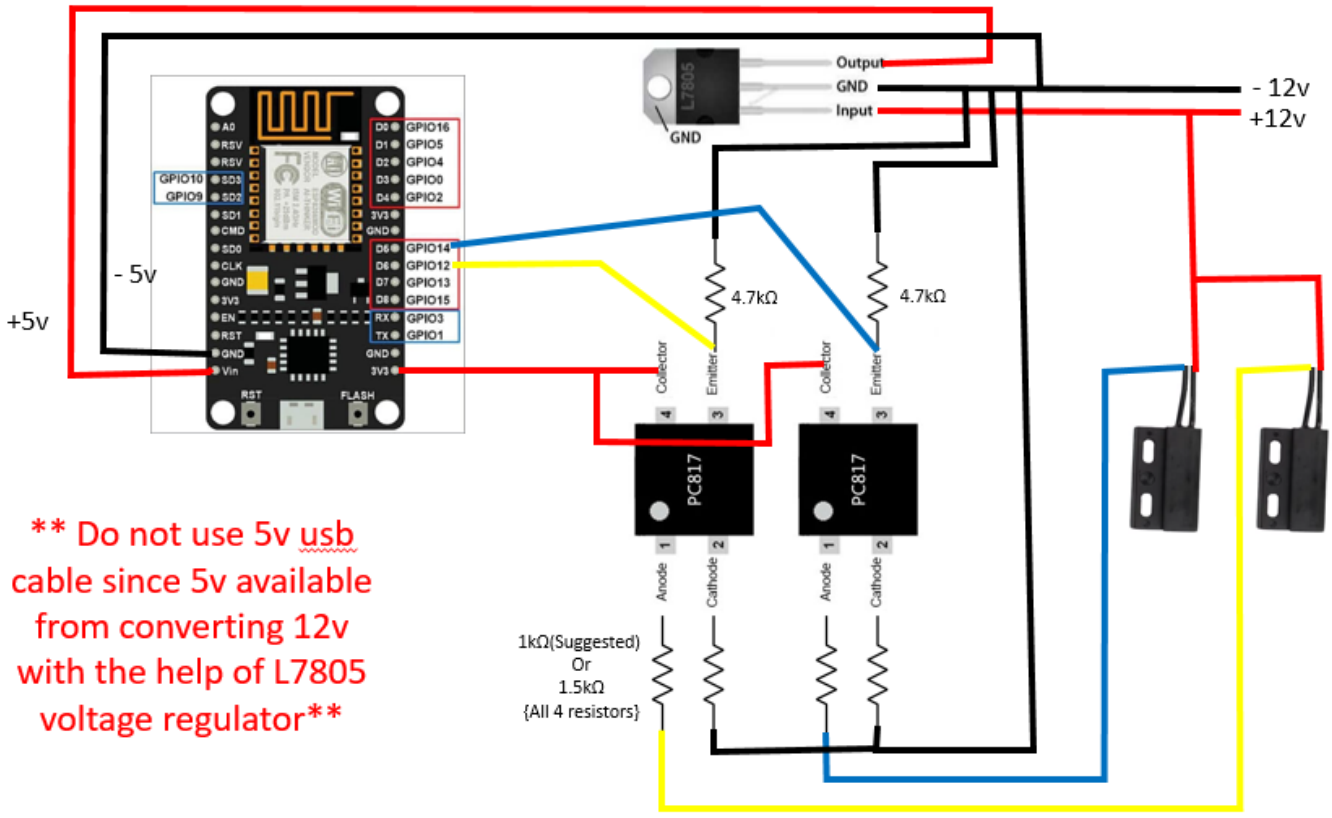
Documentation for using Optocoupler for binary sensors with HomeAssistant

Visit Github Repo:- https://github.com/hasio144/HA-Optocoupler_BinarySensor.git

This documentation includes info to use PC817 optocoupler for binary sensors in order to prevent from issues of long distance voltage drop leading to frequent false and fluctuated data reading. Can be used for various purposes like to implement long distance sensor to check open/close status of big as well as small gates.

Requirements:

- HomeAssistant
- Esphome Addon
- Microcontroller (D1 mini or esp8266 used in this case)
- PC817 Optocoupler
- 1kΩ or 1.5kΩ resistors
- 4.7kΩ resistors
- L7805 voltage regulator to convert 12v to 5v
- Reed switch



Esphome Code:

```
binary_sensor:
  - platform: gpio
    device_class: garage_door
    name: Small Gate              ##YELLOW
    pin:
      number: 12                  #D6
      mode: INPUT_PULLUP
      inverted: True
  - platform: gpio
    device_class: garage_door
    name: Big Gate                 ##BLUE
    pin:
      number: 14                   #D5
      mode: INPUT_PULLUP
      inverted: True
```