



Power Systems Solutions

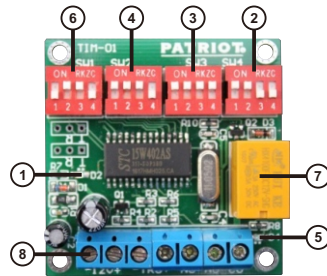
Digital Timer Board Tim 01

Features

Designed to provide 8 field programmable functions controlling a Single Pole Double Throw relay with timing intervals ranging between 1 second and 99 days

Layout

1. Power LED
2. SW4 - "Ones" DIP Switches
3. SW3 - "Tens" DIP Switches
4. SW2 - "Timing" DIP Switches
5. Relay Operation LED
6. SW1 - "Mode" DIP Switches
7. Output Relay
8. Terminal Block



Specifications

Model:	Tim 01
Input Voltage:	12VDC - 13.8VDC
Quiescent Current:	15mA @ 12VDC
Operation Current:	35mA @ 12VDC
Relay Rating:	3A @ 250V AC / 30V DC
Size:	50 x 50 mm



SW1 = Mode	1	2	3	4
One shot	On	On	On	Off
Retriggerable	On	On	Off	On
Strobe	On	On	Off	Off
Clutch Relay	On	Off	On	On
Programmed Pulse	On	Off	On	Off
Debounce	On	Off	Off	On
Stand-Off Timer	On	Off	Off	Off
Relay Fail Secure	On	*	*	*
Relay Fail Safe	Off	*	*	*

SW2 = Timing	1	2	3	4
Seconds	On	On	On	Off
Minutes	On	On	Off	On
Hours	On	Off	On	On
Days	Off	On	On	On

SW3 = Tens	1	2	3	4
0	On	On	On	On
1	On	On	On	Off
2	On	On	Off	On
3	On	On	Off	Off
4	On	Off	On	On
5	On	Off	On	Off
6	On	Off	Off	On
7	On	Off	Off	Off
8	Off	On	On	On
9	Off	On	On	Off

SW4 = Ones	1	2	3	4
0	On	On	On	On
1	On	On	On	Off
2	On	On	Off	On
3	On	On	Off	Off
4	On	Off	On	On
5	On	Off	On	Off
6	On	Off	Off	On
7	On	Off	Off	Off
8	Off	On	On	On
9	Off	On	On	Off

Terminal Connections



0V	12VDC Negative Input	NC	Normally Closed Relay Contact
12V +	12VDC Positive Input	NO	Normally Open Relay Contact
Trig -	Negative Trigger Input (0V/12V negative)	CO	Common Relay Contact
Trig +	Positive Trigger Input (5-12VDC positive Max)		

Program Modes

One Shot - Applying trigger activates relay for selected time. Trigger input must be removed & re-applied to reactivate.

Retriggerable - Similar to One Shot, except when input is retriggered, the timer starts again.

Strobe - Trigger activates relay, releasing trigger starts timer, relay will activate for programmed time.

Clutch Relay - Applying trigger causes relay to change state. Removing and re-applying trigger forces relay to change state. No timing function in this mode.

Programmed Pulse - Applying trigger causes relay to operate for one second at programmed intervals. Set intervals on SW2, SW3 & SW4. Operation ceases when trigger is removed.

Debounce - Applying trigger causes relay to activate for programmed time. Relay remains activated until timeout regardless of trigger being removed. If input remains triggered after timeout, relay remains activated until trigger is removed.

Stand-Off Timer - Ideal for DOTL (Door Open Too Long) alarms. Timing commences when trigger is applied. If trigger is removed before timeout, relay will not activate. If trigger remains after timeout, relay will activate.

Fail Secure - The relay does not change state during power failure.

Fail Safe - The relay is energised when the trigger is not active. Relay will de-energise (e.g. releasing power to door locks) during a power failure.