REVOTECH IPIR-POE-FHW

REVOTECH PIR POE IP Camera User Manual

Model: IPIR-POE-FHW

1. Introduction

Thank you for choosing the REVOTECH PIR POE IP Camera. This manual provides essential information for the proper installation, operation, and maintenance of your security camera. Please read this manual thoroughly before using the product and retain it for future reference.
This camera is designed for indoor security applications, featuring a 3MP resolution, invisible IR night vision, and Power Over Ethernet (POE) functionality for simplified installation.

2. Safety Information

To ensure safe operation and prevent damage, please observe the following safety precautions:

- **Power Supply:** This product is powered by POE (802.3af Standard 48V POE Switch). An auxiliary power connector is available for use with a conventional 12V 2A power supply if POE is not utilized. Ensure the power source meets the specified requirements.
- **Installation Environment:** This camera is designed for indoor use only. Avoid exposing the camera to water, moisture, extreme temperatures, or direct sunlight.
- **Handling:** Do not drop or subject the camera to strong impacts. Handle with care.
- **Cleaning:** Use a soft, dry cloth for cleaning. Do not use harsh chemicals or abrasive cleaners.
- **Disassembly:** Do not attempt to disassemble or modify the camera. Unauthorized modifications will void the warranty and may cause damage or injury.
- **Cable Management:** Ensure all cables are properly routed and secured to prevent tripping hazards or damage.

3. Package Contents

Verify that all items are present in the package:

- 1 x REVOTECH PIR POE IP Camera
- 1 x User Manual (English)

- 1 x Screws Set

Note: This product does not include a power unit if not using POE.

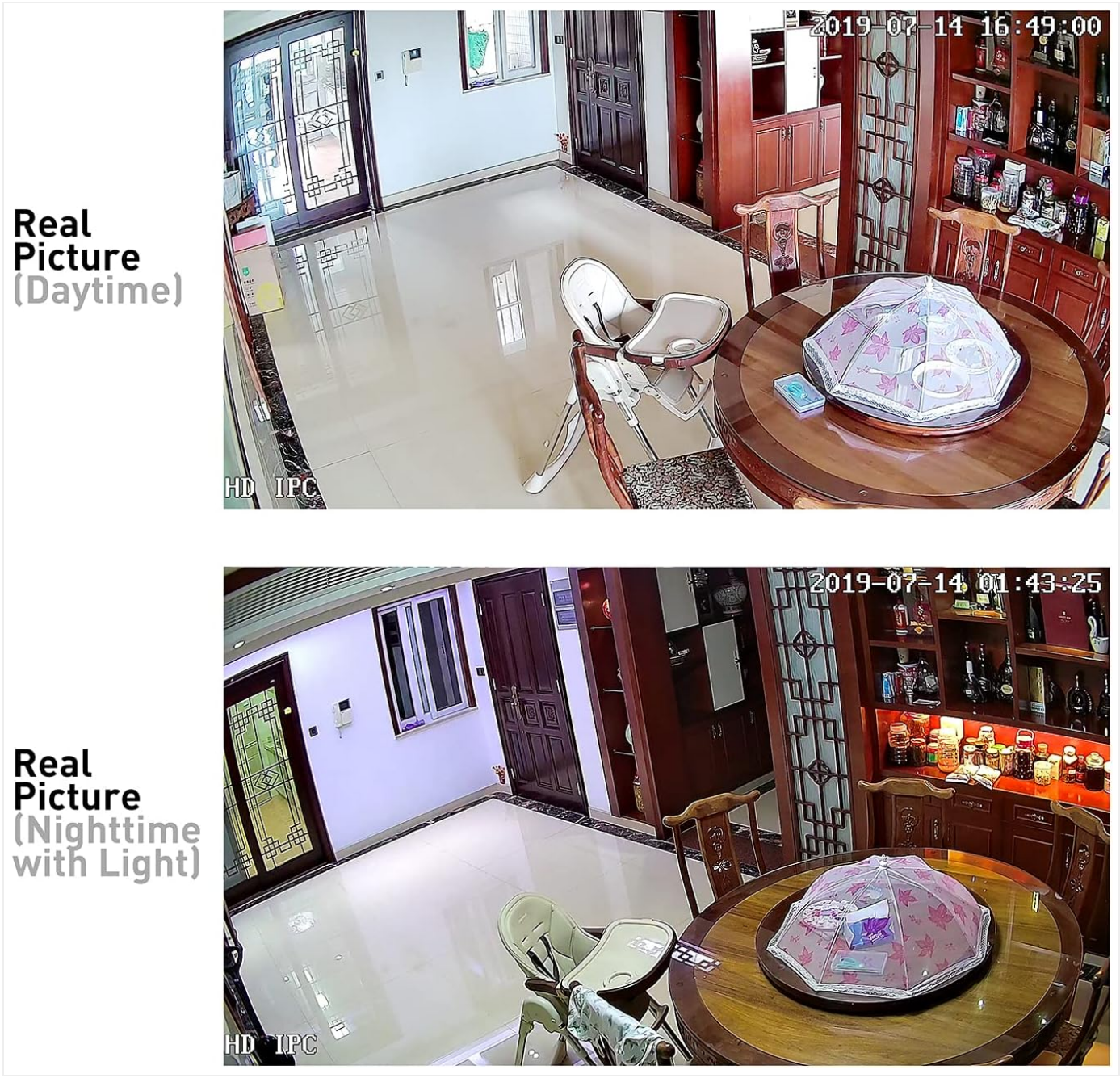


Figure 3.1: Package Contents. The image displays the camera unit, its retail box, a set of mounting screws, and the user manual.

4. Product Overview

The REVOTECH PIR POE IP Camera (Model: IPIR-POE-FHW) is a compact and efficient security solution. Key features include:

- **Resolution:** 3.0 Megapixel (2304 x 1296P) 1/3" CMOS Sensor
- **Lens:** 3.7mm Pinhole Lens with approximately 80-degree viewing angle
- **Night Vision:** 48pcs 940nm Invisible LED IR Night Vision (10-15m range)
- **Power:** Supports 802.3af Standard 48V POE; auxiliary power connector for 12V DC
- **Compression:** H.265/H.264 dual encode for efficient bandwidth and storage use
- **Connectivity:** 10M/100M mbps Ethernet (RJ-45), ONVIF Compliant Port: 6688

- **Features:** P2P Remote Viewing, Motion Detection, Email Alarm Function
- **Design:** PIR Type Shell, ABS Plastic Material



Figure 4.1: Front view of the REVOTECH PIR POE IP Camera. The camera is white with a rectangular PIR sensor window at the top and small pinhole lens and microphone holes at the bottom.



Figure 4.2: Camera Dimensions and Components. This diagram illustrates the camera's physical dimensions (4.72 inches height, 2.76 inches width) and labels key features such as the 940nm invisible LEDs, 3.7mm pinhole lens, built-in microphone, mounting bracket, camera cable, auxiliary power supply port, and the POE network cable connection.



Figure 4.3: POE Support. This image highlights the camera's Power Over Ethernet (POE) capability, showing the camera alongside an internal circuit board, emphasizing its stable and reliable power supply via a single network cable.



Figure 4.4: Invisible IR Night Vision. This image illustrates the camera's 940nm invisible LED night vision feature, showing how the camera provides clear black and white images in low light conditions without emitting visible red light.

5. Setup and Installation

5.1 Powering the Camera

The camera can be powered in two ways:

1. **Power Over Ethernet (POE):** Connect the camera's RJ-45 Ethernet port directly to an 802.3af Standard 48V POE Switch. This method provides both power and data connectivity through a single cable.
2. **Auxiliary Power:** If POE is not available, connect a conventional 12V 2A DC power supply (not included) to the auxiliary power connector on the camera cable. Then, connect the RJ-45 Ethernet port to your network router or switch for data.

5.2 Physical Installation

The camera is designed for ceiling mount installation. Follow these steps:

1. **Choose Location:** Select an indoor location that provides the desired viewing angle and is within range of your network connection.
2. **Mark Drilling Points:** Use the camera's mounting bracket as a template to mark the drilling points on the ceiling or wall.
3. **Drill Holes:** Drill appropriate holes for the included screws.
4. **Secure Bracket:** Attach the mounting bracket to the surface using the provided screws.
5. **Attach Camera:** Securely attach the camera to the mounting bracket.
6. **Connect Cables:** Connect the Ethernet cable (and auxiliary power if not using POE) to the camera.

5.3 Network Configuration

After physical installation and power connection, configure the camera for network access:

1. **Find IP Address:** The camera's IP address is dynamic by default. Use a network scanning tool or the "Onvif Device Manager" software to discover the camera's IP address on your network. The ONVIF Compliant Port is 6688.
2. **Access Web Interface:** Open a web browser and enter the camera's IP address to access its web-based configuration interface.
3. **Initial Setup:** Follow the on-screen prompts to set up the camera, including changing default passwords for security.
4. **NVR/CMS Integration:** The camera is ONVIF compatible. It can be easily integrated with Network Video Recorders (NVRs) or CMS (Central Management Software) like Blue Iris.

6. Operating the Camera

6.1 Remote Viewing (P2P)

The camera supports P2P remote viewing via the "NVSEE" app for smartphones (iOS, Android, Windows System) and CMS software for Windows computers.

1. **Download App:** Download and install the "NVSEE" app from your device's app store.
2. **Add Device:** Open the app and follow the instructions to add your camera using its unique ID or by scanning a QR code (if available).
3. **Live View:** Once added, you can view live footage, capture images, record video, and access playback functions remotely.

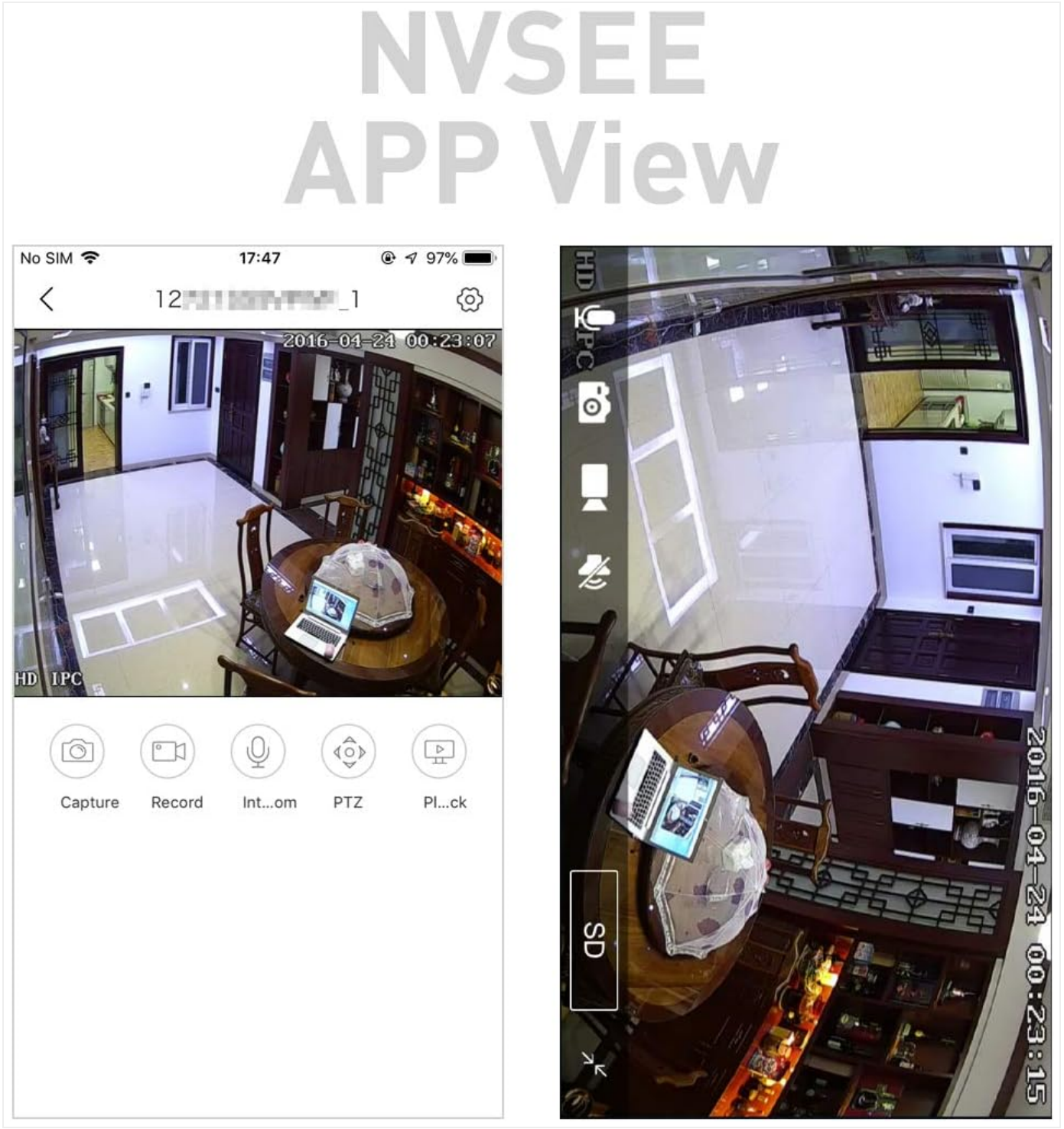


Figure 6.1: NVSEE App View. This image displays the user interface of the NVSEE mobile application, showing a live feed from the camera and various control buttons for capture, record, intercom, PTZ (if supported), and playback.

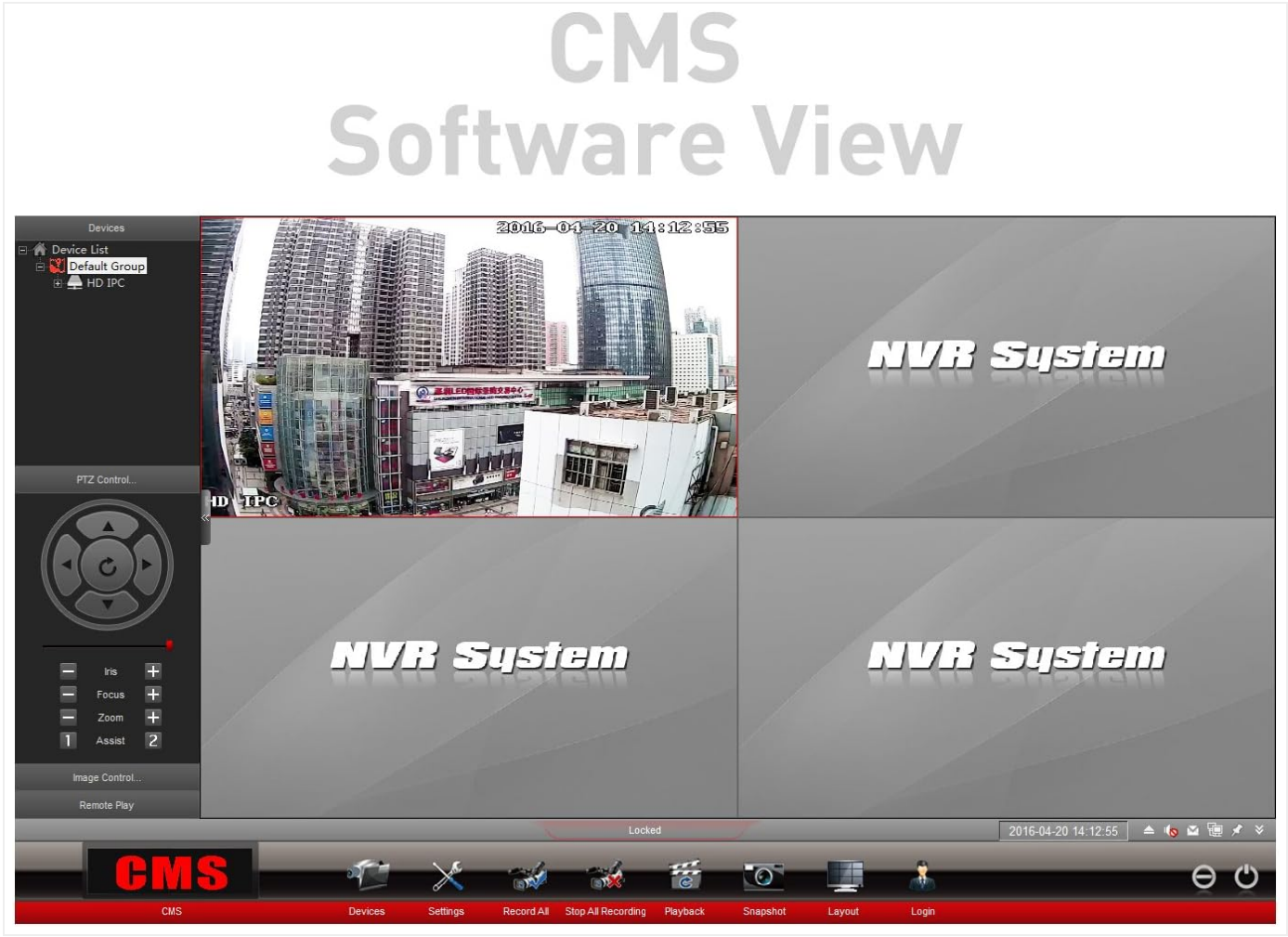


Figure 6.2: CMS Software View. This image shows the layout of the CMS software for Windows, featuring multiple camera feeds and controls for device management, settings, recording, playback, and snapshots.

6.2 Motion Detection and Email Alarm

The camera supports motion detection with email alarm functionality. Configure these settings via the camera's web interface or CMS software:

- **Enable Motion Detection:** Activate motion detection and define motion zones within the camera's field of view.
- **Configure Email Settings:** Enter your SMTP server details and recipient email addresses to receive alerts.
- **Sensitivity:** Adjust motion detection sensitivity to minimize false alarms.

6.3 Day & Night Vision

The camera automatically switches between day (color) and night (black and white) modes based on ambient light conditions. The 940nm invisible LEDs provide illumination for night vision without emitting visible light.

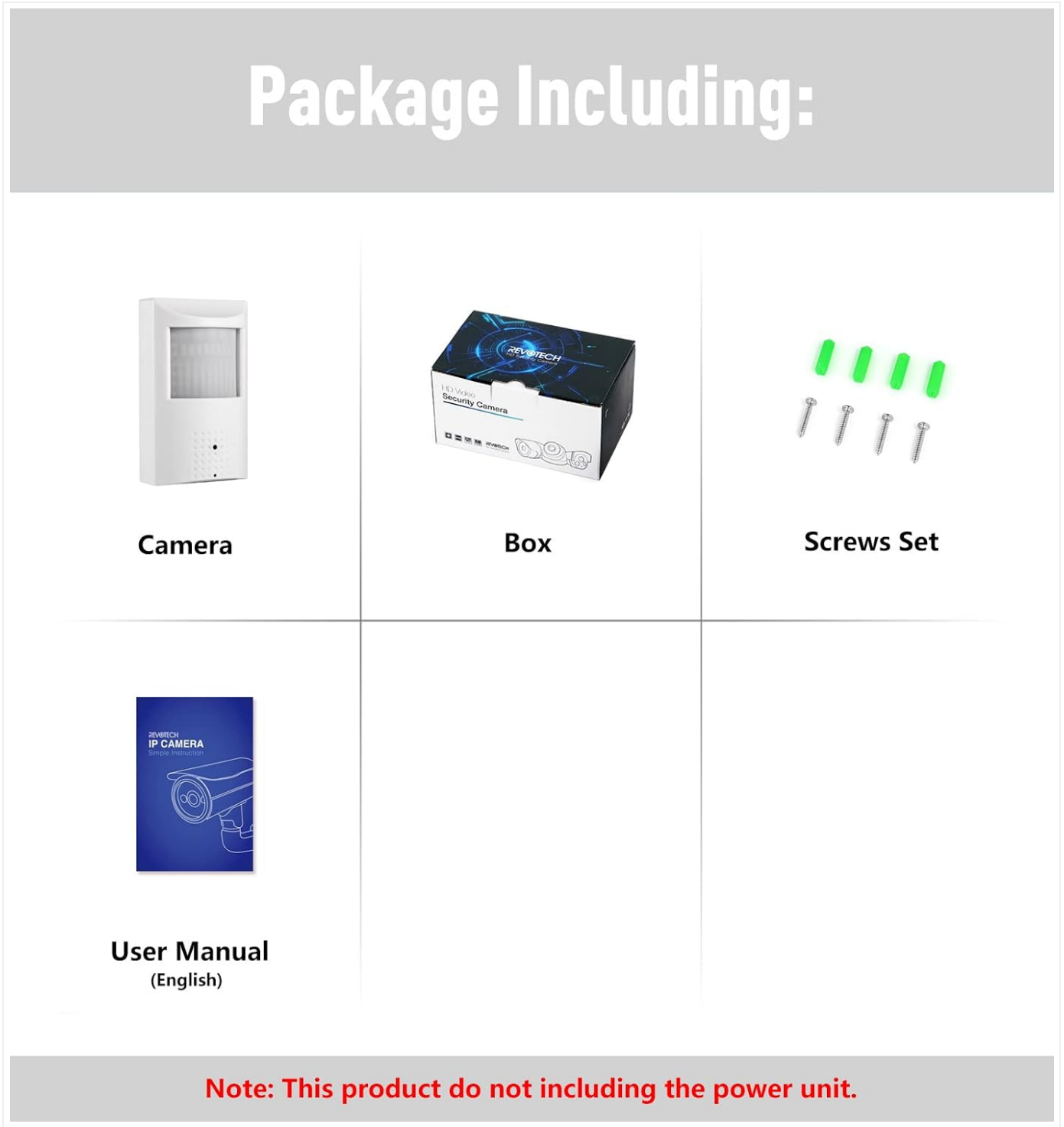


Figure 6.3: Real Picture (Daytime) and Real Picture (Nighttime with Light). This image provides a side-by-side comparison of the camera's view during the day (color) and at night (monochrome, with ambient light), demonstrating its automatic day/night switching capability.

7. Maintenance

Regular maintenance helps ensure optimal performance and longevity of your camera:

- **Cleaning:** Periodically clean the camera lens and casing with a soft, dry, lint-free cloth. Do not use liquid cleaners or aerosols.
- **Firmware Updates:** Check the manufacturer's website for available firmware updates. Keeping the firmware updated can improve performance, add features, and enhance security.
- **Network Check:** Ensure your network connection is stable and free from interference.
- **Power Supply Check:** Verify that the POE switch or auxiliary power supply is functioning correctly.

8. Troubleshooting

If you encounter issues with your camera, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
No image/camera offline	No power; Network cable disconnected; Incorrect IP address.	Ensure POE switch is on or 12V power supply is connected. Check Ethernet cable connection. Verify camera IP address and network settings.
Poor image quality	Dirty lens; Insufficient lighting; Incorrect resolution settings.	Clean the lens. Ensure adequate lighting or verify night vision is active. Check camera resolution settings (default 3MP). If NVR doesn't support 3MP/H.265, change camera to 1080P/H.264.
Motion detection not working	Motion detection disabled; Incorrect sensitivity; Motion zones not defined.	Enable motion detection in settings. Adjust sensitivity. Define motion detection zones.
Cannot access camera via app/CMS	Incorrect network settings; Firewall blocking connection; App/CMS not configured correctly.	Ensure camera has internet access. Check firewall settings on your router/PC. Reconfigure camera in the app/CMS.

9. Specifications

Feature	Detail
Model	IPIR-POE-FHW
Resolution	3.0 Megapixel (2304 x 1296P)
Sensor	1/3" CMOS (FH8852+GC2053)
Min Illumination	0.1Lux @(F1.2,AGC ON) ,0 Lux with IR
Frame Rate	20fps
Lens	3.7mm Pinhole Lens (80 Degrees Viewing Angle)
ONVIF Compliant Port	6688
Compression Format	H.265/H.264
Storage	NVR or Computer
IP Address	Dynamic (Default)/Static
Smart Alarm	Motion detection, Email alarm
Supported Protocols	HTTP, TCP/IP, ICMP, RTSP, RTP, UDP, RTCP, SMTP, DHCP, DNS, PPPoE, NTP
Ethernet	10M/100M mbps Ethernet (RJ-45)
Operating Temperature	-25°C~60°C (-13°F~140°F)
Operating Humidity	10%~90%

Feature	Detail
Power Supply	POE (802.3af Standard) or 12V DC (auxiliary)
Infrared Lamp	48 Invisible 940nm LEDs
Night Vision Distance	10-15m (33-49 ft)
Dimensions (L x W x H)	7 x 12 x 4.7cm (2.76 x 4.72 x 1.85 inches)
Weight	0.3kg (0.66 lbs)
Material	ABS Plastic
Indoor/Outdoor Usage	Indoor
IP Rating	IP67

10. Warranty and Support

For warranty information and technical support, please refer to the official REVOTECH website or contact your retailer. Keep your purchase receipt as proof of purchase for warranty claims.
For further assistance, you may also refer to the official user manual PDF available at REVOTECH User Manual PDF

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