Hikvision HWI-B121H

Hikvision HWI-B121H Hiwatch Series IP Bullet Camera User Manual

Model: HWI-B121H

1. Introduction

This manual provides essential instructions for the installation, operation, and maintenance of your Hikvision HWI-B121H Hiwatch Series IP Bullet Camera. Please read this manual thoroughly before using the product to ensure correct usage and to prevent damage.

2. Safety Information

- **Power Supply:** Use only the specified power supply. Ensure the voltage is within the camera's operating range.
- **Installation:** Install the camera in a stable location to prevent it from falling. Ensure proper grounding.
- **Environment:** Avoid exposing the camera to extreme temperatures, humidity, dust, or corrosive environments. This camera is IP67 rated for outdoor use, providing protection against dust and water immersion.
- **Cleaning:** Do not use strong detergents or abrasive materials to clean the camera. Use a soft, dry cloth.
- **Servicing:** Do not attempt to disassemble or modify the camera. Refer all servicing to qualified personnel.

3. Product Overview

3.1 Components

The Hikvision HWI-B121H is a bullet-style IP camera designed for surveillance. Key components include the camera body, lens, IR illuminators, and integrated mounting bracket.



Figure 1: Front-side view of the Hikvision HWI-B121H IP Bullet Camera, showing the main camera body, lens, and integrated mounting arm.



Figure 2: Side view of the Hikvision HWI-B121H IP Bullet Camera, illustrating the adjustable mounting bracket and cable exit point.



Figure 3: Front view of the camera lens and surrounding infrared illuminators, protected by a dark cover.

3.2 Key Features

- **Resolution:** 2.0 Megapixel Full HD (1920 × 1080p)
- **Lens:** Fixed 2.8 mm optic (112.1° viewing angle)
- **Sensor:** 1/2.7" Progressive Scan CMOS
- **Video Compression:** H.265+/H.265/H.264+/H.264
- **Power over Ethernet (PoE):** Supports power and video transmission via a single network cable.
- **Night Vision:** EXIR IR LEDs with a range of up to 30 meters.
- **Weather Resistance:** IP67 rated for outdoor installation.

- **Image Enhancement:** OSD menu with AGC, BLC, Digital WDR, 3D-DNR, Mirror, AWB, Brightness, Sharpness, Privacy Mask.
- **Compatibility:** ONVIF and ISAPI protocols.
- **Remote Access:** Accessible via Web Viewer, IVMS-4500, and HIK-Connect.

4. Setup

4.1 Physical Installation

1. **Choose a Mounting Location:** Select a suitable wall or ceiling location that provides the desired field of view and is within reach of network cabling. The camera's 3-Axis bracket allows for flexible positioning.
2. **Mount the Camera:** Secure the camera's base to the chosen surface using appropriate screws and anchors. Ensure the mounting surface can support the camera's weight.



Figure 4: Underside view of the camera's mounting base, showing screw holes for secure installation and the cable routing channel.

3. **Connect Cables:** Connect the Ethernet cable to the camera's RJ45 port. If using PoE, this single cable will provide both power and data. If not using PoE, connect a separate 12V DC power adapter (not included) to the power input port.



Figure 5: Close-up of the camera's cable connections, including the RJ45 Ethernet port and the DC power input port.

4. **Adjust Camera Angle:** Loosen the adjustment screws on the 3-Axis bracket to position the camera for the desired viewing angle. Tighten the screws once the position is set.

4.2 Network Configuration

1. **Connect to Network:** Connect the Ethernet cable from the camera to a PoE-enabled switch or NVR, or to a standard network switch if using a separate power adapter.
2. **Activate the Camera:** For initial setup, the camera may require activation by setting a strong password. This is typically done via Hikvision's SADP tool or directly through an NVR.
3. **Assign IP Address:** The camera will usually obtain an IP address via DHCP. If a static IP is required, configure it using the SADP tool or the camera's web interface.
4. **Access Web Interface:** Open a web browser (e.g., Internet Explorer) and enter the camera's IP address to access its web interface. Log in with the administrator credentials.
5. **Software Integration:** For multi-camera management, install Hikvision's IVMS-4500 client software or use the HIK-Connect mobile application for remote access.

5. Operating

5.1 Live View and Recording

Once configured, you can view the live video feed and manage recording settings through the camera's web interface, IVMS-4500 software, or HIK-Connect app. Ensure your NVR or recording device is properly configured to store video footage.

5.2 Image Settings

The camera's OSD (On-Screen Display) menu allows adjustment of various image parameters:

- **AGC (Automatic Gain Control):** Adjusts signal amplification in low light.
- **BLC (Backlight Compensation):** Improves visibility of objects in front of a bright background.
- **D-WDR (Digital Wide Dynamic Range):** Balances exposure in scenes with both very bright and very dark areas.
- **3D-DNR (3D Digital Noise Reduction):** Reduces image noise, especially in low light conditions.
- **Day/Night (ICR):** Configures infrared cut filter operation for color/black & white modes.
- **Mirror:** Flips the image horizontally.
- **Privacy Mask:** Allows masking specific areas of the video feed for privacy.

These settings can be accessed and modified via the camera's web interface under the 'Configuration' or 'Image' sections.

6. Maintenance

- **Regular Cleaning:** Periodically clean the camera lens and housing with a soft, lint-free cloth to ensure clear image quality. Do not use harsh chemicals.
- **Firmware Updates:** Check the Hikvision official website for available firmware updates. Keeping the firmware updated ensures optimal performance and security. Follow the provided instructions carefully when performing updates.
- **Cable Inspection:** Periodically inspect all cables for signs of wear or damage, especially for outdoor installations.

7. Troubleshooting

- **No Image/Video:**
  - Verify power connection and network cable integrity.

- Check if the camera's IP address is correct and accessible on the network.
- Ensure the camera is activated and a strong password has been set.

- **Poor Image Quality:**
  - Clean the camera lens.
  - Adjust image settings (brightness, contrast, WDR, DNR) via the web interface.
  - Check for obstructions in the camera's field of view.

- **Network Connection Issues:**
  - Confirm network cable is securely connected to both the camera and the network device.
  - Check network switch/router status.
  - If the camera becomes unreachable due to IP address conflicts or forgotten settings, a software reset may be necessary. Note that this model may not feature a physical reset button, requiring specific software tools (e.g., SADP tool) for IP address recovery or factory reset procedures. Consult Hikvision's support resources for detailed instructions on software-based resets.

- **Night Vision Not Working:**
  - Ensure the environment is dark enough for IR to activate.
  - Check IR settings in the camera's web interface.

8. Specifications

Feature	Specification
Model	HWI-B121H
Sensor	1/2.7" Progressive Scan CMOS
Resolution	2 MP (1920 × 1080)
Lens	Fixed 2.8 mm
Video Compression	H.265+/H.265/H.264+/H.264
Frame Rate	25 frames per second
Night Vision Range	30 meters (EXIR IR LEDs)
Power Supply	PoE (Power over Ethernet) or 12V DC (6 Watts)
Ingress Protection	IP67 (Waterproof)
Material	Metal and Plastic
Connectivity	Wired (Ethernet), Wireless (Wi-Fi)
Protocols	ONVIF, ISAPI
Dimensions (Package)	21.6 x 12.1 x 11.8 cm
Weight (Package)	500 grams

9. Support

For further assistance, technical support, or detailed product documentation, please visit the official Hikvision website or contact your authorized Hikvision dealer. Information regarding spare parts availability is not provided with this product.

Ask a question about this manual

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

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After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. Privacy details.

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question