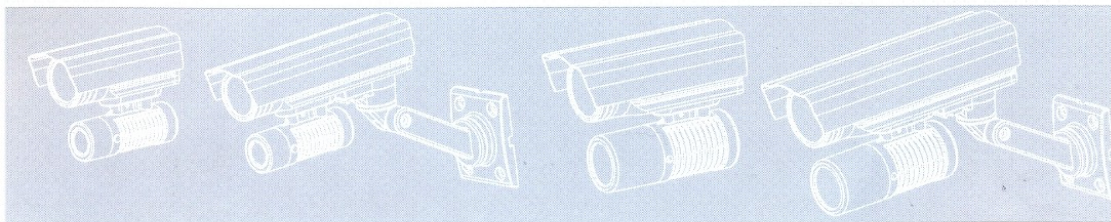


IR(LEDARRAY) DAY&NIGHT CAMERA



INSTRUCTION MANUAL

Before using or installing the machine, please read this manual carefully as to ensure to use correctly, and keep it handy for future reference.

ATTENTION AND WARNINGS



Caution:
only for people who has the qualification to install the product.

WARNING

To avoid the risk of electric shock and fire, do not use the power supply and voltage that we do not allow.

Warning

Our products has passed tests and become X-digital product. According to the 15th of FCC, it is designed for offering logical protection proof if our products be malignant impinged by others in commercial society. It is possible to bring electric wave when you are using or manufacture our product, so please ensure to install or use in term of our manual, if not, any harmful result will be settled by yourself.

Note

Any change that not be announced by our company which is concerned with our product may will have a impact on the right of using of user.



SAFETY TERMS

1. Read instruction---All the safety and operating instructions should be read before the appliance is operated.
2. Cleaning product---clean it with wet cotton. Do not use erodent liquid cleaner or aerosol cleaner. Make sure to clean the camera lens with lens paper or cotton bud with alcohol.
3. Make sure to use the factories' additional device in case of fire, electric shock and continuingency.
4. Do not put the product on unsmooth handcart and bracket.
5. Make sure to use it in ventilation place.
6. Make sure to use correct electric source that written in label.
7. Make sure to pull out the attaching plug when you are planing to not use the product for a long time or before hurricane.
8. Do not use electric outlet over-loadly or add wire, or it will build a fire or get a electric shock.
9. Anything can not be put into the inside of our equipment, or it will touch the end of voltage result in fire or electric shock.
10. To avoid getting a electric shock, please do not teardown the equipment without any safety measure. If any distroy, please contact with professional maintenance man.
11. when using the equipment, a something unnormal happen, please turn off the power source at once, and contact with professional maintenance man to mend it. Just like follow:
 - A. When the power-supply cord or the plug has been damaged.
 - B. If liquid has spilled, or objects have fallen into the camera product.
 - C. If the camera product has been dropped.
 - D. When the performance of the camera product obviously changed.
12. Replacement parts When replacement parts are required, be sure the service technician has used replacement parts. Specified by the manufacturer or that have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock or other hazards.
13. After any maintain, asking the technologist to check the camera product to make sure it can work normally.
14. Do not let the camera toward to the luminant object or be shined by sun, whatever in the use condition or not, if you did like that, you will not see the picture clearly or it will lead to halation.
15. Make sure to use camera in temperature from -40 centigrade degree to 50 centigrade degree and less than 90% humidity or in the range of electric source specification. When the camera is installed in a cold condition, it need sometime (maybe about 10minute) to warm-up.
16. Please be carefully when using the camera product, and avoid to be bumped or be oscillated.

This series of products has used the world's most advanced technology with IR filter and highly integration LED Array, it can give you the best vision effect and the most clear picture at any brightness condition.

To make sure the best visual effects, please take your attention according to the manual to install, connect, debug and maintain.

Standard Annex:

Instruction manual..... 1 pcs
 Sun visor..... 1 pcs
 Horse..... 1 pcs

(due to the list of package)

Model			
Image sensor	1/3" SONY HAD CCD		
Horizontal resolution	420 TV lines	420 TV lines	480 TV lines
signal system	NTSC / PAL		
Lens mount	M12		
Synchronization	Internal/External Auto-switch		
Gain control	AGC On/Off		
Y adjustable	0.45		
Electronic shutter	1/60-1/100,000sec (NTSC), 1/50-1/100,000sec (PAL), automatic control		
Lens Size	4mm-9mm adjustable	2.8mm, 4mm, 6mm, 8mm, 12mm	2.8mm, 4mm, 6mm, 8mm, 12mm
Lens drive	Video/DC drive		
White balance	ATW/AWC Select		
S/N ratio	>50dB		
Min illumination	0.02Lux/F1.2, 0Lux/IR on		
Video output	1.0V(p-p), 75Ω, BNC		
IR optical output	1,800mW		
IR half intensity beam angle	60°		
IR wavelength	850nm		
Power source	12VDC or 24VAC		
IP protection	IP-65		
Operating temperature	-40° C to +50° C		
Dimensions	150mm x 116mm x 65mm (camera body) Φ41mm x 120mm (IR illuminator)		

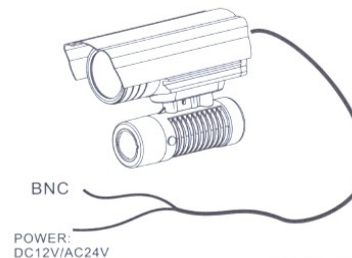
Feature:

1. Auto light control
2. IR CUT Auto Switch
3. Auto Gain control:AGC(ON/OFF)
4. White:ATW/AWC Select
5. Electric shutter: 1/60-1/100,000sec (NTSC), 1/50-1/100,000sec (PAL)
6. S/N ratio: <50dB
7. Min illumination:0.02Lux/F1.2, 0Lux/IR on
8. Horizontal resolution:420/480/540 TV Lines
9. Camera will Auto switch according to the ray of circumstance between color and white and black.
10. IR Lens can in focus clearly in day and night.

Camera Installing

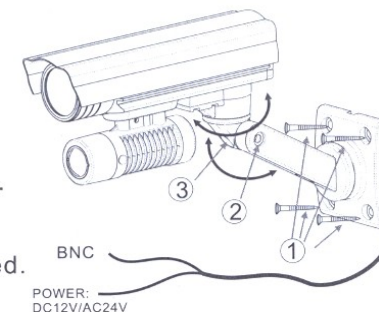
Camera Installing without Bracket:

1. Installing camera bracket, fixing the turnbuckle in the end of camera with camera bracket, adjusting the correct angle.
2. Video wire put into BNC tie-in, power line put into DC/AC.
3. Debugging the camera, and finish the installing.



Camera installing with bracket:

1. Take out of the video line of camera bracket and electric line to the bottom, and then install the bottom, and fix it with screw.
2. Adjust the 2, 3 in the picture with hexagonal head screw, adjust the angle of camera.
3. Video wire put into BNC tie-in, power line put into DC/AC.
4. Debugging the camera, and installing finished.



Model			
Image sensor	1/3" SONY HAD CCD		
Horizontal resolution	420 TV lines	420 TV lines	480 TV lines
signal system	NTSC / PAL		
Lens mount	C _s		
Synchronization	Internal/External Auto-switch		
Gain control	AGC On/Off		
Y adjustable	0.45		
Electronic shutter	1/60-1/100,000sec (NTSC), 1/50-1/100,000sec (PAL), automatic control		
Lens Size	2.8mm-11mm IR LENS		
Lens drive	Video/DC drive		
White balance	ATW/AWC Select		
S/N ratio	>50dB		
Min illumination	0.02Lux/F1.2, 0Lux/IR on		
Video output	1.0V(p-p), 75Ω, BNC		
IR optical output	1,800mW		
IR half intensity beam angle	30°, 60°, 90°		
IR wavelength	850nm		
Power source	12VDC or 24VAC		
IP protection	IP-64		
Operating temperature	-40° C to +50° C		
Dimensions	394mm x 156mm x 135mm (CAMERA) Φ60mm x 120mm (IR Illuminator)		

Feature:

1. Auto light control
2. IR CUT Auto Switch
3. Auto Gain control:AGC(ON/OFF)
4. White:ATW/AWC Select
5. Electric shutter: 1/60-1/100,000sec (NTSC), 1/50-1/100,000sec (PAL)
6. S/N ratio: <50dB
7. Min illumination:0.02Lux/F1.2, 0Lux/IR on
8. Horizontal resolution:420/480/540 TV Lines
9. Camera will Auto switch according to the ray of circumstance between color and white and black.
10. IR Lens can in focus clearly in day and night.

FAQ

Malfunction Phenomena I

Clear image in day time, but hard to see clearly in night, or there is horizontal line in the image, when night vision function startup, the image disappears.

Reason

- A. Lack of electric power
- B. Power line too long
- C. Check beyond camera to see whether there is source of disturbance.
- D. Check the camera lens to see whether there is water vapor or dirty in it
- E. Check whether the transmission distance is too long.
- F. Check the voltage work normally or not

Elimination

- A. Replacing the power
- B. Change the place of the electric power that can take out.
- C. Remove the source of disturbance
- D. Clean the camera lens with lens paper
- E. Choose the best video cable or add an amplifier
- F. Choose the balance voltage to connect the electric power

Malfunction Phenomena II

Blurry image both in the day and night

Reason

- A. focus is not in the correct place

Elimination

- A. adjust the focus of camera lens

Malfunction Phenomena III no video

Reason

- A. Check the electric to see whether it is connected correctly
- B. Must have enough electric power
- C. Check the BNC or video cable to see whether it is connected correctly
- D. The electric is broken

Elimination

- A. Restart to connect the electric power
- B. Choose the steady voltage to connect the electric power
- C. Redo connecting point of the BNC
- D. Change the electric power

Malfunction Phenomena IV The image distortion in the daytime

Reason

- A. The switch of IR cut is abnormal

Elimination

- A. Control the photosensitive simulation and switch more times

Malfunction Phenomena V Night vision effect is bad

Reason

- A. IR power is not enough
- B. The filter switch abnormally

Elimination

- A. Supply the enough power illuminator
- B. Control the photosensitive simulation and switch more times

Malfunction Phenomena VI There is electric torch effect

Reason

- A. Angle of the camera lens can not match to the amount of IR irradiance

Elimination

- A. Instead the bad camera lens with right ones, or right optical lens