

12/24V SPDT Timer Relay Manual

This relay has several installer configurable functions:

- One Shot
- Delayed Release
- Delayed Operate
- Delayed Pulse
- Pulsar/Flasher
- Momentary relay activation *at the end* of a timing cycle (this feature eliminates the need for having to use two timers to achieve this function).

Installation:

1. Set proper DC Input Voltage - Dip Switch 3: 12VDC ON, 24VDC OFF.
2. Refer to *Dip Switch Selection* and *Jumper Selection Table* for desired functions (e.g.: Timing, Trigger, Pulse)
3. Refer to *Terminal Identification* for desired wiring connections.

Note: When triggering via a N.O. (normally open), momentary or maintained trigger, connect the dry contact trigger to Pos (+) and TRG terminals.

When triggering via a N.C. (normally closed), momentary or maintained trigger, connect the trigger to Neg. (-) and TRG terminals and install a resistor [for 12VDC - 2K (2,000 ohm) or for 24VDC - 4.7K (4,700 ohm)] between the Pos (+) and TRG terminals (*Fig. 8*).

4. **Enable the reset features:** If you cut J3, when power is removed the timer will reset and not re-trigger when power is restored unless a new trigger is applied.

Note: The closed trigger and delayed pulse options will not operate if the reset feature is desired.

Dip Switch Selection Table:

- 1 - Off: Relay energizes at the start of timing cycle.*
On: Relay energizes at the end of timing cycle.*

* When relay energizes (LED is on) [N.O. & C] switch from open to close and [N.C. & C] switch from close to open.

- 2 - Off: 1-60 Minutes timing range (trimpot adjustable).
On: 1-60 Seconds timing range (trimpot adjustable).

- 3 - Off: 24VDC operating voltage.
On: 12VDC operating voltage.

- 4 - Off: Timing begins immediately upon trigger input.
On: Timing starts after removal of trigger input.

Jumper Selection Table:

J1: Cutting J1 selects the pulser/flasher mode. Relay will flip ON and OFF continuously in equally set timed intervals when timer is powered up.

J2: Cutting J2 puts timer in delayed output mode. Relay will pulse for 1 second at the end of a preset timing cycle. *Dip Switch 1 must be ON for this function.

J3: The relay will go through an initial timing cycle when first powered up unless J3 is cut (so you may not need the trigger) . If J3 is cut, timing can only be initiated via TRG terminal.

Terminal Identification:

TRG: Applying a positive voltage will activate timing cycle.
Trigger voltage range: 7-12VDC at 12 volt setting, 15-24VDC at 24 volt setting.

- , +: Connect 12 or 24VDC. Refer to *Dip Switch Selection Table* for voltage setting.

N.O., C, N.C.: Dry form "C" relay contacts are rated 8 amp at 120VAC/28VDC.

NOTES:

- LED indicates relay is energized.
- Form "C" relay contacts are 8 amp at 120VAC/28VDC.
- Current Draw: Stand-by 3mA, Relay Energized 40mA.
- Triggers via positive DC (+) voltage, dry contact closure, or removal of contact closure.
- Selectable relay activation at the start or end of the timing cycle.
- One (1) second momentary relay activation at the end of the timing cycle (eliminates the need to use two (2) timers for this function).
- Built-in reset feature which cancels timing cycle.
- Repeat (pulser/flasher) mode.
- Board dimensions: 3"L x 2.5"W x .75"H (approximate)

You *really* need to understand a little about electricity to use this relay. It will probably take experimentation for any particular application. You may need two or more Timer Relays, Slave Relays, and other supporting relays to achieve the desired results.

We are unable to tell you how to use the relay in your application, or provide installation support.

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