

## Introduction of Vibration module

### 1. Working principle

A vibration sensor, commonly known as a vibration switch, which can sense the magnitude of vibration or centrifugal force and transmit the result of the induction to the circuit device and make circuit to start work.

When we hit the vibration module, the vibration sensor detects the vibration and sends a signal from K1.

!Note: This signal changes little and cannot be tested directly with the multimeter. We need to use the interrupt to detect the changed signal in the program.

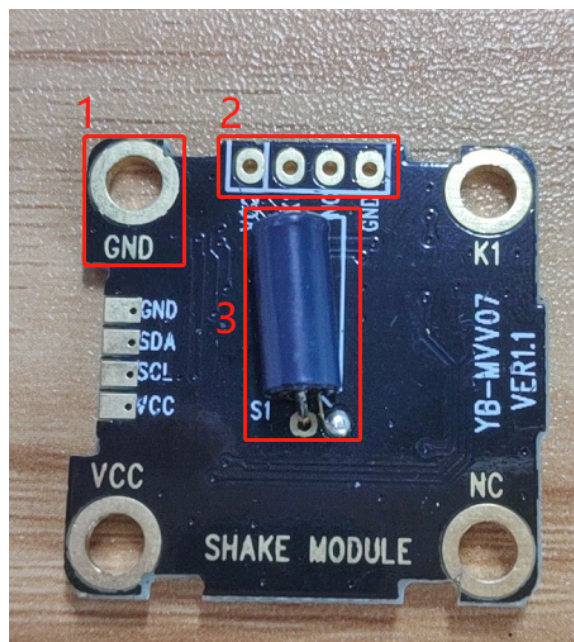
### 2. Practical application

2.1 Vibration switch.

2.2 Car anti-theft system. When the car body is damaged by external force, it can alarm.

2.3 Machine fault detection. Normal machine does not vibrate greatly when running, when there is a fault, a large vibration occurs, and the vibration sensor can alarm.

### 3. About module



3.1 Vibration module possess 4 Alligator clip port, Corresponding to GND, VCC, NC and K1. **K1 pin is the signal output pins of the module.**

3.2 4 pin holes are reserved, which can be used after welding.

3.3 When the surrounding vibration is detected, the K1 port will output a Voltage difference.

**3.4 Working Voltage: 3.3V/5V**