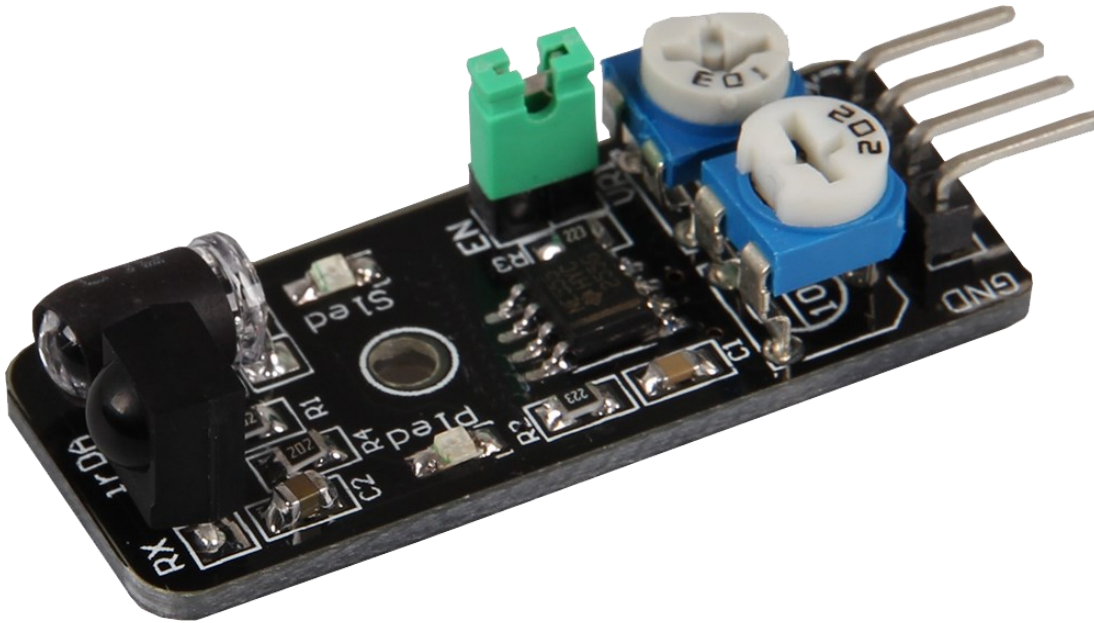


INFRARED PROXIMITY SENSOR

SEN-KY032IR



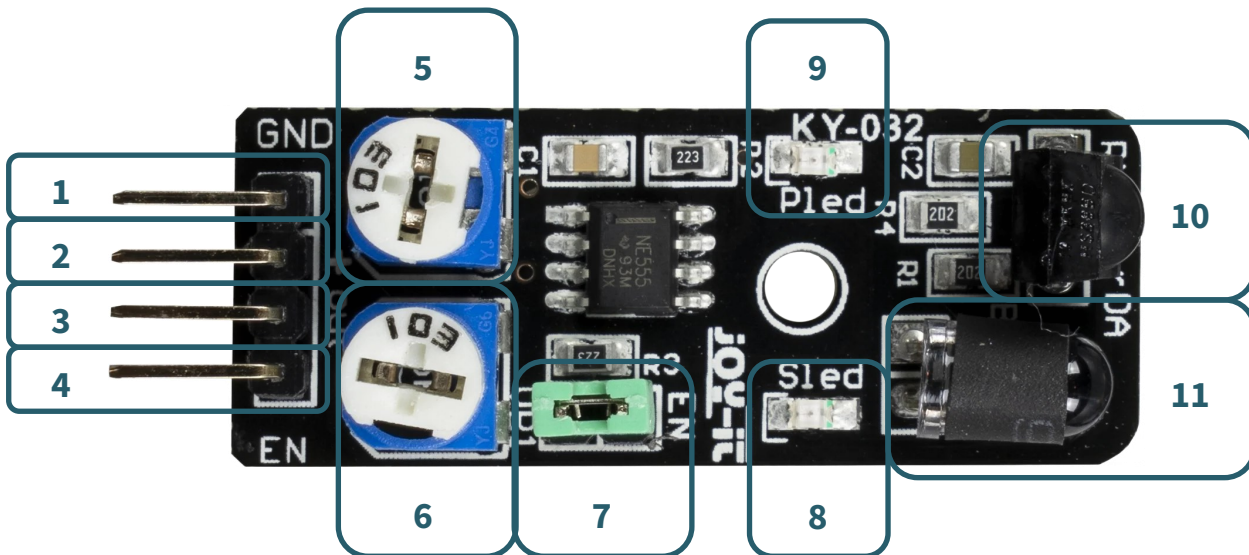
1. GENERAL INFORMATION

Dear customer,

thank you very much for choosing our product. In 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.

2. DEVICE OVERVIEW



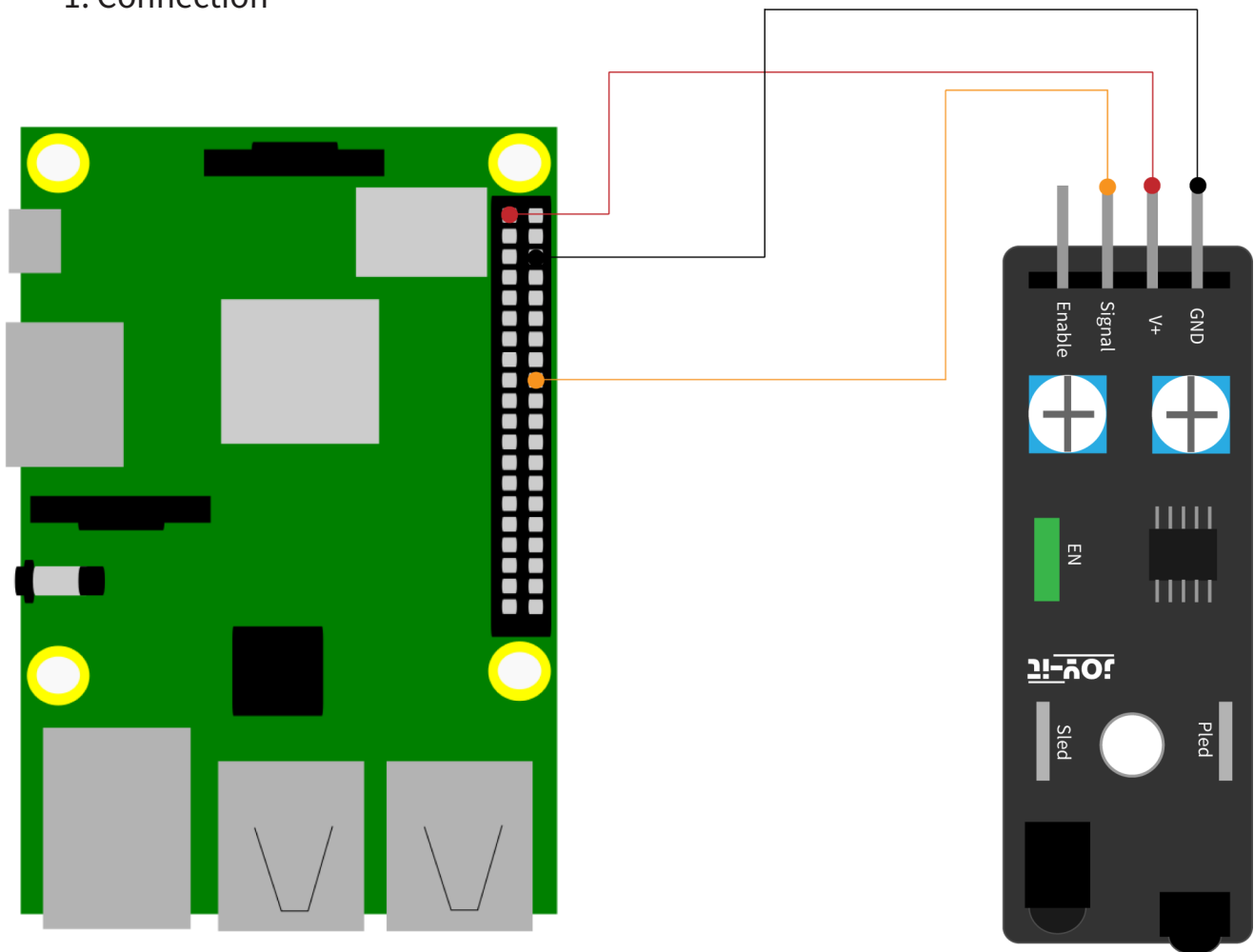
Digit	Function
1	GND-Pin; Sensor ground connection
2	+ Pin; Power supply 3 - 5 V DC
3	Out Pin; Signal output
4	EN pin; (active high) Can be used for manual transmission of an IR signal, EN jumper must be removed for this.
5	Potentiometer for adjusting the IR transmitter
6	Potentiometer for adjusting the receiver sensitivity
7	EN jumper; Jumper plugged in → IR signal is sent permanently; Jumper not plugged in → IR signal is controlled by EN pin
8	Status LED
9	Power LED
10	IR receiver
11	IR transmitter

3. USAGE WITH A RASPBERRY PI



This guide was written under Raspberry Pi OS Bookworm for the Raspberry Pi 4 and 5. It has not been checked with newer operating systems or hardware.

1. Connection



KY-032	Raspberry Pi
GND	Ground (Pin 6)
V+	3.3V (Pin 1)
Signal	GPIO24 (Pin 18)
Enable Pin	- Jumper is plugged

2. Code example

```
# Required modules are imported and set up
import time
from gpiozero import DigitalInputDevice

# Here the input pin is declared
sensor = DigitalInputDevice(24, pull_up=True)

# Pause (in seconds)
delayTime = 0.5
print("Sensor Test [press CTRL+C to end the test]")

# Main program loop
try:
    while True:
        if sensor.value:
            print("Obstacle detected")
        else:
            print("No obstacle")
            print("-----")

        # Reset + Delay
        time.sleep(delayTime)

# Cleanup after the program has ended
except KeyboardInterrupt:
    pass
```

This code reads the current status of the sensor and indicates in the console whether there is an obstacle or not.

The sensor has two potentiometers with which the sensitivity of the receiver and the transmitter can be adjusted.

You can download and unzip the file with the following commands:

```
wget https://joy-it.net/files/files/Produkte/SEN-KY032/SEN-KY032IR_RPI.zip
```

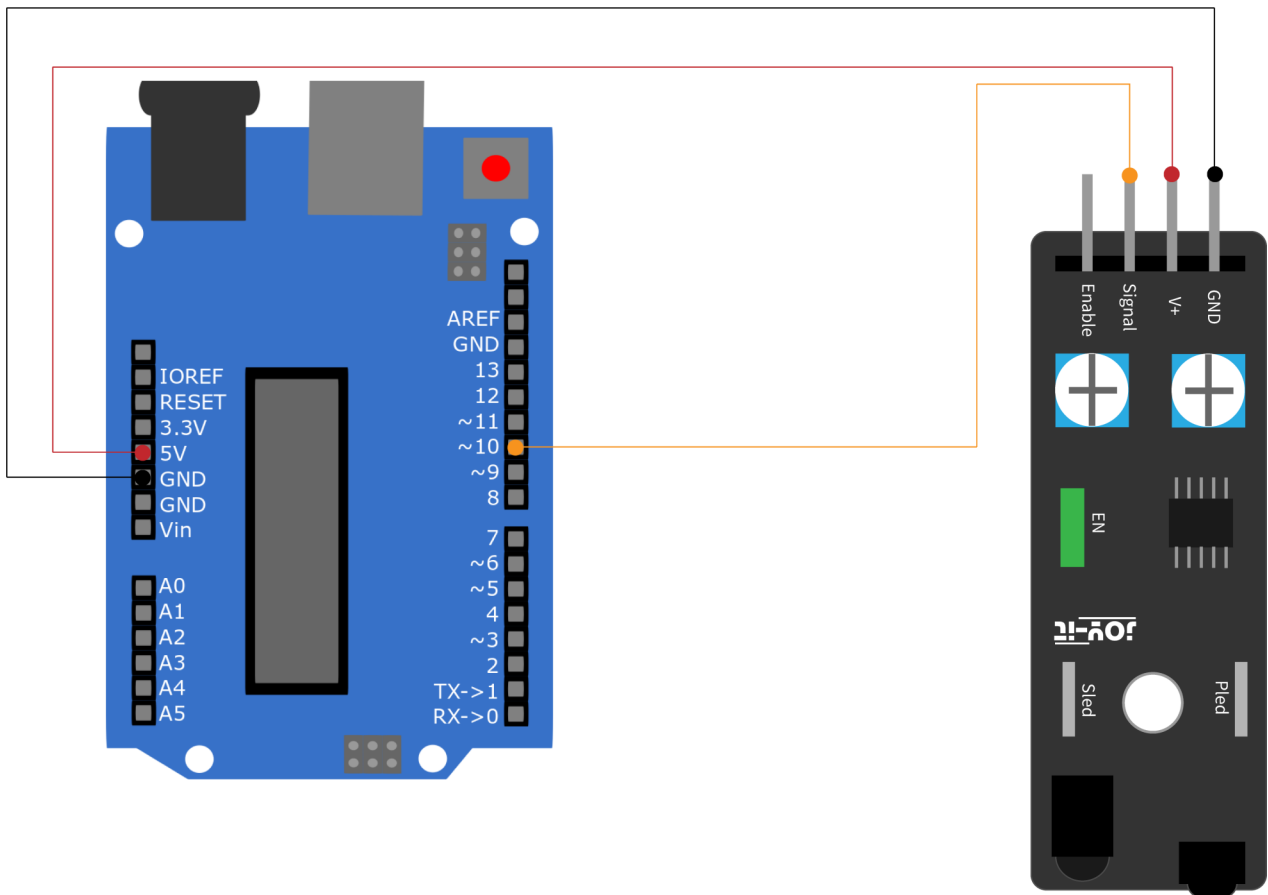
```
unzip SEN-KY032IR_RPI.zip
```

Now you can execute the file with the following command:

```
python3 SEN-KY032IR_RPI.py
```

4. USAGE WITH AN ARDUINO

1. Connection



KY-032	Arduino
GND	GND
V+	Pin 5V
Signal	Pin 10
Enable Pin	- Jumper is plugged

2. Code example

This code reads the current status of the sensor and displays in the console whether an obstacle is present or not. If the sensor detects an obstacle, another LED (Sled) lights up.

```
int Sensor = 10; // Declaration of the sensor input pin

void setup () {
  Serial.begin(9600); // Initialization serial output
  pinMode (Sensor, INPUT) ; // Initialization of sensor pin
}

// The program reads the current status of the sensor pin and
// displays in the serial console whether an obstacle is currently detected
// or if there is no obstacle in front of the sensor
void loop () {
  // The current signal at the sensor is read out
  bool val = digitalRead (Sensor) ;

  // If a signal could be detected, the LED is switched on.
  if (val == HIGH) {
    Serial.println("No obstacle");
  }
  else {
    Serial.println("Obstacle detected");
  }
  Serial.println("-----");
  delay(500); // Pause between the measurement of 500ms
}
```

In this code example, the received data is issued on the serial Monitor. Make sure that the baud rate is set correctly (9600). Also make sure that you have set the right board and port in your Arduino IDE before uploading.

You can also download the code example [here](#).

The sensor has two potentiometers with which the sensitivity of the receiver as well as the transmitter can be adjusted.

6. OTHER 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 fulfils 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 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 e-mail 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.

7. 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.

E-Mail: service@joy-it.net

Ticket system: <https://support.joy-it.net>

Telephone: +49 (0)2845 9360-50 (Mon - Thur: 09:00 - 17:00 o'clock CET,

Fri: 09:00 - 14:30 o'clock CET)

For further information please visit our website:

www.joy-it.net