

B13860S Smart Battery

User Manual

Version 1.2 **EN**

To Users

Dear user, thank you for choosing XAG products.

For safety purposes and the best experience possible, XAG recommends reading through the User Manual and Disclaimer contained in this document before attempting to use the B13860S Smart Battery.

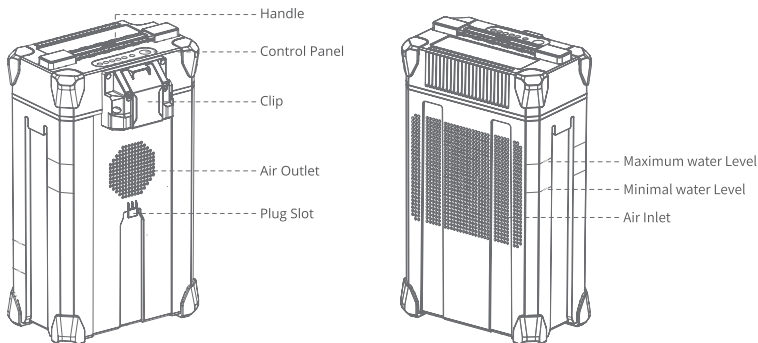
Contact Us

If you have any questions about this document, please contact our Technical Support via email: info@xa.com

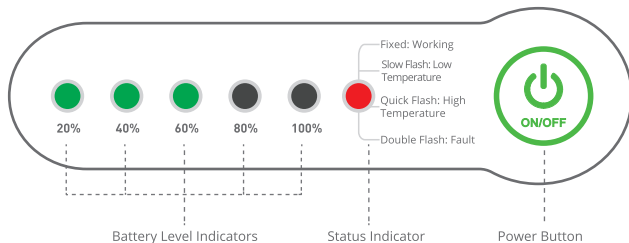
Product Profile

The B13860S Smart Battery 2020 (standard accessory for XP 2020) is compatible with all XAG P-Series Plant Protection UAV Modules. The Smart Battery contains 13 large-capacity lithium polymer batteries, and is integrated with the BMS module. It enables real-time monitoring of voltage, current, and temperature, and also features charging protection. During use, the battery can feedback information to the device in real time. In the case of low power or battery failure, the BMS system will send an emergency stop command to ensure the safety of the device.

Introduction:



ON/OFF



Battery ON/OFF

ON: The battery will be powered on after 2 long presses. When the battery is OFF, connect the device^[1], press and hold the power button for at least 1 second, and release the button after all battery level indicator lights flash at the same time, then press and hold the button for at least 1 second again until a beep is heard from the battery and the status indicator is on. This indicates that the battery has been powered on successfully.

OFF: The battery will be powered off after 2 long presses. When the battery is ON, press and hold the power button for at least 1 second, and release the button after all battery level indicator lights flash at the same time, then press and hold the button for at least 1 second again until a beep is heard from the battery and the status indicator is off. This indicates that the battery has been turned off successfully.

Checking Battery Level

When the battery is OFF, press the power button once to display the battery level. When the battery is ON, check the battery level indicators to see the battery level.

[1] : Device as UAV or Charger

Battery Level LED	Status	Battery Level
1 LIGHT FLASH	● ● ● ● ●	0%–10%
1 LIGHT ON	● ● ● ● ●	10%–30%
2 LIGHTS ON	● ● ● ● ●	30%–50%
3 LIGHTS ON	● ● ● ● ●	50%–70%
4 LIGHTS ON	● ● ● ● ●	70%–90%
5 LIGHTS ON	● ● ● ● ●	90%–100%
2 LIGHTS DOUBLE FLASH	● ● ● ● ● Self-locked	Battery is locked due to low power level. Please contact customer support to unlock the device.
3 LIGHTS DOUBLE FLASH	● ● ● ● ● Remotely locked	Battery is locked remotely. Please contact customer support to unlock device.
4 LIGHTS DOUBLE FLASH	● ● ● ● ● Anti-tamper lock	Battery is disabled. Please contact customer support to unlock device.

Checking Battery Status

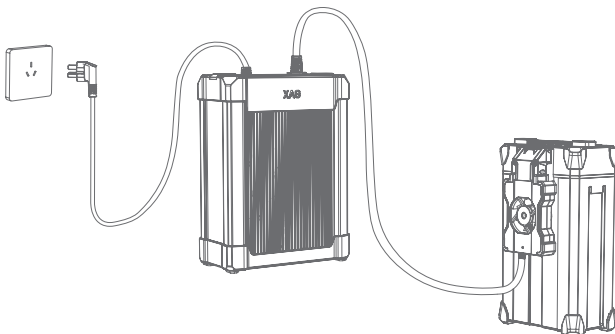
Battery Level LED	Status	Battery Level	
RED LIGHT ON	████████████████████	Normal	Normal
RED QUICK FLASH	●●●●●●●●●●	Overheated	Temporarily locked. Prohibited from charging and usage.
RED SLOW FLASH	● ● ● ● ●	Low Temperature	Low temperature triggers charging protection. Please keep battery temperature at over 10°C.
RED DOUBLE FLASH	●● ●● ●● ●●	Battery Malfunction	Stop using immediately.

Charging Battery

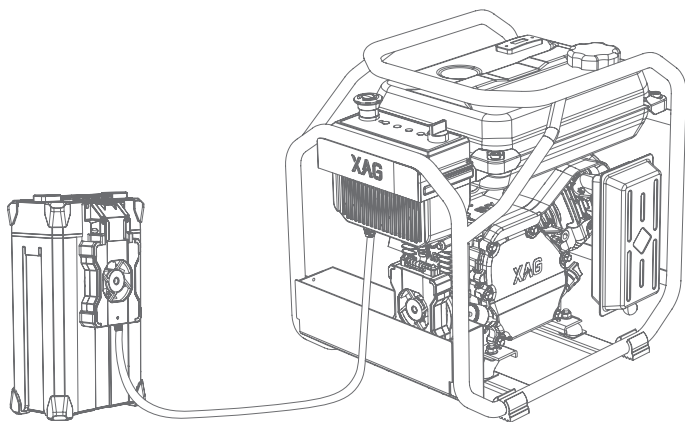
Connect the battery to the charging plug and turn the device on to activate automatic charging. At the time of charging, the fan on the charger will be turned on to dissipate heat. When the battery temperature exceeds 50°C, the battery management system will suspend charging. Charging will resume once the battery temperature drops below 50°C. Charging at the ideal ambient temperature (20°C - 35°C) helps maintain the normal service life of the battery.

When charging, a flashing battery level indicator means charging is in progress. A fully charged level is indicated by a solid light. After charging is complete, the buzzer will beep for 30 seconds. After this, all battery level indicators will flash for 2 minutes before the battery turns off automatically.

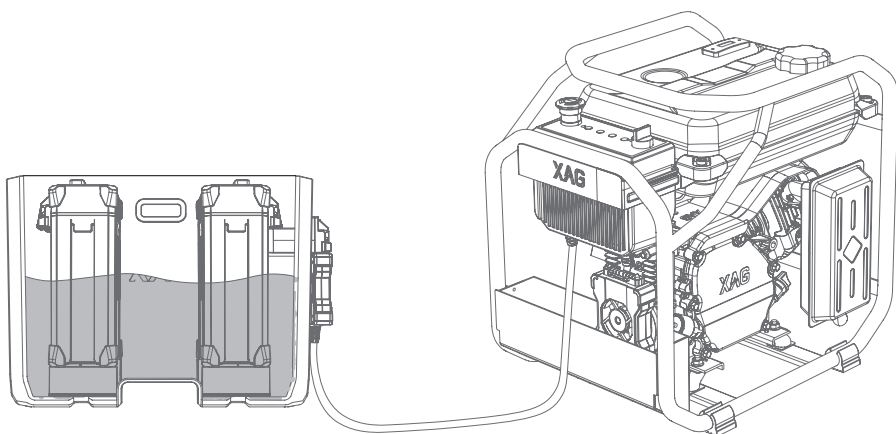
Charging with Intelligent Super Charger



Charging with GC4000 Generator



Charging with Auto Super Charge Station & Cooling Sink





- When charging with the Super Charger, please use 16A sockets in compliance with national/ industry standards only. Losses incurred by the use of non-standard or unqualified sockets to connect the SuperCharger to the battery for charging shall be borne by the user.
- Where water cooling is needed, please use clean and non-corrosive water, and make sure the water level is no higher than the maximum level marked on the battery case. To ensure optimal heat dissipation, it is recommended to maintain a water level between the Max and Min water levels. Each period of cooling should not exceed 60 minutes. Do not completely immerse the battery in water.
- Please remove the battery before pouring water out of the cooling sink.
- Before charging, please keep all battery terminals clean and dry, and ensure that no metal objects or liquids are trapped in the charging socket.
- To prevent power failure or damage to the Super Charge Station and battery, avoid splashing water onto either the charger or Super Charge Station when charging with a cooling sink.

Technical Specifications

Model: B13860S

Type: Lithium polymer battery

Capacity: 18000mAh/865.8Wh

Rated output: 48.1V/120A

Charging voltage: 56.55 V

IP Code: IP67^[1]

Operating Temperature: 10-45°C

Charging Temperature: 10-40°C

Storage Temperature: 10-30°C

Weight: Approx. 6.0kg

Dimensions: 189*137*312mm

Certificate of Inspection

**This product has passed
inspection.**

[1] : It has been tested under controlled experimental conditions to be resistant to splashes and water. However, such protective performance becomes less effective over time, and may diminish due to daily wear and tear.

Notes

- Do not plug or unplug the battery when it is turned on, otherwise the power connector may be damaged.
- Check the battery firmware before flight operation. If there is a new version, please update first. The flight loss caused by the user's failure to update the battery firmware in time will be borne by the user.
- The battery should be used between 10°C and 45°C (ambient temperature). Overheating (>45°C) may cause the battery to ignite or explode.
- Do not connect the positive and negative poles of the battery with a wire or other metal objects to avoid short circuiting.
- Do not immerse the battery in a corrosive liquid. When the battery is placed in clean water for heat dissipation, please keep the water level between the Max and Min marks. Do not leave the battery in water for more than 60 minutes. Otherwise, the liquid may permeate into the battery and cause damage.
- If there is liquid or foreign matter on the charge port, wipe immediately and keep it clean. Otherwise it may cause poor contact, resulting in loss of energy or charging failure.
- Please handle with care during use. Do not disassemble it, puncture its case or manually press the battery, including but not limited to the following: sitting on the battery, placing heavy objects on the battery or otherwise putting pressure on the battery.
- Regularly check the battery terminal, plug and other components before use. Do not use alcohol or other flammable agents to clean charging devices. Do not use a damaged charging device.
- When charging, place the battery and charging devices on flat ground that is free of flammable or combustible materials. Battery charging shall be watched over to prevent accidents.
- For safety, when charging, a distance of more than 30cm should be kept between two batteries, or between a battery and a charger, to avoid battery or charger malfunction, and other serious risks such as fire due to overheating.
- Before each flight, make sure the battery has completed charging; never operate with a full load when the battery is not fully charged.
- It is strictly forbidden to use batteries other than those provided by XAG, or to dismantle or replace a battery without authorization. For repairs or replacement, please contact the XAG or a designated dealer. The user shall bear the responsibility for battery accidents, flight failures or other accidents caused by the use of batteries or components not provided by XAG.
- In case of one green light flash after flight, please charge the battery to 40%-60% capacity before storage. Failure to charge in time may cause damage to the battery. The battery should be recharged and discharged every 90 days to maintain its activity.
- The battery should be stored in a dry environment at a temperature between 10-30°C. Do not place the battery in a location that is too damp or has leakages.
- Do not charge the battery in a damp environment. Product damage caused by liquid immersion due to reasons other than product quality, such as damaged battery case, is not covered by the warranty.
- When the battery is found swollen, leaking, deformed, or damaged, stop using the battery immediately and contact XAG or your dealer promptly.
- The liquid inside the battery is highly corrosive. If it makes contact with your skin or eyes, rinse with clean water and seek medical advice immediately.
- When disposing of the battery, please follow local laws and regulations. Protect the natural environment, and do not discard it irresponsibly.

Disclaimer

1. Please read this document carefully before using this product. This Disclaimer has an important impact on the safe use of the product and your legitimate rights and interests. The use of the product shall be deemed as you have known, understood, acknowledged, and accepted all terms and contents of this document.
2. This product is not a toy, and is not suitable for people under the age of 18. Please keep this product away from the reach of children, and be very careful when operating in the presence of children.
3. This product must be charged with the charging devices provided by XAG. For product malfunction or damage caused by the use of other charging devices, XAG does not bear the corresponding legal responsibility.
4. Please assemble and use this product in strict accordance with the “Product Manual/User Manual” . Do not modify or disassemble the product without authorization. The user shall bear all losses arising from his or her unauthorized modification or disassembly of this product, for which XAG may not be held liable.
5. To the maximum extent permitted by law, XAG shall not be liable for all losses caused by users' failure to use the product in accordance with this document and the “Product Manual/User Manual” .
6. To the maximum extent permitted by law, the liability or amount XAG under any circumstances owes to you for all damages, losses, and litigation arising therefrom will not exceed the amount paid to XAG by you for the purchase of the product.
7. In any case, the purchaser or user shall comply with relevant laws and regulations of the country and region where the product is used. XAG does not assume any liability arising from violation of relevant laws and regulations by the purchaser or user.
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Warning

Users are required to read the complete “Product Manual” and be familiar with the product operations before using the product. Otherwise, it may cause serious injury to yourself or others, or cause product damage and property loss. Strong safety awareness is required to operate this product. Do not use the parts that are not provided or suggested by XAG. Please strictly follow the instructions of XAG to install and use the product.

P-Series UAV Systems include supporting modules such as Airframe, Remote Controller, Battery, Operation Box, Liquid Refiller, Charger, RTK Rover, RTK Base Station, etc. Users may also check the "User Manuals" of the modules for a better use experience of the system.

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