Multi-Function Timer

EZ-TM4-xxx

Timer Features:

- Microcontroller based timing
- Remaining/Elapsed Time Display
- Optional Password protection for unit/range and timer type
- Set time range from 0.01 sec to 999 hours
- Digital setting with 1% resolution, 1% Absolute Accuracy, and 1% Repeat Accuracy

4 Programmable Timer Types:

- T1 (Delay On Make)
- T2 (Single Shot)
- T3 (Delay On Break)
- Cycle

TECHNICAL DATA

TIME DELAY

Range: Depends on the Time Unit

5.EC	0.01 - 9.99 seconds
SEC	1-999 seconds
Min	1-999 minutes
Hr	1-999 hours

Repeat Accuracy: +/-1% or 20 ms, whichever is greater

Reset Time: 5 ms max. (2 ms typical)

ENVIRONMENTAL

Storage Temperature: -50°C to 150°C

Operating Temperature: -20°C to 60°C

INPUT

Operating Voltage:

120, 240 VAC; 12, 24 VDC ±10% (Unfiltered input voltage to DC Models must be full-wave rectified)

Power Consumption: 3 VA max.

Frequency: 50/60 Hz

PROTECTION

Dielectric Breakdown: 2000 VAC, RMS min. at 60 Hz between input and outputs and 1000VAC between outputs

Polarity: DC units are reverse polarity protected

OUTPUT

Type: Relay contacts

Form: DPDT (Double Pole Double Throw), 2 form C

Rating: 7A max. Resistive at 250 VAC; 100 mA at 5 VDC min. load current

Life (Number of Operations):
Mechanical: 1 x 10^7
Electrical: 1 x 10^5

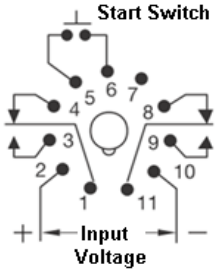
MECHANICAL DATA – WIRING AND DIMENSIONS

Termination: 11-pin plug

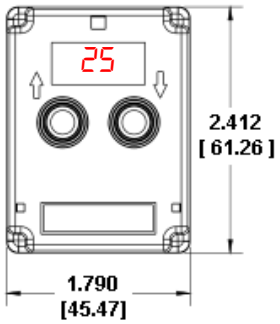
Mounting type: Socket Mount

Dimensions: 1.790 x 2.887 x 2.412 in.

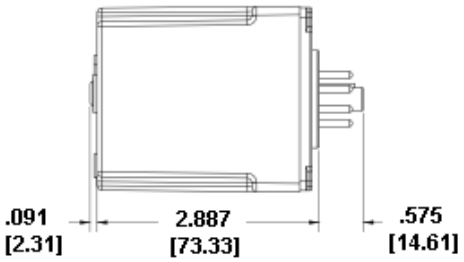
Unit: inch [mm]



11-PIN CONFIGURATION



FRONT VIEW



SIDE VIEW

HOW TO ORDER

Multi-Function Timers	***12 VDC** Input*:	**EZ-TM4-466**
	***24 VDC** Input*:	**EZ-TM4-462**
	***120 VAC** Input*:	**EZ-TM4-461**
	***240 VAC** Input*:	**EZ-TM4-465**

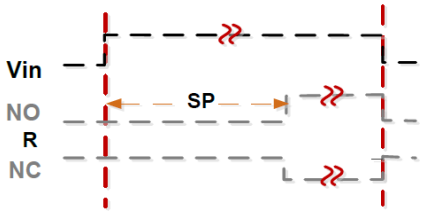
Socket: *All models require an 11-pin socket listed below:*

***11 Pin** Socket*: **EZ-TMRSKT-11PIN**

The 4 different Modes available in this Timer unit are as follows:

Delay On Make Timer (t 1)

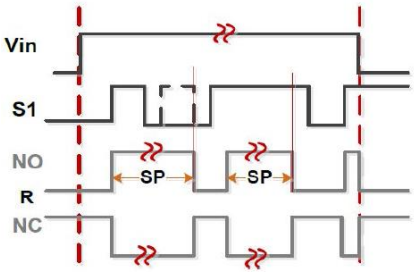
When input power is applied, the programmed timer delay (SP) begins. At the end of the set time delay, the Relay (R) energizes (contacts transfer) and remains energized as long as input power is supplied. The timer and the Relay are reset on loss of power.



Single Shot Timer (t2)

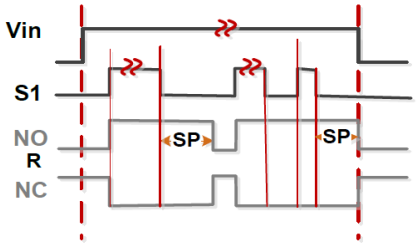
Input Power (V) must be applied to the timer before and during timing. Being Positive edge-triggered, the Relay (R) energizes (contacts transfer) upon momentary or maintained closure of the switch (S1). The energized Relay triggers the time delay (SP). When the timer delay finishes counting down, the Relay de-energizes.

Note: The time-delay remains unaffected if the switch is opened or closed during the timing countdown. The Timer is reset and re-started the next time the Switch (S1) is closed. Losing power resets the time delay and de-energizes the output.



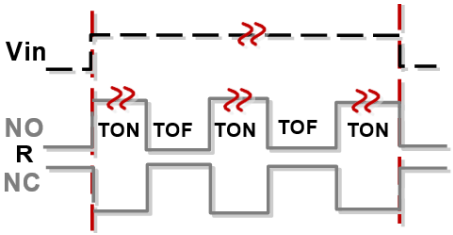
Delay On Break Timer (t3)

Input Power (V) must be applied to the timer before and during timing. When the switch (S1) is closed, the Relay (R) is energized (contacts transfer). The time delay (SP) begins when the switch is opened (negative edge-triggered) and the relay remains energized during timing. The relay is de-energized at the end of the time delay. Closing the switch while timing will resets the time delay while the output remains energized.



Cycle Timer (CYC)

When input power is applied, the Relay output is energized and the TON timer begins counting down from the set TON time. At the end of the TON time, the output de-energizes and the TOF time begins its countdown. At the end of the TOF time, the output is energized and the cycle repeats as long as power is applied.

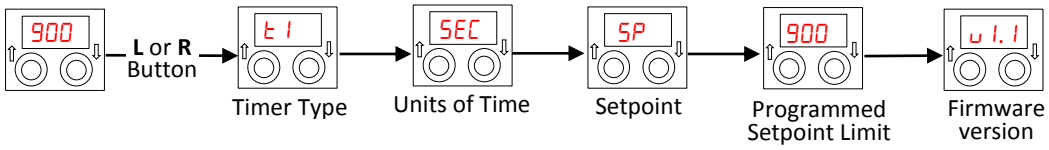


Operation and Programming (Non-Cycle)

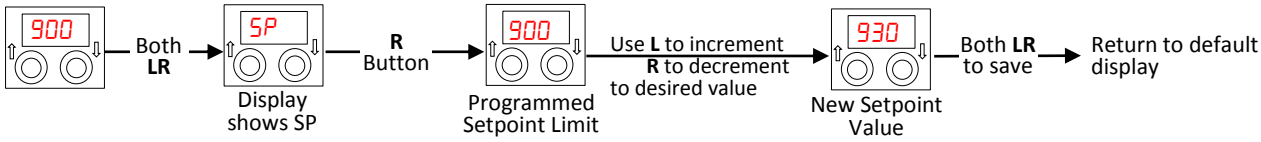
Timer has two buttons and a 3 digit display for programming. Following button actions are used in programming:

- Pressing Left (**L**) or ↑ button increments a value or moves from one parameter to another.
- Pressing Right (**R**) or ↓ button decrements a value or selects a parameter to edit.
- Pressing Both Left and Right (**LR**) button saves the displayed value and/or advances timer to next parameter.
- Pressing Left (**L**) or Right (**R**) from the default display will prompt timer to scroll through programmed values.

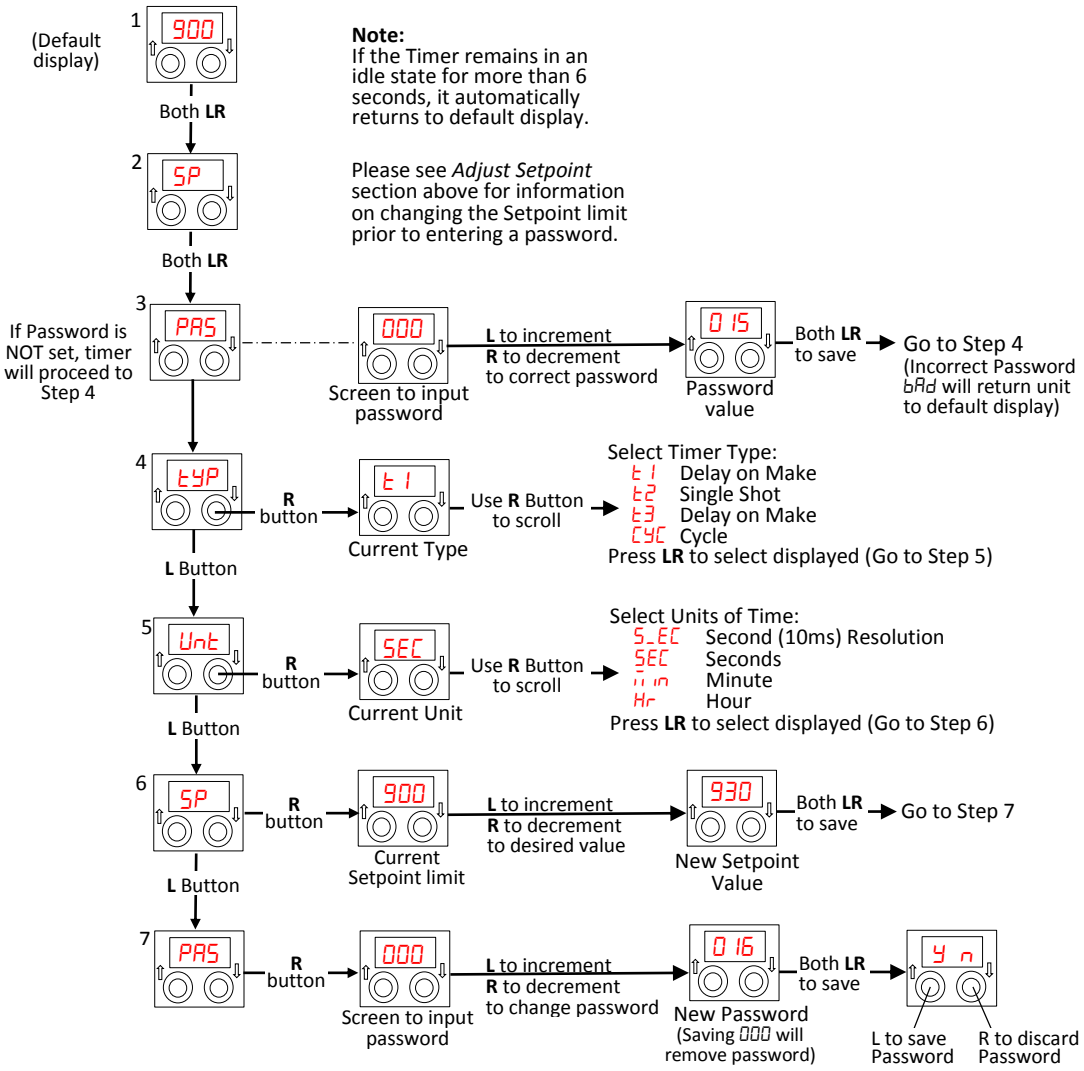
View Programmed Values:



Adjust Setpoint:

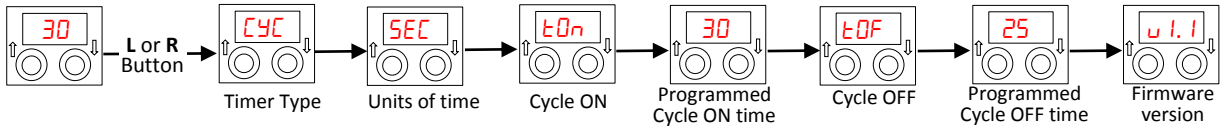


Programming Mode:

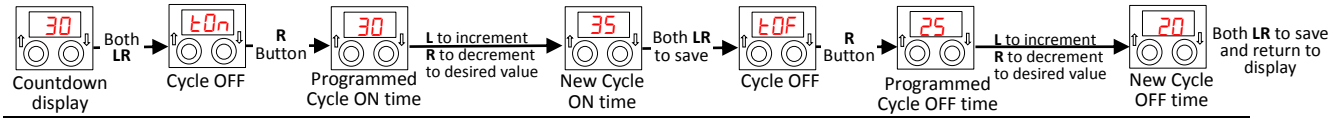


For Cycle Timer Function Only

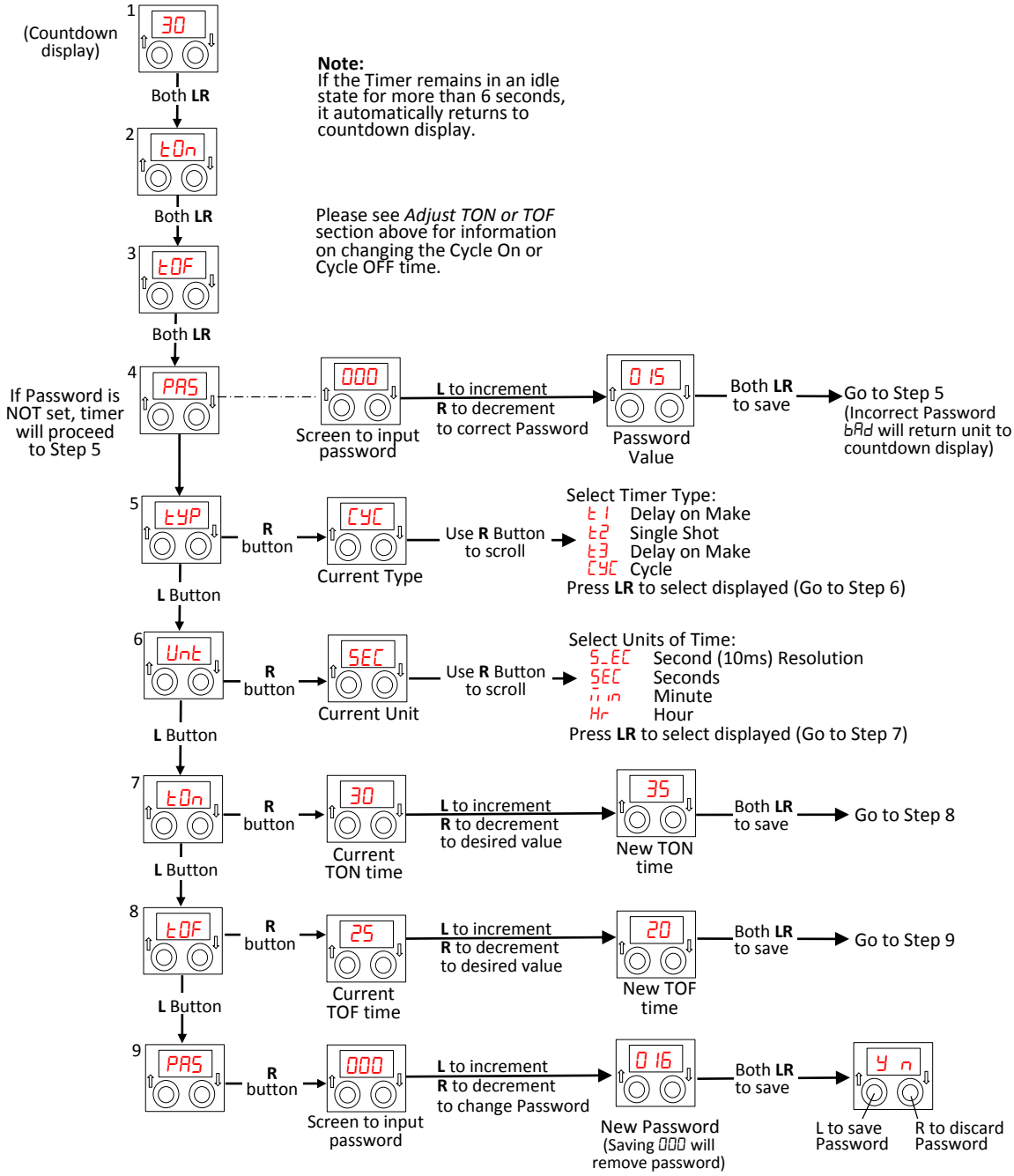
View Programmed Values:



Adjust TON or TOF:



Programming Mode:



Note:
If the Timer remains in an idle state for more than 6 seconds, it automatically returns to countdown display.

Please see *Adjust TON or TOF* section above for information on changing the Cycle On or Cycle OFF time.