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Walfront Walfrontaefdzo62yn6177

Walfront DC 12V 1-10 Second Adjustable Timer Relay Module User Manual

INTRODUCTION

This manual provides comprehensive instructions for the Walfront DC 12V 1-10 Second Adjustable Timer Relay Module. It covers product overview, specifications, setup, operation, maintenance, and troubleshooting to ensure safe and effective use of the module.

SAFETY INFORMATION

Please read and understand all safety precautions before installing or operating this module. Failure to do so may result in damage to the module, connected equipment, or personal injury.

- Always disconnect power before making any wiring connections or adjustments.
- Ensure the input voltage (DC 12V) is correct and stable. Incorrect voltage can damage the module.
- Avoid short circuits on the input or output terminals.
- Do not exceed the specified current and voltage ratings for the relay contacts (10A 250VAC / 10A 30V DC).
- Keep the module away from moisture, dust, and extreme temperatures.
- If you are unsure about any aspect of installation or operation, consult a qualified technician.

PRODUCT OVERVIEW

The Walfront DC 12V 1-10 Second Adjustable Timer Relay Module is a high-precision, stable, and reliable timing relay designed for various applications requiring timed control. It features an adjustable delay range and a trigger button for activation.

Features

- High-precision, stable, and reliable timer relay module.
- Supports reverse input protection.
- Equipped with a trigger button switch.
- Adjustable time range from 1 to 10 seconds via potentiometer.
- Widely applicable in timer operation equipment, robotics, intelligent product development,

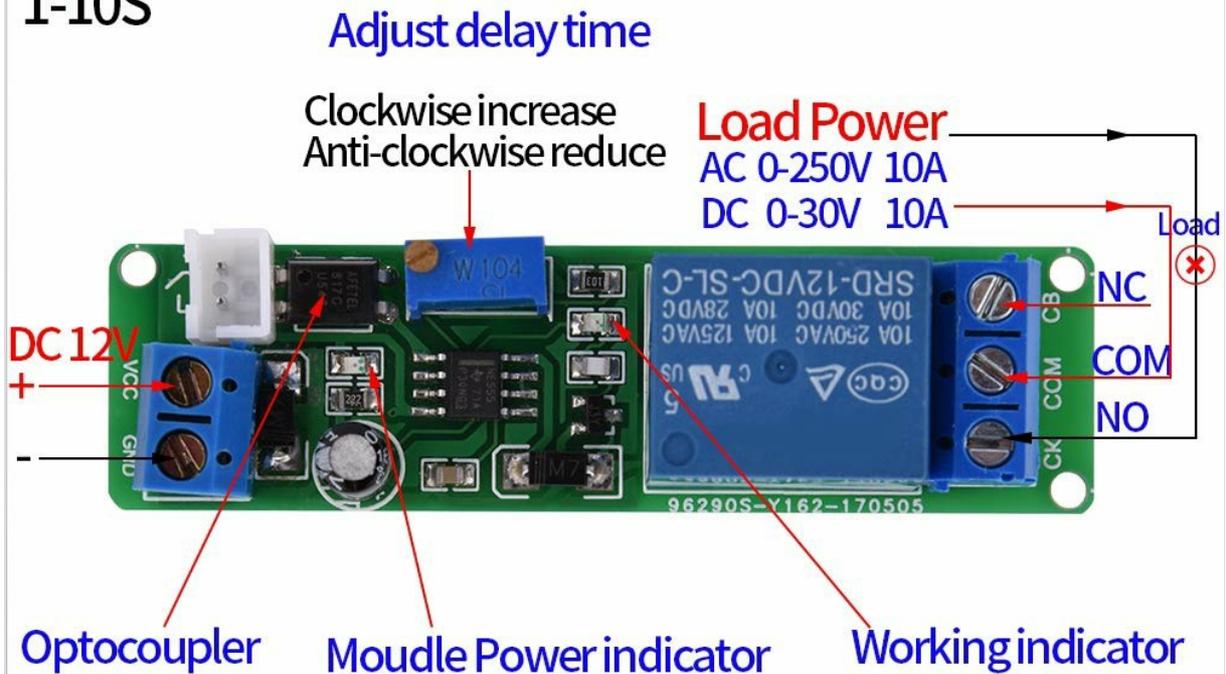
automation, PLC development, smart home anti-theft alarm delay, and electronic development.

Components

The module consists of a circuit board with a relay, a potentiometer for time adjustment, input/output terminals, and an external trigger button.

Trigger Delay Turn Off Relay Module

DC 12V
1-10S



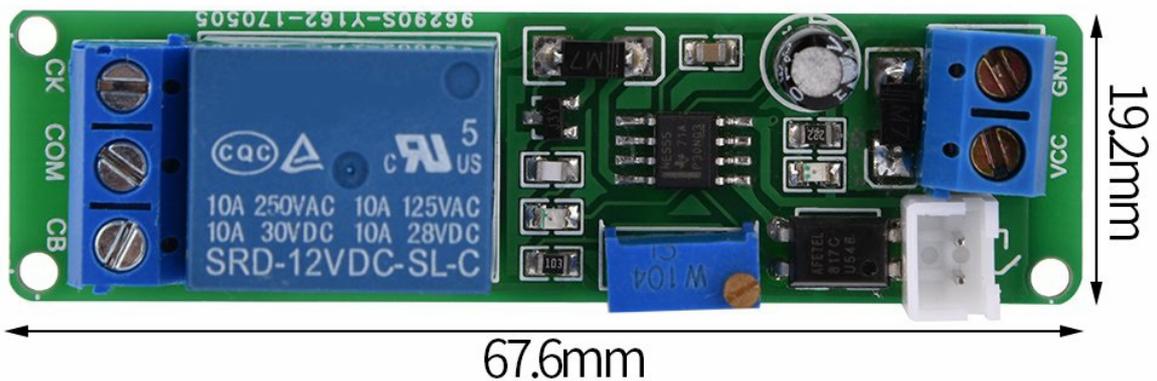
Product application : can be used for robots , intelligent product development , automation equipment , PLC development , smart home , anti-theft alarm delay , electronic development , etc..

A detailed diagram illustrating the Walfront timer relay module. It highlights key components such as the optocoupler, power indicator, working indicator, and connection points (VCC, GND, NC, COM, NO). It also shows how to adjust the delay time using the potentiometer.

SPECIFICATIONS

Attribute	Value
Product Dimensions (L x W x H)	10.3 x 6 x 2.52 cm
Weight	23 grams
Manufacturer	Walfront
Model Number	Walfrontaefdzo62yn6177

Attribute	Value
Input Voltage	DC 12V
Time Range	1 to 10 seconds (adjustable)
Relay Contact Rating	10A 250VAC / 10A 30V DC
Country of Origin	China



This image provides the physical dimensions of the Walfront timer relay module, showing its length as 67.6mm and width as 19.2mm.

SETUP

Wiring Diagram and Connections

Refer to the diagram in the Product Overview section for visual guidance. The module has clearly labeled terminals for power input and relay output.

- **Power Input:** Connect DC 12V power to the VCC (+) and GND (-) terminals. Ensure correct polarity. The module includes reverse input protection.

- **Relay Output:** The relay has three terminals: NC (Normally Closed), COM (Common), and NO (Normally Open). Connect your load according to your application's requirements.
 - For a load that should be OFF normally and turn ON after delay: Connect one side of the load to COM and the other side to NO.
 - For a load that should be ON normally and turn OFF after delay: Connect one side of the load to COM and the other side to NC.

Initial Configuration

After wiring, apply DC 12V power to the module. The power indicator LED should illuminate, indicating the module is receiving power.

OPERATING INSTRUCTIONS

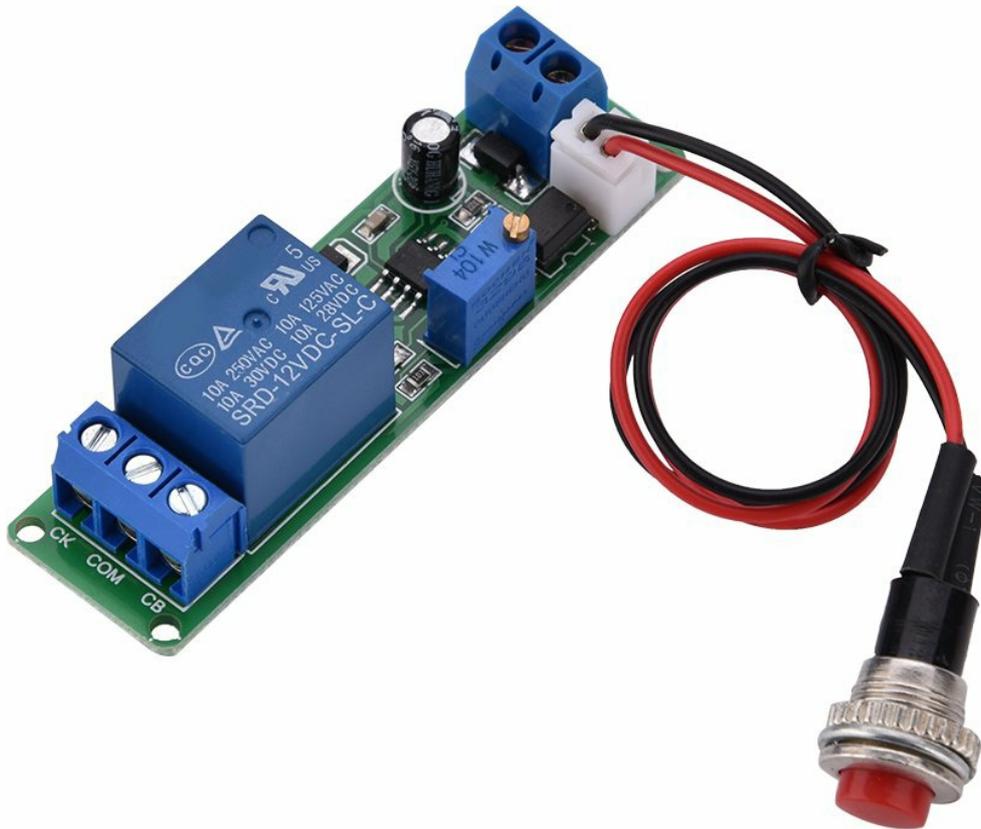
Adjusting Delay Time

The delay time of the module can be adjusted from 1 to 10 seconds using the onboard potentiometer (labeled 'W104' in the diagram).

- To **increase** the delay time, turn the potentiometer clockwise.
- To **decrease** the delay time, turn the potentiometer anti-clockwise.
- If a longer delay time is required beyond 10 seconds, it is possible to replace the existing capacitor or potentiometer with components of larger values. This modification should only be performed by experienced individuals.

Triggering the Relay

The module operates by triggering the relay and then initiating a delay before turning off the connected load.



This image displays the Walfront DC 12V 1-10 Second Adjustable Timer Relay Module, featuring the main circuit board, relay, potentiometer, and the attached red trigger button.

1. Ensure the module is powered on and correctly wired to your load.
2. Press the external trigger button.
3. Upon pressing the button, the load connected to the relay will turn ON (or OFF, depending on NC/NO connection).
4. After the set delay time (1-10 seconds) has elapsed, the load will automatically turn OFF (or ON).

MAINTENANCE

The Walfront Timer Relay Module is designed for reliable operation with minimal maintenance. Follow these guidelines to ensure its longevity:

- Keep the module clean and free from dust and debris. Use a soft, dry cloth for cleaning.
- Ensure all wiring connections remain secure. Loose connections can lead to intermittent operation or damage.
- Avoid exposing the module to excessive vibration or mechanical shock.
- Store the module in a dry, temperature-controlled environment when not in use.

TROUBLESHOOTING

If you encounter issues with your Walfront Timer Relay Module, refer to the table below for common problems and solutions.

Problem	Possible Cause	Solution
Module does not power on (no indicator light)	No power supply; Incorrect voltage; Reverse polarity; Faulty power supply.	Check power connections (VCC, GND). Ensure DC 12V is supplied. Verify polarity. Test power supply.
Relay does not activate after trigger	Faulty trigger button; Incorrect wiring to load; Load issue; Potentiometer set to minimum delay.	Check trigger button functionality. Verify load wiring (COM, NO/NC). Test the load independently. Adjust potentiometer to a visible delay time.
Delay time is incorrect or inconsistent	Potentiometer setting; Environmental factors; Component degradation.	Adjust the potentiometer carefully. Ensure stable operating environment. If issue persists, module may require replacement.
Load remains ON/OFF indefinitely	Relay contacts stuck; Module fault.	Disconnect power and check relay contacts. If the relay is physically stuck, it may need replacement. If not, the module may be faulty.

WARRANTY AND SUPPORT

For warranty information or technical support, please refer to the documentation provided at the point of purchase or contact Walfront customer service directly. Keep your purchase receipt as proof of purchase.

Related Documents - Walfrontaefdzo62yn6177

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