
X900 Industry-Level Multi-rotor Drone Battery

User's Manual

V1.0.0

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- The company reserves the right to change any information contained in the document at any time, which will be then included in a new version, without prior notice. There may be slight differences between the product features before and after the update.

General

This document provides detailed information about the product, including parameters, usage and maintenance guidance.

Model

UAV-PB8000, OEM-UAV-PB8000, DH-UAV-PB8000 and DHI-UAV-PB8000

Intended Audience






The end user who purchases this product

Reading Guide

Chapter	Name	Main content
1	Introduction	Describes the functional features and application scenarios of the product.
2	Parameters	Comprehensively describes the main components of the product.
3	Usage	Describes the usage and maintenance methods of the equipment in detail.
4	Appendix 1	Describes the definition of battery indicators.
5	Appendix 2	Lists some problems that may be encountered during the use of the product and provides corresponding solutions.

Safety Instructions

The following signal words might appear in the manual.

Signal	Description
 DANGER	Indicates a high potential hazard which, if not avoided, will result in death or serious injury.
 Warning	Indicates a medium or low potential hazard which, if not avoided, could result in slight or moderate injury.
 Notice	Indicates a potential risk which, if not avoided, could result in property damage, reductions in performance, or unpredictable results.
 TIPS	Provides methods to help you solve a problem or save you time.
 Description	Provides additional information as the emphasis and supplement to the text.

Documentation

The product documentation includes the following, which can be used as required.

- Quick Start Guide

This is intended to prompt initial usage methods and safety considerations.

- User's Manual (that is, this document)

This document provides detailed information about the product, including parameters, usage and maintenance guidance.

Revision History

NO.	Version	Revision Content	Release date
1	V1.0.0	Operation Descriptions of UAV X900 Battery	July 3 rd , 2025

Important Safeguards and Warnings

The following description is the correct application method of the drone. Read the manual carefully before use to prevent danger and property loss. Strictly conform to the manual during use and keep it properly after reading.

Battery Safety Precautions



Warning

- Use the dedicated device provided by the company to charge the drone. Otherwise, the battery may be damaged or other unpredictable consequences may be caused.
- Charge the drone at a temperature between -10°C and 45°C .
- Do not place the drone close to fire source or inflammables.
- Do not charge or discharge the drone in unattended conditions.
- Do not dismantle and destroy the battery without permission; water is not allowed to enter the drone; man-made damages are not covered by warranty.
- Do not throw the battery into fire or expose it to high-temperature environment.
- Disassembly, piercing, impact, crushing, short-circuiting, and burning of the battery are strictly forbidden.

Do not heat the battery above 160°F (70°C).

- Keep the battery away from the objects such as necklaces and hairpins when carrying or storing the battery.
- Replace the damaged battery with a new one in time. To ensure safety, damaged batteries must be disposed of according to local regulations.
- Charge the battery or discharge it to 50%–60% remaining capacity if it won't be used for a long time, and place it in a dry and cool environment.
- If the battery leaks and the liquid enters eyes accidentally, instead of rubbing your eyes; wash your eyes with clean water and see a doctor immediately.
- Usage of the battery is prohibited if it has been immersed in water.



Notice

- It is normal that the battery heats up after running for a period of time because the discharge power is quite big.
- The battery may be hot after flight; please do not touch the battery surface immediately.
- It is normal that the battery heats up when being charged.
- The cycle times of the power battery is 400 or the warranty period is half a year in normal use.

Disclaimer

- The physical product shall prevail while this User Manual is for reference only.
- The User's Manual, software, and firmware are updated in real time in accordance with the product. The update is subject to change without prior notice.

- Any loss caused by not following the instructions in this manual shall be borne by the user.
- This document may contain technical errors, non-conformities with the operations of the product, or typographic errors. The company reserves all the rights for the final explanation.
- The GUI in this document may be slightly different from the actual GUI, which shall prevail.
- Other trademarks or company names that may be referred to in this document are properties of their respective owners.

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1.1 Overview

- This product is a dedicated power battery for the X900 multi-rotor drone.
- It is an intelligent battery equipped with overcharge, over-discharge, high-temperature, over-current, and short-circuit protection. It features intelligent storage, automatic low-power sleep mode, and supports for software upgrades, CAN real-time communication, and battery logging capabilities.

2 Parameters

It comprehensively introduces the detailed parameters of this product.

Description

All dimension diagrams, structural diagrams, and interface illustrations presented in this chapter are for reference purposes only. Due to factors such as measurement location, measurement accuracy, and positional indication, there may be slight discrepancies between the diagrams and the actual product, the physical product shall prevail.

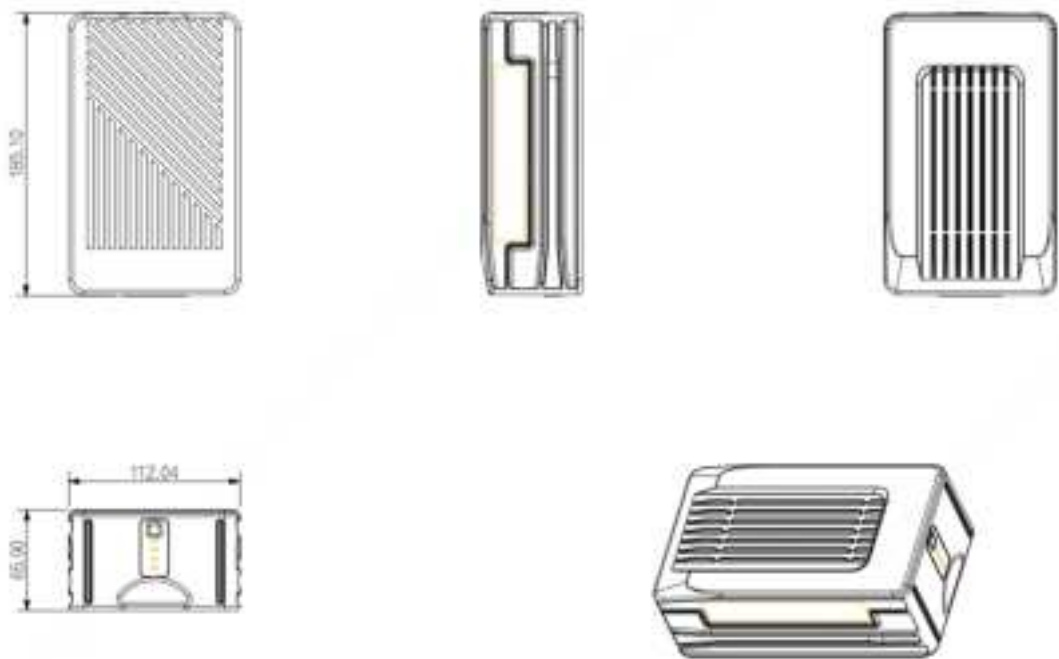
2.1 Descriptions

Table 2-1 Descriptions of parameters

No.	Name	Description
1	Ingress Protection	IP55
2	Operating Temperature	-20℃ to +55℃ (-4°F to 131°F)
3	Storage Temperature	-20℃ to +45℃ (-4°F to 113°F)
4	Working Humidity	0%–75%
5	Working Altitude	± 3,000 m
6	Power Supply	51 VDC
7	Net Weight	1.7 kg
8	Product Dimensions	L × W × H: 184 mm × 111.7 mm × 66 mm (5.9" × 5.5" × 6.3")
9	Gross Weight	2.7 kg
10	Packaging Dimensions	L × W × H: 330mm × 256mm × 208mm (5.9" × 5.5" × 6.3")
11	Certifications	UN38.3, MSDS, Air and Sea Transport Certification and CE.
12	Nominal Capacity	8,070 mAh
13	Nominal Voltage	51 V
14	Battery	High-voltage lithium battery
15	Energy	360.2 Wh
16	Standard Charging Current	15 A
17	Maximum Charging Current	20 A
18	Charging Limit Voltage	51 V
19	Maximum Discharge Current	40 A
20	Charging Temperature	-20℃ to +45℃ (-4°F to 113°F)
21	Recommended Storage Temperature	23 ± 2℃
22	Charging Time	110 VAC, 75 minutes; 220 VAC, 50 minutes.
23	Level Display	Yes

2.2 Appearance

Figure 2-2 Dimensions



Description

This chapter provides detailed instructions on the usage, maintenance, and storage of the X900 battery.

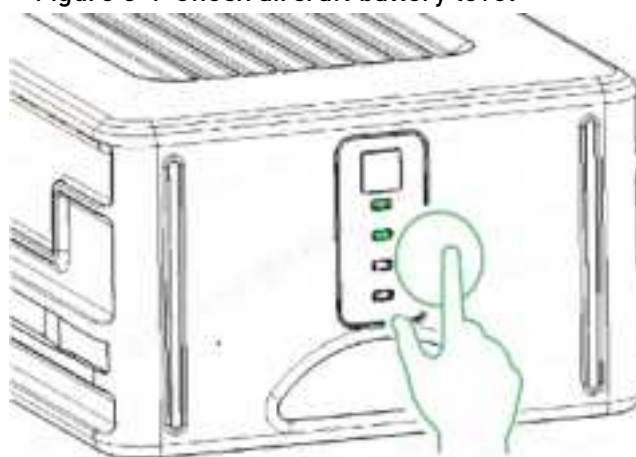
Notice

Please strictly adhere to the usage methods described in this chapter.

3.1 Use

- Please use the dedicated charging equipment to charge this product; the use of other devices for charging is prohibited.
- Depending on your usage needs, you can select between the Standard Charging Mode and Ready-to-Fly Mode on the dedicated charging equipment.
- The Standard Charging Mode can charge the battery to 100%. It can maintain a full charge for 3 days. After 3 days, the charging equipment will wake up the battery, causing it to enter a self-discharge state, which lasts for approximately 2 weeks until the charge level reaches 60%. At this point, self-discharge will stop, and the battery will automatically enter Storage Mode, remaining in this mode until it is awakened again by the charging equipment 3 months later, at which point the battery will be charged back to 100%. If the user does not use the battery, it will continue this cycle.
- The Ready-to-Fly Mode can maintain the battery charge between 85-90%.
- How to Check Battery Remaining Charge: Press the battery button briefly, as shown below:

Figure 3-1 Check aircraft battery level



3.2 Charging Time

Table 3-1 Descriptions of charging time

Input Voltage	Battery Packs	Charge to 10%	Charge to 90%	Charge to 100%
220 V, 50 Hz	Charging Single Battery	0 minutes	About 30 minutes	About 45 minutes
220 V, 50 Hz	Charging two batteries concurrently	0 minutes	About 30 minutes	About 50 minutes
110 V, 60 Hz	Charging Single Battery	0 minutes	About 30 minutes	About 50 minutes
110 V, 60 Hz	Charging two batteries concurrently	0 minutes	About 50 minutes	About 70 minutes

Note:

The above charging times were tested under room temperature of about 25 °C for batteries with a cycle life of less than 10 times. Please refer to them for reference only.

3.3 Storage and Maintenance

- Switch the dedicated charging equipment to Storage Mode.
- Insert the battery intended for storage into the dedicated charging equipment, and keep the charging device powered on at all times.
- The recommended storage temperature for the battery is: 25 ± 5°C.

3.4 Upgrade

For upgrade instructions, please refer to the user manual of the dedicated charging equipment.

Appendix 1 Battery Indicator Light

Description

The indicator lights start from the one closest to the button, considered the first light, with a total of four lights.

Indicator Descriptions:

- Charging Status Light: All four lights flash in a running sequence, which adjusts according to the charging level.
- Standby Status Light: All four lights blink slowly together.
- Discharging Status Light: This will vary according to the charge information, solid on.
- Self-Discharge Status Light: The light farthest from the button, blinking slowly.
- Self-Heating Status Light: The light closest to the button, blinking slowly.
- Battery Abnormal Status Light: All four lights blink quickly together.
- Overdue Maintenance Status Light: The two lights closest to the button, blinking slowly (the overdue timeframe is 3 months).
- Charge Level Indication: The light closest to the button is considered the first light.

Status	Capacity status	LED4(Green) (indicator)	LED3(Green) (indicator)	LED2(Green) (indicator)	LED1(red) (Power LED)
Charge and Discharge Modes:	Battery Level <12.5% SOC<12.5%	Off	Off	Off	Blink
	12.5%≤Battery Level<25% 12.5%≤SOC<25%	Off	Off	Off	On
	25%≤Battery Level<37.5% 25%≤SOC<37.5%	Off	Off	Blink	On
	37.5%≤Battery Level<50% 37.5%≤SOC<50%	Off	Off	On	On
	50%≤Battery Level<62.5% 50%≤SOC<62.5%	Off	Blink	On	On
	62.5%≤Battery Level<75% 62.5%≤SOC<75%	Off	On	On	On
	75%≤Battery Level<87.5% 75%≤SOC<87.5%	Blink	On	On	On

Status	Capacity status	LED4(Green) (indicator)	LED3(Green) (indicator)	LED2(Green) (indicator)	LED1(red) (Power LED)
	,5%				
	87.5% ≤ Battery Level 87.5% ≤ SOC	On	On	On	On

Appendix 2 FAQ and Solutions

Description

Problems can be assessed through the comprehensive indicator lights of the battery/charging equipment.

FAQ:

If the battery button indicator light does not illuminate, potential issues could be:

- a. Battery indicator light malfunction.
- b. Battery button malfunction.
- c. Battery has entered lock mode.
- d. Poor battery communication or over-discharge damage.

Troubleshooting:

For the above issues, combine with the charging equipment by inserting the battery into the battery station to see if it can enter the charging state, and evaluate the following phenomena:

① During this process, if the channel indicator light corresponding to the battery station first lights up yellow and then blinks green slowly, a red light indicates a problem with the battery, specifically, poor battery communication or over-discharge damage.

② If the channel indicator light corresponding to the charging equipment flashes green slowly, this indicates the battery is charging. At this point, check whether the battery indicator light is on:

- If not lit, that indicates a situation: battery indicator light malfunction.
- If the indicator light is on and in a running sequence, then press the battery button and it shows charge level indication, indicating c situation: the battery enters lock mode.
- If the indicator light is on and in a running sequence, but no charge level indication appears when the battery button is pressed, indicating d situation: battery button malfunction.

After-sales Service Policy

Dear Valued Customer:

Hello!

Thank you for purchasing our drone products!

To protect your legitimate interests and eliminate your worries, please purchase our products through formal channels. Our company promises to provide standard warranty services for you and provides the following services as needed:

I. Three-guarantee Services

1) Repair

Within the warranty period, the company provides free repair or replacement of components that have been damaged due to product quality issues. Warranty period aside, regardless of whether components have been damaged due to human factors or natural causes, the company will only charge for the cost of materials and labor for replacing or repairing the components.

2) Exchange

Customers have the right to exchange a product or have it repaired within 45 days of the date of purchase (inclusive of the date on the original receipt, and the same for below), In the environment specified in the User's Manual, if the company's products have the problem that is non-artificial and does not meet the User's Manual, and the relevant national quality testing standards of the hardware performance failure, the user has the right to choose to replace or ask for repairing. The company exchanges the product for another of the same model and specifications or exchanges the faulty components free of charge. If the same product model or components are no longer in production, then they will be exchanged for products or components whose functions are not less than that of the original.

Special reminders:

- In accordance with the actual purchase and sale contract, the products on sale at a discount cannot be exchanged.
- Ex-display devices that are sold at a discount are not covered by the company's exchange and related policies.

3) Refund

Customers have the right to return or exchange a product of the company or have it repaired within 7 days of the date of delivery (inclusive of the date of purchase) if the product experiences a malfunction that does not meet the related quality testing standards of the "Product manual" and national standards.

Special reminders:

- In accordance with the actual purchase and sale contract, the products on sale at a discount cannot be refunded.
- Ex-display devices that are sold at a discount are not covered by the company's exchange and related policies.

4) The company will not provide its three-guarantee services under any of the following circumstances:

- The Three Service Warranty period has expired;
- Unpacking the product without permission from the technical support team of the company or authorized supplier during product delivery;
- Malfunction or damage cause by improper use, maintenance or storage of the product;
- Unable to use the product normally due to installation of pirated, non-standard, self-made or publically unavailable third-party software.

- Malfunction or damage due to being dropped, crushed, exposed to high temperature, corrosion, introduction of foreign bodies, poor electrical circuits or other abnormal factors.
- Malfunction or damage due to natural disasters, conflict or other force majeure factors;
- Product malfunction caused by dismantling, maintenance or installation by unauthorized or uncertified personnel;
- Products that do not have labels bearing a factory name, factory address, date of manufacture, product serial number, product certification, product warranty card or product serial number, or whose such labels are unclear or damaged rendering them unreadable.
- The product type or serial number on the purchase receipt does not match the actual physical product;

II. Standard Service Guarantee

1) Warranty period

Starting from the date of purchase (from the date on the purchase receipt), this product will be entitled to free maintenance within the limits of the warranty period in accordance with the provisions of the signed sales and purchase contract. Upon expiry of the warranty period, the company will offer paid maintenance services in accordance with the Paid Service Standards.

The product mainly includes the following parts: host, consumable parts, and accessories. For the specific warranty periods, see the List of Product Standard Warranty Periods.

Explanation of Main Points:

- 1) For warranty policies of random promotional products and independent sales or non-standard products, please refer to the corresponding warranty certificates of the promotional products and independent sales or non-standard products;
- 2) Warranty periods for special product items will be set out in the purchase contract;
- 3) The non-electronic components in the packing box are not covered by the warranty. Batteries and other consumable accessories are not covered by the warranty service. They are all provided on a paid basis, with the specific cost determined based on the extent of the damage. The manufacturer will conduct a technical appraisal and then provide after-sales service according to the cause of the damage.
- 4) If the damage is due to non-operational reasons, the manufacturer shall repair or exchange the product. If the damage is due to improper operations, paid after-sales services will be provided, and the actual cost depends on the actual damage;

2) Services

(1) Customer service inquiries

If you have any questions about using the product, please feel free to call the customer service hotline:

0571-87235785, or directly contact local technical support.

(2) Repair process

When you discover a product of the company is faulty, please first contact the vendor, local technical support, or the customer service hotline by telephone or e-mail to describe the problem details and get a preliminary assessment of the fault. If it is diagnosed to be a hardware problem, please fill in the Send for Repair Feedback Card (see the appendix), put it with the faulty product, and send the product to the specified address for repair. We determine based on the warranty card information and the actual problem whether the repairs are free of charge or should be paid. If a fee is required, we will notify you of the determined price and will proceed with the repairs with your consent.

3) Special reminders:

You need to make the following preparations before sending your device for repair:

- Follow the specified service application procedure.
- Back up all the programs and data included in the product or ensure their security. The company will not bear any responsibility for any result due to data loss during use or maintenance.
- Provide necessary support and cooperation, including providing system key or passphrase, fault description, or necessary sites.

- Remove all the confidential and personal information that is protected under the law from the product. If you cannot remove such information from the product, you shall notify the service provider when applying for the warrant service. Do not attach any objects such as peripheral hardware or cables when sending the product for repair.
- If you have special requirements, please contact the company in advance and provide the relevant list when sending the product for repair to avoid unnecessary loss.

III. Precautions and Special Reminders

Cautions

- The hotline number in this document may be subject to change due to changes in the telecommunication network or other factors. Please refer to the latest consultation phone number published on our company's official website.
- The overseas after-sales policy is based on local laws and regulations.
- The company does not provide free three-guarantee services for some products with non-embedded operating systems damaged due to being infected with viruses during use.
- The above-mentioned warranty commitment made by our company only applies to the standard components and accessories of our products when they leave the factory. When you purchase the product, if the seller installs components or accessories not of the company, they will be covered by the seller's own warranty, for which the seller must make an additional commitment and the company will not be held liable. Please ask the seller for written proof to ensure that the seller honors their additional commitment to you.
- In the course of your daily use, or each time before receiving service, please be sure to back up important information so as not to lose it. The company is not responsible for compensating for any losses resulting from data loss during use or maintenance.
- Within the free warranty period, the company assumes ownership of the entire original replaced devices or faulty components that they recover from you.
- Before shipment, please pack the product carefully and pay attention to preventing vibration. You should carefully choose the delivery method and shipment company and purchase shipping insurance. The company does not bear responsibility for any damage caused in the process of shipment arranged by yourself.

IV. Service Supervision

To continuously improve customer service management and develop new customer service models, the company welcomes every customer to monitor our services and make recommendations for improvement. The contact information for service supervision is as follows:

Contact department: Market Service Department

Service email: support.waythcan@waythcan.com

Website: <https://www.waythcan.com>

Address: No.2200, Nan Chuan Road, Binjiang District, Hangzhou

List of Product Standard Warranty Periods

Product category	Product Type	Detailed description	Standard warranty period
Power Battery	X900 Power Battery	UAV Power Battery	6 Months

*Special instructions:

The warranty terms for promotional products, ex-display devices sold at a discount, or non-standard products shall be subject to the actual purchase and sale contract.

The warranty terms for special products shall be subject to the actual purchase and sale contract.

The warranty periods of the agent devices and memory cards shall be subject to the warranty periods promised by the original manufacturer or shall be subject to the actual purchase and sales contract.

Packaging is not covered under the warranty;

For the products not listed above, the warranty periods shall be subject to the actual purchase and sales contracts or written commitments.

Send for Repair Feedback Card

*Customer unit		Matching Device Model		Purchase date	
*Contact		*Contact information			
*Address:					
*Defective device		*Fault description			
*Device List					
Remarks					

Note: 1. The items marked with * are required. 2. Please fill in your receiving address in the address text box. 3. This product is a package product. Please be sure to fill in the list of devices you send back to avoid unnecessary losses. 4. Maintenance may cause the data loss of the devices. Please be sure to back up important data in advance.

Send for Repair Feedback Card

*Customer unit		Matching Device Model		Purchase date	
*Contact		*Contact information			
*Address:					
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