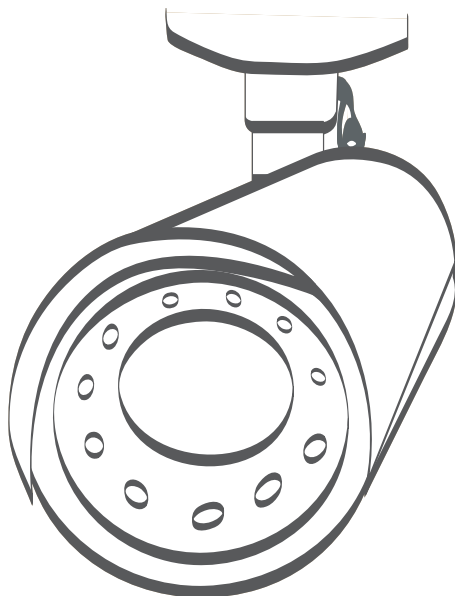


IR, Water Proof Ready-to-Go Camera



ZEIM-4000178G 351PRO.A.2

Please read this manual thoroughly before use, and keep it handy for future reference

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PRECAUTIONS



CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN



The lightning flash with an Warrhead 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.

The 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 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.

IMPORTANT SAFETY INSTRUCTIONS

- 1) Do not touch the imaging surface of the sensor.
Use a soft cloth moistened with alcohol to clean the surface if it was touched accidentally.
- 2) Before operation, ensure that the supply voltage is correct as specified for the particular variant of camera .
- 3) Do not expose the camera to rain, moisture or to temperature outside the specified limit without a suitable housing.
- 4) Avoid focusing directly on the sun.
- 5) Do not attempt to service this unit yourself unless you are authorised to do so. Opening the camera may expose you to dangerous voltages or other hazards. Refer all servicing to qualified personnel only.
- 6) If connected to the mains :
THIS APPARATUS MUST BE EARTHED.
The wires on the mains lead are in accordance with the following code :
GREEN/YELLOW -----Earth
BLUE -----Neutral
BROWN -----Live
- 7) Do not use this video product near water, for example, near a bath tub, wash bowl, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool and the like.
- 8) Use only with stand, tripod, bracket, or table recommended by the manufacturer, or sold with the video product. Any mounting of the product should follow the manufacturer's instructions, and should use a mounting accessory recommended by the manufacturer. The video product may fall, causing serious injury to a child or adult, and serious damage to the product.
- 9) This video product should never be placed near or over a radiator or heat register. This video product should not be placed in a built-in installation

Powersupply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them. Pay particular attention to cords at plugs, screws and the point where they exit from such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to.
- 10) Do not attempt to service this video product yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.
- 11) This video product should be operated only from the type of power source indicated on the marking label. If you are not sure about the type of power supply at your location, consult your product dealer.
- 12) Disconnect this video product from the power supply and refer servicing to qualified service personnel under the following conditions
 - a. When the powersupply cord or plug is damaged.
 - b. If liquid has been spilled, or objects have fallen into the video product.
 - c. If the video product has been exposed to rain or water directly.
 - d. If the video product does not operate normally by following the operating instructions in this manual. Adjust only those controls that are covered by the instruction manual as an improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the video product to its normal operation.
- 13) The warranty will be void if the S/N label on the camera is removed.

NOTES OF USE

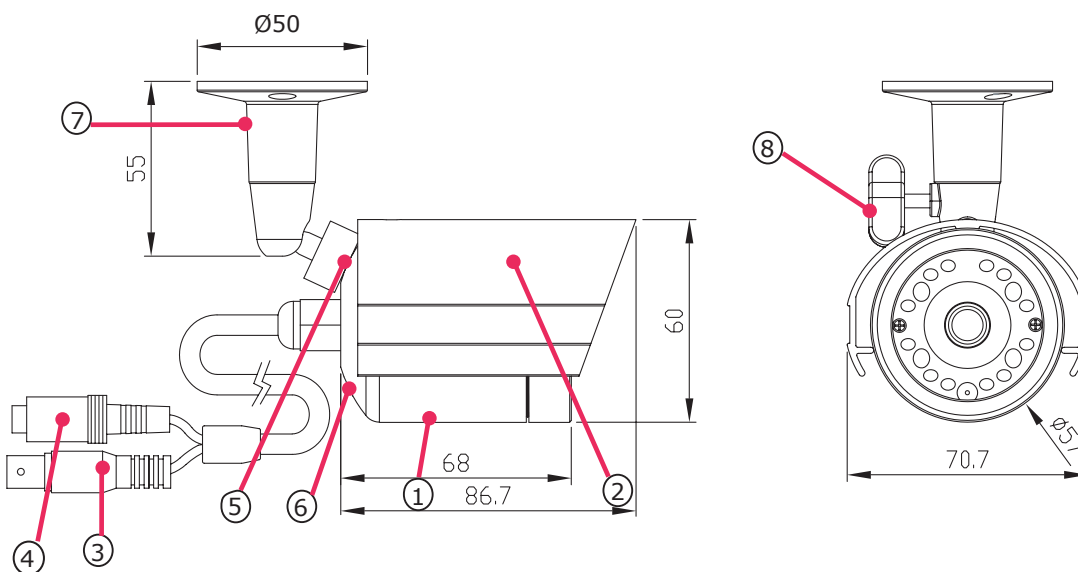
● FEATURES

1. Color: 1/3"SONY CCD Camera with 540 TV lines of resolution.
2. Easy to install and adjust.
3. Minimum illumination:
0.02 lux(F1.6,10IRE); 0.3 lux(F1.6,50IRE) 0 lux(When IR LEDs are on)
4. All-in-one function excellent for both indoor & outdoor applications.
5. Water proof of IP66 makes it ideal for outdoor surveillant applications.

● CAUTIONS

1. Do not touch the lens surface of the sensor. Use soft cloth moistened with alcohol to clean the surface if it is touched accidentally.
2. Ensure the supply voltage is correct as specified for the particular variant of camera before operation.
3. Do not expose the camera to rain, moisture or to the temperature exceeds the specified limit, without a suitable housing.
4. Avoid aiming the camera at very bright objects such as the sun or electric lights for an extended period.
5. Do not attempt to service this unit yourself unless your are authorized to do so. Opening or removing cover may expose yourself to the dangerous voltage or other hazards. Refer all servicing to qualified personnel only.

●PARTS' LOCATIONS AND FUNCTIONS



NOTES OF USE

● PARTs' NAMES AND LOCATIONS

1. **Camera main body**
2. **Sunhood**
3. **BNC connector**
Connects to the VIDEO IN connector of the Monitor Video Connector & Power Connector.
4. **Power connector**
Connects to the external power source(DC12V).
5. **Upper tripod mounting hole**
Use this mounting hole to connect to the mount bracket while mounting onto the ceiling.
6. **Lower tripod mounting hole**
Use this mounting hole to connect to the mount bracket while mounting onto the wall.
7. **Mount bracket**
Connects to the Mount.
8. **Fasten knob**

● CONNECTIONS

Connects the BNC connector and the power connector to the respective connectors.

● INSTALLATION

1. Place the **Mount bracket** against a flat surface in the desired location you wish to mount the IR camera onto. Mark the location using the three mounting holes.
2. Drill the 3 holes($\varnothing=0.208"$ (5.3mm), depth=1" (25mm). according to the mark made from the previously.
3. Use the hammer to put an anchor hold provided to each hole just drilled. (Fig-1)
4. Fix the **Mount bracket** onto the wall/ ceiling using the 3 screws.(Fig-1)
(b).Set the lens to maximum aperture and ∞ focus position.
(c).Shoot an object at a distance of 20 m or more away and adjust the lens mount until the image is in focus, then tighten the lens mount.
5. Combine the **Mount bracket** with the **Camera main body** by fastening the screws on the **Mount bracket** to the **upper tripod mounting hole/**

NOTES OF USE

lower tripod mounting hole when mounting on the ceiling/wall.(Fig-2)

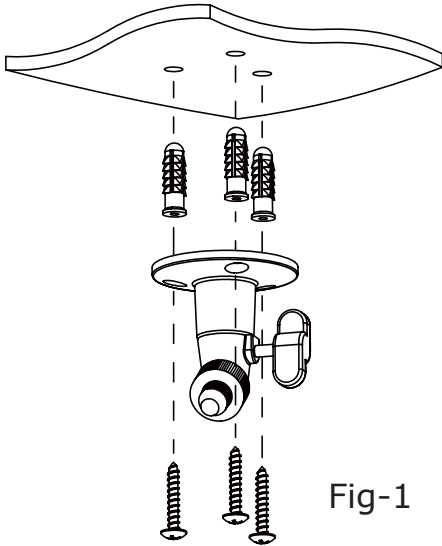


Fig-1

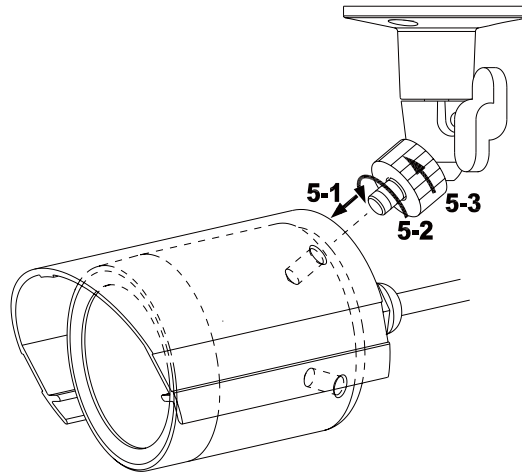
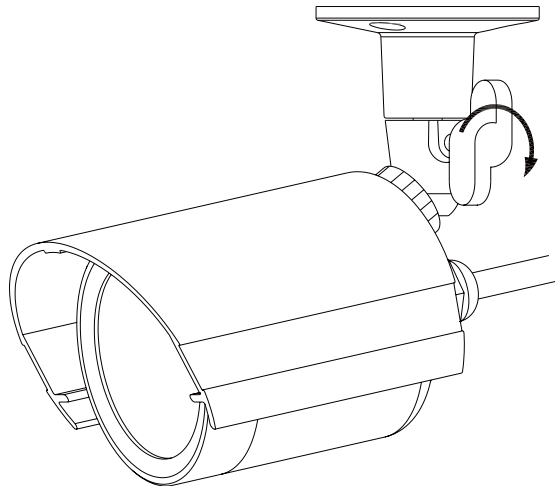


Fig-2

• ADJUSTMENT

1. Loosen the **Fasten knob**.
2. Adjust the swivel and the tilt angle of the IR camera to your desired direction, then fasten the **Fasten knob** to maintain the angle adjusted.



NOTES OF USE

●SPECIFICATION

Image System

Image pickup sensor..... 1/3" SONY CCD
Effective pixels(HxV)..... NTSC :768 x 494 PAL :752 x 582

Electrical

Scanning system.....NTSC : 2:1 interlace, V:59.94Hz,
H:15.734KHz.
PAL : 2:1 interlace,V:50Hz,
H:15.625KHz

Sync system.....Internal

Lens.....f=4.3mm, F1.6

Horizontal resolution.....540TVL

Minimum illumination..... 0.02 lux(F1.6,10IRE)/
0.3 lux(F1.6,50IRE)
0 lux(When IR LEDs are on)

S/N ratio..... More than 50dB

AES(Auto electronic shutter)..... NTSC: 1/60 ~1/100000sec
PAL : 1/50 ~1/100000sec

Gain control..... Auto

Digital day/night..... Auto

BLC(Backlight compensation)... On

White balance..... ATW (Auto trace white balance)

Video output..... 1Vpp composite output 75ohm

Power Supply

Power requirement..... DC12V ± 10%

Power consumption..... 4.5W(Max)

Environment

Operating temperature..... -10°C ~ 50°C

Operating humidity..... 30% ~ 90%

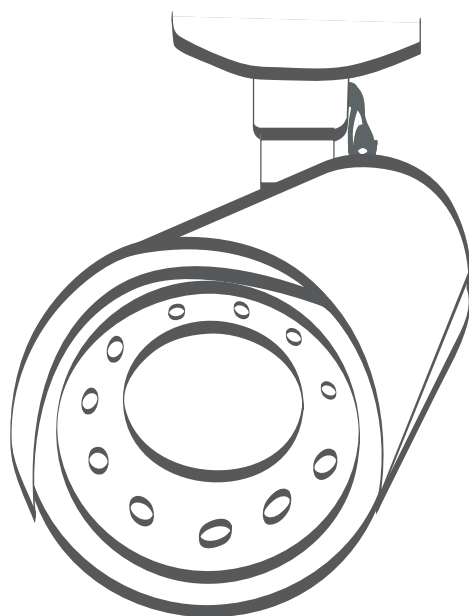
Storage temperature..... -20°C ~ 60°C

Mechanical

Dimensions..... 57(Ø)x68(H)mm

Weight..... 450g approx (with bracket)

38万画素赤外線カメラ 1/3型レンズ一体型カラーCCDカメラ 取扱説明書



- ◆ この度は、弊社のCCDカメラをお買上げ戴き、誠にありがとうございます。正しく安全にお使いいただくため、ご使用前にこの説明書を必ずお読みください。また、お読みになったあとは、いつでも見られる場所に保管して下さい。

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本製品の接続、またはご使用前にこの取扱説明書をよくお読みください。読み終わった後は、必要な時に読み直しできるよう大切に保管して下さい。

安全上のご注意

■ 安全上のご注意

- ◆ご使用前に、この「安全上のご注意」をお読みください。
- ◆ここに示した注意事項は、製品を安全に正しくお使い頂き、お客様や、他の人々への危害や損害を未然に防止するためのものです。誤った取扱いをすると生じることが想定される内容を「警告」「注意」の2つに区分しています。いずれも安全に関する重要な内容ですので、必ず守ってください。

 警告	誤った取扱いをしたときに、人が死亡や重傷等の重大な結果に結びつく可能性が大きい内容				
 注意	誤った取扱いをしたときに、人が損害を負う可能性及び物的損害の発生が想定される内容。				
	絶対にしないで下さい。		警告・注意		必ず、従って下さい。

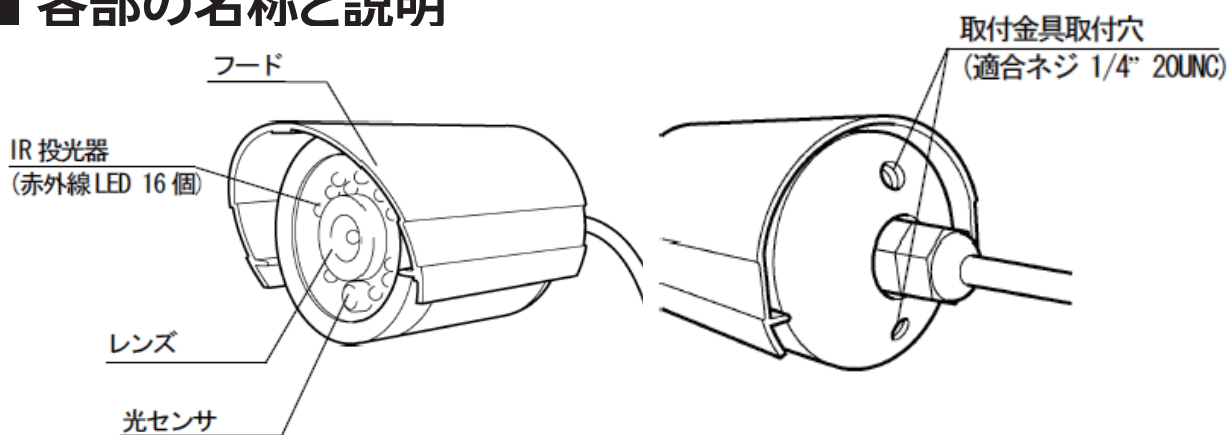
 警告	
	発火や引火の可能性のある場所に設置しないで下さい。ガスなどの充満した場所に設置すると、火災の原因となります。
	カメラの分解、改造は絶対に行わないで下さい。発熱して火災の原因となることがあります。内部の点検・調整・修理は販売店へご依頼下さい。
	濡れた手でカメラを触らないで下さい。感電の原因となることがあります。
	埃や湿気の多い場所、雨や雪が直接当たるところには設置しないで下さい。火災や感電の原因となります。
	機器に水が入ったり、また濡らさないようにご注意下さい。火災、感電の原因となります。雨天、降雪中、海岸、水辺での使用、および天井の水漏れにご注意ください。
	雷が鳴り出したら、同軸ケーブルや電源コネクタ等には触れないで下さい。感電の原因となります。
	 注意
	本機を他の機器と接続する場合には、接続する機器の取扱説明書をお読みになり悪影響が無いことを確認してください。
	周囲の温度が50℃以上、または-20℃以下の場所では使用しないで下さい。画質の低下や故障の原因となります。
	指定された電源以外では、使用しないで下さい。火災や感電の原因となります。(本機の電源はDC+12Vをお使い下さい。)

ご使用上の注意点

■ 機器構成

(1) 本体	1
(2) フィクサー	1
(3) フィクサー固定用ネジ一式	3
(4) 取り扱い説明書	1

■ 各部の名称と説明



1. カメラ本体
レンズ及び近赤外LEDを内蔵した一体型カメラです。
2. 電源用DCジャック
カメラ電源入力用ジャックです。DC 12V電源を接続してください。ジャックはセンタープラスとなっています。
3. 映像用BNCコネクタ
BNCコネクタがついた同軸ケーブルを使用し、モニター・DVR等の受像機にコネクタを映像入力端子に接続して、終端を75Ωにしてください。
4. フィクサー
付属のフィクサーです。天井や壁に取り付け、カメラを固定します。
5. 固定用ネジ一式
フィクサーを天井や壁に固定するためのネジです

仕様

■ カメラ仕様

TV信号方式	NTSC
走査方式	2:1インターレース
撮像素子	1/3型カラーインターライン転送方式 CCD
映像出力	コンポジット信号 (VBS) 1.0V (p-p), 75Ω
有効画素数	38万画素
水平解像度	540TV本
最低被写体照度	Dayモード: 0.3 lx、
SN比	Nightモード: 0 lx (F1.6 AGC ON) 50dB以上
逆光補正	ON
AGC	ON
同期方式	内部同期
ガンマ補正	$\gamma = 0.45$
ホワイトバランス	ATW
Day&Nightモード	オート
IR適正実射距離	5m~10m
電源電圧	DC12V
消費電流	max 4.5W
動作温度・湿度	-10℃ ~ +50℃ 80%以下 (非結露)
外形寸法	約(W)φ57mm×(L)68mm
重量	約250g
防塵・防水規格	IP66 準拠

■ レンズ仕様

レンズ種別	固定焦点レンズ
焦点距離	f = 4.3mm
Fナンバー	F1.6

詳細はホームページをご覧ください