



## LOSB9607 Lithium Charge Converter

### Features:

- Extend the use of approved NiCd or NiMH chargers:
- Charges approved LiPo (3.7V nominal per cell) battery packs:
- Charges approved M1 (3.3V nominal per cell) battery packs:
- Small compact size
- Ease of use

### Specifications:

- Input: Approved charger intended for NiCd or NiMH batteries listed below.
- Maximum current: 8.0A
- Maximum number of LiPo cells is 6
- Maximum number of M1 cells is 8
- Provides a charge of 90%

### User Interface:

LED Displayed:

- 8 YELLOW LED's indicate the **estimated** number of cells
  - 2 cells -> Only the 2nd LED turns on
  - 3 cells -> Only the 3rd LED turns on... thru
  - 8 cells -> Only the 8th LED will turn on

**NOTE:** The 1<sup>st</sup> LED: reserved for future use
- 1 BLUE LED to indicate battery type selected
  - ON = M1 mode
  - OFF = LiPo mode
- 1 GREEN LED to indicate charge status
  - Slow Flash = Standby or charging has finished
  - ON = Ready to charge or charge in progress
  - OFF = No charger found
  - Quick Flash = Error: Overheated, charge time over limit (1.5 hour) thermal sensor measured the MOSFET heat level above 80 degrees Celsius (which is 176 degrees Fahrenheit).

## User Interface: (continued)

### Input:

- Battery Type Selector:
  - 2-position slide switch for M1 mode or LiPo mode
- UP Key
  - push button, for detail see operating procedure
- Down Key
  - push button, for detail see operating procedure
- Start/Stop Key:
  - push button, for detail see operating procedure

### Restrictions / Limitations:

- The Lithium Charge Converter requires the user to verify and select the correct number of cells to match the battery pack about to be charged.  
Selecting the correct cell count is the **sole responsibility of the user** and neglecting to verify and ensure the proper cell count may result in damage and or fire.
- **Only** the following approved NiCd or NiMH chargers should be used:
  - Dynamite - DYN4036 - Prophet Plus™ AC/DC Peak Charger
  - LRP – 41550 - Pulsar Competition \*\*
  - Novak – 4490 – Millennium Pro \*\*
  - Orion Avionics - ORI62200 - Advanced Flight Charger ##
  - Much More - MM-CTXC – CTX Cell Master V1.0

\*\* These chargers will not charge more than 3 cells packs  
## Using the NiMH or Nicd modes
- **Only** use the Lithium Charge Converter with the following approved LiPo battery packs:
  - Losi LiPo - LOSB9810 - 11.1V 2400mAh 3C LiPo TxPk: Z1, Helios
  - Losi LiPo - LOSB9811 - 11.1V 2400mAh 3C LiPo TxPk: M11, MX-3
  - Losi LiPo - LOSB9820 - 7.4V 2000mAh 2C LiPo Rx Pack
  - Thunder Power - THP21002SPL – 2100mAh 2C 7.4V LiPo
  - Thunder Power - THP20703SX – 2070mAh 3S 11.1V Li-Po
  - Thunder Power - THP20704SX – 2070mAh 4S 14.8V LiPo
  - Thunder Power - THP20705SX – 2070mAh 5S 18.5V LiPo
- **Only** use the Lithium Charge Converter with the following approved M1 battery packs:
  - A123 Racing - HS-2300-2S1P – 6.6V 2300mAh Hypersonic
  - A123 Racing – HS-4600-2S2P – 6.6V 4600mAh Hypersonic
  - A123 Racing - HS-2300-3S1P – 9.9V 2300mAh Hypersonic
- **Power Supply** must be capable of providing enough voltage and amperage to charge the batteries. For example, charging of a 4 or 5 Cell LiPo battery requires more than 12 volts.

## Operating Procedure:

1. Connect the battery to the converter
2. Yellow and Green LED should be flashing slowly -> Standby mode
3. Select the battery type with the Battery Type Slide Switch (M1 -Blue LED is ON)
4. The number of Yellow LED's ON solid will represent the estimated number of cells; this count is ONLY an estimate of the number of cells actually in the battery pack. It is the **user's sole responsibility** to ensure the number of cells in the battery pack match the selected number of cells on the Lithium Charge Converter.
5. If the estimated number of cells displayed does not match your battery pack, you should press the "Up" or "Down" key to correct the number of cells.

**Note:** It is the **user's sole responsibility** to set the number of cells on the Lithium Charge Converter, if the cell count selected is less than the actual number of cells, then the battery will not be fully charged. If the cell count selected is greater than the actual number of cells, the battery will become overcharged (very dangerous, and may cause fire).

6. Press and hold the Start Key; Lithium Charge Converter will be ready to start charging (Green/Yellow LED = ON solid through charge).
7. Adjust the current of the Charger (set to 1C) to match the battery to be charged.

**Note:** 1C is calculated for a 2300mAh LiPo as follows:  $2300 * 0.001 = 2.3A$

8. Connect the NiCd/NiMH Charger to the input lead and start the charger.
9. Lithium Charge Converter's Green and Yellow LED will flash when charging is complete.
10. During charging, if you press the start key, it will terminate the charging process. You can also stop by terminating the NiCd / NiMH charger.
11. Disconnect the battery from Lithium Charge Converter after charging is done. If left on, the converter will consume current from the battery, and the battery can be over-discharged as a result.

## Safety Precautions:

- Read all safety precautions prior to each use
- Do not use this Lithium Charge Converter with any charger other than one documented in the Restrictions / Limitations section above or damage and possibly fire will result.
- Do not attempt to charge any battery pack not documented in the Restrictions / Limitations section above; doing so can result in overheating, damage or fire.
- Before start of charge, it is the **sole responsibility of the user** to ensure the estimated number of cells is actually the same as the battery you are about to charge. If the estimated count is not correct, follow the instructions to adjust to the correct count prior to beginning of charge.
- Read all safety precautions provided with the battery to be charged prior to using the Lithium Charge Converter
- Before charging, check battery type for LiPo or M1, and re-verify the number of cells in the battery to be charged
- Keep away from moisture, rain, direct sunshine, dropping or vibration
- Keep away from flammable objects
- Do not connect directly to a power supply
- Do not use if input power is over 8A; doing so will result in overheating, damage or fire.
- Do not discharge any battery through the Lithium Charge Converter even if the approved charger supports discharging. This will over-discharge the LiPo/M1 battery and cause permanent damage or fire.
- Do not charge NiCd / NiMH / or lead acid batteries
- Do not attempt to charge dead or damaged batteries
- Ensure proper polarity for connection to charger
- Ensure proper polarity at battery connection
- Do not attempt to charge any single-cell batteries; doing so will result in overheating, damage or fire.

**Warranty Period:**

Exclusive Warranty- Horizon Hobby, Inc., (Horizon) warranties that the Products purchased (the "Product") will be free from defects in materials and workmanship at the date of purchase by the Purchaser.

**Limited Warranty**

(a) This warranty is limited to the original Purchaser ("Purchaser") and is not transferable. REPAIR OR REPLACEMENT AS PROVIDED UNDER THIS WARRANTY IS THE EXCLUSIVE REMEDY OF THE PURCHASER. This warranty covers only those Products purchased from an authorized Horizon dealer. Third party transactions are not covered by this warranty. Proof of purchase is required for warranty claims. Further, Horizon reserves the right to change or modify this warranty without notice and disclaims all other warranties, express or implied.

(b) Limitations- HORIZON MAKES NO WARRANTY OR REPRESENTATION, EXPRESS OR IMPLIED, ABOUT NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OF THE PRODUCT. THE PURCHASER ACKNOWLEDGES THAT THEY ALONE HAVE DETERMINED THAT THE PRODUCT WILL SUITABLY MEET THE REQUIREMENTS OF THE PURCHASER'S INTENDED USE.

(c) Purchaser Remedy- Horizon's sole obligation hereunder shall be that Horizon will, at its option, (i) repair or (ii) replace, any Product determined by Horizon to be defective. In the event of a defect, these are the Purchaser's exclusive remedies. Horizon reserves the right to inspect any and all equipment involved in a warranty claim. Repair or replacement decisions are at the sole discretion of Horizon. This warranty does not cover cosmetic damage or damage due to acts of God, accident, misuse, abuse, negligence, commercial use, or modification of or to any part of the Product. This warranty does not cover damage due to improper installation, operation, maintenance, or attempted repair by anyone other than Horizon. Return of any goods by Purchaser must be approved in writing by Horizon before shipment.

**Damage Limits:**

HORIZON SHALL NOT BE LIABLE FOR SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES, LOSS OF PROFITS OR PRODUCTION OR COMMERCIAL LOSS IN ANY WAY CONNECTED WITH THE PRODUCT, WHETHER SUCH CLAIM IS BASED IN CONTRACT, WARRANTY, NEGLIGENCE, OR STRICT LIABILITY. Further, in no event shall the liability of Horizon exceed the individual price of the Product on which liability is asserted. As Horizon has no control over use, setup, final assembly, modification or misuse, no liability shall be assumed nor accepted for any resulting damage or injury. By the act of use, setup or assembly, the user accepts all resulting liability.

If you as the Purchaser or user are not prepared to accept the liability associated with the use of this Product, you are advised to return this Product immediately in new and unused condition to the place of purchase.

Law: These Terms are governed by Illinois law (without regard to conflict of law principals).

**Safety Precautions:**

This is a sophisticated hobby Product and not a toy. It must be operated with caution and common sense and requires some basic mechanical ability. Failure to operate this Product in a safe and responsible manner could result in injury or damage to the Product or other property. This Product is not intended for use by children without direct adult supervision. The Product manual contains instructions for safety, operation and maintenance. It is essential to read and follow all the instructions and warnings in the manual, prior to assembly, setup or use, in order to operate correctly and avoid damage or injury.

**Questions, Assistance, and Repairs:**

Your local hobby store and/or place of purchase cannot provide warranty support or repair. Once assembly, setup or use of the Product has been started, you must contact Horizon directly. This will enable Horizon to better answer your questions and service you in the event that you may need any assistance. For questions or assistance, please direct your email to [productsupport@horizonhobby.com](mailto:productsupport@horizonhobby.com), or call 877.504.0233 toll free to speak to a service technician.

**Inspection or Repairs**

If this Product needs to be inspected or repaired, please call for a Return Merchandise Authorization (RMA). Pack the Product securely using a shipping carton. Please note that original boxes may be included, but are not designed to withstand the rigors of shipping without additional protection. Ship via a carrier that provides tracking and insurance for lost or damaged parcels, as **Horizon is not responsible for merchandise until it arrives and is accepted at our facility**. A Service Repair Request is available at [www.horizonhobby.com](http://www.horizonhobby.com) on the "Support" tab. If you do not have internet access, please include a letter with your complete name, street address, email address and phone number where you can be reached during business days, your RMA number, a list of the included items, method of payment for any non-warranty expenses and a brief summary of the problem. Your original sales receipt must also be included for warranty consideration. Be sure your name, address, and RMA number are clearly written on the outside of the shipping carton.

**Warranty Inspection and Repairs**

**To receive warranty service, you must include your original sales receipt** verifying the proof-of-purchase date. Provided warranty conditions have been met, your Product will be repaired or replaced free of charge. Repair or replacement decisions are at the sole discretion of Horizon Hobby.

**Non-Warranty Repairs**

**Should your repair not be covered by warranty the repair will be completed and payment will be required without notification or estimate of the expense unless the expense exceeds 50% of the retail purchase cost.** By submitting the item for repair you are agreeing to payment of the repair without notification. Repair estimates are available upon request. You must include this request with your repair. Non-warranty repair estimates will be billed a minimum of ½ hour of labor. In addition you will be billed for return freight. Please advise us of your preferred method of payment. Horizon accepts money orders and cashiers checks, as well as Visa, MasterCard, American Express, and Discover cards. If you choose to pay by credit card, please include your credit card number and expiration date. Any repair left unpaid or unclaimed after 90 days will be considered abandoned and will be disposed of accordingly. **Please note: non-warranty repair is only available on electronics and model engines.**

Electronics and engines requiring inspection or repair should be shipped to the following address:

**Horizon Service Center  
4105 Fieldstone Road  
Champaign, Illinois 61822**

All other Products requiring warranty inspection or repair should be shipped to the following address:

**Horizon Product Support  
4105 Fieldstone Road  
Champaign, Illinois 61822**

**Please call 877-504-0233 with any questions or concerns regarding this product or warranty.**