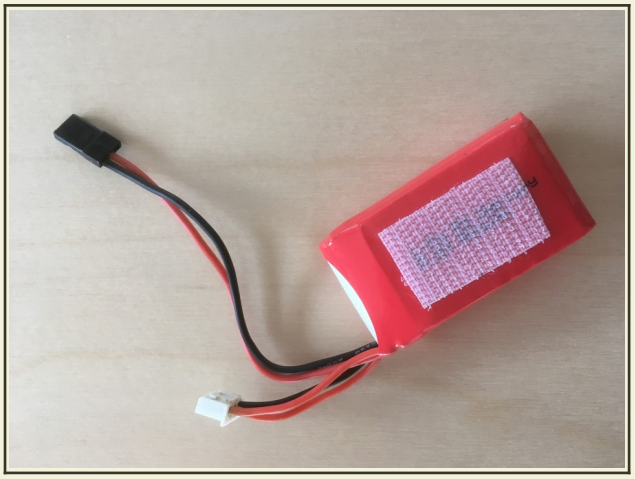
FatSparrowRacing

Installing a Lightweight Battery

The following procedure applies to DF65 hulls only.

Using an alternative, lighter battery pack is discussed in the DF65 instruction manual, but not the methods for extending the cable or mounting the battery. DF65 class rules allow a cable extension and the use of hook and loop fastening to secure the battery down the forward hatch.

I use LiFe batteries in both DF65 and DF95 hulls. They are lighter than battery cassettes and not having exposed terminals, are more reliable. These batteries will easily last a day of regatta sailing.



6.6volt 850mAh LiFe battery

The cable from the power switch will not reach a battery placed up by the mast so the cable must be extended. The class rules allow a battery extension lead, but don't specify what form the lead should take. Do one of the following:

1. Buy a male to female servo extension cable from the same hobby store you bought the battery. A length of 100 – 150mm will do the job.

   Squirt some CorrosionX into the connectors before joining.

2. The following is for those confident with a soldering iron. Cut the existing battery cable at about the mid point, strip back 5mm of insulation at the cut ends and solder in 100mm of wire to extend the cable. Use some heat-shrink tube to protect and insulate the solder joints. Slide the heat-shrink over the wires BEFORE soldering the

second pair of joints. Shrink the tube with the soldering iron (you can touch the heat shrink tube with the iron, but not the insulation). If done well, this method is slightly more reliable than using a cable as it eliminates two connectors. It also saves the small cost of an extension cable.

The extended battery cable can now be routed forward to the small hatch beside the mast. Route the cable across the top of the servo tray so that the connector or solder joint doesn't lie in any water that gets into the hull.

Cut a 50mm length of sticky backed velco tape and attach down the side of the keel box. Get the top end of the tape right up against the underside of the deck – it will provide a support for the receiver antenna. Stick a length of velcro (other polarity) to one face of the battery. You should now be able to plug in the LiFe battery, drop it down into the hatch and secure it against the side of the keel box.