

Thank you for purchasing an Airtek Lipo pack. Lipo batteries outperform previous battery technology such as Ni-Cd and Ni-MH by a significant margin in terms of capacity, voltage and weight. The downside to these performance gains are that lipo batteries require special handling and care. When following these guidelines you can expect safe and reliable performance from your battery pack.

**PLEASE THOROUGHLY READ THE FOLLOWING SAFETY INSTRUCTIONS BEFORE USING YOUR BATTERY PACK FOR THE FIRST TIME.**

- Never leave your battery unattended whilst charging is taking place and charge in a fire proof location. Lipo batteries have been known to spontaneously combust so must be attended at all times during charging.
- Always charge your lipo in a fireproof bag. They are inexpensive and can contain a fire should one occur.
- Always remove your battery from the model during charging. A hot pack could ignite foam plastic or wood.
- Never trickle charge your Lipo Pack.
- If your battery exceeds 140°F/60°C during charging it is possible that it has been previously damaged. Terminate the charging process immediately and dispose of the battery pack.
- If you see any smoke or swelling of the pack during the charging pack terminate charging immediately. The chemicals used in a Lipo pack if leaked may ignite upon exposure to the air. Remove the battery pack to a safe place and leave for 60 minutes.
- If you crash your model check the battery for damage. It may appear to have no physical damage but there may be a delayed chemical reaction internally which could cause a fire. Remove to a safe fire proof location and leave for 24 hours.
- Do not allow the batteries electrolyte to get into your eyes or on your skin. Wash affected areas immediately and seek medical attention.
- Always transport your Lipos in a fireproof bag or container and do not leave in a hot car.
- Always store your Lipos in a fireproof bag or container in a temperature of between 40° to 75° F out of direct sunlight and away from any liquids. Make sure all plugs and connectors are adequately covered to prevent accidental shorting.
- Never carry your Lipo pack in your pocket or clothing.
- Never solder to your battery pack. Soldering to Lipo cells requires specialist knowledge and conditions.
- Never modify, disassemble or puncture your Lipo pack.

### **NOW PLEASE READ THE USAGE INSTRUCTIONS BELOW**

- Charge your battery using a charger specifically designed for the charging of lithium polymer batteries. If your charger is capable of charging other types of battery always ensure it is set to Lipo mode. NEVER EVER use a charger designed for Ni-CD/Ni-Mh batteries.
- Your Airtek Lipo is designed to be charged at a rate of 1C only (1C is the hour rate of the pack)- NEVER CHARGE AT A HIGHER RATE. To set your charger correctly for your chosen pack use the following examples:  
  
For a 3 Cell 2200mah battery set the cell count on your charger to 3cell (some chargers will auto detect) and the charge rate at 2.2amps, for a 2 cell 500mah battery set your charger to 2 cell and your charge rate to 0.5amps i.e take the mah rating of your battery and divide by 1,000 to find the charge amperage rate. Therefore an 1800mah battery is charged at 1.8amp, a 1300mah battery is charged at 1.3amp etc. You may wish to charge the pack at a lower amp rating than 1C which is perfectly acceptable but this will require a longer charging time.
- We recommend you balance charge your pack EVERY TIME through the JST-XH balance plug. If your charger does not have a JST-XH port or lead you will have to purchase an adaptor.

- Never discharge your battery to below 3.3v per cell. For first flights it is particularly important not to over discharge otherwise your pack will be PERMANENTLY RUINED. Keep the first few flights short and avoid excessive high throttle use to break in the pack.
- Lipo cells do not have the cycle life of other batteries. As a general rule you can expect up to 100 cycles from your pack, but MUCH LESS if pushed hard. Where possible follow the '80% rule'. This is where you assume your cells are 80% of the stated capacity. e.g. 80% of a 2000mah pack = 1600. Times this by the maximum discharge rate of the battery (25c in the case of Airtek lipos) which equals 40amps. If you ensure that your motor does not draw more than 40amps you will DRAMATICALLY INCREASE THE CYCLE LIFE OF YOUR PACK.
- Do not store your packs in a discharged state. If your charger has a storage mode use it.
- Before each flight check the voltage before recharging (inexpensive voltage checkers are available from Airtek Hobbies). Do not charge if the voltage is below 3.0v per cell i.e. for a 2 cell pack 6.0v, a three cell pack 9.0v etc.
- Always use a quality ESC designed for use with Lipo cells be sure to set your esc to the correct cut off voltage if this is required (many do this automatically).
- A battery that loses 20% of its capacity should be considered expired and must be disposed of.

## LIPO BATTERY DISPOSAL

Lipo batteries must be disposed of if damaged or if they have reached the end of their service life. Where possible discharge the pack prior to disposal. Lipo batteries are more environmentally friendly than other types, but before disposing please do the following:

- Put the battery in a tub or bucket (with a lid which does not need to be air tight) of salt water. Use approximately 3 gallons of water with half a cup of salt per gallon. Place the battery in the solution and leave in a safe place (away from pets and children) for 2 weeks.
- After 2 weeks it is safe to remove the battery and dispose of at your local household waste recycling site.

### LIPO BATTERY WARRANTY

**Because of the nature of Lipo batteries and the fact that we have no control over the use of these packs we only offer a very limited warranty. Each pack is checked for voltage prior to posting to ensure that the minimum cell voltage required is correct. It is the customers responsibility to check that the voltage is not below 3.0v per cell before using/charging. ONCE THE BATTERY IS CONNECTED TO A CHARGER WE OFFER NO FURTHER WARRANTY OTHER THAN YOUR STATUTORY RIGHTS.**

**Airtek Hobbies and their employees/representatives accept no responsibility for the misuse of this product by the buyer who must take full responsibility for the use of their Lipo Pack.**

**IF YOU DO NOT AGREE WITH THIS WARRANTY PLEASE DO NOT USE YOUR PACK AND RETURN FOR A REFUND.**

### **AND FINALLY...**

Please do not be put off by all of the above. We sincerely wish you many happy hours of use. The information is provided for your own safety and to enhance the enjoyment of your product.

Happy Landings!

**For a full range of accessories to compliment your Lipo, please visit [www.airtek hobbies.com](http://www.airtek hobbies.com)  
We hope you enjoy your product - Happy Landings!**

**airtek**

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