How to maintain the Lipo battery?

Before Charge

- Please read the charger instruction book before charging.
- Always check the voltage of Batteries before each charge session in order to ensure they are at or above the minimum safe starting voltage. If starting voltage is below recommended levels then Batteries have been over discharged or have experienced a failure and should NOT be charged.
- Always check the battery before charging for any type of damage. Check the battery packaging, wires and connectors for defects, which may cause a short circuit and eventual battery failure.
- Make sure you are using charge leads which are compatible with the battery connectors.
- User should check the polarity of the battery cable and charger lead carefully before the connection to avoid any short circuit.
- Always verify the charger is in good condition. A poor quality charger can be dangerous.
  It is solely your responsibility to assure that the charger you use works properly. Always monitor the charging process to assure batteries are being charged properly. Failure to do so may result in a fire.

Charging

- Only use charger designed for lithium polymer/Lion battery. Do not use a NIMH/ NICD/ LIFEPO4/ LEAD ACID charger. If the charger can support different battery types. Be absolutely sure to select the Lithium polymer (Lipo) mode on the charger. Failure to do so may cause a fire, which may result in personal injury and property damage.
- User should Always charge Batteries in an open area away from flammable materials, liquids and surfaces.
- Never charge Batteries inside of the model.
- Never charge batteries below freezing (0°C, 32°F)
- Never charge Batteries that are hot to the touch (above 100° F). DO NOT handle Batteries until they are cool.
- User should Always set the charger to the proper cell count and/or voltage listed on Batteries' labels.
- User should Always set the charger to the amp charge rate as listed on Batteries' labels.
  The charger should never be set to charge Batteries at a rate greater than 1C (One (1) times the capacity of Batteries in amp hours) unless another C rate is specified in the manufacturer's product documentation or the rate is preset as part of a specific battery and charger combination. DO NOT alter the charge rate once charging has begun.

- Never overcharge Batteries beyond the capacity listed on Batteries' labels.
- Never overcharge batteries over their rated maximal voltage (4.2V/cell for LiPo).
- It must choose series charging if two or more battery packs be connected in series for using.
- Use suitable and good quality chargers, please don't use cheap and low quality chargers, use the professional Lithium polymer charger to charge the Gens ace & Tattu battery. When charging, please make sure the surroundings is clean, without sundries around. Don't charge without monitoring. Using lipo sack is suggested when charging to ensure the charging safety. Stop charging timely when the battery is fully charged. Do not connect the charger and the battery for a long time when the battery is fully charged. We will not be responsible for any personal in jury and property lost or any kind accident that caused by improper charging.

Discharging

- Never discharge Batteries at amperage rates higher than specified on Batteries' labels.
- Never allow the temperature of Batteries to exceed 140°F during discharge. Adequate cooling for Batteries is required, especially when discharging at or near maximum rates.

- Never discharge Batteries to voltage below which they are rated by the manufacturer when measured under load(connected to the vehicle or a charger capable of discharge). Batteries discharged to a voltage lower than the lowest approved voltage may be damaged, resulting in loss of performance and potential fire when Batteries are charged.
- Never discharge battery to a level below 3V per cell under load. For Tattu series batteries which are used for Unmanned Aircraft System, The recommended cut off voltage is 3.5V per cell.
- Never leave battery unattended during the discharging process. During the discharging process, user should monitor the process constantly and react to potential problem that may occur.
- In case of emergency, discontinue the process immediately, disconnect the battery, place it in a safe area, and observe it for approximately one hour. This may cause the battery to leak and the reaction with air may cause the chemicals to ignite, resulting in a fire. A safe area should be outside of any building or vehicle and away from any combustible materials. A battery can still ignite even after one hour.
- User need to check the conditions of the battery before use it or discharge it. Stop using it if user found the cells are not balanced or cells are puffing or weeping.

Lipo Battery Storage:

- Do not directly connect the terminals with metal objects. This will short-circuit Batteries, resulting in heat and electrical discharge.
- Never store loose Batteries together, the Batteries' terminals may contact one another causing a short circuit.
- Never storage Batteries to extreme temperatures or direct sunlight. The battery should be stored within -10℃ ~ 45℃ range environmental condition. If the battery has to be stored for a long time (Over 3 months), the environmental condition should be:
  Temperature: 23±5℃

  Humidity: 65±20%RH

  The voltage for a long time storage should be 3.6V~3.9V range per cell.

- Always disconnect Batteries when not in use and store Batteries in a non-conductive and fireproof container.
- Never alter, puncture or impact Batteries or related components.