

Vari-focal Vandal Dome Instruction Manual



ZEIM-4000223G A.2_417U

CONTENTS

■ PRECAUTION.....	1
■ NOTES OF USE.....	2
■ INSTALLATION.....	5
■ SONY CCD & DSP.....	9
■ SPECIFICATION.....	10

WARNING

To avoid electrical shock, do not open the cabinet. Refer servicing to qualified personnel only.

PRECAUTION



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance

The serial number of this product may be found on the top of the unit. You should note the serial number of this unit in the space provided and retain this book as a permanent record of your purchase to aid identification in the event of theft.

Model No. _____

Serial No. _____

NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications.

Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

FCC Caution: To assure continued compliance, (example – use only shielded interface cables when connecting to computer or peripheral devices). Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

NOTES OF USE

■ Power Supply

You can use either AC 24V or DC 12V as power input. The camera automatically detects the power. When connecting the transformer, be sure to connect each lead to the appropriate terminal. Wrong connection may cause malfunction and/or damage to the video camera. Ground the unit or an irregular voltage may be generated in the AC power cable and may cause malfunction and/or damage to the video camera.

■ Operating or storage location

Avoid shooting very bright objects (such as light fittings) for an extended period. Avoid operating or storing the unit in the following locations:

- Extremely hot or cold places (operating temperature: -10°C to $+50^{\circ}\text{C}$)
- Close to sources of strong magnetism
- Close to sources of powerful electromagnetic radiation, such as radios or TV transmitters
- Close to humid or excessively dusty places
- Where exposed to mechanical vibrations
- Close to fluorescent lamps or objects reflecting light
- Under unstable light sources (it may cause flickering)

■ Attaching the dome casing

Attach the dome casing with the supplied screw

■ Transportation

When transporting the camera, repack it as originally packed at the factory or in materials equal in quality

■ Cleaning

- The dome cover is the optical part. Use a soft, dry cloth to remove the fingerprints or dust
- Use a blower to remove dust from the lens
- Clean the body with a dry soft cloth. If it is very dirty, use a cloth dampened with a small quantity of neutral detergent, then wipe dry
- Do not use volatile solvents such as alcohol, benzene or thinners as they may damage the surface finishes

■ Water resistant

Use waterproof adhesive/tape to wind around the connections (threads) between pipes to prevent water from entering.

NOTES OF USE

■ Using the camera outdoors

Make sure you seal the locations listed below with sealant (e.g.,silicon sealant) to prevent moisture from getting inside the casing.

- The holes where the unit casing bottom is attached to a ceiling or wall
- Conduit holes (side/bottom): you can seal the hole by using an waterproof accessory.
- Joint surface of the camera casing gasket and unit casing.

■ Location and Function of Parts

1. Unit casing

The unit casing is made of die-cast aluminum and has conduit holes on the side and bottom.

2. Safety cord

The safety cord prevents the dome casing from falling to avoid do harm to people. Please do not remove the safety cord from the unit. If it is necessary to remove, please remember to fasten the screws accompanied.

3. Zoom lever & Focus lever

Adjusts the camera range and focus. The lever itself is a screw and can be re moved. Turning this screw all the way clockwise locks the position.

4. UTP-Unshield Twisted Pair(white/black wire)

Twisted Pair(TP) terminal (CAT.5E) for video signal. Usage of TP output re quires a TP receiver at the other end of the TP line.

5. Power connector(red/black wire)

Connects to the external power source. (DC12V/AC24V)

6. BNC connector

Connects to the VIDEO IN connector of the Monitor Video Connector.

7. LEVEL adjustment switch

Use to compensate for the iris level.Turn toward L(low) to make the picture darker. Turn toward H(high) to make the picture brighter

8. Mode setting DIP switch

The following DIP switches are set to defalut position(shaded) as shipped from factory.

- BLC (backlight compensation) (Initial setting: OFF)

When switched on, the function adjusts exposure to compensate for situa tions where the subject is lit from behind.

- AGC (automatic gain control) (Initial setting: ON)

The automatic gain function automatically adjusts picture in accordance with the brightness of subject.

- DC/AES Mode switch (Always setting: ON) This function is useless in the camera.

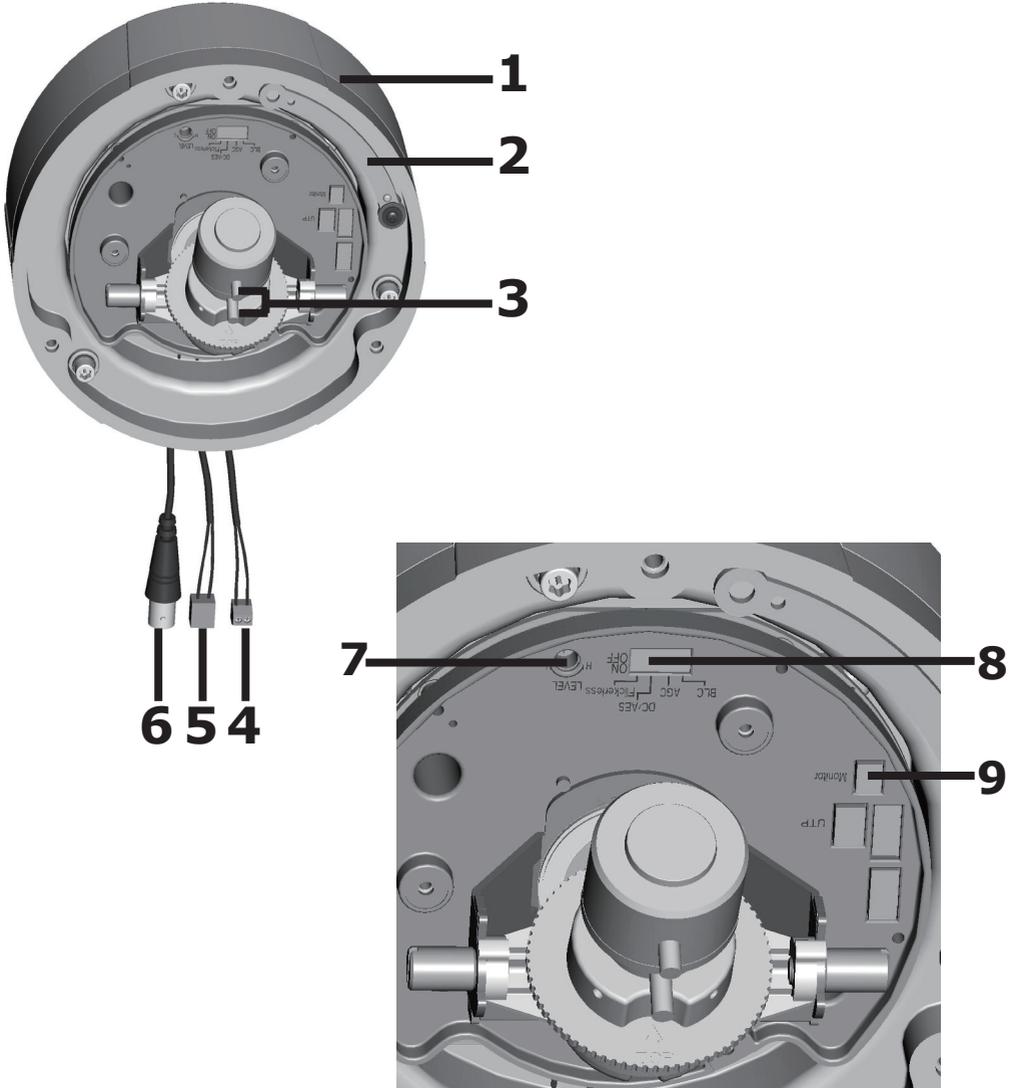
- Flickerless (Initial setting: OFF)

Flickerless reduces flickers when NTSC camera is used with 50Hz power frequency and vice versa. Users can turn on the flickerless function.

NOTES OF USE

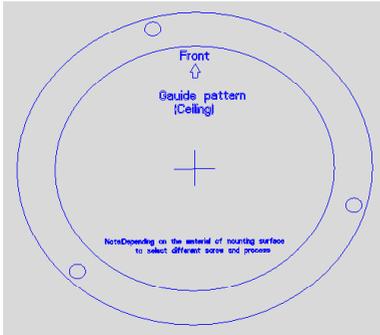
9. Monitor (MONITOR OUT) connector

You can connect to a monitor from this connector. You can adjust the camera while looking at the image on the monitor. After adjusting the camera, disconnect the cable.



INSTALLATION

■ Ceiling mount installation



Step 1: Adhere the guide pattern to the installation surface. Drill one big and three small holes on the soft wall.



Step 2: Install the camera onto the ceiling and lock tightly by screws.



Step 3: Press the grip portion to remove the mask and rotate the main bracket to adjust the pan angle.

INSTALLATION

Step 4: Loosen the screw to adjust the tilt angle then tighten the screw again



Step 5: Put the mask back to the camera.

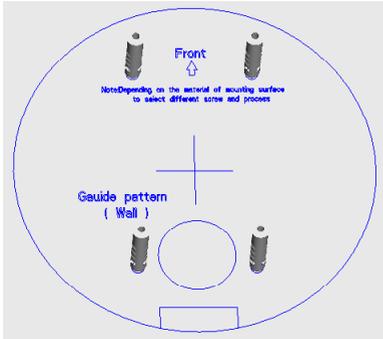


Step 6: Screw the top cover to the camera tightly.



INSTALLATION

■ Wall mount installation



Step 1: Adhere the guide pattern to the installation surface. Drill four small holes for the plastic anchors.



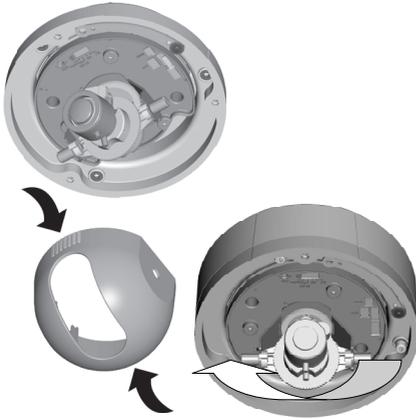
Step 2: Install the bottom case by securely fastening four screws.



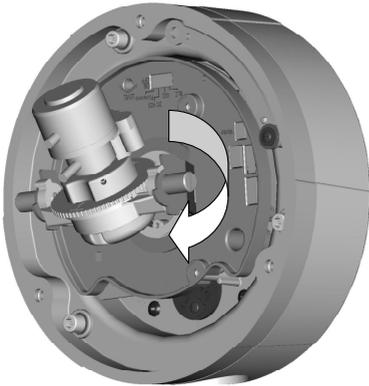
Step 3: Install the camera onto the bottom case and lock tightly by screws.

INSTALLATION

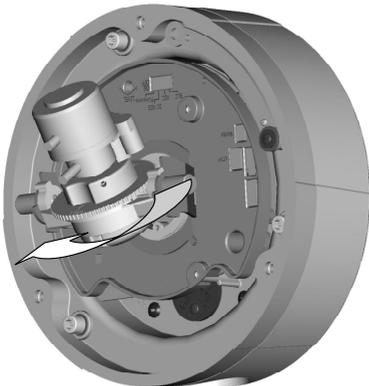
Step 4: Press the grip portion to remove the mask and rotate the main bracket to adjust the pan angle.



Step 5: Loosen the screw to adjust the tilt angle then tighten the screw again



Step 6: Adjust the camera zoom to suitable position.



INSTALLATION



Step 7: Put the mask back to the camera, then screw the top cover to the camera tightly.

SONY CCD & DSP

The color camera, featuring the SONY® CCD combined with SONY® the latest advances in digital signal processing (DSP) technology to enable day/night monitoring and surveillance applications, as well as other challenging lighting conditions including backlighting, bright sunlight and deep shadows.

SPECIFICATIONS

Signal system	NTSC	PAL
Image system		
Imaging area	4.9mm x 3.7mm	
Image pickup device	1/3" SONY CCD	
Effective pixels(HxV)	768 x 494	752 x 582
Electric		
Scanning system	2:1 Interlace V: 59.94Hz,	2:1 Interlace V: 50Hz,
	H: 15.734KHz	H: 15.625KHz
Sync system	Internal	
Horizontal resolution	560 TV lines	
Built-in lens	f=3.7~12mm, F1.4 DC Iris Varifocal Lens	
IRIS Control	DC Iris Driver	
View angle	Horizontal:76.92°(wide) ~ 22.73°(tele), Vertical:56.89°(wide) ~ 17.07°(tele)	
Gamma correction	0.45	
Minimum illumination	0.7 Lux (AGC ON)@50 IRE ; 0.2 Lux (AGC ON)@10 IRE	
S/N ratio	More than 50dB (AGC off)	
White balance	Auto:(2500°K~9500°K)	
Electric shutter	1/60 sec.	1/50 sec.
UTP	Passive; 300M (985 ft.)	
Flicker Less	On / Off	
BLC	On / Off	
AGC	On / Off	
Day/Night Mode	Easy D/N ; Auto	
Video output	1Vpp composite output, 75 ohm	
Monitor output	1Vpp composite output, 75 ohm	
Power supply		
Power requirement	DC12V/AC24V +/-10%	
Power consumption	4.5W (max.)	
Environment		
Operating temperature	-10°C ~ 50°C(14°F ~ 122°F)	
Operating humidity	30% ~ 90% RH	
Storage temperature	-20°C ~ 60°C(-4°F ~ 140°F)	
Mechanism		
Dimensions(øxH)	150mm x 132mm (5.9" x 5.2")	
Weight	1150g approx.	
Vandal proof	1000Kg impact resistance	
Protection class	IP67	