

Vibration sensor module



Technical Manual Rev 1r0



This **Vibration Sensor** use the **SW-18010P** from MEC to measure the vibration. It can triggerd from any angle, and often used for flex, touch, vibration and shock measurements.

There is an on-board potentiometer to adjust the threshold of vibration. It outputs logic HIGH when this module not triggered while logic Low when triggered.

General Specifications:

Input supply voltage: 5VDC

Output: Digital and Analog

0 - detected, 1 - no detection

On board IC: LM393 comparator IC

Sensor: SW-18010P

PCB Dimensions: 31.5mm x 14.5mm

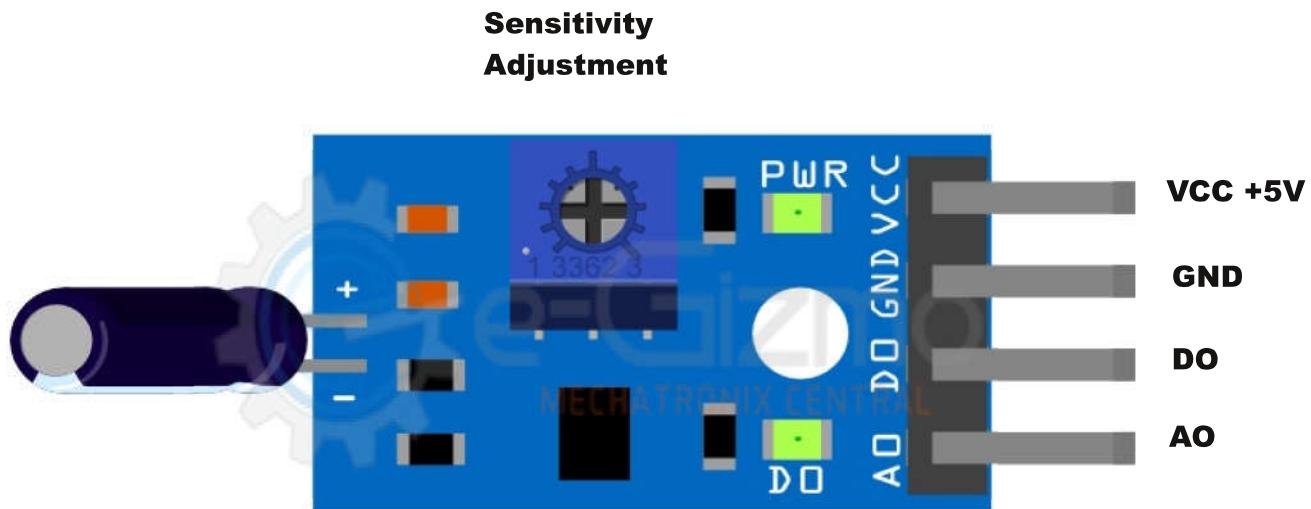
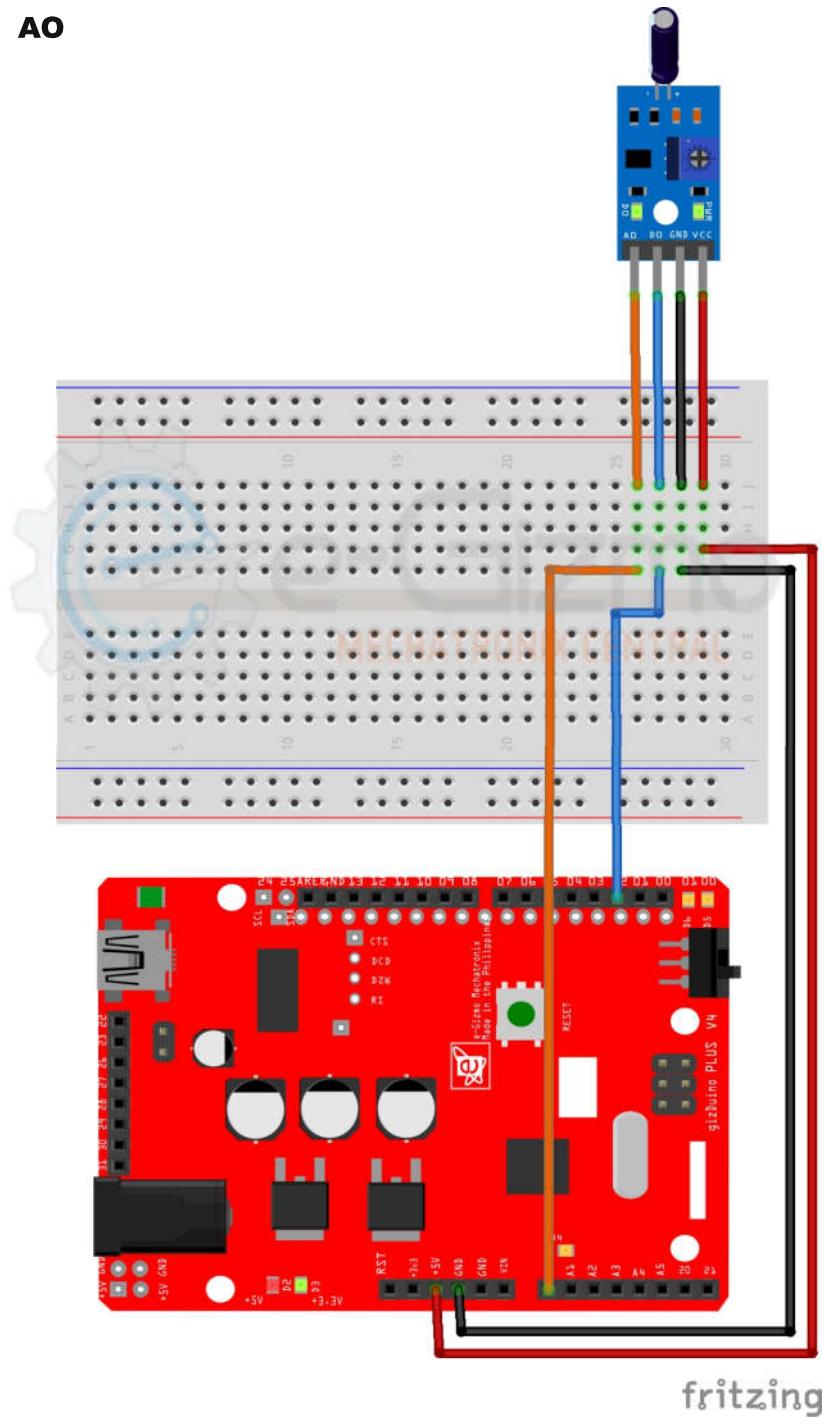


Figure 1: Major parts of Vibration sensor module.

Wiring Connections:

Gizduino to Vibration sensor

+5V	VCC
GND	GND
D2	DO
A0	AO



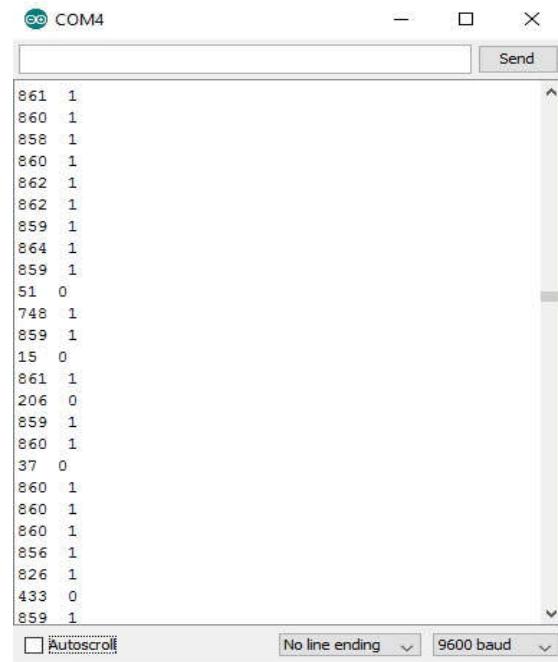
```
/*
e-Gizmo Vibration sensor module

This example code reads an analog input on pin 0
and on pin 2 digital input, then prints the
result to the serial monitor.

Codes by
e-Gizmo Mechatronix Central
http://www.e-gizmo.com
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*/
// pins assignment
int OUTPUT_PIN = 2;
// the setup routine runs once when you press reset:
void setup() {
    // initialize serial communication at 9600 bits per second:
    Serial.begin(9600);
    pinMode(OUTPUT_PIN, INPUT);
}

// the loop routine runs over and over again forever:
void loop() {
    // read the input on analog pin 0 and pin 2:
    int SENSOR_VALUE = analogRead(A0);
    int OUTPUT_STATE = digitalRead(OUTPUT_PIN);
    // print out the value you read:
    Serial.print(SENSOR_VALUE);
    Serial.print(" ");
    Serial.println(OUTPUT_STATE);
    delay(10);      // delay in between reads for stability
}
```



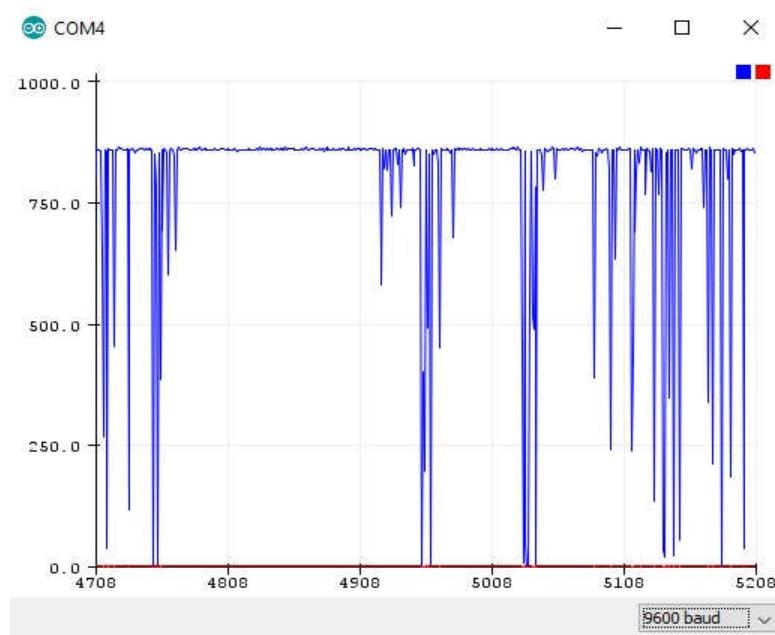


Figure 2: Analog Output.

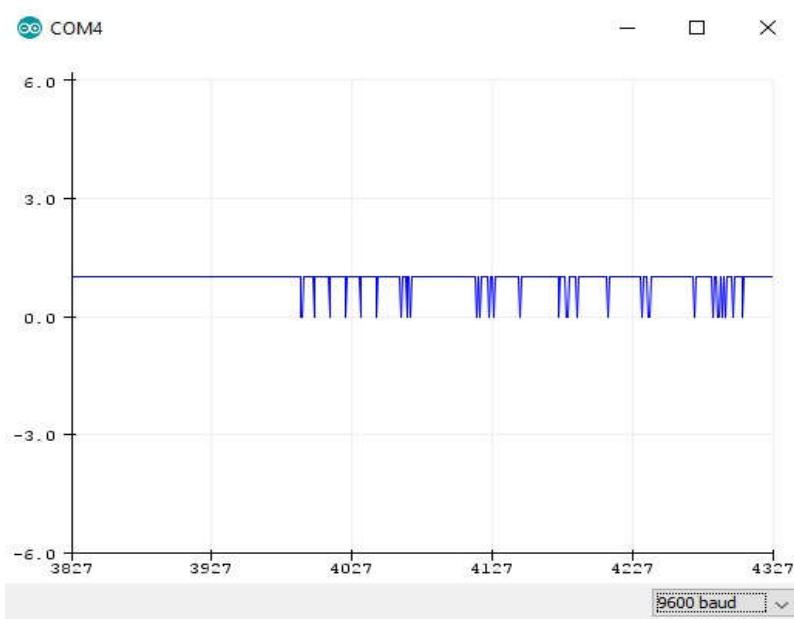


Figure 3: Digital Output.