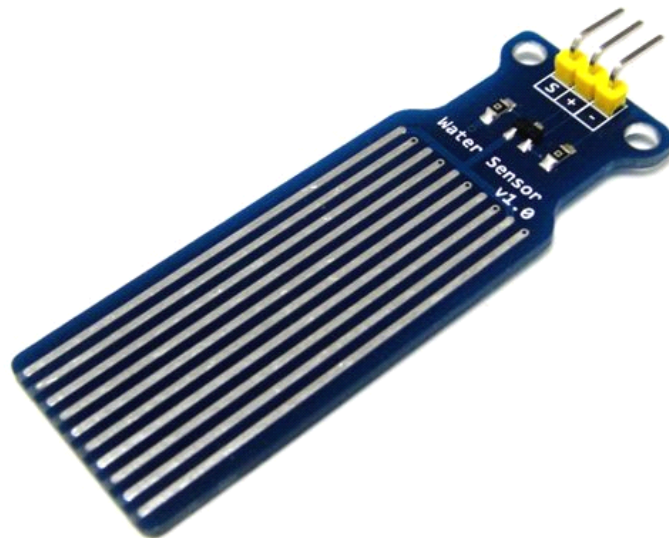


High Sensitivity Water Sensor



Description:

Water sensor brick is designed for water detection, which can be widely used in sensing the rainfall, water level, even the liquid leakage. The brick is mainly comprised of three parts: An Electronic brick connector, a 1 M Ω resistor, and several lines of bare conducting wires.

This sensor works by having a series of exposed traces connected to ground and interlaced between the grounded traces are the sensor traces. The sensor traces have a weak pull-up resistor of 1 M Ω . The resistor will pull the sensor trace value high until a drop of water shorts the sensor trace to the grounded trace. Believe it or not this circuit will work with the digital I/O pins of your Arduino or you can use it with the analog pins

to detect the amount of water induced contact between the grounded and sensor traces.

This item can judge the water level through with a series of exposed parallel wires stitch to measure the water droplet/water size .

This item can easily change the water size to analog signal, and output analog value can directly be used in the program function, then to achieve the function of water level alarm.

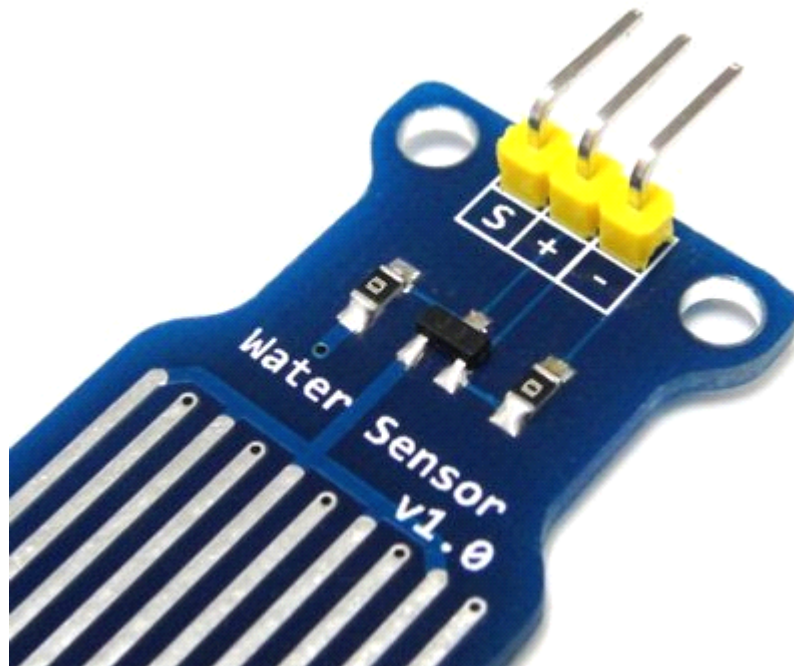
This item have low power consumption, and high sensitivity, which are the biggest characteristics of this mdoule.

This item can be compatible with Arduino UNO、 Arduino mega2560、 Arduino ADK etc.



Features:

- 1、 Working voltage: 5V
- 2、 Working Current: <20ma
- 3、 Interface: Analog
- 4、 Width of detection: 40mm×16mm
- 5、 Working Temperature: 10°C~30°C
- 6、 Weight: 3g
- 7、 Size: 65mm×20mm×8mm
- 8、 Arduino compatible interface
- 9、 Low power consumption
- 10、 High sensitivity
- 11、 Output voltage signal: 0~4.2V



Pin definition:

"S" stand for signal input

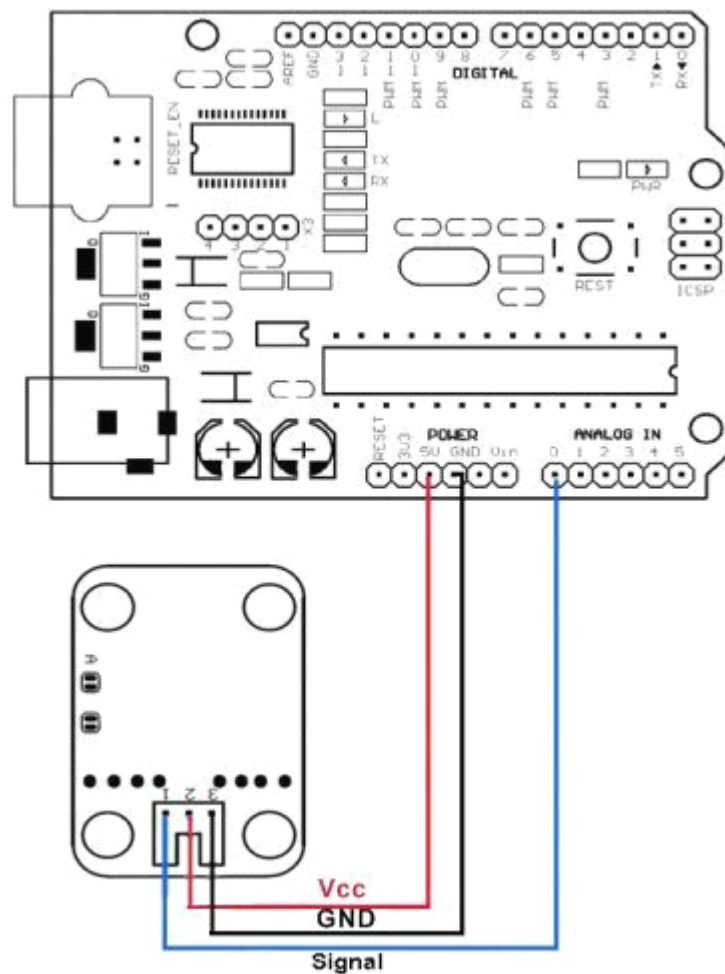
"+" stand for power supply

"-" stand for GND

Applications:

- 1、 Rainfall detecting
- 2、 Liquid leakage
- 3、 Tank overflow detector

Connecting Diagram:



This sensor module come with 3 Pin Dual-female Jumper Wire length 300mm as below:



Example:

Please use the cable to connect the Water sensor with A1 interface of Arduino Sensor shield.

Please use the cable to connect the LED module with D8 interface of Arduino Sensor shield.

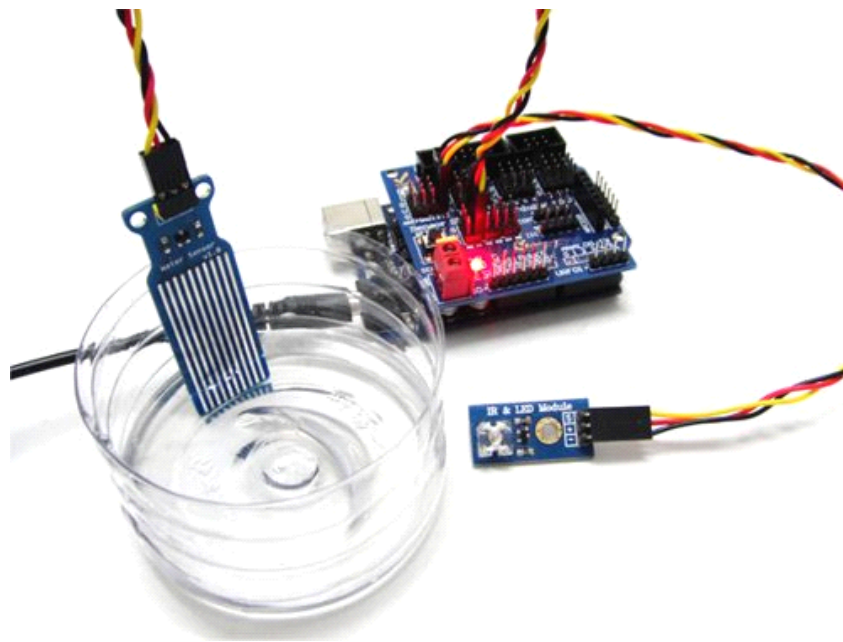
After hardware connection, please download the test code to Arduino after being compiled code, and the Arduino test code such as below:

```

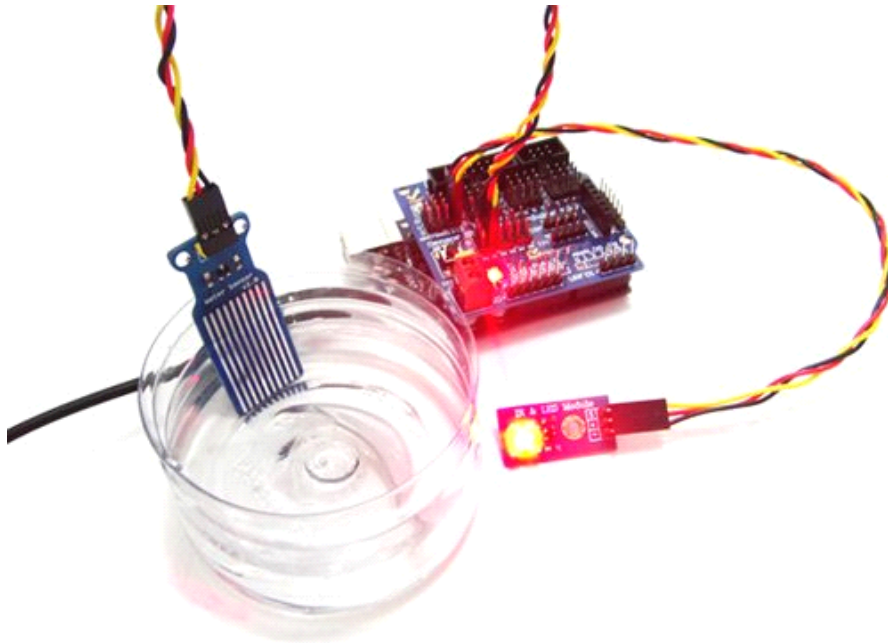
Int analogPin = 1; // water sensor connected to the analog port 1
Int led = 12; // LED connected to the digital mouth 12
Int val = 0; // definition variable val initial value as 0
Int data = 0; // definition variable data initial value as 0
Void setup ()
{
PinMode (led, OUTPUT); // definition led as output pin
Serial. Begin (9600); // set the baud rate as 9600
}
Void loop ()
{
Val = analogRead (analogPin); // read the simulation value and send to variable val
If (val > 700) { // judgment variable val is whether more than 700 or not
DigitalWrite (LED, HIGH); // variable val greater than 700, LED on
}
Else {
DigitalWrite (led, LOW); // variable val less than 700, LED off
}
Data = val; // variable val assignment to variable data
Serial. Println (data); // serial print variable data
Delay (100);
}

```

The come out the result as below:



Water level has not reached alarming value, the system will not alarm, LED will not light up.



Water level beyond warning value, the system will alarm, LED will lights up.