# **USER MANUAL**

# Regular Camera Series



The product image may differ from the actual product.

Please read the instructions thoroughly before using the product.



# CAUTION

## **RISK OF ELECTRIC SHOCK**



#### **CAUTION:**

To reduce the risk of electric shock, do not expose this apparatus to rain or moisture.

Only operate this apparatus from the type of power source indicated on the label.

The company shall not be liable for any damages arising out of any improper use, even if we have been advised of the possibility of such damages.



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.



This 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 appliance.



#### **ROHS Announcement**

All lead-free products offered by the company comply with the requirements of the European law on the Restriction of Hazardous Substances (RoHS) directive, which means our manufacture processes and products are strictly "lead-free" and without the hazardous substances cited in the directive.



The crossed-out wheeled bin mark symbolizes that within the European Union the product must be collected separately at the product end-of-life. This applies to your product and any peripherals marked with this symbol. Do not dispose of these products as unsorted municipal waste.



#### CE Mark

This apparatus is manufactured to comply with the radio interference.

The company does not warrant that this manual will be uninterrupted or error-free. We reserve the right to revise or remove any content in this manual at any time.

## **FEATURES**

- 1. 1/3" HR Color CCD with SONY Effio DSP
- 2. High resolution
- 3. Digital wide dynamic range (D-WDR) to increase the image recognizability of the overexposed and dark areas
- 4. Clear and sharp images in the dark environment with the B/W mode selectable
- 5. Further camera parameters configuration via its own OSD
- Multilingual on-screen display menu in 7 languages
   (English / Japanese / German / French / Russian / Portuguese / Spanish)
- 7. Built-in microphone for audio recording

# **PACKAGE CONTENT**

Camera x 1

User manual x 1

Wrench x 1

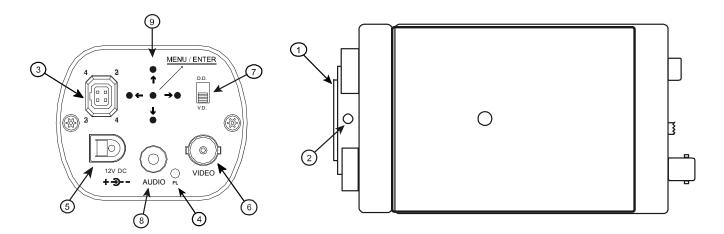
# SPECIFICATION\*

Pick up Element	1/3" HR color CCD image sensor with SONY Effio DSP		
Number of Pixel	768(H) x 494(V) <ntsc> / 752(H) x 582(V) <pal></pal></ntsc>		
Resolution	Super high resolution		
Min. Illumination	Color mode: 0.1 Lux / F2.0;		
	B/W mode: 0.08 Lux / F2.0		
S/N Ratio	More than 48dB (AGC off)		
Electronic Shutter	AUTO: 1/50 (60) to 1/100,000 sec.		
	MANUAL: 1/50(60), FL 1/120(100), 1/250, 1/500, 1/1,000, 1/2,000,		
	1/4,000, 1/10,000 sec.		
Lens Mount	CS Mount		
IRIS Mode	AES / VD / DD		
Gain Control	AGC adjustable / OFF		
Day & Night Mode	Color / B/W / Auto		
Color Rolling Suppress	YES		
DWDR	YES		
Video Output	1.0 Vp-p composite, 75Ω		
Microphone	Built-in		
Power Source (±10%)	DC 12V		
Current Consumption(±10%)	80mA		
Dimensions (mm)**	117(L) x 60(W) x 50(H)		

<sup>\*</sup> The specifications are subject to change without notice.

<sup>\*\*</sup> Dimensional Tolerance: ± 5mm

# MAJOR OPERATING CONTROL AND FUNCTIONS



#### 1. Flange Back Adjusting Ring

It is suitable for CS-mount lens. When using C-mount lens, please use the CS-C conversion ring\*.

## 2. Back Focal Lock Hexagonal Bolt

The camera is set at the standard back focal position. Fine-tuning is inevitable according to the lens types. Adjust the lens back-focus by turning the focusing knob.

#### 3. Auto Iris Lens Connector

Supplies power and controls signals to an Auto Iris Lens.

#### 4. Power LED Indicator

The Power LED Indicator indicates normal status during operation.

#### 5. Power Input Terminal 🛆

■ For connecting to DC12V regulated power supply.

#### 6. Video Output Connector (VIDEO OUT)

For connecting to CCTV monitor video input with coaxial cable.

#### 7. V.D. / D.D. selectable

When using Auto Iris Lens, select Video Drive or Direct Drive depend on the type of lens you used.

#### 8. Audio Output Connector (AUDIO OUT)

Connect to the AUDIO IN connector of the recording device.

#### 9. OSD Menu Selection

For more details, please refer to "CAMERA PARAMETERS".

#### INSTALLATION

\*\*\* It is recommended to have the following installation done by the qualified service personnel or system installer. \*\*\*

#### 1. Mount a lens onto the camera (By turning it clockwise).

It is suitable for CS-mount lens.

But if the lens you chose is C-mount, please use the **CS-C conversion ring\*** to connect the C-mount lens and the camera.

## 2. Switch the lens selection depending on the lens you used.

#### \* Auto iris lens:

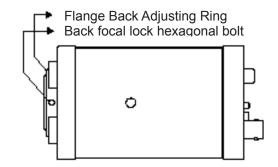
V.D. / D.D.: Select VD or DD depend on the type of lens you used.

- 3. Connect the camera VIDEO output and the monitor video input with a  $75\Omega$  coaxial cable.
- 4. Connect the camera AUDIO output and the monitor audio input with a coaxial cable.
- 5. Connect the POWER terminal of the camera to a right power supply.
- 6. Adjust the focus or flange-back (Please refer to NOTE for adjustment instructions).

<sup>\*</sup> The CS-C conversion ring is not supplied in the sales package and needs to be purchased separately.

# NOTE: Focus or Flange-Back Ring Adjustment

- 1. Mount the lens by turning it clockwise on the lens mount of the camera.
- 2. Loosen the screws on the flange-back adjusting ring.
- 3. Turn the flange-back adjusting ring to the desired position.
- 4. Tighten the screws on the flange-back adjusting ring.

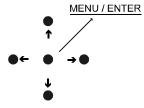


## **PRECAUTIONS**

- ★ Do not install the camera in an environment where the humidity or temperature is high
- ★ Do not install the camera under the unstable lighting condition
- ★ Do not expose the camera to rain or moisture
- ★ Do not keep the camera face to strong light directly
- ★ Do not touch the front glass of the camera
- ★ Do not use other than specified power source
- ★ Do not disassemble the camera

# **CAMERA PARAMETERS**

There are five buttons on the camera rear panel for users to further configure camera parameters.



If you want to	Press
Enter the camera configuration menu	MENU
Move to the sub-menu you want	↑ / ↓
Change setting	← / →
Enter the configuration page of an option	ENTER

# **Menu Tree**

For options with →, press the button "→" (Enter) to enter their respective setting pages.

SUB-MENU	OPTIONS			
LENS	MANUAL			_
	AUTO₄	TYPE	DC / VIDEO	
		MODE	AUTO / OPEN / CLOSE	
		SPEED	0 ~ 255	
SHUTTER / AGC	AUTO₄J	HIGH LUNINANCE	MODE	SHUT
			BRIGHTNESS	0 ~ 255
		LOW LUMINANCE	MODE	AGC / OFF
			BRIGHTNESS	x0.25 / x0.50 /
				x0.75 / x1.00
	MANUAL₄	MODE	SHUT + AGC	
		SHUTTER		
		AGC	6.00 / 12.00 / 18.00 / 24.00 / 30.00 / 36.00 /	
			42.00 / 44.80	

SUB-MENU	OPTIONS						
WHITE BAL	ANTI CR	ANTI CR					
	MANUAL₄ <sup>⊥</sup>	LEVEL	012 ~ 031				
	PUSH LOCK	PUSH LOCK					
	ATR₊	SPEED	0 ~ 255				
		DELAY CNT	0 ~ 255				
		ATW FRAME	x0.50 / x1.00 / x1.50 / x2.00				
		ENVIRONMENT	INDOOR / OUTDOOR				
	PUSH						
	USER1₊ /	B – GAIN / R – GAIN	0 ~ 255				
	USER2₊						
BACKLIGHT	OFF / BLC /	HLC					
PICT ADJUST	4	MIRROR	OFF / ON				
		BRIGHTNESS /	0 ~ 255				
		CONTRAST /					
		SHARPNESS / HUE /					
		GAIN					
ATR	OFF						
	ON₄	LUMINANCE	LOW / MID / HIGH				
		CONTRAST	LOW / MIDLOW / MID / MID	HIGH / HIGH			
PRIVACY	OFF						
	ON₊	AREA SEL	1/4; 2/4; 3/4; 4/4	T			
			TOP / BOTTOM	0 ~ 244			
			LEFT / RIGHT	0 ~ 378			
		COLOR	0~8				
		TRANSP	0.00 / 0.50 / 0.75 / 1.00				
		MOSAIC	ON / OFF				
DAY / NIGHT	COLOR						
	B/W₄	BURST	ON / OFF				
	AUTO₄	BURST	ON / OFF				
		DELAY CNT / DAY ->	0 ~ 255				
		NIGHT / NIGHT -> DAY					
NR	4	NR MODE	Y/C; Y; C; OFF				
CAMERA ID	OFF / ON⊷						
LANGUAGE	ENGLISH /	日本語 / DEUTSCH / FRANC	CAIS / РУССКИЙ / PORTUGU	JÊS / ESPAÑO			
CAMERA RESET							

# **Sub-menu Brief Description**

SUB-MENU	DESCRIPTION
LENS	Select and set the type of your lens: D.D., V.D., or board lens.
SHUTTER / AGC	Select "AUTO" to allow the camera to act automatically when the light condition of the environment changes.
	<ol><li>Select "MANUAL" to fix the shutter and AGC modes of the camera no matter how the light condition of the environment changes.</li></ol>
WHITE BAL	Process the current image to retain color balance over a color temperature range.
BACKLIGHT	Adjust the image to compensate for an area that is overpowered by brightness because of excessive light.
	"BLC" is to automatically adjust the level of the light to show more details in the dark environment.
	"HLC" is to mask extremely bright areas.
PICT ADJUST	Adjust the color of the pictures in, for example, brightness, contrast, sharpness and hue.
ATR	D-WDR to increase the image recognizability of the overexposed and dark areas.
PRIVACY	Mask areas that should be not visible.
DAY / NIGHT	Set the night surveillance mode to color or B/W.
NR	Reduce noise by separating luminance (Y) and chrominance (C) settings.
CAMERA ID	Set the title of the camera.
LANGUAGE	Select the language of the menu on-screen display.
CAMERA RESET	Press