CSI-to-HDMI Adapter Kit for Raspberry Pi Cameras

Published in June 2022
by ARDUCAM TECHNOLOGY CO., LIMITED
Before Assembling CSI-to-HDMI Connector Kit

To use the CSI-to-HDMI adapter kit, you need to first verify if you the camera module you choose works properly with Raspberry Pi.

1. Connect your camera module of choice directly to your Raspberry Pi.
2. If it's also your first time using the camera on a Raspberry Pi, follow their respective tutorials until you can successfully get a preview window up/a captured image. If it's already a working camera, you can skip this step.

Installation

An HDMI cable (10m max) with two standard (type A) connectors is required to use the kit. The kit is compatible with the official camera module V1, V2, HQ and most of Arducam Pi cameras.

Turn off your Raspberry Pi and disconnect the power supply.

Packing List

1. Assemble the 80mm flat cables and lock the connectors in place.
Installation

2. Place the camera and the adapter board back to back with the spacers, nuts and screws in the following positions.

3. Connect the other adapter board to your Raspberry Pi's MIPI-CSI 2 connector.

4. Connect the two adapters with your HDMI cable.

The cable should at least be compliant with HDMI 1.2.
For camera module V1/V2, Arducam OV5647/IMX219 series, keep the cable under 10 meters.
For HQ camera, Arducam IMX477 series, 16MP-AF, 64MP-AF, keep the cable under 5 meters.
Installation

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

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

If a live preview window pops up, you are all set.
If not, double-check to make sure you followed the steps correctly.

Adapter Pinout

With some extra jumper wires, you can also use the three pins (A, B & C) on the adapters to extend any of Raspberry Pi's GPIO ports.

Instructions for Safe Use

To properly use the Arducam CSI-to-HDMI adapter 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.