



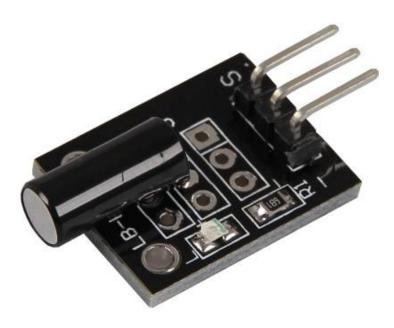
KY-017 Tilt switch module

# KY-017 Tilt switch module

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## **Picture**

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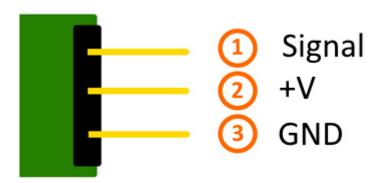
# Technical data / Short description

Depending on the angle, a switch connects the circuit.





## **Pinout**



# Code example Arduino

This example will light up a LED as soon as the tilt module is in the right angle.

The modules KY-011, KY-016 or KY-029 can be used as 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 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:**

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```
LED + = [Pin 13]

LED - = [Pin GND]

Sensor Signal = [Pin 10]

Sensor +V = [Pin 5V]
```





KY-017 Tilt switch module

Sensor - = [Pin GND]

#### **Example program download**

SensorTest\_Arduino\_withoutPullUP

## Code example Raspberry Pi

```
# Needed modules will be imported.
import RPi.GPIO as GPIO
import time
GPI0.setmode(GPI0.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)
print "Sensor-test [press ctrl+c to end]"
# This output function will be started at signal detection
def outFunction(null):
         print("Signal detected")
# The output function will be activated after a signal was 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\_withoutPullUP

To start, enter the command:

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sudo python SensorTest\_RPi\_withoutPullUP.py