



# High Power Adapters For FlightPower And Thunder Power Batteries

When charging or discharging FlightPower and Thunder Power brand LiPos between 3-6 amps through the Equinox LiPo Cell Balancer from ElectriFly, it's necessary to use these high power adapters. Adapters are available for batteries configured as 2S, 3S, 4S, and 5S packs. Please read all instructions thoroughly before use.

## SPECIFICATIONS

Compatible input: Compatible batteries: Voltage range: Max. current: Battery power connector: Equinox LiPo Cell Balancer by ElectriFly (GPMM3160) FlightPower and Thunder Power LiPo batteries which are **wired for balancing only** 2S, 3S, 4S, and 5S (7.4V, 11.1V, 14.8V, 18.5V) 6 amps Deans<sup>®</sup> Ultra male

## **IMPORTANT PRECAUTIONS**

- **NEVER** attempt to charge or discharge a battery through Equinox or the high power adapters at more than 6 amps, as permanent damage will result.
- **NEVER** cut or attempt to modify the wiring of any adapter. Failure to do so might result in erratic or a short-circuit condition which could cause permanent damage to all equipment.

## CARE & HANDLING OF LITHIUM-POLYMER & LITHIUM-ION BATTERIES

**Never attempt to care for lithium-polymer (LiPo) cells in the same way as other battery types!** LiPo characteristics differ greatly from NiCd and NiMH batteries and therefore require different care and handling. Always read the instructions that are included with your lithium batteries and lithium charger carefully before use. Failure to follow these care and handling instructions can quickly result in severe, permanent damage to the batteries and its surroundings and even start a **FIRE!** 

- IMPORTANT!! CHARGING AT MORE THAN 3 AMPS IS RECOMMENDED ONLY FOR LIPO BATTERIES WITH A RATED CAPACITY OF MORE THAN 3000MAH. ALWAYS FOLLOW THE MAXIMUM CHARGE CURRENT RECOMMENDATIONS FROM YOUR BATTERY SUPPLIER, WHICH SHOULD BE NO MORE THAN THE BATTERY'S 1C RATING. NEVER CHARGE LIPO PACKS AT CURRENTS EXCEEDING THEIR MAXIMUM CHARGE CURRENT RATING.
- ALWAYS charge lithium batteries in a fireproof location, which could be a container made of metal or ceramic tile. Monitor the area with a smoke or fire alarm, and have a lithium approved "ABC type" fire extinguisher available at all times. **NEVER** charge lithium batteries on a combustible surface, such as paper, carpet, leather, a wooden or plastic surface, inside an R/C model or full sized automobile.
- NEVER leave lithium batteries unattended during charge!
- ALWAYS provide adequate ventilation around LiPo batteries during charge, discharge, while in use, and during storage.
- NEVER allow LiPo cells to overheat at any time, as they can and usually will become physically damaged and could possibly EXPLODE or catch FIRE!! If a battery becomes overheated, disconnect it from the charger IMMEDIATELY!
- NEVER continue to charge LiPo batteries if the charger fails to recognize full charge. Swelling of LiPo cells is an indication that they are in an overcharge condition and they should be disconnected from the charger immediately.
- **NEVER** set the charger's LiPo battery voltage to greater than the nominal rating of the LiPo battery, as such cells cannot handle overcharging in any way.
- NEVER discharge LiPo batteries at currents which exceed the discharge current rating of the battery, as this can often cause a cell to overheat.
- NEVER allow LiPo cells to come in contact with moisture or water at any time.
- **NEVER** allow the internal electrolyte from LiPo batteries to get in the eyes or on skin wash affected areas immediately if they come in contact with the electrolyte and contact your physician!
- ALWAYS store LiPo cells/packs in a secure location away from children.

# CONNECTIONS

These high powered adapters are unlike the adapters which are included with the Equinox LiPo Cell Balancer. Instead of all current being transferred between the battery and charger through the balancing connectors, some current is also transferred through the Deans<sup>®</sup> plug. The balancing connectors still allow Equinox to monitor the voltage of each cell in the pack. ALL connectors must be connected for these adapters to work correctly.



LIPO BATTER

- 1. Using a high powered adapter is necessary only when using the Equinox LiPo balancer in Interface Mode (connected to a separate charger or discharger). It is not necessary to use a high powered adapter when Equinox is used in Quick-Balance mode.
- 2. Connect the larger connector to Equinox's output jack.
- 3. Connect the smaller balancing connector to the balancing plug on the battery.
- 4. Connect the male Deans Ultra plug on the adapter to the female Deans Ultra plug on the battery.
- 5. Follow all instructions with the Equinox balancer to charge or discharge.

# ADDITIONAL ADAPTERS

Other adapters are available separately for the Equinox LiPo Cell Balancer, which can be found at your local retailers:

GPMM31612S, 3S Adapters - ElectriFlyGPMM31624S, 5S Adapters - ElectriFlyGPMM31632 - 5S Hi Power Adapters - ElectriFlyGPMM31802S Adapters - FlightPower/Thunder Power (3)GPMM31813S Adapters - FlightPower/Thunder Power (3)GPMM31824S Adapters - FlightPower/Thunder Power (3)GPMM31835S Adapters - FlightPower/Thunder Power (3)

| 2S Hi Power Adapters - FlightPower/Thunder Power (3)<br>3S Hi Power Adapters - FlightPower/Thunder Power (3)<br>4S Hi Power Adapters - FlightPower/Thunder Power (3) |
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| 5S Hi Power Adapters - FlightPower/Thunder Power (3)   |
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# TROUBLESHOOTING GUIDE

**PROBLEM**: Equinox Cell LEDs do not show the correct number of cells in the battery. (1) Bad cell in the pack. (2) Incorrect adapter harness used. (3) Bad connector on battery, adapter or Equinox. (4) Cell voltage too low for Equinox to detect. **PROBLEM**: Batt voltage low after charging in Interface Mode. (1) Charger set to incorrect voltage. (2) Wrong type adapter

connected to the battery. (3) Cell in LiPo pack bad, or at too low a voltage for Equinox to recognize. **PROBLEM**: Can't charge through Equinox. (1) Equinox not set in Interface Mode before starting charge. (2) Bad connection on input or output. (3) Charger set to incorrect voltage, or identifies problem with battery and won't allow itself to start delivering charge.

(4) Deans plug on adapter not connected to Deans plug on battery. (5) Possible damage, contact Hobby Services. **PROBLEM**: Can't discharge through Equinox while in Interface Mode. (1) Equinox not set in Interface Mode before starting discharge. (2) Bad connection on input or output. (3) Discharger set to incorrect voltage, or identifies problem with battery and won't allow itself to start discharging. (4) Possible damage, contact Hobby Services. (5) Possible damage, contact Hobby Services.

## 1-YEAR LIMITED WARRANTY - \*U.S.A. & CANADA ONLY

ElectriFly warrants this product to be free from defects in materials and workmanship for a period of one (1) year from the date of purchase. During that period, ElectriFly will, at its option, repair or replace without service charge any product deemed defective due to those causes. You will be required to provide proof of purchase (invoice or receipt). This warranty does not cover damage caused by abuse, misuse, alteration or accident. If there is damage stemming from these causes within the stated warranty period, ElectriFly will, at its option, repair or replace it for a service charge not greater than 50% of its then current retail list price. Be sure to include your daytime telephone number in case we need to contact you about your repair. This warranty gives you specific rights. You may also have other rights, which vary from state to state.

For service on your ElectriFly product, warranty or non-warranty, send it post-paid and insured to:

HOBBY SERVICES 3002 N. Apollo Drive, Suite 1 Champaign, IL 61822 (217) 398-0007 www.hobbyservices@hobbico.com



\*For warranty and service information if purchased outside the USA or Canada, see the additional warranty information insert (if applicable) or ask your retailer for more information.