December, 2020 REV C   **901-0000-276**

DANGER!

⚡ **Potentially hazardous voltages are present. Electrical shock can cause death or serious injury. Installation should be done by qualified personnel following all National, State & Local Codes.** ⚠

BE SURE TO REMOVE ALL POWER SUPPLYING THIS EQUIPMENT BEFORE CONNECTING OR DISCONNECTING WIRING.

Installation: Mount the appropriate 8 or 11 pin octal socket in a suitable enclosure. Wire the socket per the wiring diagram on the side of the time delay relay. Make sure to match the terminal numbers on the socket to the ones shown on the wiring diagram (the wiring diagram on the relay is the view looking towards the bottom of the relay vs. the top of the socket). Use #12-20 solid or stranded copper or copper-clad aluminum wires with Macromatic sockets and a terminal tightening torque of 7 in-lbs. Plug the time delay relay into the socket, making sure the key on the center post is in the proper orientation before insertion. If the relay must be removed from the socket, do NOT rock the relay back and forth excessively—the center post could be damaged.

The following applies to only the TD-881 Series Multi-Function unit (Figure 1):

Programming is accomplished through the use of two 10-position DIP-switches. Switches A-D of the left-mounted DIP-switch are used to select a function (as a guide, see the descriptions of how each function operates on the reverse side of this sheet). Switches E, F & G of the same DIP-switch are used to select the time base (t) for single mode functions and (t1) for dual mode functions. Switches H, J & K are used to select the time base (t2) for dual mode functions. A convenient chart is on the side of the product to clearly illustrate how to set both the function and time base.
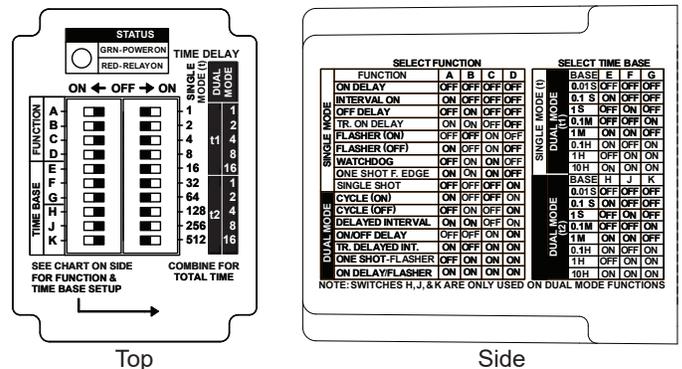
The right-mounted 10-position DIP-switch is used to select the time delay within the time base or bases selected with switches E-K from the first DIP-switch. Each position on the right-mounted DIP-switch is marked with a time increment. The required delay, (t) for single mode functions or (t1) and (t2) for dual mode functions, is selected by moving the switch of each increment to the ON position and adding their corresponding values. NOTE: Dual mode functions can either have the same or different (t1) and (t2) times as well as different time bases. NOTE: Switches H, J ,& K are only used on dual mode functions and are not used for single mode functions.

LED Indicator: Green ON--Power, Red ON--Relay Energized

Top   Side

Figure 1

The following applies to all TD-8 Series Single-Function units (Figure 2):

Programming is accomplished through the use of one 10-position DIP-switch (single mode functions) or two 10-position DIP-switches (dual mode functions). Each position on the DIP-switch is marked with a time increment. The required delay, (t) for single mode functions or (t1) and (t2) for dual mode functions, is selected by moving the switch of each increment to the ON position and adding their corresponding values.

As a guide, a description of how each function operates is on the reverse side of this sheet.

LED Indicator: Green ON--Power, Red ON--Relay Energized

Single Mode Functions   Dual Mode Functions

Figure 2
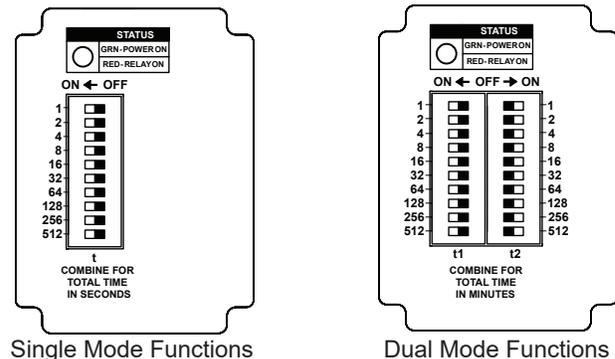
Troubleshooting: If the unit fails to operate properly, check that all connections are correct per the appropriate wiring diagram on the product. Refer to the description of the function operation on the next page. If problems continue, contact Macromatic at 800-238-7474 or e-mail tech-support@macromatic.com for assistance.

Warranty: All Catalog-listed TD-8 Series Time Delay Relays manufactured by Macromatic are warranted to be free from defects in workmanship or material under normal service and use for a period of five (5) years from date of manufacture.

ON DELAY - Single Mode

INPUT VOLTAGE

OUTPUT

t — t

TRIGGERED ON DELAY - Single Mode

INPUT VOLTAGE

TRIGGER

OUTPUT

t — <t

INTERVAL ON - Single Mode

INPUT VOLTAGE

OUTPUT

t — t

REPEAT CYCLE (OFF 1ST) - Dual Mode

INPUT VOLTAGE

OUTPUT

t1 t2 t1 t2 <t1

FLASHER (OFF 1ST) - Single Mode

INPUT VOLTAGE

OUTPUT

t t t t <t

REPEAT CYCLE (ON 1ST) - Dual Mode

INPUT VOLTAGE

OUTPUT

t1 t2 t1 t2 <t1

FLASHER (ON 1ST) - Single Mode

INPUT VOLTAGE

OUTPUT

t t t t <t

DELAYED INTERVAL - Dual Mode

INPUT VOLTAGE

OUTPUT

t1 t2 t1 t2

OFF DELAY - Single Mode

INPUT VOLTAGE

TRIGGER

OUTPUT

t <t t

TRIGGERED DELAYED INTERVAL - Dual Mode

INPUT VOLTAGE

TRIGGER

OUTPUT

t1 t2 t1 t2

SINGLE SHOT - Single Mode

INPUT VOLTAGE

TRIGGER

OUTPUT

t t

ON DELAY/OFF DELAY - Dual Mode

INPUT VOLTAGE

TRIGGER

OUTPUT

t1 t2

WATCHDOG - Single Mode

INPUT VOLTAGE

TRIGGER

OUTPUT

t <t t

ONE (SINGLE) SHOT-FLASHER - Dual Mode

INPUT VOLTAGE

TRIGGER

t1

OUTPUT

t2 t2 t2 t2 <t2

ONE (SINGLE) SHOT (FALLING EDGE) - Single Mode

INPUT VOLTAGE

TRIGGER

OUTPUT

t <t t

ON DELAY/FLASHER - Dual Mode

INPUT VOLTAGE

OUTPUT

t1 t2 t2 t2 <t2