

## How To Reduce The Chance of Shorting a Battery When Using 4mm Connectors

Our own personal preference for connectors for medium to high power setup is the 4mm gold bullet connector. To greatly reduce the chance of shorting the battery this is what we do. The main consensus is to fit the female connector on the +VE of the battery and the male connector on the -VE of the battery. Please DO NOT be tempted to put 2 female connectors on the battery as this can easily lead you to blowing up your ESC (Electronic Speed Controller). It is very easy to be distracted when connecting the battery to your ESC and if connected incorrectly your ESC will be destroyed instantly. With a female on the +VE of the battery and the male connector on the -VE of the battery, this can not happen.



Firstly cut a piece of red Heatshrink tube approximately twice the length of the female connector.



Shrink the tube. Please note that it overhangs the end slightly



Then cut a piece of black Heatshrink tube approximately twice the length of the male connector plus a couple of extra mm to overhang the end of the connector.



Only shrink the portion of the heatshrink tube that covers the wire and the solder cup of the connector. The portion that covers the "bird cage" part of the connector should remain un-shrunk.



This is a close up of the end of the connector. Please note that the end of the heatshrink overhangs the end of the connector by a couple of mm. Now you can see that the female portion of the connector can now slip over the male pin but inside of the un-shrunk portion of the heatshrink.



This photo shows the start of the insertion of the female into the male half



This photo shows this method being used on both the -VE and +VE wires of the battery

Battery                      ESC