

Real HD DS-2CD1083G2-LIUF

Real HD DS-2CD1083G2-LIUF 4K 8MP IP Bullet PoE Camera User Manual

Model: DS-2CD1083G2-LIUF

1. INTRODUCTION

This manual provides essential instructions for the installation, operation, and maintenance of your Real HD DS-2CD1083G2-LIUF 4K 8MP Smart Hybrid Light IP Bullet PoE Camera. Please read this manual thoroughly before using the product to ensure proper and safe operation. This camera is designed for outdoor security surveillance, offering 4K resolution, advanced AI detection, and robust weather protection.

2. SAFETY INFORMATION

- Ensure the power supply (12V DC or PoE) meets the camera's requirements.
- Do not expose the camera to extreme temperatures, humidity, or corrosive environments.
- Avoid pointing the lens directly at strong light sources for extended periods.
- Installation should be performed by qualified personnel and comply with local electrical codes.
- Disconnect power before performing any maintenance or cleaning.

3. PACKAGE CONTENTS

Verify that all items are present in the package:

- Real HD DS-2CD1083G2-LIUF IP Bullet PoE Camera (1 unit)
- Mounting Screws and Wall Plugs
- Waterproof Connector for Ethernet Cable
- Quick Start Guide (if included)

Note: SD card and power adapter are not included.

4. PRODUCT OVERVIEW

The DS-2CD1083G2-LIUF is an 8MP 4K IP bullet camera featuring a 2.8mm wide-angle lens, Smart Hybrid Light technology, and advanced human and vehicle detection capabilities. It is designed for outdoor use with an IP67 weatherproof rating.

4K Ultra HD Visual Feast for Home Security



Figure 4.1: The camera provides 4K Ultra HD resolution for clear surveillance footage.

Key Features:

- **4K 8MP Resolution:** Captures detailed video at 3840 × 2160 pixels.
- **2.8mm Fixed Lens:** Provides a wide 112° horizontal field of view.
- **Smart Hybrid Light:** Combines IR and white light for clear night vision, including color images in low light.

- **Human and Vehicle Detection:** AI-powered analytics reduce false alarms.
- **H.265+ Compression:** Efficient video encoding saves storage and bandwidth.
- **Built-in Microphone:** For audio monitoring.
- **SD Card Slot:** Supports up to 512GB for local storage (SD card not included).
- **IP67 Weatherproof:** Durable design for outdoor environments.
- **PoE (Power over Ethernet):** Simplifies installation with single cable for power and data.

5. SETUP AND INSTALLATION

5.1 Physical Installation

The camera is designed for wall mounting. Choose a suitable location that provides the desired viewing angle and is within reach of your network cable.

1. **Mounting Location:** Select a sturdy wall or surface. Ensure the camera's field of view is unobstructed.
2. **Drill Holes:** Use the provided mounting template (if available) or the camera base to mark and drill pilot holes for screws.
3. **Secure Camera:** Attach the camera base to the wall using the supplied screws and wall plugs.
4. **Adjust Angle:** Loosen the adjustment screws to position the camera lens for optimal coverage, then tighten them to secure the angle.



Figure 5.1: The IP67 weatherproof design ensures reliable outdoor performance.

5.2 Network Connection (PoE)

The camera supports Power over Ethernet (PoE), allowing a single Ethernet cable to provide both power and data connection.

1. **Connect Ethernet Cable:** Connect one end of an Ethernet cable to the camera's RJ45 port. Use the waterproof connector to protect the connection if installing outdoors.
2. **Connect to PoE Device:** Connect the other end of the Ethernet cable to a PoE-enabled NVR, PoE switch, or PoE injector.
3. **Alternative Power (12V DC):** If not using PoE, connect a 12V DC power adapter (not included) to the camera's power input and an Ethernet cable to a standard network switch/router.

5.3 Initial Configuration

After connecting the camera to your network, you will need to activate and configure it.

1. **Discover Camera:** Use the manufacturer's SADP tool or your NVR's device search function to find the camera's IP address on your network.

2. **Activate Camera:** The camera will likely be inactive upon first use. Set a strong password for the camera.
3. **Access Web Interface:** Open a web browser (e.g., Chrome, Firefox) and enter the camera's IP address. Log in with the newly set password.
4. **Network Settings:** Configure network settings (e.g., static IP, DNS) if necessary.
5. **Time Settings:** Set the correct date and time for accurate recording timestamps.

6. OPERATING INSTRUCTIONS

6.1 Accessing Live View and Playback

You can access the camera's live view and recorded footage via its web interface or a compatible NVR/client software.

- **Web Browser:** Log into the camera's web interface. Navigate to the "Live View" section to see real-time footage. For playback, go to the "Playback" section and select the desired date and time.
- **NVR:** If connected to an NVR, access the camera's feed and recordings through the NVR's interface. Refer to your NVR's manual for specific instructions.

6.2 Recording Management

The camera supports various recording methods.

- **SD Card Storage:** Insert a microSD/SDHC/SDXC card (up to 512GB, not included) into the camera's card slot. Format the card via the web interface. Configure recording schedules and event-triggered recording.

Built-in Memory Card Slot

Support MicroSD card

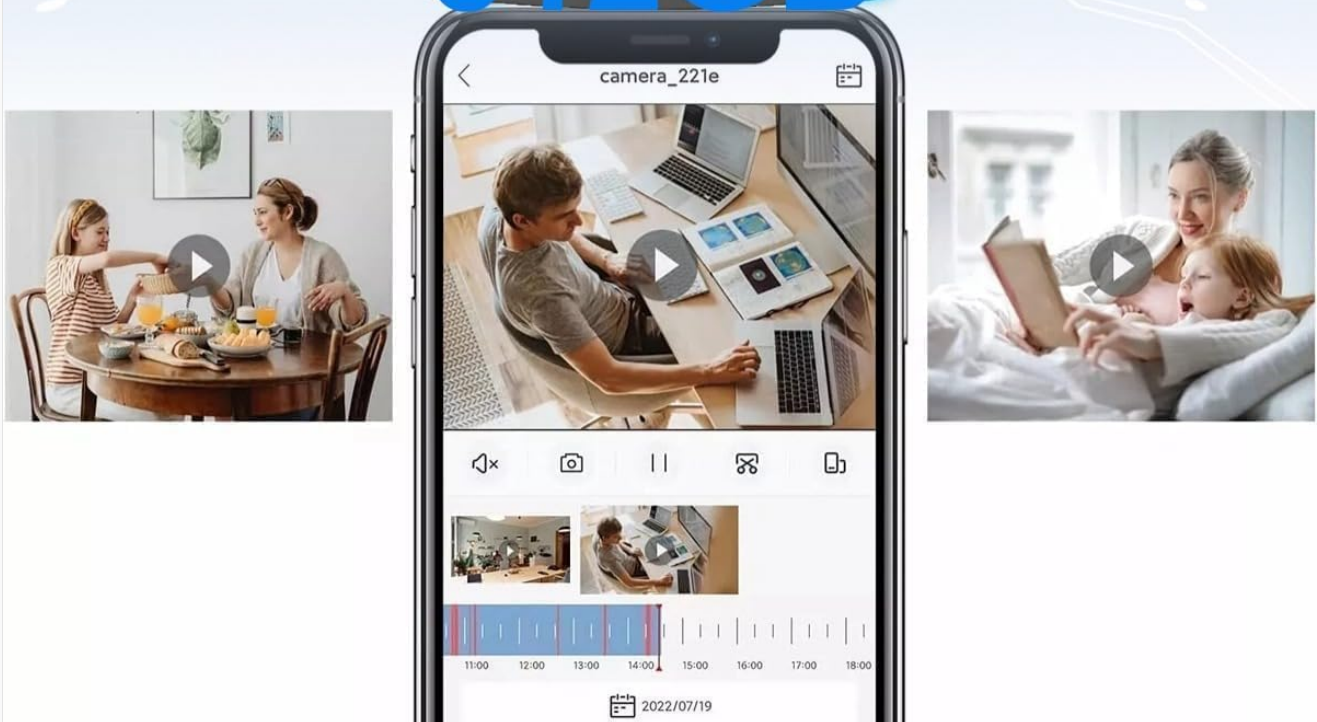
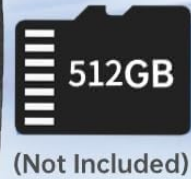


Figure 6.1: The camera features a built-in memory card slot supporting up to 512GB for local storage.

- **NAS Storage:** Configure Network Attached Storage (NFS, SMB/CIFS) for remote recording.
- **H.265+ Compression:** The camera utilizes H.265+ video compression to optimize storage space and bandwidth without compromising video quality.

H.265+ Video Compressing

Requier Less Storage,Record Longer Time

H.264



H.265+



Up to 80% Less Data

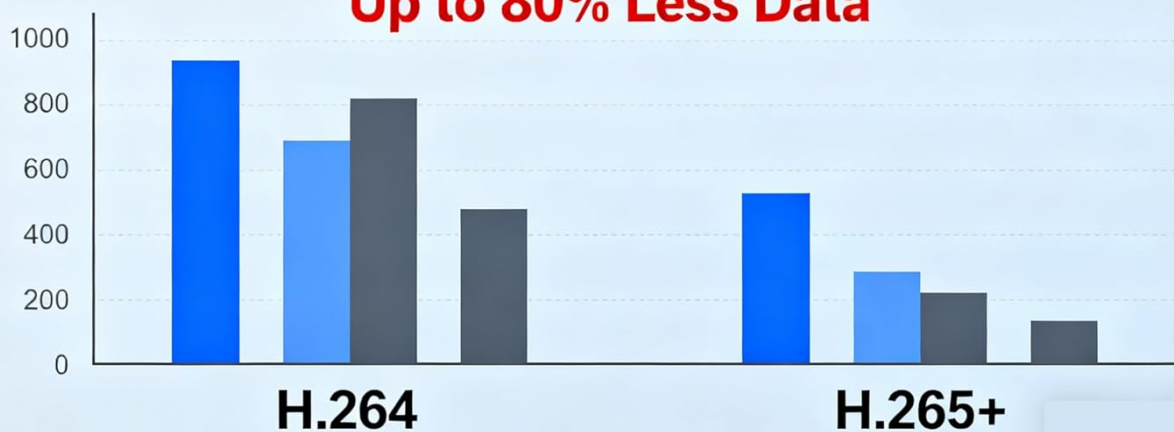


Figure 6.2: H.265+ compression reduces data usage by up to 80% compared to H.264.

6.3 Smart Features (AI Detection)

The camera's advanced AI capabilities provide intelligent detection and reduce false alarms.

- **Human and Vehicle Detection:** Configure detection zones and sensitivity in the camera's web interface. The system can differentiate between humans, vehicles, and other moving objects like raindrops or leaves.
- **Line Crossing Detection:** Set up virtual lines, and the camera will trigger an alarm when an object crosses them in a specified direction.
- **Intrusion Detection:** Define virtual regions, and the camera will alert you if an object enters and loiters within that area.
- **Unattended Baggage/Object Removal:** Configure specific areas for detecting objects left behind or removed.



Figure 6.3: Smart AI detection accurately identifies humans and vehicles, reducing false alarms.

6.4 Audio Monitoring

The built-in microphone allows for real-time audio monitoring. Enable and adjust audio settings via the camera's web interface.

6.5 Night Vision and Smart Hybrid Light

The camera features advanced infrared technology and Smart Hybrid Light for clear imaging in various lighting conditions.

- **IR Mode:** Provides black and white video in complete darkness with a range of up to 98 feet.
- **Smart Hybrid Light:** In low-light conditions, the camera can automatically switch to a mode that uses supplemental white light to provide full-color images. This can be configured in the camera settings.

Advanced Infrared Technology with Long IR Range

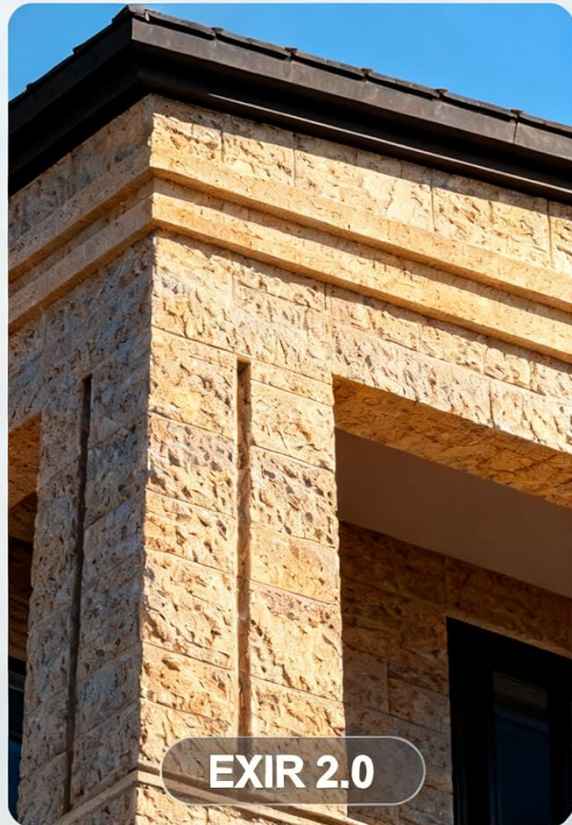


Figure 6.4: Advanced Infrared Technology (EXIR 2.0) enhances night vision clarity.

7. MAINTENANCE

7.1 Cleaning

- Gently wipe the camera lens and body with a soft, damp cloth.
- Do not use harsh chemicals or abrasive cleaners.
- Ensure no moisture enters the camera body.

7.2 Firmware Updates

Periodically check the manufacturer's website for firmware updates. Updating firmware can improve performance, add new features, and enhance security. Follow the instructions provided with the firmware update package carefully.

7.3 Storage Management

Regularly review and manage recorded footage. If using an SD card, ensure it is functioning correctly and has sufficient space. Consider backing up important footage to an NVR or NAS.

8. TROUBLESHOOTING

Problem	Possible Cause	Solution
No image/video feed	No power; Network cable disconnected; Incorrect IP address; Camera not activated.	Check power supply (PoE or 12V DC); Verify Ethernet cable connection; Ensure correct IP address and network settings; Activate camera and set password.
Poor image quality	Dirty lens; Insufficient lighting; Incorrect video settings.	Clean the lens; Ensure adequate lighting or enable Smart Hybrid Light; Adjust image settings (brightness, contrast, sharpness) in the web interface.
False alarms from detection	Sensitivity too high; Detection zones too wide; Environmental factors (e.g., moving branches).	Adjust detection sensitivity; Refine detection zones to exclude irrelevant areas; Utilize human/vehicle detection to filter out non-human/vehicle movements.
Cannot record to SD card	SD card not inserted; SD card not formatted; SD card full or faulty.	Insert SD card correctly; Format SD card via web interface; Replace SD card if faulty.

9. SPECIFICATIONS

Feature	Detail
Model Name	DS-2CD1083G2-LIUF
Image Sensor	1/2.7" Progressive Scan CMOS
Effective Still Resolution	8 MP (3840 × 2160)
Min. Illumination	0.01 Lux @ (F2.0, AGC ON), 0 Lux with Light
Lens	2.8mm Fixed Lens
Viewing Angle	Horizontal FOV 112°, Vertical FOV 61°, Diagonal FOV 134°
Day & Night	Auto
Digital Noise Reduction	3D DNR
Video Compression	H.265+/H.265/H.264+/H.264/MJPEG
Max. Image Resolution	3840 × 2160 @ 15fps
Image Enhancement	BLC/3D DNR/HLC/ROI
Network Storage	microSD/SDHC/SDXC card (512GB max), NAS (NFS, SMB/CIFS), ANR
Communication Interface	1 RJ45 10M / 100M Ethernet interface
Behavior Analysis	Line crossing detection, intrusion detection, unattended baggage detection, object removal detection
Power Supply	12 VDC ± 25%, PoE (802.3af, class 3)

Feature	Detail
Power Consumption	Max. 10 watts
Weather Proof	IP67
Night Vision Range	98 Feet
Indoor/Outdoor Usage	Outdoor
Material	Metal, Plastic
Dimensions	6.7 x 6.7 x 6 inches (approximate)

10. WARRANTY AND SUPPORT

For warranty information, technical support, or service inquiries, please contact the Real HD Store or your authorized dealer. Keep your purchase receipt as proof of purchase.

You can visit the [Real HD Store on Amazon](#) for more information and support resources.