# **Waterproof IR Zoom Camera**

# **USER GUIDE**



Please read the "USER GUIDE" carefully before you use this product.

# Catalogue

Product introduction	3
Note	
Warning	
Friendly suggestion	
OSD Menu	4
1. CAMERA ID	
2. FOCUS	
3. WB MOD	
4. AE MODE	5
5. OSD DIS	
6. SPECIAL	
7. DAY / NIGHT	
8. RESET	
9. EXIT	
OPERATION	6
1. Enter the main menu	_
2. Address code	
3. Protocol	
4. Baud Rate	
5. Zoom	
6. IR ON/OFF	
PICTURE OF BACK PLATE INTERNAL STRUCTURE	7

### 1. Products introduction

#### Thank you for using our IR ZOOM CAMERA

Our products use perfect function design of high performance digital DSP, stable performance. The key parts, we use world famous bands, like electrical motor, zoom module, electrical ring, IR lights components. With the perfect electrical circuit design and convenient installation method, make it can tracing objectives fast and correctly. The skillful design of hardware reducing failure rate as its possible. The human design of software make the operation become simple and convenient. These advantages make the system become convenient for installation, using, maintaining, and working stably. We believe our products have excellent performance, so it can be the best in the industry! These products can be applicable to intelligent building, bank security protection, city roads, airport, quay, station, residential district, industrial factory and mine and so on.

#### **Notes**

- A. Please read the installation instructions before you operate it;
- B. Please comply with safe operating instructions when you operate it;
- C. Only professional and experienced worker can operate the installation and maintain works of it;
- D. Please use reliable tools, those tools which of poor quality maybe causing dangerous situation;
- E. Please ensure the installation and using environment is in line with our products demands;
- F. Please check the space for install the supporter, including strength and toughness, the weight support capacity of substrate at least up to 5 multiples of both products and parts;
- G. Please save the packaging of product, in order to package and transport it in the future.

#### Warning

- A. Don't put it near to inflammable and explosive things, please keep it far away dangerous areas;
- B. Don't put it on the unstable or supporter:
- C. Don't let any foreign material and liquid into the machine, that will damage it;
- D. Don't try to use wrong power or adapter to supply electricity, it's power voltage is DC 12V;
- E. Please recognize the RS-485 control wire:
- F. Don't try to supply power for it before you have not finish the installation;
- G. Don't try to take it apart to repair;
- H. Don't use corrosive cleaner to clean it;
- I. Please don't let the camera face to strong light directly, like strong lamp light, strong sunlight, etc. Otherwise its CCD maybe damaged forever;
- J. Please do not let it bear weight pressure or strong hit, and strong shake;
- K. Please read the introductions carefully before you operate it.

#### Friendly suggestions

- 1. Please use high quality and safe power supply, our standard power adapter should be near to the camera, the best distance is within 3m, to avoid too much attenuation, please make sure your power supply is enough.
- 2. We suggest you to use high quality wires for both power and transmission, and avoid to tie a knot wires, please try your best to wiring smoothly, sometimes you have to connect many wires together, please be careful to make the connection point be perfect, don't think one core is not important, don't just tie them together, please make all cores one-to-one. Please consider to add electronic resistance and UPS when you find the power supply is not normal.
- 3. Please never carry the wire which is outside the dome, and don't let that wire to bear the camera weight.
- 4. We suggest you'd better to do some grounding and lightning protection measures, because camera have control cable, it is easier to be hit by thunder and lightning than other normal camera.

# **OSD MENU**

**CAM ID** 

**FOCUS** 

**WB MODE** 

**AE MODE** 

**OSD DIS** 

**SPECIAL** 

**DAY/NIGHT** 

#### 1 CAM ID

#### 2 FOCUS

- (1) FOCUS MODE: AUTO / PUSH / MENU, default is AUTO.
- (2) SENSITIVITY: HIGH / MID / LOW, default is LOW.
- (3) FOCUS LIMIT: 20 CM / 1 M / 5 CM, default is 20 CM.
- (4) LENS INIT: 5 K / 10 K / 15 K / 20 K / EX EC / OFF, default is 5 K.
- (5) ZOOM START: 1-30, default is 1.
- (6) ZOOM END: 1-30, default is 30.

#### 3 WB MODE (white balance)

- (1) WB MODE: INDOOR / MENUAL / AUTO / OUTDOOR, default is AUTO.
- (2) BLUE: 0-255, default is 128/
- (3) RED: 0-255, default is 128.

#### 4 AE MODE (auto exposure)

- (1) AE MODE: AUTO / MENU, default is AUTO.
- (2) AGC: 1-4, default is 1.
- (3) BLC: ON / OFF, default is ON.
- (4) SUTTER: 1 / 50 1 / 10 K, default is 1 / 50.

#### 5 OSD DIS

- (1) MODE: PUSH / ON / OFF, default is PUSH.
- (2) CAM ID: OFF / ON, default is OFF.
- (3) FOCUS: ON / OFF, default is ON.
- (4) ZOOM: ON / OFF, default is ON.

#### 6 SPECIAL

- (1) MIRROR: OFF / ON, default is OFF.
- (2) BRIGHTNESS: 0 255, default is 75.
- (3) SHARPNESS: 1 8, default is 4.
- (4) SATURATION: OFF / 1 8, default is 7.
- (5) LANGUAGE: ENG / 中, default is ENGLISH.

#### 7 DAY / NIGHT

- (1) DE-NOISE: OFF / ON, default is OFF.
- (2) DAY / NIGHT: ATUO / DAY / NIGHT / SYNC, default is AUTO.

#### 8 RESET

OFF / ON

#### 9 EXIT

## **Operation:**

This camera can be controlled by keyboard RS-485 way.

#### 1. Enter the main menu:

Use the control keyboard to go / call preset #59. Or open the back plate to use the inside control plate, detailed buttons as follows picture.

#### 2. Address code

We already set the camera's address code before send it to you, you can find the label which we sticked to the camera on its back plate. If you want to change it, you can open the back plate to use the control plate's buttons.

#### 3. Protocol

This camera can use 2 protocols for control, PELCO\_D / PELCO\_P, default is PELCO\_D, you can use keyboard to enter the menu and set it, move keyboard's joystick up / down for choose, move joystick left / right for change value.

#### 4. Baud Rate

This camera can use baud rate as 2400 bps / 4800 bps / 9600 bps / 19200 bps, default is 9600 bps, you can use keyboard to enter the menu and set it, move keyboard's joystick up / down for choose, move joystick left / right for change value.

#### 5. Zoom

You can use keyboard's buttons of "ZOOM +" & "ZOOM -" to change zoom.

#### 6. IR ON / OFF

This camera will auto control the IR on / off according to environment brightness, the IR LED have 2 levels, default is when you zoom camera to 10X, the IR will change level automatically. Before 10X, only the 2 IR LED on the top will works, after 10X, only the 2 IR LED on the bottom will works.

## Below is the picture of back plate internal structure.



