

# 4 PORT LIPO CHARGERS

by Jack Hiner

The RC SOS Electric Power Rubber design rules for 2015 require single cell 160 mAh maximum capacity batteries for motor power. So no more 4 cell Ni-Cd 350 mAh motor packs may be used for the R/C SOS Electric Powered Rubber models in 2015.

We go to a single cell LIPO battery for the motor with lower voltage and less capacity. With a five ounce minimum weight, flight times will go down.

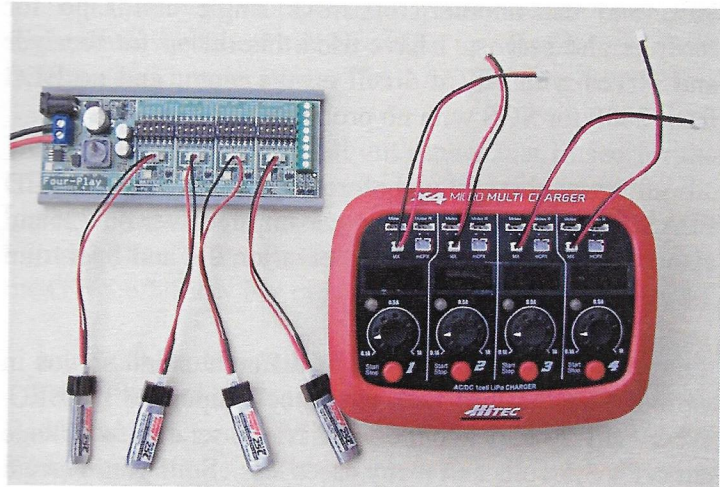
Four of us that are flying models per the new rules at this time are getting 7 to 11 minutes flight time in light wind and no lift conditions. We are all using a second single cell Lipo for receiver and servos with no BEC.

Some folks think that will not work. But consider if you flew with 4 cell Ni-Cd using BEC the low voltage cut off was 3.6 volts or less. So if you have a model set up with 4 cell Ni-Cd using BEC you should have no problem with a single cell LIPO running receiver and servos without BEC.

With single cell LIPO on the motor and another for receiver and servos you need at least 4 single cell batteries and maybe more. I tried a couple brands of single cell LIPO batteries and have best results with Thunder Power 25C 160 mAh cells.

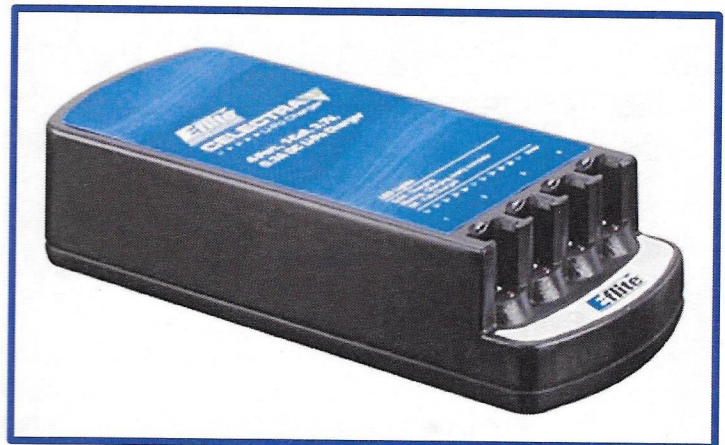
For a number of years I have been using a 4 port single cell Lipo charger from Sonic-Tronics Inc. called Four-Play. It is sort of low tech with dip switches to select each port's charging rate. I have had no problems with this unit.

A more recent higher tech 4 port single cell Lipo charger is the Hitec X4 MICRO MULTI CHARGER. A photo of both charges together gives you an idea of their construction. The Hitec X4 is available from Tower Hobbies if you can not get it at your local hobby shop.



Both chargers are designed to have the single cell batteries plugged directly into the charger. The Four-Play only has the connector for the smaller single cell Lipo such as the Thunder Power single cell 160 mAh. The Hitec X4 has 4 different connectors for each port so is more versatile.

Connectors are designed for just so many insertions so I use jumpers for both chargers. If the jumper or extension connector gets damaged over time just replace the jumper. Hobby King USA sells a 5 pack of these extensions for a little over \$2 when I got mine. 10 cm long and known as "Mini Plug Extensions For Micro Battery 10 cm". E-Flite calls these connectors "Pico Plugs". So get that SOS model modified and flying per the new rules. If you have no SOS model get to building.



Recently another charger has arrived on the market, This one from E-flite is the E-flite Celecra 4 port single cell 3.7 V LIPO Charger. This charger is available from a number of vendors but I have not yet used one.