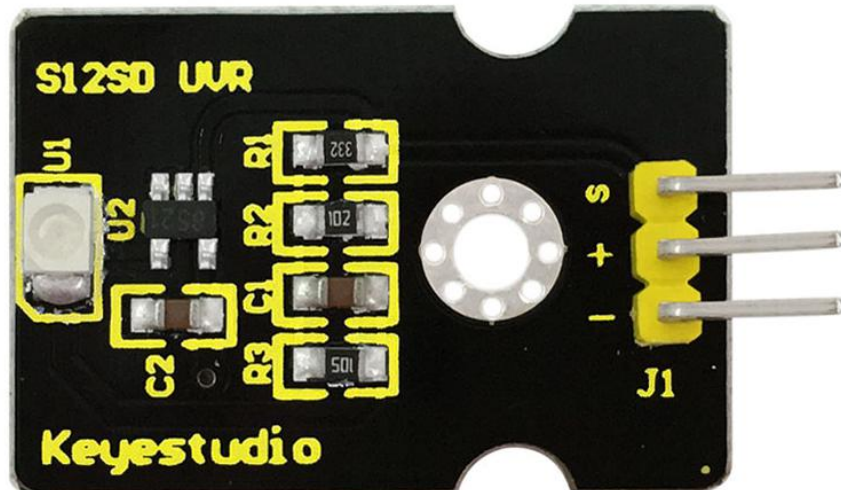

TA0059 - Ultraviolet Sensor



1. Introduction

TA0059 ultraviolet sensor is used to detect ultraviolet light. It includes GUVVA-S12SD applied to measure ultraviolet index of intelligent wearable device, such as watches, smart phone and outdoor device with UV index detecting.

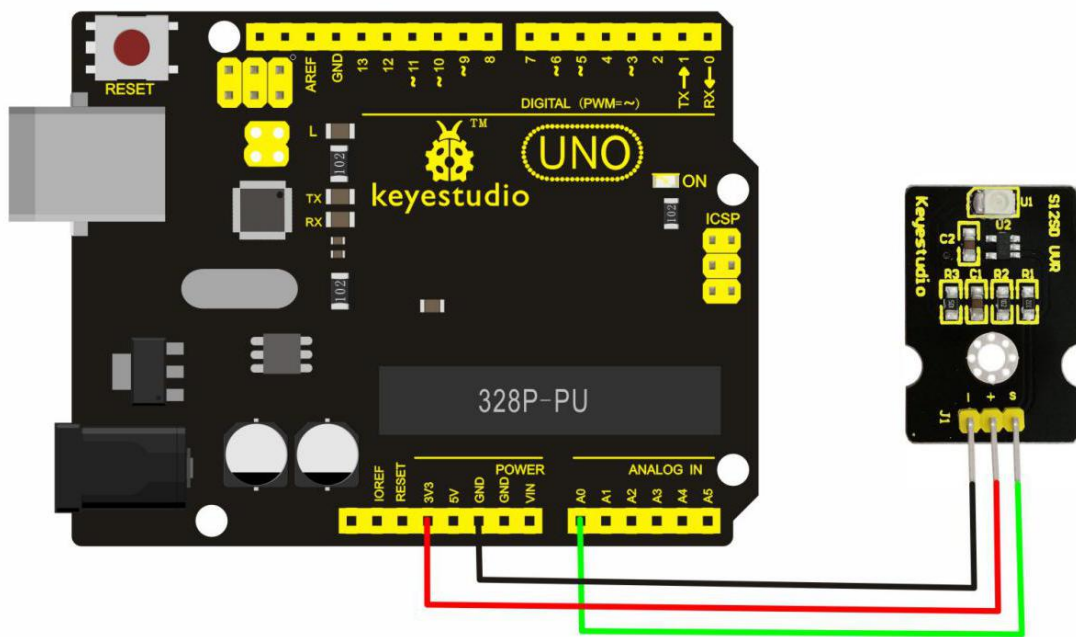
It can be also used to monitor the intensity of ultraviolet light or used as a UV flame detector when disinfecting things by ultraviolet light.

2. Parameters

- Supply Voltage: 2.5V~5V
- Output Signal: Analog Signal

- Detecting Range of Spectrum: 240-370nm
- Active Region: 0.076mm²
- Responsivity: 0.14A/W
- Dark Current: 1nA
- Light Current: 101~125nA UVA Light, 1mW/cm²

3. Connection Diagram



4. Sample Code

```
////////////////////////////////////
```

```
/*
```

```
  AnalogReadSerial
```

Reads an analog input on pin 0, prints the result to the serial monitor.

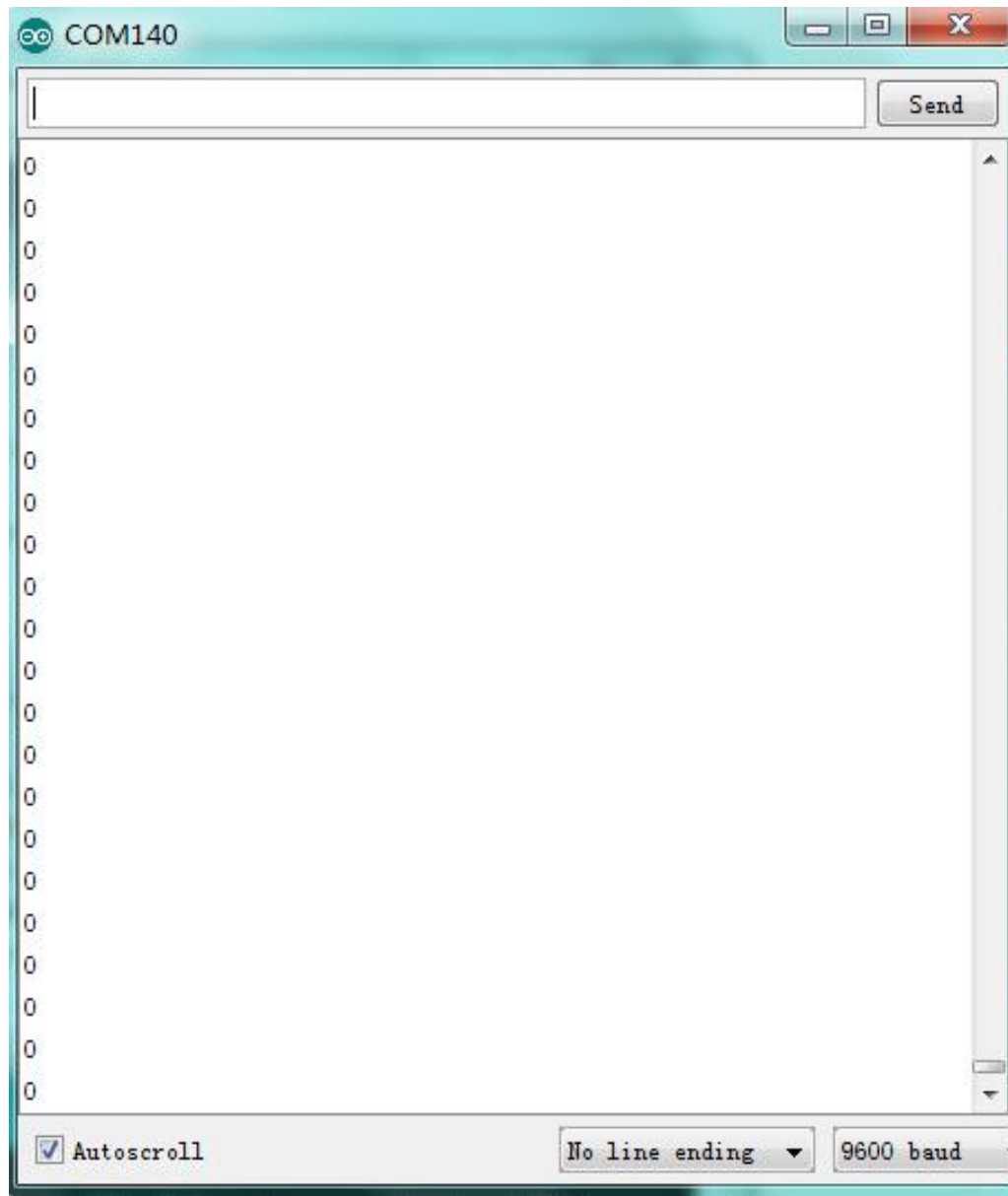
Attach the center pin of a potentiometer to pin A0, and the outside pins to +5V and ground.

This example code is in the public domain.

```
*/  
  
// the setup routine runs once when you press reset:  
void setup() {  
    // initialize serial communication at 9600 bits per second:  
    Serial.begin(9600);  
}  
  
// the loop routine runs over and over again forever:  
void loop() {  
    // read the input on analog pin 0:  
    int sensorValue = analogRead(A0);  
    // print out the value you read:  
    Serial.println(sensorValue);  
    delay(1);        // delay in between reads for stability  
}  
  
////////////////////////////////////
```

5. Result

When wires are connected well, upload the program code, then open serial monitor, it will display the data shown as the following picture.



Shine UV lamp to the sensor, and the data on serial monitor is changing shown as following picture.

