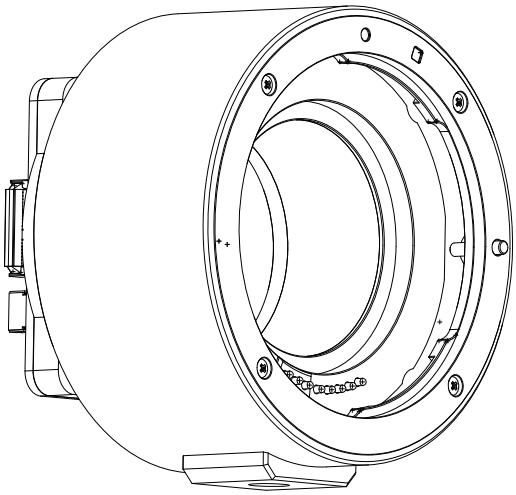
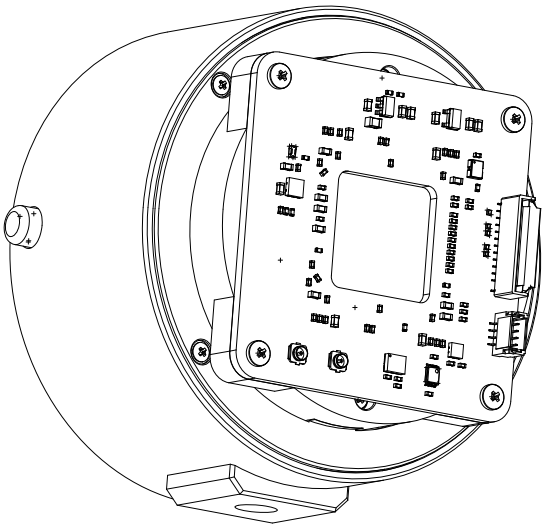
EF / EF-S Lens Controller & Adapter for FourthirdsEye Camera (Canon® Lens Compatible)

Bring autofocus and aperture control to your Canon EF / EF-S lens on your Raspberry Pi® Camera – seamless integration with *libcamera* and *rpicam-apps*.





* Canon is a registered trademark of Canon Inc. This product is not manufactured by, endorsed by, or affiliated with Canon Inc.
* Raspberry Pi is a registered trademark of Raspberry Pi Ltd. This product is not affiliated with or endorsed by Raspberry Pi Ltd.

Overview





Mount Canon EF or EF-S lenses onto your FourthirdEye camera with this electronic lens controller adapter, providing access to features such as autofocus and electronic aperture control through rpicam-apps, libcamera and the V4L2 (Video4Linux2) API.

The adapter features a large aperture opening designed to accommodate the FourThirdEye camera's large Sony IMX294 Type 4/3 sensor, ensuring full optical coverage without restricting the sensor's imaging area.

Product Highlights

- **EF/EF-S Lens Compatibility**
  Supports Canon EF and EF-S lenses for photography and video applications.
- **Autofocus**
  Automatic focus control through *libcamera*.
- **Aperture Control**
  Control lens aperture using the V4L2 (Video4Linux2) API from the Raspberry Pi.
- **Seamless Software Integration**
  Operates directly with *rpicam-apps* and *libcamera*, no custom code required.
- **Large-Aperture Optical Design**
  Large aperture opening to fully accommodate the Sony IMX294 Type 4/3 sensor.
- **Compatible with all models**
  It is compatible with all models of Raspberry Pi computer that use the latest software.
- **Maker-Friendly**
  Ideal for Raspberry Pi enthusiasts, developers, and camera projects needing pro lens features.

Technical Specification

Power	+3.3V through one of 4-pin connectors +5.0V through RPI GPIO header
Communication Interfaces	I2C (3.3V) Serial / UART (3.3V) Connectors: Molex PicoBlade, 1.25mm pitch
Dimensions	68 x 45.4 mm
Camera mount	4 × screws, 40 × 40 mm square
Lens mount	Canon EF or EF-S
Adapter Material	Plastic housing with metal components
Durability	Rated for repeated connect/disconnect cycles

The adapter includes a compartment for an optional, unmounted 36 × 2 mm IR-cut filter.

Application

- Digital Imaging
- Aerial Imaging
- Industrial Applications
- Surveillance and Security
- Traffic Monitoring

Software Support

Detailed assembly and setup instructions are available in our GitHub repository: https://github.com/pinefeat/cef168

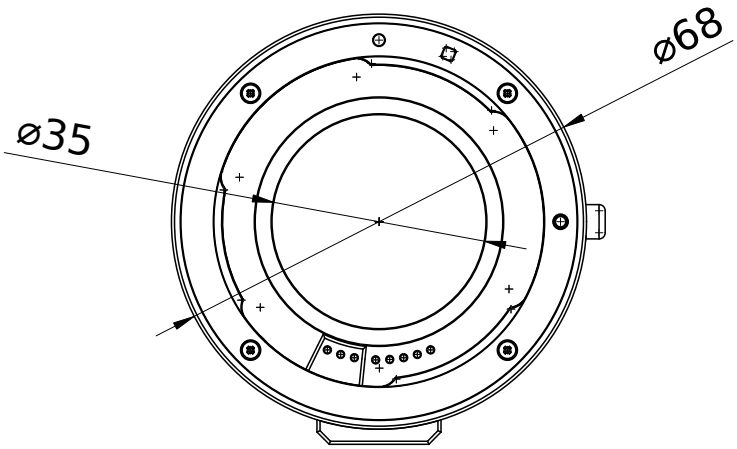
Compliance

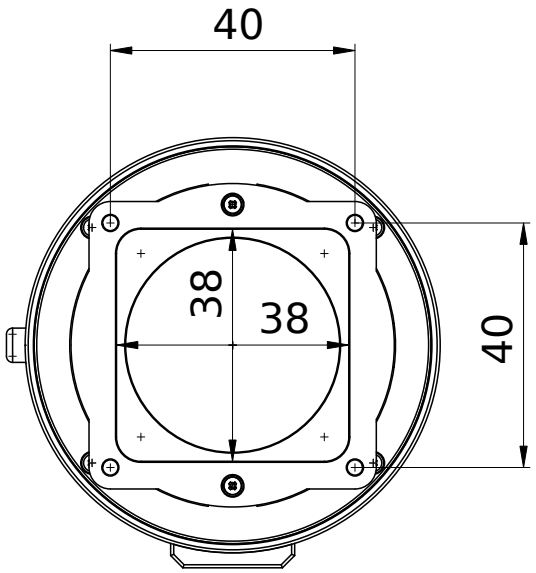
- Electromagnetic Compatibility Directive (EMC) 2014/30/EU
- Restriction of Hazardous Substances (RoHS) Directive 2011/65/EU

Package Contents

1) Canon EF / EF-S lens to camera adapter
2) 4-wire data cable
3) 2-wire power cable
4) Optional IR-cut filter

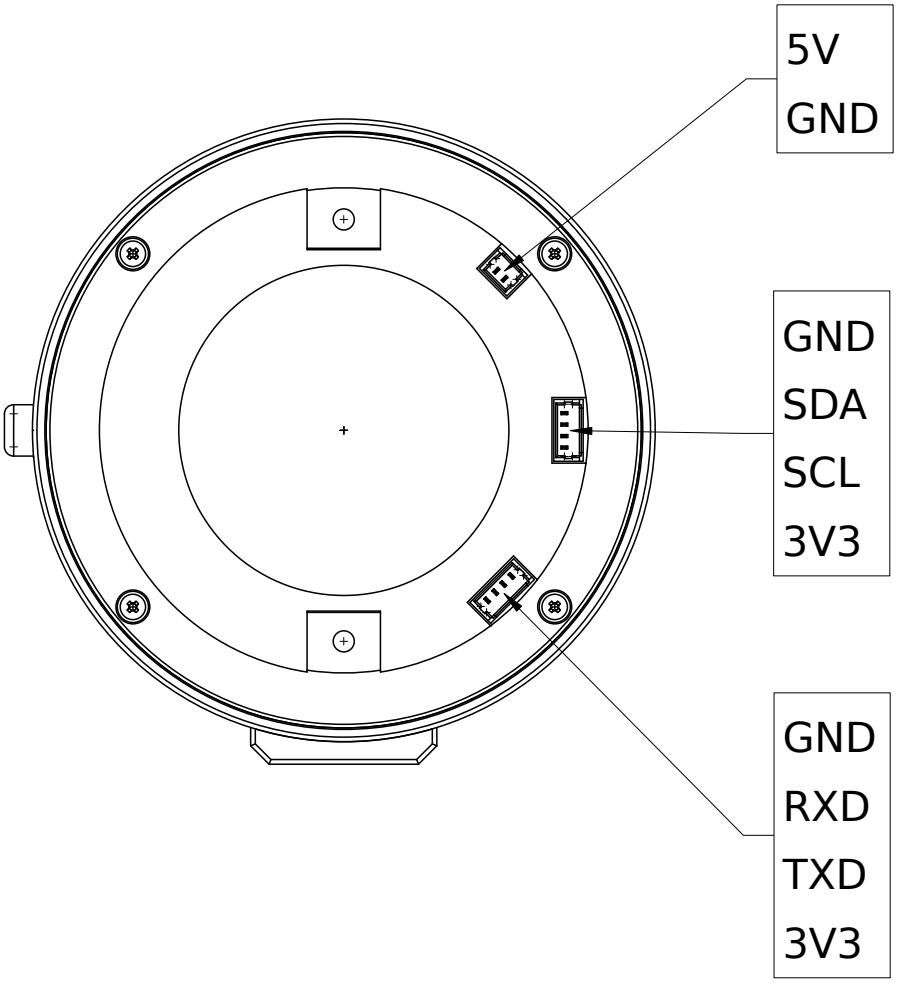
Physical Specification





Note: all dimensions in mm

Connectors Pinout



Warnings

Whilst in use, this product should be firmly secured. For stable support, use the built-in tripod mount. With heavier lenses, use a Tripod Mount Ring around the adapter or lens to balance the weight and prevent strain on the camera and adapter connections.

The connection of incompatible devices other than Canon EF / EF-S lenses and FourthirdEye Camera may affect compliance, result in damage to the unit, and invalidate the warranty.

All peripherals used with this product should comply with relevant standards for the country of use and be marked accordingly to ensure that safety and performance requirements are met.

Safety Instructions

To avoid malfunction or damage to this product, please observe the following:

- Ensure you follow the assembly guide carefully.
- **Important**: Before connecting this device, shut down your Raspberry Pi computer and disconnect it from external power.
- This device should be operated in a dry environment at 0–50°C.
- Do not expose to water or moisture, or place on a conductive surface whilst in operation.
- Do not expose to heat from any source; the adapter is designed for reliable operation at normal ambient temperatures.
- Store in a cool, dry location.
- Avoid rapid changes of temperature, which can cause moisture to build up in the adapter.
- Take care when screwing in parts. A cross-thread can cause irreparable damage and void the warranty.
- Take care whilst handling to avoid mechanical or electrical damage to the connectors.

Warranty

This product is covered by a 1-year warranty against manufacturing defects. For warranty claims or support, please contact us.



Manufacturer

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United Kindgom

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Note: Product specifications are subject to change without notice