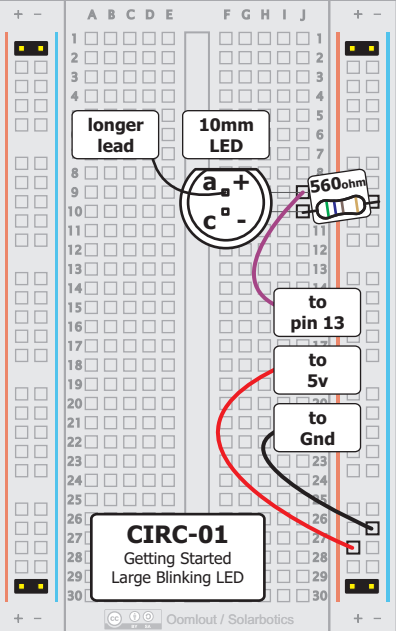
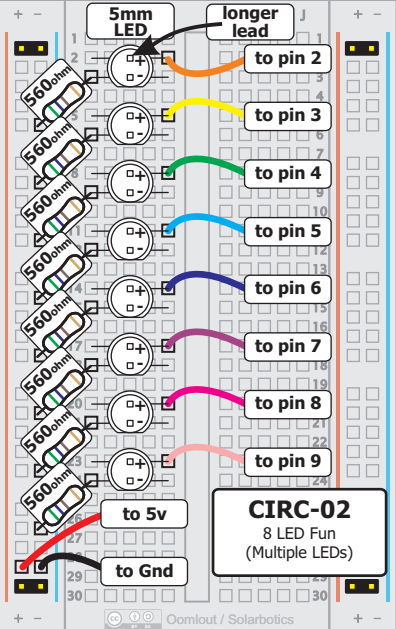






**Transistor
(P2N2222A)**



2.2k Ω



to pin 9

diode

optional



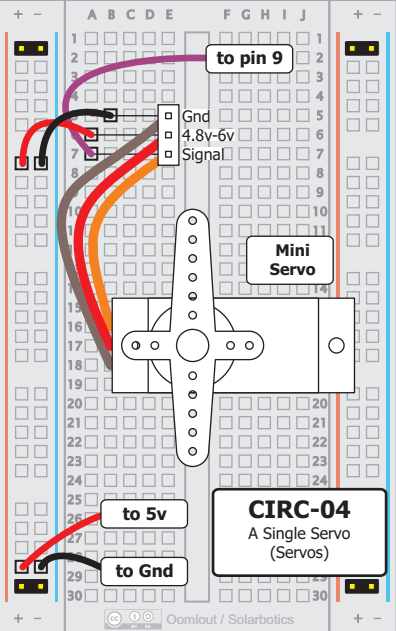
**longer
lead**

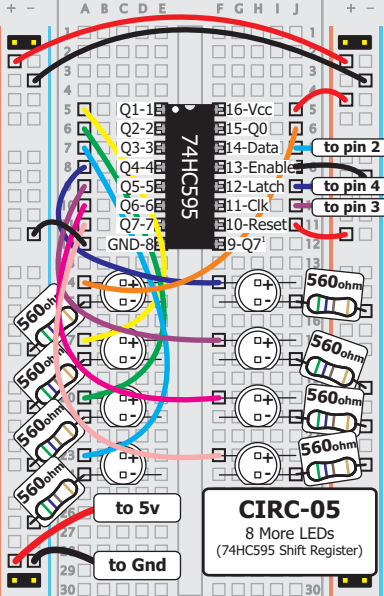
to 5v

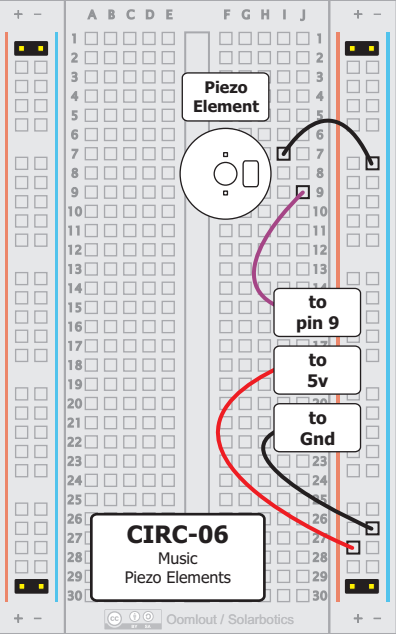
to Gnd

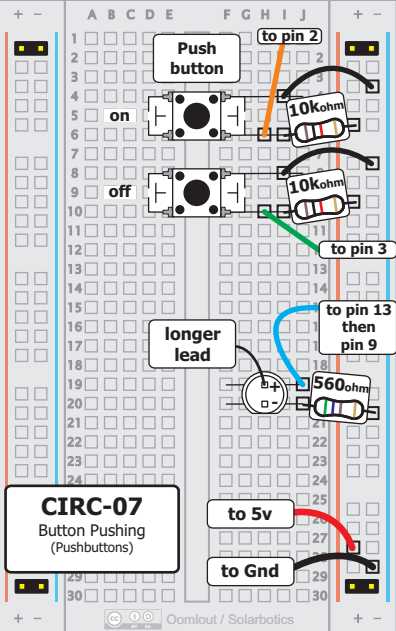
CIRC-03

Spin Motor Spin
(Transistor & Motor)









Potentiometer
(variable resistor)

V+
← wiper
gnd

to pin analog 0

longer
lead

to pin 13
then
pin 9

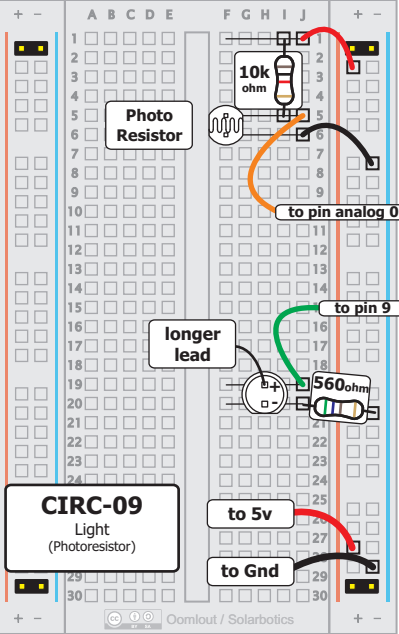
560ohm

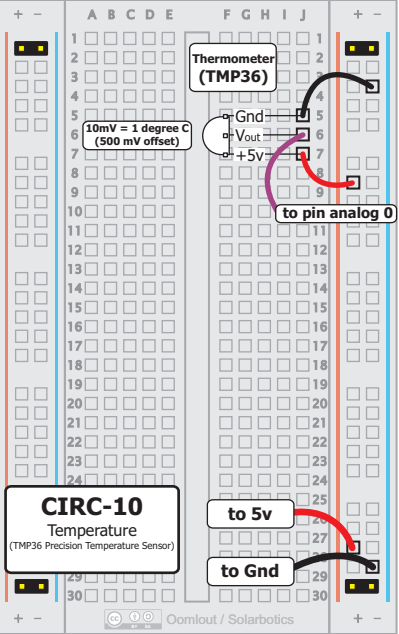
CIRC-08

Twisting
(Potentiometer)

to 5v

to Gnd





Thermometer
(TMP36)

10mV = 1 degree C
(500 mV offset)

Gnd
Vout
+5v

to pin analog 0

to 5v

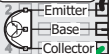
to Gnd

CIRC-10

Temperature

(TMP36 Precision Temperature Sensor)

Transistor (P2N2222A)



diode



coil

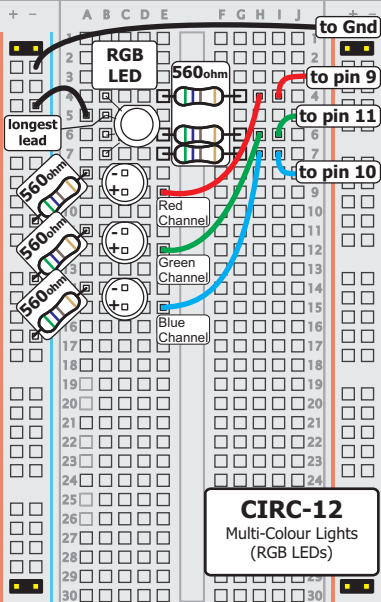
DPDT
Relay

CIRC-11

Larger Loads
(Relays)

to 5v

to Gnd



CIRC-12

Multi-Colour Lights
(RGB LEDs)