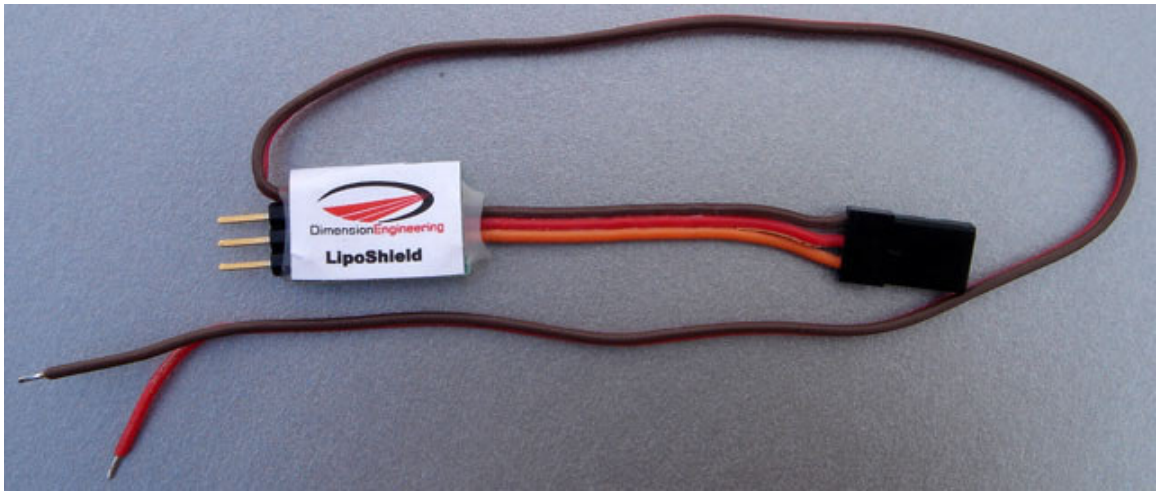
LipoShield installation guide

November 2005

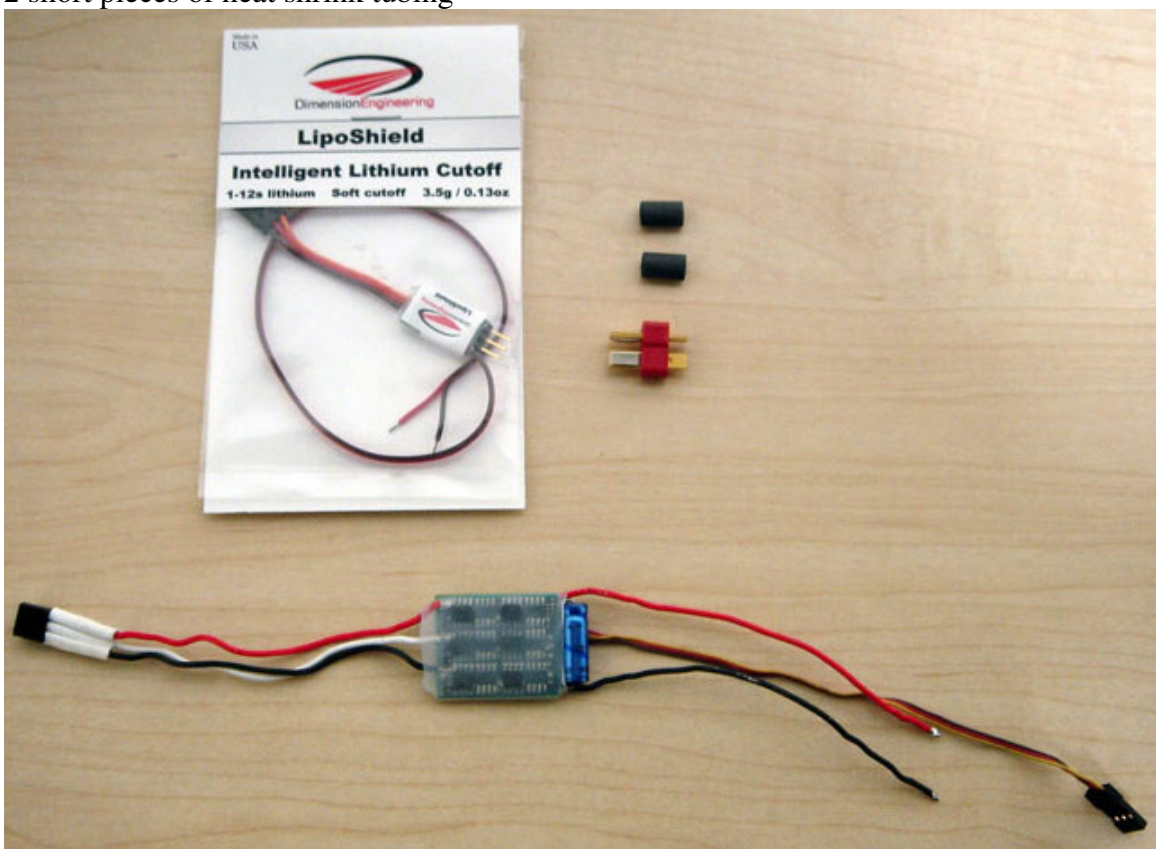


Introduction:

LipoShield is a low voltage cutoff device which enables any ESC to be used with lithium battery packs. It installs easily between your receiver and ESC and provides a reliable 3.0V per cell soft cutoff to prevent over-discharge damage to your expensive lipo packs. This installation guide will walk you through the usual way to install a **LipoShield**.

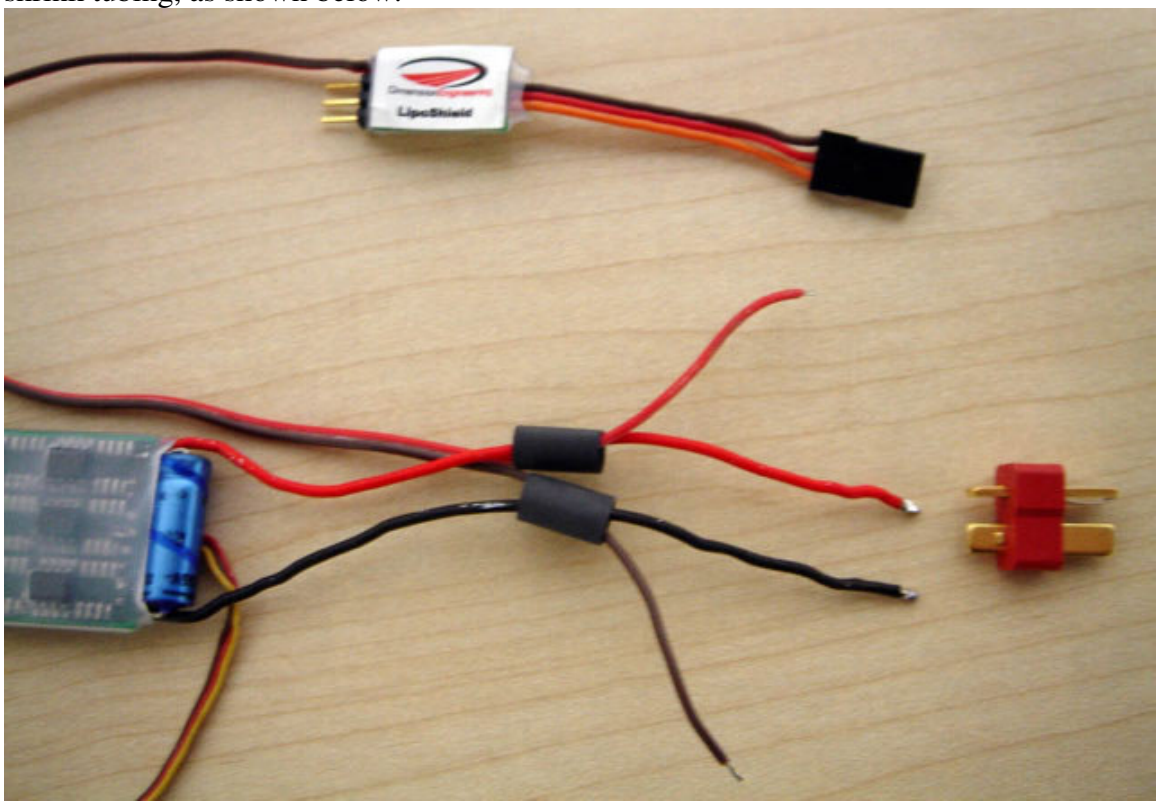
Required Materials:

ESC
LipoShield
Battery connector (usually already installed on the ESC)
2 short pieces of heat shrink tubing

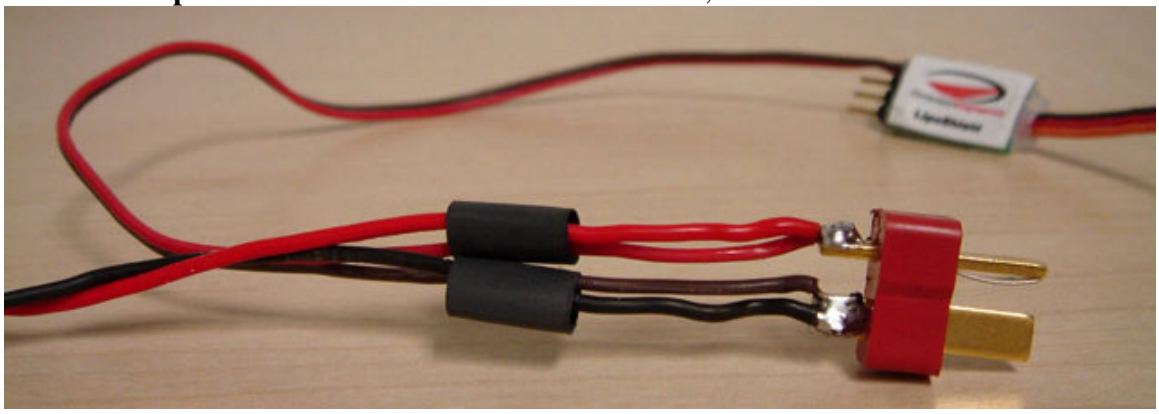


Installation Instructions:

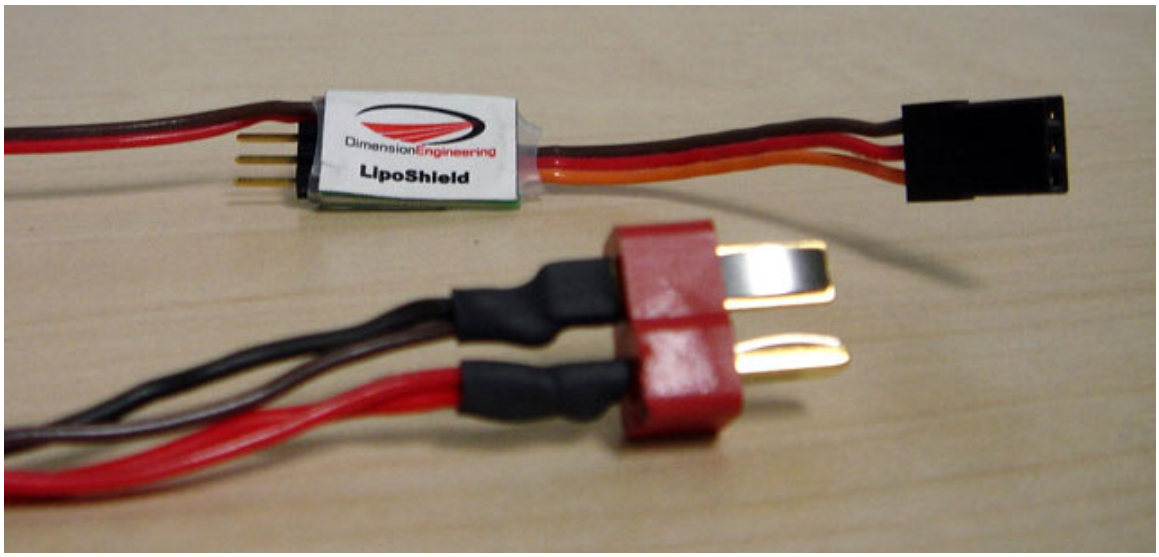
Step 1:
You must connect the long brown and red cable coming from the **LipoShield** to the ESC side of your battery connector. Begin by removing the connector from your ESC if attached, then thread the ESC and **LipoShield** battery wires through two pieces of heat shrink tubing, as shown below.



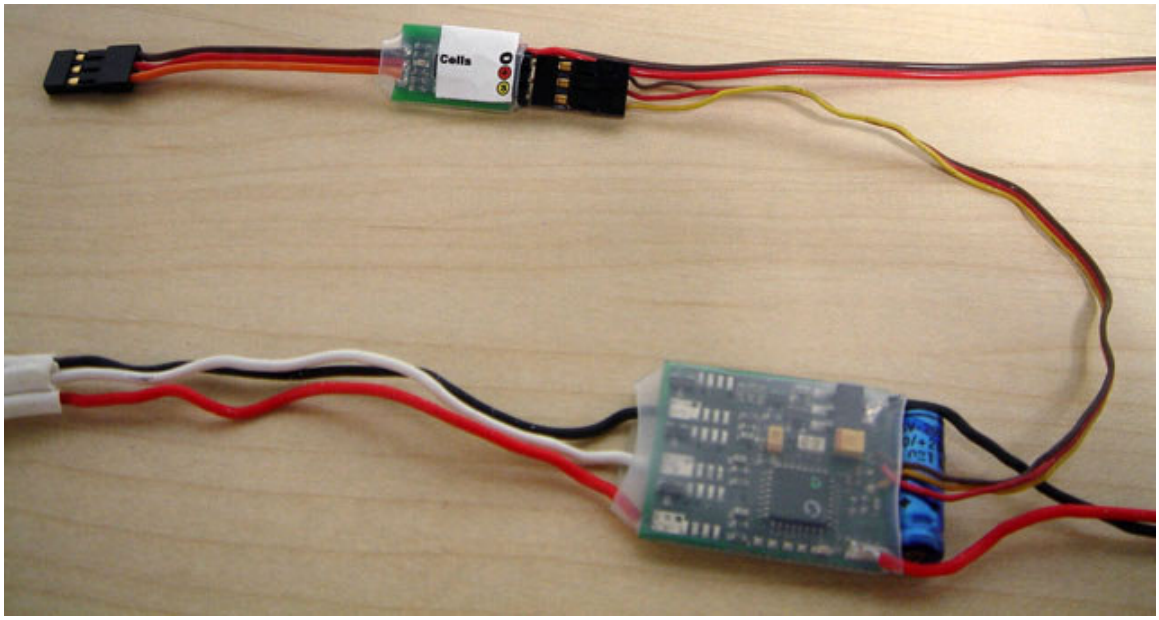
Step 2:
Solder the **LipoShield** and ESC wires to the connector, as shown below.



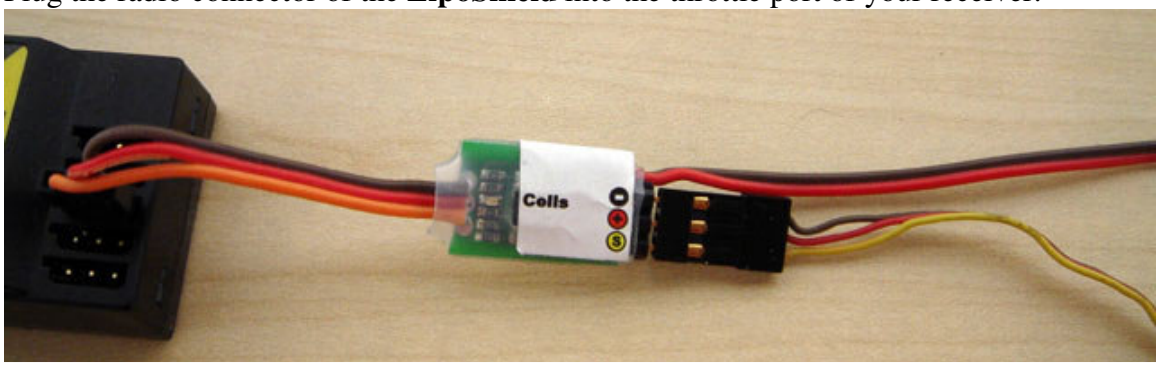
Step 3:
Shrink the heat shrink tubing around the exposed solder joint on the connector, as shown below.



Step 4:
Turn the **LipoShield** over and you will see the polarity marking for the ESC. Depending on your brand of ESC, the signal wire that connects to the pin marked with the yellow-circled 'S' may be yellow, white or orange. Plug the ESC's throttle cable into the **LipoShield** as shown below.



Step 5:
Plug the radio connector of the **LipoShield** into the throttle port of your receiver.



Step 6:
Secure the **LipoShield** to the airframe with Velcro, double sided tape or rubber bands. Verify ESC and servo functionality before your first flight. This completes the installation of the **LipoShield**. After you plug in the battery, check that the green light marked “Cells” is blinking the correct number of times. A 3s battery pack should cause the light to blink three times, pause, blink three more times, and so on. If the **LipoShield** does not blink the correct number of cells, then the battery is in a state of deep discharge and must be charged before flight.