

Two Way Infinite Loop Delay Module For AC / DC Motor Forward / Reverse

The module has two relay outputs. When the module is connected to the power supply, the relay 1 is connected. Then the relay 1 is automatically disconnected after a delay time, and the relay 2 is connected at the same time. Then the relay 2 is automatically disconnected after a delay time, and the relay 1 is connected. Two relays are connected or disconnected alternately, and the module repeats the cycle until the power supply is turned off. The delay times of two relays can be adjusted individually.

Feature:

Application: It can be used in industry automation, agriculture automation and home automation, such as factory, house, farm, pasture, vehicle, ship, offshore operation, aerial vehicle, field call, etc. It can remote control equipments on land, water and air, such as remote control lights, sirens, locks, motors, fans, winches, blinds, linear actuators, doors, windows, electric solenoid valves, security alarm, business signs and various devices.

It can control a AC or DC motor to rotate automatically in the positive and reversal direction.

Relay Output: This module are relay outputs; it can be used to operate both DC and AC equipments. The terminals are NO / NC (normally open / normally closed), which serves as a switch. That means you should also connect a separate power supply to equipments.

Parameters:

Model No.: 0040002

Power Supply (Operating Voltage): DC12V±1V

Static Current: ≤6mA

Working Current: 35mA

Output: Two Relay outputs (Normally open and normally closed)

Working Voltage Range of Relay: AC110~240V or DC0~28V

Maximum Working Current for relay output: 10A / each channel

Adjustable delay time: 1~35 seconds for version 1, or 5~ 150 seconds for version 2, (You must specify a version, otherwise version 1 will be sent out as default choice)

PCB size: 65mm x 40mm x 19mm

Case size: 71mm x 44mm x 30mm

Usage:

The module can be used to control both DC 0~28V and AC 110~240V equipments.

Notice: The module is relay output, not DC/AC power output. Initial state of relay output terminals: Terminals COM and NO are Normally Open; Terminals COM and NC are Normally Closed.

Wiring:

Connect the positive pole of DC 12V power supply to terminal "+" of INPUT, and connect the negative pole of DC 12V power supply to terminal "-" of INPUT.

If you want to control a DC 12V lamp, do as following:

Connect terminal "NO" to the positive pole of DC power supply, connect terminal "COM" to the positive pole of DC lamp, and connect the negative pole of DC lamp to the negative pole of DC power supply.

If you want to control an AC 220V lamp, do as following:

Connect terminal "NO" to the live wire of AC power supply, connect terminal "COM" to one side of AC lamp, and connect another side of AC lamp to the neutral wire of AC power supply.

If you want to control a DC motor, do as following:

Connect two terminals "NO" to the positive pole of DC power supply, connect two terminals "NC" to the negative pole of DC power supply, and connect two terminals "COM" to two wires of DC motor. You can exchange motor's two wires to change the rotating direction of motor.

If you want to control an AC 220V motor, do as following:

Connect two terminals "NO" to the live wire of AC power supply, connect two terminals "COM" to the UP wire and the DOWN wire of AC motor, and connect the COMMON wire of AC motor to the neutral wire of AC power supply. You can exchange the UP and DOWN wires to change the rotating direction of motor

Operation:

The module is connected to the power supply.

The relay 1 is activated (connect the terminals "NO1" and "COM1", disconnect the terminals "COM1" and "NC1");

Then the relay 1 is deactivated after a delay time (disconnect the terminals "NO1" and "COM1", connect the terminals "COM1" and "NC1");

And the relay 2 is activated (connect the terminals "NO2" and "COM2", disconnect the terminals "COM2" and "NC2");

Then the relay 2 is deactivated after a delay time (disconnect the terminals "NO2" and "COM2", connect the terminals "COM2" and "NC2");

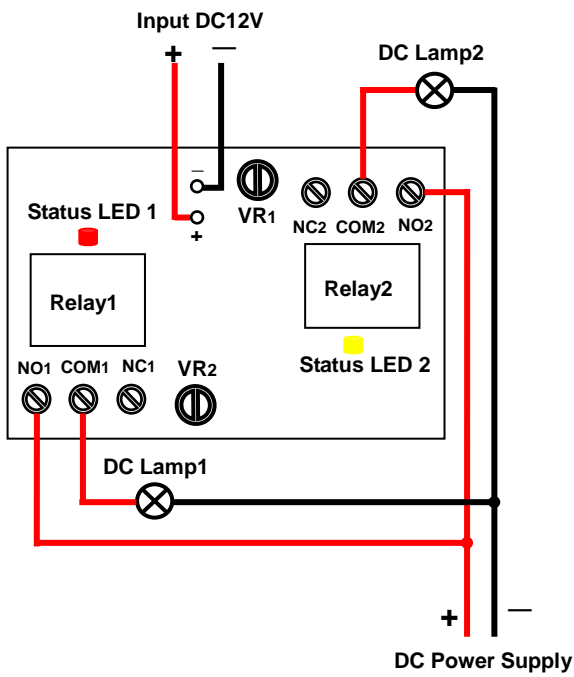
And the relay 1 is activated. Two relays are activated or deactivated alternately, and the module repeats the cycle until the power supply is turned off.

Setting the delay time:

1) Setting the delay time of relay 1: Turn the potentiometer VR1 clockwise to prolong the delay time; Turn the potentiometer VR1 anti-clockwise to shorten the delay time.

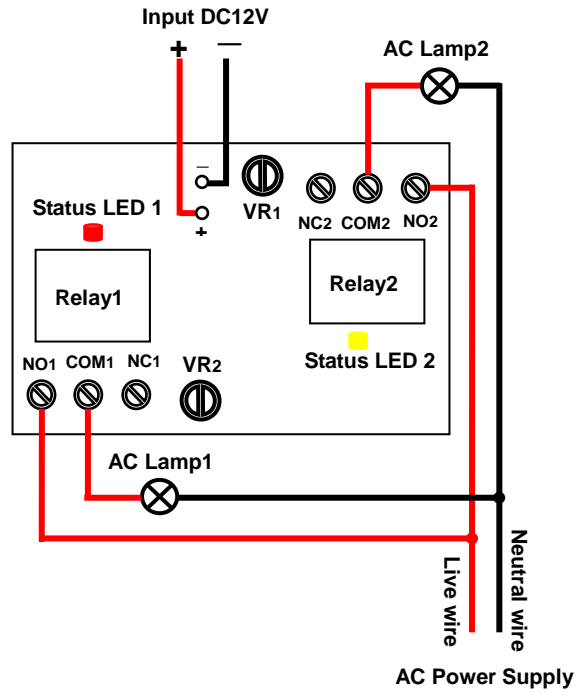
2) Setting the delay time of relay 2: Turn the potentiometer VR2 clockwise to prolong the delay time; Turn the potentiometer VR2 anti-clockwise to shorten the delay time.

Control DC Lamp



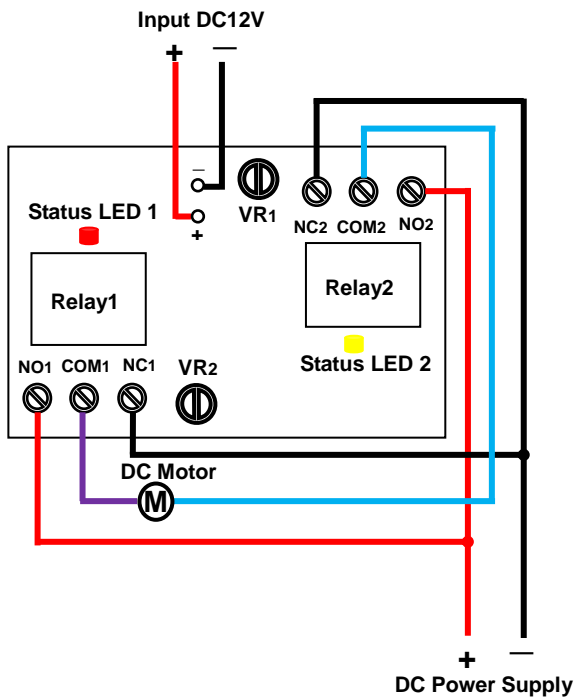
COM, NO=Normally Open; COM, NC=Normally Closed.

Control AC Lamp



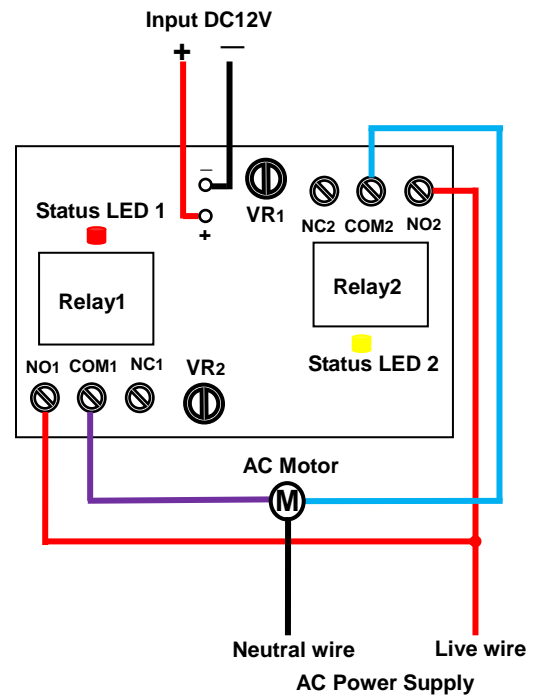
COM, NO=Normally Open; COM, NC=Normally Closed.

Control DC Motor



COM, NO=Normally Open; COM, NC=Normally Closed.

Control AC Motor



COM, NO=Normally Open; COM, NC=Normally Closed.

