

Power Distribution

Just like the human body has a circulatory system to carry oxygen-rich blood to wherever it is needed, the drone has a power distribution board (PDB) to take the all-important battery power and send it to every component. In this step, you will mount 4 ESCs (electronic speed controllers), a BEC (battery eliminator circuit), a battery lead with XT60 connector, and a battery monitor lead to your PDB (power distribution board).

Strip Wires

Cut off all the bullet connectors on the thick wires of the ESC as close to the connector as possible. Leave the PWM signal connector alone. Strip 0.5 cm from each of the wires you just cut.

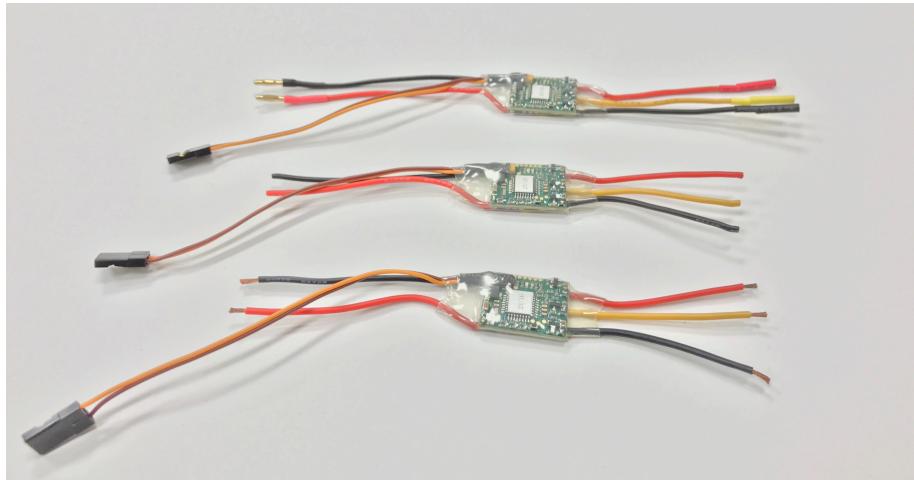


Figure 1: ESC PRE POST SNIP

Strip 0.5cm off your battery lead with XT60 connector.

Inside the plastic box labeled, SKYLINE 32, find the battery monitor lead, cut off the two larger connectors, and strip 1cm.

Tin PDB and Stripped wires.

Tin all 20 ESC leads. Twist the battery monitor leads around the BEC leads and tin.

Thoroughly tin the battery lead with XT60 connector. It is important that solder flows all the way through the exposed wire.



Figure 2: XT60 PIGTAIL STRIPPED

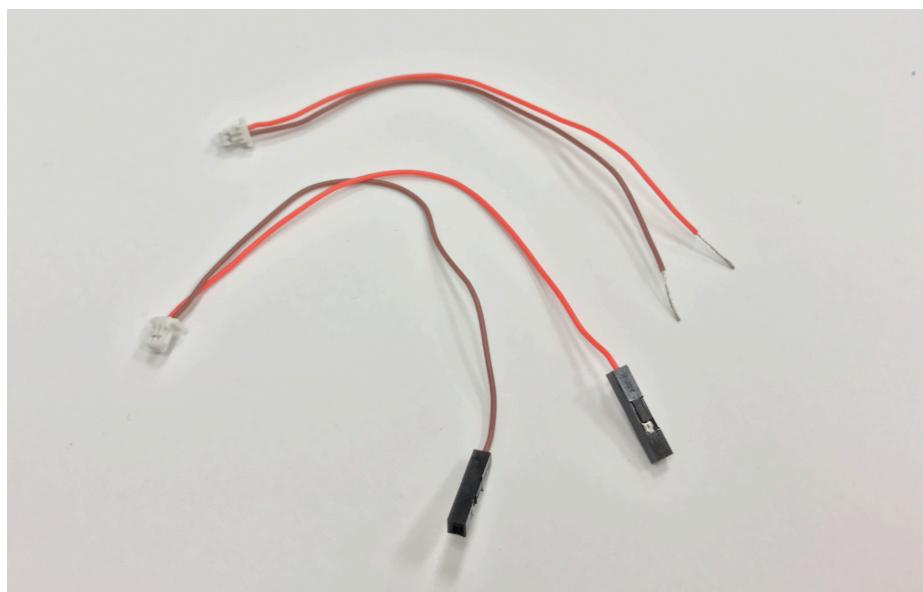


Figure 3: SKYLINE BATTERY MONITOR PRE POST STRIP



Figure 4: BEC AND BATT MONITOR

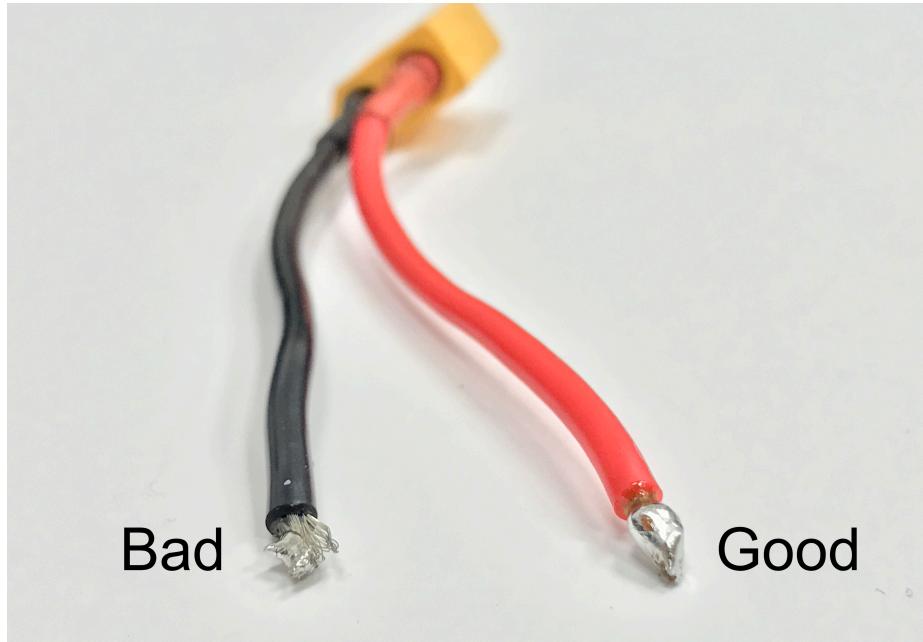


Figure 5: TINNED BATT LEAD

Tin the pads on the PDB as shown. Leave the 5V OUT and 12V OUT pads alone.

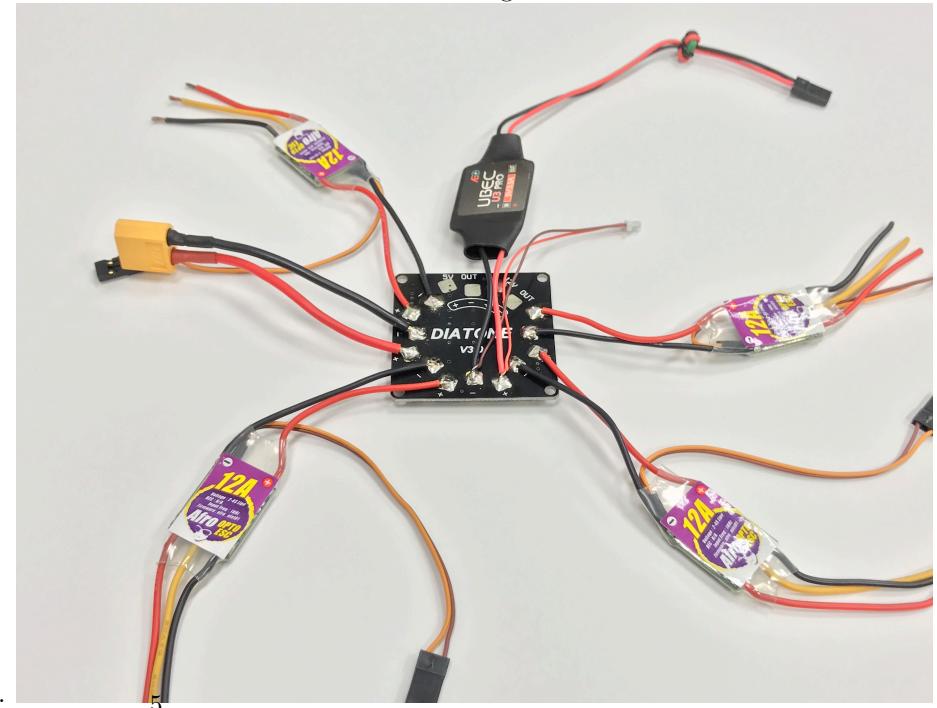


Figure 6: TINNED PDB

Connect components to the PDB

Solder the tinned components to the PDB as shown. Make sure Red goes to +

and black/brown goes to -.



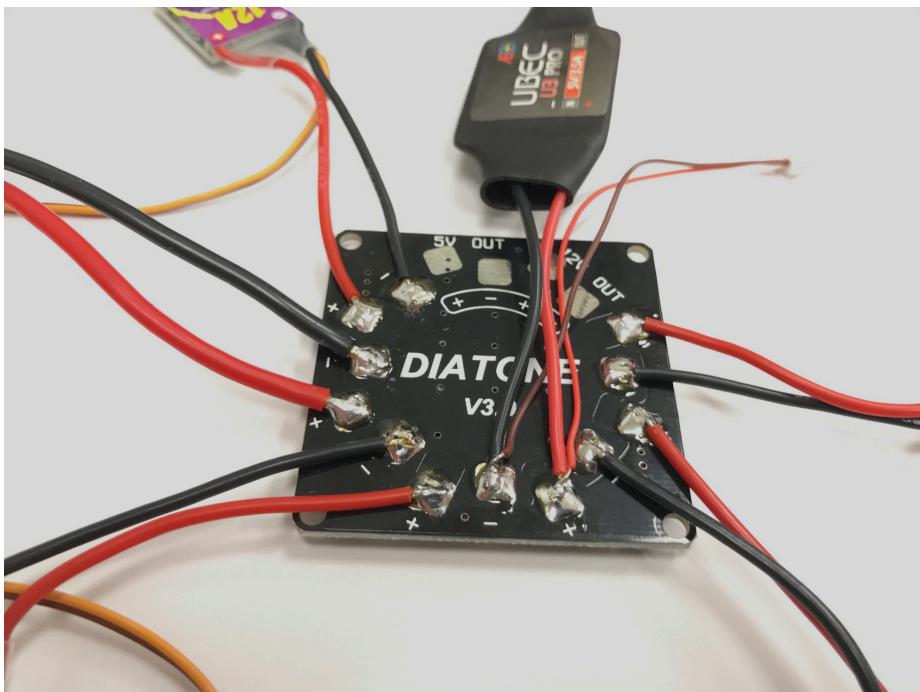


Figure 7: PDB OCTOPUS CLOSE