RC energy Batteries

"Dependable energy for your model"

MODEL AIRCRAFT ELECTRONICS

STANDARDS

- Manufacturers design transmitters and receivers around the oldest technology, being NiCD.
- The use of alternate chemistries is done at your risk and understanding of the necessary chargers, power regulators and connectors for use with your model.
- Receiver battery packs of 6V cannot be charged with the standard wall chargers supplied with transmitters. The purchase of larger models requiring 6V battery packs will require the investment in a modern charger.
- Always fully charge your transmitter and receiver battery before flying.

FIXED WING

- One to four servos use four cell (4.8V) battery pack
- Five or more servos use five cell (6V) battery pack or if you have long servo leads to either the ailerons or down the back for elevators and rudder.
- For LMA sized models (2m mono w/s, 1.5m biplane w/s) always use 6V twin battery redundancy system where each individual battery and its associated regulator is capable of handling the amp load. This includes checking the battery regulators (5V) maximum load capability which should be 10 or more amps.

HELICOPTER

- Receivers battery packs are usually restricted to the gyro voltage requirements. Read the gyro instructions carefully, it will state the minimum and maximum voltage. Generally this is four cell (4.8V) battery packs.
- Use of high powered digital servos creates high and continuos load on the battery as the servos are constantly working under full load. Recommend at least subC size NiMH cells or Lithium based with a very high amp regulator.

2.4Ghz SYSTEMS

- All main manufactures utilise a low voltage (3.5V) cutoff. This is different to the 40/72Mhz systems where low receiver battery voltage only gave slow or sloppy response. 2.4Ghz systems require this minimum voltage to operate and will shut down when this limit is reached.
- "Browning Out" occurs when the servo load (amp) momentarily reduces the Rx battery voltage below 3.5V despite indications on the ground to the contrary. Even on large models with twin Rx battery packs we have witnessed acute failure when the Redundancy system was inadequately designed for the loss of a battery:
  - 1/ the remaining battery pack is unable to deliver the load without dropping below 3.5V.
  - 2/ the selection of voltage regulator is inadequate under load and fails.
  - 3/ twin battery input receivers are incapable of handling the complete load (amp) through a single input. Read the instructions carefully.

RETRACTS

- Electronic or mechanical retracts are becoming popular with the use of high torque servos or electric screw jacks. We recommend separating the power source of these retracts from that of the receiver as these systems if misaligned when retracted continually work for the duration of the flight, draining the battery pack within 10 mins.

IGNITION Battery Packs

- Primarily designed for 4.8V Nickel based battery packs of 1500mAh or more.
- Read the instructions carefully, some will handle 6V battery packs.
- If using Lithium based chemistry packs use a regulator.
- Starting the petrol motor uses the most power so if having trouble starting for long periods remember to check the battery pack and recharge if necessary.

154 Kohimarama Rd
Kohimarama
Auckland 1071
New Zealand

PH +64 9 5212179
FAX +64 9 5212159

www.titanenergy.co.nz
sales@titanenergy.co.nz