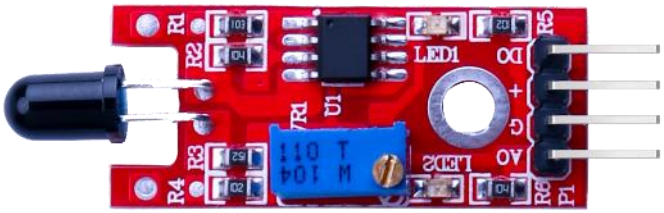
Flame Sensor Module

DESCRIPTION:

A flame sensor module that consists of a flame sensor (IR receiver), resistor, capacitor, potentiometer, and comparator LM393 in an integrated circuit. It can detect infrared light with a wavelength ranging from 760nm to 1000nm.The far-infrared flame probe converts the light detected in the form of infrared light into current changes. Sensitivity is adjusted through the onboard variable resistor with a detection angle of 60 degrees.

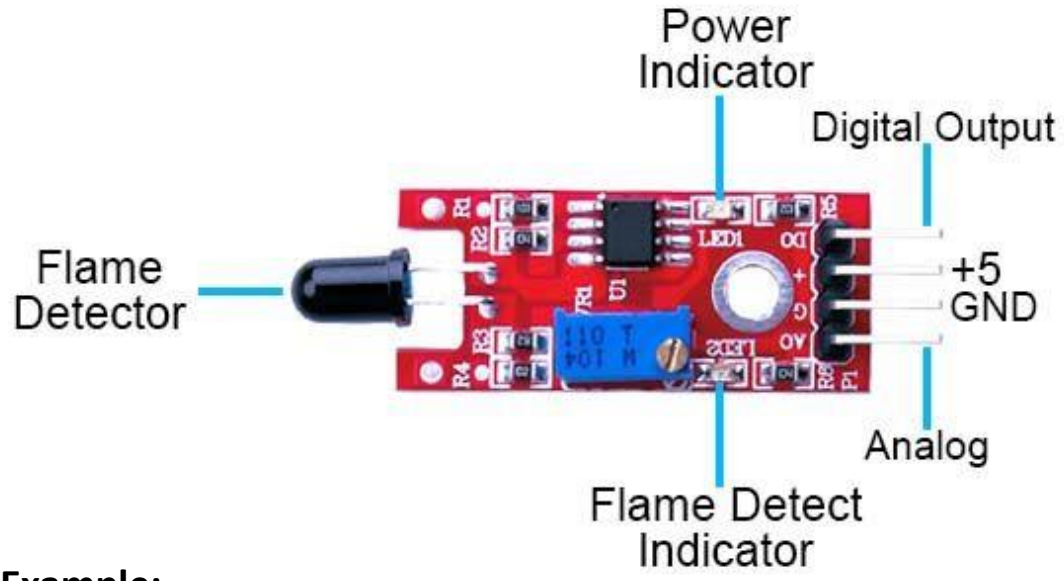


Specification

- Operation voltage: 5V for analog, 3.3V for digital
- Both digital and analog output pin
- Adjustable sensitive
- Detect IR wavelength: 760nm~1100nm
- Size: 45*15mm
- Weight: 3g

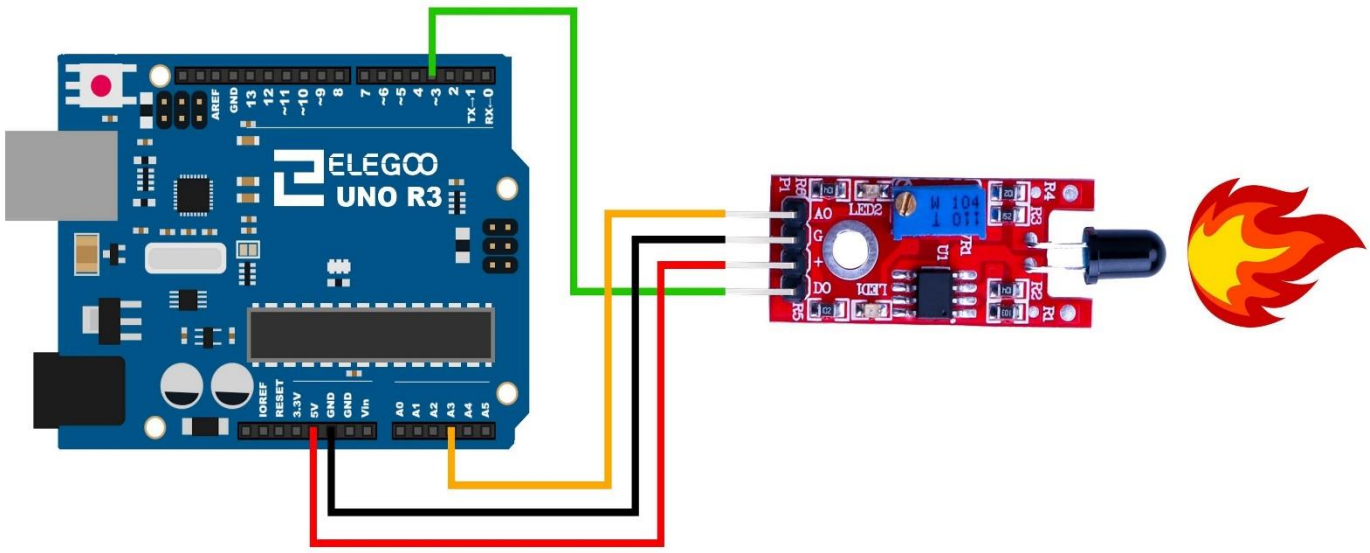
PIN CONFIGURATION:

1、 “A0”: Analog
2、 “G” : GND
3、 “+” : +5V
4、 “D0”: digital output



Example:

Here is an example for how to use both the analog pin(A0) and digital pin(D0), connect the circuit as below, upload this sketch, open the Serial Monitor, you will see the real-time value of the thermal resistance, and once the flame closing to it, the value will change. If the value reaches a certain threshold, the D0 pin will output High signal meanwhile the LED13 turns on. And threshold can be adjusted by potentiometer.



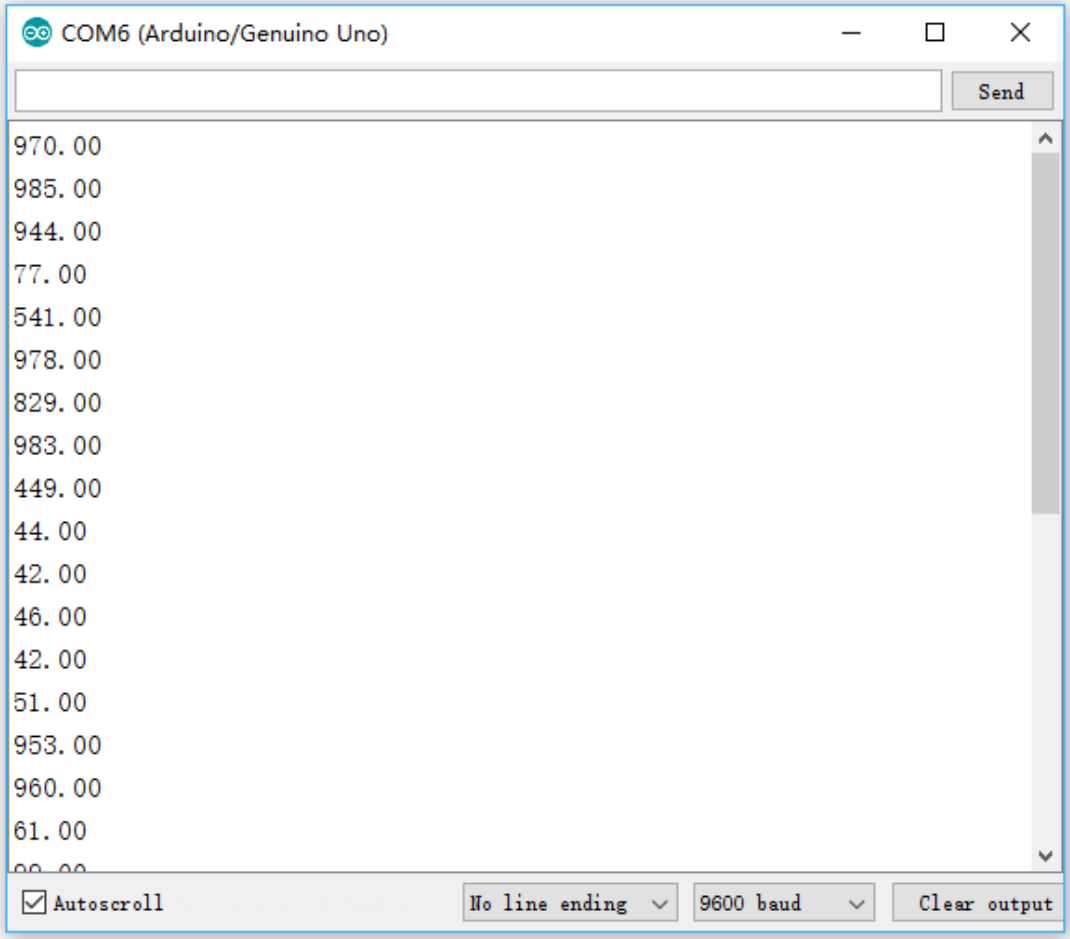
Code:

```
int Led = 13 ;// define LED Interface
int buttonpin = 3; // define the flame sensor interface
int analoog = A3; // define the flame sensor interface
int val ;// define numeric variables val
float sensor; //read analoog value
void setup ()
{
pinMode (Led, OUTPUT) ;// define LED as output interface
pinMode (buttonpin, INPUT) ;// output interface defines the flame sensor
pinMode (analoog, INPUT) ;// output interface defines the flame sensor
Serial.begin(9600);
}
void loop ()
{
sensor = analogRead(analoog);
Serial.println(sensor);    // display tempature
val = digitalRead (buttonpin) ;// digital interface will be assigned a value of 3 to read
val
if (val == HIGH) // When the flame sensor detects a signal, LED flashes
{

digitalWrite (Led, HIGH);
}
else
{
digitalWrite (Led, LOW);
}
delay(1000);
```

}

Result:


COM6 (Arduino/Genuino Uno)
Send
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978.00
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953.00
960.00
61.00
Autoscroll
No line ending
9600 baud
Clear output