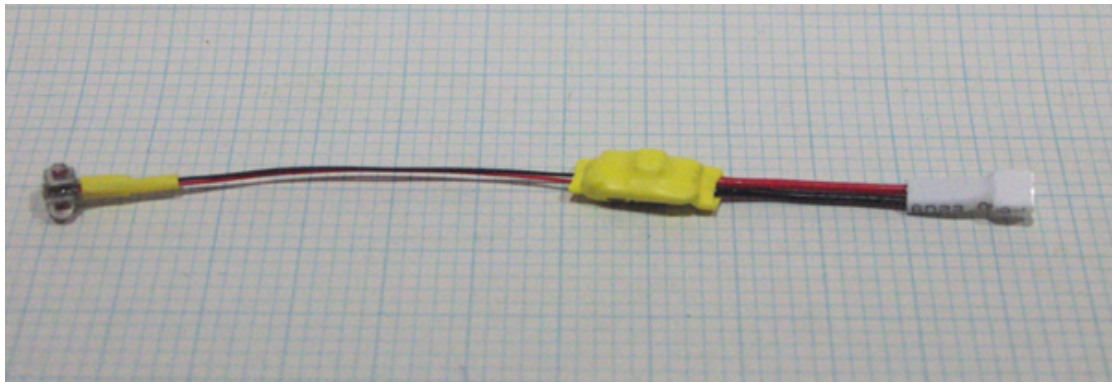




User Manual
Beacon



www.4dfx.com.au/DTox

The Dtox Beacon is an experimental device, just like your free flight model.

Determining the suitability of the beacon for your particular application is solely your responsibility, and you take all responsibility for any outcome in its use.

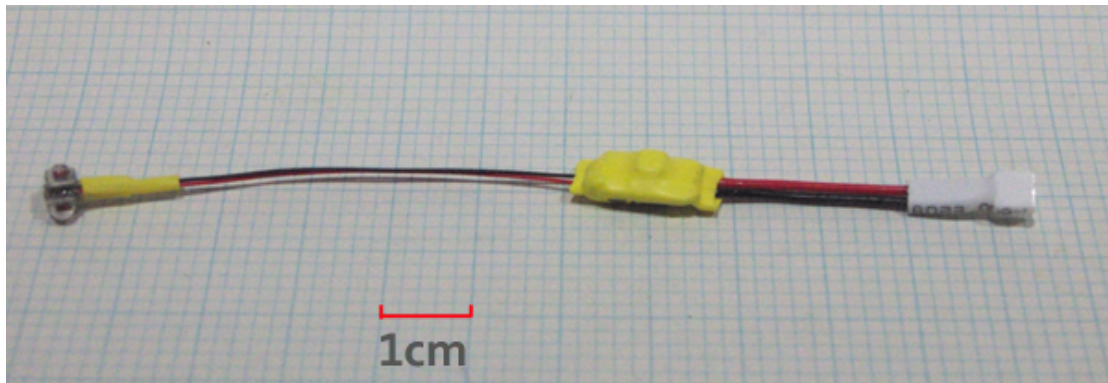
Nothing is infallible, and the DTox Beacon fits into this category.

DTox timers and software are under continuous development and as a result any images and screen grabs may not accurately reflect the current versions of either.

Any clarification requests or suggestions about this manual can be addressed to info@4dfx.com.au

The latest version of this document is always available at www.4dfx.com.au/DTox

FEATURE DESCRIPTION



The DT0x Beacon is a high visibility strobe to be used as an aid in the visual tracking of a model in flight. Being small and only weighing 1.1 grams, the unit is easily attached to your model without significant impact on performance.

The strobe cluster contains 3 high power LEDs arranged at 120 degree to provide all round visibility.

The unit is powered by a single cell Lipo battery (which you supply). An E-flite JST plug is provided but if a different style battery is desired you will have to modify the power lead making sure correct polarity is observed. Choice of alternate battery should take into account discharge rate of the battery and your weight limitations. A 30Mah E-flight battery, with 25C discharge rate is more than sufficient to last a full contest schedule (7 rounds).

OPERATION

Operation in the standard form is completely autonomous.

To activate the unit simply apply power to the unit. This may be plugging the battery into the connector, or if the unit has been modified with a power switch, just turn it on. When power is first applied, the unit will emit 4 low power pulses to confirm activation. Then after a pause of 30 seconds, which should be sufficient time to launch the model, the strobe will emit a double high power pulses every 1.5 seconds. This will continue for 10 minutes after which the unit will enter a paused state. If the battery is not disconnected (or switched off), after a period of 8 hours the strobe will begin to emit single high power pulses, at 30 second intervals until either the battery is disconnected (or switched off) or the battery is completely depleted.

OPTIONS

The beacon in its standard form has red LEDs and operates autonomously.

The following options are offered and must be selected at time of purchase.

- The colour of the strobe LEDs can be selected from Red, Green or White (or any combination)
- The timing parameters can be customised as indicated in the following table, but cannot be altered after assembly of the unit.

Sequence	Timing	Action
Power on	-	4 low power pulses
Delay	30 seconds	No pulses
Normal operation	10 minutes	High power pulses @ 1.5 second interval
Pause	8 hours	No pulses
Lost model mode	3 seconds repeat forever	High power pulse

- Although not offered immediately, the unit can be modified during assembly to be controlled by an external source capable of producing variable length command pulses. The next generation of P-type timers will have this facility.

NOTES

Installation method is left entirely to the end user. The battery connector should be accessible as there is no provision for charging in the unit. The LED cluster should be placed so that it is visible while model is in flight (obviously) but mounted in such a way as not to be subjected to undue force when the model lands. Vibration levels should be taken into account to preserve connection wires to both LEDs and battery connector. If an on/off switch is required, simply insert it into the positive battery lead, the red one. Batteries other than those with an E-flite connector will require some modification or replacement of the plug. Take care to observe the correct polarity, red is positive.

A fully charged E-flite battery of 30 mAh is more than adequate for a full day.

