# AHD Waterproof IR Camera User Manual





# BLSBVM50/2.4FHD

# 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 conn-ect 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 note 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

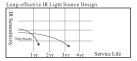
Do not attempt to aim the camera at the sun or other extremely brightob -jects that causes mear to appear irrespective of whether the camera is operating or not. This can damage the sensor.

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

When this camera is installed near the equipment like wireless commun -ication device which emits strong electromagnetic field, some irregula -rity such as noise on monitor screen may happen.

#### FEATURES

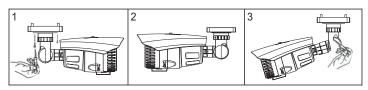
- ★2.0Megapixel high performance SONY322+NVP2441 sensor with 25/30fps@1080P, no compressed, no delay, and real-time transmission image.
- ★Built in IR-CUT, ensure the camera work properly both day and night.
- ★IP66 waterproof standard
- ★Long-life IR LED design, whose brightness is several times higher and service life longer than ordinary LED's



- ★SMART-IR,50 meters IR range
- ★Image transmission up to 500 meters.
- ★Adopts special algorithm, reducing video and color noise andthus 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.

 $\star$ Powerful OSD menu allows for various function settings.

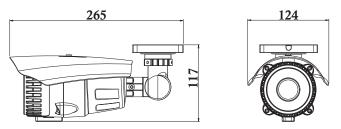
# PARTS INSTRUCTION AND INSTALLATION



Camera Installation

- Fix the camera to the needed place with the four pieces of screws.
  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	BLSBVM50/2.4FHD
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
Backlicht	AUTO
NR	2D-DNR/3D-DNR
Brightness	Adjustable
Smart IR	Support
Sync code	Internal
Voltage	DC12V
Current	360mA±15%(IR ON);80mA±10%(IR OFF)
DAY/NIGHT	Support ICR
Lens	2.8-12mm HD Lens
IR range	50m
Waterproof standard	Ip66
Video output	AHD/CVBS
Storage temperature	-20°C~70°C
Operate Temperature	-10°C~50°CRH90% MAX
Size	261(L) * 117(H) * 124(W)
Weight	610g±20g

\*Specifications subject to change without notice.

#### **OSDMENU**

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 المار (MANUAL)	
2.EXPOSURE	ا ا	
3.BACKLIGHT	OFF(BLC , HSBLC )	
4.WHITE BAL	ATW(AWC → SET, INDÓOR, OUTDOOR,	
	MANUAL اله,AWB (المه,AWB المه)	
5.DAY&NIGHT	EXT الم CÓLOR,B/W الم EXT) (AUTO) ( الم	
6.NR		
7.SPECIAL	له	
8.ADJUST	له	
9.EXIT	ŘET <b>₄i</b>	

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.

I.MODE 2.IRIS SPEED 3.RETURN	DC LENS MODE INDOOR(OUTDOOR (i i i i i i i i i i i i i i i i i i i
(	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	11111111 <b> </b> 15 (0-15)
3.SENS-UP	OFF(ON)
4.BRIGHTNESS 5.D-WDR	
6.DEFOG	AUTO(OFF,ON نه) OFF(AUTO ( نه)
7.RETURN	RET <sub>4</sub> j
D-WDR	
1.LEVEL	0(0-8)
2.RETURN	RET₄i
DEFON	
1.POS/SIZE	له
2.GRADATION	<b>•</b> 
3.DEFAULT	
4.RETURN	ŘET <b>↓</b>
3. BLC	
Press the menu button into	the BLC's submenu, set the GAIN\AREA\DEFAULT
as needed.	
BL	.C
▶ 1.GAIN	MIDDLE(HIGH,LOW)
2.AREA	له
3.DEFAULT	له
4.RETURN	RET(END)
HSBLC	
1.SELECT	AUTO(ARE1-ARE4)
2.DISPLAY	ON نه (OFF)
3.BLACK MASK	ON(OFF)
4.LEVEL	ALL DAY(NIGHT)
5.MODE 6.DEFAULT	
7.RETURN	نه RET
	······

4. WB (WHITE BALANCE)

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

	NIG 1.AGC GRADE 2.RETURN	HT ۱۱ <b>۱</b> ۱۱۱۱۱۱ 20 (0-100) RET <b>₄i</b>	
MANUAL WB        1.BLUE      ↓			

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 E	XT	
	1.D-N DELAY		
	2.N-D DELAY	<b> </b>                     2 (0-60)	
	3.RETURN	RET	
	D&N A	UTO	
	1.D→N(AGC)	<b>.</b> 18 (0-18)	
	2.D+N DELAY	<b>I</b> I I I I I I I I I I I I I I I I I I	
	3.N→D(AGC)	· · · · · · · · <b> </b> 18 (0-18)	
	4.N→D DELAÝ	<b>I</b> IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	
	5.RETURN	RET₊i	
B/W			
	1.BURST	RET	
	2.IR SMART	RET	
	3.RETURN	RET	
	IR SM		
	1.LEVEL	ı <b>l</b> ııııııı 2 (0-15)	
	2.AREA	له ا	
	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			
2D NR		HIGH		
.3D NR		LOW		
RETURN		RET <b>₊i</b>		

2. 3. 7. Special

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

MOTION, I RIVACI, LANOC	JAGE DEFECT as needed.
SPECIAL 1.CAM TITEL 2.D-EFFECT 3.MOTION 4.PRIVACY 5.LANGUAGE 6.DEFECT 7.RS485 9.DEFLUDN	OFF(ON) 4 OFF(ON 4 ATW(AWC + SET,INDOOR,OUTDOOR, END4i (CHN14i,CHN24i,TUR4i,NED4i,POR4i, RUS4i,POL4i,SPA4i,ITA4i,FRA4i,GER4i) 4 5 5 5 5 5 5 5 5 5 5 5 5 5
8.RETURN	RET₊i
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-EFFEC	Г
1.FREEZE 2.MIRROR 3.NEG IMAGE 4.RETURN	OFF(ON) OFF(MIRROR,V-FLIP,ROTATE) OFF(ON) RET <b>₄i</b>
MOTION	
1.SELECT 2.DISPLAY 3.SENSITIVITY 4.COLOR 5.TRANS 6.ALARM 7.DEFAULT 8.RETURN	AREAI(AREA2,AREA3,AREA4) ON ↓i (OFF) GREEN 11111111111111111111111111111111111
PRIVACY	
1.SELECT 2.DISPLAY 3.COLOR 4.TRANS 5.DEFAULT 6.RETURN	AREAI(AREA2,AREA3,AREA4) COLOR، ن(MOSAIC نه) WHITE 1.00 ما RET
DEFECT	
1.LIVE DPC 2.WHITE DPC 3.BLACK DPC 4.RETURN	OFF(ON 4 <sup>i</sup> ) ON 4 <sup>i</sup> ON 4 <sup>i</sup> RET4 <sup>i</sup>
LIVE DPC	
1.AGC LEVEL 2.LEVEL 3.RETURN	nuluuu 64 (0-100) nuuuuu 1 100 (0-100) RET <b>₄i</b>
WHITE DF	00
1.POS/SIZE 2.START 3.DPC VIEW 4.LEVEL 5.AGC 6.SENS-UP 7.RETURN	4 5 0 F 1 1 1 1 1 1 1 1 1 1 1 1 1
BLACK DF	
1.POS/SIZE 2.START 3.DPC VIEW 4.LEVEL 5.RETURN	4 OFF ΠΠΠΠΠΙ 100 (0-100) RET <b>4</b>
RS485	
1.CAM ID 2.ID DISPLAY 3.BAUDRATE 4.RETURN	IIIIIIIII 0 (0-255) OFF(ON) 38400(2400/4800/9600/19200) RET <b>4</b>
VIDEO OUT as needed.	the submenu, set the SHARPNESS, MINITOR, LSC,
ADJUST 1.SHARPNESS 2.MONITOR 3.LSC 4.VIDEO.OUT 5.RETURN	AUTO,ŧİ LCDŧİ ON PAL RETŧİ