QuietKat Lithium-Ion Battery Maintenance Manual

This document describes the detailed maintenance operations for the Li-ion Battery packs supplied by QuietKat Inc., the products mentioned in the document accord with GB/T18333.1-2001 Standard.

Transportation:

- Batteries can be transported (with proper paperwork) via truck, train, and vessel, **NOT by airplane**. Keep out of the sun & rain during transportation.
- Keep dry, well ventilated, and out of direct sunlight
- Hand with care during assembly
- Do not throw
- Do not place under heavy objects
- Do not transport or store near flammable, explosive, or sharp objects
- Package should be labeled with Moisture Proof/Water Proof, Anti-Fire and Fragile stickers

Storage:

- When the battery has not been use for more than 2 months, discharge and re-charge it to reactivate the electricity prior to use.
- To ensure a longer battery life cycle, it is recommended to cycle the battery pack (discharge and re-charge) every 2 to 3 months. This should be completed even when the battery is being stored long term.
- Do not store a fully charged battery pack, discharge or charge the battery to 40% to 60% state of charge (SOC).
- Before using a battery pack that has been stored for a long period of time, cycle the battery several times. Doing this will help balance the cells, eliminate the SOC difference, and the lost capacity in the cells should be restored.
- When your QuietKat is not ins use, disconnect the Anderson cable connection from the battery & QuietKat (unplug battery from unit).

Operation:

- If the battery fully discharges and turns off automatically, re-charge the battery pack within 12 hours. Failure to do so could shorten the battery life cycle.
- Do not try to utilize a battery pack that has turned off automatically until it has been recharged.
- The recommended range of charge is up to 90% SOC and discharge of no less than 20% when the battery is in use to prolong the battery life cycle.
- When you QuietKat is not in use, disconnect the Anderson cable connection from the battery & QuietKat (unplug battery from unit).
- The battery pack performance is best under the following conditions:
  - -15°C to 50°C (5°F to 122°F) for discharging
  - 0°C to 45°C (32°F to 113°F) for charging
  - Best working conditions are 15°C to 40°C (59°F to 104°F)
Operation (continued):

- Use heat insulation materials in the winter to keep the battery protected from extreme cold. When the internal temperature of the battery is lower than -15°C (5°F) there is a risk of shortened battery life cycle.
- Keep out of direct sunlight. When the internal temperature of the battery pack is in excess of 75°C (167°F) there is a risk of shortened battery life cycle and explosion.
- Do not wash the battery shell with organic solvent.
- In case of fire, do NOT use CO2 to extinguish fire. Use CCl4 or sand/soil to extinguish fire.
- Handle the battery pack with care. Do not throw, drop, or expose to heavy vibration.
- Do not submerge the battery pack in water. The battery pack should remain dry at all times.

Warranty

We will repair or replace any battery pack during the warranty period for the below issues:

- The battery pack cannot be charged or discharged
- The battery capacity is less than 80% of rated capacity in the first year, under the standard conditions for testing
- There is liquid leakage
- The battery pack casing or wires have damage caused by the battery

The following will void all warranty on the battery pack:

- Manual instructions were not followed which resulted in battery damage.
- The battery pack is dismantled or converted in any way by the user or representative of the user.
- The battery is charged with the incorrect charger for the battery pack and damage is caused to the unit.
- There is damage to the battery, the battery case, the battery pack wires, or the battery charger that was caused by the user or a representative of the user.