



# **CAMERA SERIES**

**User Manual**

# Foreword

Thank you for purchasing this product.

This manual refers to the introduction and description of DIS and CCD CCTV camera features.

This product adopts latest chipset solution, providing clear and sharp video as well as reliable product quality.

Please read all the contents in this manual carefully before using this product.

## Precautions

- ❖ Do not install camera under extreme temperature condition. (Use it within  $-10^{\circ}\text{C}$  ~  $+50^{\circ}\text{C}$  temperature conditions. Make sure good ventilation in camera installation environment.)
- ❖ Do not install or operate the camera under extreme humid condition. (It will decrease the picture quality of camera.)
- ❖ Don't use it under strong light variation conditions. (Camera can't be used under strong light or strong flicker condition)
- ❖ Don't touch the lens of camera. Lens is important component. Make sure it is clean.
- ❖ No dropping and falling.
- ❖ Don't make camera under strong light. (It will damage the image sensor.)
- ❖ Don't allow camera subject to rain or beverage. (Avoid any liquid infiltrate into the camera. It will damage the PCB of camera.)
- ❖ Don't use camera under the condition of strong magnetic field. It will interfere the camera sensor.
- ❖ Make sure camera is connected with power correctly.

## CCD CAMERA FEATURES

### ●Day/Night

According to the intensity of light in day and night, it can adjust color and black/white modes automatically

### ●ELC

ELC can adjust shutter speed within 1/60~1/120,000.

### ●Mask Area Setup

This function can be set on the area which required mask, to protect privacy.

### ●DC/VIDEO Lens Drive

Selecting the lens' drive mode depends on the different lens.

### ●OSD Menu

Easy to set up the OSD of camera via Monitor

### ●Other functions

Motion Detection, Mirror function, Image Sharpness, Mask privacy etc.

## DIS PRODUCTS FEATURES

Adopting the latest DIS image sensor, smart and shockproof, it is the best choice of CCTV System.

### ●IR-CUT

With IR-cut, it can work normally in daytime and IR Filter in night. It can work all day with the same clear image.

### ●Auto Electronic Shutter

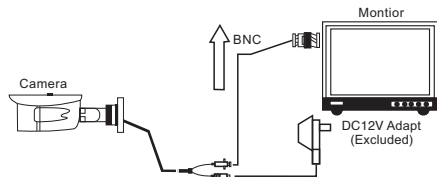
AES can revise the sensitive time of DIS. whatever the light is strong or weak, it can catch clear image and keep sensitive.

### ●Back Light Compensation

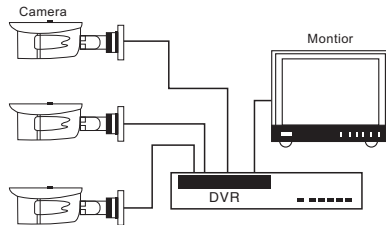
This is a new digital light intensity control function. Adopting DPS technology, it can solve dark issue through changing the aperture and optical gain.

## SYSTEM CONNECTION

A: One monitor connects to one camera.



B: One Monitor connects to two or more cameras.



## OPERATION STEPS

1. Guarantee the power system is normal.
2. Guarantee the Camera and Monitor's power supply is OK, Picture by the Camera display on the Monitor.
3. Avoid camera to the eave or roof, it will bring reflection, effect the image quality.

## COMMON FAULTS

When the camera can't work properly, please check it as the following solutions. If it still can't be solved, please contact us.

Problems	Method
No image on the monitor	connect the power supply correctly connect the BNC cable correctly When using auto iris lens, please choose the right DC /video drive mode
Unclear image	Install clear lens, using soft cloth or paper for lens wiping Adjust the contrast ratio of the monitor Don't let the camera lens straight to the sun, adjust the camera installation place when this situation happen Re-adjust the back focal length
Dark image	Adjust the radiance of monitor. Adjust the terminal impedance to be 75Ω Choose auto iris lens or adjust the lens' iris
Heating or black stripe	Guarantee the power supply is suit for the camera, check its current / voltage
Color difference	Check the W/B setting
Shaking image	1. Check the camera is straight to the sun or LFL 2. Check the camera's auto iris lens is normal Check the connection between camera and lens (for box camera)
Motion detection malfunction	1. Check the motion detection function is enabled 2. Check the M/T function's sensitivity is too low or not 3. Check the M/T area setting

## CCD PRODUCT SPECIFICATIONS

Image Sensor	CCD 960H	CCD 760H	CCD 510H
Effective Pixels	976(H) × 582(V)/752(H) × 582(V)/510(H) × 582(V)		
TV System	PAL/NTSC		
Horizontal Resolution	800TVL	700TVL	650TVL 600TVL 480TVL 420TVL
Usable Illumination	0LUX(IR on)		
S/N Ratio	≥ 52dB		
Video Out	1.0Vp-p/75 Ω		
Mirror Mode	Horizontal		
Motion Detection	8 positions setting		
Privacy Mask	8 positions setting		
Sharpness Control	Off/Low/Middle/High		
Gain Control	Auto/Manual		
White Balance	Auto/Manual		
Back Light Compensation	Auto/Manual		
Electronic Shutter	Auto/Manual		
Lens Control	DC/VIDEO		
Lens Mount	C/CS/M12		
Power	DC12V±5%		
Operation Temperature	-10°C ~ +50°C		

## DIS PRODUCT SPECIFICATIONS

Image Sensor	1/3"DIS	1/4"DIS	1/3"SONY IMAX
Effective Pixels	1280(H)×1024(V)/752(H) × 582(V)/510(H)×582(V)		
TV System	PAL/NTSC		
Horizontal Resolution	1080TVL/900TVL/800TVL/700TVL/600TVL		
Usable Illumination	0LUX(IR on)		
Video Out	1.0Vp-p/75Ω		
Auto Gain Control	Auto		
Electronic Shutter	1/50(1/60)~1/100000sec		
Lens Mount	C/CS/M12		
Lens	2.8mm/3.6mm/6mm/8mm/ 12mm/16mm		
IR Range	10-80m		
Power	DC12V±5%		
Operation Temperature	-10°C ~ +50°C		
Operation Humidity	≅85%		
Waterproof Level	IP66		