

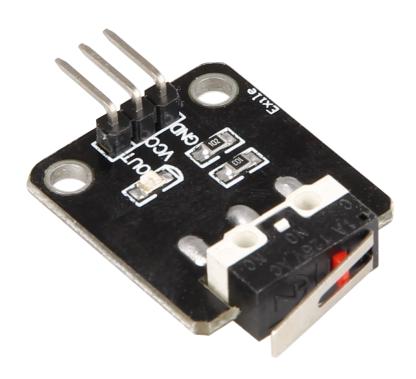
BUMP-SENSORSEN-BUMP01





BUMP-SENSOR

SEN-BUMP01



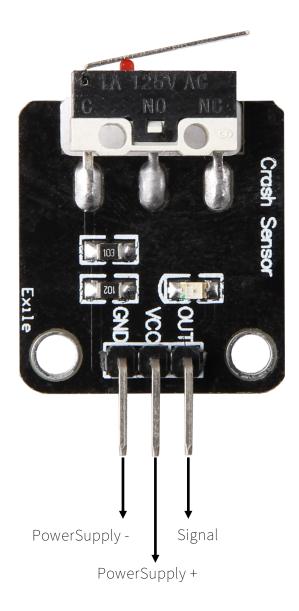
1. GENERAL INFORMATION

Dear customer,

thank you very much for choosing our product.

In the following, we will introduce you to what to observe while starting up and using this product.

Should you encounter any unexpected problems during use, please do not hesitate to contact us.

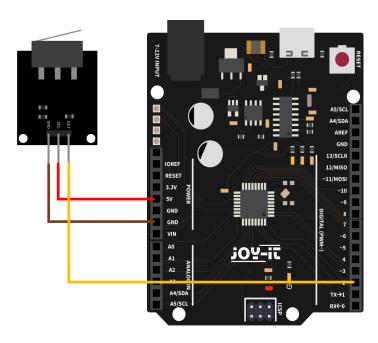


When the switch is not activated, a HIGH level is present at the signal pin. When the switch is activated, a LOW level is present at the signal pin and the LED on the board lights up red.

3. USE WITH ARDUINO

<u>Wiring</u>

Connect the sensor to your Arduino as shown in the diagram and table below.



BUMP-Sensor	Arduino
GND	GND
VCC	5 V
OUT	2

Example Code

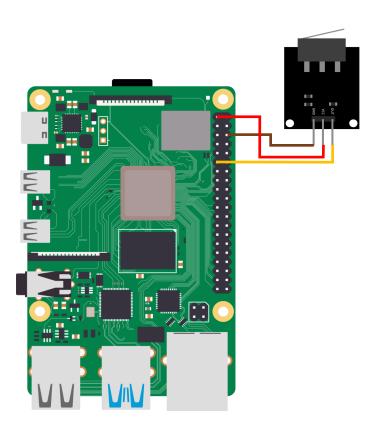
In this code example, the status of the sensor is read out every second and displayed in the serial monitor.

```
const int SWITCH PIN = 2;
bool switchState = HIGH; //Variable the switch status
void setup() {
 // Initialize the switch pin as an input
 pinMode(SWITCH PIN, INPUT);
 // Initialize serial communication at 9600 bps:
 Serial.begin(9600);
void loop() {
  // Read the state of the switch value:
 switchState = digitalRead(SWITCH PIN);
 // Read the state of the switch
 if (switchState == LOW) {
   Serial.println("Switch is pressed!");
  } else {
   Serial.println("Switch is not pressed!");
 // Wait for a short period before reading again
 delay(1000);
```

4. USE WITH RASPBERRY PI

<u>Wiring</u>

Connect the sensor to your Raspberry Pi as shown in the diagram and table below.



BUMP-Sensor	Raspberry Pi
GND	GND (Pin 6)
VCC	3V3 (Pin 1)
OUT	GPIO17 (Pin 11)

Example Code

In this code example, the status of the sensor is read out every second and displayed in the console.

```
import RPi.GPIO as GPIO
import time
# Define the GPIO pin number
SWITCH PIN = 17
# Setup GPIO mode
GPIO.setmode(GPIO.BCM)
# Setup the GPIO pin as input with a pull-up resistor
GPIO.setup(SWITCH PIN, GPIO.IN, pull up down=GPIO.PUD UP)
try:
   while True:
       # Read the state of the switch
        switch state = GPIO.input(SWITCH PIN)
        # Check switch state
        if switch_state == 0:
            print("Switch is pressed!")
        else:
           print("Switch is not pressed!")
        # Wait for a short period before reading again
        time.sleep(1)
except KeyboardInterrupt:
   # Cleanup the GPIO settings when the script is terminated
 GPIO.cleanup()
```

5. ADDITIONAL INFORMATION

Our information and take-back obligations according to the Electrical and Electronic Equipment Act (ElektroG)

Symbol on electrical and electronic equipment:

This crossed-out dustbin means that electrical and electronic appliances do not belong in the household waste. You must return the old appliances to a collection point.

Before handing over waste batteries and accumulators that are not enclosed by waste equipment must be separated from it.

Return options:

As an end user, you can return your old device (which essentially fulfills the same function as the new device purchased from us) free of charge for disposal when you purchase a new device.

Small appliances with no external dimensions greater than 25 cm can be disposed of in normal household quantities independently of the purchase of a new appliance.

Possibility of return at our company location during opening hours:

SIMAC Electronics GmbH, Pascalstr. 8, D-47506 Neukirchen-Vluyn, Germany

Possibility of return in your area:

We will send you a parcel stamp with which you can return the device to us free of charge. Please contact us by email at Service@joy-it.net or by telephone.

Information on packaging:

If you do not have suitable packaging material or do not wish to use your own, please contact us and we will send you suitable packaging.

6. SUPPORT

If there are still any issues pending or problems arising after your purchase, we will support you by e-mail, telephone and with our ticket support system.

Email: service@jov-it.net

Ticket system: http://support.jov-it.net

Telephone: +49 (0)2845 9360-50 (Mon - Thur: 10:00 - 17:00 o'clock,

Fri: 10:00 - 14:30 o'clock)

For further information please visit our website:

www.jov-it.net

SIMAC Electronics GmbH Pascalstr. 8, 47506 Neukirchen-Vluyn