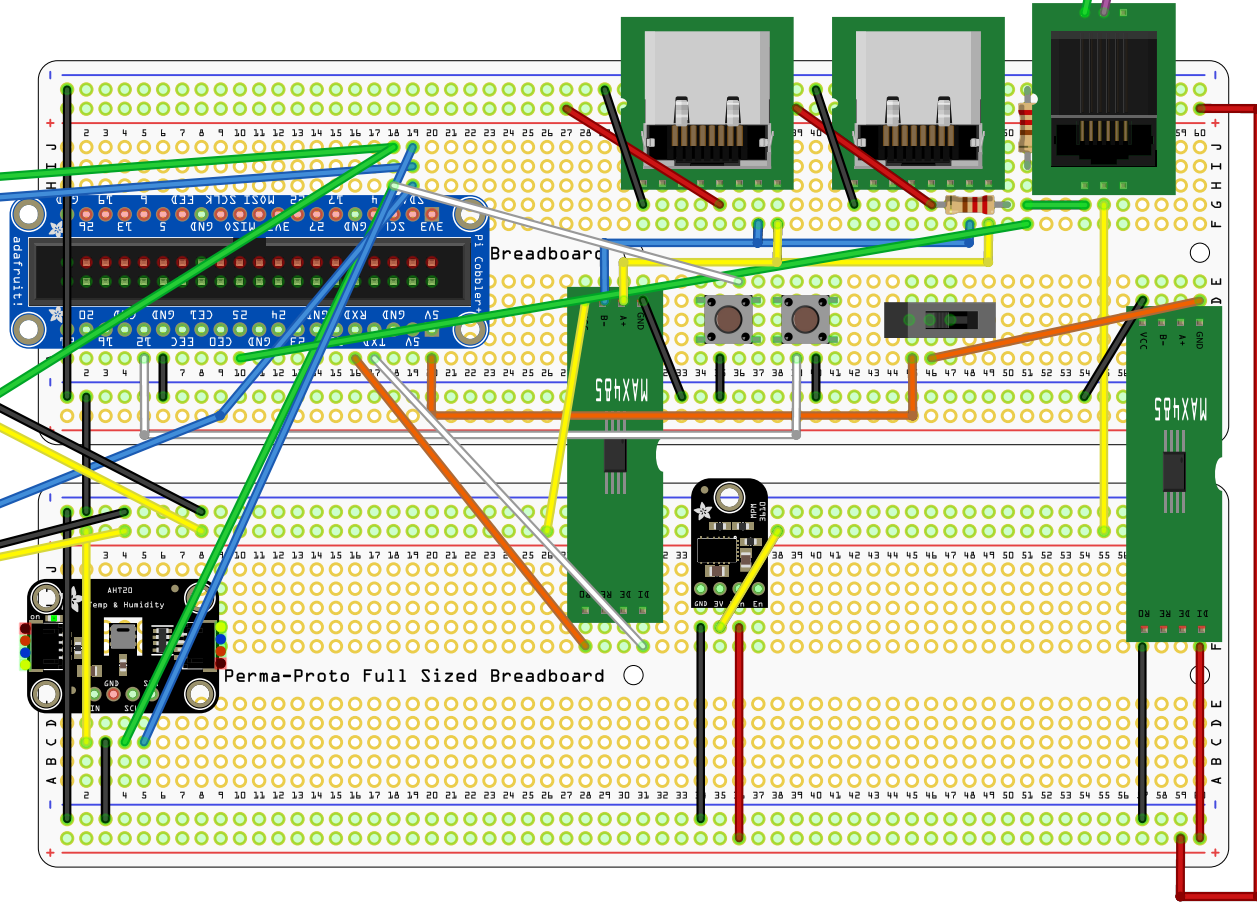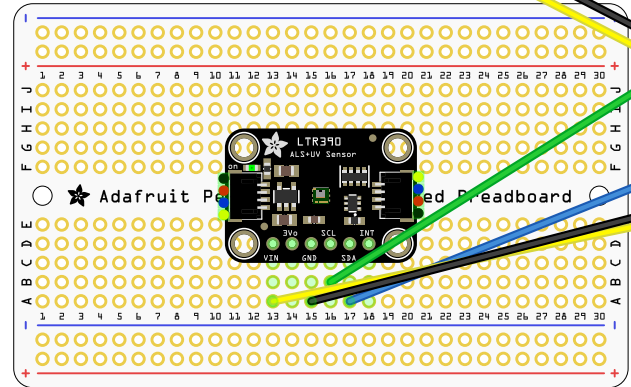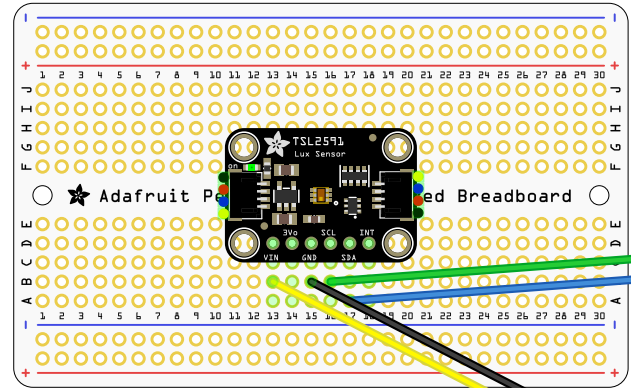SHT30
(TEMPERATURE and
HUMIDITY) on RJ45
on RS485
red = +12V
black = GND
blue = B-
yellow = A+
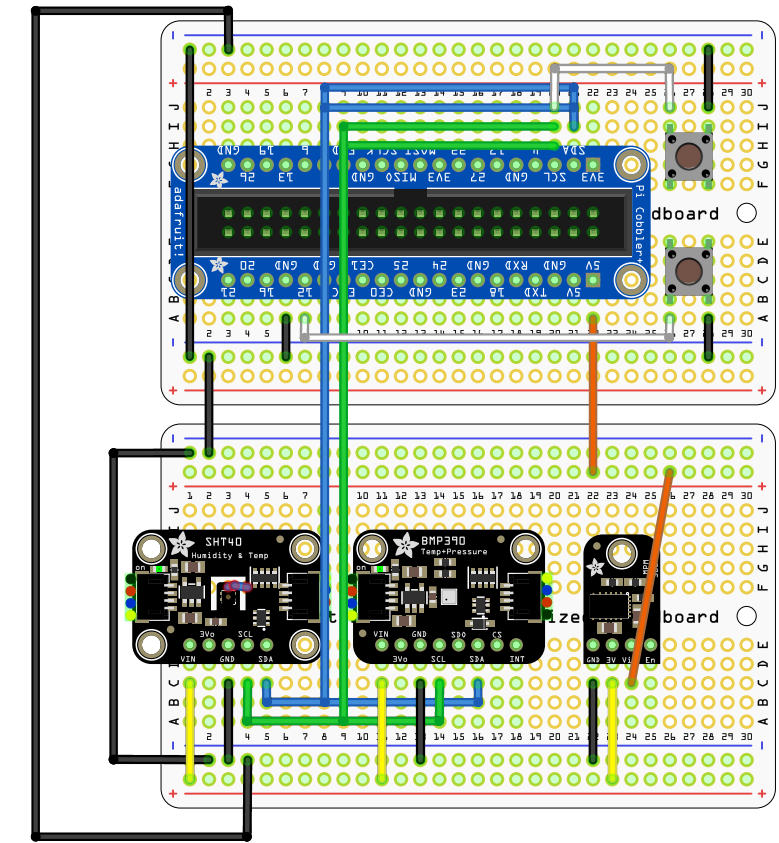
RAIN BUCKET
hall effect switch
bucket tip = switch press
rj11 plug for switch wire
15k resistor

wall power to
raspberry pi

J1

Adafruit P___ed Breadboard

TSL2591
Lux Sensor

3Vo SCL INT
VIN GND SDA

LTR390
ALS+UV Sensor

3Vo SCL INT
VIN GND SDA

Adafruit P___ed Breadboard

Breadboard

MAX485

MAX485

AHT20
Temp & Humidity

Perma-Proto Full Sized Breadboard

SHT40
Humidity & Temp

3Vo SCL INT
VIN GND SDA

BMP390
Temp+Pressure

VIN GND 3Vo CS
3Vo SCL SDA INT

___t ___ze ___board

wall power to
raspberry pi

5V power out pin
from raspberry pi goes to 12V
step up

step down
12V in (red)
3V out (yellow)
powers:
(1) RAIN switch
(2) LIGHT sensors
(3) rs485 transd.

step up
5V in (orange)
12V out (red)
powers:
(1) MODBUS
(2) step down

step down
5V in (ochre)
3V out (purple)
powers:
(1) RAIN switch
(2) LIGHT sensors
(3) ADC
(4) TXB0108

fritzing