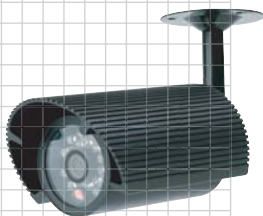


# Night View Color LED camera

## OPTION



\* Chip set  Sony  Panasonic  Sharp

\* Resolution  380TVL  
 400TVL  
 400TVL Ex-view  
 480TVL  
 500TVL  
 500TVL Ex-view  
 560TVL  
 560TVL Ex-view

\* Lens -Monofocal Fixed Iris  
 2.9mm  3.6mm  4.3mm  
 6.0mm  8.0mm  12mm  
 16mm

\* Sunshield  Yes  No

\* Cable -Waterproof Connector  
 1+1Feet  1+2Feet  
 2+4Feet  Other

-w/o Waterproof Connector  
 1Ft  2Ft  4Ft  18Ft  
 60Ft  100Ft  170Ft  
 Other

-Ext. cable w/Waterproof conn.  
 20ft  60ft  100ft  
 Other



## Specification

	STD-Res	High-Res
<b>Image sensor</b>	1/3" Sony Super HAD CCD	1/3" Sony Ex-view HAD CCD
<b>Effective Pixels</b>	NTSC : 512(H)X492(V) PAL : 500(H)X582(V)	NTSC : 768(H)X494(V) PAL : 752(H)X582(V)
<b>H.Resolution</b>	Med : 400TVL, High : 500TVL, HQ : 560TVL	
<b>Synchronizing system</b>	Internal	
<b>Scanning system</b>	NTSC 525 Lines PAL 625 Lines 2:1 Interlaced	
<b>Video output</b>	1.0Vp-p Composite. 75 Ohms	
<b>S/N ratio</b>	More than 50 dB (AGC Off)	
<b>BLC</b>	ON / OFF	
<b>White balance</b>	2100°K ~ 9100°K Auto	
<b>Gain Control</b>	4dB ~ 32dB Auto	
<b>Gamma correction</b>	$\gamma=0.45$	
<b>Smear effect</b>	0.005%	
<b>Shutter speed</b>	NTSC : 1/60 ~ 1/100,000 sec PAL : 1/50 ~ 1/100,000 sec	
<b>LED spectrum</b>	850nm Visible IR LED x 21EA	
<b>IR Beam distance</b>	25M	30M 25M 30M
<b>Power source</b>	DC12V 0.5Amp	
<b>Operation current</b>	Less than 370mA w / regulated 12VDC power in	
<b>Lens Standard</b>	3.6mm (92')	
<b>Option</b>	2.9mm (120'), 4.3mm (78'), 6mm (54'), 8.0mm (39'), 12mm (26'), 16mm (19')	
<b>Operating Temperature</b>	14° F ~ 122° F ( -10° C ~ +50° C )	
<b>Humidity</b>	Within 90% RH	
<b>Output Terminal</b>	1.2M DIY cable with BNC-Female (RCA-Female) for Video, DC Jack-Male for Power (Standard)	
<b>Measurement (mm)</b>	50(D) x 89(L)	
<b>Weight(Approx.g)</b>	900 (STD Cable)	
<b>Optional Function 1</b>	Invisible 940nm IR LED	
<b>Optional Function 2</b>	External Audio with C-Microphone " - 35dB / mV "	

Made in Korea

### ***EX-Clear view at total darkness ( 0 Lux /F2.0)***

With the high sensitive, visible(850nm) Infra-red LED x 21 adapted, it reveals a clear picture of the covert area at 0 Lux at night within the distance up to 25M view from the camera

### ***Live & vivid picture quality with video enhancement technology***

It is our own unique technology enabling a normal CCD camera to provide an extremely clear vision. With the help of this function cameras also perform a greater resolution and better low lux sensitivity.

### ***Automatic LED ON/OFF***

With the built-in CDS photo sensor, the LED lights are on at below 4-5 Lux and off at over 4-5 lux illumination automatically making it possible for 24hrs of surveillance.

### ***Extremely reliable Power control***

The model is provided with a power safety technology to prevent it from overheating. It is remarkable that the unit used with high-power LEDs does not generate heat at all. Generally LED cameras produce too much heat and it hurts the life cycle of LED and CCD sensor. It is regarded as natural having no alternative before. This unit provides a clear solution for a trouble-free multi- LED camera.

### ***Beautiful design & anti-scratch coating***

The camera design matches well with the products quality. It looks so elegant as much as the camera quality stands for. The unique face aims to best fit to the environment decorative to any place. It lasts its beautiful shape long time with scratch-free coating.

### ***Complete weatherproof mechanism***

The unit is produced and passed for moisture condensation-free on the glass against any harsh weather condition.

### ***Robotic aluminum housing & Non-stretchable waterproof cable***

It is made of robotic aluminum housing to avoid an erosion against air for long. Strong coating on the case insures of more protection against salty environment. The cable is non-stretchable to withstand any installation condition

### ***Audio Available ( Option )***

High sensitive, very clear one way audio is externally supplied with a flexible length of audio cable.

### ***Reverse polarity power input protection is built in.***

### ***Key Features***

Moisture condensation-free guaranteed  
 IR sensitive BW switching at night & true color at day  
 Remarkably clear picture quality  
 Remarkable low Lux performance of 0 Lux with IR LED  
 No heat !!  
 Automatic LED on/off

#### ***<Sony Version>***

1/3" Super HAD Color CCD sensor / Ex-view HAD CCD  
 Medium Resolution 400TVL, High Resolution 500TVL (HQ 560TVL)

#### ***<Sharp/Panasonic Version>***

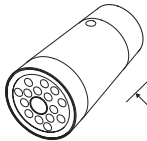
1/3" Color CCD  
 Medium Resolution 380TVL(Sharp), High Resolution 480TVL(Panasonic)

## Applications

Defence systems, Military troops, Police, Airports, Forest surveillances, Subway stations (in order to view objects under fire accident or an area of no illumination), Company warehouses, Highly criminal streets, Residential fences or guarages, Public office buildings, Conference room, Jewellery centers, Department stores, Hospitals, Jails, Night clubs, Casinos etc.

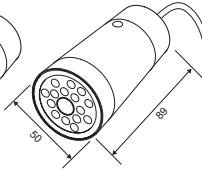
## Option

21 IR LED - 20 Degree



## Dimension(mm) & Wiring

21 IR LED - 30 Degree

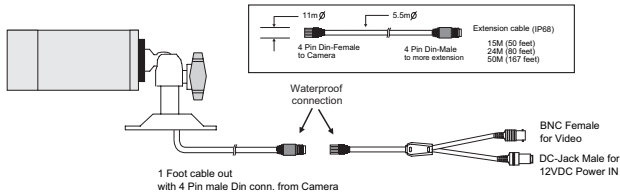


## Cable Option

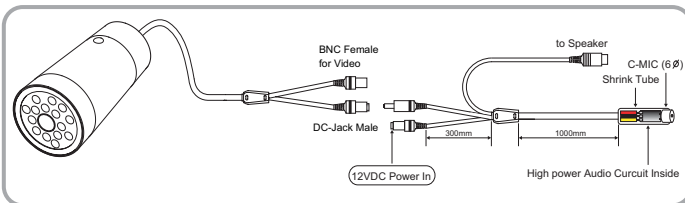
Standard	20f (6M)
Option	60f (18M)
	100f (30M)
	150f (45M)
	3,000f (100M)

BNC Female  
DC-Jack Male

## Day/Night camera with SWIVEL bracket and waterproof cable with 12VDC



## External audio option



## Trouble Shooting

If the unit continues to be fault after the following adjustments, please consult you dealer

### When the IR LED does not work.

- \* Please check if the power unit is regulated or not. Please use 12VDC regulated power unit only.

### When the picture is not displayed on the monitor

- \* Please check if the AC-DC power unit is plugged into the AC power outlet firmly.
- \* Please check if there are any misconnections in the cabling.

### When the picture is blurred

- \* Please check if the both lens and front glass are contaminated. Please clean the lens (on both sides) and the front glass surface gently with soft cloth or tissue.
- \* Please check if the lens is focused properly.
- \* Please check if the monitor is set to brightly. Adjust the brightness or contrast level on the monitor correctly.

### When the color displayed on the monitor is not correct

- \* Please check if the monitor's color adjustment is set correctly.
- \* Please check if the camera is changed to BW mode under 5 lux.

### When the picture is too dark

- \* Please check if the monitor's contrast is set too dark.
- \* Please check if the camera is positioned toward a door or window. In this case, Please shift the direction of the camera.

### When the picture is too bright

- \* Please check if the monitor's brightness control is too high.

### Trouble Shooting

*When there is noise on the picture in dark illumination conditions*

- \* Please check if IR LEDs are on or not & use 12VDC regulated power source.

*When the picture is not clear on the monitor*

- \* Please check if the monitor is set to correctly.
- \* Please check if the camera is pointer towards an area where too much light comes in.  
Adjust the direction of the camera in this case.

*When the picture is flickering*

- \* Please check if the camera is pointed at the fluorescent lighting or bright sunlight. Use a visor or adjust the direction of the camera in this case.

*When the picture is distorted*

- \* Please check if the lens is defective.
- \* Please check if the camera is PAL/CCIR(50Hz) in an NTSC/EIA(60Hz) area or vice versa.

### Specification

	Sharp	Panasonic
<b>Image sensor</b>	1/3" Sharp Med-Res Color CCD	1/3" Panasonic Hi-Res Color CCD
<b>Effective Pixels</b>	NTSC : 512(H)X492(V) PAL : 500(H)X582(V)	NTSC : 768(H)X494(V) PAL : 752(H)X582(V)
<b>H.Resolution</b>	380 TV Lines	480 TV Lines
<b>Synchronizing system</b>	Internal	
<b>Scanning system</b>	NTSC 525 Lines PAL 625 Lines 2:1 Interlaced	
<b>Video output</b>	1.0Vp-p Composite. 75 Ohms	
<b>S/N ratio</b>	More than 50 dB (AGC Off)	
<b>BLC</b>	ON / OFF	
<b>White balance</b>	2100°K ~ 9100°K Auto	
<b>Gain Control</b>	4dB ~ 32dB Auto	
<b>Gamma correction</b>	$\gamma=0.45$	
<b>Smear effect</b>	0.005%	
<b>Shutter speed</b>	NTSC : 1/60 ~ 1/100,000 sec PAL : 1/50 ~ 1/100,000 sec	
<b>LED spectrum</b>	850nm Visible IR LED x 21EA	
<b>IR Beam distance</b>	20M	
<b>Power source</b>	DC12V / 0.5Amp	
<b>Operation current</b>	Less than 300mA w / regulated 12VDC power in   Less than 320mA w / regulated 12VDC power in	
<b>Lens Standard</b>	3.6mm (92')	
<b>Option</b>	2.9mm (120'), 4.3mm (78'), 6mm (54'), 8.0mm (39'), 12mm (26'), 16mm (19')	
<b>Operating Temperature</b>	14° F ~ 122° F ( -10° C ~ + 50° C )	
<b>Humidity</b>	Within 90% RH	
<b>Output Terminal</b>	1.2M DIY cable with BNC-Female (RCA-Female) for Video, DC Jack-Male for Power (Standard)	
<b>Measurement (mm)</b>	50(D) x 89(L)	
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