

Datasheet

Qosain Scientific PhysGate

Introduction:

PhysGate, an infrared (IR)-based photogate, is the ultimate tool to record how an object appears and disappears with time. A lego exterior provides robust mounting of the PhysGate to fit a range of user-defined orientations and applications. With a response time as fast as 1 μ s, it finds its application in reading optical encoders as well.



Features:

- High sensitivity to even semi-transparent medium
- Compact and adaptable to various installments
- PhysInstrument class: Analog
- Connects with PhysLogger
- Comes with a compatible bracket
- Hot pluggable

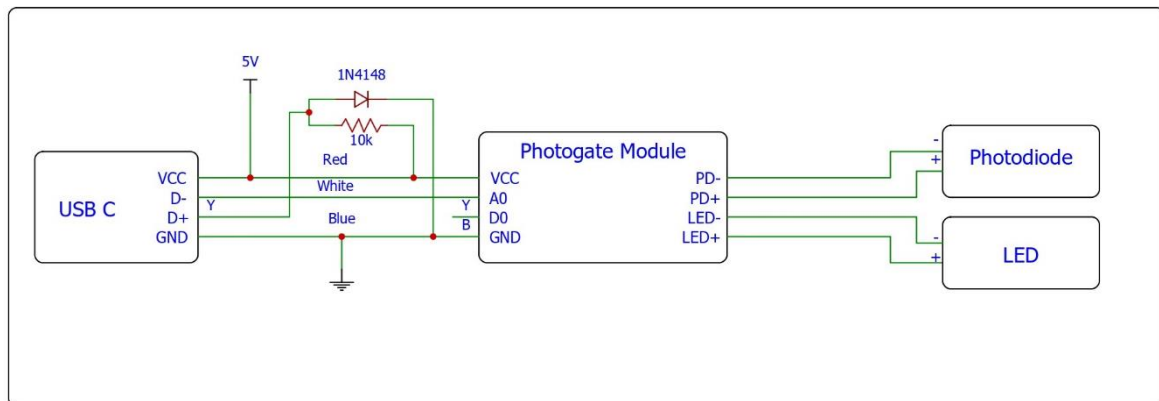
Specifications:

- Photogate width: 4.5 cm
- Response Time: Less than 1 μ s
- Obstruction sensor: IR-based

Typical Applications

- Learn about pendulums and oscillations
- Calculate gravity by accurately timing a free fall
- Investigate collisions and the laws of motion on an air track
- Determine how fast your motor rotates; use it as an optical tachometer
- Explore a wide variety of principles in rotational mechanics

Circuit Diagram:



Resources

- Instrument URL:
www.physlogger.com/PhysHall.html
- Discussion:
www.community.physlogger.com/c/p/hysinstruments/physgate/19

