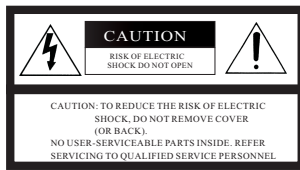# AHD Waterproof IR Camera
# User Manual

**BPL**

## BLSBFM30/2.0FHD

### 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.
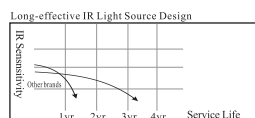
### ATTENTION

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.

**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

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.
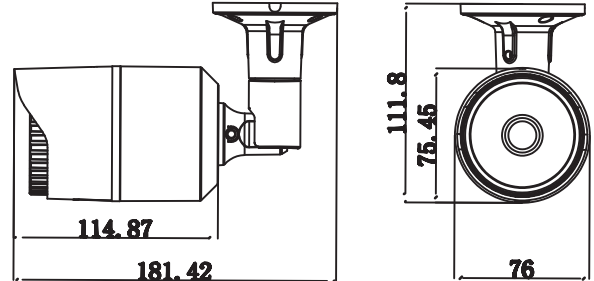
### FEATURES

★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

Long-effective IR Light Source Design

IR Sensitivity / Other brands

1yr 2yr 3yr 4yr Service Life

★SMART-IR,30 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.

★Powerful OSD menu allows for various function settings.

### DIMENSION(MM)



111.8
75.45
114.87
181.42
76

### SPECIFICATION

| Model | BLSBFM30/2.0FHD |
|---|---|
| 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 | 300mA±15%(IR ON);80mA±15%(IR OFF) |
| DAY/NIGHT | Support ICR |
| Lens | 3.6mm |
| IR range | 30m |
| Waterproof standard | IP66 |
| Video output | AHD/CVBS |
| Storage temperature | -20℃~70℃ |
| Operate Temperature | -10℃~50℃RH90% MAX |
| Size | 181.4(L) *111.8(H) * 76(W) |
| Weight | 510g |

*Specifications subject to change without notice.

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 | ↵ |
| 3.BACKLIGHT | OFF( BLC↵,HSBLC↵ ) |
| 4.WHITE BAL | ATW(AWC➜SET,INDOOR,OUTDOOR, MANUAL↵,AWB↵ ) |
| 5.DAY&NIGHT | EXT↵(AUTO↵,COLOR,B/W↵ ) |
| 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, |
| 5.LANGUAGE | END↵ (CHN1↵,CHN2↵,TUR↵,NED↵,POR↵, RUS↵,POL↵,SPA↵,ITA↵,FRA↵,GER↵) |
| 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 | AREAI(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 | AREAI(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↵ |