

# Installation and Operating Instruction Manual

## NIGHT VISION IR BULLET CAMERA



ERN-R3660EN/R3660EP

Thank you for your purchase of this product. Before attempting to connect or operate this product, please read these instructions carefully. Product specifications and its contents subject to change without any prior notice. The picture is for reference, the object as the standard.

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### 1. General Information

#### ► Safety Precaution

1. Read these instructions carefully before commissioning the camera in order to avoid damages caused by improper installation or use.
2. Do not harm the camera and avoid striking, shaking, etc. The camera could be damaged by improper handling or storage.
3. Use a dry cloth to clean the camera front glass cover when dirty. When the dirt is hard to remove, use a mild detergent and wipe gently. Then wipe off the remaining detergent with a dry cloth.
4. Do not aim the camera at bright objects. Whether the camera is in use or not, never aim it at the sun or other extremely bright objects. Otherwise, blooming or smears may be caused.
5. Operate the camera with the designated voltage only.
6. Use the camera at temperatures within -10 C to +50 C and humidity below 90%.

#### ► Package Contents

1. IR Bullet Camera
2. Operating Instructions
3. Mounting Template Sticker

**Caution**  
To Reduce the risk of electric shock, do not remove cover. No user serviceable parts inside. Refer servicing to qualified service personnel.

### 2. Installation of Camera

#### ► Camera Connections

##### 12V DC Power Supply

Use standard 12V DC output power supply with 2.1mm standard DC power female pin. Before connect power check power supply polarity (+ and -).



##### Video Output Connection

Use standard 75Ω Male BNC pin terminate with Co-axial video cable then connect to camera video out BNC Female pin.

#### ► Installation of Camera

**Mounting Template Sticker:** The mentioned technical drawing is for reference only. Actual size of Mounting Template Sticker is matched with bracket. Stick Mounting Template Sticker supplied for drilling the mounting hole on the mounting surface.

#### ► Tips for Camera Location

1. Never expose the camera to direct sunlight without additional camera housing. Keep sufficient distance to direct heat sources.
2. Never install the camera at humid, oily or dusty locations without using an additional housing. (Without additional housing the camera is not suitable for outdoor use)
3. Do not aim the camera towards indoor lighting, the windows, the sunlight or the sky. (To get good pictures, camera and light should be aimed towards the object)
4. Avoid peak light as background (Also caused by reflection)

### ► Dimension

### 3. Technical Specification

Model Number	ERN-R3660EN/P
<b>Video</b>	
Image Sensor	1/3" Digital Image Sensor
Lens	4.0 mm Fixed lens
Effective Pixel	NTSC:768 x 494 PAL:752 x 582
Horizontal Resolution	600 TVL
Minimum Illumination	0.8Lux@F1.2
Scanning Frequency (H)	NTSC : 15.734KHz/PAL : 15.625KHz
Scanning Frequency (V)	NTSC : 59.94KHz/PAL : 50Hz
Gamma	0.45
S/N Ratio	More than 65db
Video Output	1V p-p, 75Ω
Sync System	2:1 Internal
FL-FREE	Auto
IR LED	36 IR LED
IR Distance	25~30 Meter
IR Wave Length	850nm
Diameter	Ø 0.5
<b>Operational</b>	
IRIS	Electronically
AGC	Auto
BLC	Auto
Exposure Mode	AES
Shutter Speed	NTSC : Auto 1/60s-1/120,000s PAL : Auto 1/50s-1/120,000s
White Balance	ATW
<b>Electrical</b>	
Power Supply	12V DC Standard ±10%
Current Consumption	<100mA
IR Consumption	<100mA
<b>Environmental</b>	
Operating Temperature	-10°C ~ 45°C
Humidity	95%
Protection Class	IP66

Dimensional	
Housing	Outdoor Wall Mount & Ceiling Mount with Cable Managed Bracket
Weight	670g
Dimension	150(L) x 70(H) x 70(W)

### 4. Troubleshooting

Error	Cause
No Picture	Check supply voltage, check power cable and video cable
The picture is noisy	Insufficient light (Properly adjusted to the camera)
The picture is too bright	Too much peak light, change camera location or activate back light function of the camera
The picture is not sharp	Lens focus not adjusted properly
The picture is distorted	Different GND potentials between camera and monitor (Bad connection)
Ghost Image	Wrong 75 termination, shield of video cable interrupted.
No Night Vision	Check IR LED working or not
Night Vision over Exposure	Check Camera Angle installed properly or whether any reflection coming from any object.

### 5. Cleaning and Care

- Before you start to clean the camera body, disconnect the unit from power supply.
- For reasons of electrical safety never clean the camera with water or other liquid matters and never put the camera under water.
- To clean use a soft dry cloth. Cleaning the camera inside is strictly forbidden and may only be done by your authorized dealer.
- Since all camera functions are self adjusting and the camera does not contain any parts or components that are subject to wear. We advice you not to open the camera (except for the flap for settings), unless the camera appears to be defective.

### 6. Maintenance and Support

#### 1. How to request after-sale service?

Whenever you want to send repairing material back to us kindly use the same channel from where you purchased the material and must be attached with Return Material Authorization (RMA) Form. Download it from our website.  
<http://www.eyerisdigital.com/RMAForm.pdf>

#### 2. Following cases should be paid even within the warranty period.

- A) When defects are caused by the careless handling of the user.
- B) When improper or unauthorized repairs are done or when the inside is modified or damaged.
- C) Defects caused by natural disaster or power problem.

**Technical Support:** For any type of product operation, Function, Installation related queries or want to know more about our product details specification or function, Visit our website or E-mail to us.

<http://www.eyerisdigital.com/support.html>