Free sample from The RC Car Driving & Tuning Planner. This is worksheet 8 of 12. Get all 12 worksheets: rccarcalc.com/kit/rc-car-driving-and-tuning-planner

Battery Runtime & Charge Plan

How long each pack lasts, how many a session needs, and how long they take to charge

Driver	**Date**
Car	**Cells**

The numbers on this sheet come from the free LiPo runtime, C rating and charge time calculators on this site. Plan a session from the packs you have, not the other way round.

Runtime per pack, from the free runtime calculator

Pack #	mAh	Average amps (driving style)	Runtime to 80% (min)	Measured runtime (min)

Runtime (min) = mAh / 1000 x 0.8 / average amps x 60. Example from the calculator: a 5000mAh pack at a 25 A average draw gives about 9.6 minutes to a safe 80 percent discharge. Your measured runtime from the Session Log is the number to plan with once you have it.

Session plan

Field	Your answer
Packs this week's session needs (from sheet 3)	
Packs I own that fit this car (same plug, same cell count)	
Cool-down between packs for the motor (min)	
Charge current at 1C (A) = mAh / 1000	

Field	Your answer
Charge time per pack at 1C, from the charge time calculator (min)	
Can I charge between packs at the spot, or charge at home only?	

1C charging takes about 60 to 70 minutes with the balance phase. Charge faster than 1C only if the pack label states a higher charge rating, and never unattended.

Pack health log

Date	Pack #	Resting volts per cell after the run	Cell spread (V)	Puffed, dented or hot?	Action

LiPo reference, from this site's calculators: 3.7 V per cell nominal, 4.2 V full, about 3.8 V storage, 3.2 V per cell as a cutoff floor. A pack whose runtime drops suddenly or whose cells drift apart is ageing; see sheet 9.

Named above, from the site's own catalog

Real listings from this site's own catalog. Confirm the plug and cell count before ordering.

- **LiPo cell checker with low-voltage alarm, 2-pack**: Reads every cell for the pack health log, and beeps before a pack goes too low.
- **Digital cell meter**: Reads each cell's voltage, which is how the cell spread column gets filled in.
- **200 W AC/DC balance charger**: Enough power to charge a 3S 5200mAh pack at 1C, the charger this site's intermediate builds use.
- **3S 5200mAh hard-case pack, EC5**: A second 3S pack means one cools while the other runs. Match your car's plug.
- **2S 6200mAh hard-case pack, 2-pack**: Two 2S packs for longer crawler or 2S basher sessions. Match your car's plug.

Current prices and our latest picks for each item: **rccarcalc.com/kit/rc-car-driving-and-tuning-planner/gear/**

Researched guidance, not professional advice. Always follow the manual for your vehicle and the instructions printed on your battery and charger. Never charge a LiPo unattended, and never drive near people, pets or roads.