Battery & Charging Troubleshoot

Q1. If we change the battery with rated voltage from 8.5v without changing anything else, will it affect the circuit?

(A1) For maximum efficiency and long run time Qu-Bot circuit doesn't have regulator or reverse polarity protection. It works directly on a single Li-Ion cell. Rest of the Qu-bot circuit is designed to work on maximum 5V. If you give more voltage than 5V most components of Qu-bot will burn off, including microcontroller.

If you want to use a bigger battery use a 5V regulator in between and give it to correct polarity to Qu-bot battery connector. If the voltage is above 5.5 it can damage many components permanently.

Q2. The Charge LED lights up very dimly. During day time it hardly visible. Does the duration (extent) of charge determine the Charge LED brightness?

(A2) Just simply check by disconnecting the battery from the circuit board via connector when the charger is connected. If you get same brightness in Charge LED there is a bit problem in charger.

In a very few chargers the voltage output is a bit lower hence the LED does not glow completely. That is not a fault of the Qu-Bot design but a fault of charger which we procure from third party. We will sort matter soon and our new stock won't have such problems for sure.

The duration will not increase brightness. The charging time is around 2-3 hours using charger. Once charging is complete the LED will glow and then no further charging will be done.

Q3. When I plug the AC adapter my led not glowing but glowing after removal of battery plug from the two pin male.

(A3) The charge led glows when the charge completes. The brightness depends on charger output voltage. Check the output of charger. If the voltage is over 4.2 it will definitely charge the battery. So still with the low glow the battery will be charged perfectly and robot will work fine.

Q4. When my battery is charging what should be the voltage rating?

(A4) When the battery is charging, the voltage ratings must be anything above 3.6v. It should be increasing w.r.t. time.