

mainboard

DFR0392 DFRduino M0

**Robot Controller** 

Mainboard Arduino Compatible

DFR0398 Romeo BLE Quad

Introduction Specification Pinout **Dimension Diagram** Tutorial FAQ More Documents

COMMUNITY NEW

#### SKU:SEN0556

**FORUM** 

**BLOG** 

Introduction

This proximity sensor measures reflected infrared(IR) energy to detect the presence of an object within a distance of 10±5mm



**EDUCATION** 

to 80±20mm. It outputs high/low and has the advantages of strong anti-interference ability, quick response and small size. So this module can be easily embedded in various detection devices like automatic hand washers, smart taps, smart toilets, smart restrooms, and object proximity switches. In addition, the sensor includes a housing with mounting holes,

which allows users to design proper installation for it to ensure waterproofing when applied to scenarios in which it's likely to contact water, such as smart taps and automatic hand washers. Specification

## · Operating Voltage: 5V

- Operating Current: <30mA within the sensing range; <25mA</li>
- outside the sensing range Power: <100mW within the sensing range; <75mW outside the</li>
  - sensing range
- Sensing Range: 10±5 80±20mm

Sensing Time: 100μs Ta=25°C

Operating Temperature: -20°C - 75°C

• Storage Temperature: -20°C - 85°C

- Service Life: 50000h
- Operating Humidity: less than 70%

Name

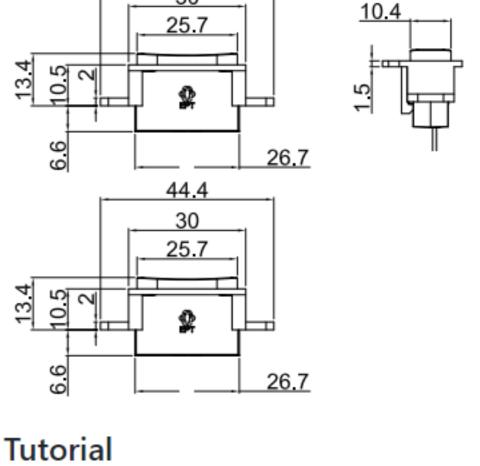
**Pinout** 

Description

# Color

44.4		
Dimension Diagram		
Green	OUT	Signal Output
Black	GND	Power -
Red	VCC	Power +

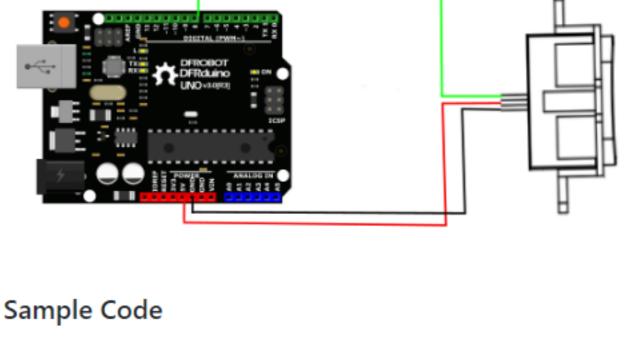
#### 30



### Requirements Hardware

#### DFRduino UNO R3 (or similar) × 1 Infrared Proximity Sensor × 1

- Wires
- Software
  - Arduino IDE
- **Connection Diagram**



# int led = 13; // Pin 13 has an LED connected on most Arduino

```
int sensor = 8;
 void setup() {
    pinMode(led, OUTPUT); // Initialize the digital pin as an
    pinMode(sensor, INPUT);
    digitalWrite(led, LOW);
  }
  void loop() {
    int val = digitalRead(sensor);
    if (val)
      digitalWrite(led, HIGH);
    else
      digitalWrite(led, LOW);
Result
```

# When the detected object is in the detection range of the sensor,

the LED corresponding to pin 13 of the UNO board lights up; when it's outside the detection range, the LED goes out.

# **FAQ**

For any questions, advice or cool ideas to share, please visit the DFRobot Forum.

## More Documents

Get Infrared Proximity Sensor from DFRobot Store or DFRobot Distributor.

Turn to the Top