

INSTRUCTION MANUAL

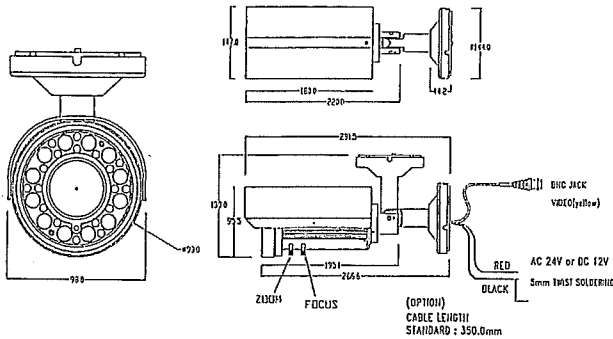
COLOR VANDAL PROOF CAMERA

PT72-CB90HL-TDN2-AC2-30IR

About this manual

Before installing and using the camera, please read this manual carefully. Be sure to keep it handy for later reference.

Dimensions : mm



PRECAUTIONS

- Do not open or modify
Do not open the cabinet exet during maintenance and installation, as it may be dangerous and cause damages.
- Do not put objects inside the unit
Make sure that no metal objects or flammable substances get insdie the camera. It could cause fire, short-circuits or damages.
- Be careful when handling the unit
To prevent damage, do not drop the camera or subject it to strong shock or vibration.
- Install away from electric or magnetic fields.
- Protect from humidity and dust.
- Protech from high temperature
Be careful when installing colose to the ceiling , in a kitcher or boiler room, as the temperature may raise to high levels.
- Cleaning
Dirt can be removed from the cabinet only by wiping it with a soft cloth moistened with a soft detergent solution.
- Mounting Surface
The mounting surface material must be strong enough to secure the camera.

TROUBLESHOOTING

Before sending the camera out for repair, check the items below. If the problem persists after checking these items, contact your service center.

■ If no image appears

- Is the coaxial cable attached securely?
- Are the power and voltage normal?
- Has the iris of the lens inside the camera been adjusted correctly (with the level volume) ?
- Is there adequate illumination?

■ If the image is unclear

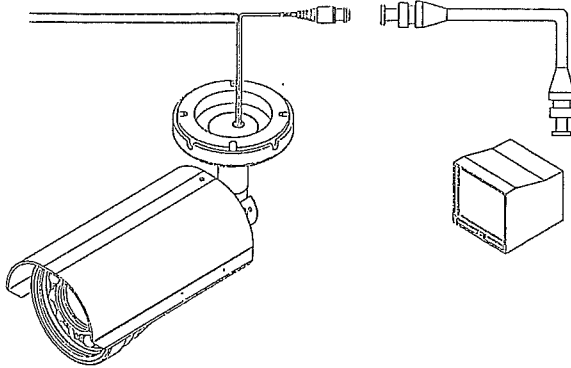
- Is the lens in focus?
- Is the lens dirty?
Dirt of fingerprints on the lens can adversely affect the images. Gently wipe any dirt or fingerprints off the lens with a soft cloth or lens cleaning paper and cleaning fluid (commercially available).
- Is the monitor adjusted correctly?

SPECIFICATION

MODEL	PT72-CB90HL-TDN2-AC2-30IR	
General Spec	NTSC	PAL
CCD Type	1/3" 410K Pixels Color	1/3" 470k Pixels Color
Total number of pxels	811(H) X 508 (V)	795(H) X 596(V)
Light sensiltvity	COŁOR→B/W	4Lux
	B/W→COLOR	10Lux
Video Output	1.0V p-p/75 ohm Composite	
Resolution	550 TV Lines	
S/N Ratio	48dB or more(AGC off)	
Shutter speed	1/60s - 1/100,000s	1/50s - 1/100,000s
Sync System	Internal / External	
White Balance	DIP Switch Select (AWB/ATW)	
Connector	Wire	
Power Input	Wire	
Video Output	BNC Cable	
Electric Spec		
Voltage	DC 12V (11 - 20V) or AC24V (20 - 27V)	
Power Consumption	DC12V : LED (ON: 7.5W OFF: 2.5W)	
	AC24V : LED (ON: 7.1W OFF:2.1W)	
Mechanical Spec		
Lens	5.0-50 mm	
Dimension	98.0 X 291.5mm	
Weight	1.7Kg	
Operation temp	-10°C ~ +55°C	
In storage temp	-20°C ~ +70°C	
Operation humidity	Under 90% (Non-condensing)	

INSTALLATION

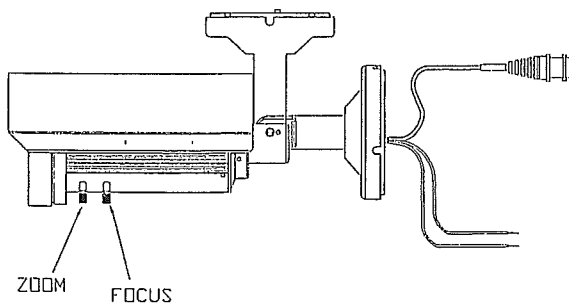
■ CAMERA CONNECTIONS



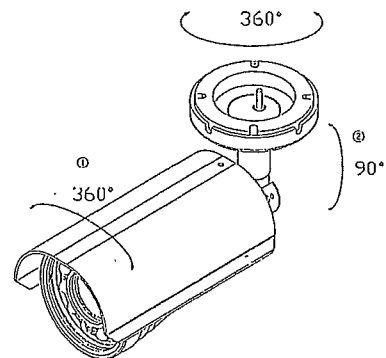
CAUTION :

Check for polarity when using a DC 12V or AC 24V power supply.

■ LENS FOCUS SETING



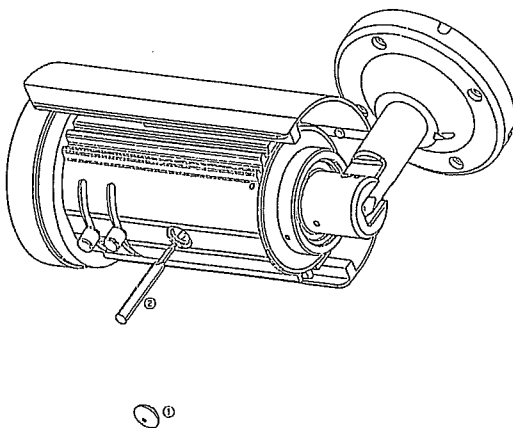
■ CAMERA SETING ANGLE



※ ATTENTION

1. Do not rotate ① more than 360°
2. Do not twist ② many times unnecessarily.

■ AUTO IRIS LEVEL ADJUSTMENT

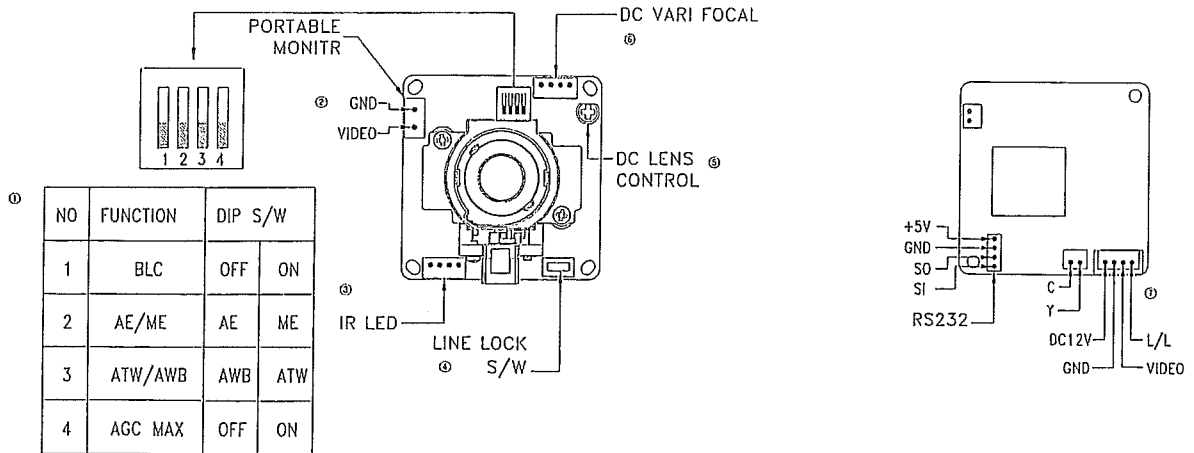


※ ADJUSTMENT

1. Separate opening cap "①" from CAMERA BODY.
2. By using screw driver ② "-" or "+", adjust IRIS level.
3. Assemble opening cap "①" with CAMERA BODY.

CAMERA SETTINGS

■ CAMERA SETTINGS for CB90HL-TDN2 Series Camera



① DIP Switch function

(1) Compensating for backlight

ON	When back light is so bright
OFF	Normal setting

CAUTION : It will be correctly set by adjusting DC Lens control.

(3) Confirming the White Balance

ATW	Use this under light source below 2500K and over 9500K of sodium.
AWB	Use this under light source between 2500K and 9500K of fluorescent lamp, incandescent light

(2) Confirming the iris setting

AE	The default setting when fixed iris lens is installed
ME	The default setting when DC auto-iris lens is installed

CAUTION : The iris setting is preadjusted as the best condition for use at time of factory shipment, so it isn't necessary to change settings

(4) Setting gain control (AGC)

For adjusting the sensitivity of the camera. Use this setting for shooting in dark environments.

ON	Normal setting
OFF	Set this when there is excessive noise

② SECOND VIDEO OUT CONNECTOR (OPTION)

If installer do setting with portable monitor, this connector should be connected.

③ IR LED CONNECTOR

If extra IR LED board is attached, this connector should be connected.

④ Setting monitor synchronization

(AC 24V adaptor users)

Vertical sync disturbance may occur when a selector is used to switch between multiple cameras connected to one monitor.

To prevent vertical sync disturbance, adjust ④.

CAUTION

* When using the DC 12V adaptor, sync setting is set to internal sync.

⑤ Adjusting level volume

If the entire image is too dark or bright, or the backlight compensation is not correct even after ①-(1) is set to "ON", you need to adjust the level volume.

CCW (Low)	Closes the lens iris, making the entire image darker
CW (High)	Opens the lens iris, making the entire image brighter

⑥ DC VARIFOCAL CONNECTOR

This should be used with ⑤ by DC IRIS LENS.

⑦ POWER CONNECTOR

Connect with AC/DC POWER BOARD attached inside.

CAMERA FEATURES

■550TV Line High Resolution

- It's truly showed 550TV Line.

■True Day Night function

- True day/night by moving OLPF and glass.
- At night[B/W mode], the color is killed.

■IR Lamp Synchronizing

- Camera will be in B/W position when IR Lamp on [Our IR Lamp Board].
- 18pcs IR Lamp(5 ϕ , 850nm, 25 $^{\circ}$) are inside.
- 12pcs IR Lamp(10 ϕ , 850nm, 17 $^{\circ}$) are inside.

■Day Night Decide by CDS

- The IR Lamp boards has CDS for light sensing.

■All Weatherproof

- IP66 Certificate is obtained.

■Tool-Less Structure

- It doesn't require any tool for user's adjustment.
- Lens Focus and Zoom are easily adjusted from outside.

■Very-Wide-Pan-&-Tilt-Movement

- 2 arms mounting bracket offers very wide vertical(90 $^{\circ}$) and horizontal(360 $^{\circ}$) movement.

■Reliable Cable treatment

- The cable is fully sealed with housing from top to the bottom.
- No way for a cable to be twisted.
- 2 arms structure of mounting bracket solved this possibility.

■Extremely Wide Varifocal Lens

- Dc-controlled iris circuit.
- Vari-focal(f5-50mm)Lens provides extremely wide view.

■Line Lock Mode

- Line-lock mode enables external synchronizing vertical phases with the AC power supply.

■Digital Signal Processor

- Regulated and excellent colored picture is provided by quality-reliable digital signal processor.

■Wide voltage Input operation

- It allows wide range of voltage input upon various needs on operating circumstances.
[DC12V (11.0V~20.0V) , AC24V (20.0V~27.0V)]