Barlus IPC5MPIP68IR42POE-B

Barlus 5MP POE IP Underwater Camera IPC5MPIP68IR42POE-B Instruction Manual

Model: IPC5MPIP68IR42POE-B

1. Introduction

This manual provides essential information for the proper installation, operation, and maintenance of your Barlus 5MP POE IP Underwater Camera. Please read this manual thoroughly before using the product to ensure safe and efficient performance. This camera is designed for underwater surveillance in freshwater environments.

2. Safety Information

- **Freshwater Use Only:** This camera is engineered for permanent freshwater submersion. It is **not compatible with saltwater environments**.
- **Power-over-Ethernet (POE):** The camera utilizes POE technology for power and data transmission. Ensure your POE switch or injector meets the specified voltage requirements (48V-54V POE IEEE 802.3af).
- **External Power Adapter:** If not using POE, use a DC12V power adapter. Ensure the power adapter and any non-waterproof connectors are kept dry and protected from water exposure.
- **Cable Integrity:** Do not cut, stretch, or damage the waterproof cable. Any damage may compromise the camera's waterproof integrity.
- **Installation:** Ensure secure mounting to prevent the camera from dislodging and causing damage or injury.
- **Infrared Illumination:** The built-in infrared light operates automatically in low-light conditions and is designed not to interfere with aquatic life.

3. Package Contents

Verify that all items are present in the package:

- Barlus 5MP POE IP Underwater Camera
- 32ft (10m) Waterproof Cable

- DC12V Power Adapter (if not using POE)
- Mounting Hardware (screws, anchors)
- User Manual (on USB drive)

4. Product Overview

The Barlus 5MP POE IP Underwater Camera is constructed from 304 stainless steel, ensuring durability and corrosion resistance in freshwater. It features 5MP HD imaging (2592×1944 resolution), built-in infrared LEDs for night vision, and a 3.6mm Cemra lens with an 80-degree viewing angle.



Figure 4.1: Detailed view of the Barlus Underwater Camera components, including the 304 Stainless Steel housing, 6PCS infrared LED, Cemra lens, photosensitive IC automatic switch, Ethernet port, and DC12V input.

The camera's dimensions are approximately 5.12 x 3.54 x 3.54 inches (130 x 91 x 91 mm) and it weighs 3.3 pounds (1.5 kg).

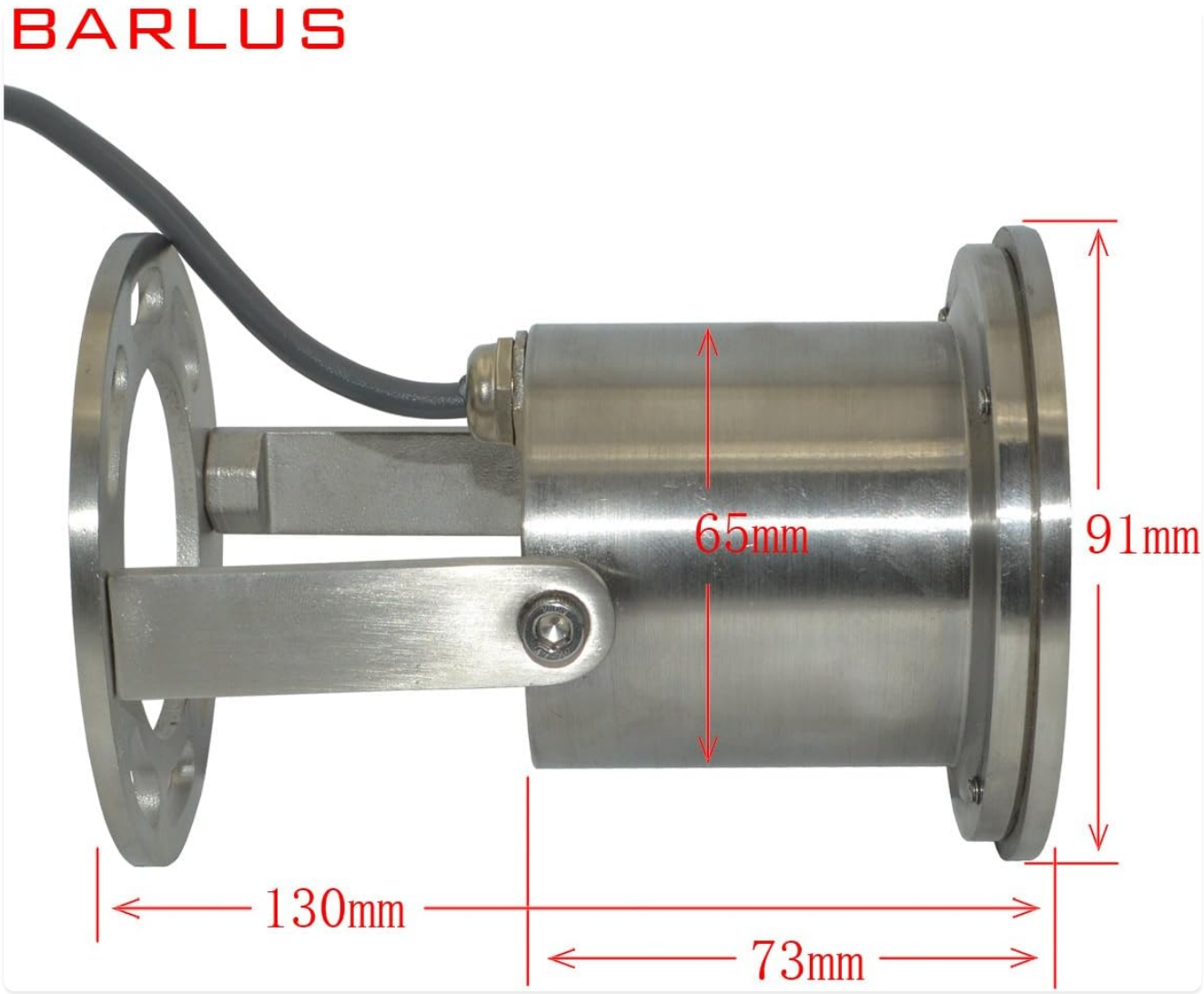


Figure 4.2: Dimensional drawing of the Barlus Underwater Camera, showing key measurements in millimeters.

5. Setup

5.1. Initial Connection Methods

The camera supports various connection methods for power and data. Ensure all non-waterproof connectors are kept dry.



Figure 5.1: Diagram illustrating three basic connection methods: 1) Direct connection to a computer via power adapter, 2) Connection to a router via power adapter, and 3) Connection to a router/computer powered by a POE switch.

1. **Direct to Computer (with DC12V Power Adapter):** Connect the camera's DC12V input to the power adapter, then connect the camera's Ethernet cable to your computer's network port.
2. **To Router (with DC12V Power Adapter):** Connect the camera's DC12V input to the power adapter, then connect the camera's Ethernet cable to an available LAN port on your router. Your computer or phone can then access the camera via the same network.
3. **To Router/Computer (with POE Switch):** Connect the camera's Ethernet cable directly to a POE switch. The POE switch will provide both power and data. Then connect the POE switch to your router or computer.

5.2. Video Tutorials for Connection

For detailed visual instructions on connecting your camera, refer to the following official video tutorials:

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Video 5.1: This video demonstrates the process of connecting the Barlus Underwater Camera to your network, detailing the physical connections required for operation.

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Video 5.2: This video provides a step-by-step guide on how to connect the Barlus Underwater Camera to a computer or router, covering various setup scenarios.

5.3. Mounting the Camera

The camera comes with mounting hardware for secure installation. Choose a stable location underwater that provides the desired viewing angle. Use the provided screws and anchors to fix the camera's bracket firmly.



Figure 5.2: The Barlus Underwater Camera installed in a pool, showcasing its compact design and potential for discreet placement.

The special underwater cable is waterproof and anti-corrosion, designed to withstand pulling forces up to 170 pounds. Standard cable length is 32ft (10m), with customizable lengths available.



Figure 5.3: Illustration of the robust, waterproof, and anti-corrosion special underwater cable available in various lengths (16ft/5m, 32ft/10m, 65ft/20m).

6. Operating Instructions

6.1. Remote Viewing

Once connected to your network, the camera can be accessed remotely via PC, smartphone (iOS, Android), or tablet. Download the XMEye Pro app for mobile viewing. The camera supports ONVIF and RTSP protocols for integration with various surveillance systems.



Figure 6.1: A smartphone displaying live underwater video from the Barlus camera, demonstrating remote viewing capabilities via the XMEye Pro app.



Figure 6.2: The Barlus Underwater Camera's live feed can be viewed on multiple platforms, including smartphones, tablets, and desktop computers, allowing for flexible monitoring from anywhere.

6.2. Night Vision

The camera features smart infrared illumination. Built-in infrared lights automatically activate when ambient light is low, providing clear night vision up to 32 feet (10 meters). The infrared light is designed not to disturb fish or cause light pollution, preserving the natural aquatic environment.



Figure 6.3: The camera's automatic night vision with infrared lights, designed to be fish-friendly and provide clear visibility in low-light conditions without manual intervention.

6.3. Multi-Scene Application

This camera is suitable for a variety of freshwater applications:

- **Koi Pond Monitoring:** Observe koi behavior and pond conditions.
- **Swimming Pool Safety:** Monitor activity in swimming pools.
- **Aquarium Conditions:** Keep an eye on aquarium inhabitants and water quality.
- **Water Treatment Systems:** Surveillance of water treatment processes.
- **Underwater Research:** For various research projects requiring underwater observation.

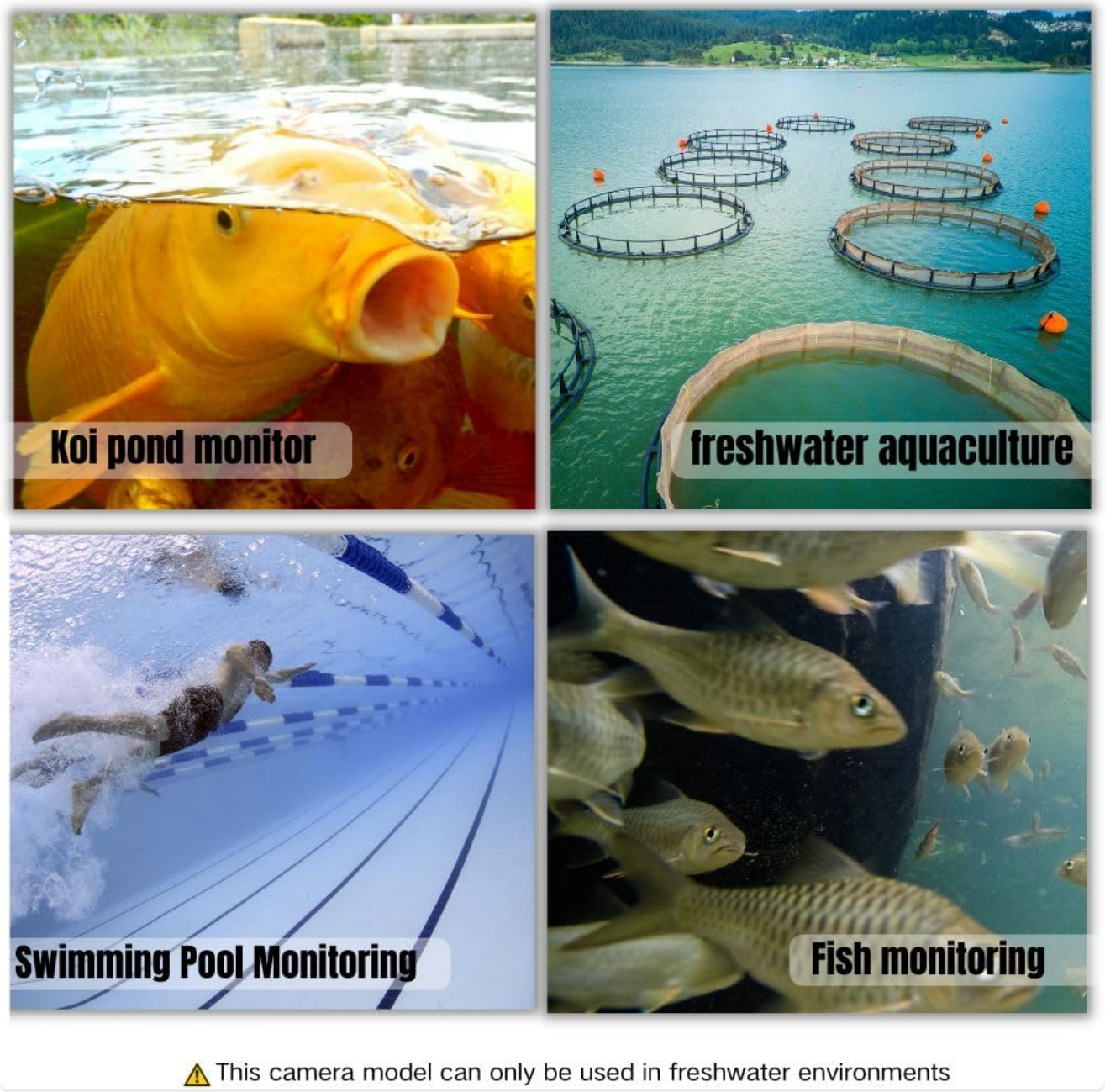


Figure 6.4: Examples of the Barlus Underwater Camera's application in koi ponds, swimming pools, and for general fish monitoring. Note: This camera model is for freshwater use only.

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Video 6.1: This video demonstrates the Barlus underwater camera capturing fish activity in a stream, showcasing its clear imaging capabilities in a natural freshwater environment.

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Video 6.2: This video provides a glimpse into the underwater world of a pond, captured by the Barlus camera, highlighting its utility for observing aquatic ecosystems.

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Video 6.3: A short preview video showcasing customer feedback on the Barlus camera, demonstrating its real-world application and user satisfaction.

7. Maintenance

- **Cleaning:** Periodically clean the camera lens and housing to remove algae or debris that may obstruct the view. Use a soft cloth and freshwater. Avoid abrasive cleaners.
- **Cable Inspection:** Regularly inspect the cable for any signs of wear, cuts, or damage. Replace if necessary to maintain waterproof integrity.
- **Storage:** When not in use for extended periods, store the camera in a cool, dry place away from direct sunlight and extreme temperatures.

8. Troubleshooting

- **No Video Feed:**
  - Check power connection (DC12V adapter or POE).
  - Verify Ethernet cable connection to camera and network device.
  - Ensure network settings (IP address, gateway) are correctly configured.
- **Poor Image Quality:**
  - Clean the camera lens.
  - Check for obstructions in the water.
  - Ensure sufficient lighting for optimal visibility (night vision should activate automatically in low light).
- **Remote Access Issues:**
  - Confirm your mobile device or PC is connected to the same network as the camera.
  - Verify app settings and camera registration.
  - Check internet connectivity for remote access outside your local network.

9. Specifications

Feature	Specification
Model Number	IPC5MPIP68IR42POE-B
Image Resolution	5 MP (2592×1944)
Lens	3.6mm
Viewing Angle	80 Degrees
Night Vision Range	32 Feet (10 meters)
Material	304 Stainless Steel
Water Resistance Level	IP68 (Permanent Freshwater Submersion)
Power Source	POE (48V-54V IEEE 802.3af) or DC12V
Max Power Consumption	7W
Connectivity Technology	Wired (Ethernet)

Connectivity Protocol	ONVIF, RTSP
Compatible Devices	Computer, Phone (iOS, Android)
Cable Length	32ft (10m) standard, customizable
Dimensions (L x W x H)	5.12 x 3.54 x 3.54 inches (130 x 91 x 91 mm)
Item Weight	3.3 pounds (1.5 kg)

10. Warranty and Support

For warranty information and technical support, please refer to the documentation provided on the included USB drive or visit the official Barlus website. Barlus is committed to providing high-quality products and customer service.
Online Resources:

- Official Website: www.barlus.net
- Software and Manual on U disk: www.cn-rov.com