VLBTIR

Waterproof Infrared Illumination Camera

Instruction Manual

VER.:1.0, NO.: R040057A

Thank you very much for purchasing our product. Before operating this product, please read this instruction manual carefully to ensure proper use.

1. Safety Precautious

CAUTION

RISK OF ELECTRIC SHOCK. DO NOT OPEN!

CAUTION : TO REDUCE THE RISK OF ELECTRICAL SHOCK, DO NOT OPEN COVERS. NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

Disposal of Old Electrical & Electronic Equipment (Applicable in the European Union and other European countries with separate collection systems).

- When in use, please avoid camera window directly contacting the eyes and do not touch the camera body, for it can be heated up to 70℃.
- When installing the camera, please avoid pointing it directly to paper or flammable materials.
- Although the camera is provided with tempered glass, please avoid all direct contact to eliminate contamination, and use cotton balls dipped in cleaning alcohol to clean the window.

2. Description

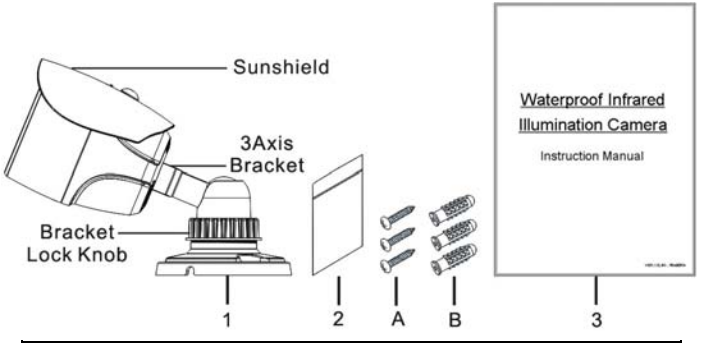
This inbuilt Infrared Illuminator camera uses a high sensitive 1/3" (1/4") interline transfer Charge Coupled Device (CCD) image sensor, and all state circuitry, which provides extremely long life and high reliability. This camera offers excellent image quality and functions with low lag and high burn resistance, and is not subject to distortions from magnetic fields.

Highly resistant to shock and vibration and easy to install, this camera is an excellent choice for your CCTV system.

3. Feature

- Built-in high quality CCD camera and high performance infrared illuminator module.
- Total pixels of sensor: NTSC=380K / PAL=440K pixels.
- High sensitivity, low smear, excellent anti-blooming, and high S/N ratio.
- Supports functions: Auto Electronic Shutter (AES), Auto Gain Control (AGC), Auto White Balance (AWB), Back Light Compensation (BLC), and Flickless mode (FL).
- Special functions: Mirror (Option), Positive/Negative (Option).
- Built-in board Lens and furnished with mounting bracket.
- DC type power request, low power consumption.
- Dual Window Structure to Prevent Reflection and Diffusion of Infrared Light.
- 3-Axis Concealed Cable Bracket.
- Waterproofing criterion: IP68.

4. Content

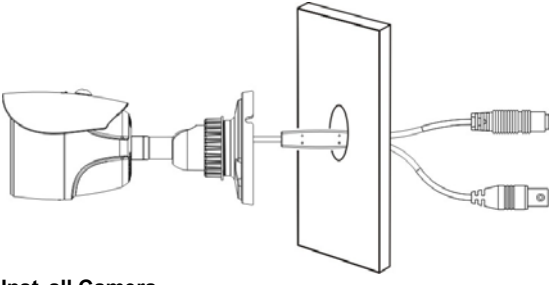


Item	Name of Part		Quantity
1	Infrared Camera		1
2	Appurtenances Bag		1
	A	Fix Retaining Screw for Bracket	3
	B	Anchor	3
3	Instruction Manual		1

5. Installation & Operation

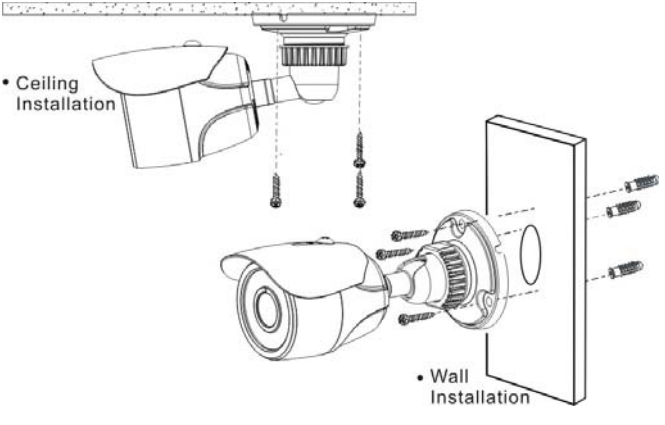
1. Inst all Preparation

Drill holes on wall if wires need to go through the wall.



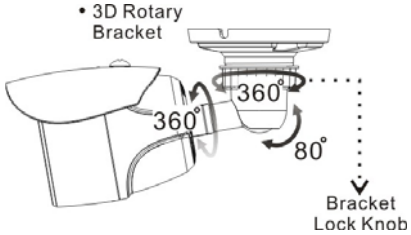
2. Inst all Camera

Use the 3 screws provided to attach the camera and bracket to the ceiling, surface or wall.



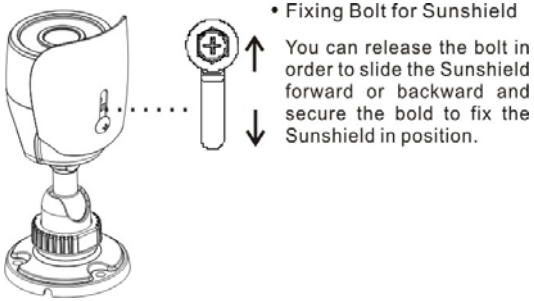
3. Adjust 3-Axis Bracket

Adjust the bracket while checking the view angle from the monitor. Loosen the bracket lock knob by turning counterclockwise, after adjusting the 3-Axis bracket (X-Y-Z Axis) to get the desired viewing angle, tighten the lock knob by turning it clockwise.



4. Inst all Sunsheid

To install the sunshield, please follow the instruction shown below:



6. SPECIFICATIONS

According to the camera purchased, select and refer to the appropriate specification below:

Color Camera							
Image Device	1/3" Color CCD (Sony Chipset)		1/3" Hi-Res. Color CCD (Sony Chipset)	1/3" Hi- Res. CCD	1/3" Ultra Hi- Res. Color CCD (Sony Chipset)	1/4" Color CCD (Sony Chipset)
Picture Elements	NTSC: 510x492 PAL: 500x582		NTSC: 768x494 PAL: 752x582			NTSC: 510x492 PAL: 500x582
Resolution	380 TVL	420 TVL	470 TVL	540 TVL	550 TVL	380 TVL
Min Illumination	0.02Lux/ F2.0 (Day) 0Lux (IR On)		0.03Lux/ F2.0 (Day) 0Lux (IR On)		0.04Lux/ F2.0 (Day) 0Lux (IR On)	0.03Lux/ F2.0 (Day) 0Lux (IR On)
S/N Ratio	More than 48dB					
Electronic Shutter	NTSC: 1/60S~1/100,000S PAL: 1/50S~1/100,000S					
Gain Control	Auto					
White Balance	Auto					
Scanning System	Interlace 2:1					
Gamma	0.45					
Lens Furnished	Board Lens					
Sync System	Internal					
Video Output	1Vp-p/ 75 Ohms					
Power Supply	DC 12V±10%					
Power Consumption **IR OFF**	120mA max.	75mA max.	120mA max.	75mA max.	180mA max.	75mA max.
Power Consumption **24 IR LED ON**	340mA max.	295mA max.	340mA max.	295mA max.	400mA max.	295mA max.

Infrared Illuminator Module	
Infrared Luminary	24 IR LED
Wavelength	850nm
Illuminant Distance	20 M
Power Supply	DC 12V±10%
Power Consumption	3 W

System Device	
Operating Temp.	-10℃ to 50℃ (14℉ to 122℉)
Construction	Aluminum Case
Waterproofing Criterion	IP 68
Dimensions	φ53x58 (L) mm (Body only)

B/W Camera				
Image Device		1/3" B/W CCD (Sony Chipset)	1/3" Hi-Res. B/W CCD (Sony Chipset)	1/3" B/W CCD
Picture Elements		EIA: 510X492 CCIR: 500x582	EIA: 768x494 CCIR: 752x582	EIA: 510X492 CCIR: 500x582
Resolution		420 TVL	600 TVL	400 TVL
Min Illumination		0.01Lux/ F2.0 (Day) 0Lux (IR On)	0.02Lux/ F2.0 (Day) 0Lux (IR On)	0.03Lux/ F2.0 (Day) 0Lux (IR On)
S/N Ratio		More than 48Db		
Electronic Shutter		EIA: 1/60S~1/100,000S, CCIR: 1/50S~1/110,000S		
Gain Control		Auto		
Scanning System		Interlace 2:1		
Gamma		0.45		
Lens Furnished		Board Lens		
Sync System		Internal		
Video Output		1Vp-p/ 75 Ohms		
Power Supply		DC 12V±10%		
Power Consumption	**IR OFF**	120mA max.		100mA max.
	24 IR LED ON	340mA max.		360mA max.

Infrared Illuminator Module	
Infrared Luminary	24 IR LED
Wavelength	850nm
Illuminant Distance	20 M
Power Supply	DC 12V±10%
Power Consumption	3 W

System Device	
Operating Temp.	-10℃ to 50℃ (14℉ to 122℉)
Construction	Aluminum Case
Waterproofing Criterion	IP 68
Dimensions	φ53x58 (L) mm (Body only)

(Note: Design and specifications are subject to change without prior notice.)