EVERFOCUS

Weatherproof Long Range IR Camera
Operation Instructions

Model No. **EZ230E/235E/330E/335E**

Please read this manual first for correct installation and operation. This manual should be retained for future reference. The information in this manual was current when published. The manufacturer reserves the right to revise and improve its products. All specifications are therefore subject to change without notice.

PRECAUTIONS

1. Do not place any object on top of the cover.
2. Be careful when handling the camera, do not drop it or subject it to strong shock or vibration to prevent any damages to it. Do not disassemble it or place it on an unstable base.
3. Install the camera away from TV, radio transmitter, magnet, electric motor, transformer, audio speakers because the magnetic fields generate from above devices will distort the video image.
4. Install the camera away from stoves, or other heat generating devices as the high temperature could cause deformation, discoloration or other damages of the camera.   Install the camera at where the temperature range will stay between -40℃ to 50℃ (-40℉ to 122℉).
5. Never aim the camera at the sun or other extremely bright objects whether it is in use or not.
6. Do not touch the surface of CCD sensor by hand directly.   Use a soft cloth to remove the dirt from the camera body.   Use lens tissue or a cotton tipped applicator and ethanol to clean the CCD sensor and the camera lens.   When the camera is not in use, put the cover cap on the lens mount.
7. All warnings on the products and in the operating instructions should be adhered to.
8. Do not use attachments not recommended by the appliance manufacturer as they may cause hazards.
9. Do not allow anything to rest on the power cord. Do not locate this appliance where the cord

will be abused by persons walking on it.

10. Do not overload wall outlets and extension cords as this can result in fire or electric shock.

11. Never push objects of any kind into his appliance through cabinet slots as they may touch dangerous voltage points or short out parts that could result in fire or electric shock.

12. Refer all work related to the installation of this product to qualified service personnel or system installers.

PREFACE

EZ230E/235E/330E/335E series camera is a true day/night, weather-proof, long range IR color camera, designed with the 1/3" SONY HAD color CCD to provide a high performance in low LUX environment. It is ideal for outdoor applications such as parking lots, gas stations and shopping malls.
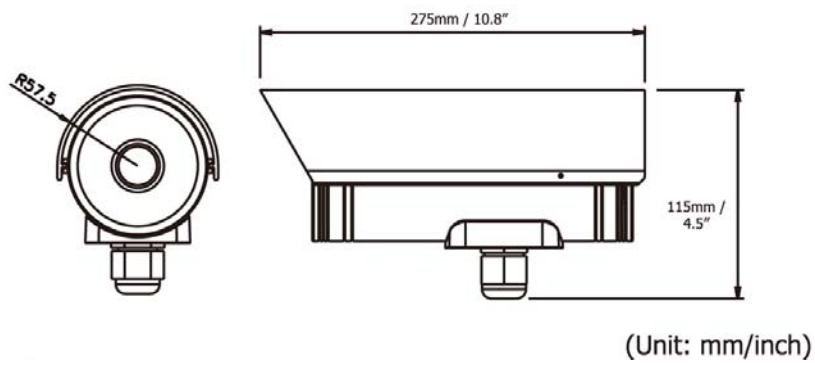
FEATURES

- The electronic shutter and AGC functions allow the camera to be used in environment with varying light levels
- The advanced 1/3" SONY Super HAD color CCD provides low light sensitivity 0.3 Lux/F=1.2 (AGC ON) for EZ230E/EZ235E and 0.4 Lux/F=1.2 (AGC ON) for EZ330E/335E
- Vari-frequency IR control
- Long IR distance: 30 meters/98 feet for EZ230E/EZ330E and 50 meters/164 feet for EZ235E/EZ335E
- Lifespan of High Light IR LED is 20,000 hours
- IP66 weatherproof rated
- Built-in heater for camera to work in low temperature environment
- Cables covered by the bracket, to prevent from intentional destruction
- Internal cable connection provides installation without additional waterproof connection box
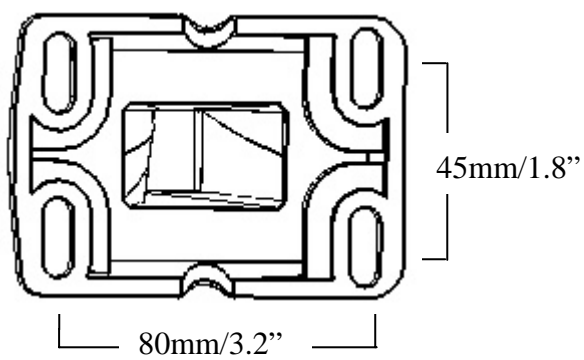- Vandal proof design

STANDARD ACCESSORIES

- ➢ IR Long Range Camera x 1
- ➢ Operation Instructions x 1 (this document)
- ➢ Waterproof Connector x 1 (connected to the camera body)
- ➢ Bracket x 1
- ➢ Mounting kit includes:

  -Long Screws x 4 (for mounting bracket)

  -Short Screws x 4 (for connecting camera body to bracket)

  -Expanding Screws x 4

  -Hex key x 1 (for adjusting bracket)
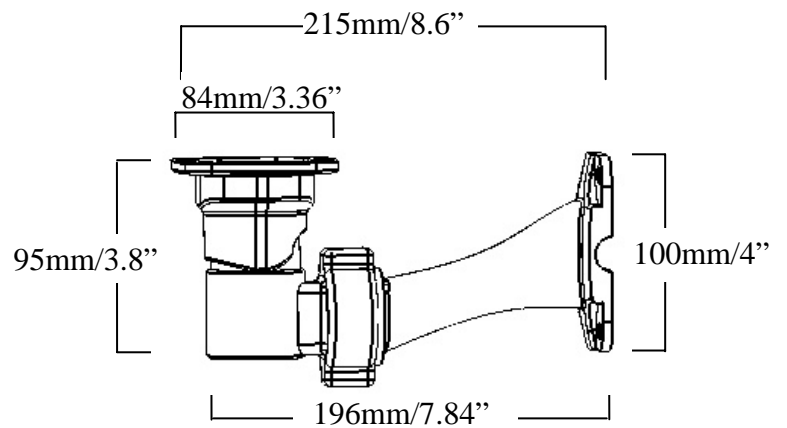
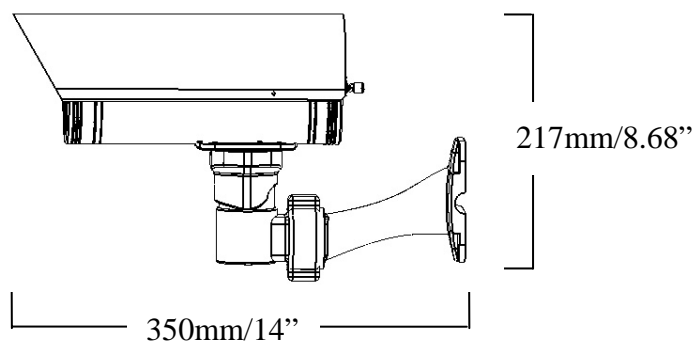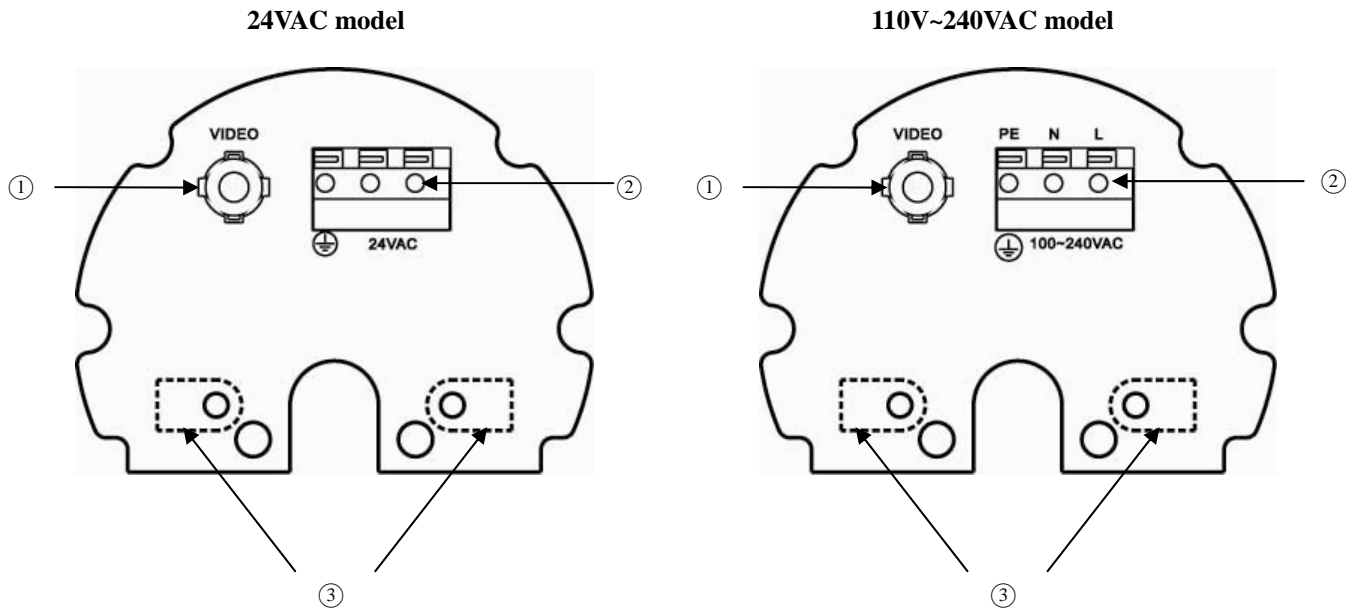 -Hexagon wrench x 1 (for adjusting sunshield)

DIMENSIONS

275mm / 10.8"

R57.5

115mm / 4.5"

(Unit: mm/inch)

Dimension of holes to holes

Dimension of Bracket

45mm/1.8"

80mm/3.2"

215mm/8.6"

84mm/3.36"

95mm/3.8"

100mm/4"

196mm/7.84"

The dimension of whole camera with bracket

217mm/8.68"

350mm/14"

NAMES AND FUNCTIONS OF BACK PANEL

24VAC model   **110V~240VAC model**

①   Video Output Connector

Connect the video output of the camera to a color monitor or other video devices through a 75 Ohm type coaxial cable with BNC female connector at backside of the camera.

②   Power Input Terminal

Connect to the appropriate power to each model. N/L is used to connect to power in. PE is a ground pin.
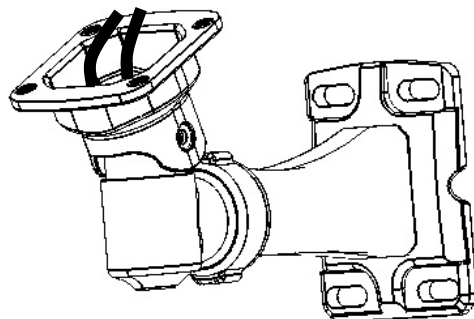
③   Cable clips

Used to fix power cable.

INSTALLATION GUIDE

Sun shield

Fixing screw for sunshield
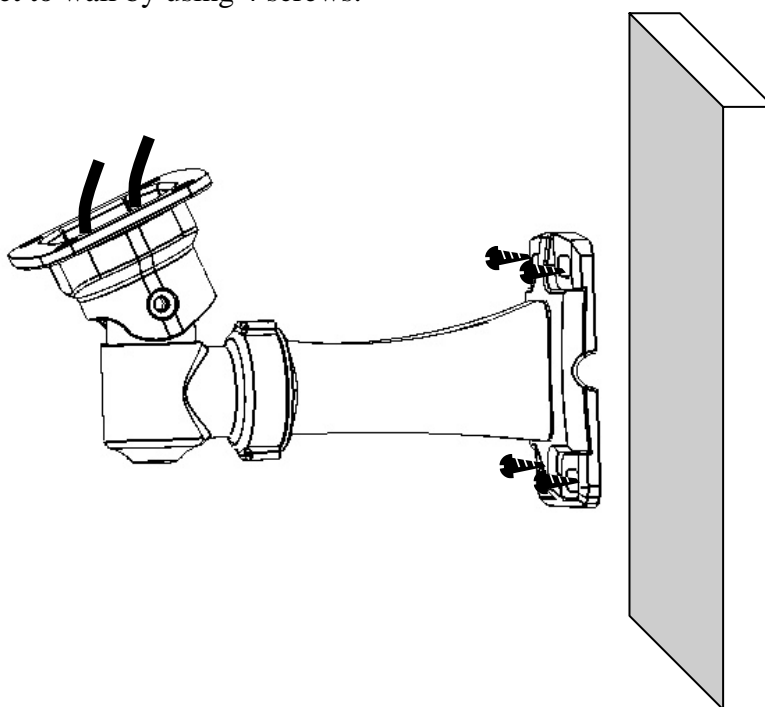
Bracket

Power connector

Video output
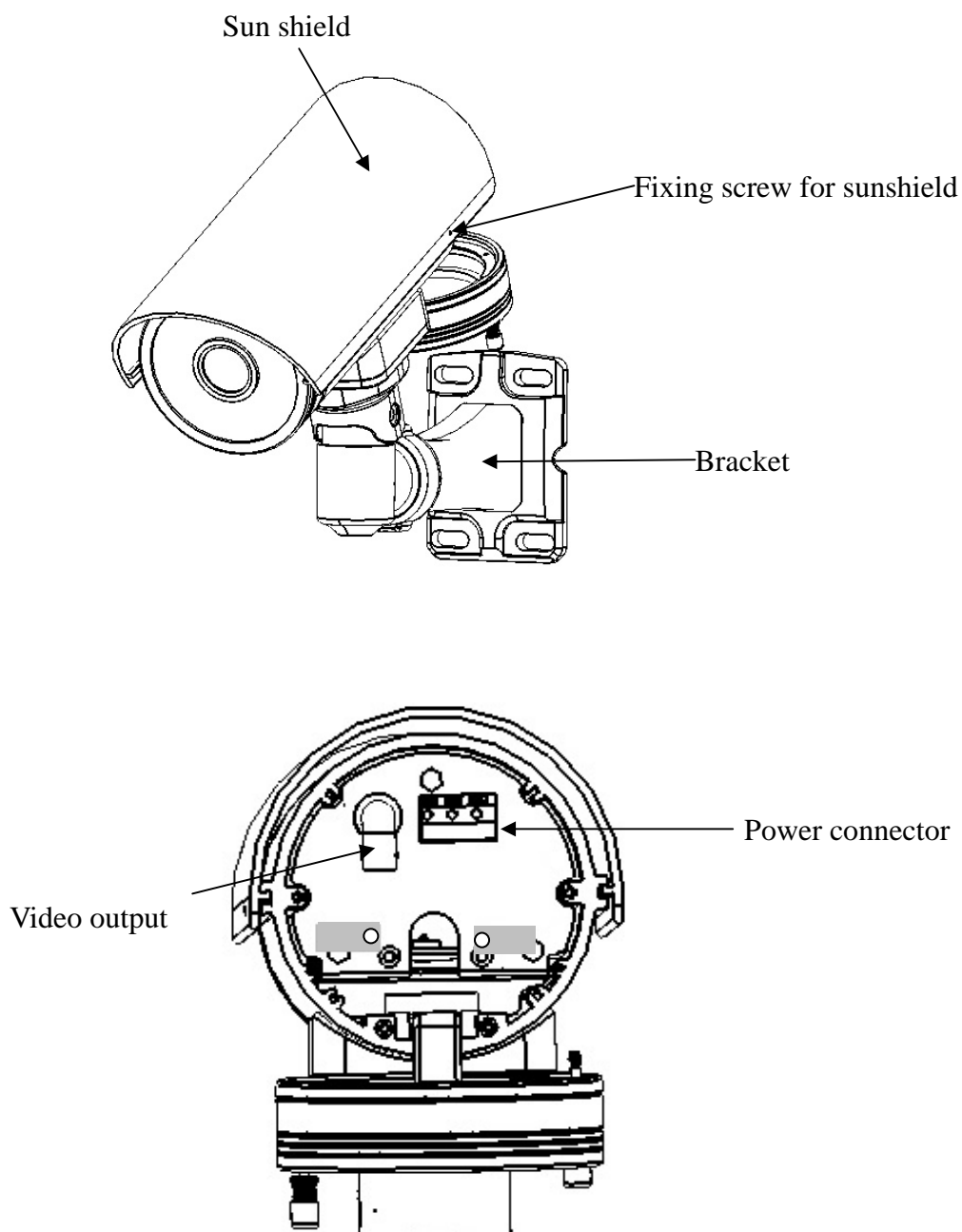
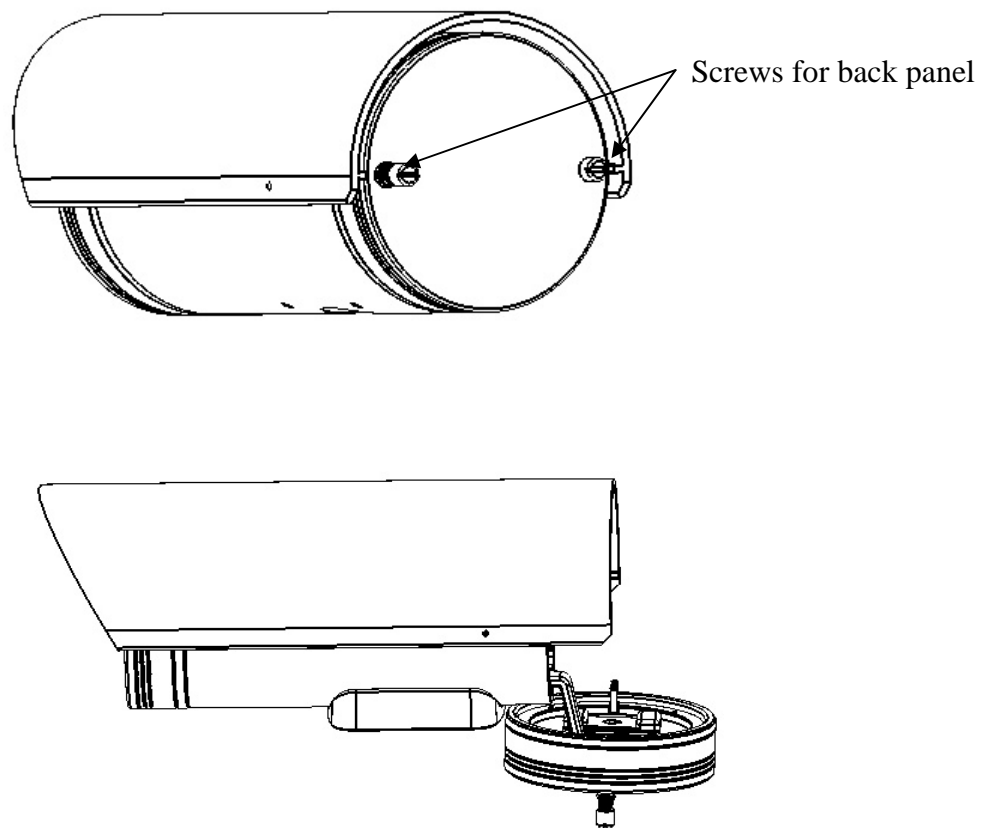1. Wire coaxial cable and power cable through the bracket.

   *Note: Please use **RG59/5C2V coaxial cable without connector***

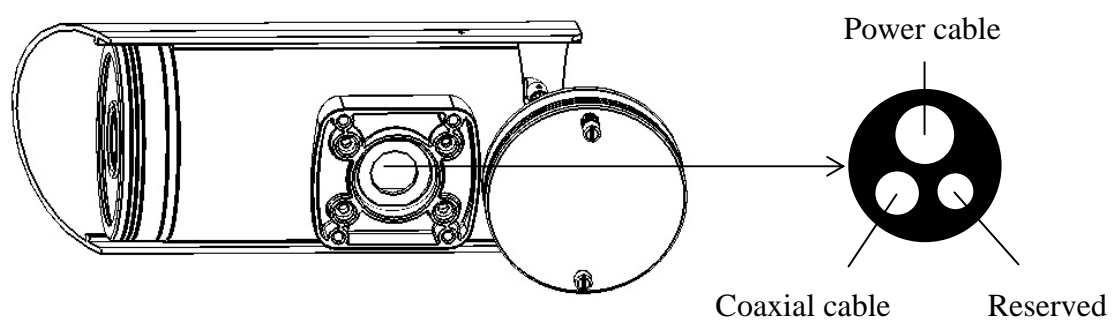2. Fix the bracket to wall by using 4 screws.

3. Open camera's back cover: Loose the 2 screws from the back panel, then open the back cover.

Screws for back panel

4. Take off the cap of waterproof connector which is under the camera.

Power cable

Coaxial cable   Reserved

Note: 1. The holes of waterproof connector were plugged by stoppers, please remove the stoppers when you need to use it for connection.
2. Please always keep the smallest hole (5 mm) plugged by stopper, to avoid any possible damage caused by humidity. This is a reserved hole.

5. Take coaxial cable and power cable to pass through waterproof connector, place them into camera housing.
   *Note: Do not connect BNC connector to **coaxial cable** until coaxial cable has passed through camera housing*
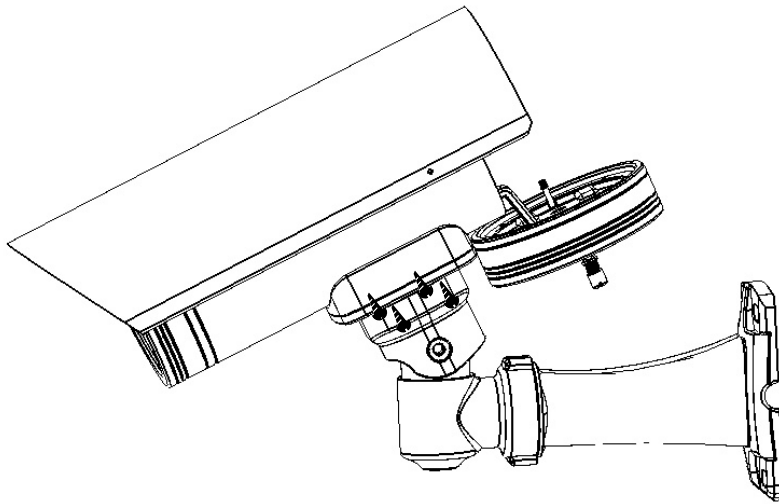
Video cable and power cable
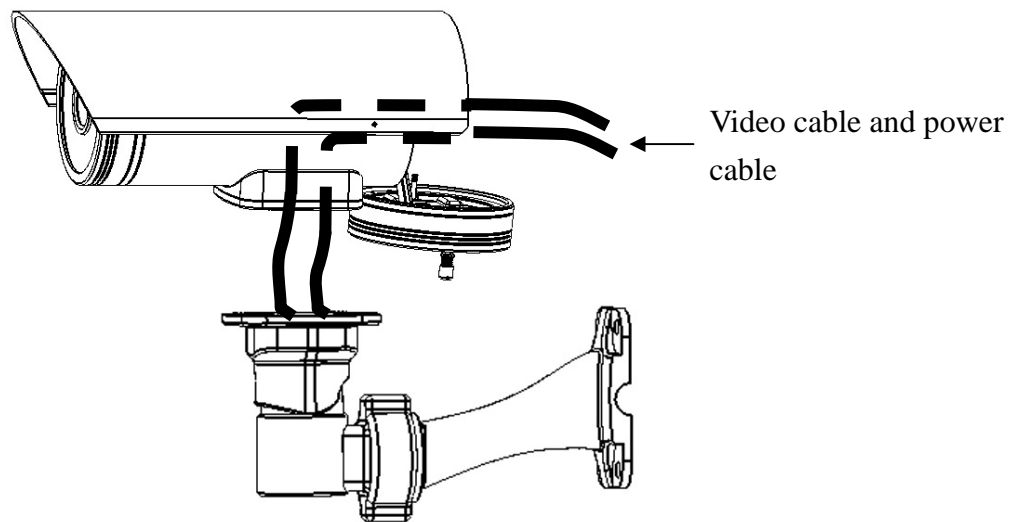
Note: 1. *Power cable's diameter must be under 10mm*
   *2. Only use RG59/5C2V coaxial cable*

6. Close the waterproof cap and fix waterproof connector to the base of camera firmly.

7. Fix the camera body to bracket by using the 4 shorter screws.

8. Connect **RG59 coaxial cable** with BNC connector.

9. Unscrew the cable clips, wire power cable through the cable clips. Then, screw the cable clips to rear panel.
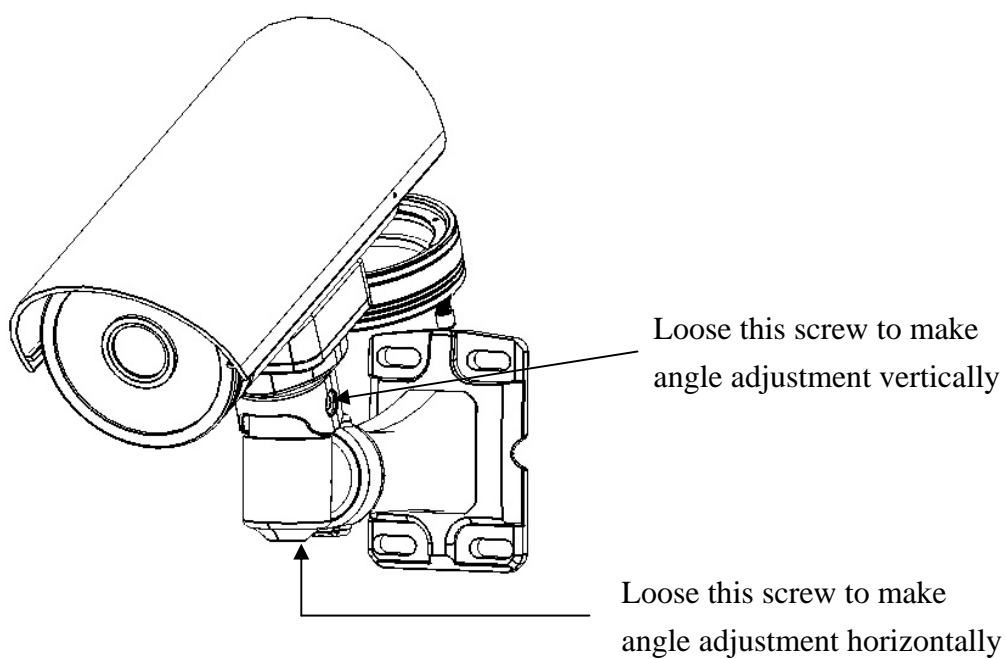

Power cable

Coaxial cable

Cable Clips
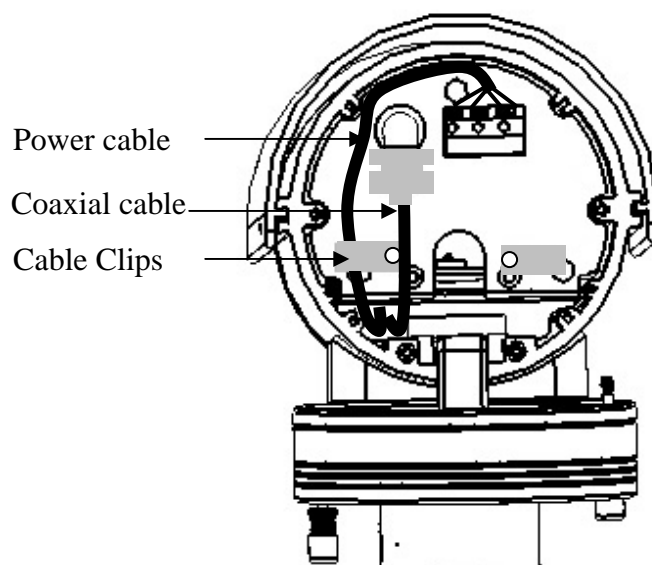
10. Close the back cover and screw the 2 screws firmly. Now, you are done with the installation.

Screws for back panel
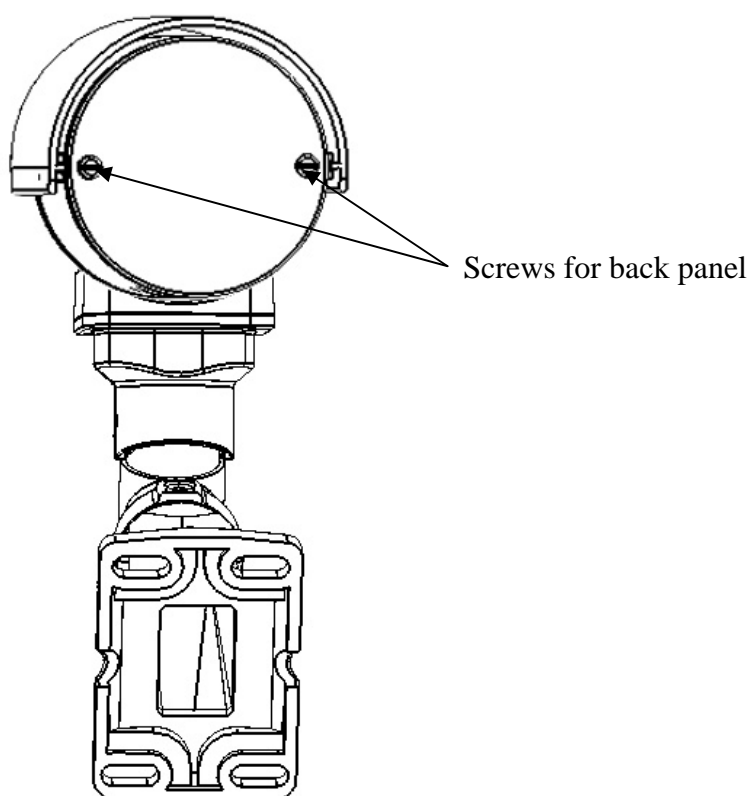
ADJUSTMENT

Adjust camera's angle vertically or horizontally by using hex key included in package.

Loose this screw to make
angle adjustment vertically

Loose this screw to make
angle adjustment horizontally

SPECIFICATIONS

Type	EZ230E	EZ235E	EZ330E	EZ335E
Pickup Device	1/3" SONY Super HAD CCD			
Picture Elements	510 x 492 (NTSC) 500 x 582 (PAL)		768 x 494 (NTSC) 752 x 582 (PAL)	
Horizontal Resolution	380 TVL		520 TVL	
Video Output	BNC 1.0Vp-p, 75ohm			
*Lens Type	6mm, 8mm	8mm, 16mm, 25mm	6mm, 8mm	8mm, 16mm, 25mm
Sensitivity	0.3 Lux/F=1.2 (AGC ON) 0 Lux (IR On)		0.4 Lux/F=1.2 (AGC ON) 0 Lux (IR On)	
Gamma Correction	0.45			
S/N Ratio	Over 48 dB (AGC off)			
Auto White Balance	Yes			
Black Light Comp.	Yes			
Auto Gain Control	Yes			
Sync. Mode	Internal Sync.			
IR LED Lifespan	20,000 hours			
Weatherproof	IP66			
Power Source	2 types: 24VAC ; 100VAC~240VAC			
Power Consumption	24VAC / 100VAC~240VAC : 16W max.			
Dimensions	115mm(W) x 115mm(H) x 275mm(D) ; 4.5"(W) x 4.5" (H) x 10.8"(D)			
Operating Temperature	-40°C to +50°C ; -40°F to 122°F (20%~80% Humidity)			
Weight	2.5 kg ; 5.5 lbs (with bracket)			
IR Distance	30M / 98 feet	50M / 164 feet	30M / 98 feet	50M / 164 feet
IR Wavelength	850nm			
Certifications	FCC/CE			

*Lens models and availability vary in different regions

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