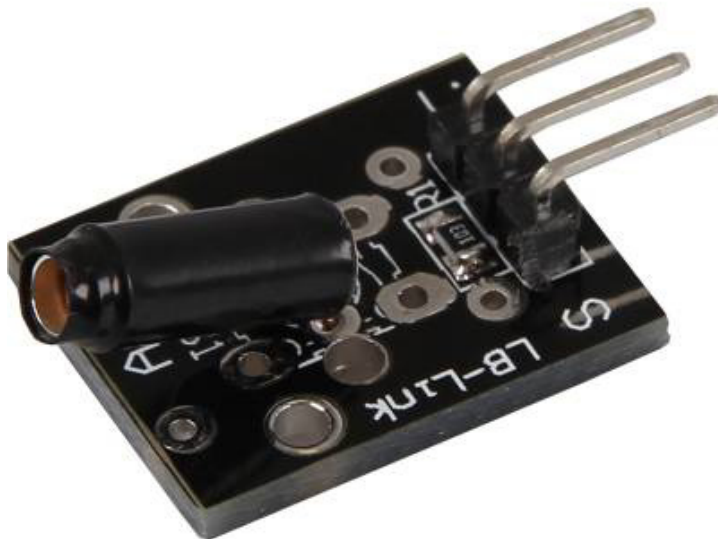


## KY-002 Vibration-switch module

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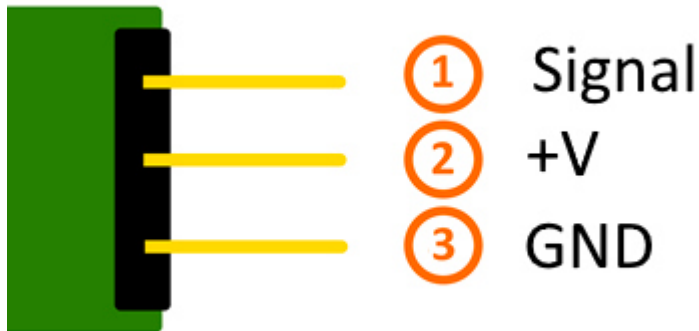
### Picture



### Technical Data / Short discription

On vibration, the contact of the two input pins will be connected.

## Pinout



## Code example Arduino

This example will activate a LED as soon as the sensor detects a signal.

The modules KY-011, KY-016 or KY-029 can be used as a LED.

```
int Led = 13 ;// Declaration of the LED output pin
int Sensor = 10; // Declaration of the Sensor input pin
int val; // Temporary variable

void setup ()
{
  pinMode (Led, OUTPUT) ; // Initialisation output pin
  pinMode (Sensor, INPUT) ; // Initializstion sensor pin
  digitalWrite(Sensor, HIGH); // Activating of the internal pull-up resistors
}

void loop ()
{
  val = digitalRead (Sensor) ; // The active signal at the sensor will be read

  if (val == HIGH) // If a signal was noticed, the LED will be on
  {
    digitalWrite (Led, LOW);
  }
  else
  {
    digitalWrite (Led, HIGH);
  }
}
```

### Connections Arduino:

LED +	= [Pin 13]
LED -	= [Pin GND]
Sensor Signal	= [Pin 10]

## KY-002 Vibration-switch module

Sensor +V = [Pin 5V]  
Sensor - = [Pin GND]

### Example program download

[SensorTest\\_Arduino](#)

## Code example for Raspberry Pi

```
# needed modules will be imported
import RPi.GPIO as GPIO
import time

GPIO.setmode(GPIO.BCM)

# The input pin of the Sensor will be declared. The pullup resistor will be activated.
GPIO_PIN = 24
GPIO.setup(GPIO_PIN, GPIO.IN, pull_up_down = GPIO.PUD_UP)

print "Sensor-Test [press ctrl+c to end it]"

# This output function will be started at signal detection
def outFunction(null):
    print("Signal detected")

# At the moment of detecting a Signal ( falling signal edge ) the output function will be activated.
GPIO.add_event_detect(GPIO_PIN, GPIO.FALLING, callback=outFunction, bouncetime=100)

# main program loop
try:
    while True:
        time.sleep(1)

# Scavenging work after the end of the program
except KeyboardInterrupt:
    GPIO.cleanup()
```

### Connections Raspberry Pi:

Signal = GPIO24 [Pin 18]  
+V = 3,3V [Pin 1]  
GND = GND [Pin 6]

### Example program download [SensorTest\\_RPi](#)

To start use the following command line:

```
sudo python SensorTest_RPi.py
```