

- Manuals.plus /
- › Arducam /
- › Arducam 1080P Low Light WDR USB Camera Module Instruction Manual

Arducam B0861M62KW

Arducam 1080P Low Light WDR USB Camera Module Instruction Manual

Model: B0861M62KW

- Box
- Features
- Specifications
- Setup
- Introduction
- Operating
- What's in the Maintenance
- Troubleshooting
- Warranty
- Support

1. INTRODUCTION

This manual provides detailed instructions for the Arducam 1080P Low Light WDR USB Camera Module. This compact camera is designed for various applications requiring high-definition video capture, especially in low-light conditions, and offers wide dynamic range (WDR) capabilities. It features a 2MP 1/2.8" CMOS IMX291 sensor and a 160-degree ultra-wide-angle lens, making it suitable for surveillance, machine vision, and embedded systems.



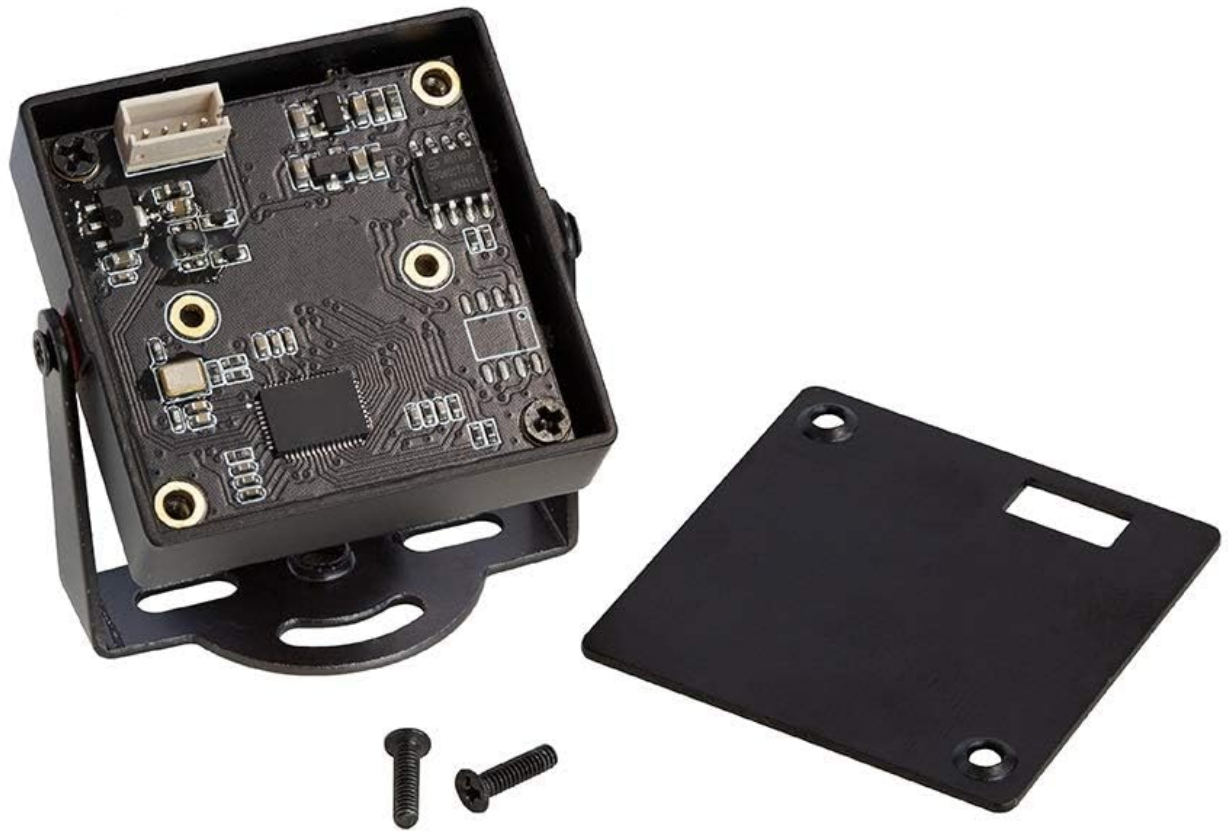
Figure 1: Arducam 1080P Low Light WDR USB Camera Module with metal case and mounting bracket.

2. WHAT'S IN THE BOX

Verify that all components are present upon opening the package:

- Arducam 1080P Low Light WDR USB Camera Module with Metal Case
- USB Cable

1080P



ArduCam



Windows



Mac



Linux

Figure 2: The Arducam USB Camera Module and its accompanying USB cable.

3. KEY FEATURES

- **HD Resolution and Low Light Performance:** Equipped with a 2MP 1/2.8" IMX291 Color CMOS sensor, offering 80DB wide dynamic range and the ability to capture images in extremely low light conditions (minimum illumination 0.001Lux).
- **Ultra-Wide Angle Lens:** Features a 160-degree (diagonal) M12 lens with an IR filter for a broad field of view.
- **Video with Audio Capture:** Supports high frame rates including H.264 30fps@1920x1080, MJPG 30fps@1920x1080, and YUY2 30fps@640x480. Includes dual stereo microphones for audio recording.
- **Plug & Play (UVC-compliant):** Compatible with Windows XP/7/8/10, Linux, Android, and Mac OS. No additional drivers are required; simply connect via USB.
- **Versatile Applications:** Its compact design and metal case allow for placement in various hidden or narrow spaces, suitable for home video surveillance, day/night low-light security systems, dashcams, and other machine vision projects.



Figure 3: Demonstrates the superior low-light performance of the Arducam camera compared to a standard smartphone camera.

4. SPECIFICATIONS

Feature	Detail
Model Name	Arducam 1080P Low Light WDR USB Camera Module
Effective Still Resolution	2 MP
Video Capture Resolution	1080p
Photo Sensor Technology	CMOS (IMX291)
Lens Angle	160° (Diagonal)
Focus Type	Fixed Focus

Feature	Detail
Connectivity Technology	USB
Compatible Devices	Laptop, Personal Computer, Tablet
Operating Systems	Windows XP/7/8/10, Linux, Android, Mac OS
Video Capture Format	H.264, MJPG, YUY2
Frame Rates	30fps@1920x1080 (H.264/MJPG), 30fps@640x480 (YUY2)
Audio	Dual stereo microphones
Weight	0.09 Kilograms



Figure 4: Physical dimensions of the camera module.

5. SETUP INSTRUCTIONS

The Arducam USB Camera Module is UVC-compliant, meaning it generally does not require special drivers for most operating systems. Follow these steps for basic setup:

1. **Connect the USB Cable:** Insert the smaller end of the provided USB cable into the camera module's USB port.
2. **Connect to Device:** Plug the standard USB-A end of the cable into an available USB port on your computer (Windows, Mac, Linux), Raspberry Pi, or Android device (an OTG adapter may be required for Android, not included).
3. **Automatic Recognition:** Your operating system should automatically detect the camera as a standard UVC webcam.
4. **Software Access:** Open a compatible camera application or video conferencing software to access the camera feed.



Figure 5: The camera module connected to a laptop via USB.

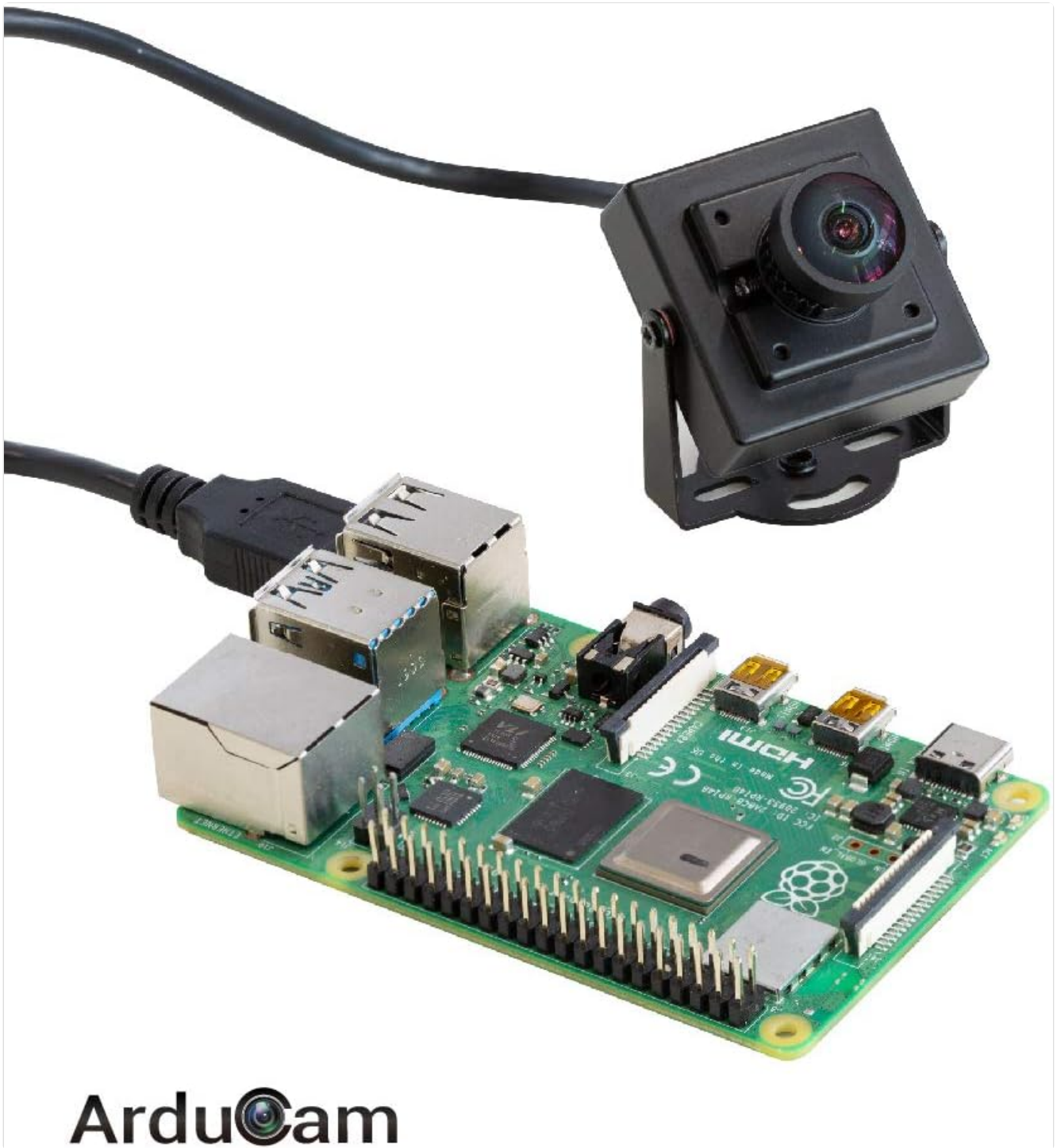


Figure 6: The camera module connected to a Raspberry Pi.

6. OPERATING INSTRUCTIONS

Once connected, the camera can be operated using various software applications depending on your platform.

6.1. Using with Windows

On Windows, you can use the built-in Camera app or third-party software like AMCap. AMCap allows for detailed control over camera parameters and video formats.

1. Connect the camera to your Windows PC.
2. Open a camera application (e.g., AMCap, OBS Studio, or the Windows Camera app).
3. Select the Arducam USB Camera as your video input device.
4. Adjust parameters such as brightness, contrast, saturation, and white balance through the software's camera

settings.

5. Choose desired video formats and resolutions (e.g., H.264 1920x1080, MJPG 1920x1080, YUY2 640x480).

6.2. Using with Raspberry Pi

For Raspberry Pi, you can use VLC Media Player or other Linux-compatible camera software to view and capture video.

1. Connect the camera to your Raspberry Pi via USB.
2. Open VLC Media Player.
3. Go to **Media > Open Capture Device**.
4. Select the camera device (e.g., /dev/video0 or /dev/video1).
5. Adjust video settings as needed within VLC's preferences.

6.3. Using with Android

To use with an Android smartphone or tablet, an OTG (On-The-Go) adapter is typically required (not included). You will also need a compatible USB camera application from the Google Play Store.

1. Connect the camera to your Android device using an OTG adapter.
2. Open a compatible USB camera application.
3. Grant necessary permissions to the app to access the USB camera.
4. Select the desired resolution and format within the app.

Your browser does not support the video tag.

Video 1: This video demonstrates the setup and basic operation of the Arducam Low Light Wide Angle USB 2.0 Camera with Case (B020201) on a laptop, Raspberry Pi, and Android smartphone, including adjusting parameters and switching formats.

7. MAINTENANCE

- **Cleaning:** Use a soft, dry cloth to clean the camera lens and body. Avoid abrasive materials or harsh chemicals.
- **Storage:** Store the camera in a cool, dry place away from direct sunlight and extreme temperatures when not in use.
- **Handling:** Handle the camera with care to prevent damage to the lens or internal components.

8. TROUBLESHOOTING

Camera not detected:

- Ensure the USB cable is securely connected to both the camera and the host device.
- Try a different USB port on your device.
- Restart your computer or device.
- Verify that your operating system is compatible (Windows XP/7/8/10, Linux, Android, Mac OS).
- For Android, ensure you are using an OTG-compatible device and adapter, and that the USB camera app has permissions.

No video feed or black screen:

- Check if the camera is selected as the active video input in your application.
- Ensure no other application is currently using the camera.
- Verify that the camera lens is not covered.
- Adjust lighting conditions, especially in very dark environments, to see if the low-light feature activates.

Poor image quality:

- Clean the camera lens gently with a microfiber cloth.
- Adjust brightness, contrast, and other image parameters in your camera software.
- Ensure you are using an appropriate video resolution and format for your needs.
- Check for sufficient lighting in the environment.

9. WARRANTY INFORMATION

This Arducam product comes with a **6-month warranty** from the date of purchase. The warranty covers manufacturing defects and malfunctions under normal use. It does not cover damage caused by misuse, accidents, unauthorized modifications, or improper installation. Please retain your proof of purchase for warranty claims.

10. SUPPORT

For further assistance, technical support, or to explore other Arducam products, please visit the official Arducam store or contact customer service:

- **Arducam Store:** [Visit Arducam on Amazon](#)
- **Manufacturer:** Arducam

© 2023 Arducam. All rights reserved.

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

Anonymous

Email

you@example.com

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

Open the live page

<https://manuals.plus/asin/B0861M62KW>

More documents and user manuals: <https://manuals.plus/>