**Sensor:**

The Sensor used for this is the Light Dependent Resistor (LDR).

I have used 3 LDRs, they are on the PCB. So if you don’t assemble the PCB from the Manufacturer you will have to solder it on the PCB.

Try to Enclose them in a pipe, so that the external light don’t disturb the reading.

Place a light Source in front of the sensor, so that the light falls directly on the sensors.

Link: <https://www.aliexpress.com/item/32760631393.html?spm=a2g0o.productlist.main.3.298e5fcfJXlE0q&algo_pvid=ff2a2955-9a98-4b63-9321-705a2e9786ed&algo_exp_id=ff2a2955-9a98-4b63-9321-705a2e9786ed-1&pdp_ext_f=%7B%22sku_id%22%3A%2210000001115154392%22%7D&pdp_npi=2%40dis%21USD%210.65%210.54%21%21%210.26%21%21%40212279b716663345980126444d07b8%2110000001115154392%21sea&curPageLogUid=0OzGHZDoNmLn>

Required Quantity: 3

**Relay Module:**Link: <https://www.aliexpress.com/item/32841468796.html>

Required Quantity: 1

**Pump:**

Link 13L/min: <https://www.aliexpress.com/item/4001174385534.html?spm=a2g0o.productlist.main.67.34c557a0TLcazq&algo_pvid=fe75e2ba-44ac-4386-94d5-ff9e6eb9b45b&algo_exp_id=fe75e2ba-44ac-4386-94d5-ff9e6eb9b45b-33&pdp_ext_f=%7B%22sku_id%22%3A%2212000018344417830%22%7D&pdp_npi=2%40dis%21USD%217.42%215.94%21%21%215.91%21%21%40211bf31716663342088888068d0734%2112000018344417830%21sea&curPageLogUid=T3AoFtcVcPXs>

<https://www.aliexpress.com/item/1005004355463680.html?spm=a2g0o.productlist.main.55.25e851545Q9hkc&algo_pvid=99c80f8e-ce30-4a15-8616-8597122c6c3b&algo_exp_id=99c80f8e-ce30-4a15-8616-8597122c6c3b-27&pdp_ext_f=%7B%22sku_id%22%3A%2212000028879664722%22%7D&pdp_npi=2%40dis%21USD%2158.57%2135.14%21%21%21%21%21%40212243c016663338556465598d076d%2112000028879664722%21sea&curPageLogUid=MoYBw2ee73hJ>

<https://www.aliexpress.com/item/1005003803531791.html?spm=a2g0o.productlist.main.31.25e851545Q9hkc&algo_pvid=99c80f8e-ce30-4a15-8616-8597122c6c3b&algo_exp_id=99c80f8e-ce30-4a15-8616-8597122c6c3b-15&pdp_ext_f=%7B%22sku_id%22%3A%2212000027225299702%22%7D&pdp_npi=2%40dis%21USD%2151.55%2132.99%21%21%21%21%21%40212243c016663338556465598d076d%2112000027225299702%21sea&curPageLogUid=OpNnkW3tHp0X>

**Arduino Nano:**

Link: <https://www.aliexpress.com/item/1005002883165283.html?spm=a2g0o.productlist.main.13.58f56f37cXZm0x&algo_pvid=aca5ce0f-a1bd-4bab-847a-cff15c1dab72&algo_exp_id=aca5ce0f-a1bd-4bab-847a-cff15c1dab72-6&pdp_ext_f=%7B%22sku_id%22%3A%2212000022605800013%22%7D&pdp_npi=2%40dis%21USD%213.98%212.39%21%21%210.29%21%21%40211bf04a16663346375744592d07a7%2112000022605800013%21sea&curPageLogUid=HxHwq2BwOzB6>

Required Quantity: 1

**Instructions:**

* When you get the PCB, place all the components and solder it, or get the PCB assembled from China.
* Connect the USB to Arduino Nano and Upload the code I provided.
* There is a Terminal block in the PCB, having pins 5V, SIG, GND. Connect 5V to 5V of the Relay, SIG to CTRL of the Relay, and GND to GND of the Relay.
* Take the motor, connect its Ground Wire or Black wire to the Ground or Black wire of the Power Supply.
* Take the Positive Wire of Motor and connect it to one pin of the the Load Block of the Relay.
* Take the Positive Wire of the Power Supply and Connect it to the other pin of the Load block. And everything is setup now.