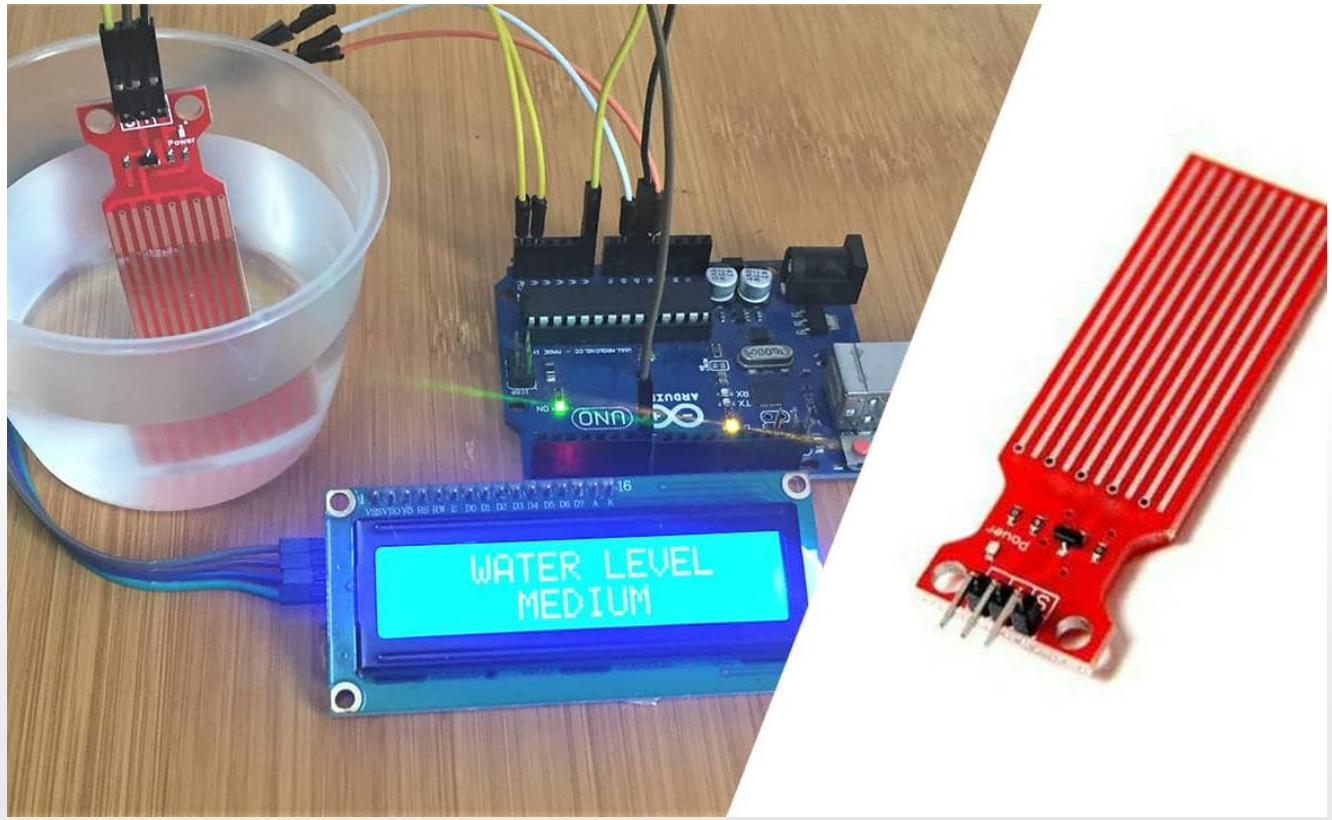
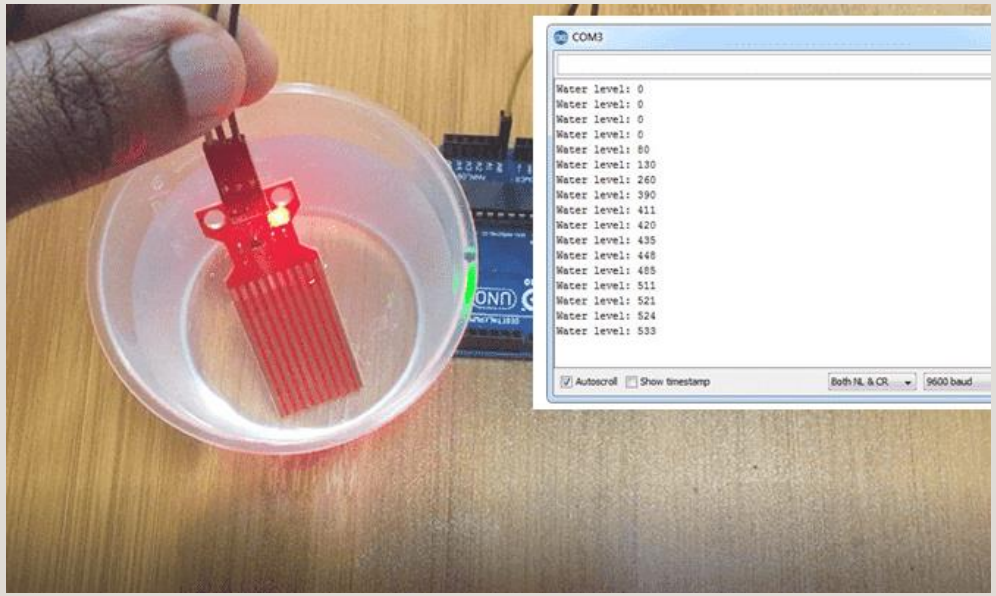
WATER LEVEL SENSOR



WATER LEVEL SENSOR
LIQUID WATER DROPLET DEPTH DETECTION

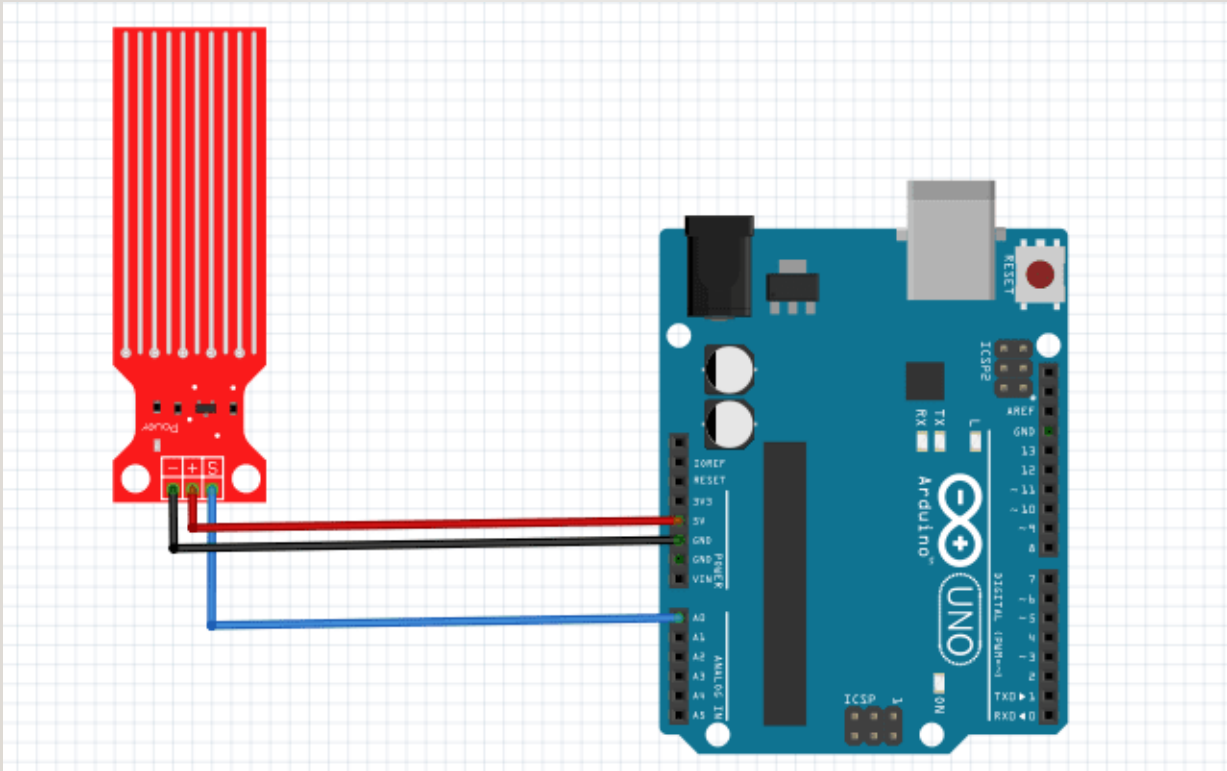
- Water Level Sensor គឺជាsensor ដែលមាននាទីសម្រាប់វាស់កម្រិតទឹក។



HARDWARE COMPONENTS

- Water Level Sensor Liquid Water Droplet Depth Detection × 1
- Arduino Uno Rev3 × 1
- Jumper wires (male to female) × 10
- Breadboard (optional, makes wiring easier) × 1
- USB cable type A/B × 1

WIRING – WATER LEVEL SENSOR
LIQUID WATER DROPLET DEPTH DETECTION



WATER LEVEL SENSOR
LIQUID WATER DROPLET DEPTH DETECTION

- យើងប្រើប្រាស់ breadboard និង jumper wire ខ្លះសម្រាប់ភ្ជាប់ឧបរណ៍ទាំងនេះដើម្បីដំណើរការ

Water Level Sensor	Arduino Connection
VCC	5V
GND	GND
OUT	Pin A0

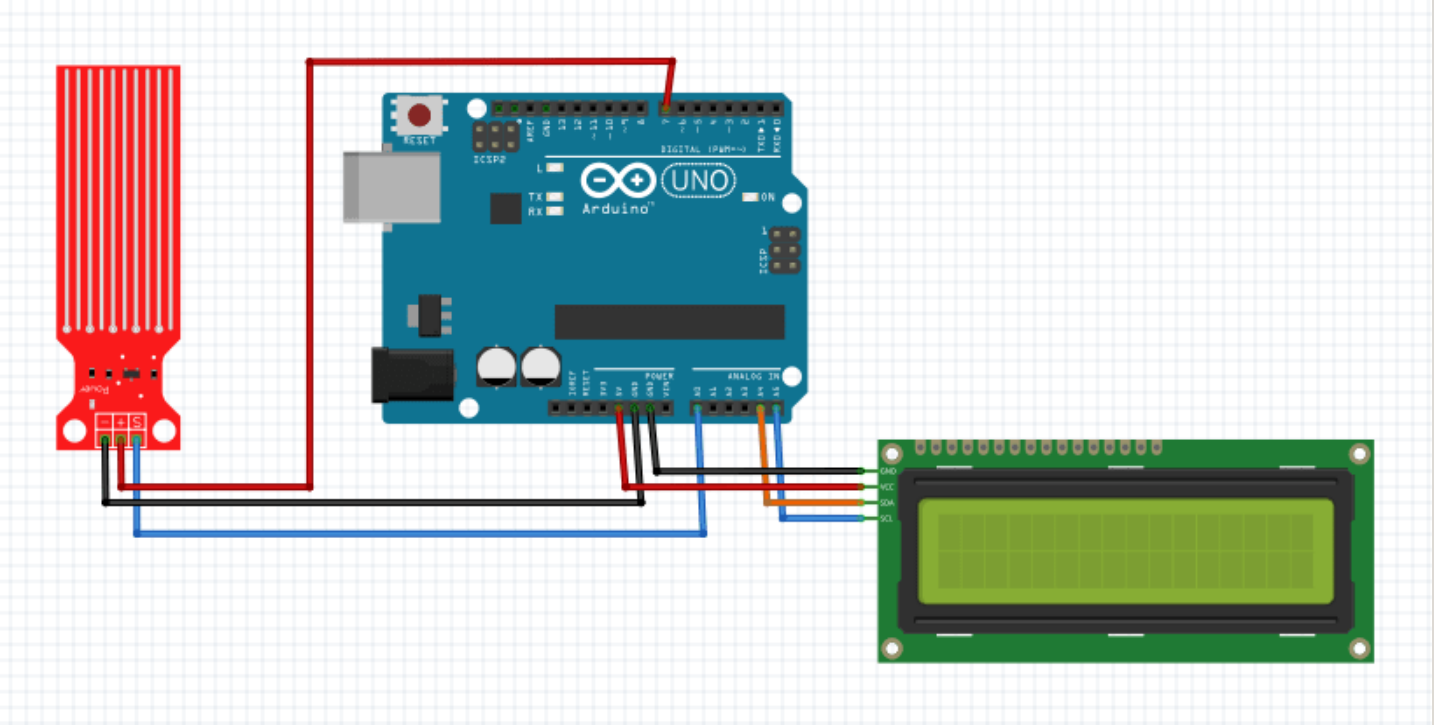
WATER LEVEL SENSOR
LIQUID WATER DROPLET DEPTH DETECTION

```
const int analogInPin = A0;
int sensorValue = 0;
void setup() {
        Serial.begin(9600);
}
void loop() {
         sensorValue = analogRead(analogInPin);
        Serial.print("Sensor = " );  Serial.println(sensorValue);
        delay(1000);
}
```

HARDWARE COMPONENTS

- Water Level Sensor Liquid Water Droplet Depth Detection × 1
- Arduino Uno Rev3 × 1
- Jumper wires (male to female) × 10
- Breadboard (optional, makes wiring easier) × 1
- USB cable type A/B × 1
- I2C LiquidCrystal x 1

WIRING – WATER LEVEL SENSOR LIQUID WATER DROPLET DEPTH DETECTION



WATER LEVEL SENSOR
LIQUID WATER DROPLET DEPTH DETECTION

- យើងប្រើប្រាស់ breadboard និង jumper wire ខ្លះសម្រាប់ភ្ជាប់ឧបរណ៍ទាំងនេះដើម្បីដំណើរការ

Water Level Sensor	Arduino Connection
VCC	Pin D7
GND	GND
OUT	Pin A0
I2C LiquidCrystal	**Arduino Connection**
VCC	5V
GND	GND
SDA	A4
SCL	A5

WATER LEVEL SENSOR
LIQUID WATER DROPLET DEPTH DETECTION

```
#include <Wire.h>
#include <LiquidCrystal_I2C.h>
LiquidCrystal_I2C lcd(0x27, 2, 1, 0, 4, 5, 6, 7, 3, POSITIVE);
int lowerThreshold = 310;
int upperThreshold = 510;
#define sensorPower 7
#define sensorPin A0
int val = 0;
```

WATER LEVEL SENSOR
LIQUID WATER DROPLET DEPTH DETECTION

```
void setup() {
        Serial.begin(9600);
        lcd.begin(16,2);
        lcd.backlight();
        pinMode(sensorPower, OUTPUT);
        digitalWrite(sensorPower, LOW);
}
```

WATER LEVEL SENSOR
LIQUID WATER DROPLET DEPTH DETECTION

```
void loop() {
        int level = readSensor();
        if (level == 0) {
                Serial.println("Water Level: Empty");
                lcd.setCursor(0,0);
                lcd.print("   WATER LEVEL ");
                lcd.setCursor(0,1);
                lcd.print("     EMPTY      ");
        }
```

WATER LEVEL SENSOR
LIQUID WATER DROPLET DEPTH DETECTION

```
else      if (level > 0 && level <= lowerThreshold) {
                    Serial.println("Water Level: Low");
                    lcd.setCursor(0,0);
                    lcd.print("   WATER LEVEL ");
                    lcd.setCursor(0,1);
                    lcd.print("      LOW       ");
          }
```

WATER LEVEL SENSOR
LIQUID WATER DROPLET DEPTH DETECTION

```
else      if (level > lowerThreshold && level <= upperThreshold) {
                Serial.println("Water Level: Medium");
                lcd.setCursor(0,0);
                lcd.print("   WATER LEVEL ");
                lcd.setCursor(0,1);
                lcd.print("     MEDIUM     ");
          }
```

WATER LEVEL SENSOR
LIQUID WATER DROPLET DEPTH DETECTION

```
                else    if (level > upperThreshold) {
                            Serial.println("Water Level: High");
                            lcd.setCursor(0,0);
                            lcd.print("   WATER LEVEL ");
                            lcd.setCursor(0,1);
                            lcd.print("     FULL       ");
                        }
        delay(1000);
}
```

WATER LEVEL SENSOR
LIQUID WATER DROPLET DEPTH DETECTION

```
//This is a function used to get the reading
int readSensor() {
        digitalWrite(sensorPower, HIGH);
        delay(10);
        val = analogRead(sensorPin);
        digitalWrite(sensorPower, LOW);
        return val;
}
```