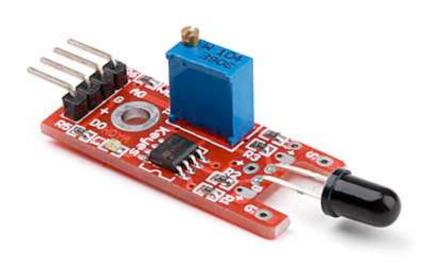


# Flame Sensor Module



#### Introduction

This module is sensitive to the flame and radiation. It also can detect ordinary light source in the range of of a wavelength 760nm-1100 nm. The detection distance is up to 100 cm.

The Flame sensor can output digital or analog signal. It can be used as a flame alarm or in fire fighting robots.

### **Description**

- Detects a flame or a light source of a wavelength in the range of 760nm-1100 nm
- Detection distance: 20cm (4.8V) ~ 100cm (1V)
- Detection angle about 60 degrees, it is sensitive to the flame spectrum.
- · Comparator chip LM393 makes module readings stable.
- Adjustable detection range.
- Operating voltage 3.3V-5V
- · Digital and Analog Output

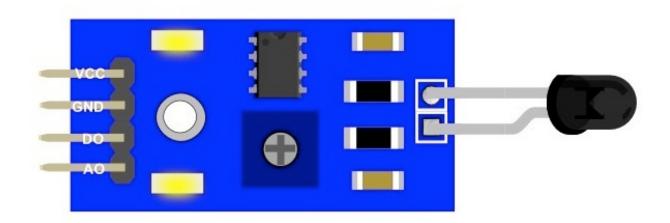
DO digital switch outputs (0 and 1)

AO analog voltage output

Power indicator and digital switch output indicator

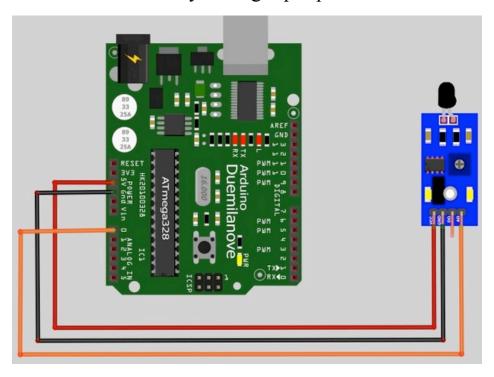
# **Interface Description (4-wire)**

- 1) VCC -- 3.3V-5V voltage
- 2) GND -- GND
- 3) DO -- board digital output interface (0 and 1)
- 4) AO -- board analog output interface



# **Arduino Example**

Here is sample code and connection to Arduino board. The analog output can be connected to any analog input pin on Arduino.



```
AnalogReadSerial
 Reads an analog input on pin 0, prints the result to the serial monitor.
 Attach the center pin of a potentiometer to pin AO, 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 in between reads for stability
 delay(1);
}
```