Model: SDP-003 Dual Programmable Timer

The Smartswitch Dual Programmable Timer is a Universal Duel Programmable Timer.

The SDP-003 has a programmable ON time and a programmable OFF time, both these timers can be individually programmed from between 1 second and 365 days.

The On and Off Times are completely independent e.g. you can set the On Time for 10 seconds and the Off Time for 10 days or vice versa.

Once the input is triggered the relay will close and the unit will run timer 1 then timer 2.

Just program the On Time required, the Off Time required and which cycle to start in. Connect the Input connection (*Fig 2*), connect the Power and Relay (*Fig 3*) and it's ready to go.

Time’s:

Programmable On and Off Time Options (Actuate to ± 0.1%)

Option 1 sets seconds from 1 to 240
Option 2 sets minutes from 1 to 240
Option 3 sets hours from 1 to 240
Option 4 sets days from 1 to 240

The On and Off Times are completely independent e.g. you can set the On Time for 10 seconds and the Off Time for 10 days or vice versa.

Inputs:

Input Trigger Option 1

Input one will trigger the device when shorted to Gnd. The timer will complete the first time cycle, then the second time cycle, then halt waiting for another trigger. When the timing cycle is running, a second press will cancel the cycle (reset).

Input Trigger Option 2

Input two will trigger the device when shorted to +vdc. The timer will complete the first time cycle, then the second time cycle then halt waiting for another trigger. In this mode Input One can be used to cancel the cycle (reset).

Programming the Device:

ENSURE INPUT TWO IS NOT IN CONTINIOUS LOOP MODE

Step 1 – Placing the unit in program mode (see *Fig 3* for button layout). After wiring and applying power, hold the Set button down for 3 seconds. The LED will give five quick flashes indicating you have entered program mode.

Step 2 – Setting up seconds, minutes, hours or days (pause between each press and wait for the LED to flash).

Press the x1 button:

- Once for seconds (the LED will flash once indicating second mode)
- Twice for minutes (the LED will flash twice indicating minute mode)
- Three times for hours (the LED will flash three times indicating hour mode)
- Four times for days (the LED will flash four times indicating day mode - 1 day = 24 hours)

A fifth press will cancel and start back at *Step 2* (the LED will give four quick flashes to indicate this).

Once the above time mode is selected, press the Set button again. The LED will flash once to indicate this has been set.

Step 3 – Setting the time – Next press any combination of the x1 or x10 buttons to select the time required. The LED will flash with each press indicating a valid key press.

For example:

Time required = 50 (seconds, minutes, hours or days) you can either press the x1 button 50 times or press the x10 button 5 times.

Time required = 56 (seconds, minutes, hours or days) press the x10 button 5 times and the x1 button 6 times.

Step 4 – Setting – Once the above time is selected press the Set button. The LED will flash once to indicate this.

Step 5 – Setting On or Off time - Press either the x1 or the x10 button. The x1 button will set the On Time and the x10 button will set the Off Time. The LED will give five quick flashes indicating you have now programmed the device and left program mode.

Please Note: Steps 1 to 5 have to be performed for both the On and Off Times

Programming the Start Timer – Setting the timer to start in the On or Off mode.

Step 1 – Hold the x10 button down for 3 seconds. The LED will flash five times to indicate this program mode.

Step 2 – Press the x1 button to start with the On Timer or press the x10 button to start with the Off Timer. The LED will flash once indicating a valid key press.

Step 3 – Press the Set button. The LED will give five quick flashes indicating you have now programmed the device and left program mode.

The device is now programmed and ready for use. If you make an error or want to cancel the programming operation simply turn the power off, wait a few seconds power the timer back on and start again from *Step 1*.

Programming Flow Chart

Hold the **Set** button down
for 3 seconds
(LED will give five flashes)
Release button you are in program mode

↓

Press the **x 1** button
Once for seconds (LED will give 1 flash)
Twice for minutes (LED will give 2 flash)
Three times for hours (LED will give 3 flash)
Four times for days (LED will give 4 flash)

Five times will start back at the beginning again

↓

Press and release the **Set** button
This has now selected the time as above

(LED will give one flash)

↓

Press the **x 1** button for multiples of 1
e.g if you want 5 seconds push 5 times

Press the **x 10** button for multiples of 10
e.g if you want 50 seconds push 5 times

Press and release the **Set** button
This has now selected the time as above

(LED will give one flash)

↓

Press the **x 1** button to set this as the ON time

Press the **x 10** button to set this as the OFF time

LED will give five flash and leave program mode

Both the On and OFF time must be set so repeat this for both timers

Hold the **x 10** button down
for 3 seconds
(LED will give five flashes)
Release button you are in program mode

↓

Press the **x 1** button to make the timer start with the ON time

Or

Press the **x 10** button to make the timer start with the OFF time

↓

Press and release the **Set** button
This has now selected the time as above

LED will give five flash and leave program mode

Input Wiring (*Fig 2*)

The triggering switch can be connected to s/w com and Input 2 or Gnd and Input 1 as per (Fig 2.1 a & b).

Fig 2.1a

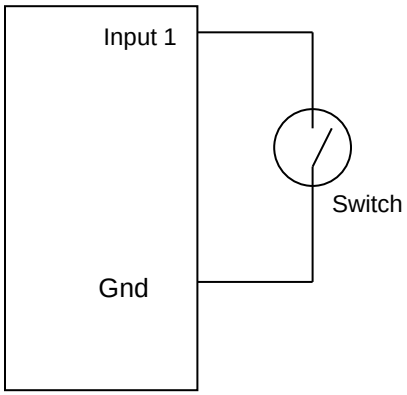
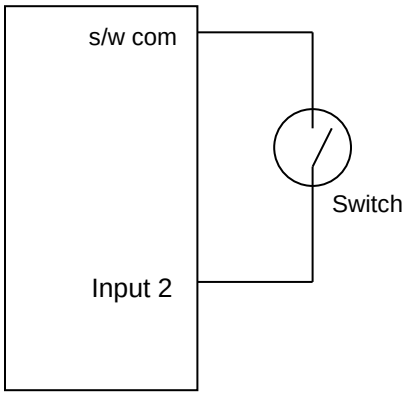
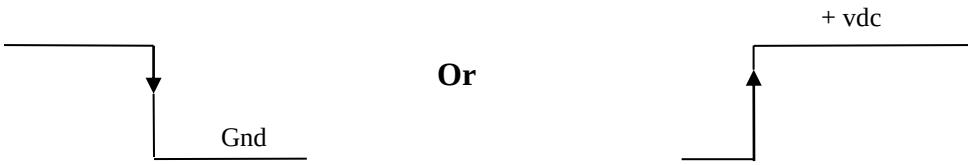


Fig 2.1b





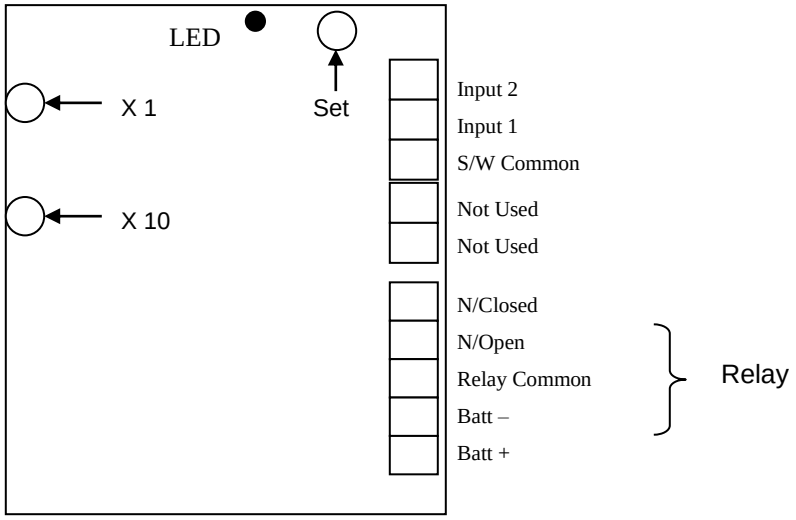
Reset:

If you have triggered the timer with Input 1, then triggering Input 2 will reset the timer.

If you have triggered the timer with Input 2, then triggering Input 1 will reset the timer.

Connections

Fig 3



Electrical Specifications

Supply Voltage	=	12 or 24 Volts DC (Auto-Sensing)
Current Draw	=	12 mA @ 12 Volts
Output Load	=	3 amps 125 VAC (Inductive)
Input Trigger	=	5 ~ 37 Volts DC
Input	=	Voltage and EMI Protected
Data Retention	=	40 years (without power)

This device should be fuse protected (*5 Amp maximum*) and mounted in a dry area.

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