

DIY Light-Controlled Timing Module



AI Overview

A homemade light-controlled timing module can automatically switch devices on or off based on light detection, using a trigger input, programmable timing, and a relay output. Understanding the Module

Typical light-controlled timing module consists of three main parts:

- Light Sensor / Trigger Input:** Detects light changes and sends a signal to the module. This can be a photodiode, LDR (light-dependent resistor), or optocoupler input that accepts 3V–24V DC signals.
- Timer Circuit:** A microcontroller or digital timer inside the module measures the time interval and controls the relay. Timing can be set for delay ON, delay OFF, or repeated ON/OFF loops.
- Relay Output:** Switches the connected device (fan, bulb, motor) on or off according to the timer settings.

Setting Up the Module

- Power the Module:** Connect a suitable power source, such as 6V–30V DC or USB 5V, depending on your module specifications.
- Connect the Light Sensor:** Wire the sensor to the trigger input. Ensure the sensor output voltage matches the module's input range. For Arduino-based setups, the sensor can be connected to a digital input pin.
- Configure Timing:** Use the module's buttons or software interface to set the desired timing. Options typically include:
 - Short delays: 0.1–99.9 seconds
 - Medium delays: 1–999 seconds
 - Long delays: 1–999 minutesYou can also set looping ON/OFF cycles for repeated operation.
- Connect the Load:** Attach the device you want to control to the relay output. Make sure the relay rating matches the device's voltage and current requirements.

Operating the Module

When the light sensor detects a change (e.g., light turning on or off), it triggers the timer. The timer counts the programmed delay and then activates or deactivates the relay. For repeated cycles, the module can automatically loop the ON/OFF sequence based on the set timing. Some Arduino-based modules can also provide visual or acoustic feedback, such as LEDs or beeps, to indicate timing status.

Practical Tips

- Test with a low-power device first** to ensure correct timing and relay operation.
- Shield the senso...**

Article Content

Light Activated Timer using LDR

In this tutorial, we are going to make a project on the Light Activated Timer switch circuit. It can activate the timer only one time

How to Make a Timing Light: A Step-by-Step Guide for DIY

While commercial timing lights like the KZYEE KT60 are designed for reliability and ease of use, building a DIY version can be a rewarding project for experienced hobbyists.

Amazon : Timer Module

DROK Time Delay Relay 2pcs, DC 6-30V Timer Relay 12V 24V 0.01s-9999min 50mA Digital Timer Cycle Delay Switch Module AC 220V Power On-Off Controller with LCD Display Switch Button Case

Timing Light Sequences: Build a Traffic Light Controller with an ...

Timing Light Sequences: Build a Traffic Light Controller with an Arduino MEGA Learn how to simulate a traffic light using an Arduino.

DIY Arduino Simple LED Timer Circuit : 3 Steps

DIY Arduino Simple LED Timer Circuit: In this Instructable I am going to show you how you can make a simple timer circuit. To start off this project I got my hands on the Basic Arduino Starter Kit made by

Adjustable Timer Circuit Diagram with Relay Output

3 Simple ways to build an adjustable timer circuit diagram (1 to 10 minute timer, cyclic on-off timer and Arduino timer to adjust long intervals of time).

Creating a DIY Light Control System Using the ATtiny85

Creating a DIY Light Control System Using the ATtiny85 Microcontroller and a 3-Channel Relay Module Hello and welcome back. In this project, we will learn how to make a DIY light design

How to Make a Timing Light: A Step-by-Step Guide for DIY

Craft a DIY timing light with an inductive coil, microcontroller, and strobe lamp. Follow step-by-step assembly for precise ignition timing checks. The KZYEE KT60 offers a ready-made solution with

Programmable 35238-MP Timer Module? How to Use it

So this 35238-MP Multi-Function Timer module is an digital adjustable programmable timer which we can use it for doing time-based

How to Make a Engine Timing Light

Learn how to make an engine timing light at home with simple tools and step-by-step instructions. Save money and gain hands-on experience tuning your engine.

DIY LED Timing Light Design Guide | PDF

This document provides instructions and a parts list for building a DIY LED timing light using inexpensive components. The design uses electrostatic induction to pick up a signal from the spark plug wire

DC 5V ~ 36V Dual MOS LED Digital Time Delay Relay Trigger Cycle

Buy DC 5V ~ 36V Dual MOS LED Digital Time Delay Relay Trigger Cycle Timer Delay Switch Circuit Board Timing Control Module DIY with fast shipping and top-rated customer service. Once you know,

Traffic Light Controller Using Arduino: Simple DIY Project

Project scalability: This project can be expanded into a smart city traffic management system, offering endless opportunities for learning and innovation. Conclusion
Creating a Traffic Light

Programmable 35238-MP Timer Module? How to Use it

Light control for night time Motor pump timing control Robotic arm or motor actuation Incubator egg turning timing Toilet fan or exhaust fan auto OFF

Need Help making a DIY timing light | All About Circuits

Unless you working on old vehicles a timing light is like a dinosaur. New cars and most bikes don't even use timing marks any more, the timing is done by reluctor wheels and electronic

DIY Strobe Light: Transistors and 555 Timer IC based Led

This article provides a deeper understanding on DIY strobe light controller circuit designing using transistors and 555 timer ICs.

Beginner's Guide to the 12V Time Delay Relay Module

Learn how to use a 12V time delay relay module with a pre-wired LED. This beginner-friendly guide covers wiring, timing settings, and trigger

Wireless Laser-Gate Timing System for Track and Field

You can either buy a Keyes laser module, a 3.3V regulator, a 9V battery, and my Laser Module PCB, or you can provide your own laser pointer.

DIY Timer Switch Tutorial: Create Your Own Timer for Home

Hello friends! Learn how to make a timer switch in this step-by-step DIY tutorial! Whether you want to automate your home lighting, appliances, or any other electronic devices, this guide will ...

How to build your own magneto timing light/buzzer

With this, it's easy to make a magneto timing light/buzzer yourself. It's quite nice, doing so. It's really not complicated, but does take so much concentration, that it really helps to clear your head.

Automated LED Lighting System with Real-Time Clock

In this project, we'll create an automated LED lighting system using an ESP32 C3-Mini microcontroller, a real-time clock (RTC) module, and an OLED display. The system will automatically

Arduino Laser-based Timing System : 6 Steps (with Pictures ...

Arduino Laser-based Timing System: As part of my teaching, I needed a system to accurately measure how quickly a model vehicle travelled 10 meters. Initially, I thought I would buy a cheap ready-made

timing light - Hackaday

Older cars that used a central distributor made use of a specialty stroboscope called a timing light in order to properly advance the ignition timing of the engine.

Build a Timer-Based Automatic Light Circuit with NE555 IC | DIY ...

Explore how to create a timer-based automatic light circuit using the versatile NE555 IC in monostable mode. This step-by-step DIY electronics project includes components, wiring

Arduino Timer With On/Off Set Point

Hi, with this project you will be able to control the on and off of your devices between the time you want. They may be the lights at the night, water the garden, turn on a machine, etc.

Stream Deck Module (15 Keys) | DIY Control Panel | Elgato

Stream Deck Module delivers trusted tactile control for custom projects and commercial products alike. With an unbranded design and access to hundreds of plugins plus the SDK, it's everything you love

Contact Us

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

Website: <https://www.adicor.eu>

Email: info@adicor.eu

Phone: +33 6 48 37 92 15

Address: 12 Rue de la Paix, 75002 Paris, France

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

