Real HD HD-N2EBFE

Real HD HD-N2EBFE 2MP 180-Degree Fisheye Dome Security Camera Instruction Manual

Model: HD-N2EBFE | Brand: Real HD

1. Introduction

This instruction manual provides detailed guidance for the installation, operation, and maintenance of your Real HD HD-N2EBFE 2MP 180-Degree Fisheye Dome Security Camera. Please read this manual thoroughly before using the product to ensure proper setup and functionality. Retain this manual for future reference.

2. Product Overview

The Real HD HD-N2EBFE is a versatile 2-megapixel dome security camera designed for both indoor and outdoor surveillance. It features a 1.8mm fisheye lens, providing an ultra-wide 180-degree viewing angle. This camera supports four video output modes (HD-TVI, AHD, CVI, and 960H Analog CVBS), making it compatible with a wide range of Digital Video Recorders (DVRs). Equipped with infrared (IR) illumination, it offers clear day and night vision capabilities up to 20 meters (65 feet).



Figure 2.1: Front view of the Real HD HD-N2EBFE 2MP 180-Degree Fisheye Dome Security Camera.

3. Package Contents

Please check the package for the following items:

- 1 x Real HD HD-N2EBFE 2MP 180-Degree Fisheye Dome Security Camera
- Mounting Screws
- Instruction Manual (this document)

4. Setup

4.1 Pre-Installation Considerations

- This camera requires a Digital Video Recorder (DVR) for recording video. It does not have built-in recording or remote viewing capabilities.
- A power adapter (12V DC) is required and sold separately.
- Ensure your DVR supports one of the camera's video output modes (HD-TVI, AHD, CVI, or 960H Analog CVBS).

4.2 Video Mode Configuration

The camera supports four video output modes. You can switch between these modes using the small joystick located on the camera's cable. The correct mode must be selected to match your DVR system.

1. Locate the joystick on the camera's cable.
2. Connect the camera to a power source and your DVR.
3. To switch modes, push the joystick in one of the four directions (up, down, left, right) and hold for 5 seconds. The video output will change.
4. Repeat until the correct video format is displayed on your monitor connected to the DVR. Refer to the diagram below for typical switch positions.



Figure 4.1: Diagram illustrating the 4-in-1 video mode switching via the joystick.

5. Installation

5.1 Mounting Location

This camera is designed for both outdoor and indoor use, with an IP65 international protection rating, indicating resistance to dust and water jets. It is suitable for ceiling mount installations. Choose a location that provides the desired viewing angle and is within reach of power and video cables.



Figure 5.1: The camera features an IP65 weatherproof rating, suitable for various environmental conditions.

5.2 Physical Installation

1. **Prepare the Mounting Surface:** Identify the desired mounting spot on a ceiling or wall.
2. **Mark Drill Holes:** Use the camera's base as a template to mark the positions for drilling screw holes.
3. **Drill Holes:** Drill pilot holes at the marked positions.
4. **Secure the Camera:** Attach the camera base to the mounting surface using the provided screws.
5. **Adjust Angle:** Loosen the adjustment ring to position the camera ball for the desired viewing angle. Once set, tighten the ring to secure the camera in place. Ensure the camera is centered within its housing to prevent IR

reflection issues at night.

6. Wiring

Connect the camera to your DVR and power supply as follows:

1. **Video Connection:** Connect the BNC connector from the camera's video cable to an available BNC input port on your DVR.
2. **Power Connection:** Connect the camera's power input to a 12V DC power adapter (sold separately). Plug the power adapter into an electrical outlet.



Figure 6.1: Diagram illustrating the wiring connections for the security camera to a DVR and power adapter.

7. Operation

7.1 Day and Night Vision

The camera automatically switches between day (color) and night (black and white infrared) vision modes based on ambient light conditions. The integrated IR LEDs provide illumination for clear images in low-light or complete darkness, with a night vision range of up to 20 meters (65 feet).

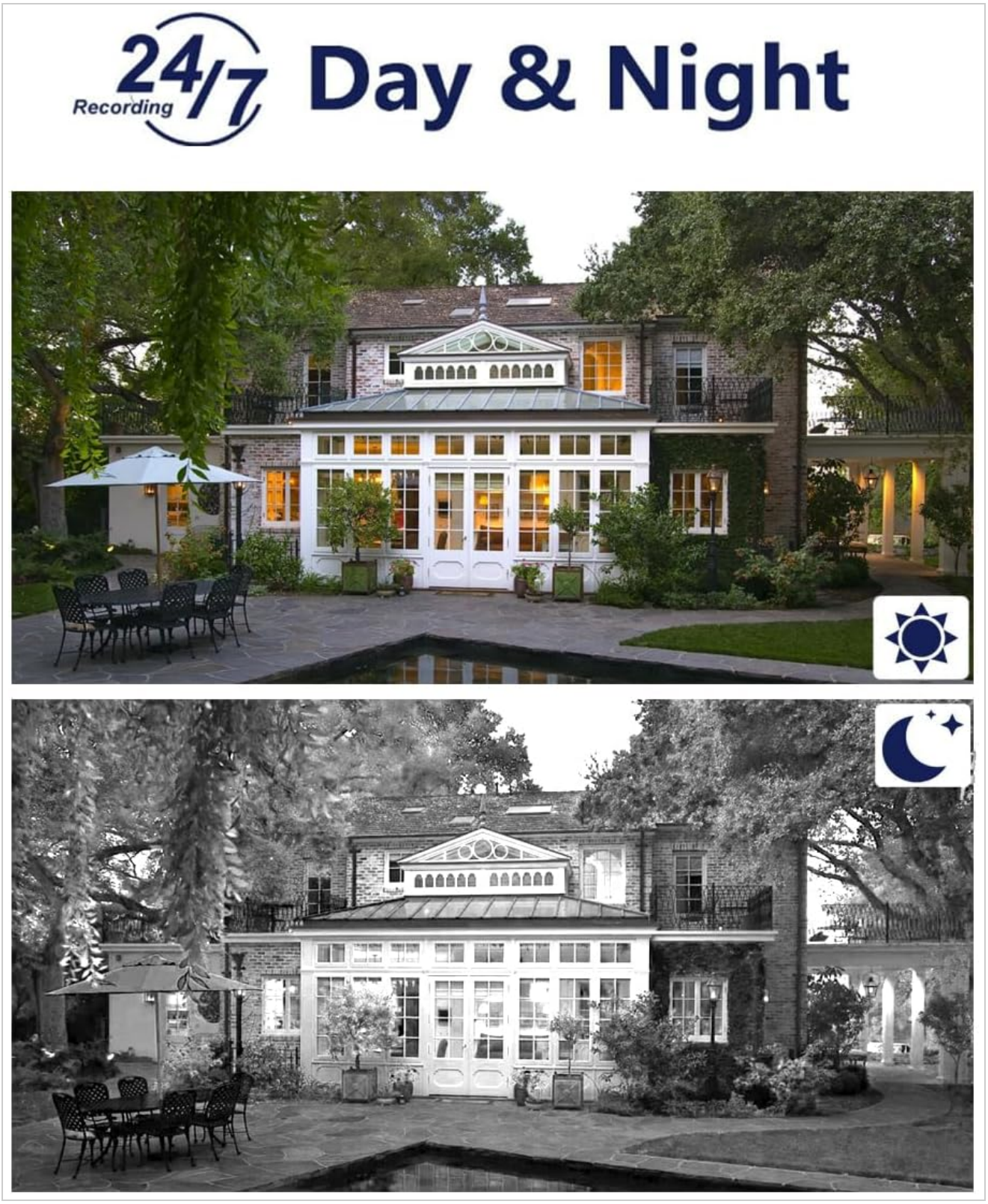


Figure 7.1: Comparison of the camera's image quality during day (color) and night (black and white IR) conditions.

7.2 Wide Angle View

The 1.8mm fisheye lens provides an expansive 180-degree ultra-wide angle view, allowing a single camera to cover a large area that might otherwise require multiple standard cameras. This reduces installation complexity and costs.



Figure 7.2: An example of the extensive coverage provided by the camera's 180-degree wide-angle fisheye lens.

8. Maintenance

- **Cleaning the Lens:** Gently wipe the camera lens with a soft, clean cloth. For stubborn dirt, use a lens cleaning solution designed for optics. Avoid abrasive materials that could scratch the lens.
- **Checking Connections:** Periodically inspect all cable connections (power and video) to ensure they are secure and free from corrosion or damage, especially for outdoor installations.
- **Housing Inspection:** For outdoor cameras, check the housing for any signs of damage or wear that could compromise its weatherproof integrity.

9. Troubleshooting

- **No Video Output:**
  - Ensure the camera is receiving power. Check the power adapter and connections.
  - Verify the video cable is securely connected to both the camera and the DVR.
  - Confirm the camera's video output mode (HD-TVI, AHD, CVI, or 960H Analog CVBS) matches your DVR's input settings using the joystick switch (refer to Section 4.2).
- **Poor Image Quality:**
  - Clean the camera lens if it appears dirty or smudged.
  - Check the video cable for damage or interference. Use high-quality coaxial cables.
  - Ensure the camera is receiving adequate power. Low voltage can affect image quality.

- **Night Vision Issues:**
  - Ensure there are no obstructions directly in front of the IR LEDs that could cause reflection.
  - Verify the camera is properly centered in its housing to prevent IR light impingement on the housing edges.
  - Check for external light sources that might interfere with the camera's automatic IR activation.

10. Specifications

Feature	Specification
Model Number	HD-N2EBFE
Video Capture Resolution	1080p (2MP)
Viewing Angle	180 Degrees (Fisheye Lens)
Lens	1.8mm
Video Output Modes	HD-TVI, AHD, CVI, 960H Analog CVBS (4-in-1 Hybrid)
Night Vision Range	Up to 20 meters (65 Feet)
Low Light Technology	Black & White (Infrared)
Photo Sensor Technology	CMOS (1/2.3" Color CMOS Sensor)
Indoor/Outdoor Usage	Outdoor
International Protection Rating	IP65
Connectivity Technology	Wired (Coaxial BNC)
Power Source	Corded Electric (12V DC, 7 Watts)
Mounting Type	Ceiling Mount
Dimensions (L x W x H)	4.5 x 4.5 x 5 inches
Item Weight	13.1 ounces

11. Warranty and Support

For warranty information and technical support, please refer to the manufacturer's official website or contact the seller directly. Keep your purchase receipt as proof of purchase.

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.

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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