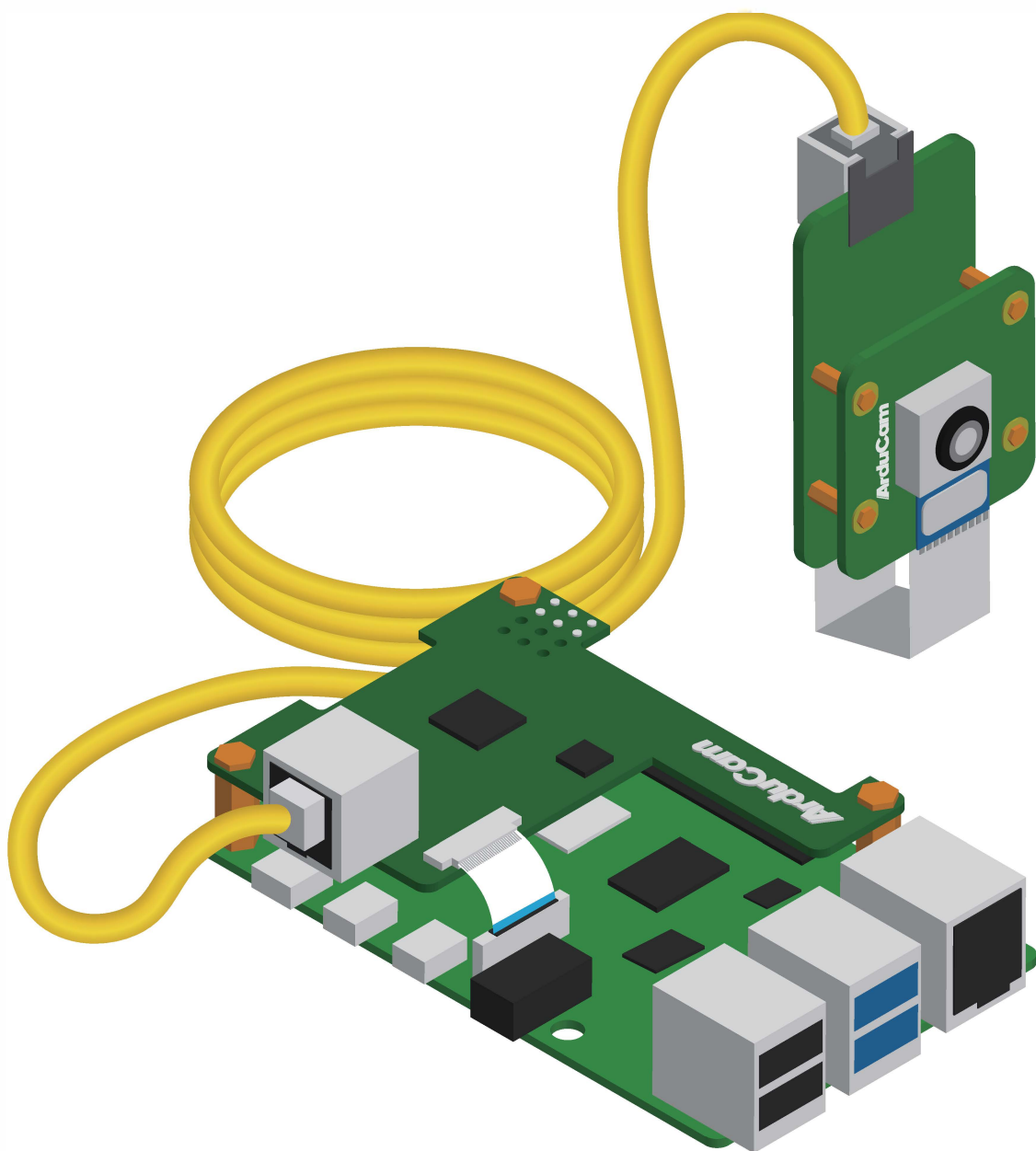


Cable Extension Kit

for Camera Module V1/V2/HQ/16MP-AF

Getting Started



Things to Do Before Assembling the Cable Extension Kit

Note: To use the cable extension kit, you need to first follow the steps below to verify if the camera module you choose works properly.

Steps for The Official Camera Module V1.3/V2.1/HQ

1. Connect the camera directly to your Raspberry Pi.
2. Open up a terminal, enter the following commands:

If you already got the latest Raspberry Pi OS and camera software:

```
libcamera-still -t 0
```

If you are still using the legacy camera software:

```
raspistill -t 0
```

If a live preview window pops up, you are good to go with the kit. If not, contact the company where you got your camera module for help.

Steps for The Arducam 16MP Autofocus Camera



Before You Start

- Please make sure you are running the latest version of Raspberry Pi OS.(January 28th, 2022 or later releases, Debian version:11(Bullseye))
- 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
- For Raspberry Pi Compute Module 3/4
The latest software only supports one camera at this time, CM4 uses CAM1 by default.

Things to Do Before Assembling the Cable Extension Kit

1. Connect the camera directly to your Raspberry Pi.

2. Download the shell scripts

```
wget -O install_pivariety_pkgs.sh  
https://github.com/ArduCAM/Arducam-Pivariety-V4L2-Driver/releases/download/install\_script/in  
stall\_pivariety\_pkgs.sh
```

```
chmod +x install_pivariety_pkgs.sh
```

3. Update your Pi

```
sudo apt update
```

4. Install libcamra-dev

```
./install_pivariety_pkgs.sh -p libcamera_dev
```

5. Install libcamera-apps

```
./install_pivariety_pkgs.sh -p libcamera_apps
```

6. Install the kernel driver

```
./install_pivariety_pkgs.sh -p imx519_kernel_driver_low_speed
```

7. Reboot

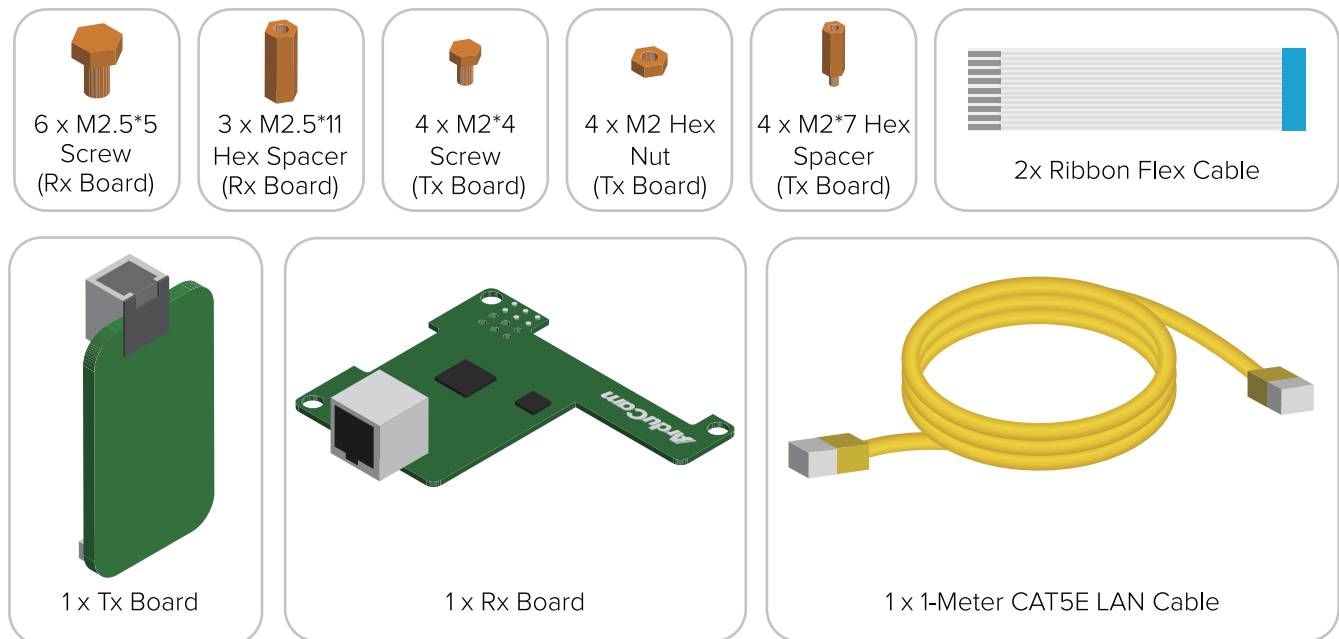
8. Open up a terminal, enter the following commands:

```
libcamera-still -t 0
```

If a live preview window pops up, you are good to go with the kit. If not, check the cable connection and contact us.

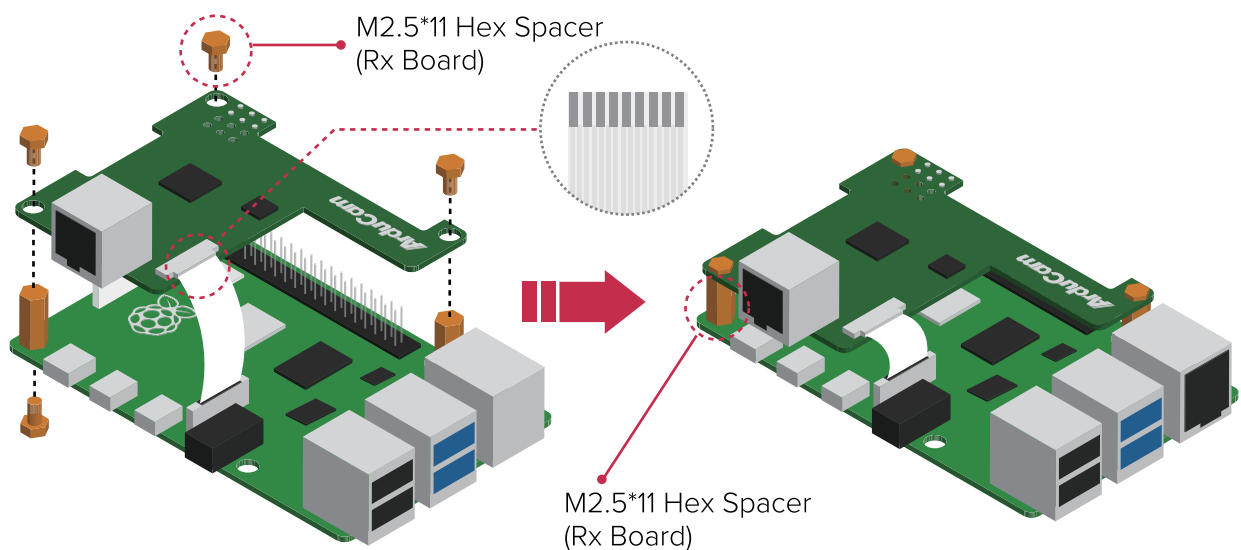
Installing The Cable Extension Kit

Packing List



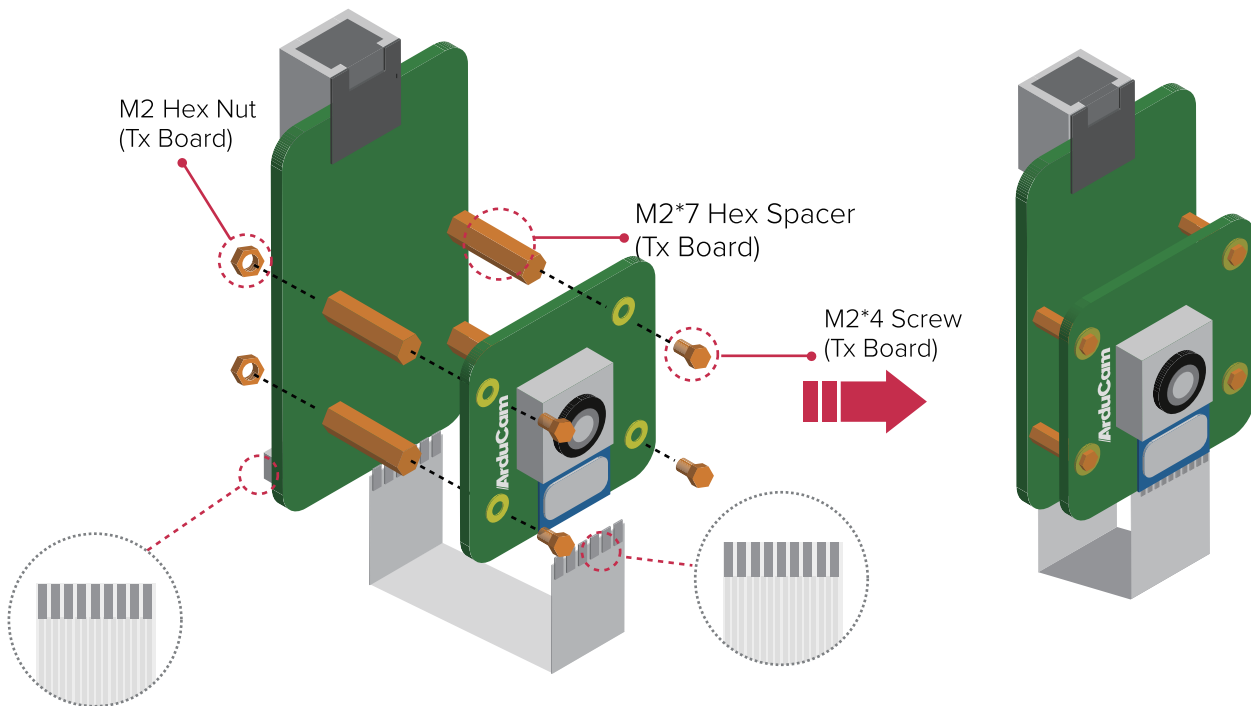
Turn off your Raspberry Pi and disconnect the power supply.

1. Connect the Rx board to your Raspberry Pi with the ribbon cable, spacers, screws, and nuts.

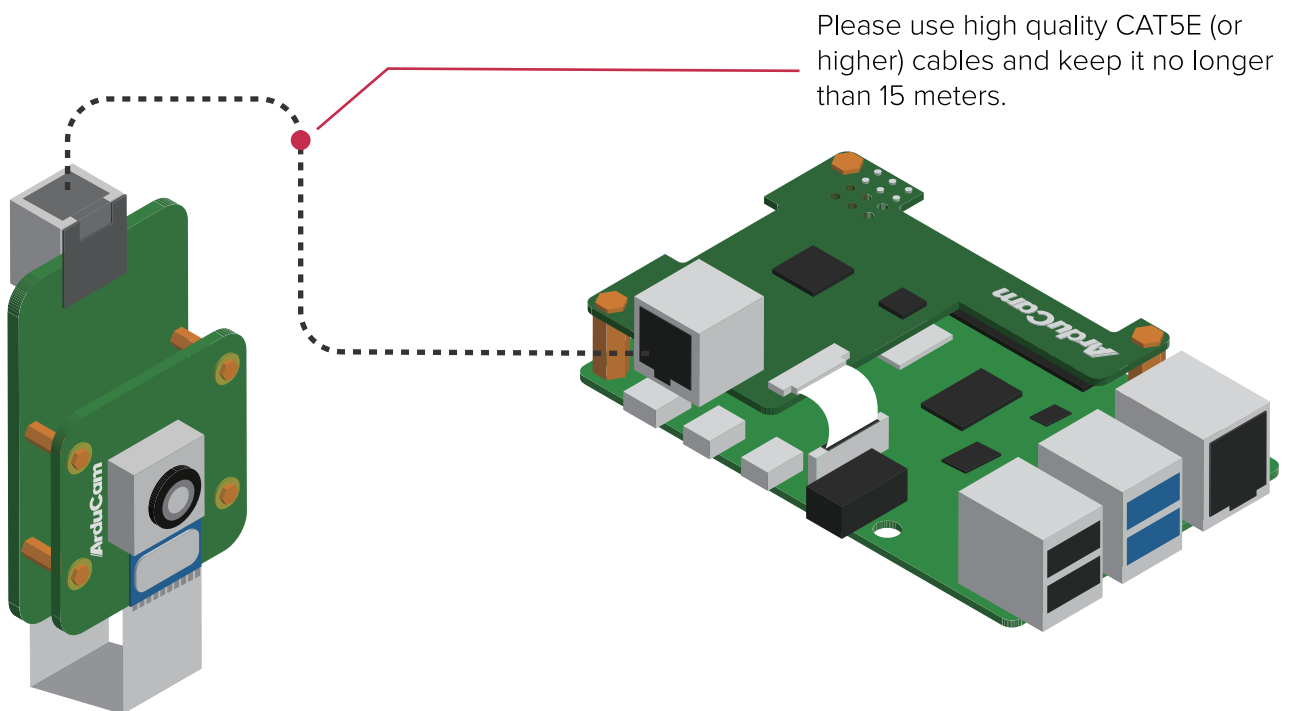


Installing The Cable Extension Kit

2. Connect the Tx board to a Raspberry Pi Camera with the ribbon cable, spacers, screws, and nuts.



3. Connect the two boards with a LAN cable



Installing The Cable Extension Kit

4. Power your Raspberry Pi on.

5. Open up a terminal, enter the following commands:

If you already got the latest Raspberry Pi OS and camera software:

```
libcamera-still -t 0
```

If you are still using the legacy camera software with the official camera modules:

```
raspistill -t 0
```

If a live preview window pops up, you are all set.

If not, make sure you followed the steps correctly, get a screenshot of the error message, and contact us for help.

More info about using the Official Cameras:

<https://www.raspberrypi.com/documentation/accessories/camera-era.html>

More info about the latest camera software and the Arducam 16MP Auto-focus Camera:

<https://www.arducam.com/docs/cameras-for-raspberry-pi/raspberry-pi-libcamera-guide/>

Instructions for Safe Use

To properly use the Arducam camera cable extension kit, note:

- Before connecting, you should always power the Raspberry Pi off and remove the power supply first.
- Make sure the cable on the camera board is locked in place.
- Make sure the cable is correctly inserted in the Raspberry Pi board's MIPI CSI-2 connector.
- Avoid high temperatures.
- Avoid water, moisture, or conductive surfaces while in operation.
- Avoid folding, or straining the flex cable.
- Avoid cross-threading with tripods.
- Gently push/pull the connector to avoid damaging the printed circuit board.
- Avoid moving or handling the printed circuit board excessively while it's in operation. Handle by the edges to avoid damages from electrostatic discharge.
- Where the camera board is stored should be cool and as dry as possible.
- Sudden temperature/humidity changes can cause dampness in the lens and affect the image/video quality.

Visit us at
www.arducam.com

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