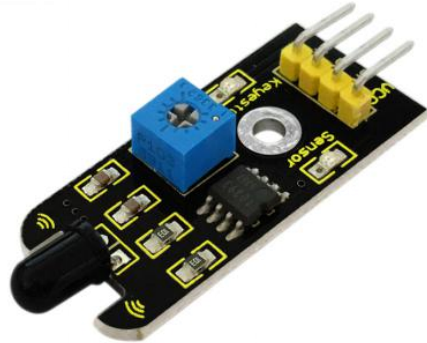# TA0159 - Flame Sensor

Introduction

This flame sensor can be used to detect fire or other lights with wavelength stands at 760nm ~ 1100nm.

In the fire-fighting robot game, the flame plays an important role in the probe, which can be used as the robot's eyes to find fire source.

Specification

- Supply Voltage: 3.3V to 5V
- Detection range: 20cm (4.8V) ~ 100cm (1V)
- Rang of Spectral Bandwidth: 760nm to 1100nm
- Operating temperature: -25℃ to 85℃
- Interface: digital

Connection Diagram

Connect the D0 pin to digital 2, GND pin to GND port, VCC pin to 5V port.
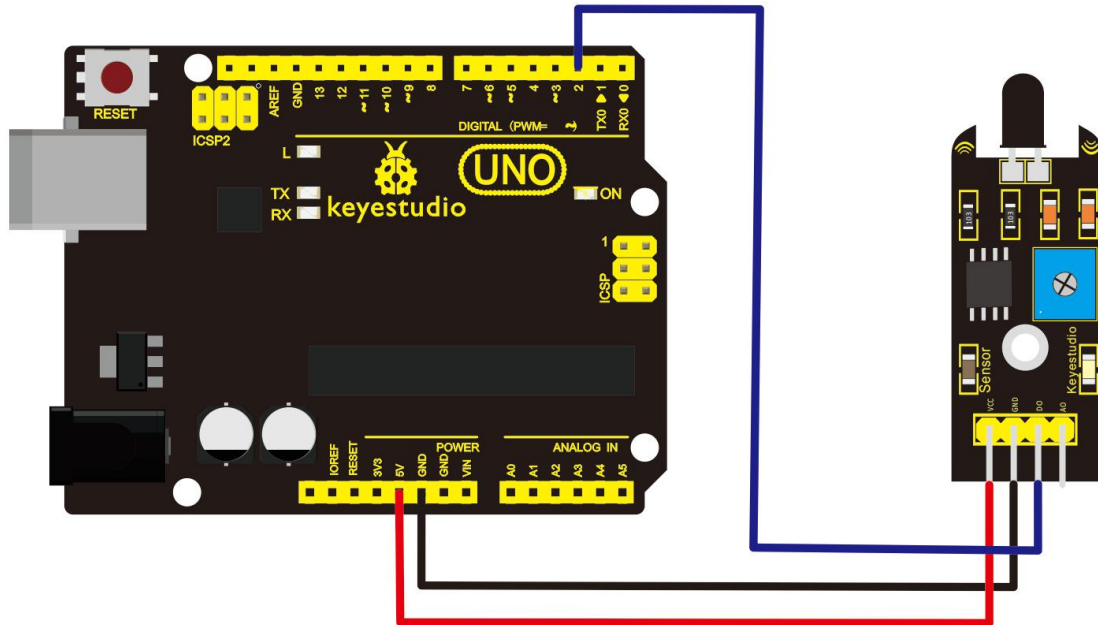
Sample Code:

****

```
const int flamePin = 2;        // the number of the flame pin
const int ledPin =    13;        // the number of the LED pin
// variables will change:
int State = 0;                // variable for reading status
void setup() {
   // initialize the LED pin as an output:
   pinMode(ledPin, OUTPUT);
   // initialize the pushbutton pin as an input:
   pinMode(flamePin, INPUT);
```

```
}
void loop(){
    // read the state of the value:
State = digitalRead(flamePin);
    if (State == HIGH) {


        // turn LED on:
        digitalWrite(ledPin, HIGH);
    }
    else {
        // turn LED off:
        digitalWrite(ledPin, LOW);
    }
}
```

****

Example Result

Done wiring and powered up, upload well the code to the board.
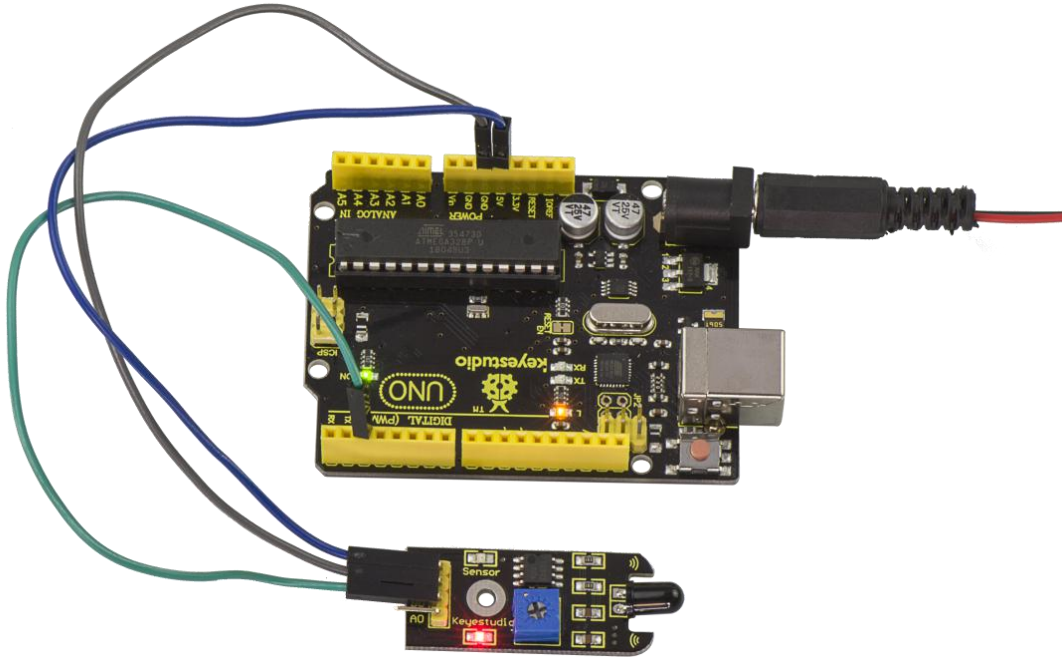
Then if you put a lighter close to the sensor, when the sensor detects the flame, another led on the sensor is turned on.