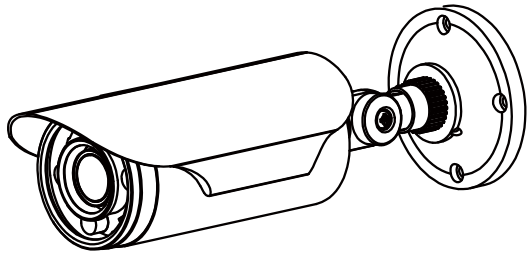


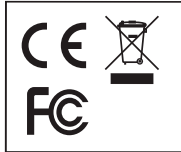


# Outdoor IR Bullet Camera Instruction Manual



Emissions: - CE:  
- EN55022  
- EN55011  
- FCC:  
- 47 CFR Part 15 Subpart B  
- ANSI C63.4  
- ICES-003

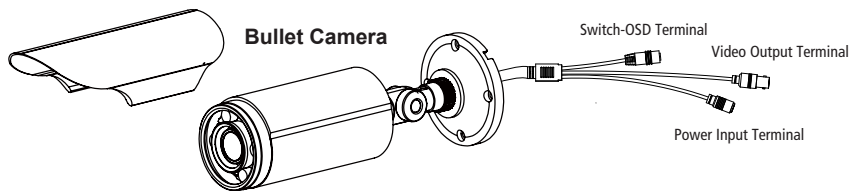
Immunity: - CE:  
- EN55024  
- EN50130-4



V531-BQ003-201  
Ver.10/2019

## Parts and Descriptions

### Sunhood



### Accessories

- Screws X 4
- Short screws X 4
- Wall plugs X 4
- Rubber sealing plug X1
- Inner hexagon spanner X1
- OSD control cable X1
- Power lead X 1
- Mounting base X1

## Specifications

General Specifications	
TV System	NTSC PAL
Image Sensor	Sony 1/3" Super HAD-II Wide Dynamic
Effective Picture	976(H) x 494(V) 976(H) x 582(V)
Scanning Frequency	60Hz 50Hz
Resolution	700 TVL
Minimum Illumination	Day Mode 0.3Lux (F1.2,50IRE, AGC ON,IR Off), Night Mode 0 Lux (IR On)
S/N Ratio	50dB (100 IRE, F1.2)
Video Output	Composite (75 Ω BNC unbalanced connector)
2nd Video Output	Yes (supports installation check)
Power Source	12 VDC ±10% / 24 VAC ±20%
Power Consumption	Normal: 2.6 W, IR On: 6.7W (Max)
Operating Temperature	-10°C ~ +50°C
Storage Temperature	-20°C ~ +60°C
Dimensions	φ 90.7*79.2*274.8 mm

Functional Specifications	
Sense Up	ON / OFF
Shutter Speed	AES NTSC: 1/60 ~ 1/100000 PAL: 1/50 ~ 1/100000
	MES 1/50 (1/60), 1/120 (1/100), 1/250, 1/500, 1/1K, 1/2K, 1/4K, 1/10K
Wide Dynamic Range (WDR)	OFF/ATR-EX/WDR
High-Light Compensation (HLC)	ON/OFF
Backlight Compensation (BLC)	Full Range
AGC Gain Control	44.8 dB
Day/Night	Support
White Balance Control	ATW / Manual / Push / Push Lock / USER1,2
Auto White Balance Range	Indoor: 1800K~10500K Outdoor: 6500K~10500K
Mirror	OFF/V-FLIP/H-FLIP/HV-FLIP
Defog	ON/OFF
Sync System	INT /LL
Motion Detection	4 Areas
Privacy Zone	Up to 15 Masks
Digital Noise Reduction	3D DNR
Digital Zoom	255X Max
DIS	ON/OFF
IR Optimizer	ON/OFF
IR LED Count	4 PCS
IR Illumination Wavelength	850 nm
IR Illumination Range	50 m

## Lens Specifications

Lens Specifications		
Focal Length	2.8 ~ 12mm	
F-No.	F1.8	
Iris Range	F1.8 ~ F360C	
Minimum Object Distance	0.3 m	
Field of View	Diagonal	140° ~ 40°
	Horizontal	100° ~ 32°
	Vertical	72° ~ 24°

## Connection and Adjustment

### Precautions

This product must be installed and maintained in accordance with good installation practices by qualified personnel only.

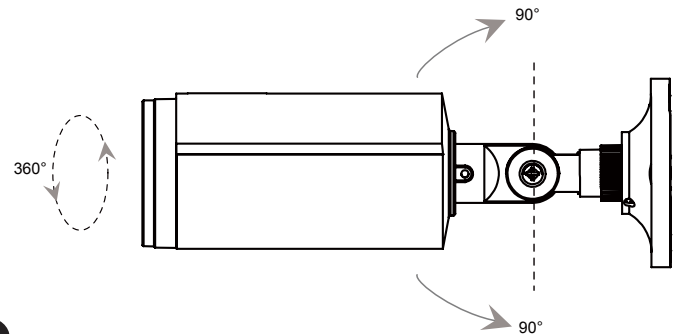
To prevent damage to your camera or injury to yourself or to others, read and comply with the safety precautions as follows:

- Never attempt to disassemble or modify the camera. Any modification could lead to damages that are not covered by the guarantee.
- Do not expose or operate the camera in wet areas. Moisture may damage the camera and also increase the danger of electrical shock.
- Make sure the power source is switched off and disconnected before installation. Refer servicing to qualified personnel only.
- Do not attempt to aim the camera at the sun or other extremely bright objects. This may cause damage to the CCD and the void of warranty.
- To prevent fire or electrical shock, use only regulated power supply and the wiring should be used for the appropriate input terminal.
- Do not touch the lens or the CCD by hands while installing or adjusting the camera. This may cause damage to the camera.

## Camera Installation

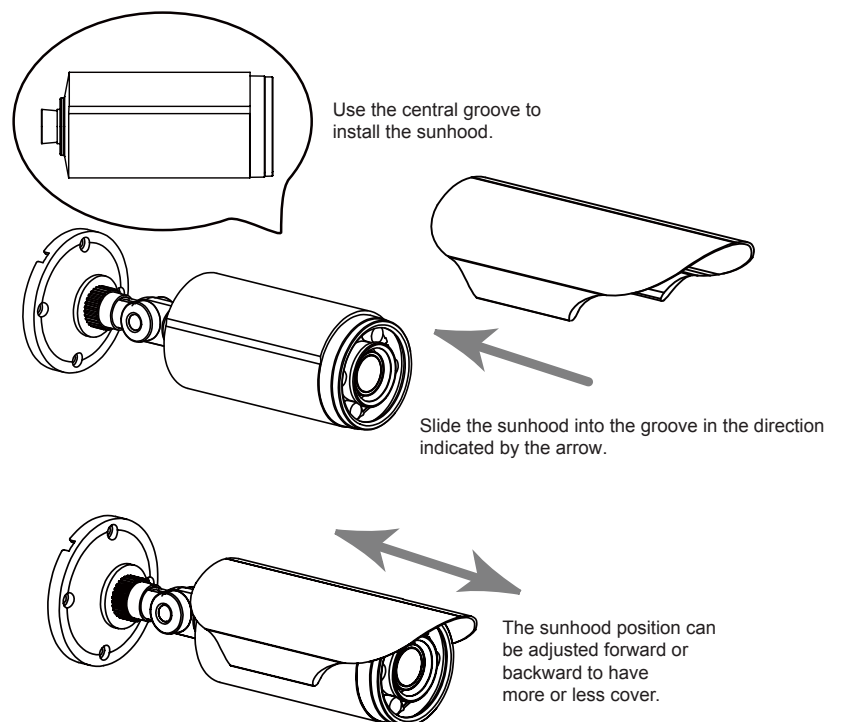
1

Screws can be loosened and the desired position can be adjusted. Loosen and tighten the screws by using a crosshead screwdriver.



2

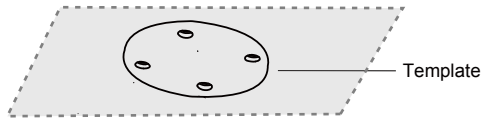
To remove/install the sunhood, please follow the direction indicated below.



### 3 Mounting on ceiling

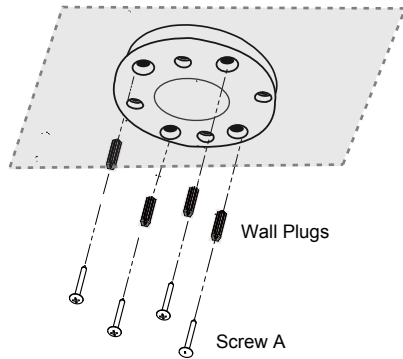
#### Step1: Prepare the mounting area

Use the template to mark an appropriate mounting position on the ceiling, drilling to create apertures on a wall or ceiling.



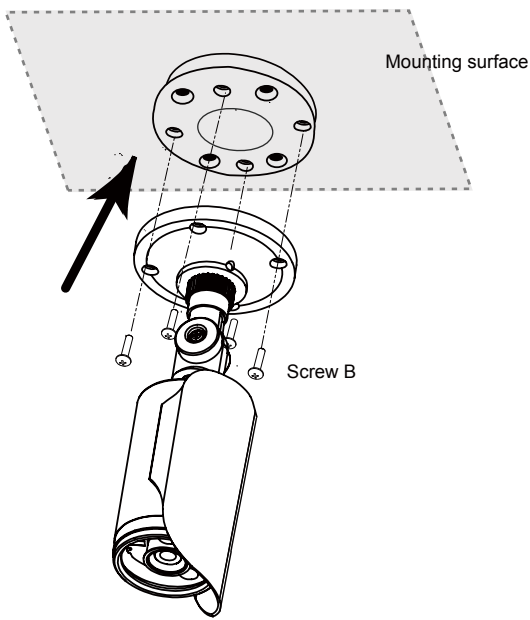
#### Step2: Mount the mounting base

Insert the wall plugs into the drilled holes and fix the mounting base onto surface by using screws "B" supplied in the accessories bag.



#### Step3: Fix the camera onto mounting base

Secure the camera onto the mounting base by using screw driver to fasten screw "A".

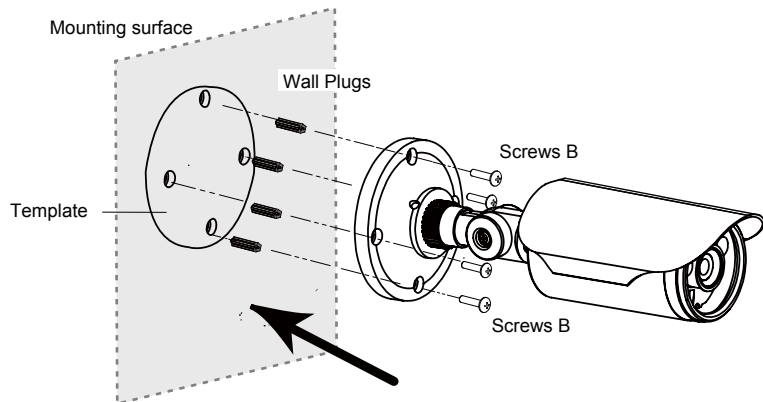


### Mounting on wall

Use the template to mark an appropriate mounting position on the ceiling, drilling to create apertures on a wall or ceiling.

Insert the wall plugs into the drilled holes and install the camera to the mounting surface by fastening four screws.

Secure the camera on the mounting surface by using a screw driver.

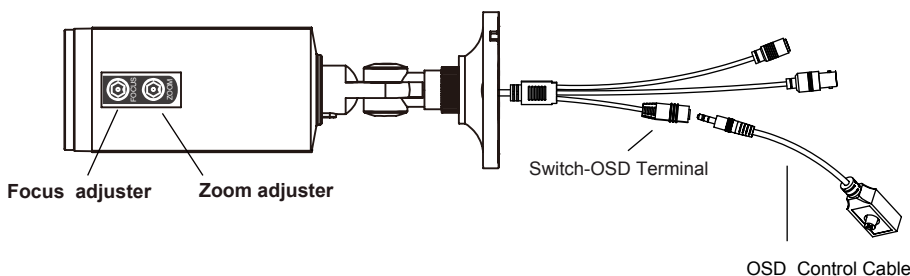


## Connection and Adjustment

### Camera Adjustment

There is an adjustment mechanism on the top of the camera. Please use the Inner hexagon spanner attached in the accessories bag to make the adjustment of the zoom and focus to acquire the premium image.

Please use the OSD control cable supplied in the accessories bag to make the OSD adjustment.



## Camera OSD Menu

PAGE1		SHUTTER / AGC	AUTO	AE LEVEL	001 ~ 250
SCENE SELECT	FULL AUTO	AGC MAX	6.0DB ~ 44.8DB		
	INDOOR	SENS UP	AUTO / OFF		
	OUTDOOR	SHUTTER	256FLD ~ 1/10000		
	BACKLIGHT	AGC MAX	6.0DB ~ 44.8DB		
	ITS	SHUTTER	256FLD ~ 1/10000		
	CUSTOM	AGC MAX	6.0DB ~ 44.8DB		
		SPEED	000 ~ 255		
		DELAY CNT	001 ~ 255		
		ATW FRAME	001 ~ 255		
		ENVIRONMENT	INDOOR / SUNNY / SHADE / AUTO		
		RGAIN	000 ~ 255		
		BGAIN	000 ~ 255		
		RGAIN	000 ~ 255		
		BGAIN	000 ~ 255		
		LEVEL	00 ~ 63		
		PUSH LOCK			
		OFF			
		HLC	CLIP LEVEL	000 ~ 255	
		BLC(*2)			
		OFF			
		CONTRAST	LOW / MID / HIGH(*4)		
		CLEAR FACE	LOW / MID / HIGH / OFF		
		WDR	CONTRAST	LOW / MID / HIGH	
		CLEAR FACE	OFF / LOW / MID / HIGH		
		LEVEL	0 ~ 6		
		BURST	ON/OFF		
		CNTL SIGNAL	INT/EXT1/EXT2		
		DELAY CNT			
		DAY->NIGHT			
		NIGHT->DAY			
		MODE	AUTO CENTER		
		IR AREA			
		TOP	0~ 6		
		BOTTOM	0~ 6		
		LEFT	0~ 8		
		RIGHT	0~ 8		
		WEIGHT	00~ 15		
		LEVEL	0~ 12		
		IR LED	OFF		
		FIX	LEVEL	000 ~ 255	
		DAY/NIGHT	LEVEL MIN	001 ~ 255	
		LEVEL MAX	001 ~ 255		
		COLOR NIGHT	OFF		
		ON	COLOR GAIN	LOW / MID / HIGH	
		IR SHADE COMP	OFF		
		ON	PATTERN	SET1 / SET2 / SET3	
		POSH	000 ~ 959		
		POSV	000 ~ 490		
		LEVEL	OFF / LOW / MID / HIGH		
		OFF			
		ON	PATTERN	SET1 / SET2 / SET3	
		POSH	000 ~ 959		
		POSV	000 ~ 490		
		LEVEL	LOW / MID / HIGH		
		OFF			
		ON	MODE	GAIN CNTL	
		SHUTTER FIX			
		OFF			
		ON	MODE	GAIN CNTL	
		SHUTTER FIX			
		AUTO/OFF/ON			
		BRIGHTNESS			
		CONTRAST			
		SHARPNESS			
		HUE			
		COLOR GAIN			
		ON/OFF			
		OFF			
		ON	MAG/PAN/TILT		
		AREA SEL	1~15		
		DISPLAY	OFF / ON		
		POSITION			
		WHITE / BLACK / RED / GREEN / BLUE / YELLOW / CYAN / MAGENTA			
		TRANSP	0.00 / 0.50 / 0.75 / 1.00		
		MOSAIC	OFF / ON		
		OFF			
		ON	DETECT SENSE		
		INTERVAL			
		BLOCK DISP			
		MASK AREA			
		MOTION AREA			
		AREA SEL	1~4		
		MODE			
		TOP			
		BOTTOM			
		LEFT			
		RIGHT			
		INT/LL(*6)			
		MANUAL			
		AUTO	TYPE		
		MODE			
		ADJUST			
		SPEED			
		OFF/H/V/H			
		LCD/CRT			
		COMMUNICATION	PROTOCOL		
		ADDRESS			
		BAUDRATE			
		DATABIT			
		PARITY			
		STOPBIT			
		OFF			
		ON	POS		
		ENGLISH/中文/ESPAÑOL/PORTUGUES/RYCKNN/FRANCAIS/DEUTSCH/日本語			
		VERSION			
		W.PIX MASK	MANUAL	REGISTRATION	
		CAMERA RESET		REG.POINT	
				CURSOR COLOR	
				BLINK	
				REG.NUMBER	
		SAVE			
		NOT SAVE			
		CANCEL			
		BACK			
		AUTO	RUN		
		BACK			
		DATA CLEAR			

Note:  
 \*1 This can not be changed from ATW except CUSTOM mode.  
 \*2 BLC can be selected on CUSTOM mode.  
 \*3 This can not be changed except CUSTOM mode.  
 \*4 This is MID on FULL AUTO, OUTDOOR and ITS mode, LOW on INDOOR mode, HIGH on BACKLIGHT mode.  
 \*5 This can not be changed except CUSTOM mode.  
 \*6 The default SYNC Mode is set as INT.  
 The SYNC Mode can be selected as LL on OSD menu but the actual mode is INT when the power is DC12V.  
 ▶ This item has subsequent adjustment screens