

FOWADO LITHIUM BATTERY SAFETY MANUAL

NOTICE

This document applies to the following models of Fowado batteries: Fowado US 6S and 12S High Performance Lithium Polymer Batteries. All instructions and other collateral documents are subject to change at the sole discretion of Fowado Unmanned Systems. For up-to-date information, visit www.fowadotechnologygroup.com and click on the product page for this product.

Glossary

The following terms are used throughout the product literature to indicate various levels of potential harm when operating this product.

NOTICE - Procedures, which if not properly followed, create a possibility of physical property damage AND a little or no possibility of injury.

CAUTION - Procedures, which if not properly followed, create the probability of physical property damage AND a possibility of serious injury.

WARNING - Procedures, which if not properly followed, create the probability of property damage, collateral damage, and serious injury OR create a high probability of superficial injury.



WARNING Read the ENTIRE user manual to become familiar with the features of this product before operating it. Failure to operate the product correctly can result in damage to the product, or personal property, and may cause serious injury. It must be operated with caution and common sense and requires some basic mechanical knowledge and ability. Failure to operate this product in a safe and responsible manner could result in injury, or damage to the product, or other property. This product is not intended for use by children without direct adult supervision. DO NOT use this product with incompatible components, or alter this product in any way outside of the documents provided by Fowado Technology Group, LLC. These Safety Guidelines contain instructions for safety, operation and maintenance. It is essential to read and follow all of the instructions and warnings in the user manual prior to assembly, setup or use, in order to operate the product correctly and safely, avoiding damage or serious injury.



WARNING
To avoid fire, serious injury, and property damage, observe the following safety guidelines when using, charging, or storing your Lithium Battery.

USING THE BATTERY

1. DO NOT allow the battery to come into contact with any kind of liquid. If the inside of the battery comes into contact with water, chemical decomposition may occur, possibly resulting in the battery catching fire, or even exploding.

2. Never use or charge swollen, leaky, or damaged batteries. If your battery is abnormal, contact Fowado US Service Department immediately for further assistance.

3. Never install or remove the battery from the aircraft when it is switched on. DO NOT insert or remove a battery if the plastic cover has been torn or compromised in some way.

4. Ideally, the battery should be used in temperatures ranging from -20°C to 50° C (-4° F to 122° F). Battery usage in environments above 50° C (122° F) can lead to serious damage and in environments above 60° C (140° F), can lead to a fire or explosion. Battery usage in temperatures below -20° C (-4° F) can impact the battery's performance, which will affect the drone's performance.

5. Never disassemble or pierce the battery in any way, or the battery could leak, catch fire, or explode.

6. Electrolytes in the battery are highly corrosive. If any electrolytes make contact with your eyes or skin, immediately wash the affected area with clean running water for at least 15 minutes. See a doctor immediately.

7. DO NOT use the battery again if it was involved in a crash of any kind or if it was dropped and experienced heavy impact.

8. If the battery falls into water with the aircraft during flight, take it out immediately and place it in a safe and open area. DO NOT use the battery again. Dispose of the battery properly as described in the Battery Disposal section below. DO NOT heat the battery. Put out any battery fire using sand or a dry powder fire extinguisher.

9. DO NOT place the battery in a microwave oven or in a pressurized container.

10. DO NOT place battery on any conductive surface such as a metal table.

11. DO NOT put the battery in a pocket, bag or drawer, where they may short-circuit against other items, or where the battery terminals could be pressed against each other.

12. DO NOT drop or strike the battery. DO NOT place heavy objects on the battery or Battery Charger.

13. Always clean the battery terminals with a clean, dry cloth. This will avoid the risk of connection failure.

14. Regularly check the Battery voltage level with voltmeter. The battery is rated for 200 cycles. It is not recommended to continue using it afterward.

15. Make sure the battery ports, battery surfaces, and battery compartment surfaces are dry before inserting the batteries

CHARGING THE BATTERY

1. Never attach the batteries to wall sockets or car charger outlets directly. Fowado US is not responsible or liable, directly or indirectly, for damages caused by charger.

2. DO NOT charge the battery near flammable materials, objects or on flammable surfaces such as carpet or wood. Never leave the battery unattended during charging.

3. Make sure the charger is well ventilated while charging.

4. DO NOT charge the battery immediately after flight; battery temperature may be too high. Instead, allow the battery to cool down close to room temperature before charging again. The ideal battery charging temperature range is from 15° C to 40° C (59° F to 104° F).

5. Disconnect the battery charger when not in use. Examine the battery charger and the battery regularly for damage to the cord, plug, enclosure, or other parts. DO NOT clean the Battery Station or the battery with denatured alcohol or other flammable solvents. Never use a damaged Battery Station or a damaged battery.

6. Make sure the battery is installed fully in the battery charger while charging.

7. Always be alert to avoid serious over-discharging to prevent permanent battery damage.

8. To extend battery life, prevent the battery from float charging. (Leaving the battery on the charger)

9. Make sure the battery ports and battery surfaces are free from any liquid before charging the batteries.

BATTERY STORAGE

1. Keep the battery out of reach of children and pets. See a doctor immediately if swallowed accidentally.

2. DO NOT leave the battery near heat sources such as furnaces or heaters. DO NOT leave the battery inside a vehicle on hot days. The ideal storage temperature is 22° C to 30° C (72° F to 86° F).

3. Always keep the battery dry. Never drop the battery into water.

4. DO NOT drop, strike, impale, or manually short-circuit the battery.

5. Keep the battery away from metal objects such as glasses, watches, jewelry, and hairpins.

6. Never attempt to travel with or transport a damaged battery or a battery with a power level higher than 30%.

7. Please follow the regulations and guidelines for traveling with these batteries via air.

BATTERY DISPOSAL

1. Batteries that are swollen, involved in a crash, come into contact with liquid, damaged or leaky must be disposed. To ensure safety, DO NOT use any battery in such cases as above.

2. Dispose of the battery in specific recycling boxes in your local area and only after a complete discharge. DO NOT place the battery in regular trash containers or bins. Strictly follow your local area regulations and guidelines regarding the disposal and recycling of batteries.

BATTERY MAINTENANCE

1. Never use the battery when the temperature is too high or too low.

2. Never store the battery in environments outside the range from 10° C to 45° C (50° F to 113° F).



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CAUTION

1. Make sure the battery is fully charged before each flight.

2. Land the aircraft immediately when the low battery level warning is activated in the flight app. Replace or recharge the battery.

3. Before first use, it is recommended to mark two batteries as a pair and continue using them as a pair (charge and discharge them together) to maximize service life and ensure flight performance. The aircraft may fail to take off if the two batteries have different power levels.

CHARGING THE BATTERY

1. Most modern smart battery chargers are designed to stop charging when it is full. However, it is good practice to monitor the charging progress and disconnect the battery when fully charged.

BATTERY MAINTENANCE

1. Battery life may be reduced if not used for an extended period of time.

2. Fully charge and discharge the battery at least once every three months to maintain battery health.

3. For every 50 cycles, charge and discharge the battery as per instructions.

4. Please follow the standard charging and discharging procedure as per instructions.

Checklist for battery maintenance:

- (a) Charge and discharge the battery as per instructions.
- (b) Make sure the battery is not swollen, leaky, or damaged.
- (c) Make sure battery terminals are clean.

Standard charge and discharge operation instructions

(1) Charge the battery to 100% and leave the battery stationary for more than 24 hours

(2) Install the battery into the aircraft before flight. After flying, if the remaining power level is less than 20%, land the aircraft and remove the battery.

(3) Leave the battery stationary for more than 6 hours.

(4) Charge the battery to 100% power level.

(5) Repeat the above steps.

BATTERY STORAGE

1. Charge or discharge the battery to 40% ~ 60% if NOT intended to be used for 10 days or more. This can greatly extend the battery's overall life span. It is normal that you may feel moderate heat emitting from the battery during the discharge process.

2. DO NOT store the battery for a long period of time with its power fully discharged. It may lead to irreversible damage.

3. Remove the battery from the unit when planning to store it for an extended period of time.

5. Always store batteries in a well-ventilated place.

BATTERY DISPOSAL

1. If the battery is disabled and the battery cannot be fully discharged, please contact a professional battery disposal or recycling agent for further assistance.

2. Dispose of the battery immediately if it cannot be powered on after over-discharging.

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Questions? Give us a call
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