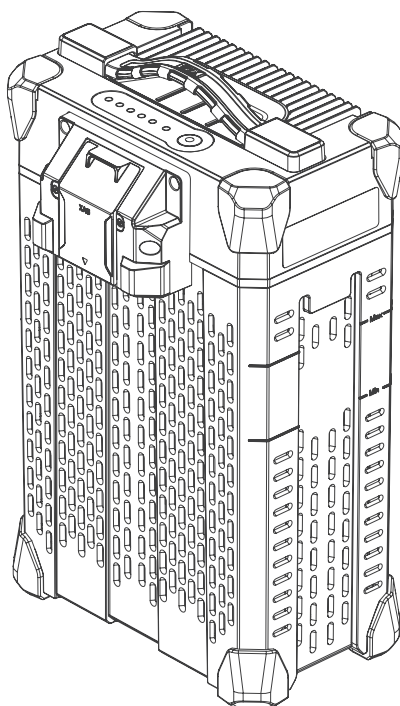


B13970 Smart Battery

User Manual

Version AU V1.0 **EN**



Disclaimer

Carefully read and understand this User Manual before using this product for the first time. Failure to read and follow the instructions may result in serious injury to yourself and/or others, damage to your Products and/or other objects in the vicinity. By using this product, you hereby signify that you have read this document carefully and that you understand and agree to abide by all terms and conditions of this document and all relevant documents of this product. You agree that you are solely responsible for your own conduct while using this product, and for any consequences thereof. XAG accepts no liability for damage, injury, or any legal responsibility incurred directly or indirectly from the use of this product.

XAG reserves the rights for final interpretation and revision of the Terms and conditions herein to the extent permitted by law. XAG also has the right to update, modify or terminate these terms and conditions via its official website without prior notice.

The content of this User Manual is subject to change without prior notice.

Warning

This product must be operated with Strong safety awareness. Failure to operate this product in a safe and responsible manner could result in injury or damage to product or other property. This product is not intended for use by those who are under 18 years old. DO NOT alter this product or use this product with incompatible components or parts.

Content

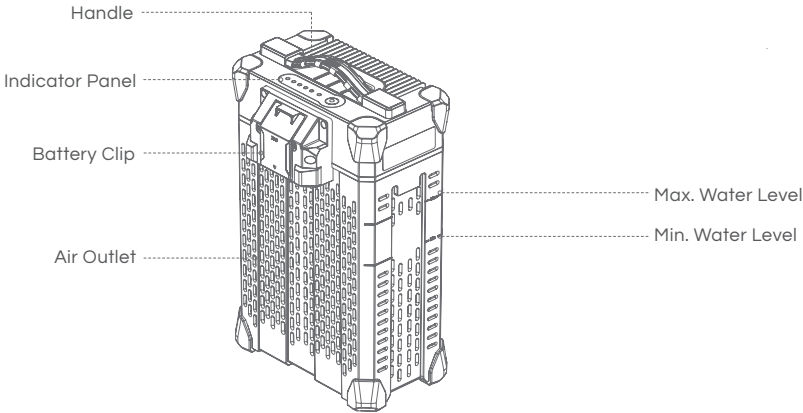
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Product Profile

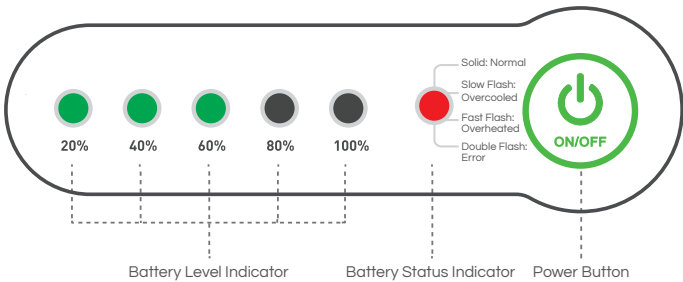
The B13970 Smart Battery is compatible to all 2021/2022/2023 Model XAG Agricultural Drone at a Rated Output of 48.75V/140A. The Smart Battery contains 13 large-capacity lithium polymer batteries, and is integrated with a BMS module. It enables real-time monitoring of voltage, current, and temperature, and also features charging protection. During use, the battery can transmit feedback information to the device in real time. In case of low power or battery failure, the BMS system will send an emergency stop command to ensure the safety of the device.

Overview – B13970 Battery

Structure



Indicator Panel



Using the Battery

IMPORTANT







- √ ENSURE to check and update Battery firmware and Device Software prior to any Flights.
- √ ENSURE there are no liquid or foreign matter on the battery terminal, wipe and clean in a timely fashion. Otherwise, it may cause poor contact, resulting in loss of power or charging failure.
- X AVOID the Liquids (Electrolytes) in the battery as it is highly corrosive. If any liquid make contact with your skin or eyes, rinse with clean water and seek medical attention immediately.
- X DO NOT Fly when the Battery Level is less than 30%.
- X DO NOT connect the Cathode and Anode of the battery with conductive object, otherwise it may cause a short circuit.
- X DO NOT Connect or Disconnect the battery when it is turned ON, otherwise the power ports may be damaged.
- X DO NOT use or store battery near heat sources such as a furnace, heater and within a vehicle during hot days.
- X DO NOT use Batteries with abnormal conditions such as swollen, leaking, or deformed batteries. Contact XAG After-sales Support for further assistance.
- X DO NOT use Overheated Battery exceeding 40° C, may lead to fire or an explosion.
- X DO NOT disassemble, pierce or apply pressure the battery in any way, including but not limited to behaviours such as Sitting / Standing on the Battery.

Battery Level

INSTRUCTION

When the battery is OFF, press the power button once to display the battery level.

When the battery is ON, observe the battery level indicators to see the battery level.

Battery Level Indicator		Description
1 Green Flash		01 – 09 %
1 Solid Green		10 – 29 %
2 Solid Green		30 – 49 %
3 Solid Green		50 – 69 %
4 Solid Green		70 – 89 %
5 Solid Green		90 – 100 %

Battery Status

Battery Level Indicator	Status	Description
2 Green – Double Flash	Battery Locked (Over discharge)	Battery is locked due to over-discharge or excessive voltage difference Contact After-sales Support to Unlock
3 Green – Double Flash	Battery Locked (Remote)	Battery is locked Remotely Contact After-sales Support to Unlock
4 Green – Double Flash	Battery Locked (Anti-Dismantling)	Failed to verify Cell information Contact After-sales Support to Inspect
2 / 4 Green – Alternate Flash	Power Disabled	Similar Battery Level on both batteries required
Battery Status Indicator	Status	Description
Red Solid	Normal	Normal
Red Quick Flash	Too HOT	Temperature is too HOT Prohibit charging and discharging
Red Slow Flash	Too COLD	Temperature is too COLD Prohibit charging and discharging
Red Double Flash	Anomalous	Over discharge / Cell Failure / Temperature Failure Contact After-sales Support
Red Third Flash	Anomalous	Plug Temperature Abnormal Contact After-sales Support

Battery ON/OFF

INSTRUCTION

- When the Battery is OFF, press the Power button once to check the current battery level indicated by the Battery level LED. If the battery is too low, recharge before use.
- When the battery is placed on the aircraft, press and hold the Power button to activate the Battery.
- Repeat Step 02 to turn OFF the Battery.

Battery Charging

INSTRUCTION

01. Connect the Charger Plug to the Battery.
02. Power ON the device to Start Battery Charging.

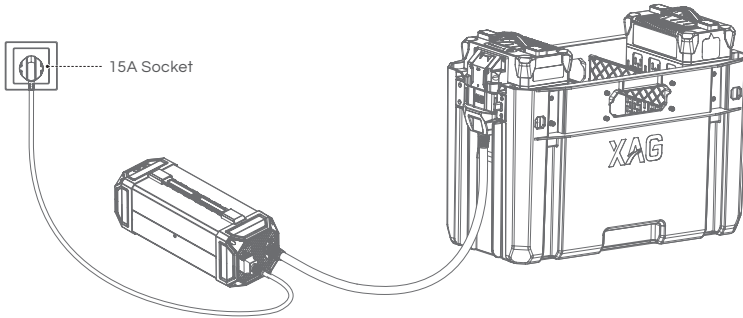
The battery management system will automatically suspend the charging if the temperature is over 55° C, and resume after the temperature drops below 55° C. The ideal ambient charging temperature (20° C - 35° C) for charging helps maintain the normal service life of the battery.

The battery level indicators corresponding to the current battery level will be solid green, and the remain will be flashing in series indicating the battery is currently charging. Once the charging is completed, the buzzer will beep once and all indicators will be off, the Battery will be turned OFF automatically.

IMPORTANT

- √ ENSURE there are no liquid or foreign matter on the battery terminal, wipe and clean in a timely fashion. Otherwise, it may cause poor contact, resulting in loss of power or charging failure.
- √ ENSURE pure water is used for heat Dissipation.
- √ ENSURE Battery & Chargers is placed on even ground with no nearby combustible materials.
- √ ENSURE Batteries have a minimum of 30cm distance between the batteries and Chargers during Charging.
- √ ENSURE Water level should be kept between the Minimum and Maximum Water levels to achieve the best heat dissipation effect.
- X DO NOT exceed the Max. Water level or Submerge the Battery in Water, or Battery will be damaged.
- X DO NOT use Corrosive liquids for heat Dissipation, or Battery will be damaged.
- X DO NOT exceed 60 minutes for heat Dissipation, or Battery will be damaged.
- X DO NOT clean the charging device with alcohol or other combustible liquids.

Charging with CM12500P/CM13600 Battery Charger



Battery Storage

IMPORTANT

- ✓ ENSURE the Battery is stored in a dry and ambient environment of 10° C - 30° C.
- ✓ ENSURE the Batteries are recharge every 90 days to maintain battery health.
- X DO NOT Store Batteries with less than 30% Power.
- X DO NOT store Batteries for an extended period, otherwise it may damage the battery or impact battery life.

Technical Specifications

Model	M1PPA13970A
Dimensions	189mm x 139mm x 307mm
Weight	Approx. 6.6 kg
Battery Type	Lithium Polymer
Capacity	20000 m/Ah
Energy	975 Wh
Rated Output	48.75V / 140A
Maximum Charging Current	100A
Operating Temperature	10° C to 45° C
Charging Temperature	10° C to 40° C
Storage Temperature	10° C to 30° C
IP Rating	IP65
Compatible Aircraft	XAG 2023 P100 Pro XAG 2023 V50 XAG 2022 P100 XAG 2022 R150 XAG 2021 P80 XAG 2021 P40 XAG 2021 V40
Compatible Chargers	CM12500p CM13300 CM13600 CM27000 GC4000+ GC6000
Charging Voltage	56.55V
Battery Charging Time	
Warranty Details	6 Months



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