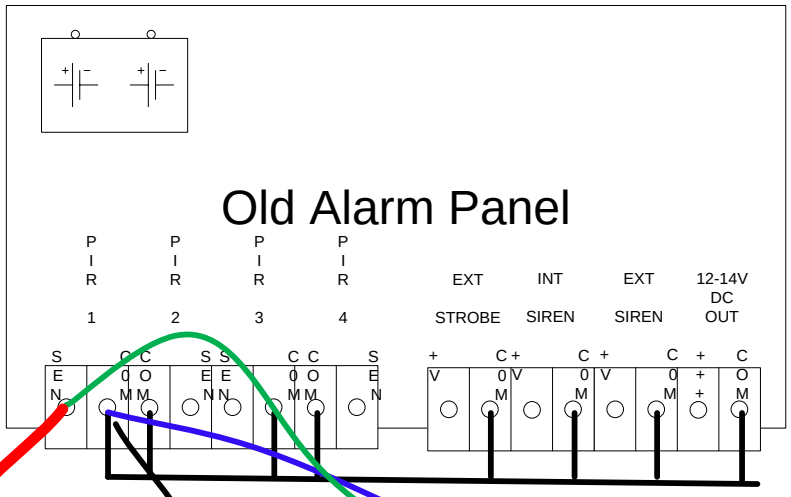
Setting PIR reference voltage



Software config

If **Valarm** is greater than **Vclear**
Then in the in the .ino file we need to leave
#define AlarmHigh
If **Vclear** is the higher, then comment out
// #define AlarmHigh

Calculate the reference voltage

Irrespective of which voltage is the higher
We need to set the reference voltage to equal to the lower of the two readings plus half the difference between the readings.

If say Vclear = 1volts
Valarm = 4 volts

Vref = 1+(4 – 1)/2
= 2.5volts.

Leave #define AlarmHigh

Or if Vclear = 9volts
Valarm = 3 volts

Vref = 3+(9 – 3)/2
= 6.0volts.

COMMENT // #define AlarmHigh

Testing the PIR

Measure the voltage when the PIR is clear
Lets Say **Vclear** =1volt
Them measure the voltage when its activated **Valarm** = 4 volts

Adjusting reference voltage.

Measure the voltage between the common ground and the point where R4,R6 R8 and R10 meet, set the voltage to the calculated value by adjusting VR1