

I would really be grateful if you start to build the Lightning Capture Device, that you go to the Photrio thread and say hi. Also please post photos of your completed project.

Please refer to the Photrio thread for further build help

[Lightning Capture Device - Cheap - Simple & it works \(photrio.com\)](https://photrio.com/thread/lightning-capture-device-cheap-simple-it-works)

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

ESP32 Lightning Capture Wiring Guide V1.0 18/07/2024

Wiring of the modules is easily accomplished using Dupont wires. They come in a variety of lengths with terminals being male-male, female-female or male-female. Using a screw-terminal breakout board, male-female are most suitable, with a mix of 10 and 20cm lengths.

There are limited 3.3V and 0V (or GND) screw terminals available. One solution is to gather the 3.3V wires together, cut off the connector and remove a small piece of the insulation. Terminate all of the wires into a choc-bloc and then just one wire from the choc-bloc will go to the screw-terminal on the breakout board. The same is then done with the 0V wires.

Do not use the GND terminal on the lower left of the Lolin D32 board. (it is an error on the board printing and is CMD, not GND)

If using the NodeMcu32 board, do not use the GND terminal between pins 19 & 21 (it is an error on the board printing and is CMD, not GND)

Please refer to the schematic for details of all connections and use them in conjunction with the photographs below.

Please be aware that the photos below are of the 32 pin Lolin D32 board and it only uses 32 of the 38 screw connections (the rear 3 on either side are not used) and that **the breakout board legends do not match that of the Lolin D32 board.**

The NodeMcu32 has more pins & uses all 38 screw terminals. Refer to the schematic for the correct connections. Note the outer two pins are not connected and there is also a non-connected pin towards the center of the tft screen.

Oled connections.

VCC - Red - Vcc

GND - Black - GND

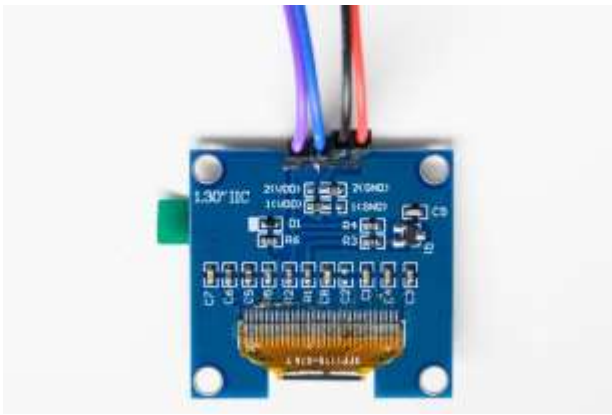
SCK - Blue - 22

SDA - Purple - 24

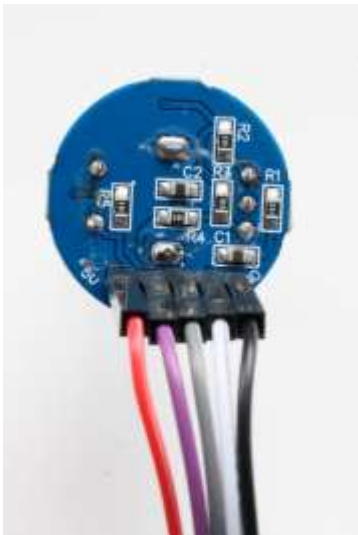
Caution, some Oled modules have the Vcc and GND Reversed.

The screen-printed legends should be correct. In the photo just in front of the jumper wires, two soldered links can be shown, indicating how the board is wired for polarity.





Encoder wiring.
 3V - Red - 3V
 Key - Purple - 26
 S2 - Grey - 33
 S1 - White - 25
 GND - Black - GND



Button Wiring (no photo)

Button - Green - 12

Button - Black - GND

Traffic Lights

GND - Black - GND

Red - Red - 3V

Yellow - Yellow - 14

Green - Green - 17



Shutter release socket

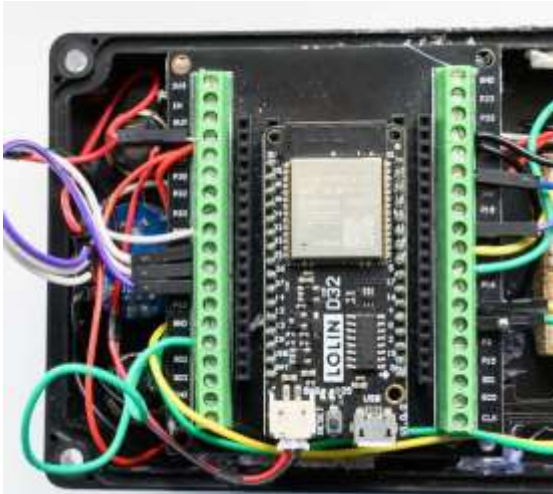
Body - Black - GND of Isolator Outputs

Collar - Yellow - Out of Isolator

Tip - Green - Out of Isolator



Completed wiring.



Note:- a different opto-isolator is shown in this photo.



A very boring & rough looking project box.

