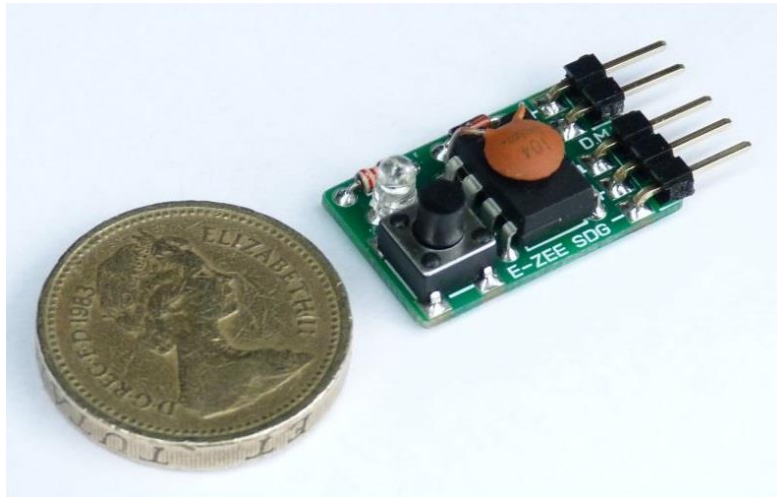


# E-ZEE Servo Operated DT Timer



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## Designed & Manufactured in the UK by:-

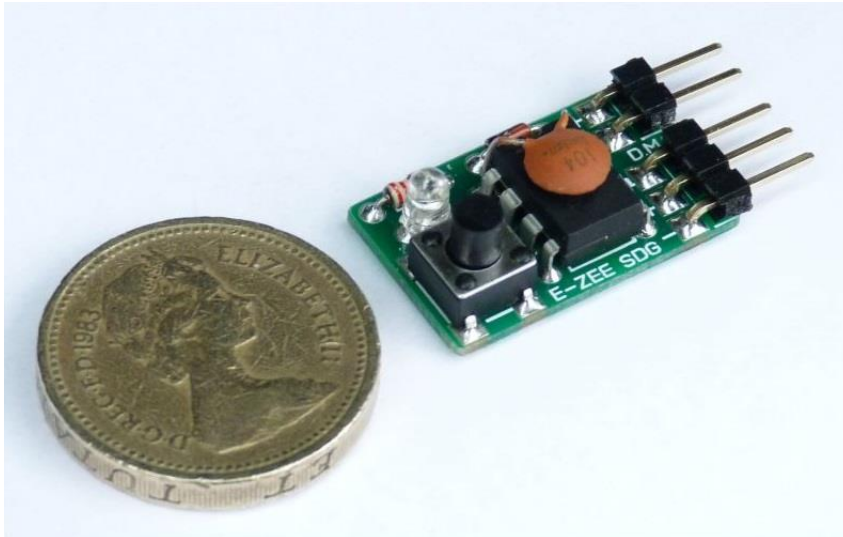


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## Introduction



Accurate and repeatable control of DT timing make for enjoyable frustration free flying. The E-ZEE Glider timer has been designed and developed so that sports flyers can enjoy all these advantages at a realistic price.

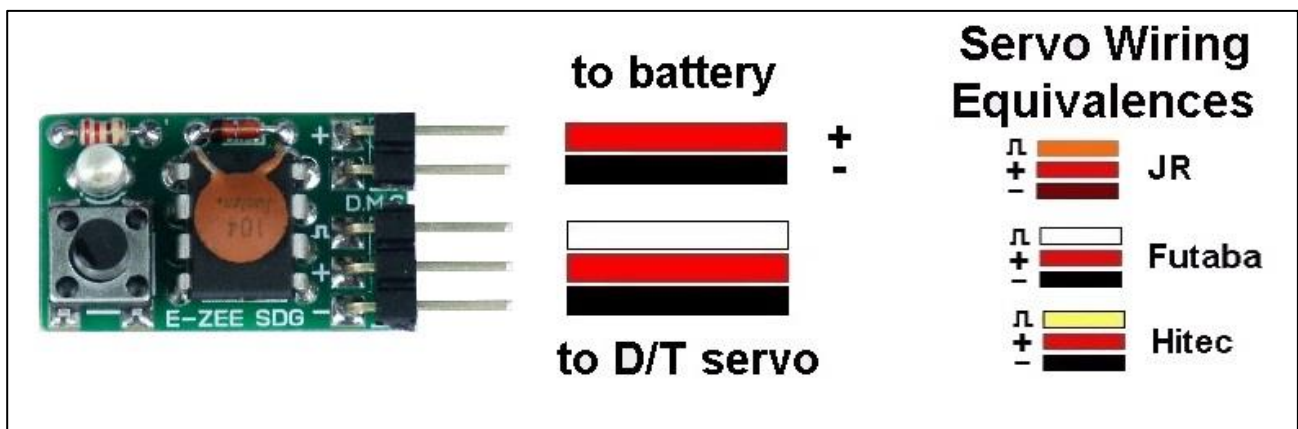
This timer drives a D/T servo to terminate the flight, the D/T periods being set by a simple push button / LED interface.

## Key Features

- d/t duration:- adjustable 10 seconds to 5 minutes, set in 10 second increments
- push button immediately cancels the flight at any time
- duration settings are saved in memory – so a single button push serves to repeat a flight.

## INSTALLATION

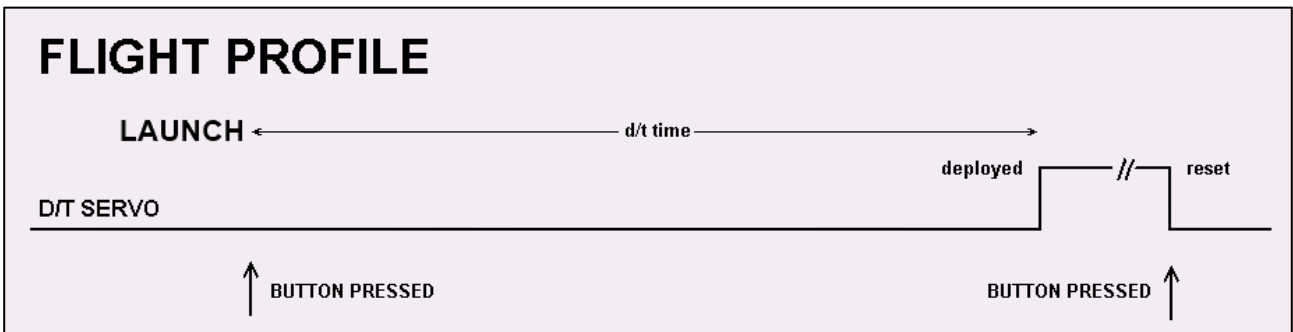
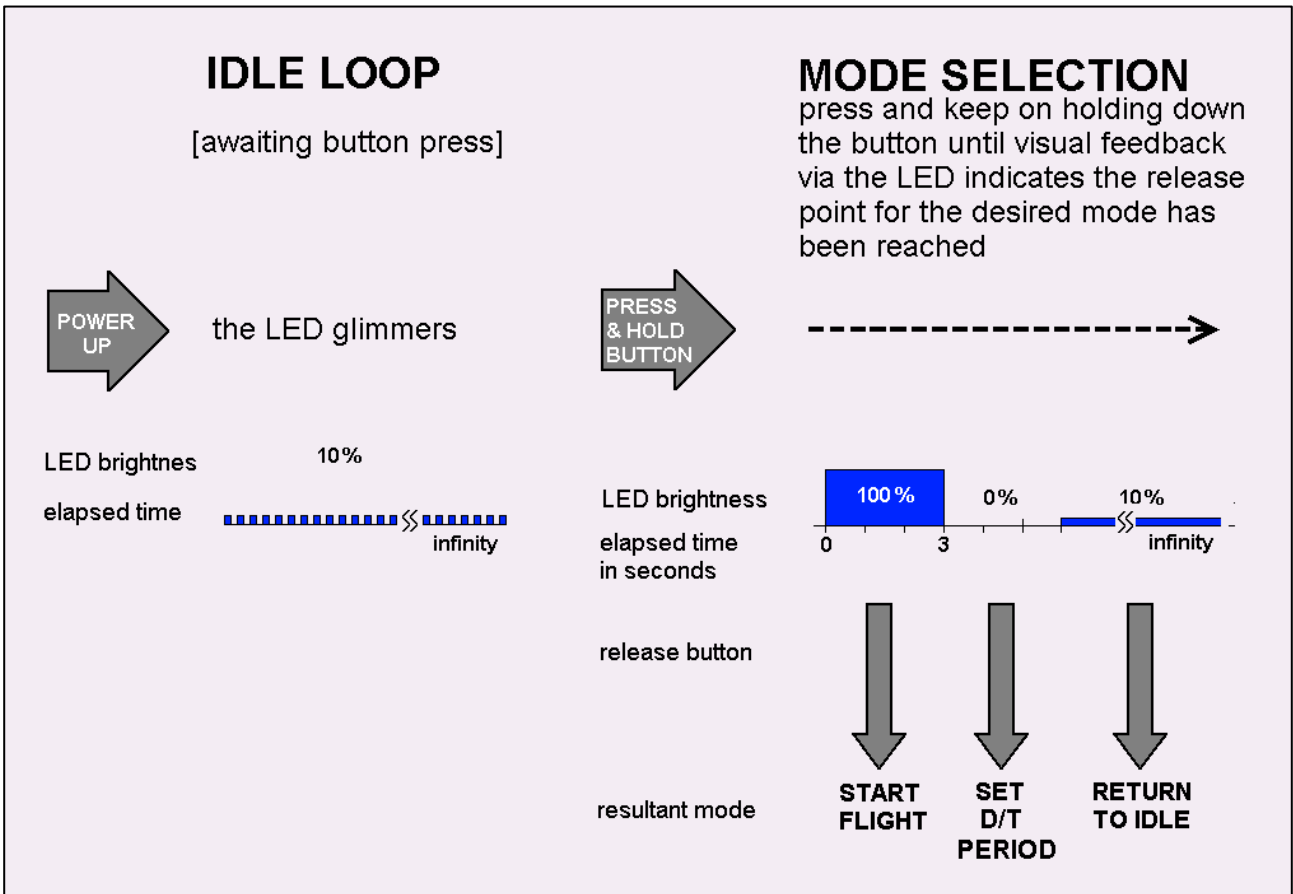
The image below shows the connection of the battery and D/T servo.



The battery lead usually coloured red/black, connects to the top two pin header on the timer as shown in the image below and the D/T servo to the lower three pin header. Note the orientation of white/red/black leads. The timer is shown here unpackaged for clarity.

**The chip used in the timer has a maximum rating of 5.5v, and is intended for use with a single cell Li-Po battery (3.7v nominal, 4.2v fully charged)**

# E-ZEE GLIDER TIMER - QUICK GUIDE



## E-ZEE F/F TIMER – IN DETAIL

**Idle Loop** – initially entered at power up. Subsequently it is entered following the successful conclusion of modes [1] or [2] below. Here it awaits a button press, either to commence a timed flight or to enter the D/T Duration setting mode. Whilst in the loop, the LED glimmers to signify that the unit is powered.

**Operating Modes** - there are two possible modes of operation which are entered by a single press of the push-button. The duration of the press determines the mode selected and visual feedback from the LED informs the user when to release the button as each mode becomes available.

**[1] FLIGHT** – entered from the idle loop by a brief press of the button (must be less than 3 seconds or the subsequent D/T duration setting routine will be entered instead). The LED is lit and, if fitted, the sounder also operates to acknowledge the button press. When the button is released the sounder is silenced, the D/T timing period commences and the LED counts off each second by giving a brief flash.

When the D/T period has elapsed the servo activates and the LED brightness then slowly fades up and down to indicate this condition was reached. A press of the button returns the unit to idle mode and re-sets the D/T servo.

The D/T timing period may be aborted at any time by a brief press of the push-button which returns the unit back to the idle loop.

**[2] D/T DURATION** – selected from the idle loop by holding the button pressed until the LED returns to full brightness (in the 3 to 6 second window) and then releasing it. The D/T duration is now set in units of 10 seconds by repeated brief presses of the button – so 10 pushes would set 100 seconds and so on. The maximum available period is 300 seconds (5 minutes) and any presses in excess of 30 are ignored. When the timer ascertains that no further presses are being made, the unit then returns to the idle loop. The selected duration is stored in memory and is retained indefinitely (including power cycles) until it is next altered by the user - so in this example a further flight with a 100 second D/T duration would only require a single button press from the idle loop to start it.

## **SAFETY**

***Note that the blue LED used is a high brightness type to ensure good visibility outdoors in bright sunlight. If the timer is operated in the workshop under poor lighting conditions avoid looking directly at the LED to avoid potential damage to your eyes.***