

# AHD Waterproof IR Camera User Manual



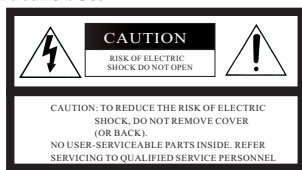
## BLSBVM40/2.4FHD

### DESCRIPTION

The waterproof bullet camera adopt 2.0 Megapixel pixels 1080P@25/30fps high performance AHD sensor, no compressed, no delay, and realtime transmission image. IP66 waterproof standard, IR-CUT filter, smart-IR control. Fashionable and professional design.

### ATTENTION

Thank you for your purchasing this product. Before attempting to connect or operate this product, please read these instructions carefully and save this manual for future use.



#### 1. Use the Appropriate Power Supply

The input power for the camera is DC12V. Be sure to connect it to the appropriate power. Wrong connection may cause malfunction and/or damage to the video camera.

#### 2. Do not attempt to disassemble the camera.

To prevent electric shock, do not remove screws or covers. There are no user serviceable parts inside. Ask a qualified service person for servicing.

#### 3. Handle the camera with care.

Do not abuse the camera. Avoid striking, shaking, etc. The camera could be damaged by improper handling or storage.

#### 4. Do not use strong or abrasive detergents when cleaning the camera body.

Use a dry cloth to clean the camera when dirty. In case the dirt is hard to remove. Use a mild detergent and wipe gently.

#### 5. Clean the sensor faceplate with care.

When cleaning the sensor panel, do not use strong or abrasive detergents. Use a piece of lens tissue or cotton tipped applicator and ethanol.

#### 6. Do not attempt to aim the camera at the sun

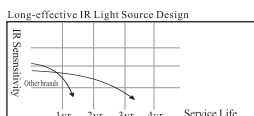
Do not attempt to aim the camera at the sun or other extremely bright objects that causes glare to appear irrespective of whether the camera is operating or not. This can damage the sensor.

#### 7. Do not put the camera in a place with interference.

When this camera is installed near the equipment like wireless communication device which emits strong electromagnetic field, some irregularity such as noise on monitor screen may happen.

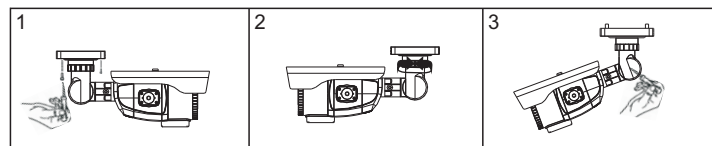
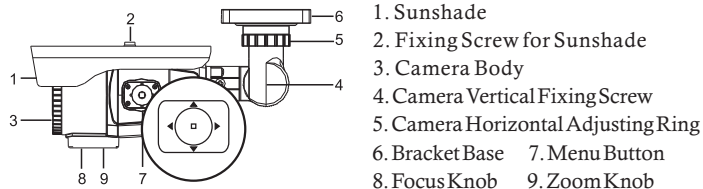
### FEATURES

- ★ 2.0 Megapixel high performance SONY322+NVP2441 sensor with 25/30fps@1080P, no compressed, no delay, and real-time transmission image.
- ★ Built in IR-CUT, ensure the camera work properly both day and night.
- ★ IP66 waterproof standard
- ★ Long-life IR LED design, whose brightness is several times higher and service life longer than ordinary LED's
- ★ SMART-IR, 40 meters IR range
- ★ Image transmission up to 500 meters.
- ★ Adopts special algorithm, reducing video and color noise and thus improve image resolution, to produce clearer and sharper image.
- ★ Elegant and solid combined type bracket, with video and power cable built-in. makes installation convenient and reliable.
- ★ Powerful OSD menu(optional) allows for various function settings.



★ Powerful OSD menu allows for various function settings.

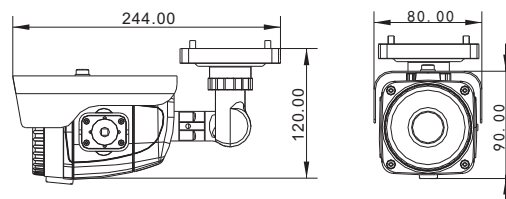
### PARTS INSTRUCTION AND INSTALLATION



#### ■ Camera Installation

1. Fix the camera to the needed place with the four pieces of screws.
2. Loosen the horizontal adjusting ring, adjust it to the needed place, then fix the horizontal adjusting ring.
3. Loosen the angle fixing screw, adjust it to the needed place, then fix the angle fixing screw.

### DIMENSION(MM)



### SPECIFICATION

Model	BLSBVM40/2.4FHD
Sensor	SONY322+NVP2441
Effective Pixels	1920(H)x1080(V)
Video Frame Rate	25/30fps@1080P
Max. transmission distance	500M
Video format	PAL/NTSC
Mini-illumination	0Lux (IR ON)
S/N Ration	More than 80dB (with AGC OFF)
OSD	Support
AGC	AUTO
White Balance	AUTO
Backlight	AUTO
NR	2D-DNR/3D-DNR
Brightness	Adjustable
Smart IR	Support
Sync code	Internal
Voltage	DC12V
Current	350mA±15%(IR ON);80mA±15%(IR OFF)
DAY/NIGHT	Support ICR
Lens	2.8-12mm HD Lens
IR range	40m
Waterproof standard	IP66
Video output	AHD/CVBS
Storage temperature	-20℃~70℃
Operate Temperature	-10℃~50℃RH90% MAX
Size	244(L) * 120(H) * 80(W)
Weight	1000g

\*Specifications subject to change without notice.

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## OSD MENU

Press the button into the main menu, set the LENS mode, EXPOSE, BACKLIGHT, WHITE BALANCE, DAY&NIGHT, NR, SPECIAL, ADJUST as needed.

MAIN MENU	
1.LENS	DC (MANUAL)
2.EXPOSURE	OFF (BLC, HSBLC)
3.BACKLIGHT	ATW(AWC → SET, INDOOR, OUTDOOR, MANUAL, AWB)
4.WHITE BAL	EXT (AUTO, COLOR, B/W)
5.DAY&NIGHT	
6.NR	
7.SPECIAL	
8.ADJUST	
9.EXIT	RET

### 1. LENS

After set the LENS mode, press the menu button into the submenu, can adjust the P-IRIS MODE, LEVEL and LIMIT as needed.

DC LENS MODE	
1.MODE	INDOOR(OUTDOOR)
2.IRIS SPEED	8 (0-15)
3.RETURN	RET

OUTDOOR MODE	
1.MIN SHU	DC (MANUAL)
2.MAX SHU	1/50(1/200、1/400、1/1000、1/2000、1/5000、1/10000、1/50000、FLK)
3.RETURN	ATW(AWC → SET, INDOOR, OUTDOOR,

### 2. EXPOSURE

Press the menu button into the expose's submenu, set the SHUTTER\AGC\ SENS-UP\ BRIGHTNESS\ D-WDR and DEFOG as needed.

EXPOSURE	
1.SHUTTER	---
2.ACG	15 (0-15)
3.SENS-UP	OFF(ON)
4.BRIGHTNESS	34 (0-100)
5.D-WDR	AUTO(OFF, ON)
6.DEFOG	OFF(AUTO)
7.RETURN	RET

D-WDR	
1.LEVEL	0 (0-8)
2.RETURN	RET

DEFON	
1.POS/SIZE	
2.GRADATION	0 (0-2)
3.DEFAULT	
4.RETURN	RET

### 3. BLC

Press the menu button into the BLC's submenu, set the GAIN\ AREA\ DEFAULT as needed.

BLC	
► 1.GAIN	MIDDLE(HIGH, LOW)
2.AREA	
3.DEFAULT	
4.RETURN	RET(END)

HSBLC	
1.SELECT	AUTO(ARE1-ARE4)
2.DISPLAY	ON (OFF)
3.BLACK MASK	ON(OFF)
4.LEVEL	20 (0-100)
5.MODE	ALL DAY(NIGHT)
6.DEFAULT	
7.RETURN	RET

### 4. WB (WHITE BALANCE)

Press the menu button into the WB's submenu, set the BLUE\ RED tone as needed.

NIGHT	
1.AGC GRADE	20 (0-100)
2.RETURN	RET

MANUAL WB	
1.BLUE	50 (0-100)
2.RED	50 (0-100)
3.RETURN	RET

### 5.D&N (DAY & NIGHT)

Press the LEFT OR RIGHT button choose the D&N's mode, and then press the menu button into the submenu, set the params as needed.

D&N EXT	
1.D→N DELAY	2 (0-60)
2.N→D DELAY	2 (0-60)
3.RETURN	RET

D&N AUTO	
1.D→N(AGC)	18 (0-18)
2.D→N DELAY	1 (0-60)
3.N→D(AGC)	18 (0-18)
4.N→D DELAY	1 (0-60)
5.RETURN	RET

B/W	
1.BURST	RET
2.IR SMART	RET
3.RETURN	RET

IR SMART	
1.LEVEL	2 (0-15)
2.AREA	
3.RETURN	RET

### 6. NR( NOISE REDUCE)

Press the menu button choose the NR mode, and then press the menu button into the submenu, set the params as needed.

NR	
1.2D NR	HIGH
2.3D NR	LOW
3.RETURN	RET

### 7. Special

Press the menu button into the submenu, set the CAMERA TITLE, D-EFFECT, MOTION, PRIVACY, LANGUAGE DEFECT as needed.

SPECIAL	
1.CAM TITEL	OFF (ON)
2.D-EFFECT	
3.MOTION	OFF (ON)
4.PRIVACY	ATW(AWC → SET, INDOOR, OUTDOOR, END (CHN1, CHN2, TUR, NED, POR, RUS, POL, SPA, ITA, FRA, GER)
5.LANGUAGE	
6.DEFECT	
7.RS485	
8.RETURN	RET

SPECIAL	
0 1 2 3 4 5 6 7 8 9	
A B C D E F G H I J K	
L M N O P Q R S T U V	
W X Y Z	
( ) --- = & : ~ , .	
← → CLR POS END	
AHD 2.0	

D-EFFECT	
1.FREEZE	OFF(ON)
2.MIRROR	OFF(MIRROR, V-FLIP, ROTATE)
3.NEG IMAGE	OFF(ON)
4.RETURN	RET

MOTION	
1.SELECT	AREA1(AREA2, AREA3, AREA4)
2.DISPLAY	ON (OFF)
3.SENSITIVITY	GREEN
4.COLOR	64 (0-100)
5.TRANS	1.00
6.ALARM	
7.DEFAULT	
8.RETURN	RET

PRIVACY	
1.SELECT	AREA1(AREA2, AREA3, AREA4)
2.DISPLAY	COLOR (MOSAIC)
3.COLOR	WHITE
4.TRANS	1.00
5.DEFAULT	
6.RETURN	RET

DEFECT	
1.LIVE DPC	OFF(ON)
2.WHITE DPC	ON
3.BLACK DPC	ON
4.RETURN	RET

LIVE DPC	
1.AGC LEVEL	64 (0-100)
2.LEVEL	100 (0-100)
3.RETURN	RET

WHITE DPC	
1.POS/SIZE	
2.START	
3.DPC VIEW	OFF
4.LEVEL	8 (0-100)
5.AGC	14 (0-15)
6.SENS-UP	x2(x4, x6, x8, x10, x15, x20, x25, x30)
7.RETURN	RET

BLACK DPC	
1.POS/SIZE	
2.START	
3.DPC VIEW	OFF
4.LEVEL	100 (0-100)
5.RETURN	RET

RS485	
1.CAM ID	0 (0-255)
2.ID DISPLAY	OFF(ON)
3.BAUDRATE	38400(2400/4800/9600/19200)
4.RETURN	RET

### 8. ADJUST

Press the menu button into the submenu, set the SHARPNESS, MINITOR, LSC, VIDEO OUT as needed.

ADJUST	
1.SHARPNESS	AUTO
2.MONITOR	LCD
3.LSC	ON
4.VIDEO.OUT	PAL
5.RETURN	RET