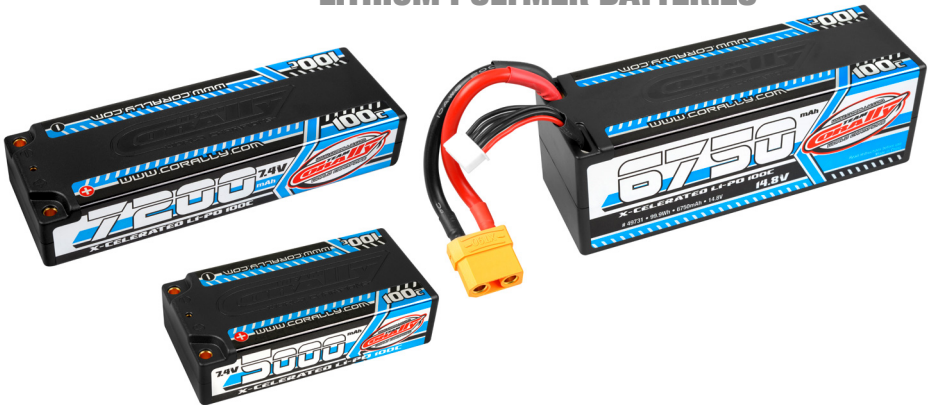




# LITHIUM POLYMER BATTERY SAFETY PRECAUTIONS

## LITHIUM POLYMER BATTERIES



## LIPO SAFETY BAGS



Please Read these instructions carefully and especially if you are not familiar with handling LiPo batteries. It is very important to observe these instructions for your safety as well as that of other people and property. Failure to comply with these operating instructions may result in a risk of fire and serious injury and damage to property.

# LITHIUM POLYMER BATTERY SAFETY PRECAUTIONS

## NEVER Forget

Take all necessary precautions before, during and after using the LiPo battery. You are responsible for the safe charge and use of your LiPo battery.

## LiPo Battery Charge Safety Precautions

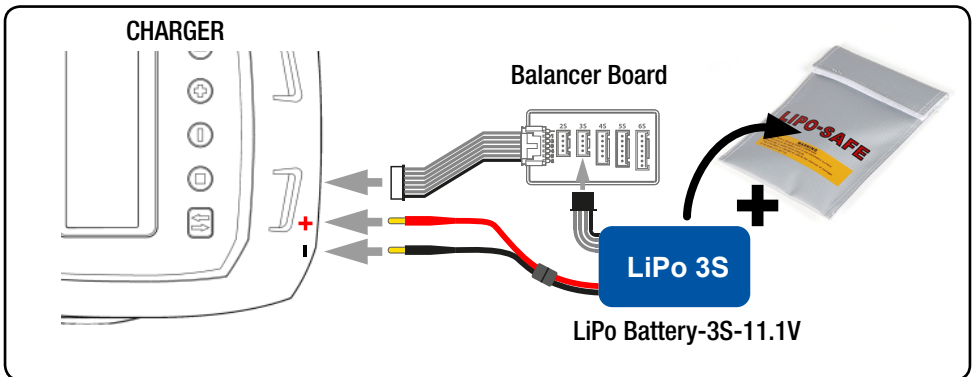
- Always follow the manufacturer's safety instructions
- Use only a charger designed for charging LiPo batteries. Never use any other type of charger.
- When charging a LiPo battery always use LiPo Safety Bag (Flame retardant).
- Never charge a LiPo battery while inside your model.
- Always charge the LiPo battery outdoors or in a ventilated area away from flammable objects and surfaces.
- NEVER leave your LiPo battery unattended while charging.
- If the battery swells during charging, stop charging immediately and disconnect the battery from the charger. Leave the battery outside for a few hours and observe. Then recycle the battery according to the instructions of your country/region.
- Never charge a damaged or inflated battery.  
Always use the appropriate balancer/charger when charging your LiPo battery pack.
- Never charge a very hot battery as this may cause an explosion or fire.
- When the battery is empty, recharge it immediately. Do not store an empty battery, the battery will continue to discharge, it will fall below the minimum voltage and become unusable.
- It is prohibited to disassemble a LiPo battery, this may generate a gas release or cause a fire
- If your skin or eyes come into contact with liquid from the battery, rinse thoroughly and notify a medical service for expert advice.

## Connecting the LiPo Battery to the Charger *(Read the Charger Instructions)*

Always use a balancer board to charge LiPo Battery with more than 1 cell.

Observe the polarities (Negative and Positive).

Use the charger program to charge the LiPo batteries, never use any other program.



# LITHIUM POLYMER BATTERY SAFETY PRECAUTIONS

## LiPo Battery Charge Current (Ah)

Charging current should be less than maximum charge current specified in the Product Specification. Charging with higher current than recommended value may cause damage to cell electrical, mechanical and safety performance and could lead to heat generation or leakage.

## LiPo Battery Charging voltage (V)

Read the Product Specification and respect the maximum voltage (4,2V/cell). Never charge higher than 4,25V, which is the maximum voltage. Charging with a higher voltage will irreparably damage the battery and may lead to the start of a fire.

## LiPo Battery Charging Temperature

The battery must be charged to an ambient temperature of 10°C~45°C.

## Reverse Polarity

It is essential to observe the polarity. Reverse polarity (POSITIVE and NEGATIVE) will damage the cells, cause the battery to swell and can damage your charger.

## Discharging Current

The battery must be discharged at less than the maximum discharge current specified in the battery instruction manual. High discharging current may reduce the discharging capacity significantly or cause over-heat.

## Discharge Temperature

Environmental temperature : -20°C~60°C.

## Over Discharging

Never discharge the battery cells below 3.2V.

When the battery is empty, recharge it immediately. Do not store an empty battery, the battery will continue to discharge, it will fall below the minimum voltage and become unusable.

To prevent over-discharging, the battery shall be charged periodically to maintain between 3.6V and 3.9V. The High-performance charger are equipped with a device to prevent further discharging exceeding a specified cut-off voltage.

## LiPo Battery Storage

The batteries must be stored within -10°C~45°C range environmental condition.

If the battery has to be stored for a long time (+3 months), the voltage storage shall be a 3.6V~3.9V range. Always store your LiPo pack in a safe and non flammable container away from flammable objects.

## Handling of LiPo Battery

Take maximum care when handling and installing LiPo batteries made of flexible aluminum packaging in your model. These batteries are quickly damaged on sharp edges or spikes.



# LITHIUM POLYMER BATTERY SAFETY PRECAUTIONS

Never drop this type of battery, it will be deformed and we advise you never to try to charge a deformed battery as this may cause swelling, leakage and even fire.

## Soldering Connectors

Use a soldering iron where the temperature can be controlled.

The temperature must not exceed 350°C and the time must not exceed 3 seconds.

Perfectly isolate all electrical connections from the battery circuit.

## Battery installation

The battery must be installed in the model on a flat surface.

The battery must be protected from physical contact with any other part of the model.

The battery must be protected against shocks and splashing of materials from outside the model. The battery and all electrical connections must be protected against splashing liquids. Electrical cables and connectors must be protected against accidental tearing.

## Recycling after use

- If the battery swells during charging, stop charging immediately and disconnect the battery from the charger. Leave the battery outside for a few hours and observe.
- Before recycling your defective battery, it must be neutralized. Take a plastic container, fill it with water and add a lot of salt until the water becomes opaque. Place the LiPo battery in the water and leave for 24 hours. Check with a voltmeter that the voltage is 0.0V.
- Then recycle the battery according to the instructions of your country/region. Never dispose of a LIPO battery with domestic waste.
- Never incinerate nor dispose of the cells in a fire. These may cause firing of the cells, which is very dangerous and is prohibited.
- The cells shall never be soaked with liquids such as water, seawater drinks such as soft drinks, juices coffee or others.