

Common Sense RC
18333 Minnehaha St.
Northridge, CA 91326
877-709-3835
sales@CommonSenseRC.com
www.CommonSenseRC.com

Basic Lithium Polymer Battery Guidelines

If you are unclear about any of the information presented here, please contact us PRIOR to charging or discharging these batteries.

Please contact us if any abnormal conditions exist.

By purchasing this battery, the buyer assumes all risks associated with lithium batteries. We assume no liability for failure to comply with these warnings and safety guidelines.

Lithium Polymer batteries are volatile and can be very dangerous if mis-handled, stored, charged or discharged improperly. Failure to read and follow these instructions may result in fire, personal injury, and damage to property

Store below 80F and above 40F whenever possible (not in direct sunlight). Never store or charge a battery pack inside your car in extreme temperatures (100 F and above), since extreme temperature could cause fire. Use caution to avoid puncture of the cells. Puncture of cells may cause fire.

Charge before using. **Use only chargers made specifically for lithium polymer batteries.** Before the first charge, check for damage to the connectors, wire leads or any other abnormality. Please check the voltage of your pack. Packs are shipped from the factory at the following voltages: **Never charge Lithium Polymer batteries unattended.**

2 cell packs – 7.6 volts +/- .5 volt
3 cell packs – 11.4 volts +/- .5 volt
4 cell packs – 15.2 volts +/- .5 volt
5 cell packs – 19.0 volts +/- .5 volt

You must select the charge rate current that does not exceed 1C (one time the capacity of the battery, unless otherwise noted). A higher setting may cause fire. This chart is calculated at 1x capacity of pack. Generally speaking, charging at even lower rates will extend battery life.

800 mAh:	Charge at or below 800mA
1500 mAh:	Charge at or below 1.5 Amps
6000 mAh:	Charge at or below 6.0 Amps

If at any time you witness a battery starting to balloon or swell up, discontinue the charging process immediately. Disconnect the battery and observe it in a safe place for approximately 15 minutes. Continuing to charge a battery that has begun to swell may result in fire.

Please check pack voltage after the first charge. The following information shows the correct voltage range after the first charge is completed.

Example:	1-cell 4.2V (4.18 to 4.22)
	2-cell 8.4V (8.36 to 8.44)
	3-cell 12.6V (12.48 to 12.66)
	4-cell 16.8V (16.68 to 16.88)
	5-cell 21.0V (20.90 to 21.10)

Do not attempt to solder connectors to Lithium Polymer batteries unless you have sufficient experience.

Wire lead shorts can cause fire. If you accidentally short the wires, the battery must be placed in a safe area for observation for approximately 15 minutes. Additionally, if a short occurs and contact is made with metal (such as rings on your hand), severe injuries may occur due to the conductivity of electric current.

If, for any reason, you need to cut the terminal wires, it will be necessary to cut each wire separately, ensuring the wires do not touch each other, or a short may occur potentially causing a fire.

To solder a connector, remove any protective insulation on the red wire and solder to the positive terminal of a connector, then remove any protective insulation on the black wire and solder to the negative terminal of the connector. Be careful not to short the wire lead. If you accidentally cause the battery to short, place it in a safe open space and observe the battery for approximately 15 minutes. A battery may swell or even possibly catch fire after a short time.

Do not charge battery packs in series. Charge each battery pack individually. Failure to do so may result in incorrect battery recognition and charging functions. Overcharging may occur and fire may be the result.

You must check the pack voltage before each charging session. Do not attempt to charge any pack if the voltage per cell is less than 3.0 V.

Example:	Do not charge a 2-cell pack if below 6.0V
	Do not charge a 3-cell pack if below 9.0V

Do not discharge battery to a level below 3V per cell under load. Deep discharge below 3V per cell can dramatically deteriorate battery performance and will likely cause the battery pack to become defective and un-usable.

Batteries that lose 20% of their capacity must be removed from service and disposed of properly. For example, a 2000mah battery that behaves as if it is only a 1600mah battery is unsuitable for service. Discharge the battery to 3V/cell, making sure that output wires are insulated. Wrap battery in a bag and place in an appropriate disposal canister.