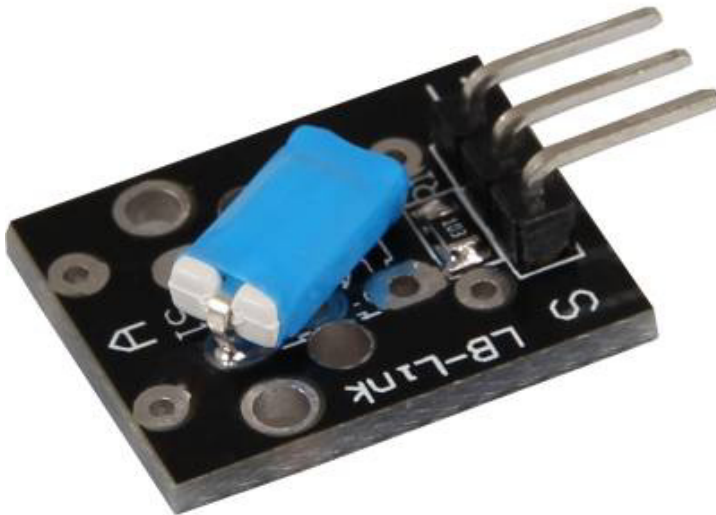


KY-020 Tilt switch module

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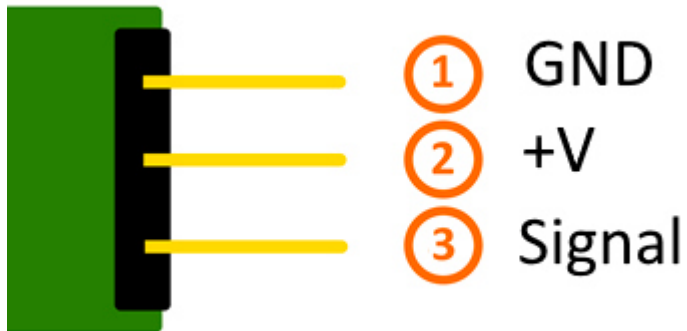
Pircure



Technical data / Short description

Depending on the angle, a switch connects the circuit.

Pinout



Code example Arduino

This example will light up a LED after a sensor detected a signal.

the modules KY-011, KY-016 or KY-029 could be used as LED too for example.

```
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 will be 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]

KY-020 Tilt switch module

Sensor - = [Pin GND]

Example program download[SensorTest_Arduino_withoutPullUP](#)**Code example Raspberry Pi**

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

GPIO.setmode(GPIO.BCM)

# Declaration of the input pin which is connected with the sensor.
GPIO_PIN = 24
GPIO.setup(GPIO_PIN, GPIO.IN)

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

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

# The outFunction will be started after detecting of a signal (falling signal edge)
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_withoutPullUP](#)

To start, enter the command:

```
sudo python SensorTest_RPi_withoutPullUP.py
```