

## DRAGANFLYER LITHIUM-POLYMER BATTERY PRECAUTIONS

### **READ AND UNDERSTAND THESE SAFETY INSTRUCTIONS AND WARNINGS BEFORE USING OR CHARGING YOUR LITHIUM-POLYMER BATTERIES**

### **NEVER CHARGE ANY LITHIUM-POLYMER BATTERIES UNATTENDED**

Lithium-Polymer batteries are a revolution in battery technology. These next-generation batteries are capable of powering the Draganflyer in ways that would have been unimaginable only a year ago. However, lithium batteries require special consideration and handling techniques due to their extremely high capacity.

- **If more than  $\frac{3}{4}$  throttle is required to sustain a hover, end use, let battery cool, and re-charge. Draining the battery past this point will drastically reduce its lifespan, and fully discharging the battery will cause permanent damage.**
- **Use only the approved charger supplied by Draganfly Innovations to charge the Draganflyer's Lithium-Polymer battery.**
- **Never allow the battery to short circuit**
- **Do not leave Lithium-Polymer batteries charging unattended**
- **Use caution to prevent puncturing or rupture of the cells**
- **Do not charge batteries near flammable materials such as carpet, furniture, drapes, oils, gasoline etc.**

If the Lithium-Polymer battery is damaged in a crash or appears to swell, discontinue use immediately. Even if there are no signs of damage, visually monitor the battery on a non-flammable surface to ensure it has not sustained any internal damage.

Charge your battery on a safe surface, away from any flammable materials.

If the battery balloons or expands, it can not be used again, and it must be disposed of according to your location's safe battery disposal procedures. If the charger refuses to charge the battery it may be because a cell is damaged. Contact Draganfly Innovations to determine the cause.

As soon as a drop in power is noticed, **end use immediately and wait until battery cools** (30-45 minutes) before charging again. Lithium-Polymer batteries have no memory effect, and fully discharging them will only shorten their life.

If you notice a performance decrease of greater than 20% in your Lithium-Polymer battery, the battery is at the end of its life cycle. Do not continue to use, and ensure the battery is disposed of properly.

Do not store the Lithium-Polymer battery inside a vehicle. Temperatures inside a parked vehicle can rapidly exceed the recommended maximum of 140 degrees Fahrenheit.

**If at any time you witness the battery swelling or ballooning** while charging remove from charger **IMMEDIATELY** and observe the battery carefully in an area safe from fires. If the battery leaks, a chemical reaction may occur resulting in a fire.

**Lithium-Polymer batteries have unparalleled energy density, and, if used improperly, may cause a fire.**

**NEVER CHARGE ANY LITHIUM-POLYMER BATTERIES UNATTENDED**  
**Safety Information**

# DRAGANFLYER LITHIUM-POLYMER BATTERY PRECAUTIONS

Lithium-Polymer batteries are a revolution in battery technology. These next-generation batteries are capable of powering the Draganflyer in ways that would have been unimaginable only a year ago. However, lithium batteries require special consideration and handling techniques due to their extremely high capacity.

- Use only chargers designed specifically for Lithium-Polymer batteries
- Never allow the battery to short circuit
- Do not leave Lithium-Polymer batteries charging unattended
- Do not charge batteries near flammable materials

If the Lithium-Polymer battery is damaged in a crash or appears to swell, discontinue use immediately and contact Draganfly Innovations technical support for assistance.

## Supplied Components

Your Draganflyer will include a 3-cell (11.1v) Lithium-Polymer battery, charger, and AC adapter.

- The type of battery supplied will be indicated on a label affixed to the battery.
- The charger will also be labeled as being designed for 3-cell or 4-cell batteries.

## Using your Draganflyer Lithium-Polymer battery charger

1. Connect the charger to the supplied AC adapter.
2. The charger's green light will illuminate and blink slowly.

## Charging the Lithium-Polymer battery

1. Connect the battery to the charger.
2. The green light will illuminate steadily.
3. When done charging (1-3 hours) the green light will go out.

## DO NOT LEAVE LITHIUM BATTERIES CHARGING UNATTENDED

### Charging the Transmitter

1. Connect the transmitter to the charger.
  2. The yellow light will illuminate.
  3. The transmitter will be fully charged in 14 to 16 hours
- NOTE: The yellow light will NOT go off when the transmitter is fully charged

### Flying the Draganflyer with Lithium-Polymer batteries

The Draganflyer may be operated as it normally would with Ni-Cad batteries, however we recommend the following:

1. Allow the Draganflyer motors to cool after every 5-7 minutes of flight. Extended continuous operation of the Draganflyer (especially when performing advanced maneuvers) will result in overheating of the motors and possibly shorten their life. This will also allow the battery to cool, resulting in longer overall flight times, and longer overall life for the batteries.
2. Allow the battery to cool to room temperature after use and before charging as well as after charge and before use in the Draganflyer.
3. Removal of the red caps (if supplied) from the motors will aid in cooling the motors extending both flight time and life of the motors.