Arducam

Camera Module for Raspberry Pi

SKU: B0392
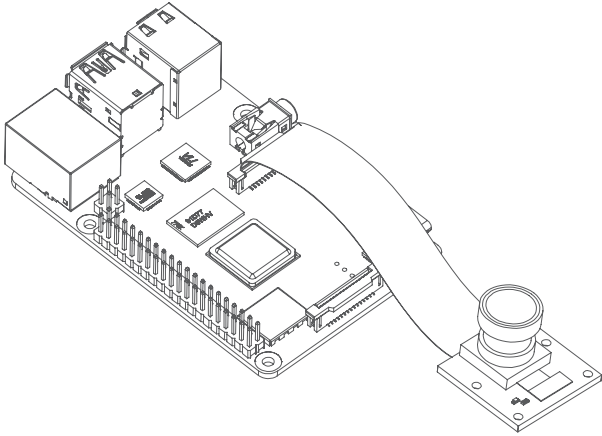
QUICK START
8MP IMX219 Wide Angle M12 Lens
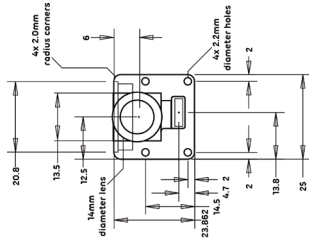
CONNECT THE CAMERA

You need to connect the camera module to the Raspberry Pi's camera port.

1. Locate the camera port near the USB C power connector, and gently pull up on the plastic edge.
2. Push in the camera ribbon and make sure the silver connector is facing the Raspberry Pi camera MIPI port. Do not bend the flex cable and make sure it is firmly inserted.
3. Push the plastic connector down while holding the flex cable until the connector is back in place.

SOFTWARE SETTING

Power on Raspberry Pi 4B and open the Terminal (Ctrl+ALT+T) Please make sure you are running the latest version of Raspberry Pi OS. (January 28th 2022 or later releases, Debian version: 11 (bullseye)).

For Raspbian Bullseye users running on Pi 4, please do the following:

1. Edit the configuration file: *sudo nano /boot/config.txt*
2. Find the line: *camera_auto_detect=1,* update it to:
camera_auto_detect=0
dtoverlay=imx219
3. Save and reboot.

For Bullseye users running on Pi 0-3, please also:
1. Open a terminal
2. Run *sudo raspi-config*
3. Navigate to Advanced Options
4. Enable Glamor graphic acceleration
5. Reboot your Pi.

Operating The Camera

libcamera-still is an advanced command line tool for capturing still images with the IMX219 Camera Module.
libcamera-still -t 5000 -o test.jpg
This command will give you a live preview of the camera module, and after 5 seconds, the camera will capture a single still image. The image will be stored in your home folder and named test.jpg.
-t 5000: Live preview for 5 seconds.
-o test.jpg: take a picture after the preview is over and save it as test.jpg
If you only want to see the live preview, use the following command:
libcamera-still -t 0

If the image captured is reddish, please refer to the lens shading calibration instructions as follows:
https://www.arducam.com/docs/cameras-for-raspberry-pi/native-raspberry-pi-cameras/lens-shading-calibration-2/
(Please note that --tuning-file xxx.json needs to be run each time you use the camera.)

Please Note:
This camera module supports the latest Raspberry Pi OS Bullseye (released on Jan 28th, 2022) and libcamera apps, not for the previous Raspberry Pi OS (Legacy) users.

FURTHER INFOMATION

For further information, check the following link:
https://www.arducam.com/docs/cameras-for-raspberry-pi/raspberry-pi-libcamera-guide/