instruction provided below to make any lens adjustments

- · Loosen the Zoom & Focus screws.
- · Using the screw, move it LEFT or RIGHT to the desired position.
- Once the desired adjustments have been made, tighten the screw to lock in place.
- Adjust the Field of View by moving the screw towards the LEFT(Tele) to zoom in, or towards the RIGHT(Wide) to zoom out.
- Adjust the Focus the same way as described above after the desired zoom position is established.

Focus: Far  $\leftarrow \rightarrow$  Near Zoom: Tele  $\leftarrow \rightarrow$  Wide



This camera utilizes an on-screen user MENU. To set items on the menu, use the following switch.



#### ۰UP

Used to move upper direction on the menu screen. Use this button to select an item or adjust the parameters.

#### • DOWN

Used to move lower direction on the menu screen. Use this button to select an item or adjust the parameters.

#### • RIGHT

Moves the cursor to the right. Used to increment the value selected in the menu. The parameter changes each time this button is pressed.

#### • LEFT

Moves the cursor to the left. Used to decrement the value selected in the menu. The parameter changes each time this button is pressed.

#### • SET

Executes selections and displays a submenu for an item with the  $\mathsf{e}^\mathsf{i}\mathsf{mark}.$ 

### **OSD Menu Overview**

The following table shows the list of menu items and options. You can adapt the camera to your requirements by setting up the respective items in these menus.

Main Menu	Sub Menu	Contents	
USER TITLE	OFF		-
USERTITLE	ON		-
		BACKLIGHT	OFF/BLC/HSBLC
	ALC/ ELC	BRIGHTNESS	0 to 100
		AGC	OFF/LOW/MID-
		AGC	DLE/HIGH
EXPOSURE			AUTO/OFF/
		SHUTTER	A.FLK/1/60,, 1/90
			000/x512,, x2
		SENS-UP	OFF
		SEINS-OP	AUTO

Main Menu	Sub Menu	Contents	
			STANDARD
	ATW	USER MODE	VIVID
	AIW	USER MODE	WARM
			COOL
USER TITLE	AWC → PUSH		-
		COLOR TEMP	INDOOR, OUTDOOR
	MANUAL	RED	-100 to 100
		BLUE	-100 to 100
	OFF		-
3D-DNR	LOW		-
SD-DINK	MIDDLE		-
	HIGH		-
		LEVEL	LOW/ MIDDLE/
	AUTO	LEVEL	HIGH
DAY/NIGHT		DWELL TIME	5, 10, 15, 30, 60 SEC
	DAY		-
	NIGHT		-

Main Menu	Sub Menu	Contents	
	OFF	-	
		MASK NUMBER	AREA1 to AREA8
		DISPLAY SET	ON/OFF
	ON	COLOR SET	GRAY/ WHITE/
PRIVACY			BLACK
		HEIGHT	4 to 100
		WIDTH	4 to 100
		MOVE Y	2 to 98
		MOVE X	2 to 98

Main Menu	Sub Menu	Contents			
	LANGUAGE	ENG/CHN/KOR/JAP/FRE/ITA/S			
		DL	JT/GER/POL/RUS		
	COLOR EFFECT	OFF/ ON			
	SHARPNESS		0 to 6	8	
	STABILIZER		OFF/ C	N	
		OFF		-	
	D-ZOOM		Z	MOC	
	D-200M	ON	PAN		
			Т	ULT	
	D-EFFECT		OFF/ V-FLIP/ MIRROR/ ROTATE		
SPECIAL	MOTION DET	OFF	-		
		MOTION DET		ZONE NUMBER	AREA1 to AREA4
				ZONE STATE	OFF/ON
			ON	HEIGHT	12 to 100
			WIDTH	16 to 100	
			MOVE Y	6 to 94	
			MOVE X	8 to 92	
			SENSITIVITY	0 to 100	
	FACTORY RESET		-		
EXIT	-		-		

### **General Operation**

#### 1. Press [SET] button.

The setup menu screen appears on the monitor.

CAMERA	SETTING
USER TITLE EXPOSURE WHITE BAL 3D-DNR DAY/NIGHT PRIVACY SPECIAL# EXIT 1	ELC.

- Use [UP] or [DOWN] button to select an option then press [SET] button.
   Submenu appears on the monitor.
- 3. Use [UP] or [DOWN] button to select a submenu option.
- 4. Use [LEFT] or [RIGHT] button to select a value.
- Select [EXIT] option then press [SET] to exit the setup menu. In the submenu, use [UP] or [DOWN] button to select the [RETURN] then press [SET] to return to the previous setup menu.
  - RETURN: Return to the previous.

### Setting the USER TITLE

You can use the camera identification to assign a number and character to the camera (0 to 9, A to Z, a to z).

The USER TITLE is displayed on the upper left of the screen. To disappear the user title, select [OFF].

- 1. Select [USER TITLE] option.
- 2. Use [LEFT] or [RIGHT] button to select a [ON] then press [SET]. The USER TITLE menu appears.



3. Use [UP], [DOWN], [LEFT] or [RIGHT] button to select

a character or number then press [SET] button.

- CLR: Clear all entered characters and numbers.
- POS: Move the USER TITLE position on the screen
  using the arrow buttons.

- · END: Confirm your selection or exit the setting
- [](Blank): Inserts a space at the cursor position.
- ←/→ : Moves cursor to left or right.

### **Exposure Settings**

You can set the exposure options using the EXPOSURE menu.

Select [EXPOSURE] option on the [CAMERA SETTING] menu.
 Use [LEFT] or [RIGHT] button to select a mode (AL↔ ELC).
 Press [SET] button and the EXPOSURE menu appears.

	CAMERA	SETTING
EXP WHI 3D- DAY PRI	R TITLE OSURE TE BAL DNR ∕NIGHT VACY CIAL∳ T≒	لېELC م⊺سټ MIDDLE

#### BACKLIGHT setting

Use BACKLIGHT option to view the object clearly in backlight conditions.

	EXPOSUR	E-ELC		
•	BACKLIGHT BRIGHTNESS AGC SHUTTER SENS-UP RETURN+	50	OFF HIGH AUTO OFF	

1. Select [BACKLIGHT] option.

2. Use [LEFT] or [RIGHT] button to select a mode then press [SET].

• BLC: Camera's backlight compensation feature helps alleviate issues of visibility in high contrast areas. Set the BLC limit.

> BLC LIMIT: LOW  $\leftrightarrow$  MIDDLE  $\leftrightarrow$  HIGH

- HSBLC: Use for masking brightness of the specific area to view the subject more clearly. The HSBLC mode is automatically activated only in low luminance scene.
  - > AREA SETTING: Use [LEFT] or [RIGHT] button to select a area then use [UP] or [DOWN] button to select a ON or OFF. Press [SET] to exit the Area setting menu.
  - > GRAY SCALE: Use [LEFT] or [RIGHT] button to select a gray scale. (GRAY ↔ D.GRAY ↔ BLACK).
  - > USER SCALE: Use [LEFT] or [RIGHT] button to select a bright level.(5 level)
  - > MASK: Use [LEFT] or [RIGHT] button to select [ON] or [OFF]. If you set the MASK to ON, the mask function is activate only when the HSBLC is automatically activated in low luminance scene.

• OFF: Not used.

### BACKLIGHT setting

You can increase the brightness of the darkened video. If you set the brightness to lower value, the image is darkened. If you set the brightness to higher value, the image gets bright.

-				
	EXPOSUR	E-ELC		
•	BACKLIGHT BRIGHTNESS AGC SHUTTER SENS-UP RETURN≋	50	OFF HIGH AUTO OFF	

1. Select [BRIGHTNESS] option.

2. Use [LEFT] or [RIGHT] button to set the bright level.

### AGC (Automatic Gain Control) setting

If the images are too dark, change the maximum [AGC] value to make the images brighter.

	EXPOSUR	E-ELC		
•	BACKLIGHT BRIGHTNESS AGC SHUTTER SENS-UP RETURN™	50	OFF HIGH AUTO OFF	

Select [AGC] option.
 Use [LEFT] or [RIGHT] button to select a mode.
 (OFF ↔ LOW ↔ MIDDLE ↔ HIGH)

#### SHUTTER (Shutter Speed) setting

Select the desired shutter speed for camera exposure. You can change the shutter speed to higher speed to capture fast-moving subjects, though the image becomes darker.

	EXPOSUR	E-ELC	
	BACKLIGHT BRIGHTNESS AGC SHUTTER SENS-UP RETURN≒	50	OFF HIGH AUTO OFF

1. Select [SHUTTER] option. 2. Use [LEFT] or [RIGHT] button to set shutter speed. (AUTO ↔ OFF ↔ A.FLK ↔ 1/160, ..., 1/90 000 ↔ x512, ..., x2)

#### SENS-UP setting

If pictures are not clear due to darkness, this SENS-UP operation would increase the sensitivity of picture.

		EXPOSUR	RE-ELC		
	·	BACKLIGHT BRIGHTNESS AGC SHUTTER SENS-UP RETURN≒	50	OFF HIGH AUTO OFF	
l					

- 1. Use **[UP]** or **[DOWN]** button to select [SENS-UP] option. 2. Use **[LEFT]** or **[RIGHT]** button to select mode.
  - AUTO: Adjust the sensitivity of the picture auto matically.
    - > SENS-UP LIMIT: Use [LEFT] or [RIGHT] button to set the SENS-UP limit.
  - OFF: Not used.

#### Note:

If you set to one of the SHUTTER options except AUTO on the [SHUTTER] menu or [AGC] to [OFF], the [SENS-UP] setting is not available and [---] mark is displayed.

### White Balance settings

Select the method by which the camera shifts its output colors to compensate for the color of a light source.

	CAMERA	SETTING
•	USER TITLE EXPOSURE WHITE BAL 3D-DNR DAY/NIGHT PRIVACY SPECIAL# EXIT	ONئ Elcئ Atuj Middle Autoj ON¢

1. Select [WHITE BAL] option.

2. Use [LEFT] or [RIGHT] button to select a mode then press [SET].

 ATW (Auto-Tracing White Balance): Use [LEFT] or [RIGHT] button to select the ATW then press [SET] button. You can select the USER MODE. (STANDARD - VIVID - WARM - COOL)



- AWC → PUSH: If you select the AWC → PUSH mode, you will be able to set up the White Balance automatically using [SET] button.
- · MANUAL: You can set the white balance options manually.

- INDOOR: The color temperature range for the proper white balance is approximately3 200 K.
- OUTDOOR: The color temperature range for the proper white balance is approximately 5 100 K.
- > RED: Obtains the optimum amount of red gain.
- > BLUE: Obtains the optimum amount of blue gain.

### **3D-DNR Setting**

	CAMERA	SETTING
•	USER TITLE EXPOSURE WHITE BAL 3D-DNR DAY/NIGHT PRIVACY SPECIAL# EXIT®	0N4 ELC4 MIDDLE Auto4 ON4

1. Select [3D-DNR] option.

If pictures are not clear due to brightness, this option would reduce the noise of picture.

2. Use [LEFT] or [RIGHT] button to select a option. (OFF ↔ LOW ↔ MIDDLE ↔ HIGH)

#### Notes:

- If you set the AGC to [OFF] on the [EXPOSURE] menu, the [3D-DNR] function is not available and [---] mark is displayed.
- When you use this function, the afterimage may occ

### **Day/Night Setting**

CAMERA	SETTING
USER TITLE EXPOSURE WHITE BAL 3D-DNR DAY/NIGHT PRIVACY SPECIAL# EXIT®	لله ELC ئېW MIDDLE AUTO↓

1. Select [DAY/NIGHT] option.

Use [LEFT] or [RIGHT] button to select mode for day/night function.
 AUTO: You will be able to change the Day/Night mode automatically.

#### Note:

If you set the AGC to [OFF] or the SHUTTER is set to one of the SHUTTER options except AUTO on the [EXPOSURE] menu, the AUTO mode of the DAY/NIGHT function is not available and [---] mark is displayed.

- > LEVEL: Use [LEFT] or [RIGHT] button to select a level. (LOW  $\leftrightarrow$  MIDDLE  $\leftrightarrow$  HIGH)
  - > DWELL TIME: Use [LEFT] or [RIGHT] button to select a dwell time. (5, 10, 15, 30 or 60 SEC)
  - DAY: Color mode enabled.
  - NIGHT: Black-and-white mode enabled.

### **Privacy Setting**

This function is aiming at the protection of personal privacy, selecting a screen part black not to be displayed in the screen. Up to 8 zones can be registered.

CAMERA SETTING
USER TITLE ONJ EXPOSURE ELCJ WHITE BAL ATUJ 3D-DNR MIDDLE DAY-NIGHT AUTOJ PRIVACY ONJ SPECIALJ EXITA

- 1. Select [PRIVACY] option.
- 2. Use [LEFT] or [RIGHT] button to select a [ON] and press [SET]. The PRIVACY SETUP menu appears.
- Use [LEFT] or [RIGHT] button to select a mask (AREA1 to AREA8) on the [MASK NUMBER].
- 4. Use [LEFT] or [RIGHT] button to set up the ON or OFF on the DISPLAY SET option.

- Use [LEFT] or [RIGHT] button to set up the GRAY, WHITE or BLACK on the COLOR SET option.
- Use [UP] or [DOWN] to select an option then use [LEFT] or [RIGHT] button to adjust the option.
  - HEIGHT: Enlarge or decrease the vertical size of the mask.
  - WIDTH: Enlarge or decrease the horizontal size of the mask.
  - · MOVE Y: Moves vertical position of the mask.
  - MOVE X: Moves horizontal position of the mask.

#### Note:

The parts with the registered mask numbers from AREA1 to AREA4 have the same color. (So do the parts with the numbers from AREA5 to AREA8). If you change the mask color, the registered mask color will be changed automatically with the same color for each of group (AREA1 to AREA4, AREA5 to AREA8).

### **Special Menu Settings**

This menu lets you adjust and set up LANGUAGE, COLOR EFFECT, SHARPNESS, STABILIZER, D-ZOOM, D-EFFECT, MOTION DET, FACTORY RESET function by yourself in the SPECIAL menu.

CAMERA	SETTING
USER TITLE EXPOSURE WHITE BAL 3D-DNR DAY/NIGHT PRIVACY \$PECIAL# EXIT®	ELC# ATW# MIDDLE

1. Select [SPECIAL] option.

2. Press [SET] button and the SPECIAL menu appears.

#### LANGUAGE Setting

Select the viewer language for the camera setup menu and OSD information display.

	SPECIAL	
•	LANGUAGE COLOR EFFECT SHARPNESS STABILIZER D-ZOOM D-EFFECT NOTION DET FACTORY RESET RETURN	ENG ON OFF OFF OFF OFF

1. Select [LANGUAGE] option on the [SPECIAL] screen. 2. Press [LEFT] or [RIGHT] button to select a language.

### Setting the COLOR EFFECT

You can switch the displayed picture to gray scale or color.

	SPECIA	Ĺ		
·	LANGUAGE COLOR EFFECT SHARPNESS STABILIZER D-ZOOM D-EFFECT MOTION DET FACTORY RESET RETURN+	34	ENG ON OFF OFF OFF OFF	

- 1. Select [COLOR EFFECT] option on the [SPECIAL] menu.
- 2. Use [LEFT] or [RIGHT] button to change a color effect.
  - ON: To display the picture with color.
  - OFF: To display the picture with grayscale.

#### Setting the SHARPNESS effect

The degree to which the boundary of the two portions is clearly distinguished.

SPECIAL	
LANGUAGE ENG COLOR EFFECT ON STARPHESS 34 STARPHESS 34 OFF D-2004/2ER OFF D-2004/2ER OFF D-2004/2ER OFF D-2004/2ER OFF D-2004/2ER OFF ROTION DET OFF FACTORY RESETJ RETURN	

- 1. Select [SHARPNESS] option on the [SPECIAL] menu.
- Use [LEFT] or [RIGHT] button to change a adjust the option. If you set the sharpness value to higher, the image outline becomes sharp. If you set to lower value, the image outline becomes dim.

### STABILIZER setting

SPECIA	L		
LANGUAGE COLOR EFFECT SHARPNESS STABILIZER D-ZOOM D-EFFECT MOTION DET FACTORY RESET RETURN%	34 #	EN NS OFFF OFFF OFFF	

The image stabilizer function minimizes the appearance of shaky images caused by low-frequency vibration. This function is useful for outdoor surveillance. Select [STABILIZER] option and set to ON or OFF.

#### Note:

If you set the [STABILIZER] to ON, the Digital zoom is set to [x1.1] automatically.

#### Setting the D-ZOOM (Digital Zoom ) level You can select the digital zoom level.

LANGUAGE ENG COLOR EFFECT ON	SPECIA	L		
SHARPHESS 34 mmmmmmm STABLIZER OFF D-ZOOM OFF D-EFFECT OFF NOTION DET OFF FACTORY RESET≠ RETURN1	COLOR EFFECT SHARPNESS STABILIZER D-ZOOM D-EFFECT MOTION DET FACTORY RESET		ON OFF OFF OFF	

- 1. Select [D-ZOOM] option on the [SPECIAL] menu.
- Use [LEFT] or [RIGHT] button to select a [ON] then press [SET] the DIGITAL ZOOM menu appears. When you set to ON, the displayed image can be shaking.
- Use [UP] or [DOWN] to select a option then use [LEFT] or [RIGHT] button to select a level.
  - ZOOM: Use [LEFT] or [RIGHT] button to enlarge the screen.
  - PAN: Use [LEFT] or [RIGHT] button to move the screen. (left or right)
  - TILT: Use [LEFT] or [RIGHT] button to move the screen. (up or down)

#### Setting the D-EFFECT (Digital effect) You can select the digital effect.

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LANGUAGE COLOR EFFECT SHARPNESS STABILIZER D-ZOOM D-EFFECT MOTION DET FACTORY RESET RETURNS	34	ENG ON OFF OFF OFF OFF

Select [D-EFFECT] option on the [SPECIAL] menu.
 Use [LEFT] or [RIGHT] button to select a digital effect.

- V-FLIP: Flip the picture vertically.
- MIRROR: Turn on the mirror effect.
- ROTATE: Rotate the picture. (180°)
- OFF: Turn off the digital effect.

### **Motion Detection Setting**

The motion detection detects the moving objects in the scene by monitoring changes in brightness level. You can select the level of sensitivity for motion detection to 4 zone.

SPECIAL					
•	LANGUAGE COLOR EFFECT SHARPNESS STABILIZER D-ZOOM D-EFFECT MOTION DET FACTORY RESET RETURN <sup>4</sup>	34 #	ENG ON OFF OFF OFF OFF		

- 1. Select [MOTION DET] option.
- 2. Use [LEFT] or [RIGHT] button to select a [ON] and press [SET].

The MOTION DETECTION menu appears.

- Use [LEFT] or [RIGHT] button to select a zone number (AREA1 to AREA4) on the [ZONE NUMBER].
- Use [LEFT] or [RIGHT] button to set up the ON or OFF on the ZONE STATE.

- 5. Use [UP] or [DOWN] to select an option then use [LEFT] or [RIGHT] button to adjust the option.
  - HEIGHT: Enlarge or decrease the vertical size of the mask.
  - · WIDTH: Enlarge or decrease the horizontal size of the mask.
  - MOVE Y: Moves vertical position of the mask.
  - MOVE X: Moves horizontal position of the mask.

6. Use [SENSITIVITY] option to obtain the optimum detection level.

### **Factory Reset Setting**



 FACTORY RESET: To reset the camera setting to factory setting, select [FACTORY RESET] option.

# Specification

Model	L6213R–BP	L6213R-BN/DN	
Signal System	PAL	NTSC	
Total Pixels No. / Effective Pixels No.	470К / 440К	410K / 380K	
Image Device	1/3" CCD (ICX638/639BK)		
DSP	XDI-52		
Lens	2.8~11mm Vari-focal lens		
Digital Zoom	X8		
Sync. System	Internal		
Scanning Frequency (H/V)	15.625 KHz / 50 Hz	15.734 KHz / 59.94 Hz	
Horizontal Resolution	620 TV Lines		
S/N Ratio	52dB		
Minimum Illumination (30 IRE)	0 Lux (IR LED On) IR LED Distance : 25 m		
Control Method	Inner Key button		
Video Output Signal	1Vp-p Composite (75Ω)		
Day & Night	ICR Day / Night / Auto		
WDR(BLC)	OFF / BLC / HSBLC		
DNR	3D-DNR (Off/Low/Middle/High)		
Auto Gain Control	Auto Gain Control Off / Low / Middle / High		

# Specification

Electronic Shutter Speed			1/50 ~1/90,000	1/60 ~1/90,000	
Electronic Sensitivity			OFF/Auto ( x2, x3, x4,x 128 )		
White Balance			Auto / ATW / One Push / Manual (1,700°k ~ 11,000°k)		
Motion Detection			4 Zones		
Privacy Zone Masking		J	8 Masks		
Stabilizer(EIS)			On / Off		
User Color Mode			Standard / Cool / Warm / Vivid		
Multi OSD Language			15 Languages		
	Dual	LED ON	DC12V ±10% Max. 620mA / AC24V ±10% Max. 500mA / 6.8W		
Power Consumption		LED OFF	DC12V ±10% Max. 210mA / AC24V ±10% Max. 235mA / 3.0W		
	DC12V	LED ON	-	DC12V ±10% Max. 450mA	
		LED OFF	-	DC12V ±10% Max. 160mA	
Operation	Operation Temp./Humidity		-10°C ~ 50°C ( 0%RH ~ 80%RH )		
Storage Temp./Humidity			-20°C ~ 60°C ( 0%RH ~ 85%RH )		
Weight			869g		
Dimension			109.1(H) x Ø150.5		
Accessory			TEMPLATE		



