

GitHub repository where all documentation & code can be found. [billbill100 \(github.com\)](https://github.com/billbill100)

Trigger Trap Timer & Lightning Capture

Camera Connections V1.1 18/07/2024

The opto-isolator board provides total electrical separation between the camera and the timer. One of the chips on the board is an 'opto-isolator'. On one side is an LED, which lights when controlled by the ESP32. On the other side is a photo-resistor, which sees this light & responds in kind. There is no electrical connection, the only thing passing across is light. This light is used to control the other side of the board, which connects to the camera.

Purchase the correct camera shutter release cable for your camera, to 3.5mm socket.

Canon use two different connectors, depending on the camera. A 2.5mm socket or bespoke Canon connector.

Nikon use three different camera connectors.

Canon & Nikon are the simplest of cables and a pre-made shutter release cable should be wired as such and should work without modification.

Some manufacturers use just two wires, but with added resistors, **Fuji & Panasonic**, for example. This makes the cable a little more complicated. Having not used such a camera or cable, I cannot say if pre-made cables have the additional resistors built in or not. For these cameras, some experimentation will be required & the use of a multimeter to test the cables.

To connect to the Trigger/ Lightning box 3.5mm jack plug,
Common Outer - Black
Focus to collar - Yellow
Shutter to Tip - Green

Below are links to useful web sites showing the connectors & pin-outs.

[www.doc-diy.net :: camera remote release pinout list](http://www.doc-diy.net/camera-remote-release-pinout-list)

[DIY - Release Cable for Canon DSLRs \(diyphotography.net\)](http://diyphotography.net/DIY-Release-Cable-for-Canon-DSLRs)

[Canon N3 Connector Pinout and Wiring : Martin Pot - Photography Blog \(martybugs.net\)](http://martybugs.net/Canon-N3-Connector-Pinout-and-Wiring)

[Panasonic Shutter Release Cable for Arduino Camera Control and Timelapse Ep 22 \(youtube.com\)](https://www.youtube.com/watch?v=...)