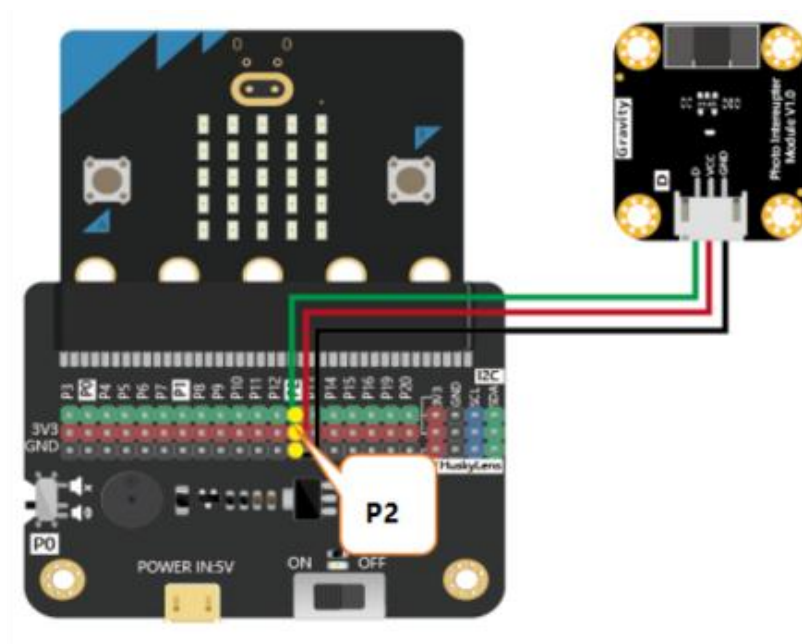


Introduction

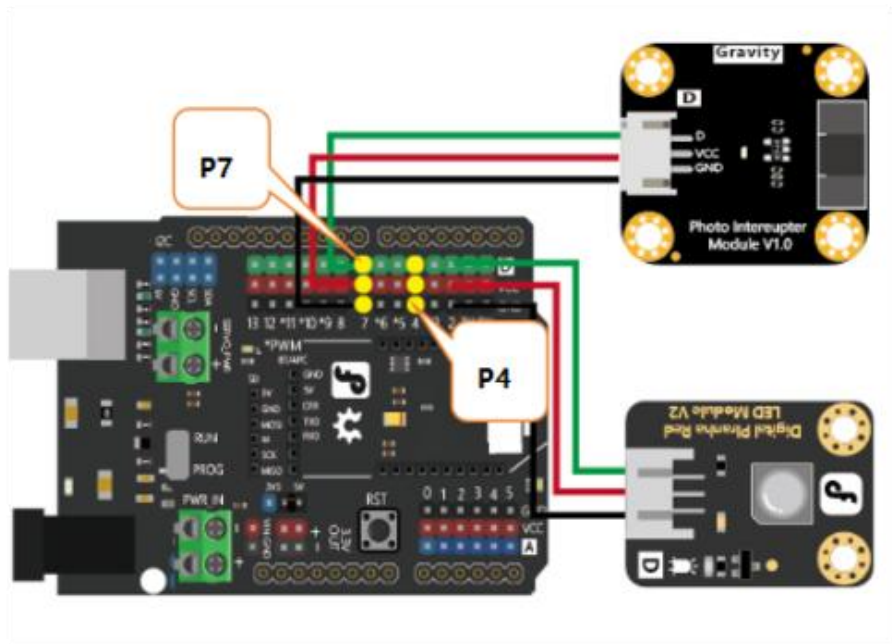
The Gravity: Photo Interrupter Module integrates a high-performance ITR9608 photoelectric switch. Its compact design and easy operation make it an ideal choice for electronic projects and applications. Whether for [robotics](#), automation equipment, or counting systems, this module provides precise photoelectric detection and efficient signal processing.

What is the photo interrupter?

The photo interrupter is a device that operates by blocking light with an object. Its main components include a light emitter and a light receiver, both arranged face-to-face within the same enclosure. When an object passes through the light path between the emitter and receiver, the light at the receiver is obstructed, triggering the operation of the photoelectric sensor.



Wiring Diagram of Gravity: Photo Interrupter Module and [micro:bit](#)



Wiring Diagram of Gravity: Photo Interrupter Module and Arduino UNO

Features

High Sensitivity and Precision: Utilizing the ITR9608 slotted photoelectric switch.

Wide Photonic Gap: With a 5.0mm wide photonic gap design, it is suitable for detecting objects of various sizes.

Simple and Easy to Use: Designed with a standard Gravity interface, it offers easy operation and strong compatibility, making connections hassle-free.

Strong Compatibility: [Arduino](#), [micro: bit](#), and [UNIHAKER](#)

Applications

Counter: Facilitates object counting on production lines.

Speed Detection and Measurement: Provides pulse signals for calculating rotation speed and frequency.

Smart Card Switch: Detects card insertion and removal for power control.

Printer and Copier Paper Detection: Controls printing and transmission by detecting paper position.

Specification

Operating Voltage: 3.3~5V

Output Type: Digital Signal

Light Source Wavelength: 940nm (Infrared)

Photonic Gap: 5.0mm

Interface Type: PH2.0-3P

Product Dimensions: 27x32mm

Product Weight: 4.0g (total weight including packaging and sensor wire is 12g)

Documents

[Product wiki](#)

[Pin Description](#)

[micro:bit Tutorial](#)

[Arduino Tutorial](#)

[UNIHAKER Tutorial](#)

[Schematic Diagram](#)

[Dimensional Drawing](#)

Shipping List

Gravity: Photo Interrupter Module x1

Gravity: Digital Sensor Cable for Arduino - 30cm x1