



[Manuals.plus](#) /

> [IFWATER](#) /

> IFWATER 48MP USB Camera Module (Model: IF-USB48MP03-AF70) Instruction Manual

IFWATER IF-USB48MP03-AF70

IFWATER 48MP USB Camera Module Instruction Manual

Model: IF-USB48MP03-AF70

INTRODUCTION

This manual provides detailed instructions for the setup, operation, and maintenance of your IFWATER 48MP USB Camera Module. Please read this manual thoroughly before using the product to ensure optimal performance and longevity.

WHAT'S IN THE BOX

- 1x USB Camera Module
- 1x User Manual
- 1x Package Box
- 1x 1-meter USB Cable

FEATURES

- **48MP Ultra HD Imaging:** The camera features a 48-megapixel sensor, delivering ultra-high-definition images with a maximum resolution of 8000x6000 pixels. Its fast autofocus system ensures clear and realistic color reproduction without interpolation.
- **70-Degree Autofocus No Distortion Lens:** Equipped with a non-distortion lens, this camera offers a wide field of view (HFOV: 70 degrees, DFOV: 82 degrees). It can capture objects from millimeter-level close-ups to distant scenes with automatic focus adjustment, eliminating the need for manual lens tools.
- **Colorful Night Vision:** Integrated with 6 white LEDs, the mini webcam can capture clear and colorful images in dark or low-light environments without requiring additional lighting.
- **Plug and Play (Driver-Free):** This UVC-compliant camera connects directly to your PC, laptop, Android device, or Raspberry Pi via the included USB cable, requiring no additional driver installation.

SETUP

1. **Unpack the Camera:** Carefully remove the USB camera module and included USB cable from the

package.

2. **Connect to Device:** Insert the USB cable into the camera module's USB port. Connect the other end of the USB cable to an available USB port on your PC, laptop, Android device, or Raspberry Pi.
3. **Automatic Recognition:** The camera is UVC-compliant and driver-free. Your operating system should automatically detect and install the necessary drivers. This process typically takes a few seconds.
4. **Verify Connection:** Open your preferred camera application (e.g., Windows Camera, OBS Studio, VLC, etc.) on your device. Select the "IFWATER 48MP USB Camera" as your video input source.



Figure 1: The IFWATER 48MP USB Camera Module connected to a device via USB.

Text Description: An image showing the compact IFWATER 48MP USB Camera Module with its attached USB cable. The camera features a black circuit board with a central lens surrounded by six white LEDs, and gold-colored standoffs at the corners. The USB-A connector is visible at the end of the cable.

OPERATING INSTRUCTIONS

1. **Launching the Camera:** Once connected, open any application that supports webcam input. This could be video conferencing software, streaming software, or a native camera application.
2. **Selecting the Camera:** In your chosen application, navigate to the video settings and select

"IFWATER 48MP USB Camera" as your primary camera device.

3. **Autofocus Functionality:** The camera features fast autofocus. It will automatically adjust focus to ensure subjects are clear, whether they are close to the lens or further away. No manual adjustment is typically required.
4. **Night Vision Activation:** The 6 built-in white LEDs provide illumination for low-light conditions, enabling clear and colorful night vision. These LEDs activate automatically when light levels are low.
5. **Resolution Settings:** The camera supports up to 8K (8000x6000) resolution. You can select your desired resolution within your camera application's video settings.

48MP Autofocus USB Camera



Figure 2: An image illustrating the camera's fast autofocus capability, capturing a clear image of a wedding scene with the camera module overlaid in the corner.

Text Description: This image highlights the 200ms fast autofocus speed of the 48MP USB Camera. The main visual shows a clear, in-focus wedding scene, with a small inset of the camera module in the bottom right corner.

Colorful Night Vission

Built with White Led Lights Can Shoot Sharp Clear Image in Both Day and Night

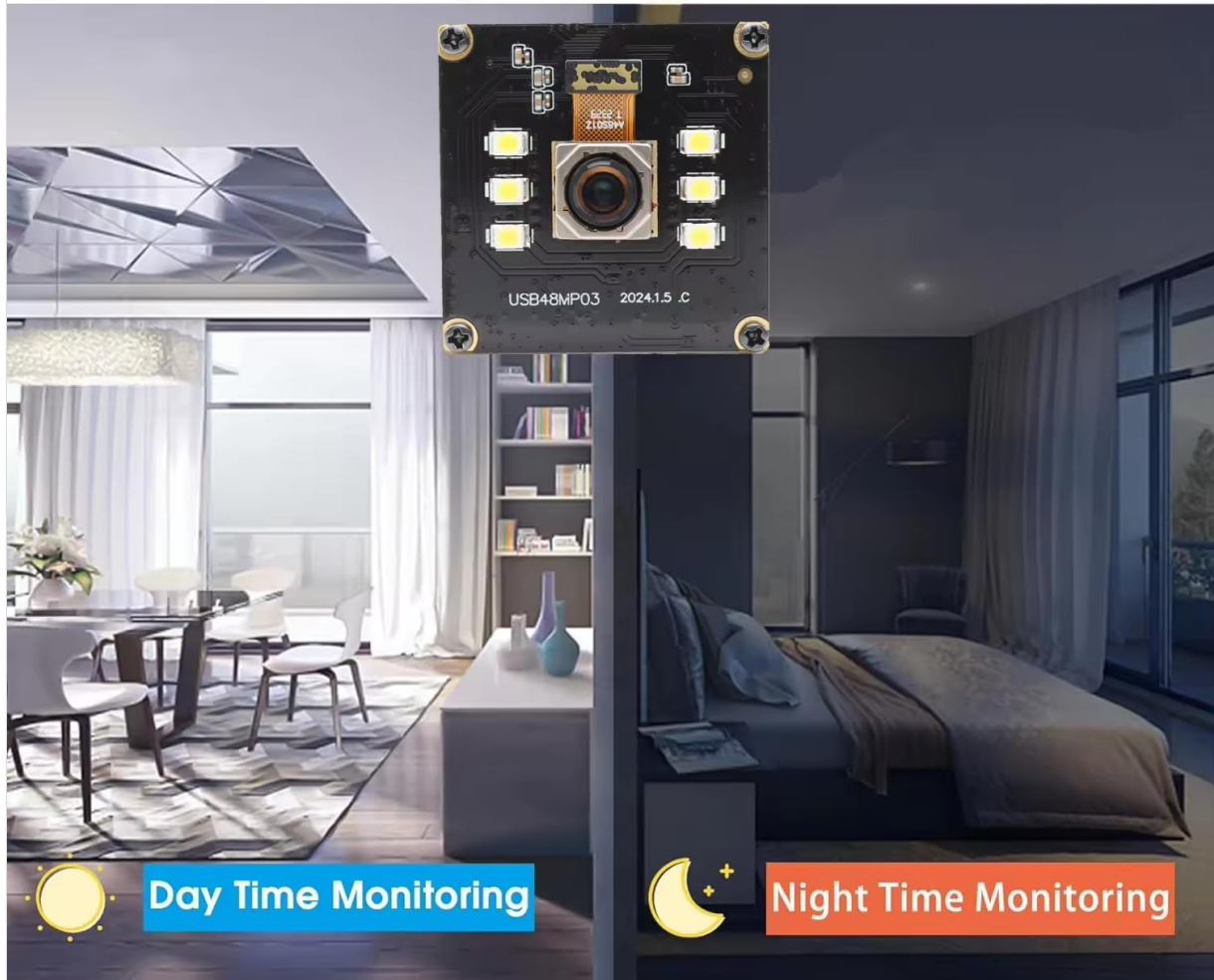


Figure 3: A split image demonstrating the camera's colorful night vision. The left side shows a brightly lit room during the day, and the right side shows the same room at night, illuminated by the camera's white LEDs, with the camera module overlaid.

Text Description: This image showcases the Colorful Night Vision feature of the mini webcam. It's a split view: the left side depicts a room under normal daylight conditions, labeled 'Day Time Monitoring', while the right side shows the same room in darkness, labeled 'Night Time Monitoring', with the camera's 6 white LEDs providing clear illumination.

APPLICATIONS

The compact size and versatile features of the IFWATER 48MP USB Camera Module make it suitable for a wide range of applications:

- **Industrial Inspection:** Ideal for detailed visual inspections in industrial settings due to its high resolution and autofocus capabilities.
- **Document Scanning:** Excellent for high-resolution document scanning, capturing fine details without distortion.
- **Medical Imaging:** Recommended for medical imaging and image analysis in various medical machines.
- **Research & Development:** Suitable for R&D projects requiring high-quality visual data capture.
- **High-Speed Photographic Apparatus:** Can be integrated into systems requiring high-speed photography.

- **PC/Computer Webcam:** Functions as a high-quality webcam for video conferencing and streaming on various platforms.
- **Raspberry Pi/Android Development:** Compatible with Raspberry Pi and Android development boards for custom projects.



UVC Compatible USB2.0 Plug and Play

Figure 4: A collage of images showing the camera module used in diverse applications, including industrial automation, medical vision, laser engraving, face recognition, 3D printer monitoring, and factory automation.

Text Description: This image displays the multiple applications of the 48MP Ultra HD USB Camera. It features a central image of the camera module surrounded by smaller images depicting its use in industrial automation, medical vision, lightburn camera for laser engravers, face recognition, monitoring Octoprint 3D printers, and factory automation.

SPECIFICATIONS

Feature	Detail
Brand Name	IFWATER
Item Model Number	IF-USB48MP03-AF70
Item Weight	3.2 ounces

Package Dimensions	4.3 x 3.5 x 2.1 inches
Color	White
Photo Sensor Technology	CMOS
Video Capture Resolution	8K
Maximum Aperture	3 f
Connectivity Technology	USB
Special Features	48MP 8K USB Camera, Mini Size, Autofocus 70-degree No Distortion Lens, Plug And Play, Free Driver, UVC Compliant.

TROUBLESHOOTING

- **Camera Not Detected:** Ensure the USB cable is securely connected to both the camera and your device. Try a different USB port or restart your computer. Verify that your operating system's device manager recognizes the camera.
- **Poor Image Quality:** Check your application's video settings to ensure the correct resolution (e.g., 8K) is selected. Ensure adequate lighting; the built-in LEDs should activate in low light. Clean the camera lens gently with a soft, lint-free cloth.
- **Autofocus Issues:** Ensure there are no obstructions in front of the lens. If the camera is struggling to focus, try moving the subject slightly or ensuring sufficient contrast in the scene.
- **LEDs Always On/Off:** The white LEDs are designed to activate automatically in low-light conditions. If they are not functioning as expected, check your camera application for any specific lighting controls.

MAINTENANCE

- **Cleaning the Lens:** Use a soft, dry, lint-free cloth to gently wipe the camera lens. Avoid using harsh chemicals or abrasive materials that could scratch the lens.
- **Storage:** When not in use, store the camera in a clean, dry place away from direct sunlight and extreme temperatures.
- **Cable Care:** Avoid bending or twisting the USB cable excessively to prevent internal damage.

WARRANTY AND SUPPORT

For information regarding product warranty, returns, or technical support, please refer to the official IFWATER website or contact your retailer. Additional protection plans may be available for purchase through Amazon, offering extended coverage for your device.