


Super Night Vision Camera



* Thank you for choosing our high quality camera.
Before attempting to connect or operate, please read and follow these instructions.



**Correct Disposal of This Product
(Waste Electrical & Electronic Equipment)**

(Applicable in the European Union and other European countries with separate collection systems)

This marking shown on the product or its literature, indicates that it should not be disposed with other household wastes at the end of its working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate this from other types of wastes and recycle it responsibly to promote the sustainable reuse of material resources.

Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take this item for environmentally safe recycling.

Business users should contact their supplier and check the terms and conditions of the purchase contract.
This product should not be mixed with other commercial wastes for disposal.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions;

1. This device may not cause harmful interference.
2. This device must accept any interference received, including interference that may cause undesired operation.

Note - This equipment has been tested and found to comply with limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses, and can radiate radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio / tv technician for help.

Caution - Any changes or modifications in construction of this device which are not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

⚠ CAUTION

1. A regulated DC 12V 3A power supply is recommended for use with this camera for the best picture and the most stable operation.
An unregulated power supply can cause damage to the camera. When unregulated power supply is applied, product warranty will be out of subject. (Only use the regulated power supply marked Class 2)

2. It is recommended that the camera is used with a monitor that has a CCTV quality 75 video impedance level. If your monitor is switched to high impedance then please adjust accordingly.

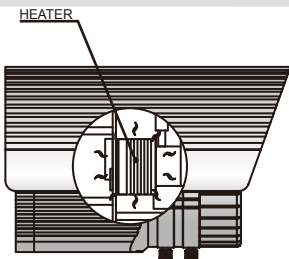
3. Do not attempt to disassemble the camera to gain access to the internal components. Refer servicing to your dealer.

4. Never face the camera towards the sun or any bright or reflective light, which may cause smear on the picture and possible damage to the CCD.

5. Do not remove the serial sticker for the warranty service

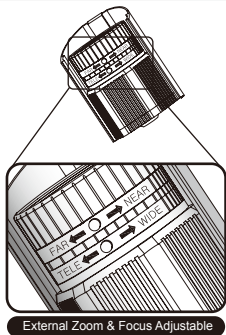
SPECIAL FEATURES

Heater



Built in heater protects the camera from low temperature. (Operating temperature with Heater:-40°C)

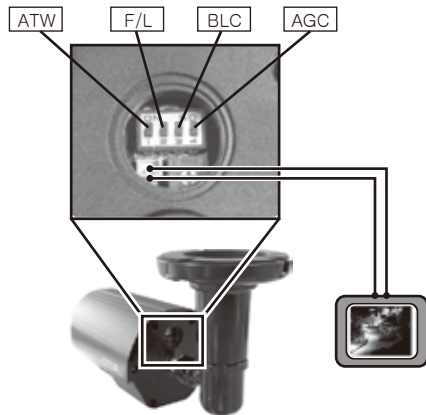
External Zoom & Focus Adjustable



External Zoom & Focus Adjustable

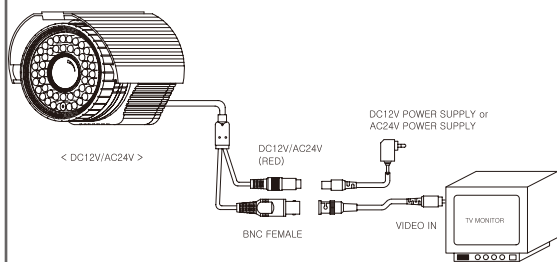
Service Video connector & Dip switches

1	ATW (Automatic Tracing White Balance)	ON : ATW / OFF : Push
2	F/L (FLICKERLESS)	ON / OFF
3	BLC (Back Light Compensation)	ON / OFF
4	AGC (Automatic Gain Control)	ON : MAX / OFF : Min



Installation is simple made by the adjustable DC Volume and Dip Switches. The Service Video Connector also provides the installer with an easy way of configuring the camera.

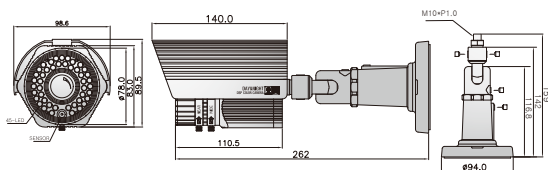
CONNECTION



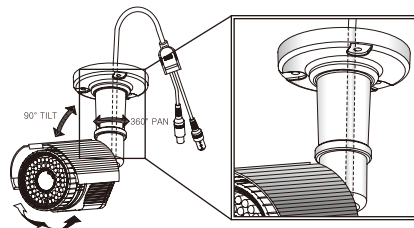
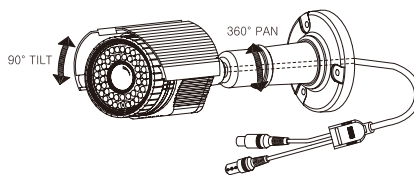
DUAL DC12V(AC24V)

! When you install the camera, please glue up the end of cable to keep it stable in order to protect the camera from the humidity problems.

DIMENSIONS



CAMERA MOUNTING POSITION



<Cable Concealed Thru Bracket>

ACCESSORIES FURNISHED

Accessories	DIY cable	Mounting Bracket	Screw	Manual	Wrench	Video output test cable
Q'ty	-	-	3	1	1	1
Option	-	-	-	-	-	-

Key Features

- 1/3" Sony Super HAD CCD, 550 TV Lines
- IR LED : 45ea, Max 50m
- f=2.9 ~ 10.0mm / f=9.0 ~ 22.0mm Varifocal(ICR)
- External Zoom & Focus Adjustable
- Cable Concealed Thru Bracket
- Waterproof(IP67)

SPECIFICATIONS

Signal Format	NTSC	PAL
Image Device	1/3" Sony Super HAD CCD	
Scanning System	2:1 Interlace	
H.Resolution	550 TV Lines	
Scanning Frequency	H : 15.734 KHz, V : 59.94 Hz	H : 15.625 KHz, V : 50 Hz
Total Pixels No.	811(H) × 508(V), 410K	795(H) × 596(V), 470K
Effective Pixels No.	768(H) × 494(V), 380K	752(H) × 582(V), 440K
Electronic Shutter Speed	1/60	1/50
S/N Ratio	More than 45 dB (AGC off)	
Gamma Correction	γ=0.45	
Sync. System	Internal	
Second Video Connector	1.0 Vp-p Composite 75(Ω) unbalanced	
Input Power Source	DC12V/AC24V Dual Voltage	AC 24.0[V] ±10%, Less than [700mA(IR LED On) 1.1A 21W(Heater On) DC +12.0[V] ±10%, Less than [850mA(IR LED On) 1.1A(Heater On)
IR LED	45ea	
IR LED Half Angle	±30 Degree	
IR LED Wavelength	850 nm	
IR LED Distance	Max 50 m	
IR LED On/Off	On/Off detection range of automatic sensor	
Operating Lux	IR LED On: 3 Lux / IR LED Off: 12 Lux	
Water Resistant	IP67	
Lens Option	f=2.9mm ~ 10.0mm, f=9.0mm ~ 22.0mm Varifocal Lens(ICR)	
Operating Temperature	-10℃ ~ +50℃ (Heater on: -40℃ ~ +50℃)	
Storage Temperature	-20℃ ~ +60℃	
Operating Humidity	10% ~ 80%	
Options	Heater [Built in Heater(On: 5℃ / Off: 15℃)]	