KY-010 Light barrier-module

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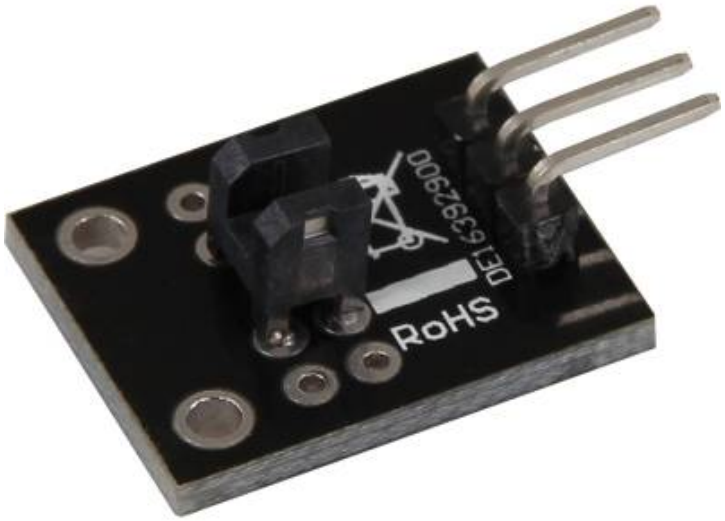
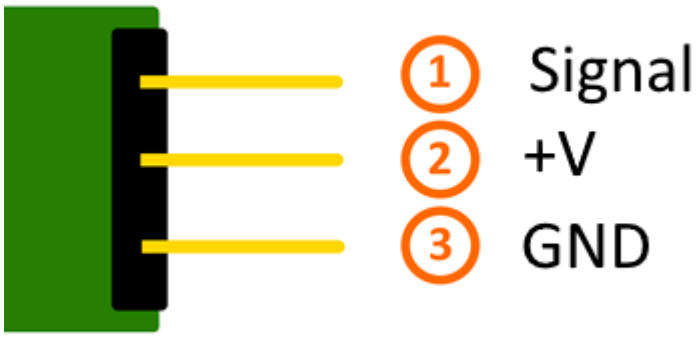
Picture



Technical data / Short description

The connection between both input pins will be interrupted if the optical barrier is beeing interrupted.

Pinout



Code example Arduino

In this program, a LED will flash up, if a signal was detected at the sensor. You can also use the modules KY-011, KY-016 or KY-029 as LEDs.

```
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 sensorpin
}

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

  if (val == HIGH) //The led will flash up, if a signal was detected.
  {
    digitalWrite (Led, HIGH);
  }
  else
  {
    digitalWrite (Led, LOW);
  }
}
```

Connections Arduino:

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

Example program download

SensorTest_Arduino_inverted

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 which is connected with the sensor.<br />
# Additional to that the pull up
GPIO_PIN = 24
GPIO.setup(GPIO_PIN, GPIO.IN, pull_up_down = GPIO.PUD_DOWN)

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

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

# The outputFunction will be started at the moment of a signal detection (raising edge).
GPIO.add_event_detect(GPIO_PIN, GPIO.RISING, callback=outputFunction, 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_inverted

To start, enter the command:

```
sudo python SensorTest_RPi_inverted.py
```