KY-031 Knock-sensor module

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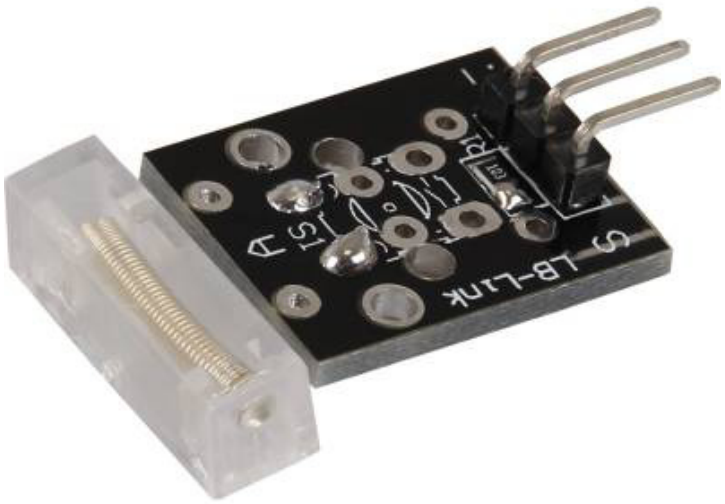
Picture



Technical data / Short description

On knocks or vibrations, the contact of the two input pins are connected.

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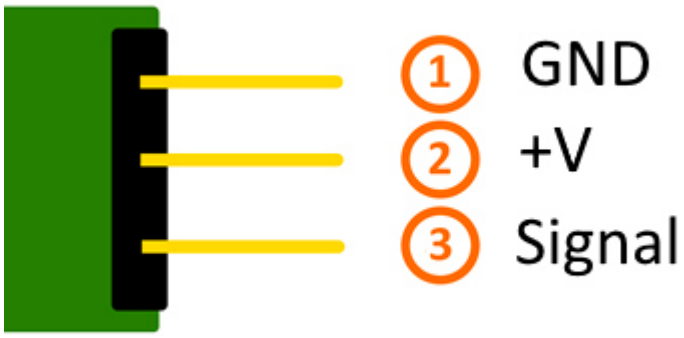
Pinout



Code example Arduino

This example will light up a LED after the sensor detected a knock or vibration.

The modules KY-011, KY-016 or KY-029 can be used as an 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) ; // Initialization output pin
  pinMode (Sensor, INPUT) ; // Initialization sensor pin
}

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

  if (val == HIGH) // If a signal was detected , the LED will light up
  {
    digitalWrite (Led, LOW);
  }
  else
  {
    digitalWrite (Led, HIGH);
  }
}
```

Connections Arduino:

LED +	= [Pin 13]
LED -	= [Pin GND]
Sensor signal	= [Pin 10]
Sensor +V	= [Pin 5V]

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Sensor - = [Pin GND]

Example program download

SensorTest Arduino

Code example Raspberry Pi

```
# Needed modules will be imported and configured
import RPi.GPIO as GPIO
import time

GPIO.setmode(GPIO.BCM)

# The input pin of the sensor will be declared.
GPIO_PIN = 24
GPIO.setup(GPIO_PIN, GPIO.IN)

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

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


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, enter the command:

```
sudo python SensorTest_RPi_withoutPullUP.py
```

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