# PROGRAMMABLE | MULTI-FUNCTION

## DIP-Switch | Digital-Set | TD-8 Series

◆ Sixteen user-selectable modes in one unit

◆ DIP-Switches for accurate digital set of time delay & selection of function

◆ 50ms - 10,230 hours programmable time delay (Single Mode functions only)

◆ Uses industry-standard 8 or 11 pin octal socket
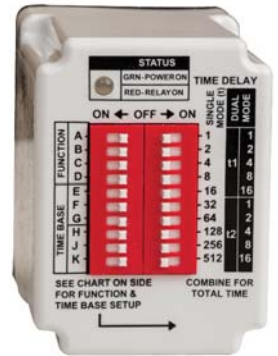
◆ Pilot duty rating

with appropriate socket

The TD-881 Series offers the digital-set accuracy of DIP-switch setting as well as the f exible programmability of a multi-function and multi-time range relay. These products provide an easy and accurate method to select any of 16 time delay functions and any time delay between 50ms and 10,230 hours (310 hours maximum for Dual Mode functions). Programming is accomplished through the use of two 10-position DIP-switches. This product can literally replace hundreds of different catalog numbers, thereby reducing inventory requirements.

**MUL**        **TI-FUNCTION ■**
(16 Functions in One Unit)

| Single Mode | Dual Mode |
|---|---|
| ◆ On Delay | ◆ Repeat Cycle (OFF 1st) |
| ◆ Interval On | ◆ Repeat Cycle (ON 1st) |
| ◆ Flasher (OFF 1st) | ◆ Delayed Interval |
| ◆ Flasher (ON 1st) | ◆ Triggered Delayed Interval * |
| ◆ Off Delay * | ◆ On/Off Delay * |
| ◆ Single Shot * | ◆ Single Shot-Flasher * |
| ◆ Watchdog * | ◆ On Delay/Flasher |
| ◆ Single Shot (Trailing Edge) * | |
| ◆ Triggered On Delay * | |

\* These are the only functions requiring use of the Control Switch shown in Wiring Diagrams below.

| OUTPUT | INPUT VOLTAGE | CATALOG NUMBER | WIRING/ SOCKETS |
|---|---|---|---|
| **11 Pin** 120V **DPDT** 12V | AC/DC DC 24V AC/DC 240V AC | TD-88122 TD-88126 TD-88128 TD-88121 | 11 PIN OCTAL **70170-D** <br> DIAGRAM 121 |
| **8 Pin** 120V **SPDT** 12V | AC/DC DC 24V AC/DC 240V AC | TD-88162 TD-88166 TD-88168 TD-88161 | 8 PIN OCTAL **70169-D** <br> DIAGRAM 169 |

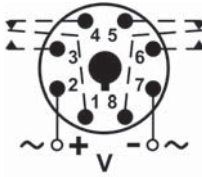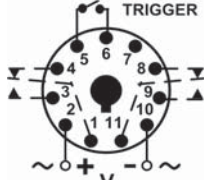■ See "Def nitions of Timing Functions".

**Sockets & Accessories available**

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# PROGRAMMABLE | SINGLE FUNCTION
## DIP-Switch | Digital-Set | TD-8 Series

The TD-8 Series time delay relays offer an easy and accurate method to select any time delay between 100ms and 1,023 hours. Programming is accomplished through the use of a 10-position DIP-switch. Each position is marked with a binary time increment. The required delay is selected by moving the switch of each increment to the ON position and adding their corresponding values (see examples below). This method provides a greater setting accuracy than is found on other units with an analog potentiometer. An LED indicates relay status.

| FUNCTION ■ 50/60Hz. | INPUT VOLTAGE | CATALOG NUMBER ** | WIRING/ SOCKETS |
|---|---|---|---|
| **ON DELAY** 120V **A** | AC/DC 12V DC 24V AC/DC 240V AC | TD-80222-** TD-80226-** TD-80228-** TD-80221-** | 8 PIN OCTAL **70169-D** |
| **INTERVAL ON** **B** | 120V AC/DC 12V DC 24V AC/DC 240V AC | TD-80522-** TD-80526-** TD-80528-** TD-80521-** | **DIAGRAM 1** |
| **REPEAT CYCLE \*** (OFF Time First Followed By ON Time and Repeating) **L** | 120V AC/DC 12V DC 24V AC/DC 240V AC | TD-83122-** TD-83126-** TD-83128-** TD-83121-** | |
| **REPEAT CYCLE \*** (ON Time First Followed By OFF Time and Repeating) **M** | 120V AC/DC 12V DC 24V AC/DC 240V AC | TD-85122-** TD-85126-** TD-85128-** TD-85121-** | |
| **OFF DELAY** 120V Control Switch Trigger **C** | AC/DC 12V DC 24V AC/DC 240V AC | TD-81622-** TD-81626-** TD-81628-** TD-81621-** | 11 PIN OCTAL **70170-D** |
| **SINGLE SHOT** 120V Control Switch Trigger **D** | AC/DC 12V DC 24V AC/DC 240V AC | TD-81522-** TD-81526-** TD-81528-** TD-81521-** | **DIAGRAM 2** |

■ See "Definitions of Timing Functions".
\* ON & OFF Time Ranges for these functions are the same.
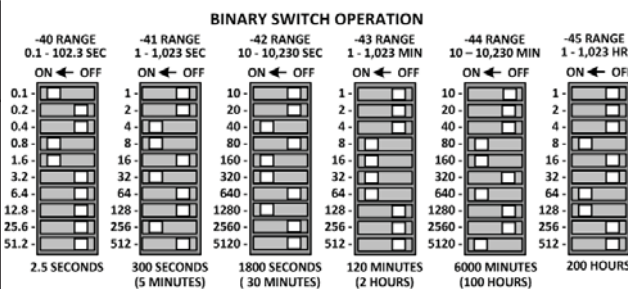
**Single Mode**     **Dual Mode**

◆ DIP-Switches for accurate digital set of time delay

◆ 100ms - 1,023 hours programmable time delay

◆ Uses industry-standard 8 or 11 pin octal sockets

◆ 10A DPDT output contacts

◆ LED indicates relay status

◆ Pilot duty rating

with appropriate socket

## Time Delays

**\*\*TIMING RANGE TABLE**
COMPLETE PRODUCT NUMBER USING TWO DIGIT CODE BELOW: i.e., TD-80222-40

| Time Delay Range | Code |
|---|---|
| 0.1 - 102.3 Sec. | 40 |
| 1 - 1,023 Sec. | 41 |
| 10 - 10,230 Sec. | 42 |
| 1 - 1,023 Min. | 43 |
| 10 - 10,230 Min. | 44 |
| 1 - 1,023 Hr. | 45 |

**BINARY SWITCH OPERATION**

| -40 RANGE 0.1 - 102.3 SEC | -41 RANGE 1 - 1,023 SEC | -42 RANGE 10 - 10,230 SEC | -43 RANGE 1 - 1,023 MIN | -44 RANGE 10 - 10,230 MIN | -45 RANGE 1 - 1,023 HR |
|---|---|---|---|---|---|
| 2.5 SECONDS | 300 SECONDS (5 MINUTES) | 1800 SECONDS (30 MINUTES) | 120 MINUTES (2 HOURS) | 6000 MINUTES (100 HOURS) | 200 HOURS |

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