Chapter 5 Smart Battery

5.1 Battery Introduction

The aircraft comes standard with ABX40 or ABX41 smart battery (both hereafter referred to as smart battery) as the power battery. As power battery, they both are rechargeable lithium-ion polymer (LiPo) battery and feature high energy density and capacity. They can be charged with an MDX120W battery charger.

Note

- The MDX_8070_1488 smart battery model has been changed to ABX40, and the original model has been discontinued.
- ABX40 and ABX41 smart batteries only differ in battery capacity and are the same in terms of other functions. If the aircraft is required to fly at altitude of more than 3000m, please use ABX40 smart battery. When purchasing aircraft kit, please refer to the battery configured in the actual purchase order.
- The battery charger is included as part of the aircraft kit. You do not need to purchase it separately.

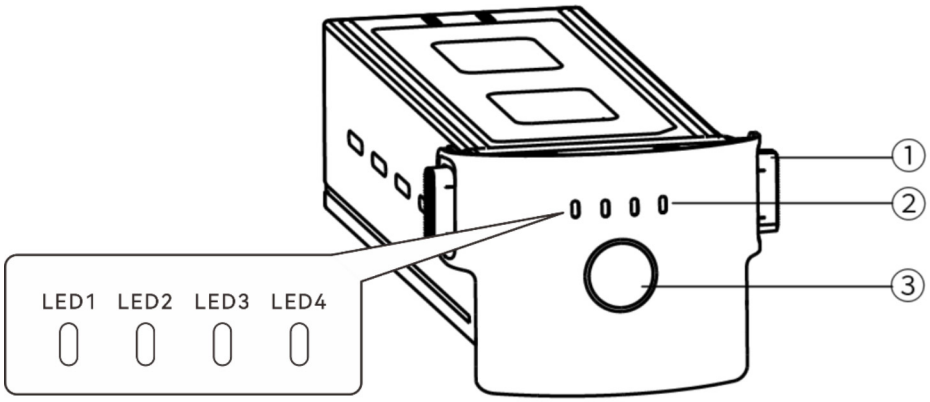


Fig 5-1 Battery Appearance

Table 5-1 Battery Appearance Details

No.	Name	Description
1	Unlock Button	To remove the battery from the aircraft, press and hold the unlock buttons on both sides and pull out the battery.
2	Battery Level Indicator	Used to display the current battery level of the smart battery in normal situations.
3	Power Button	Press and hold the power button for 3s to turn on or turn off the battery.

5.2 Smart Battery Functions

The smart battery has the following functions:

■ Battery Level Display

The smart battery has a built-in battery level indicator, which shows the current battery level of the smart battery.

■ Self-heating

This function allows the smart battery to operate normally even in low-temperature environments, ensuring flight safety. For more information, see "5.3.4 Smart Battery Self-heating" in this chapter.

■ Communication

The aircraft can obtain real-time battery information, such as voltage, current, battery level, and battery temperature, through the communication interface on the smart battery.

■ Power Saving Mode

The smart battery will automatically shut down after 30 minutes of inactivity to reduce power consumption.

■ Dust and Water Resistance

When correctly installed in the aircraft, the battery has an IP43 protection rating.

■ Ultra-low Power Mode

When the smart battery is idle for 12 hours and the battery level is less than 8%, the battery BMS will enter the ultra-low power mode to reduce self-consumption. When entering ultra-low power mode, it needs to be activated by a charger before it can continue to use normally.

■ Self-discharge Protection

If the smart battery is stored in a high-temperature environment or not used for 6 days with a high battery level, the self-discharge protection will be activated. The smart battery will automatically discharge to a battery level of about 60% (by default) and the discharge process takes 2-3 days.

Tip

- Although the battery has no indication of a self-discharge cycle, you may notice that the battery is slightly warm, which is normal.

■ Sleep Mode Protection

If the smart battery has a low battery level, it will automatically enter sleep mode to prevent over-discharge. In this mode, the smart battery does not respond when the power button is pressed. To wake up the battery, you can connect it to a battery charger.

■ Charge Temperature Protection

The smart battery will stop charging when its temperature is lower than 5°C or higher than 45°C during charging, as charging the battery under such temperatures will damage the battery.

■ Overcurrent Protection

The smart battery will stop charging when the charging current is too high, as charging the battery with a high current can severely damage the battery.

■ Overcharge Protection

Charging will stop automatically when the smart battery is fully charged, as overcharging can severely damage the battery.

■ Balance Protection

The voltage of each battery cell in the smart battery is automatically kept balanced to protect the battery and maximize the performance of the battery.

■ Short Circuit Protection

Once a short circuit is detected, the power supply of the smart battery will be cut off to protect the battery.

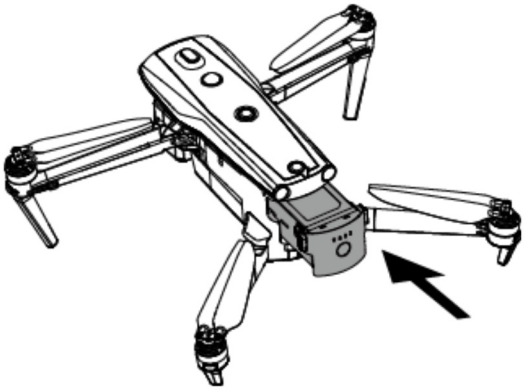
⚠ Warning
● Before using the smart battery, please carefully read and strictly follow the requirements in this Manual, “Battery Safety Operation Guidelines”, and “Disclaimer”, and those on the battery's surface sticker. The user shall undertake all consequences if he/she fails to follow the usage requirements.

5.3 Smart Battery Usage

- Please use a smart battery within the appropriate temperature range (refer to the operating temperature of the aircraft). Using it in too high or low temperatures will affect the battery’s safety and lifespan and may cause spontaneous battery combustion or permanent damage to the battery.
- Do not use the aircraft in a strong electrostatic (such as thunderstorms) or electromagnetic environment. Otherwise, some functions of the smart battery may fail (e.g., abnormal battery output and power failure), resulting in serious aircraft malfunctions.
- Do not use a smart battery that has ever been dropped from the aircraft or subjected to external impacts.
- Do not use a water-soaked smart battery or immerse a smart battery in water or other liquids. Water contact inside the battery may cause corrosion, resulting in spontaneous battery combustion and even an explosion.
- Do not use a smart battery that emits smoke, is bulged, leaks liquids, or has a damaged appearance.
- The liquid inside the smart battery is corrosive. If it leaks, please keep away from it. If it accidentally contacts your skin or eyes, rinse immediately with clean water for at least 15 minutes and seek medical attention.
- Do not disassemble, puncture, strike, crush, or burn a smart battery in any way. Otherwise, it may lead to battery combustion or even explosion.
- Do not short-circuit the positive and negative terminals of a smart battery.
- If the battery connector of a smart battery is dirty, use a dry cloth to clean it. Otherwise, it may cause poor contact, leading to energy loss or charging failure.
- Before replacing the smart battery of the aircraft, make sure that the battery connector, battery compartment interface, battery surface, and battery compartment surface are dry and free of water, and then insert the battery into the aircraft.

5.3.1 Installing/Removing the Smart Battery

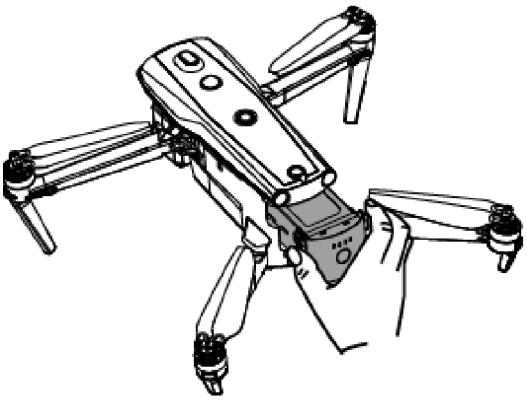
Table 5-2 Install the Smart Battery

Step	Operation	Diagram
1	Turn off the smart battery before installing the battery.	
2	Slowly insert the smart battery into the battery compartment on the aircraft fuselage, and you will hear a clicking sound when the battery is in place.	

⚠ Warning

- If the smart battery is not installed properly, it may cause the battery to fall off during the flight, damage the aircraft, or even cause personal injury.
- Before installing the smart battery on the aircraft, make sure that the battery is turned off.

Table 5-3 Remove the Smart Battery

Step	Operation	Diagram
1	Turn off the smart battery before removing the battery.	
2	Press and hold the unlock buttons on both sides of the smart battery and slowly pull out the battery.	

❗ Important

- The unlock buttons of the smart battery are wearable parts. Please do not press them hard to avoid any possible damage to the internal structure of the battery.

5.3.2 Turning On/Off the Smart Battery

■ Turning On the Smart Battery

When the smart battery is turned off, press and hold the power button for 3 seconds to turn on the battery.

■ Turning Off the Smart Battery

When the smart battery is turned on, press and hold the power button for 3 seconds to turn off the battery.

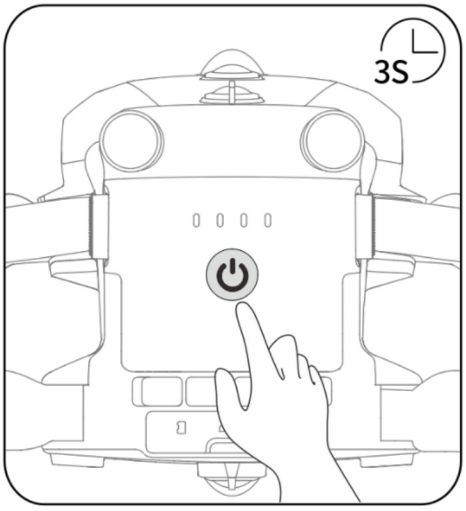


Fig 5-2 Turn On or Off the Smart Battery

Important

- If the smart battery is not installed in the aircraft, it is not recommended to turn on/off the battery, and attention should be paid to insulation protection at the battery connector.
- Before removing the smart battery from the aircraft, turn off the battery. The LED1 and LED4 battery level indicators on the smart battery will blink 5 times to indicate that the aircraft is shutting down. Remove the smart battery from the aircraft after all battery level indicators are off.

5.3.3 Checking Battery Level

When the smart battery is off, short press the battery power button for 1 second to check the current battery level through the battery level indicator status.

After the aircraft is powered on, users can also check the indicator status for current battery level.

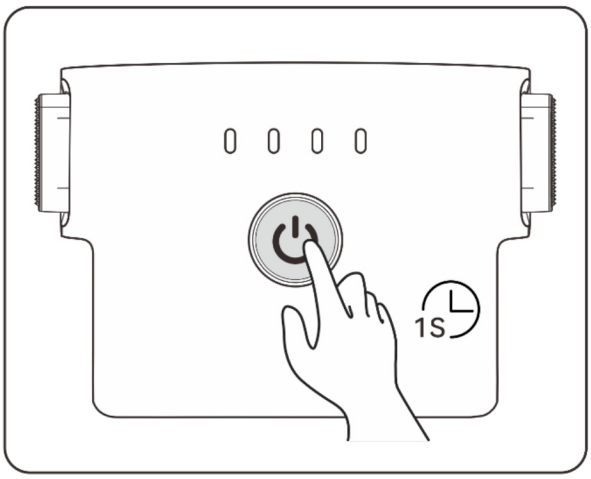


Fig 5-3 Checking Battery Level When the Smart Battery is Off

Table 5-4 Battery Level Indicator Status (While Not Charging)

0%~12%	13%~25%	26%~37%	38%~50%
51%~62%	63%~75%	76%~87%	88%~100%

■: Green light is always on ▣: Green light blinking □: Off

Tip

- After the aircraft is connected to the remote controller, you can check the current smart battery level of the aircraft in the top status notification bar or on the "Battery Information" interface of the flight application. For more information, see "6.3 Status Notification Bar" and "6.5 "Settings" Interface" in Chapter 6.

5.3.4 Smart Battery Self-heating

The smart battery has a self-heating function, which can increase the battery temperature in low-temperature environments, helping maintain good output performance.

- When the smart battery is installed in the aircraft and the battery power is turned on, if the battery temperature is lower than 15°C, the battery self-heating function will be activated. After the aircraft takes off, the battery self-heating function will be automatically turned off.

- If the smart battery is not installed in the aircraft, short press the power button for 1 second and then press and hold the power button for 3 seconds to activate the battery self-heating function to keep the battery temperature between 15°C and 20°C for 10 minutes. At this point, if you want to exit the battery self-heating function, short press the power button for 1 second, and then press and hold the power button for 3 seconds.
- When the smart battery is connected to the MDX120W battery charger and the battery power is turned on, if the battery temperature is lower than 5°C, the charger will supply power to the smart battery for self-heating. Once the battery temperature reaches 15°C, the self-heating function will be turned off.

Important

- When the self-heating function of the smart battery is manually activated, the battery should have at least around 10% of remaining power for self-heating.

When the smart battery is in the states of self-heating and heat preservation, the statuses of the battery level indicators are shown in the following table.

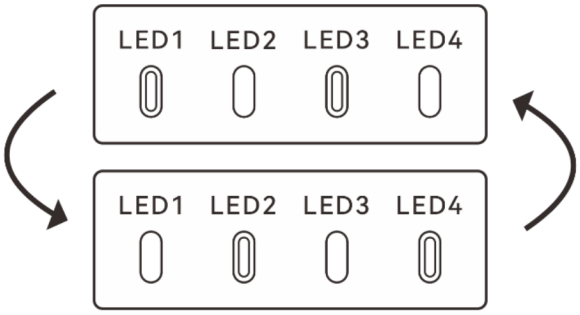


Fig 5-4 Self-heating State

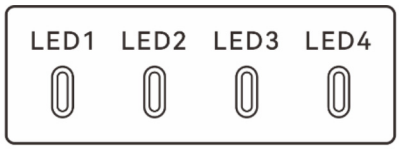


Fig 5-5 Heat Preservation State

Table 5-5 Battery Level Indicator Status

No.	Description
1	LED1, LED3 and LED2, LED4 blink alternately in groups, indicating that it is heating.
2	The 4 LEDs blink at the same time, indicating that it has entered the heat preservation state.
	: Green light blinking : Off

Warning

- When the temperature of the smart battery is lower than -10°C or higher than 70°C, the

aircraft will not be allowed to take off. It is recommended to wait until the self-heating is over or the battery naturally cools down to an appropriate temperature before operating.

- When the temperature of the smart battery is lower than 5°C, the internal resistance of the battery will increase and the voltage will drop suddenly due to the low temperature, which will reduce the usable capacity of the battery and reduce the operating time of the aircraft. In low-temperature environments, make sure that the battery is fully charged before taking off.
- If the battery level of the smart battery is lower than 50%, it is not recommended to take off. When the battery level is low, it is difficult to activate the battery, which will reduce flight safety.
- During the flight, when the flight application prompts a low battery alarm, it is recommended to immediately return to the home point or land.
- In some low-temperature environments, even if the self-heating function is activated, the battery temperature may still not reach the usable temperature. In such cases, please add insulation measures during the heating process.
- In order to get the best performance from the smart battery, it is recommended to keep the battery temperature between 15°C to 35°C before flying.
- In a low-temperature environment, the self-heating time of the battery may be longer. It is recommended that you keep the battery warm in advance to shorten the self-heating time.

5.3.5 Charging the Smart Battery

Connect the charging interface of the official battery charger MDX120W to the notch of the metal electrode of the smart battery, and connect the AC plug to the AC power supply (100-240 V~ 50/60 Hz).

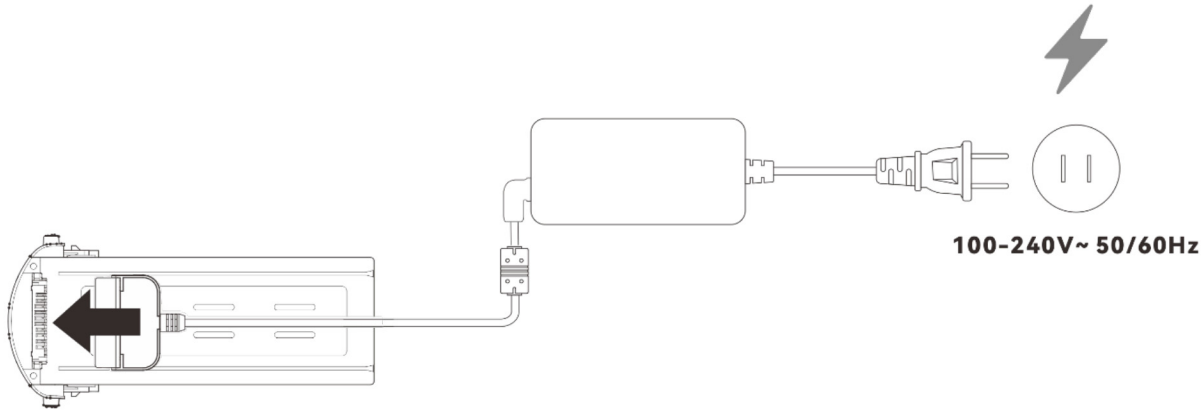
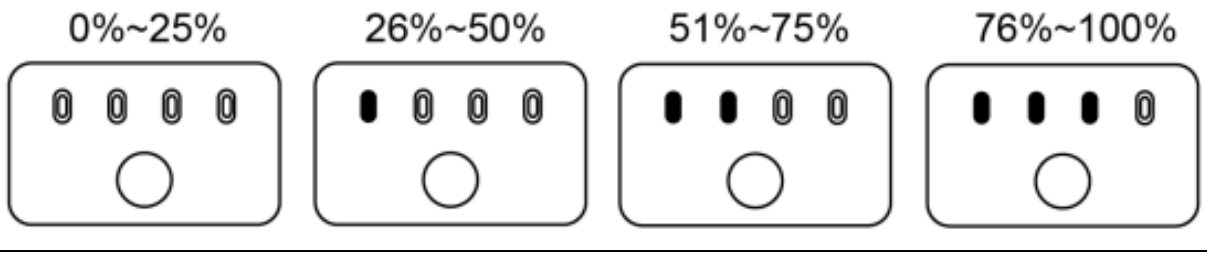


Fig 5-6 Use the Battery Charger to Charge the Smart Battery

Table 5-6 Battery Level Indicator Status (While Charging)



■: Green light is always on ▯: Green light blinking

⚠ Warning

- Do not charge a battery that emits smoke, is bulged, leaks liquids, or has a damaged appearance.
- Do not use damaged charging devices to charge the smart battery.
- Modifying the official smart battery or charging device provided by Autel Robotics is prohibited.
- Only use the battery and charging device provided by Autel Robotics. Autel Robotics is not responsible for any consequences, such as battery accidents and flight failure, caused by the use of third-party batteries or charging devices.
- Keep the smart battery away from flammable and explosive items during charging.
- After the smart battery is fully charged, disconnect the connection between the charger and the smart battery and power supply promptly.
- After flight, it is recommended to wait until the smart battery naturally cools down to an appropriate temperature before charging the battery. If the temperature of the smart battery is higher than 45°C, when the battery is connected to the charging device, the battery temperature protection function will be activated, and the battery cannot be charged until its temperature drops below 40°C.

Note

- It is recommended to fully charge the smart battery of the aircraft before flight.
- Generally, it takes about 90 minutes to fully charge the smart battery of the aircraft, but the charging time is related to the remaining battery level.

Table 5-7 Other Battery Indicator Warning Instructions

LED1	LED2	LED3	LED4	Warning Description
▯	▯	▯	▯	The temperature is too high for charging.
▯	▯	▯	▯	The charging current is too high, which causes a short circuit.
▯	▯	▯	▯	A circuit overcurrent, a circuit overload, or a short circuit occurs

				during battery discharge.

: Indicator light blinking : Off

5.4 Storing and Transporting the Smart Battery

When storing the smart battery, keep the battery away from water or heat sources and store it in a dry, well-ventilated environment at room temperature.
Ideal storage conditions: The battery level is at around 60%, the ambient temperature is between 22°C to 28°C, and the ambient humidity is 65%±20% RH.
The energy of the ABX40 smart battery is 120 Wh and that of the ABX41 smart battery is 136.5Wh. Please refer to local lithium battery transportation policies for battery shipping or carrying.

⚠ Warning

- Before storing or transporting the smart battery, please turn off the battery.
- Store the smart battery out of the reach of children and pets.
- Store the smart battery away from direct sunlight, water, or reactive chemicals.
- Do not expose the smart battery to open flame, explosives, or other hazards.
- Do not store the smart battery in extreme temperatures. Otherwise, the lifespan of the battery may be shortened and the battery may even become damaged or ineffective. If the battery is not used for more than 1 day, it should be stored in -20℃~+35℃.
- Do not place the smart battery in a microwave or pressure cooker.
- Do not place the smart battery directly on conductive surfaces (such as metal shells or panels).
- Do not place heavy objects on the smart battery. When subject to an external force, the battery may be damaged or even catch fire or explode.
- Do not store or transport the smart battery with sharp objects, watches, metal necklaces, earrings, or other metal items.
- Do not transport batteries that have a damaged appearance or a battery level of more than 30%.
- If the smart battery is left idle for a long time, please charge it every three months to avoid a shortened battery lifespan resulting from long-term low battery levels.

5.5 Maintaining and Handling the Smart Battery

5.5.1 Maintaining the Smart Battery

In order to maintain the activity of the smart battery of the aircraft, it is recommended to perform battery maintenance if any of the following conditions are met:

- It is recommended to perform battery maintenance for the smart battery every 50 times of battery cycle.
- The idle time of the smart battery reaches 3 months.

- Occasionally, there are situations that affect the lifespan of the smart battery. In this case, you can try maintenance and repair.
- The flight application reminds you when the smart battery needs maintenance.

The following battery maintenance check items are available for the smart battery:

1. Perform a standard charge and discharge operation on the smart battery.
2. Insert the smart battery into the aircraft and turn on the power. Check the battery information through the flight application, whether the voltage difference between the battery cells is less than 0.1 V, and whether the battery firmware has been upgraded to the latest version.
3. Check whether the smart battery is bulged, leaked, or damaged.
4. Check the battery connector for dirt, damage, or rust.

5.5.2 Standard Charging and Discharging Process

Use the maintenance charging mode of the original charger, and proceed as follows:

1. Use the battery charger MDX120W included in the standard aircraft kit to charge the smart battery to 100% and let the battery sit for 1 hour.
2. Insert the smart battery into the aircraft to fly, control the aircraft to land when the remaining battery level is less than 20%, and then take out the battery.
3. Let the smart battery sit for 8 hours.
4. After the above operations are completed, a standard battery charging and discharging operation is completed.

5.5.3 Smart Battery Replacement Standards

- There are obvious bulges, leakage, and damage on the smart battery surface.
- Damage to or irreparable rust on the metal contacts at the power supply interface of the smart battery.
- After the number of cycles of the smart battery reaches 200, it is recommended to replace the battery with a new one.
- After 2 consecutive standard charge and discharge operations, if the abnormal battery still cannot be repaired, it is recommended to replace it with a new one.

5.5.4 Recycling the Smart Battery

- If the smart battery is discarded due to damage, leakage, or other issues that compromise the integrity of the battery shell, it is recommended to completely immerse the battery in an insulated bucket filled with 5% salt water for more than 48 hours until the battery is completely discharged.
- If the smart battery is normally retired, confirm that it is completely discharged, and then properly recycle it according to local lithium battery waste disposal policies to avoid environmental pollution.

Important

- When the smart battery catches fire, please use solid fire extinguishers such as sand or dry powder extinguishers.

Chapter 6 Flight Application

6.1 Software Introduction

The flight application is a flight control software developed by Autel Robotics for enterprise applications. The software integrates waypoint mission, polygon mission and other mission modes and is easy to quickly get started. The latest version (V2.1.119 and higher versions) supports Single Link and A-Mesh Link modes.

Note
● This chapter is based on V2.1.119 version of the flight application. Some UI interfaces may differ due to version upgrade. Please refer to the UI interfaces actually displayed.

6.2 Main Interface

After turning on the aircraft, you will automatically enter the main interface.

Fig 6-1 Main Interface of the flight application (Fusion 4T/4T XE Gimbal and in A-Mesh Link mode)

Table 6-1 Details of the Main Interface of the flight application

No.	Name	Description
1	Status Notification Bar	For details about the status notification bar, please refer to "6.3 Status Notification Bar" in this chapter. In Single Link: ➢ It displays the aircraft system's alarm notification and information, flight mode, mission status, RC battery, RC signal, GNSS signal, aircraft battery, OA status, and flight status. In A-Mesh Link mode: ➢ When all aircrafts are selected ("ALL" selected), it only displays the aircraft system's alarm notification and information and RC battery. ➢ When one aircraft in the team is selected, it displays the aircraft's alarm notification and information, flight mode, mission status, RC battery, RC signal, GNSS signal, aircraft battery, OA status, and flight status.
2	Toolbar	Offers quick access to certain frequently used functions. Users can add icons of frequently used functions from "Shortcuts" on the toolbar.
3	"Camera" Full Screen Interface	Displays the image transmission screen of the aircraft selected currently. Users can control the gimbal camera to shoot or record in this interface. ➢ When all aircrafts are selected ("ALL" selected), it displays the image transmission display of the aircraft selected before all aircrafts are selected.
4	"Map" Preview Interface	Provides access to the full-screen "Map" interface.
5	Camera Function Access	Offers access to the gimbal camera operations and settings. ➢ When all aircrafts are selected ("ALL" selected), " " icon is displayed in grey and is unavailable.
6	Device Preview Switch	In A-Mesh Link mode, it displays all aircrafts in the team (which does not appear in Single Link), users can select an aircraft to set and control it solely. ➢ When all aircrafts are selected ("ALL" selected), " " icon is displayed in grey and is unavailable.
7	Toolbar Hide Button	Tap it to hide the toolbar.

Tip

- The flight application can automatically identify the gimbal camera model mounted on the aircraft and adjust the display content of the main interface accordingly. When an aircraft with a different gimbal camera model is connected to the remote controller, the display content on the main interface of the flight application may vary.

Table 6-2 Multi-Screen Switching Operations on the Main Interface

No.	Icon	Meaning	Description
1		Dual-Screen Mode	Tap this icon to enter the dual-screen mode. Fusion 4T Gimbal/Fusion 4T XE Gimbal: The left and right sides of the remote controller screen can display any two of the three split-screen interfaces, which are "Map", "Zoom", and "Infrared". Fusion 4N Gimbal: The left and right sides of the remote controller screen can display any two of the four split-screen interfaces, which are "Map", "Wide Angle", "Night Vision", and "Infrared".
2		Three-Screen Mode	Tap this icon to enter the three-screen mode. The flight application defaults to the three-screen mode. Fusion 4T Gimbal/Fusion 4T XE Gimbal: The left side of the remote controller screen displays the "Map" split-screen interface, the upper-right side displays the "Zoom" split-screen interface, and the lower-right side displays the "Infrared" split-screen interface. Fusion 4N Gimbal: The left side of the remote controller screen defaults to the "Map" split interface, the upper-right side defaults to the "Wide Angle" split-screen interface, and the lower-right side defaults to the "Night Vision" split-screen interface. Each split-screen interface can be switched to the "Infrared" split-screen interface.
3		Four-Screen Mode	Tap this icon to enter the four-screen mode. This mode is only supported by Fusion 4N Gimbal. In the four-screen mode, the upper-left side of the remote controller screen displays the "Wide Angle" split-screen interface, the lower-left side displays the "Map" split-screen interface, the upper-right side displays the "Night Vision" split-screen interface, and the lower-right side displays the "Infrared" split-screen interface.

4		Maximize Window	Tap this icon to adjust a split-screen interface to the corresponding full-screen interface.

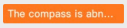
Tip

- In any camera full-screen interface or camera split-screen interface, you can swipe up anywhere to hide all function icons and swipe down to restore the display of function icons.

6.3 Status Notification Bar

Fig 6-2 Status Notification Bar of the flight application

Table 6-3 Details of the Status Notification Bar of the flight application

No.	Icon	Meaning	Description
1		Status and Fault Warning	Displays the current warning information of the aircraft: ➢ Gray indicates that the remote controller is not connected to the aircraft. ➢ Orange indicates a medium-level warning. In this case, the aircraft will not be prohibited from taking off but should pay attention to flight safety. ➢ Red indicates a high-level warning. In this case, the aircraft will be prohibited from taking off and can take off only after you solve the fault.
2		Flight Status	Displays the current flight status. There are 3 modes: GNSS mode, visual positioning mode, and attitude mode. For more information, see "3.9.1 Flight Status" in Chapter 3.
3		Mission Status	Displays the current mission type and mission status of the aircraft.
4		No SD Card	Indicates that there is no microSD card installed in the aircraft currently.
5		Remote Controller Battery	Displays the current battery level of the remote controller.
6		Remote Controller Signal Status	1. Displays the current communication signal status between the remote controller and the aircraft.

			2. Tap this icon to display the specific signal status: When the signal is 3-5 grids, the remote controller signal is displayed as strong. When the signal is 1-2 grids, the remote controller signal is displayed as weak. 3. When the remote controller is not connected to the aircraft, the remote controller signal is displayed in gray color.
7		RTK Signal Status	After a RTK module is installed on the aircraft, it displays the RTK signal status and positioning accuracy level of the aircraft.
8		GNSS Signal Status	1. Displays the current GNSS signal status of the aircraft. 2. Tap this icon to display the specific signal status and satellite connection status. 3. If the aircraft receives no GNSS signal, the GNSS signal is displayed in gray color.
9		Aircraft Battery	1. Displays the current battery information of the aircraft. 2. Tap this icon to display the battery level, voltage, and temperature of the aircraft battery.
10		Obstacle Avoidance System	Displays the current activation status of the aircraft obstacle avoidance system. ➢ Green indicates that the obstacle avoidance system is activated. ➢ Red indicates that the obstacle avoidance system is deactivated.
101		Speed Mode Display	Displays the current speed mode of the aircraft. Four modes are available, that is, Slow mode, Smooth mode, Standard mode, and Ludicrous mode. You may tap this icon to switch flight mode. For more information about the speed modes, see “3.9.2 Flight Modes” in Chapter 3.

6.4 Toolbar

The toolbar is displayed below the system status notification bar of the flight application, which allows you to quickly activate certain functions.

In the toolbar, you can press and hold and drag the function icons to customize the sorting. At the same time, you can also tap on the “” icon to enter "Shortcuts" and then tap on the “” icon on the right side of "Shortcuts" to add a function icon into or delete a function icon from the toolbar. You can also add the icon from the shortcuts to the toolbar.

Tip

- You can add a maximum of 12 function icons to the toolbar, some functions need aircraft hardware support and unavailable functions will be displayed in grey.
- When all aircrafts are selected (“ALL” selected), some functions will be displayed in grey and be unavailable.

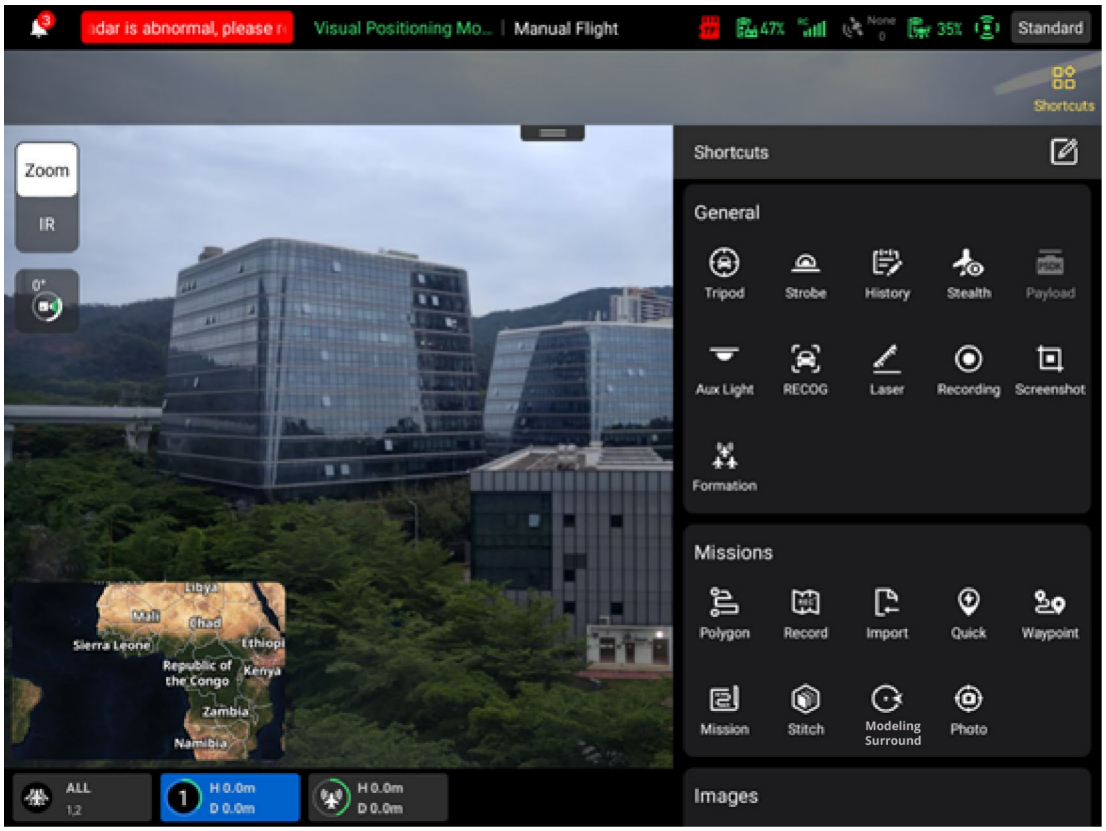


Fig 6-3 Toolbar

Table 6-4 Toolbar Details

No.	Icon	Name	Description
1		Shortcuts	Tap this icon to enter the “Shortcuts”, where you can view all shortcut function icons.
2		Edit	Tap this icon to add function icons from "Shortcuts" to the "Toolbar" or move the function icons in the "Toolbar" to "Shortcuts".
3		Tripod	Tap this icon, and the aircraft camera will automatically lock onto the selected target.
4		Strobe	Tap this icon to turn on the strobe on the top of the aircraft fuselage.
5		History	Tap this icon to view all history pinpoints in the

			map.
6		Stealth	Tap this icon, and the aircraft will turn off the arm lights, strobes, and auxiliary bottom lights after users sign the disclaimer.
7		Payload	Tap this icon to open function panel of the aircraft payload.
8		Aux Light	Tap this icon to turn on the bottom auxiliary light, which is used to improve the environment lightness when the aircraft is landing in a dark light environment.
9		RECOG	Tap this icon to intelligently identify the target object type.
10		Laser	Tap this icon to automatically measure the distance from the target point at the center of the lens to the aircraft, as well as the target point's altitude and coordinates (longitude and latitude).
11		Screenshot	Tap this icon to capture the current screen in a screenshot.
12		Recording	Tap this icon to start recording the current screen.
13		Formation	When all the aircrafts in the team take off and fly more than 30 meters above the ground, select all the aircrafts and tap this icon to execute formation flight. During the flight, non-relay aircrafts will approach the relay aircraft according to the set horizontal interval, and finally fly in the same direction as the relay aircraft does.
14		Polygon	Tap this icon to enter the "Polygon" mission editing interface.
15		Record	Tap this icon to record real-time attitude, motion, and other parameters of the aircraft and gimbal camera during a flight mission, which allows for repeating the operation process for the next mission.
16		Import	Tap this icon to import the missions (supporting KML format) saved locally into the mission library.
17		Quick	Tap this icon, after setting the quick mission point, the aircraft can fly to the mission point to execute

			temporary mission.
18		Waypoint	Tap this icon to enter the "Waypoint" mission editing interface.
19		Mission	Tap this icon to enter the “Missions” interface, where you can query, edit, favorite, and delete previously saved historical flight missions.
20		Stitch	Tap this icon to configure the remote controller to connect to a computer device with 2D/3D mapping software installed, which allows for fast mapping.
21		Modeling Surround	Tap this icon, the aircraft will fly in circle with the current position as the circle center.
22		Photo	Tap this icon, the aircraft, after flying to the target point, will recap the picture and videos shot or recorded last time.
23		Album	Tap this icon to view materials from the aircraft's album and the local album and download or delete them.
24		Defog	Tap this icon to make the shooting or recording scene more transparent and enhance color contrast, which is used to eliminate the "fogging phenomenon" in the picture or the lack of picture clarity caused by smog.
25		Pro Setting	Tap this icon to make professional settings for the gimbal camera parameters.
26		Brightness	Tap this icon to move the slider left and right to adjust the brightness of the camera.
27		Night Mode	Tap this icon, and the Wide angle Camera and Night Vision cameras will enter night shooting mode. Even when shooting in a low-light environment, the picture will remain clear.
28		Single Link	Tap this icon to achieve frequency matching between a RC and an aircraft.
29		A-Mesh Link	Tap this icon to achieve frequency matching between up to 2 RCs and 2 aircrafts to form a team.
30		Aircraft	Tap this icon to place a marked point in the aircraft’s current position.