Water level monitoring experiment

Overview

This is a water level measurement experiment, it is relatively simple to achieve, only need to read the value of the analog port(A0), and then converted to a percentage.

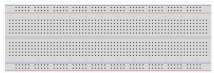
Specification

Operating voltage: DC3-5V
Operating current: less than 20mA
Sensor Type: Analog
Production process: FR4 double-sided HASL
Humidity: 10% -90% non-condensing
Detection Area: 40mmx16mm
Product Dimensions: 62mmx20mmx8mm

Pin definition

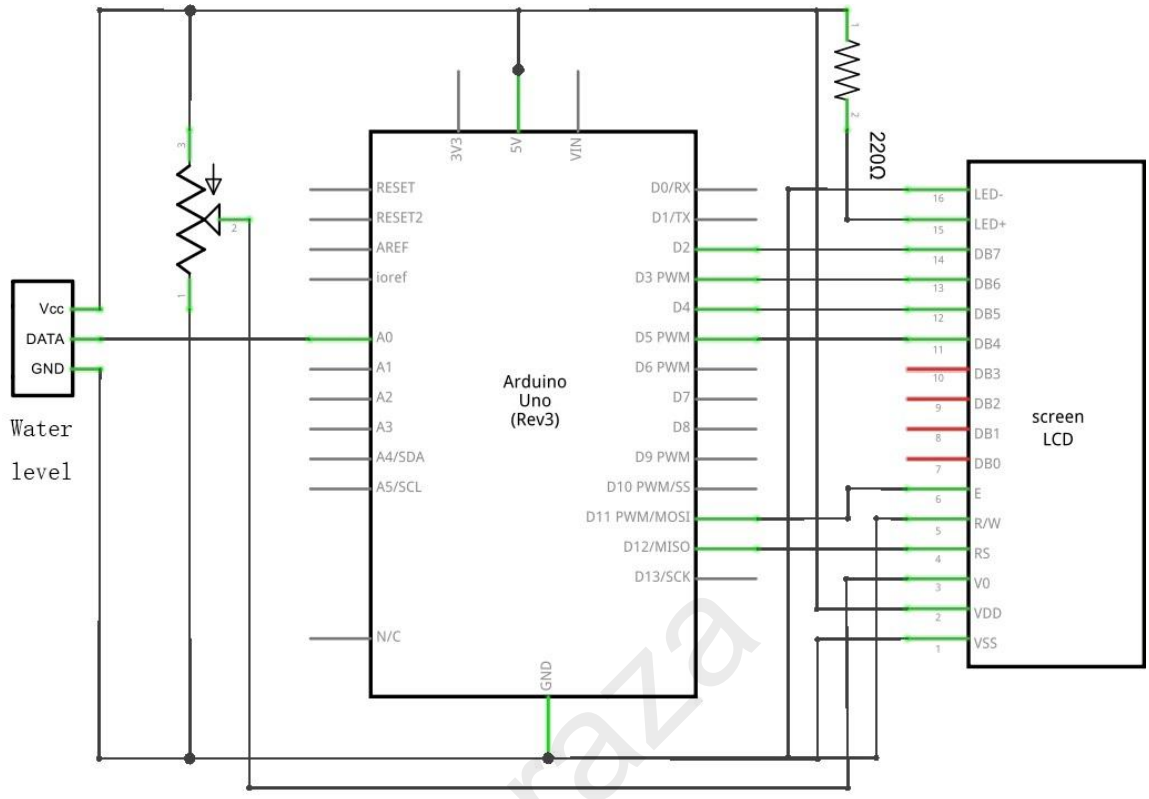
OUT	I/O
' + '	VCC
' - '	GND

Hardware required

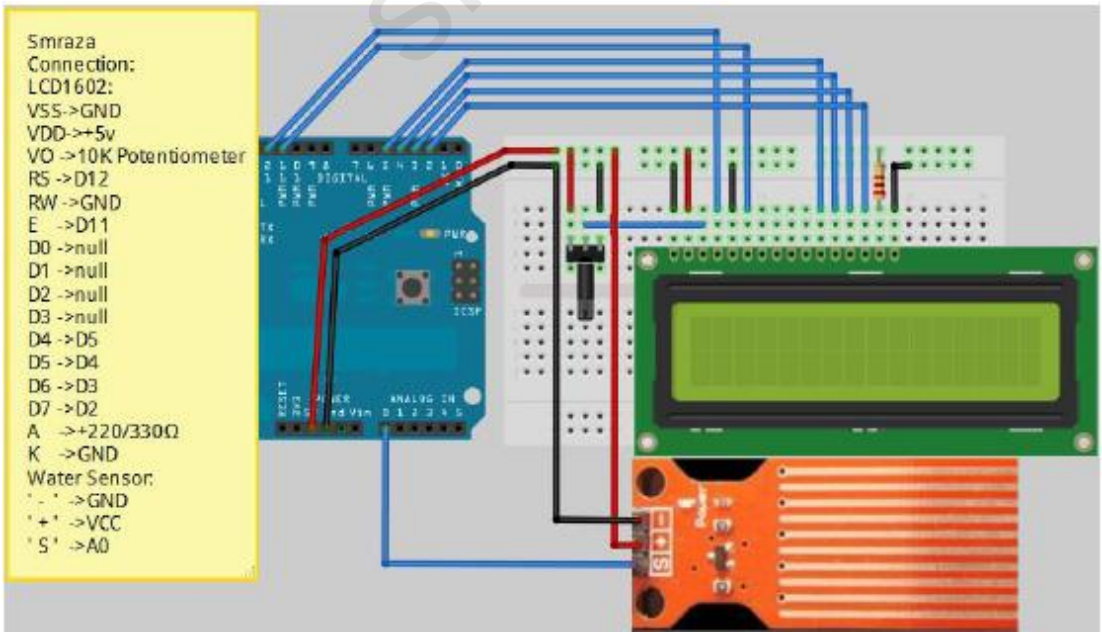
Material diagram	Material name	Number
	LCD1602	1
	Water Lever Sensor	1
	220/330Ω resistor	1
	10KΩ Potentiometer	1
	USB Cable	1
	UNO R3	1
	Breadboard	1
	Jumper wires	Several

Connection

Schematic



Connection diagram

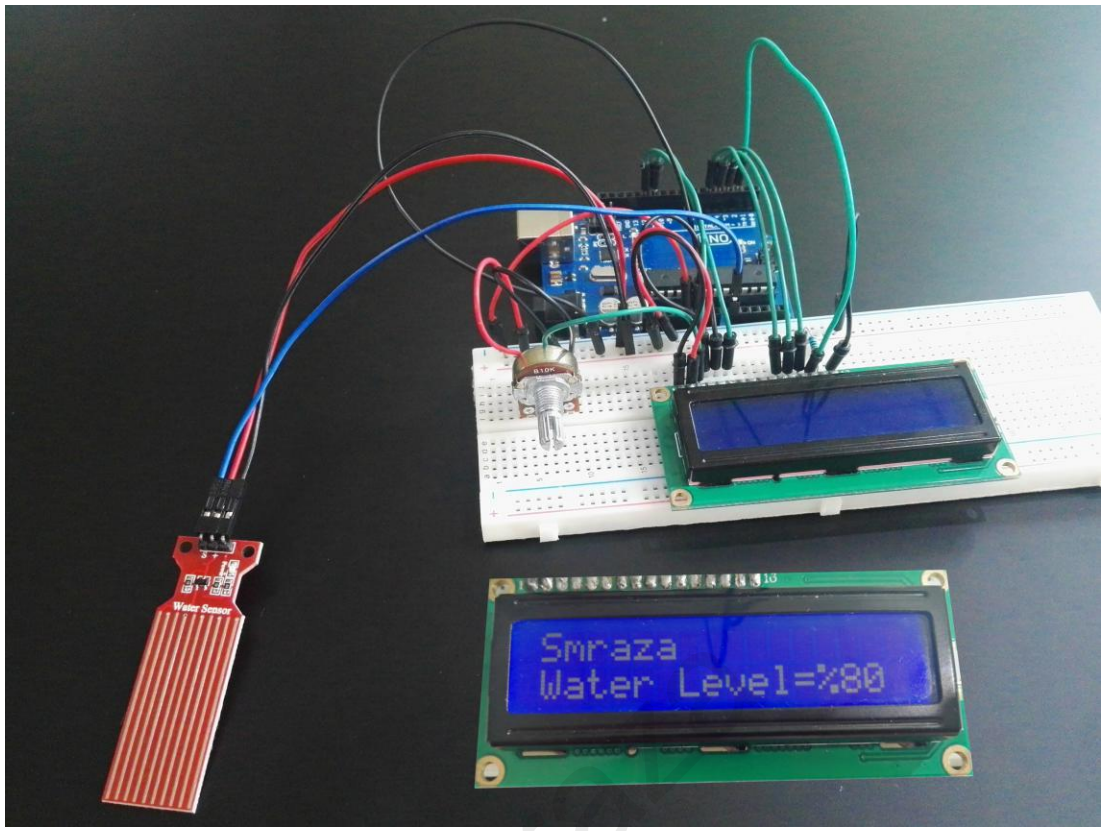


Sample code

Note: sample code under the **Sample code** folder

```
#include <LiquidCrystal.h>
LiquidCrystal lcd(12, 11, 5, 4, 3, 2);
int water = A0;
int val=0;
int count=0;
void setup()
{
      lcd.begin(16,2);
      lcd.print(" Welcome to ");
      lcd.setCursor(0,1);
      lcd.print("       Smraza");
      delay(2000);
      lcd.clear();
}
void loop()
{
      val=analogRead(water);
      if(val>220)
      count=val/2.2;
      else
      count=0;
      lcd.clear();
      lcd.print("Smraza");
      lcd.setCursor(0, 1) ;
      lcd.print("Water Level=%");
      lcd.print(count);
      delay(150);
}
```

Example picture



Language reference

Tips：click on the following name to jump to the web page.
If you fail to open, use the Adobe reader to open this document.
analogRead()

Application effect

When the water level sensor enter water and make it of different height, the LCD will display different percentage.

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* About Smraza:
* We are a leading manufacturer of electronic components for Arduino and Raspberry Pi.
* Official website: http://www.smraza.com/
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