



waag
wetlab amsterdam



Bioreactor



waag
wetlab amsterdam

Photobioreactor



Cyanobacteria (algae)





Curly phenotype





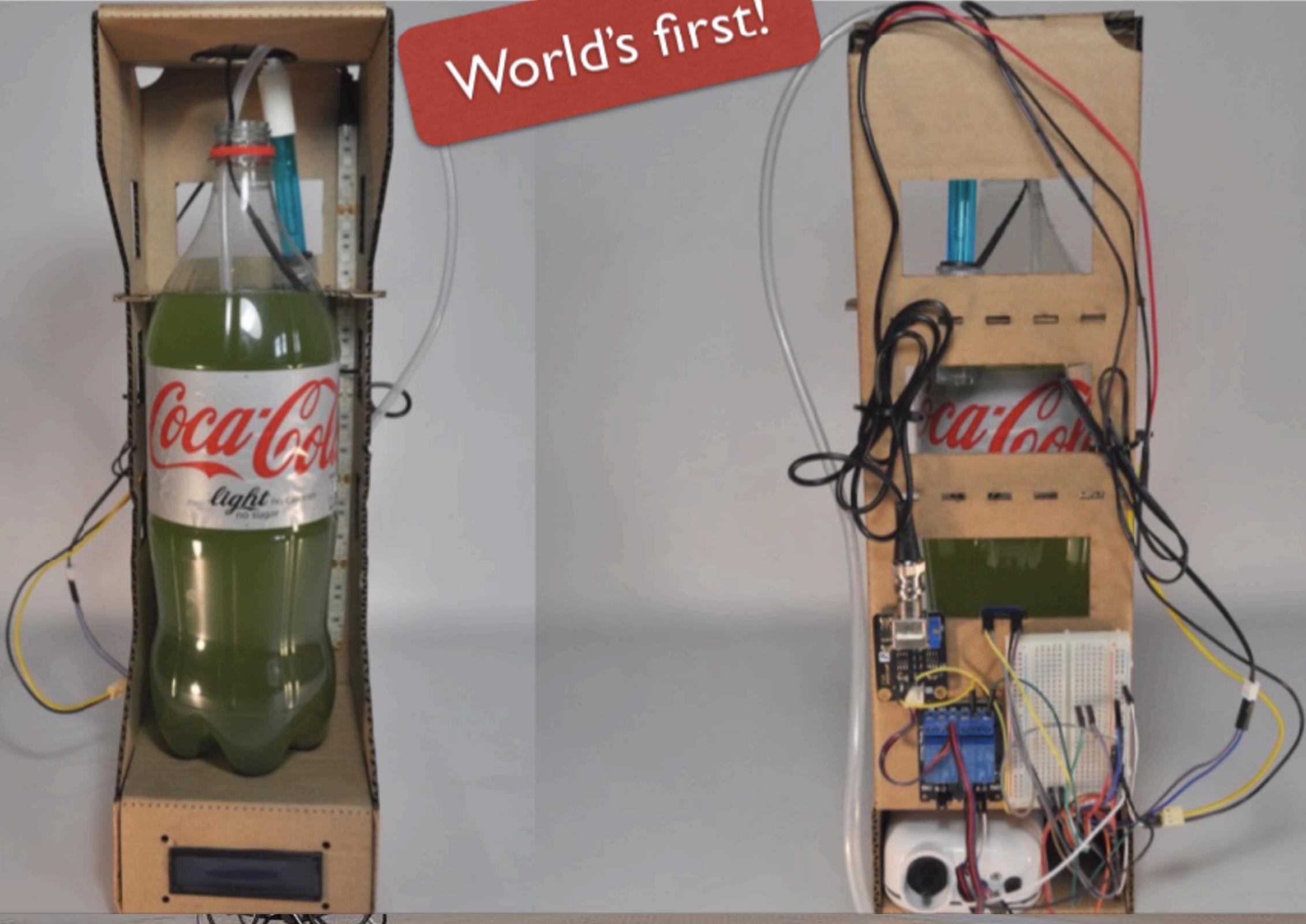
Available in stores





Foldable photobioreactor

World's first!





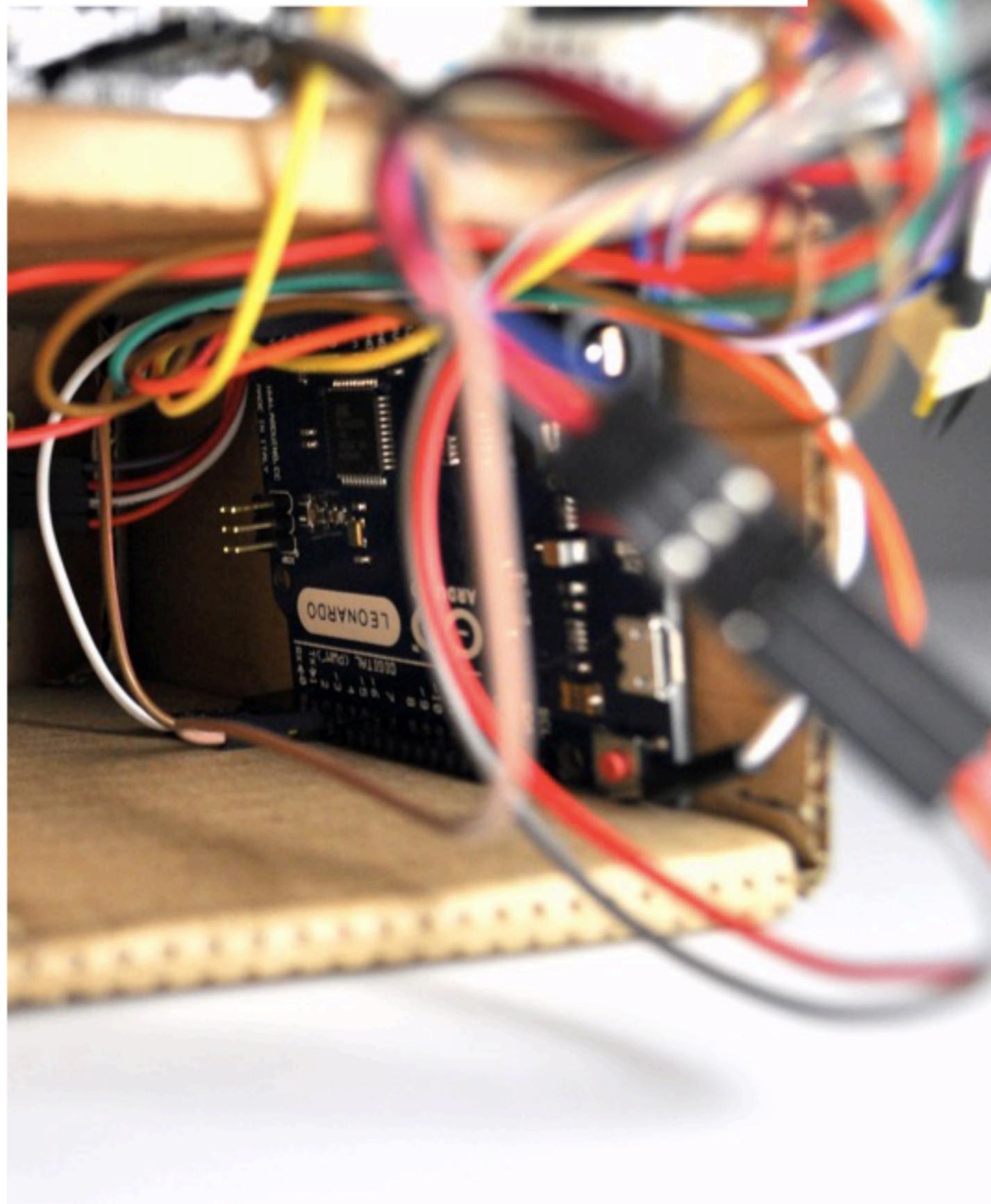
Bill of Materials

No	Amount	Description	Supplier NL	Cost
1	1	Big sheet of cardboard, just use an old box	-	-
2	1	Water proof temperature sensor NTC	HackerStore, Prototype Shop, Adafruit	2.95
3	1	10K resistor	Farnell, EOO	0.06
4	1	I2C LCD display	Bens Electronics, HackerStore, iPrototype, Hackerstore	5.95
5	1	Digital Lux sensor (*1)	HobbyElectronica	7.95
6	1	Digital lux sensor (*1)	Bens Electronics	3.50
7	1	Backflow valve	Vijverbenodigdheden	0.75
8	1	pH sensor	iPrototype	33.95
9	1	Relay	Hobby Electronica	2.95
10	1	Breadboard	Bens Electronics, HackerStore	3.00
11	2	Jumpwires	Bens Electronics, HackerStore	0.75
12	2	Male-female wires	Bens Electronics, HackerStore	0.75
13	1	Air pump	Raven Hengelsport	8.99
14	1	Battery Alkaline C	Albert Heijn	1.00
15	1	LED strip	eBay	2.90
16	1	7.5 W power supply	iPrototype, EOO	12.50
17	1	Spirulina culture	eBay	15.00



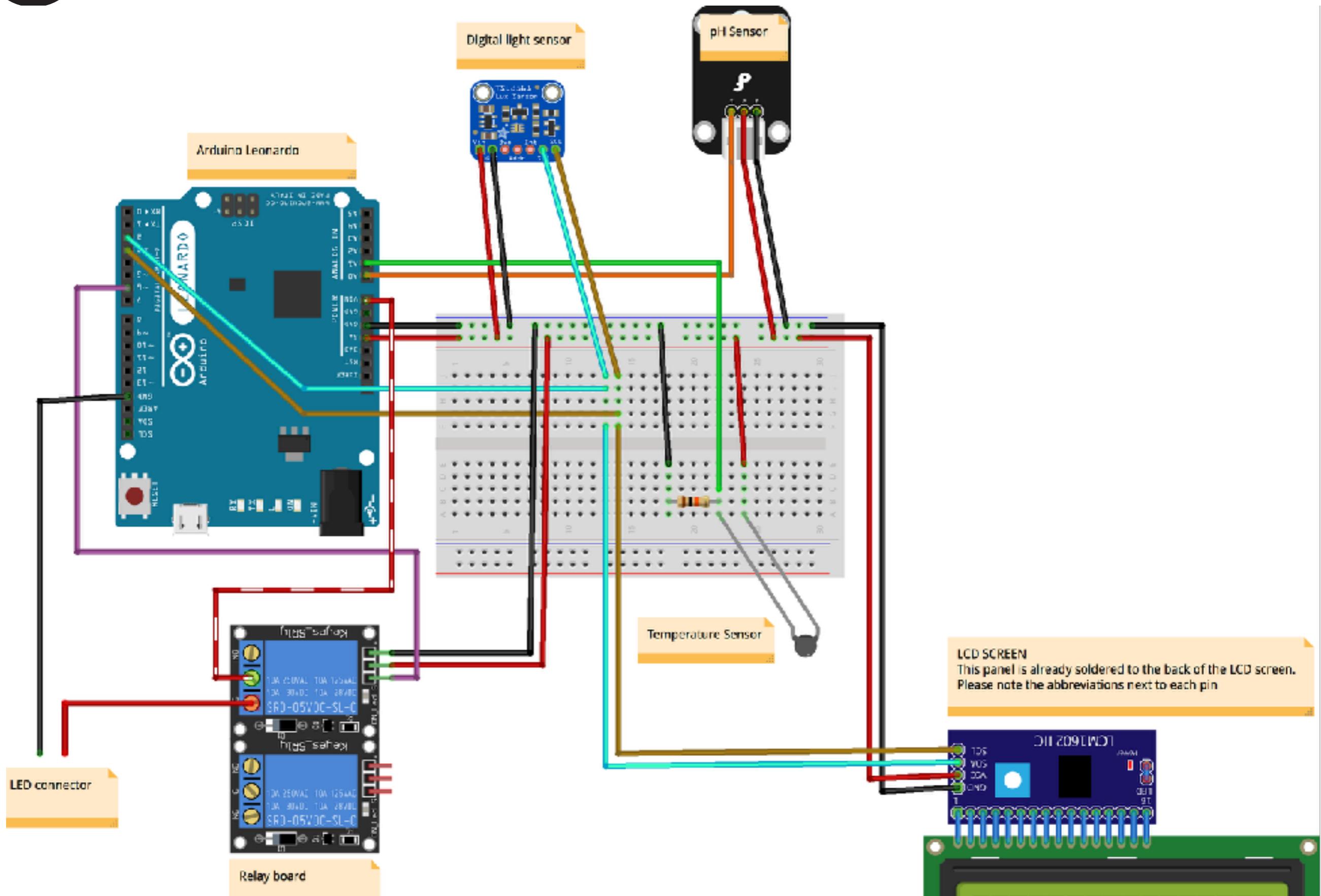
What's up with all the wires?

- Digital control
 - Day / night light cycle
 - Light monitor
 - Temperature monitor
 - pH monitor (bonus)
 - LCD display





Wiring





**some
rights
reserved**