

Thank you for purchasing the 2-3 cell LiPO Balance Charger™. While this charger is simple to use, please read these instructions thoroughly and carefully to avoid accidents and potential hazards. If you have any questions, please feel free to call our customer service department at 800.705.0620 or contact your local hobby shop. Both are excellent resources for information and are more than willing to help new hobbyists. Remember to keep your receipts if you should need warranty service on any of our products.

SPECIFICATION:

Input: 100-240V Ac 50/60Hz

Output: 0.8 A

2-3Cell (7.4V and 11.1V)

Li-polymer



INSTRUCTIONS

WARNING!

Charging and discharging batteries has the potential for fire, serious injury to persons and damage to property. The user of this charger agrees to accept responsibility for all such risks. Venom™, its affiliates, manufacturers, distributors, and retail partners cannot control the use, application, charging or installation of this product and shall not be held responsible for any accident, injury to persons, or damage to property resulting from the use of this product.

REFER TO THE LIPO SAFETY GUIDELINES IN THESE INSTRUCTIONS FOR MORE INFORMATION.

1. Always use a charger specifically designed for LiPO batteries. **ONLY** charge 2 - 3 Cell LiPO Batteries with this charger or a LiPO Charger that has Peak Voltage Detection. Never use NiCD or NiMH type chargers to charge LiPO batteries. Failure to do so will damage the batteries and may cause fire and personal injury. Read all Safety Guidelines, Charging Instructions, New Battery Break-In, and Battery Disposal Instructions before using batteries. Store battery packs out of the reach of children and pets. Children under the age of 18 must be supervised by a responsible adult.

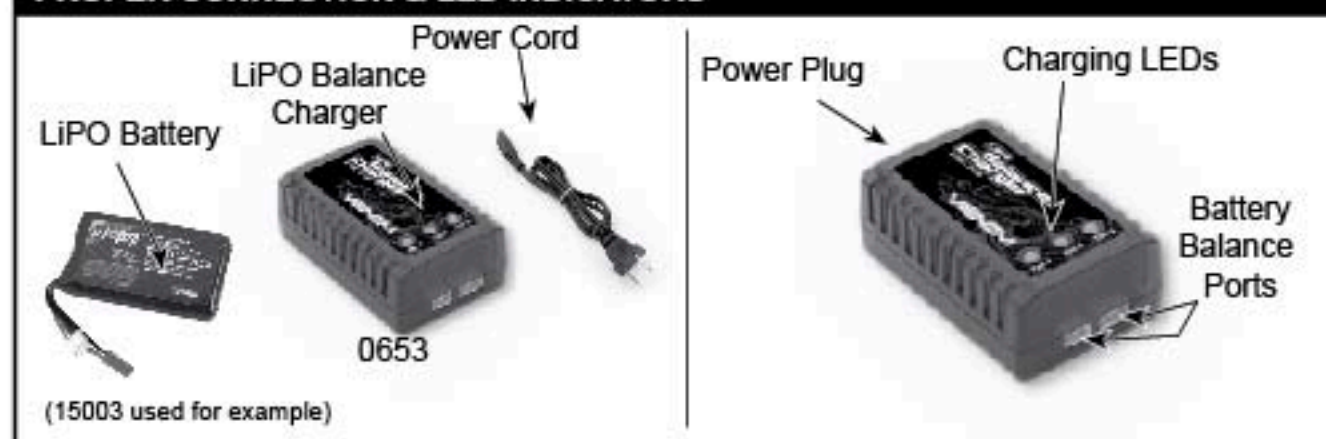
CHARGING INSTRUCTIONS

- 1) Plug the power cord into the LiPO Balance Charger and then into a wall outlet.
- 2) All three Cell indicator LED's will illuminate green indicating power is applied and is ready to charge.
- 3) Plug a LiPO battery into the correct charging port on the charger. For example, a 2-cell pack must be inserted into the 2-cell slot. The cell indicator LEDs will change from Green to Red indicating that the battery is charging.
- 4) When charging is complete, the LEDs will change from Red to Green. Charge times will vary depending on the capacity of the battery and if there is already a partial charge on the battery. Refer to pg. 2 for approximate charge times for a variety of capacities of batteries. Time estimates are based on a battery discharged to 3.0V per cell.
- 5) If the battery gets warm or hot during charging, immediately disconnect the battery, set it on a non-flammable surface and allow it to cool down. During the cool down period, monitor the pack for any signs of swelling or ballooning indicating a damaged battery, if the battery is damaged, follow the disposal instructions found in the "LiPO Battery Safety Guideline" section in this manual.

APPROXIMATE CHARGE TIMES FOR 2-3 CELL LIPO BATTERIES

(15000)	5C 2400 mah 7.4v 2-cell LiPO RX	(approx. 3 hour)
(15003)	20C 800mah 7.4v 2-cell LiPO	(approx. 1 hour)
(15005)	13C 1320mah 7.4v 2-cell LiPO	(approx. 1.6 hour)
(15023)	20C 2000mah 7.4v 2 Cell LiPO	(approx. 2.5 hour)
(15024)	20C 1300mah 11.1v 3 Cell LiPO	(approx. 1.6 hour)
(1577)	20C 2100mah 11.1v 3-Cell LiPO	(approx. 2.6 hour)

PROPER CONNECTION & LED INDICATORS



LIPO BATTERY SAFETY GUIDELINES

1. Always use a charger specifically designed for Lithium Polymer batteries. Never use NiCD or NiMH type chargers to charge LiPO batteries. Doing so will damage the batteries and may cause fire and personal injury.
2. Always charge batteries in a fire proof container or in the open, away from flammable materials. Do not charge batteries on wood, cloth, carpet, in your model, or on any other flammable material. Keep a chemical fire extinguisher nearby in case of fire.
3. Never leave batteries unattended while charging. Always observe batteries when charging so that you may react quickly to any problems that may occur.
4. Venom Power™ LiPO cells feature a separate balancing plug that isolates each cell in a pack and charges it independently. This ensures that all cells peak equally and discharge at the same rate during use, preventing one or more cells from discharging past their safe low voltage cut off rating. The balancing plug can be identified by the multi wire JST XH plug.
5. Charge each battery pack individually. Never charge battery packs in series. Charging packs in series may result in improper charger cell recognition and an improper charging rate that may lead to overcharging, cell damage and fire.
6. Always check to make sure that your charger settings match those listed on the battery pack label. Refer to the battery label for the proper cell count and charging amperage setting. Selecting a cell count or amperage charge rate other than the one listed on the battery pack will damage the battery and may cause a fire.
7. Make sure the battery connections are connected in the correct polarity. A wrong connection will damage the battery and may cause a fire.
8. Always check battery pack voltage before charging. Do not discharge LiPO batteries below 3.0 Volts per cell. The voltage of a typical LiPO cell at rest is 3.7 Volts. If the battery pack appears swollen or damaged, DO NOT attempt to charge it. Check the voltage and follow the steps listed in the discharging instructions section

9. Do not charge at over 1C current. $C = \text{battery pack mah capacity} \div 1000$. Divide the battery mah capacity by 1000 to determine the proper charge rate. Example:
 $1200\text{mah} \div 1000 = 1.20$ Amps Charge Rate for Venom Power LiPO Battery Packs, example:
- 800mah Capacity = 0.80 Amps
 - 1200mah Capacity = 1.20 Amps
 - 2000mah Capacity = 2.00 Amps
10. Do not peak charge to more than 4.2 Volts per cell. Example: A 2S Battery Pack contains two cells, therefore the peak voltage should not exceed 8.4 Volts.
11. Battery Temperature is critical. For optimum performance in cold climates, warm the pack to 100F°/ 37C° before use. Please use the following guidelines:
- Charge Temp Range: 32 - 110F° / 0-43C°
 - Discharge Temp Range: 32 - 140F° / 0-60C°
 - Storage Temp Range: 40 - 80F° / 4-26C°
12. If the battery exceeds the temperature guidelines as above, isolate the battery pack and follow the steps listed in the discharging instructions section.

NEW BATTERY BREAK-IN:

- New LiPO battery packs may require 12 or more charge/discharge cycles before the battery's optimum performance is reached.
- During this time, it is recommended that the battery pack is not discharged over 7C. $7C = 7 \times 1C$, where $1C = \text{battery pack mah capacity} \div 1000$.
Example: $[(1250\text{mah} \div 1000) \times 7] = 8.75$ Amps

Recommended Maximum Discharge Rates During Break-In Period

- 800mah Capacity = 5.4 Amps
- 1200mah Capacity = 8.4 Amps
- 2000mah Capacity = 14 Amps

DISCHARGING INSTRUCTIONS:

- Never discharge a LiPO battery pack at more than the manufacturers recommended discharge rate. The discharge rate is: $\text{Battery pack capacity (mah)} \div 1000 \times \text{Pack C rating}$
Example for 15c packs: $(3200 \text{ mah} \div 1000) \times 15c = 48$ Amps
Example for 20c packs: $(2100 \text{ mah} \div 1000) \times 20c = 42$ Amps
- Any time you have an accident with your battery, if the battery swells "balloons" or if the battery exceeds temperature guidelines, follow these safety steps:
 - Immediately remove the battery pack from your model or charger.
 - Place the battery in a non-flammable, well ventilated area.
 - Observe the battery for 30 minutes from a safe distance.
 - After 30 minutes, if the pack appears stable, is not swollen and does not show any signs of damage, return the battery pack to normal use with caution.
- If a battery is deformed, swollen or appears damaged, **DO NOT CHARGE.**
IMMEDIATELY DISCHARGE. Please follow these steps to discharge your battery:
 - Discharge battery pack to 2.5 Volts per cell or less.
 - Fill a bucket with enough water to submerge the battery pack completely.
 - Add salt to the water until no more salt will dissolve; the water is now saturated with salt.

- d. Place the battery pack in the bucket and leave submerged in the salt water solution for 24 hours.
- e. Remove the battery pack from the salt water and test the voltage.
- f. If the voltage does not read 0.0 Volts, re-submerge an additional 24 hours and re-test until the voltage reads 0.0 Volts.
- g. Once the battery pack has been discharged to 0.0 Volts, it is safe to dispose.

4. Do not let exposed battery wires touch each other. This may cause the battery to short and potentially cause a fire.
5. Store your batteries in a cool, dry place between 40-80 F° / 4-26 C°. LiPOs should be charged to 50% of their capacity minimum before being stored.
6. Do not assemble unmatched or dissimilar LiPO cells.

General Warranty Policies

Venom™ warrants this product to be free of material and workmanship defects when new. Venom™ will at its sole discretion repair or replace defective components free of charge within 90 days from date of purchase or within 30 days for all electronic components. This warranty does not cover wear and tear, crash damage, modifications, failure to perform routine maintenance, or any damages arising as a result of improper use. All warranty claims are to be directed to Venom™ Customer Service at 1-800-705-0620 or customerservice@venom-group.com.

Guarantee

All products are inspected and adjusted individually before leaving the manufacturer and are guaranteed to be free of material defects and manufacturing faults.

Important Notice

Venom™ assumes sole responsibility for our products; therefore, dealers should not be involved in any warranty issues. All warranty claims are to be directed to Venom™ Customer Service. Before returning any defective product, please contact Venom™ Customer Service at 800-705-0620 or customerservice@venom-group.com to receive a Return Merchandise Authorization Number. A dated & itemized sales receipt must accompany any product returned for warranty work.

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Notice of Liability

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