

Enlivened Technology . Digital and Smart Life

# MANUAL

IR WEATHERPROOF CAMERA

V2.0

Thank you for choosing our product, please read this user manual carefully before installation and operation.

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## 1. Instructions

### 1.1 Statement

This manual is intended to provide guidance to installation and operation of our IR Camera, and shall be amended from time to time according to our product development.

### 1.2 Safety Instructions

Warning: To prevent fire or electric accident, keep this product away from damp or rainy place.

Please observe all safety markings when using this product.



Must follow the user manual for installation and operation



May cause severe electric accident

### WARNING :

Warning: Abiding by FCC Part 15 stipulations, this product has been approved and categorized as under Class A digital devices. We will not be held responsible for any risk or lose from unauthorized operation or modification.

## 2. Operation Guide

### 2.1 Video Cable

1.0Vp-p75  $\Omega$  Video Signal

### 2.2 Power/RS485 Cable

Serial No	Color	Description	Input / Output	Note
1	Red	Power(+)/RS485 A	Input	DC +12V
1	Black	Power(-)/RS485 B	Input	DC -12V

### 2.3 Zoom Control Cable

Red	Black	Brown	Purple	Orange	Grey
DC +12V	DC -12V	Public	Zoom	Focus	Iris

# **SPECIFICATIONS**

Model	30X AUTO FOCUS				
Signal System	PAL/NTSC				
Image Sensor	1/4"SONY CCD	1/3"SONY CCD			1/3"SONY Effio-E CCD
Horizontal Resolution	480TVL	470TVL	480TVL	540TVL	700TVL
Lens	F=3.9~85.8mm				
Mini Illumination	OLUX (IR ON)				
S/N Ratio	More than 48dB			More than 50dB	
IR Distance	80~100M				
Day/Night	B&W				
IR LED	8 Pcs EPLED				
Water Resistance	IP65				
Video Output	1.0Vp-p75Ω				
Foucs	AUTO FOCUS				
OSD	N/A			English/Chinese	
Working Temperature	-10°C to+50°C				
Power Supply	DC12V/3A				
Power Consumption	12W				

# **SPECIFICATIONS**

Model	80-100M				
Signal System	PAL/NTSC				
Image Sensor	1/3"SONY CCD			1/3"SONY Effio-E CCD	
Horizontal Resolution	470TVL	480TVL	540TVL	600TVL	700TVL
Lens	8/12/16/25mm Lens Optional				
Mini Illumination	OLUX (IR ON)				
S/N Ratio	More than 48dB		More than 50dB		
IR Distance	80~100M				
Day/Night	B&W				
IR LED	8 Pcs EPLED				
Water Resistance	IP65				
Video Output	1.0Vp-p75Ω				
AGC	AUTO				
OSD	N/A			English/Chinese	
Working Temperature	-10°C to +50°C				
Power Supply	DC12V/3A				
Power Consumption	12W				



## SPECIFICATIONS

Model	70-80M				
Signal System	PAL/NTSC				
Image Sensor	1/3"SONY CCD			1/3"SONY Effio-E CCD	
Horizontal Resolution	470TVL	480TVL	540TVL	600TVL	700TVL
Lens	8/12/16/25mm Lens Optional				
Mini Illumination	0LUX (IR ON)				
S/N Ratio	More than 48dB		More than 50dB		
IR Distance	70~80M				
Day/Night	B&W				
IR LED	4 Pcs EPLED				
Water Resistance	IP65				
Video Output	1.0Vp-p75Ω				
AGC	AUTO				
OSD	N/A			English/Chinese	
Working Temperature	-10°C to+50°C				
Power Supply	DC12V/1.5A				
Power Consumption	6W				

## SPECIFICATIONS

Model	50-60M				
Signal System	PAL/NTSC				
Image Sensor	1/3"SONY CCD			1/3"SONY Effio-E CCD	
Horizontal Resolution	470TVL	480TVL	540TVL	600TVL	700TVL
Lens	8/12/16/25mm Lens Optional				
Mini Illumination	OLUX (IR ON)				
S/N Ratio	More than 48dB		More than 50dB		
IR Distance	50~60M				
Day/Night	B&W				
IR LED	4 Pcs EPLED				
Water Resistance	IP65				
Video Output	1.0Vp-p75Ω				
AGC	AUTO				
OSD	N/A			English/Chinese	
Working Temperature	-10℃ to +50℃				
Power Supply	DC12V/1.5A				
Power Consumption	3W				

## SPECIFICATIONS

Model	30-40M				
Signal System	PAL/NTSC				
Image Sensor	1/3"SONY CCD			1/3"SONY Effio-E CCD	
Horizontal Resolution	470TVL	480TVL	540TVL	600TVL	700TVL
Lens	8/12/16/25mm Lens Optional				
Mini Illumination	0LUX (IR ON)				
S/N Ratio	More than 48dB		More than 50dB		
IR Distance	30-40M				
Day/Night	B&W				
IR LED	1 Pcs EPLED				
Water Resistance	IP65				
Video Output	1.0Vp-p75Ω				
AGC	AUTO				
OSD	N/A			English/Chinese	
Working Temperature	-10°C to+50°C				
Power Supply	DC12V/1.5A				
Power Consumption	3W				

## SPECIFICATIONS

Model	IR Varifocal Waterproof Camera		
Signal System	PAL/NTSC		
Image Sensor	1/3"SONY CCD		1/3"SONY Effio-E CCD
Horizontal Resolution	470TVL	480TVL	700TVL
Lens	8/12/16/25mm Lens Optional		
Mini Illumination	0LUX (IR ON)		
S/N Ratio	More than 48dB		More than 50dB
IR Distance	40~50M		
Day/Night	B&W		
IR LED	42 Pcs $\phi$ 5LED /36 Pcs $\phi$ 8 LED		
Water Resistance	IP65		
Video Output	1.0Vp-p75Ω		
AGC	AUTO		
OSD	N/A		English/Chinese
Working Temperature	-10°C to +50°C		
Power Supply	DC12V/1.5A		
Power Consumption	6W		

# *SPECIFICATIONS*

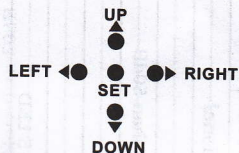
Model	Licence Plate Recognition Camera	
Signal System	PAL/NTSC	
Image Sensor	1/3"SONY CCD	1/3"SONY Effio-E CCD
Horizontal Resolution	420TVL	700TVL
Lens	8/12/16/25mm Lens Optional	
Mini Illumination	OLUX (IR ON)	
S/N Ratio	More than 48dB	More than 50dB
IR Distance	20M	
Day/Night	B&W	
IR LED	2 Pcs EPLED	
Water Resistance	IP66	
Video Output	1.0Vp-p75Ω	
AGC	AUTO	
OSD	N/A	English/Chinese
Working Temperature	-10°C to +50°C	
Power Supply	DC12V/1.5A	
Power Consumption	3W	

# *SPECIFICATIONS*

Model	25/30M IR Waterproof				
Signal System	PAL/NTSC				
Image Sensor	1/3"SONY CCD			1/3"SONY Effio-E CCD	
Horizontal Resolution	470TVL	480TVL	540TVL	600TVL	700TVL
Lens	3.6/6/8mm Lens Optional				
Mini Illumination	OLUX (IR ON)				
S/N Ratio	More than 48dB		More than 50dB		
IR Distance	25~30M				
Day/Night	B&W				
IR LED	24 Pcs $\phi$ 5LED /36 Pcs $\phi$ 5 LED				
Water Resistance	IP66				
Video Output	1.0Vp-p75 $\Omega$				
AGC	AUTO				
OSD	N/A			English/Chinese	
Working Temperature	-10°C to+50°C				
Power Supply	DC12V/1.5A				
Power Consumption	3W				



## 4. Effio-E OSD Guide



### 4.1 Control Guide

- Press "SET" to enter setup menu or sub menu.
- Press "UP" and "DOWN" to select between sub menus, press "LEFT" and "RIGHT" to set each sub menu.
- After setting, save and reboot the camera.

### 4.2 OSD Interface

SETUP MENU 1	
LENS	MANUAL
SHUTTER/AGC	AUTO ↓
WHITE BAL	ATW ↓ or PUSH
SACKLIGHT	OFF
PICT ADJUST	↓
ATR	OFF
MOTION DET	ON ↓
NEXT ↓ (go to next page)	
EXIT ↓	SAVE ALL (to save)

SETUP MENU 2	
PRIVACY	OFF
DAY/NIGHT	AUTO ↓
NR	↓
CAMERA ID	OFF
SYNC	INT
LANGUAGE	ENGLISH ↓
CAMERA RESET	
BACK (return to previous page)	
EXIT	SAVE ALL (to save)

After searching, double click the device to modify some basic parameters.



## 5. Tips and Troubleshooting

### 5.1 Tips

1. Keep the glass of the camera lens cover clean to maintain the performance of the Camera.
2. Do not open the housing, otherwise the camera will not be weatherproof.
3. Do not position the camera lens at strong light.
4. Make sure the electrical voltage is correct.
5. Do not put the camera in a working temperature more than 50°C without ventilation.
6. Do not use corrosive liquid to clean the camera.

### 5.2 Troubleshooting

1. Problem: Bright spot smears on the monitor.

Cameras are to view light reflected from the scene being viewed. When you have a bright light source in the picture, it may produce a bright white spot on the monitor and a vertical line through it. This is a problem especially at night.

Solution: Reposition the camera to avoid bright light sources in the scene.

2. Problem: Picture is snowy or snowy bars roll on the screen.

The coax cable is probably picking up electrical, magnetic, or radio interference. This is very prevalent when using inexpensive cable.

Solution: Re-route cables away from problem area where might be interference. Keep all low voltage and coax cabling away from existing mains and data cable routes and use only good quality cable for example RG59BU. Also video signals may be carried using cat5 cable via (BALUNS) this will eliminate most line-borne interference.

3. Problem: Picture rolls when switcher changes

Line locked cameras get synchronization from the AC power supply they use. If camera power supplies are out of phase during switching, you will notice a rolling between frames from one camera to another. This can be confusing to the person monitoring the system. It can also create problems for your time lapse recorders.

Solution: Power cameras from the same phase on your electrical panel or use cameras that have a phase adjustment control.