

## Real HD HD-5EB28WA

# Real HD 5MP Eyeball Dome 4-in-1 Security Camera Instruction Manual

Model: HD-5EB28WA | Brand: Real HD

## INTRODUCTION

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This manual provides detailed instructions for the installation, operation, and maintenance of your Real HD 5MP Eyeball Dome 4-in-1 Security Camera (Model HD-5EB28WA). Please read this manual thoroughly before using the product to ensure proper setup and functionality. This camera is designed for surveillance applications, offering high-definition video output compatible with various DVR systems.

## SAFETY INFORMATION

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- Ensure the power supply used is DC12V and meets the camera's specifications (1000mA). Incorrect voltage can damage the device.
- Do not attempt to disassemble or modify the camera. This may void the warranty and cause damage.
- Keep the camera away from extreme temperatures, humidity, and direct sunlight to prevent malfunction.
- Handle the camera with care to avoid physical damage.
- Installation should be performed by qualified personnel if you are unsure about the process.

## PACKAGE CONTENTS

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Verify that all items are present in the package:

- 1 x Real HD 5MP Eyeball Dome Camera
- 1 x Bag of Mounting Screws
- 1 x Installing Template
- 1 x User Manual (this document)

*Note: Power adapter and DVR are sold separately and are required for camera operation and recording.*

## PRODUCT OVERVIEW

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The Real HD 5MP Eyeball Dome Camera is a versatile surveillance solution featuring a 2.8mm fixed lens with a 100-degree wide field of view. It supports multiple video formats (TVI, CVI, AHD, 960H) and offers 65ft (20 meters) IR night vision. Its full metal housing provides IP66 weather resistance for both indoor and outdoor use.

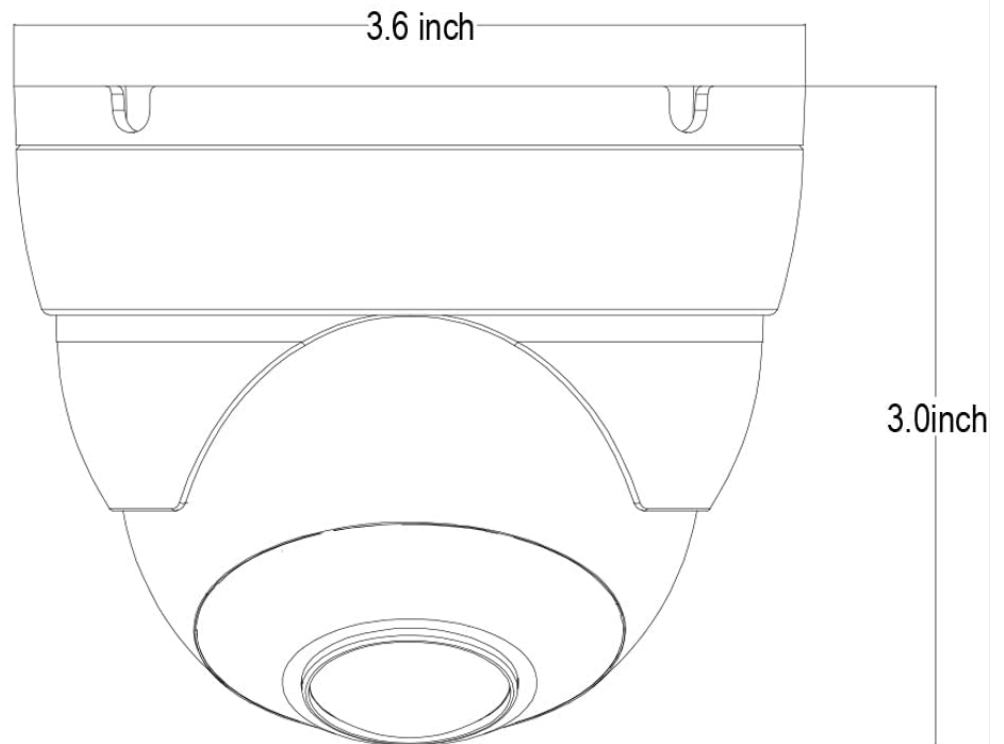
### Camera Components



**Image:** Front view of the Real HD 5MP Eyeball Dome Camera, showing the lens and IR LEDs.

### Dimensions

# Dimensions



**Image:** Technical drawing illustrating the dimensions of the Eyeball Dome Camera, approximately 3.6 inches wide and 3.0 inches high.

## SETUP AND INSTALLATION

### Compatibility Requirements

This camera is specifically designed to work with **5MP or 8MP (4K) TVI, CVI, or AHD DVRs**. It is also compatible with 960H DVRs in CVBS mode (resolution will be 1000TVL). The camera will **not** work with 4MP or lower resolution DVRs in HD modes. It does not support IP NVRs.

### Wiring the Camera

The camera requires a DC12V power supply and a coaxial cable for video transmission to a compatible DVR. Power adapters and DVRs are sold separately.

# HOW TO WIRE



**Image:** Diagram showing how to connect the camera. The camera has a power input and a video output. The video output connects to the DVR via a coaxial cable. A separate power adapter (DC12V) is required for the camera.

1. Connect a DC12V power adapter (sold separately) to the camera's power input.
2. Connect the camera's video output to your DVR using a coaxial cable.
3. Ensure all connections are secure.

## Switching Video Output Format (DIP Switch)

The camera supports HD-TVI, HD-CVI, AHD, and 960H (CVBS) video formats. The default mode is typically AHD. If your DVR uses a different format, you must switch the camera's video output using the DIP switch located on the camera's cable or body (refer to the wiring diagram image for typical location).



TVI  
Camera

AHD  
Camera

CVI  
Camera

960H  
Camera



TVI video output



AHD video output



CVI video output



960H Video output

## TVI/AHD/CVI/960H 4-in-1 Camera

Apart from the default TVI video output mode, this camera also supports AHD and CVI outputs. Just make sure your DVR supports anyone of these and then enjoy vivid video on big screen.

**Image:** Illustration showing the four video output modes (TVI, AHD, CVI, 960H) and how they appear on a monitor. A DIP switch on the camera's cable allows selection between these modes.

Consult your DVR's manual to determine the required video input format. Adjust the DIP switch settings accordingly. Incorrect settings will result in no video signal or a distorted image.

### Mounting the Camera

The camera is designed for surface mounting and can be installed indoors or outdoors due to its IP66 weatherproof rating. Use the provided mounting screws and template for secure installation.



**Image:** An example of the Eyeball Dome Camera mounted under an outdoor overhang, demonstrating its suitability for outdoor installation.

1. Choose a suitable mounting location that provides the desired viewing angle and is within reach of power and video cables.
2. Use the provided drilling template to mark the screw holes on the mounting surface.
3. Drill pilot holes if necessary.
4. Secure the camera base to the surface using the mounting screws.
5. Adjust the camera's angle as needed (refer to Camera Adjustment section).

## OPERATING INSTRUCTIONS

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### Basic Operation

This camera functions as a video input device for a compatible DVR system. It does not have built-in recording capabilities, nor does it support direct remote viewing or mobile access. All recording, playback, motion detection, and remote viewing features are managed by the connected DVR. Refer to your DVR's instruction manual for details on these functions.

### Night Vision

The camera is equipped with Smart IR LEDs, providing up to 65 feet (20 meters) of infrared night vision. In low-light conditions, the camera automatically switches to black and white night vision mode to ensure continuous surveillance.

# Smart IR LED

## *for 65 ft IR distance*



**Image:** A night-time view captured by the camera, demonstrating the effectiveness of the Smart IR LEDs for clear visibility up to 65 feet in dark conditions.

**Crime does not sleep and becomes more active when it starts to get dark,so you need to be protected 24/7.This camera can view stunningly clear night vision for up to 20 Meters away,no matter how dark the night gets.**



**Image:** An illustration depicting the camera's night vision capability, showing clear visibility up to 20 meters (65 feet) in dark environments.

## **Camera Adjustment**

The eyeball dome design allows for flexible adjustment of the camera's viewing angle after installation. You can rotate the camera module within its housing to achieve the desired coverage.

## 180° Tile Rotation



## 180° Pan Rotation

## 360° Horizontal Rotation



**Image:** Diagram illustrating the camera's adjustable features, including 180-degree tile rotation, 180-degree pan rotation, and 360-degree horizontal rotation for flexible positioning.

- **180° Tile Rotation:** Adjust the vertical tilt of the lens.
- **180° Pan Rotation:** Adjust the horizontal pan of the lens.
- **360° Horizontal Rotation:** Rotate the entire camera module around its axis.

Loosen the adjustment screws (if present) or gently rotate the camera module to position it correctly, then tighten to secure.

## MAINTENANCE

- **Cleaning:** Use a soft, dry cloth to clean the camera lens and housing. For stubborn dirt, a slightly damp cloth can be used, but avoid harsh chemicals or abrasive cleaners.
- **Environmental Protection:** While the camera is weatherproof (IP66), regularly check for any debris or obstructions that might accumulate on the lens or housing, especially in outdoor installations.
- **Cable Inspection:** Periodically inspect all cables for signs of wear, damage, or loose connections.

## TROUBLESHOOTING

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### No Video Signal / Black Screen

- **Check Power:** Ensure the camera is receiving power (DC12V). Verify the power adapter is functioning and connected securely.
- **Check Video Cable:** Ensure the coaxial cable is securely connected at both the camera and the DVR. Try a different cable if possible.
- **Verify DVR Compatibility:** Confirm your DVR is a 5MP or 8MP (4K) TVI/CVI/AHD DVR. This camera will not work with 4MP or lower resolution DVRs in HD modes.
- **Check Video Format:** Ensure the camera's video output format (TVI/CVI/AHD/CVBS) matches the input setting on your DVR. Adjust the DIP switch on the camera if necessary.

### Poor Image Quality / Distorted Video

- **Clean Lens:** Ensure the camera lens is clean and free from dust, smudges, or obstructions.
- **Cable Quality:** Use high-quality coaxial cables. Long or poor-quality cables can degrade signal strength.
- **Power Supply:** An unstable or insufficient power supply can affect image quality. Ensure the power adapter meets specifications.
- **DVR Resolution:** If connected to a 960H DVR, the resolution will be 1000TVL, not 5MP. Ensure your DVR supports 5MP input for full resolution.

### Night Vision Not Working

- **Check for Obstructions:** Ensure nothing is blocking the IR LEDs or the camera's view.
- **Power Supply:** Insufficient power can affect IR functionality.
- **Ambient Light:** Ensure the area is dark enough for the IR to activate automatically.

## SPECIFICATIONS

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<b>Model Name</b>	HD-5EB28WA
<b>Image Sensor</b>	1/2.9" Color CMOS Sensor
<b>Video Resolution</b>	5MP (2592x1944)
<b>Effective Still Resolution</b>	8 MP (Note: This refers to the sensor's capability, actual video output is 5MP)
<b>Lens</b>	2.8mm Fixed Lens
<b>Viewing Angle</b>	100 Degrees (FOV)
<b>Night Vision Range</b>	65ft (20 meters) IR Night Vision
<b>Video Output Formats</b>	HD-TVI, HD-CVI, AHD, 960H (CVBS)
<b>TV System</b>	NTSC
<b>Frame Rate</b>	25fps (50Hz), 30fps (60Hz)
<b>Minimum Illumination</b>	0.1lux (LED ON), 0.01lux (0-3 lux LED)
<b>Power Supply</b>	DC12V 1000mA (Power adapter sold separately)

<b>Power Consumption</b>	7 watts
<b>Material</b>	Full Metal Housing
<b>Weatherproof Rating</b>	IP66
<b>Operating Temperature</b>	-40°F ~ 140°F (-40°C ~ 60°C)
<b>Dimensions</b>	4.41 x 4.41 x 3.7 inches (Package Dimensions)
<b>Item Weight</b>	14 ounces

## WARRANTY AND SUPPORT

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For warranty information and technical support, please refer to the official Real HD website or contact the seller directly.

Keep your purchase receipt as proof of purchase for warranty claims.

Real HD is committed to providing reliable products and customer support. If you encounter any issues not covered in this manual, please reach out to their support team for assistance.

- **Manufacturer:** Real HD
- **Brand Store:** [Visit the Real HD Store on Amazon](#)