

How to wire a single optocoupler module



Overview

This tutorial gives an introduction to the HY-M154 / 817 optocoupler module. Moreover, a simple application is programmed that shows how to wire and how to program an Arduino when working with the module. Optocouplers are very useful when you need to isolate different sections of a circuit, for example in power. An optocoupler (also called an opto-isolator or photocoupler) is a component that transfers an electrical signal between two isolated circuits using light. Because the signal crosses as light —. This circuit is only applicable where the incoming signal has some information or data but when we just need to forward the signal from one part of the circuit to the other part but signal contains noise, then we could use the combination of IR sender and receive. From my understanding, when the modul receives DC current (5V), it's going to turn on the other circuit and turn on the bulb.



Article Content

Hot

How to Use 1 Channel Relay module with Optocoupler:

Learn how to use the 1 Channel Relay module with Optocoupler with detailed documentation, including pinouts, usage guides, and example projects. Perfect

Sep 25, 2025 Hot

Arduino Tutorial: 2-Channel Optocoupler Relay Module

High-quality SONGLE relay featuring a single pole double throw (SPDT) configuration, with one common terminal, one normally open terminal, and one normally closed

Oct 21, 2025 Hot

Arduino Tutorial: HY-M154 / 817 / PC817 Optocoupler Module

This tutorial gives an introduction to the HY-M154 / 817 optocoupler module. Moreover, a simple application is programmed

Nov 19, 2025 Hot

PC817 Optocoupler pinout, working and Example with

In this pinout diagram of PC817, pin1 and pin2 are parts of the input side and pin3 - pin4 are output pins. Pin 1 is an anode pin of IR input within the Optocoupler. It

Apr 10, 2026 Hot

Optocoupler Tutorial and Optocoupler Application

What is an Optocoupler? An optocoupler (also called an opto-isolator, photo-coupler, or optical isolator) is a solid-state semiconductor device that

Nov 16, 2025 Hot

Arduino: Using Photo Interrupter (Slotted Optocoupler)

Connect and use Photo Interrupter (Slotted Optocoupler) in your Arduino projects - quick and easy. Find this and other hardware projects on Hackster.io.

Aug 04, 2025 Hot

Optocoupler Tutorial for Beginners

An optocoupler (or opto-isolator) is a component that transfer signals between circuits using light. In this guide, you'll learn how they work and how you

Nov 19, 2025 Hot

PC817 Optocoupler Module User Guide | Wiring & Setup

Complete PC817 optocoupler isolation module guide. Covers 3.6V–30V wiring, jumper settings, resistor selection, Arduino/ESP32/PLC hookup

Dec 11, 2025 Hot

Using Opto Couplers

Assuming that a single HCT output is only feeding this optocoupler, a logic 1 voltage of about 4.9V can be presumed. The output current available from a HCT gate to

Oct 15, 2025 Hot

Optocouplers Desig

Insulation Defined The electrical insulating capability of an optocoupler, sometimes referred to as withstand voltage, is determined by its ability to protect surrounding circuitry, as well as itself, against

Mar 27, 2026 Hot

PC817 Optocoupler: Working, Pinout, Circuit,

PC817 is a widely used optocoupler that provides electrical isolation between input and output using an internal LED and phototransistor. This guide

Aug 15, 2025 Hot

Interfacing Optocoupler with Arduino

Today in this tutorial we will see the interfacing optocoupler with Arduino (4N35 or MCT2E). Optocoupler is also called an optoisolator. But before

Feb 14, 2026 Hot

Isolating Circuits From Your Arduino With Optocouplers

A Optocoupler also called a photocoupler, optical isolator or opto-isolator is a small chip that transfers signals between two isolated circuits using light. A basic

Jun 29, 2026 Hot

Everything You Need to Know About Optocouplers in

Have you ever heard the word isolation, especially in electronics? As you might guess, isolation is a key factor when it comes to optocouplers. Isolation

Nov 30, 2025 Hot

PC817 Optocoupler: Pinout, Features, and Applications

Explore the PC817 optocoupler's pinout, working principle, and applications. Learn how it provides electrical isolation and signal transfer.

Feb 14, 2026 Hot

Optocoupler | Explore Our Workshop | Jameco Electronics

Understand what an optocoupler is and how it works at our electronics workshop at Jameco Electronics. Explore tutorials on how electronic components work today.

Jan 03, 2026 Hot

How to Use Relay with optocoupler: Examples, Pinouts,

Learn how to use the Relay with optocoupler with detailed documentation, including pinouts, usage guides, and example projects. Perfect for students, hobbyists, and

Jan 19, 2026 Hot

How to make the connections to the 1 channel

Connecting the IN pin to DC+ will turn the relay on (connect NO and COM), and connecting the IN pin to DC- will turn the relay off (connect NC to COM). You may

Aug 07, 2025 Hot

Activity: Optocouplers. [Analog Devices Wiki]

Activity: Optocouplers. Objective: In this activity you will construct an optocoupler from an infra-red LED and an NPN photo transistor. You will investigate the

Feb 06, 2026 Hot

Using Opto Couplers

The main purpose of an optocoupler interface is to completely isolate the input circuit from the output circuit, which normally means there will be two completely

Sep 13, 2025 Hot

How to Use 1 Channel Way Optocoupler Isolation

Learn how to use the 1 Channel Way Optocoupler Isolation Module PC817 EL817 12V with detailed documentation, including pinouts, usage guides, and example

Apr 01, 2026 Hot

How to make the connections to the 1 channel

I want to light a bulb connected to the socket by using an 1 Channel Optocoupler Relay Module which accepts an input of 5V. From my understanding, when the

Aug 24, 2025 Hot

Optocouplers Guide: Understanding Types,

Learn how optocouplers ensure electrical isolation and signal transfer in circuits. This guide covers their components, working principles, and applications.

May 31, 2026

Contact Us

For more information, pricing, or custom solutions, please contact us:

Website: <https://www.eedenmarketing.co.za>

Email: info@moletenare-ew.co.za

Phone: +86 138 1658 3346

Address: Ningbo, China

This document is for informational purposes only. Specifications subject to change without notice.

