D Knight Limited

Castle Road, Rowlands Castle Hampshire PO9 6AS. UK

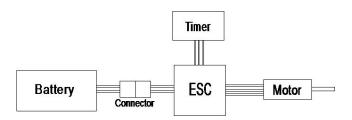
Tel. 0044 (0)2392 412172 Fax 0044(0)2392 412178 email kpaero.derek@virgin.net

KP FREE FLIGHT TIMER

Time And Speed Electronic Regulator. For the operation of electric free flight model motors.

The KP timer controls a motor in conjunction with an electronic speed controller (ESC). Any suitably matching battery, motor and ESC combination can be used, either low power, high power, brushed or brushless. The timer simply plugs in to the ESC receiver lead.

Note1: the ESC must be of the type with a battery eliminator circuit (BEC) and should have a simple arming routine.



On connecting the battery the following sequence commences.

- 1. The timer sets zero power for about 10 SECONDS to arm the ESC and to allow the flyer time to prepare prior to launch.
- 2. The motor soft-starts up to a power setting set by the **SPEED** control, approx. 33% to 100%.
- 3. The duration is set by the **TIME** control, 35 seconds maximum.
- 4. The power then ramps down to zero at a rate set by the DECAY control, 65 seconds to zero when on 100% speed.
- 5. Zero throttle is maintained until the battery is disconnected.
- All controls Maximum clockwise Minimum counter clockwise.

Note 2: the SPEED control is adjustable during the timed phase of the motor run.

Warning: the DECAY period is dependent on the SPEED setting. It takes longer to ramp down from higher power settings.

Here are some commonly used ESC wiring colour-codes

- -U Black or brown
- +U Red
- SIG White, yellow or orange.