

Charging a lipoly battery pack on the C6D Mini Charger

Power on the charger then press the BATT TYPE button until you're at this screen:



Press ENTER to select LiPo and you'll be at this screen (if not, press INC until it appears):



Use the INC/DEC buttons to set the charge current to 0.6A, press ENTER, then INC/DEC the pack voltage to 7.4V. (2S)

These are the settings for a 2S (7.4V) 300mAh lipoly battery as sold with our Viper kit (these settings are indicated in the manual).

Most lipoly batteries can be charged at 2C. This means 2x the mAh rating of the pack. So a 300mAh pack can be charged at 600mA, or 0.6A.



To start charging, hold down the START button. You will see the following screen which is asking you to confirm that the requested charge voltage (R) matches the measured voltage (S). A damaged battery might show one less cell. If R and S match, press Enter to begin charging. If not, investigate the mismatch. Do not charge a damaged battery.



Once it's charging you will see this screen updating while the battery charges.

Screen Description:

Li2S = 2S (2-cell, 7.4V) Lipoly pack

0.6A = The amps being pushed into the battery. (You set this maximum earlier.) This will drop down once the pack nears full capacity.

8.02V = This shows the actual voltage of the battery. When the battery is full it will read as high as 8.4V (the fully charged voltage of a 7.4V battery).

CHG = Current is going into the pack. The C6D Mini charger can also DIScharge packs, and BALance packs if you plug the pack's balance connector to the side of the charger. (Shown below.) It's good practice to balance a pack before each event.

000:05 = Elapsed time

00001 = The amount of charge returned to the pack, in mAh. This is useful to know how much current your robot used in a match. Sometimes you can go down a pack size (from 300mAh to 250mAh, for example) if your robot only ever uses 200mAh. (You need to have a bit left in the pack to make sure it doesn't go below the minimum voltage—which is 3.3V per cell, or 6.6V for a 2S pack.)



Balancing the cells in a pack ensures they will give you optimal performance. Plug the lipoly's white Balance Plug into the front of the charger as shown, along with the main charge leads.



Select BAL instead of CHG from the menu, set the values, and start the charge same as before.



The main updating screen will read out the same as with CHG, but you can now see each cell's individual voltage by pressing the INC button. Press INC again to return to the main display screen.