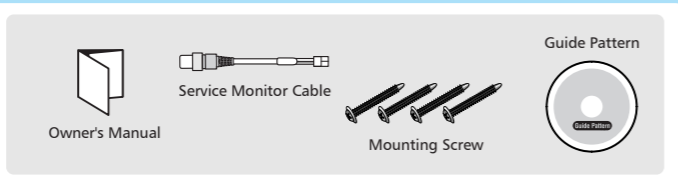


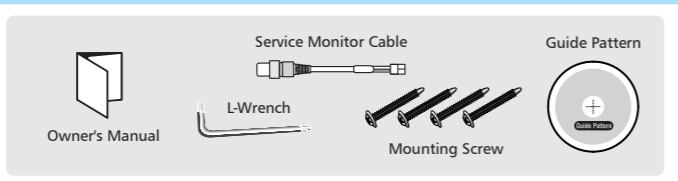
You must be fully aware of all the distinctive features and precautions related to this camera before installing it.

## COMPOSITION:

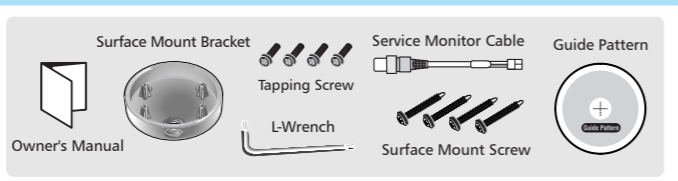
### General Dome Camera



### Vandal Resistant Dome Camera (Surface Type)

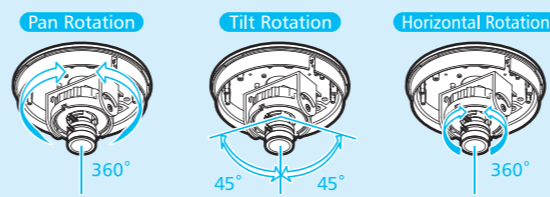


### Vandal Resistant Dome Camera (Flush Type)



Simple to install  
3-Axis bracket makes adjustment easy.

The 3D bracket (Pan, Tilt and Horizontal) allows the camera to be manually as well as moved horizontally and vertically.



## SPECIFICATIONS:

Model	NTSC	PAL
Signal System	NTSC : 525 Lines	PAL : 625 Lines
Scanning System	2 : 1 Interface	
Scanning Frequency (H)	15.734kHz	15.625kHz
Scanning Frequency (V)	59.94Hz	50Hz
Image Sensor	1/3 inch SONY IT CCD	
Total / Effective Pixels No.	410K/380K [Normal:270K/250K]	470K/440K [Normal:320K/290K]
S/N Ratio	More than 48dB (AGC Off)	
Resolution	550 TV Lines [High: 480 TV Lines / Normal: 380 TV Lines]	
Video Output Level	1.0 Vp-p (75 Ohms, composite)	
Lens	Fixed Lens (f=2.45mm, 3.8mm, 6mm Selectable)/ Vari-focal Lens	
Focus	Manual	
Sync. System	Internal	
Sensitivity	0.3 Lux(High/Normal)/ 0.1 Lux(Day&Night)/ 0 Lux(IR LED)	
Electronic Shutter	1/60 ~ 100,000 Sec.	1/50 ~ 100,000 Sec.
White Balance	Auto	
AGC	On / Off (with Slide Switch)	
BLC	On / Off (with Slide Switch)	
Flickerless	On / Off (with Slide Switch)	
Input / Output Connector	Power, Video, UTP (Option)	
Power Consumption	AC 24V (20V~28V) or DC 12V (10V~15V), 5W (Max)	
Dome Size (Ø)	100mm	
Weight	Approx. 366g / 844g / 1210g	

# OWNER'S MANUAL

## Color Dome camera

### Digital/DSPal Proof color camera

- 1/3" SONY CCD
- LENS: Vari-focal, Fixed Lens
- CCD COLOR
- AWB Auto White Balance
- AGC Auto Gain Control
- DSP Digital Signal Processor

Design and specifications are subject to change without notice.

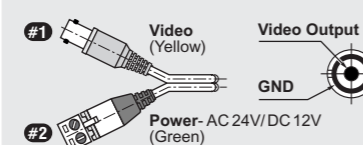
## PRECAUTIONS:

- Do not install the camera in extreme temperature conditions. Do use the camera under conditions where temperatures are within -10°C to 45°C. Be especially careful with ventilation under high temperatures.
- Do not install or use the camera in an environment where the humidity is high. It can cause the image quality to be poor.
- Do not disassemble the camera. There are no user-serviceable parts inside it.
- Do not drop the camera or subject them to physical shocks. It can cause malfunctions to occur.
- Note**  
When this camera is installed near wireless communication devices that emits strong electromagnetic field, irregularity such as noise on the monitor may appear.

## CONNECTION:

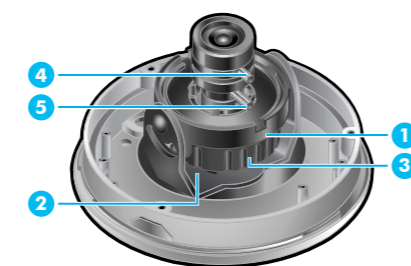
### Connecting to Monitor and Power

#### AC 24V/DC 12V Power Type



## NAME AND FUNCTION:

### Vari-focal Lens Type



#### Camera Lay-out

- Tilt rotation: Adjusting the vertical angle.
- Pan rotation: Adjusting the horizontal angle.
- Horizontal rotation: Adjusting the horizontal position of the screen.
- Focus handle: Focus (Far or Near)
- Zoom handle: Zoom (Tele or Wide)

### IR LED(3.8mm Fixed Lens Only): Option

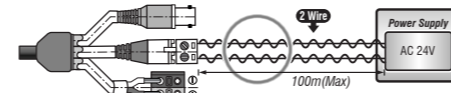
- Power Consumption: 5W
- IR LED Specification: 850nm / 30° (24EA)

- The wire is non-polarized.
- Use AC 24V ~ power source or DC 12V ~ power source.

No.	Function	Terminal Color	Remark
#1	Video Output	Yellow	1.0 Vp-p
#2	Power Input	Green	AC24V(20V~28V) or DC12V(11V~15V), Max 5W/420mA

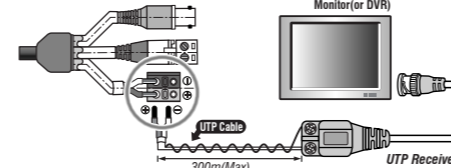
## UTP(Unshielded Twisted Pair): Option

### Connecting to Power



- When using AC 24V power, it is possible to supply the power within 100m.
- Use 4 wires by 2 pair of wires.
- When using DC 12V power, UTP wire can not be used for power line.

### Connecting to Monitor

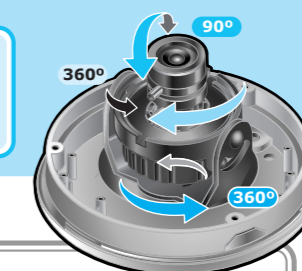
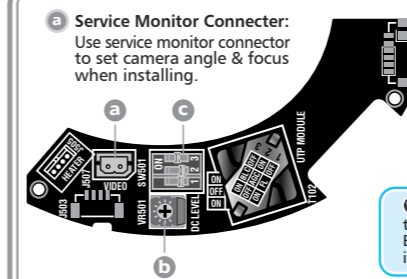


- Connect UTP (Unshielded Twisted Pair) wire to the UTP output of the camera directly. UTP transmitter is included in the camera therefore additional UTP transmitter is not necessary.
- UTP receiver is necessary to connect UTP wire to Monitor or DVR.
- When connecting UTP wire, make sure the polarity of the video signal.
- Use UTP wire "CAT5 24AWG" to have the best transmission quality.
- The twisted-pair output cannot be used at the same time as the composite video output.

## HEATER: Option

- Power Consumption: 10W
- Operating Temperature Range: -40°C ~ 50°C

## CAMERA SET-UP:



Built-in 3-axis camera bracket will make user much easier to rotate in any direction.

- Service Monitor Connector:** Use service monitor connector to set camera angle & focus when installing.
- DC Level Adjustment V.R**
- Function Selection Switch:**
  - FL(Flickerless) ON/OFF
  - AGC(Auto Gain Control) ON/OFF
  - BLC(Back Light Compensation) ON/OFF

**CAUTION:** In case of AGC off, the switching of D&N doesn't work. Because the D&N switching function is related in AGC level.

## TROUBLESHOOTING:

- If you have trouble operating your camera, refer to the following.  
If the guidelines do not enable you to solve the problem, contact an authorized technician.
- The image does not appear on the screen.
    - Check the power source for the monitor and camera and assure that the voltage and polarity are properly connected and being supplied correctly.
  - The image on the screen is dim.
    - Check if the lens is stained. If dirty, clean the lens with a soft, clean cloth.
    - Adjust the Back Focus of the lens again.
  - The camera does not work properly, the surface of the camera case is hot, and a black line appears on the screen.
    - Check if you have connected the camera to a proper power source and if there is no problem with the power, turn the unit off immediately and seek assistance from our After Service department.
  - The screen blinks a lot.
    - Check if the camera is pointed toward the sun or a fluorescent lamp.
    - Adjust the angle or location of the camera if too much light is coming into the screen.