

## 1. Product Profile

The CCD camera is mainly used for safety and security surveillance system. With the most updated DSP chip and CCD technology made by professional manufacturers in Japan and Korea, the CCD camera performs crisp, high-quality images which is anti-blooming low smear and vivid even under low illumination whatever it is color camera or B/W camera. In addition, there are many functions for user's option base on his needs.

## 2. Terminal, on-off description

(As per Fig.1, Fig.2, Fig.3, Fig.4, Fig.5, Fig.6)

- ① -Video output connector (BNC connector jack)
- ② -Auto iris lens connector (as per fig. 2)

The functions as follows:

Position	Video	DC drive
1	+12V	DAMP-
2	NC	DAMP+
3	VIDEO	DRIVE+
4	GND	DRIVE-

- ③ -On-off switch

AWB-Auto white balance

ON-ATW (Auto tracking white balance mode)

OFF-Push (Speed-tracking)

when the camera is with mirror image function then (as per fig. 3)

AWB ON OFF ⇒ NOR MIR

NOR — normal image

MIR — mirror image

AGC-Auto Gain Control switch

ON-low AGC

OFF-high AGC

EE/AI-Electronic Exposal/Auto Iris Lens switch

EE-Electronic Exposal (When connect to fixed lens or manual iris lens)

AI-Auto Iris function (When connect to auto iris lens)

BLC-Backlight Compensation

ON-Auto BLC

OFF-Strong BLC

- ④ -Auto Iris Lens Drive switch

Turn to DC-when connect to DC drive lens

Turn to VIDEO-when connect to Video drive auto iris lens

- ⑤ -DC 12V/AC 24V/AC 230V power input

- ⑥ -Phase adjustment

When CCD camera collocates DC drive auto iris lens, the user can obtain a favorable image by adjusting this knob.

- ⑦ -Power indicator

- ⑧ -Exposure Switch

Turn to AUTO-Auto Exposure (When connect to fixed lens or manual iris lens.)

## 3. Technical characteristics

Spec.	Model No.		Day & Night		Day & Night	
	Image Sensor	1/4 inch Color CCD		1/3 inch Color CCD		
Signal System	PAL/NTSC					
Horizontal Resolution	400TVL	420TVL	480TVL			
Minimum Illumination (F1.2)	1.0Lux		0.001Lux	1.0Lux	0.8Lux	
S/N Ratio (AGC off)	>48dB		>52dB	>48dB		
Video Output	1.0V <sub>p-p</sub> /75Ω					
AWB/Others	NOR/MIR	AWB Auto	NOR/MIR	AWB Auto		
AGC	Auto	Low (ON) High (OFF)	Auto	Low AGC (ON) High AGC (OFF)		
EE/AI	Electronic Exposal (EE) / AI fuction (AI)					
BLC	Auto (ON) / Manual (OFF)					
Iris Control	VIDEO	DC / VIDEO				
Sync.System	Internal					
Lens Mount	C/CS					
Power Supply	DC 12V, <150mA /AC 24V, <120mA /AC 230V, <10mA					
Operation Temperature	-20°C~+50°C					
Operation Surroundings	Humidity:40%~95% Presure:86Kpa~106Kpa					

Spec.	Model No.					
	Image Sensor			1/3 inch B/W CCD		
Signal System	CCIR / EIA					
Horizontal Resolution	420TVL	480TVL	600TVL			
Minimum Illumination (F1.2)			0.02Lux	0.001Lux		
S/N Ratio (AGC off)	>48dB	>52dB				
Video Output	1.0V <sub>p-p</sub> /75Ω					
AWB/Others						
AGC	Auto	Low (ON) High (OFF)	Auto			
EE/AI	Electronic Exposal (EE) / AI fuction (AI)					
BLC	Auto	Auto (ON) / Manual (OFF)				
Iris Control	VIDEO	DC / VIDEO				
Sync.System	Internal					
Lens Mount	C/CS					
Power supply	DC 12V, <150mA /AC 24V, <120mA /AC 230V, <10mA					
Operation Temperature	-20°C~+50°C					
Operation Surroundings	Humidity:40%~95% Presure:86Kpa~106Kpa					

Turn to MANU-When connect to video drive auto iris lens.

- ⑨ - (Use for speed way camera) EE/AI and BLC used for control Electronic shutter speed.  
when EE/AI⇒AI and BLC⇒ON, shutter speed is 1/125S.  
when EE/AI⇒EE and BLC⇒OFF, shutter speed is 1/250S.

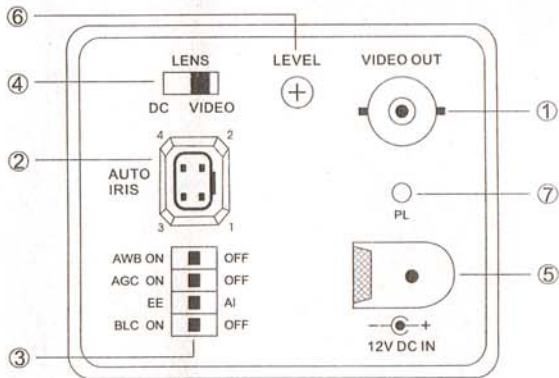


Fig.1: Camera back panel

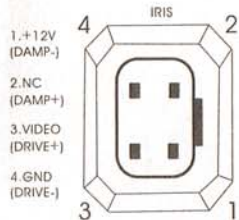


Fig.2: Auto iris lens connector

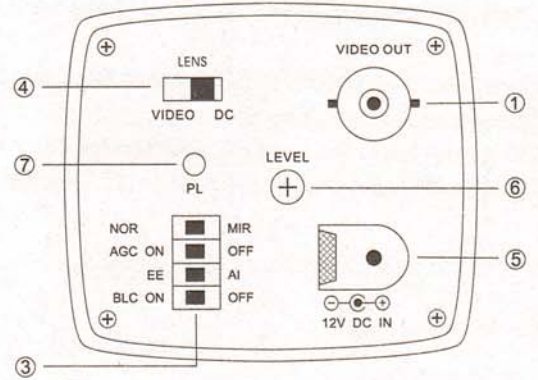


Fig.3: Camera back panel

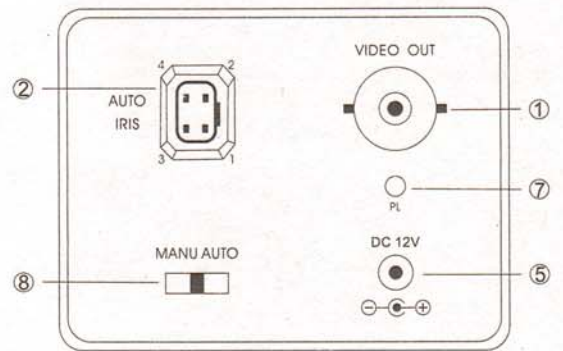


Fig.4: Camera back panel

#### 4. Caution

- Please read the manual carefully and notice the operation voltage and polarity before power is supplied.
- Please pay attention to the operation temperature and circumstance around the camera. Do not expose the device to sun and rain. Try to avoid corroding of dust and moisture.
- Do not touch CCD image sensor with hand directly. Use detergent or soft cloth to clean the camera when dirty.
- Do not remove the housing of the camera especially when the power supply is 230V, otherwise the user should burden any hazard arisen from the improper operation at his own expense.
- Please turn off the AGC switch before the user tests S/N ratio, or he may get a incorrect data.

#### 5. Problems and solutions

##### ● Blurry image

This problem may be caused by the lens connect with cuprum ring improperly. Please use screw driver to loose the screw, then readjust the cuprum ring position and fix it when the image becomes clear again.

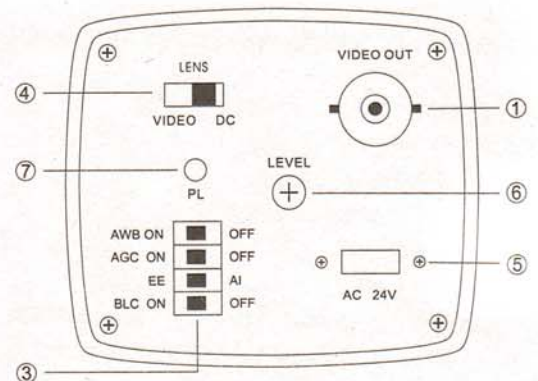


Fig.5: Camera back panel

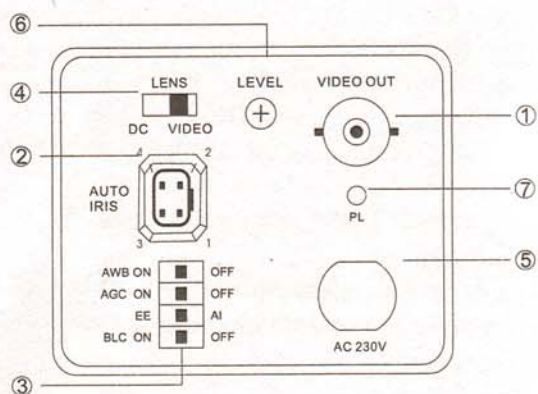


Fig.6: Camera back panel