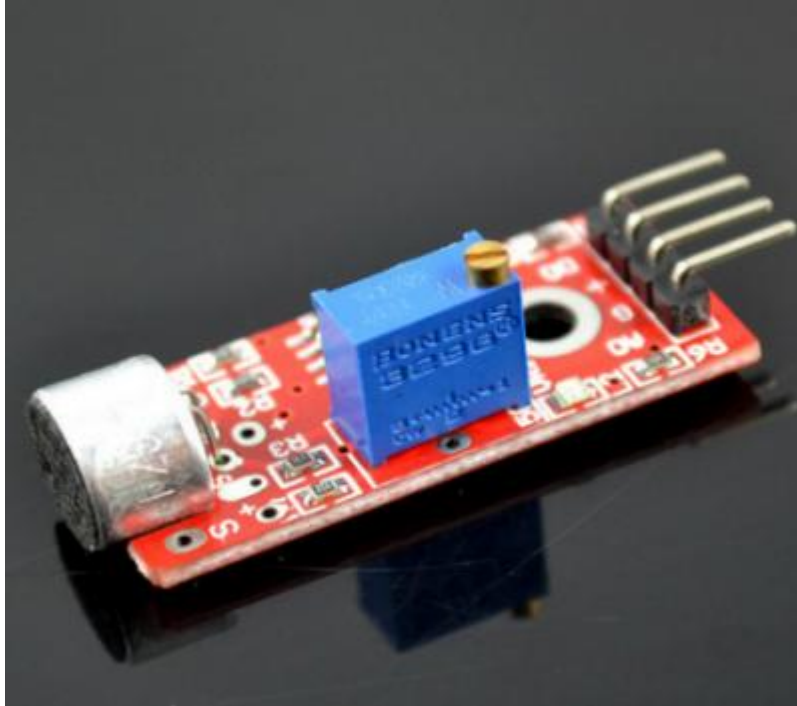# Arduino microphone sensor module

Microphone sound detection module

For sound detection Module has two outputs:

1. AO, analog output, real-time output voltage signal of the microphone
2. DO, when the sound intensity reaches a certain threshold, the output high and low signal

The threshold-sensitivity can be adjusted via potentiometer on the sensor

Connecting to the Arduino

- Pin + to Arduino 5+
- Pin - to Arduino -
- Pin A0 to Arduino A0 (for analog program)
- Pin D0 to Arduino 13 (for digital program)

Example code: Digital output

```
int Led = 13 ;// define LED Interface
```

```
int buttonpin = 3; // define D0 Sensor Interface
int val = 0;// define numeric variables val

void setup ()
{
  pinMode (Led, OUTPUT) ;// define LED as output interface
  pinMode (buttonpin, INPUT) ;// output interface D0 is defined sensor
}

void loop ()
{
  val = digitalRead(buttonpin);// digital interface will be assigned a
value of pin 3 to read val
  if (val == HIGH) // When the sound detection module detects a signal,
LED flashes
  {
    digitalWrite (Led, HIGH);
  }
  else
  {
    digitalWrite (Led, LOW);
  }
}
```

Example Code : analog outputs

```
int sensorPin = A0; // select the input pin for the potentiometer
int ledPin = 13; // select the pin for the LED
int sensorValue = 0; // variable to store the value coming from the
sensor
void setup ()
{
  pinMode (ledPin, OUTPUT);
  Serial.begin (9600);
}
void loop ()
{
  sensorValue = analogRead (sensorPin);
  digitalWrite (ledPin, HIGH);
  delay (sensorValue);
  digitalWrite (ledPin, LOW);
  delay (sensorValue);
  Serial.println (sensorValue, DEC);
}
```