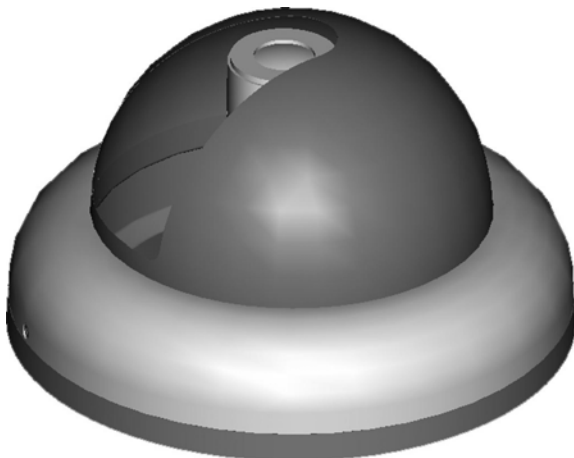


Space-Dome CCD Camera

Instruction Manual



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

1. Safety Precautions



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).

- ◆ Please do not directly touch the sensor element. If necessary, use a soft cloth moistened with alcohol to wipe off any dust.
- ◆ Please be extra careful not to shake the camera
- ◆ Please avoid places where there is direct sunlight
- ◆ When using this camera in places where the lighting differs greatly, please use the auto iris lens with ND filter.
- ◆ Please avoid places where temperatures exceed 50 or more, high humidity or where direct rain drops hit, frequent vibrations, or shocks occur.
- ◆ During the night, if a minimum brightness of 0.1 Lux can not be achieved, install appropriate light fixtures.
- ◆ When the camera is not used, keep the lens or the lens cap attached to protect the sensor.

2. Description

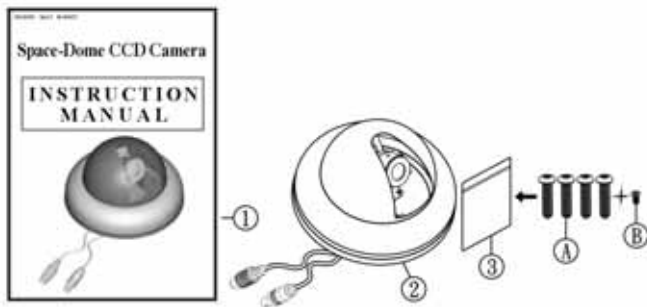
The camera uses SONY high sensitive super HAD interline transfer image sensor, and employs digital signal processor (DSP) chip-set for image control, and all integrated state circuitry which provide extremely long life and high reliability. This camera offers excellent image quality with low lag and high burn resistance, and is not subject to distortions from magnetic fields.

Highly resistance to shock and vibration, easy to install, this camera is a very good choice for your color CCTV system.

3. Feature

- ◆ Color camera with SONY 1/3" Super HAD CCD sensor.
- ◆ Employs Digital Signal Processor (DSP) IC for image control.
- ◆ Pixel number: NTSC=380K/ PAL=440K (EIA=380K/ CCIR=440K) for high resolution models, and NTSC=270K/ PAL=320K (EIA=270K/ CCIR=320K) for normal resolution models.
- ◆ High sensitivity, low smear, high anti-blooming, and high S/N ratio.
- ◆ Powerful functions: Auto Electronic Shutter (AES), Auto Iris (AI), Auto Gain Control (AGC), Auto White Balance (AWB), and Back Light Compensation (BLC).
- ◆ Supports Auto Iris Lens: both Video-Drive & DC-Drive lens.
- ◆ 3-Axis Mechanism for free lens rotation.

4. Contents

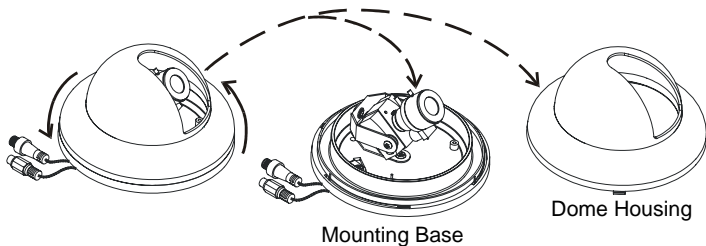


Item	Name of Part	Quantity
1	Instruction Manual	1
2	Dome CCD Camera	1
3	Appurtenances	1
A	Fix retaining screw for bracket	4
B	Countersunk head screw	1

5. Installation & Operation

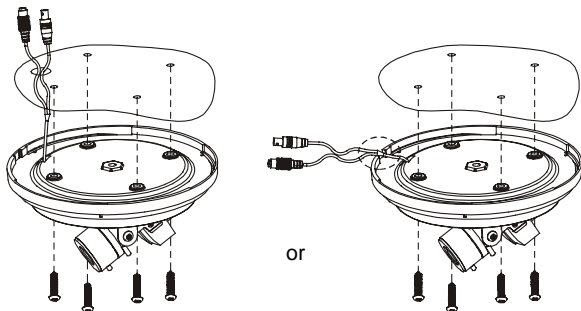
1. Please select the most suitable position on the wall or ceiling to install the camera.
2. Rotate the dome housing counterclockwise to remove it from the mounting base (as shown by the figure below).

Note: The inner parts may differ depending on the camera model type.

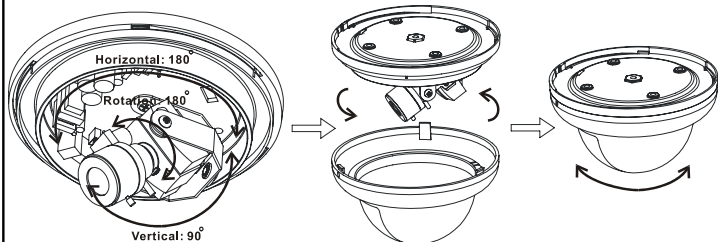


3. Set the mounting base onto the wall or ceiling and center it over the mounting hole, using the four retaining screws for the bracket (A) supplied by the accessory package (shown by the figure below). Then allow the cable connectors to pass through the sideways hole made available for that purpose (shown by figure below).

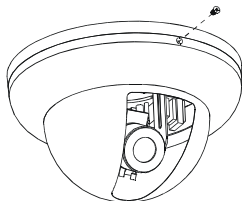
Note: Some model types may have only three mounting holes.



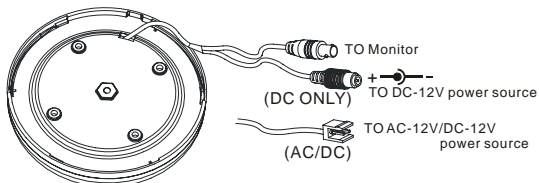
- Set the proper image by moving the camera body and set the focus by turning the lens to the left or right direction (The lens angle can be freely adjusted within the following range: 180° (horizontal), 90°(vertical) and 180° (rotation)). When the camera focus adjustment has been completed, rotate the dome housing clockwise to secure it to the mounting base.



- To prevent unpredictable damage and burglary, lock-up the dome by using the countersunk head screw (B).



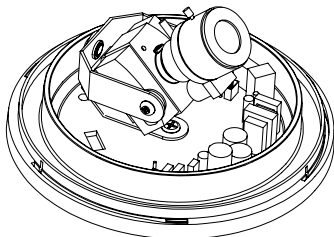
- Connect the Video Output to the monitor or other video device through a 75 Ohms type coaxial cable.
- Connect the DC-Jack or AC/DC-Terminator with power source.



Note: Power Adapter Sold separately.

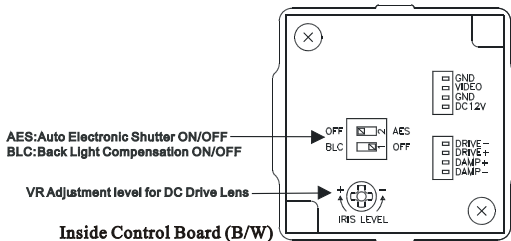
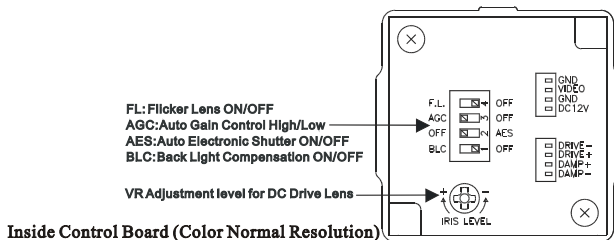
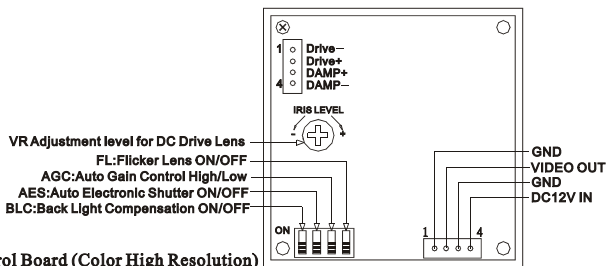
8. Vari-Focal Space Dome CCD Camera Operate.

- (1) Once the picture appears on the monitor, open the cover adjust the lens' wrench "NEAR FAR" to get the view zoom that you desire, then adjust the focus wrench of the lens to obtain the best picture. After adjustment, tighten both wrenches.



(2) DIP Switch Setting

- **Flickerless Function**
Set switch-OFF/ F.L. to Flicker to enable flickerless function, in this mode, the switch-AES/OFF is auto disabled.
- **AGC-Hi/ AGC-Lo Function**
Adjust the switch to AGC indicates AGC-Hi and OFF indicates AGC-Low. This switch setting to High or Low of the maximum AGC gain. AGC-Hi mode--The maximum AGC gain is approximately 26dB. AGC-Lo mode--The maximum AGC gain is approximately 16dB.
- **AUTO IRIS FUNCTION**
When using an Auto Iris Lens, the Switch-AES/ OFF should be in the OFF position to disable the AES function. Adjust the LEVEL with the VR to proper level.
- **BLC FUNCTION**
Set Switch-OFF/ BLC to BLC to enable Back Light Compensation (BLC) function.



6. Specification

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

Color Camera		
Image Device	1/3" Color SONY Ultra Hi-Res. Super HAD	1/3" Color SONY Super HAD
Picture Elements	NTSC: 768 x 494 PAL: 752 x 582	NTSC: 510 x 492 PAL: 500 x 582
Resolution	550 TVL	380 TVL
Min. Illumination	0.4Lux/ F2.0	0.2Lux/ F2.0
S/N Ratio	More than 48 dB	
Electronic Shutter	NTSC:1/60~1/100,000, PAL:1/50~1/110,000	
Auto-Iris Support	Video-Drive Lens & DC-Drive Lens	
Gamma	0.45	
Lens Furnished	Vari-Focal: f3.7~12.0mm/ F1.6~360 (Wide:H71.6°×V23.8°, Tele:H55.8°×V17.9°) Vari-Focal: f9.0~22.0mm/ F1.6~360 (Wide:H29.2°×V13.0°, Tele:H21.7°×V9.7°)	
Gain Control	Auto	
White Balance	Auto	
Sync. System	Internal.	
Video Output	1 Vp-p/ 75 Ohms.	
Power Supply	DC12V ± 10%, AC24V (optional)	
Power Consumption	DC/ 190mA max. AC/ 3.0W max.	DC/ 120mA max. AC/ 2.0W max.
Operating Temp.	-10 to 50	

B/W Camera

Image Device	1/3" B/W SONY Hi-Res. Super HAD	1/3" B/W CCD
Picture Elements	EIA: 768 x 494 CCIR: 752 x 582	EIA: 510 x 492 CCIR: 500 x 582
Resolution	600 TVL	420 TVL
Min. Illumination	0.2 Lux/ F2.0	0.1 Lux/ F2.0
S/N Ratio	More than 48 dB	
Electronic Shutter	EIA: 1/60~1/120,000, CCIR: 1/50~1/120,000	
Gamma	0.45	
Lens Furnished	Vari-Focal: f3.7~12.0mm/ F1.6~360 (Wide:H71.6°×V23.8°, Tele:H55.8°×V17.9°) Vari-Focal: f9.0~22.0mm/ F1.6~360 (Wide:H29.2°×V13.0°, Tele:H21.7°×V9.7°)	
Gain Control	Auto	
Sync. System	Internal, Native Sync.	
Video Output	1 Vp-p/ 75 Ohms.	
Power Supply	DC12V ± 10%, AC24V (optional)	
Power Consumption	DC/ 115mA max. AC/ 1.9W max.	DC/ 100mA max. AC/ 1.8W max.
Operating Temp.	-10 to 50	

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