

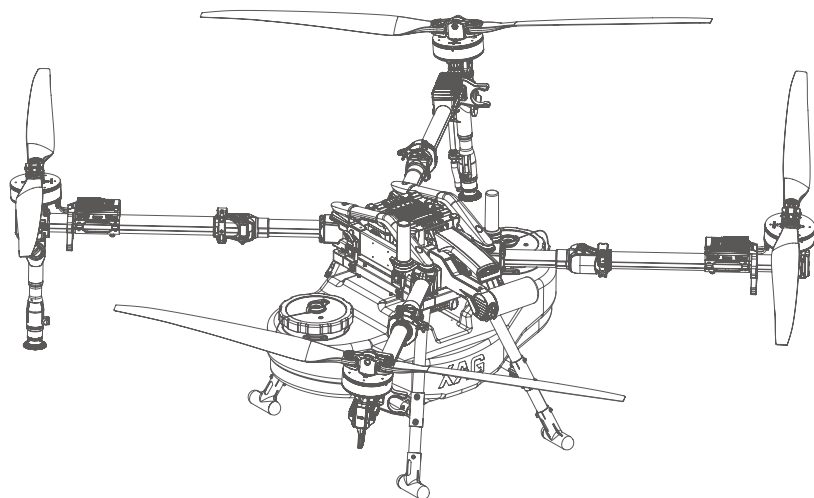
XAG P150 Max

Type: 3WWDZ-U80AH

User Manual

Version AU V1.2

EN



To User

Dear user, thank you for choosing Our products.

For safety purposes and better user experience, it is highly recommended that you read this manual carefully and strictly follow the instructions hereof.

Read Before Use

XAG provides you with tutorial videos and the following documents:

1. Disclaimer and Safety Guidelines
2. User Manual

It is recommended to read the Safety Guidelines before using for the First time.

<https://www.xag-au.com/download-center?name=XAG+P150+Max>

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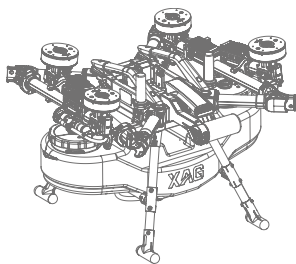
Introduction

The XAG P150 Max Agricultural Drone (hereinafter referred to as the "drone"), capable of spraying, spreading, transporting, and mapping, features a fully upgraded propulsion system that delivers significantly enhanced performance. Powered by the brand-new SuperX 5 Ultra Intelligent Control System and 4D radar sensing module, the drone brings intelligence to an entirely new level. Together with the next-generation payload systems such as RevoSpray, RevoCast, and RevoSling, it adapts to a wide range of agricultural scenarios, offering precise, efficient, stable, and reliable performance, making it a true all-rounder in smart agriculture.

List of Items

The list below contains three boxes: **P150 Max airframe** and **remote controller**^[1]. When unboxing, check the package contents against this list. Immediately contact your seller regarding any missing items.

P150 Max Airframe



P150 Max Airframe
×1



CW Propeller
×2



CCW Propeller
×2



Blade Holder (M1 & M2)
×2



Blade Holder (M3 & M4)
×2



Tool Kit
×1

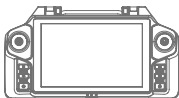
[1]: The remote controller comes in two options, the ACS4 and the SRC5. Please refer to the actual model you purchase.

Remote Controller - XAG Agricultural Control Stick 4 (ACS4)

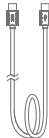


ACS4
×1

Remote Controller - XAG Smart Remote Controller 5 (SRC5)

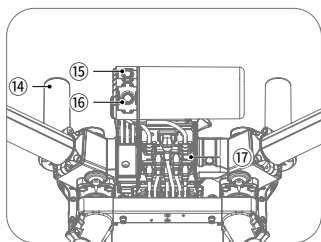
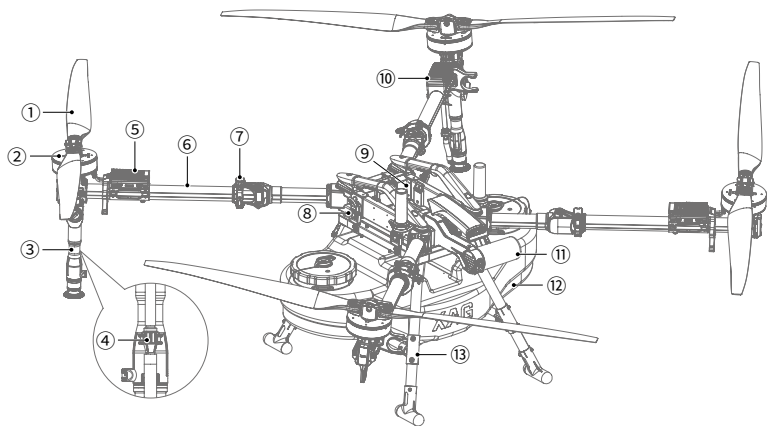


SRC5
×1

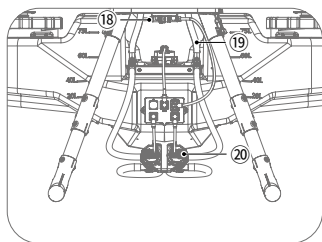


Type-C Cable
×1

Main Components



Front Bottom View



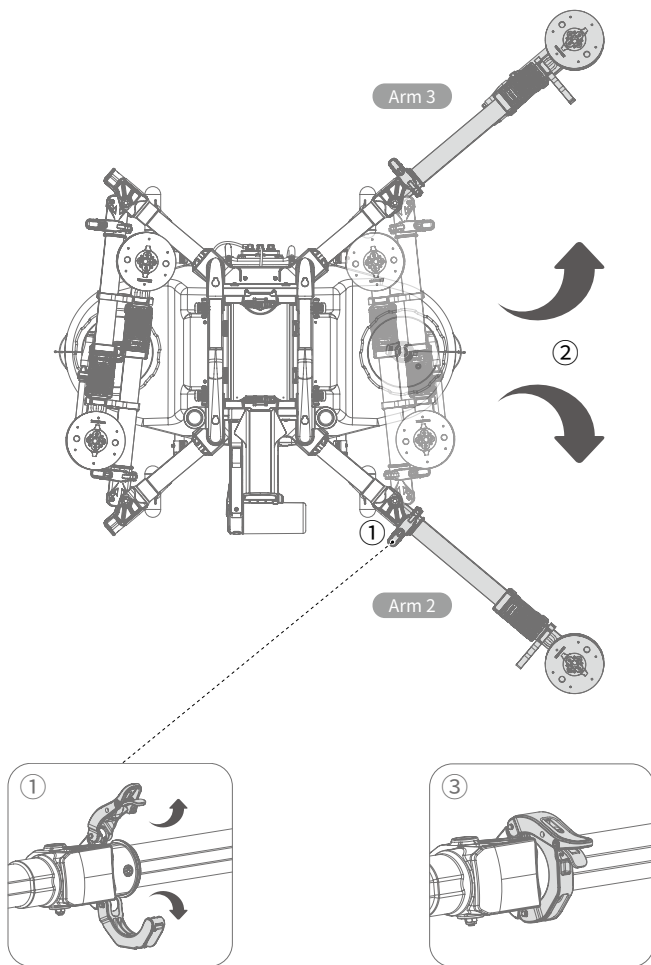
Rear View

- | | | |
|-------------------|----------------------------|--------------------------|
| ① Propeller | ⑧ Airframe Hasp | ⑮ LED Light |
| ② Motor | ⑨ Battery Compartment | ⑯ FPV Camera |
| ③ Spray Rod | ⑩ Arm Light | ⑰ Cable Hub |
| ④ Anti-Drip Valve | ⑪ 4D Imaging Radar | ⑱ Payload System Cable |
| ⑤ ESC | ⑫ Liquid Tank | ⑲ Liquid Tube |
| ⑥ Foldable Arm | ⑬ Landing Gear | ⑳ Flexible Impeller Pump |
| ⑦ Arm Fastener | ⑭ Omni-Directional Antenna | |

Prepare Drone

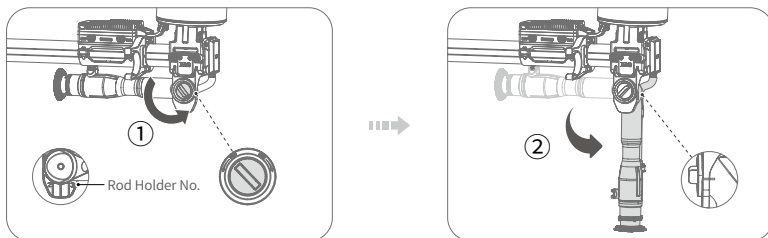
Unfold Arms

- ① Release the fasteners on Arms 2 and 3 (take the left arm as an example).
- ② Gently spread Arm 3 (the outer one) to disengage the fastener securing Arm 2. Then unfold Arm 3 followed by Arm 2.
- ③ Once fully unfolded, secure the fasteners on Arms 2 and 3.



Unfold Spray Rods

- ① Loosen the spray rod knob by turning it counterclockwise.
- ② Spread out the spray rod to its maximum angle limit, and then tighten the knob clockwise.

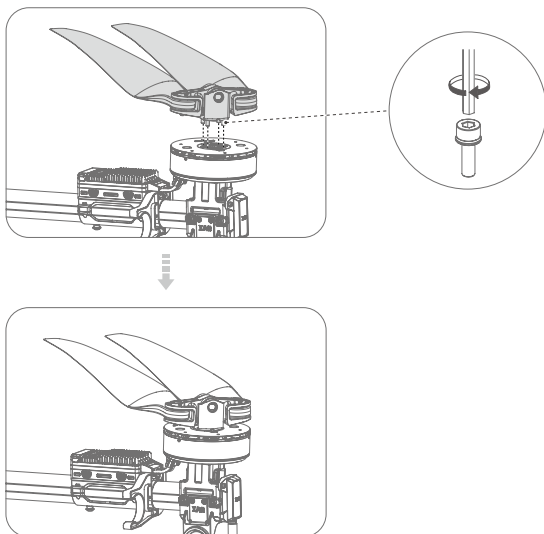


Note

- ⚠ Before unfolding the spray rod, ensure that the numbering on the rod holder matches the respective arms: Holder 3 is for Arm 3, while Holder 4 is for Arm 4. When installing the rod, ensure that both the rod and its knob are correctly inserted into the corresponding rod holder (with the knob facing toward the nose of the drone).

Install Propellers

Place the CW propellers on the CW motors of Arms 1 and 3, and the CCW propellers on the CCW motors of Arms 2 and 4. Use the L-shaped wrench and weighted socket from the tool kit to tighten the 4 screws that secure the propeller to the propeller base (four screws for each base) to complete the propeller installation.

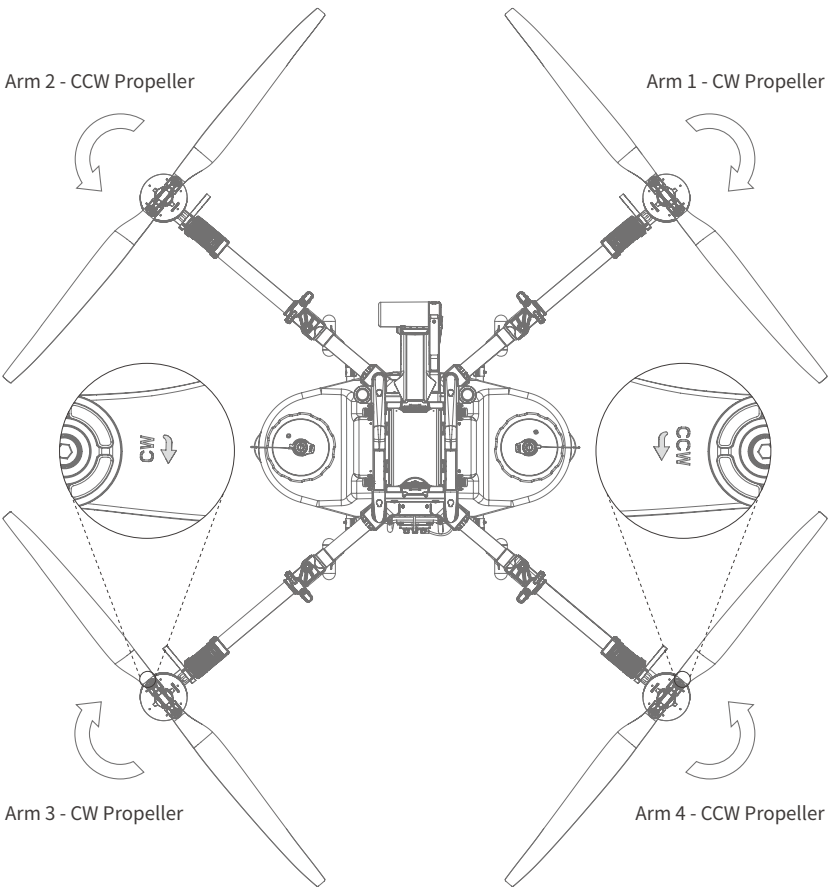


Note

- ⚠ CW propeller and CCW propeller are NOT interchangeable, or it may cause accidents.

Unfold Propellers

Spread out four propellers and see whether their models, which could be found between the clamp and the blade, match those on the arms respectively. CW propellers, rotating clockwise, should be on Arms 1 and 3. CCW propellers, rotating counterclockwise, should be on Arms 2 and 4.



Prepare Batteries

XAG P150 Max Agricultural Drone is compatible with the following battery models: B13960S, B13970, B13970S, and B141050 Smart Supercharge Batteries (referred to as "the batteries"). This user manual will take the B141050 as an example.

Power ON / OFF

Press and hold the power button for 2 seconds to turn the battery on or off.

While the battery is off, connect it to a charger or a device. Press and hold the power button for 2 seconds until the battery level indicators light up, indicating successful startup.

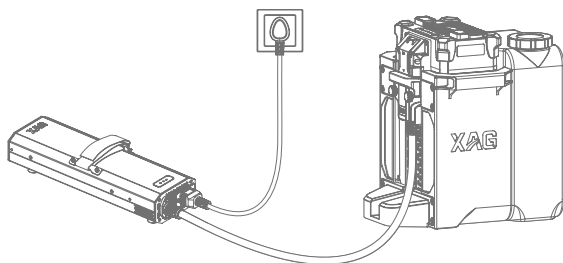
While the battery is on, press and hold the power button for 2 seconds until all the battery level indicators go off, indicating successful shutdown.

Charge

When using a Supercharge Station or a charger to charge the battery, the charging process will automatically stop once the battery is fully charged, and the battery will power off automatically.

Charge with Charger

CM13600S Charger

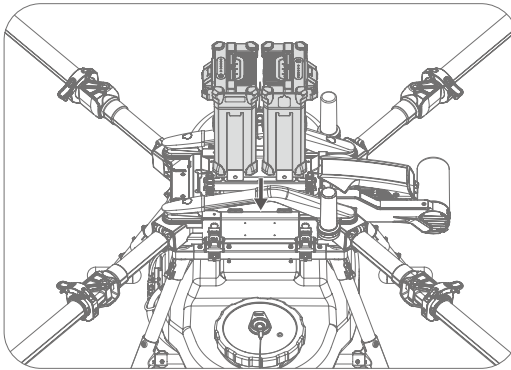


Note

- ⚠ For water or mist cooling, submerge the battery in clean, non-corrosive water for a maximum of 60 minutes. Ensure that the water level remains between the Min and Max marks on the battery casing for optimal heat dissipation. Do not fully submerge the battery in water.
- ⚠ Before charging, please see that the power contact is clean and dry and the charging plug and battery interface are free of any metal objects or liquid residue.
- ⚠ While charging, monitor the water level in the battery cooling tank/tower. If it falls below the Min mark, refill with fresh water without exceeding the Max mark.
- ⚠ While charging, be sure to prevent water from the battery cooling tank/tower from splashing onto the charger or supercharge station to avoid power failure or damage to the station and battery.
- ⚠ While charging, be sure to prevent water from the battery cooling tank/tower from splashing onto the charger or supercharge station to avoid power failure or damage to the station and battery.
- ⚠ Please remove the battery before draining the battery cooling tank/tower.

Install Batteries

Insert the battery into the battery compartment until you hear a clicking sound.



Note

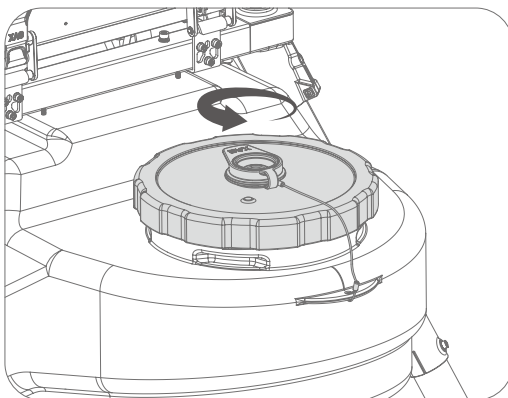
- ⚠ Before installing the battery, please keep the power connector of the drone and the battery connector clean, dry, and free of metal, foreign objects and liquid residue.
- ⚠ When equipped with B13960S, B13970, or B13970S, the drone is unable to perform full-load flight operations. For safety, the maximum payload must not exceed 60kg when using either the RevoSpray system, the RevoCast system, or the RevoSling system with these three battery models. The user shall bear full responsibility for any battery failures, flight incidents, or other safety issues resulting from overloading.
- ⚠ Before powering on the battery, ensure it is fully seated in the battery compartment to prevent flight accidents caused by inadequate power contact.

Tank Filling

You can fill the tank directly or with a pump nozzle.

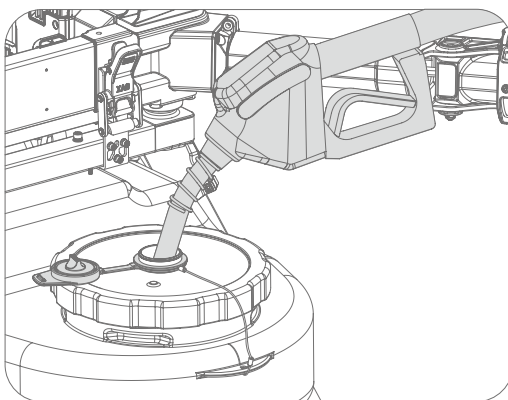
Fill Directly

Unscrew the lid counterclockwise, fill up the tank, and then tighten the lid clockwise.



Fill with Pump Nozzle

Unscrew the lid, fill up the tank with a pump nozzle, and then tighten the lid.



Protective Measures for Pesticide Preparation

Safety is paramount when preparing pesticides, so please strictly follow the guidelines below.

- ① Wear long-sleeved clothing, trousers, a mask, goggles, and rubber gloves, and stand in a well-ventilated, shady area upwind while preparing pesticides.
- ② Check your long-sleeved clothing, trousers, mask, goggles, and rubber gloves and replace them immediately if worn.

- ③ During pesticide application, refrain from smoking, eating, or drinking. If the tubes or nozzles become clogged, do not attempt to clear them by blowing with your mouth; instead, use soft objects or clean water for unclogging.
- ④ If pesticides accidentally splash into your eyes, rinse with plenty of clean water immediately. If you experience symptoms like headaches, nausea, or vomiting, stop all activities, remove your work clothes, and bring the pesticide packaging to the nearest hospital for medical attention.
- ⑤ After completing the operation, be sure to wash your hands with soap and thoroughly cleanse your entire body promptly.
- ⑥ Soak and wash your protective equipment with alkaline water.
- ⑦ Used pesticide containers and packaging should be collected and disposed of properly. Under no circumstances should they be casually discarded in ditches, wells, or areas frequented by humans and animals to prevent pesticide contamination, poisoning, or environmental pollution.

Precautions for Pesticide Preparation

- When handling pesticides, it is important to follow the safety instructions provided by the pesticide manufacturer.
- During operation, attention to drone protection is just as vital as ensuring personal safety. Prevent the entry of pesticides into the circuit board during tank installation/removal to avoid short circuits that may damage the drone. Minimize device failures caused by improper handling.
- Pesticides should be prepared with clean water; avoid using dirty or muddy water which will compromise the dispersity, wettability, and permeability of pesticides in water, leading to precipitation and poor efficacy. Impurities in water may even degrade some active ingredients in pesticides, diminishing their effectiveness.
- After adding clean water, thoroughly stir the pesticide mixture to ensure full dissolution, minimize precipitation, and enhance pesticide effectiveness. Avoid using warm water, which may cause the solution to crystallize and precipitate as the water cools down.

Pesticide Poisoning Symptoms and Emergency Response

Symptoms: dizziness, headache, nausea, vomiting, excessive sweating, chest tightness, blurred vision, weakness, shortness of breath, increased heart rate, and in severe cases, incontinence and constricted pupils.

Emergency Response: In case of ingestion, do NOT induce vomiting. Immediately take the individual to the hospital with the pesticide label.

Prepare Remote Controller

There are two types of remote controllers: ACS4 and SRC5. Unless otherwise specified, the features or precautions described in this document for the "remote controller" apply to both models.

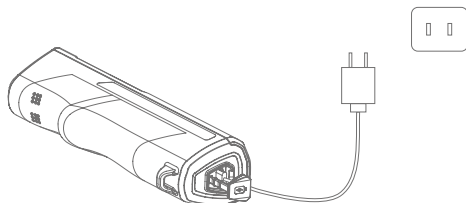
Warning

- ⚠ As the remote controller is specially designed for XAG's product, most likely it is not compatible with non-XAG products. User who uses it on other products shall be held accountable for the damage and legal responsibilities arising therefrom.
- ⚠ Since the remote controller is not waterproof, please avoid getting it wet or soaked during charging and use. Otherwise, user shall be responsible for any product failure or damage arising therefrom.
- ⚠ When flying the drone with the remote controller, please ensure the surrounding area is clear and maintain a safe distance from the drone. Keep the drone away from crowds, animals, or any other obstacles.

ACS4

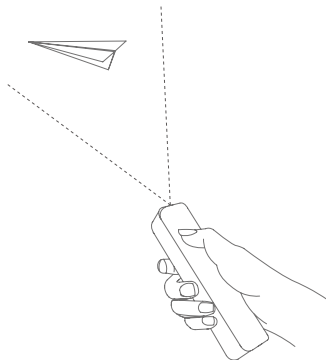
Charging

Insert the Type-C end of the cable into the charging port of the ACS4 and the USB end into the charging adapter before connecting it to a power source. When you hear the voice prompt "Charging Complete" and the power indicator light turns solid green, the ACS4 is fully charged.



Operation Methods

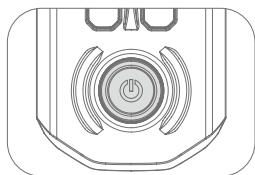
When operating a drone with the ACS4, always make the Wi-Fi antenna on the top of the ACS4 face the drone and avoid obstruction to prevent signal blockage.



Note

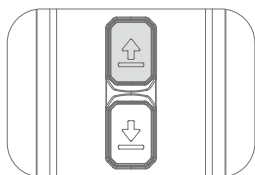
- ⚠ When operating the drone with the ACS4, the ACS4's warning indicator will blink red, along with a voice prompting "Drone's battery low" when the drone's battery level is less than 20%. During operation, make sure the drone is always within your line of sight, keep a close eye on it, and return or force it to land in a timely manner according to the warning prompts.

Power on/off



- When the ACS4 is off, turn it on by pressing and holding  for 2 seconds until you hear the "XAG" voice prompt.
- When the ACS4 is on, turn it off by pressing and holding  for 2 seconds until you hear the "power off" voice prompt.

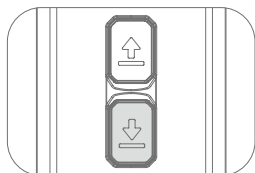
Take-off



- Press and release  once, followed by a long press until you hear the voice prompt "take off soon", the propeller will start to idle. Keep pressing until the drone takes off. Alternatively, press and hold  and  at the same time, and the drone will automatically take off and hover at 2.5 meters.

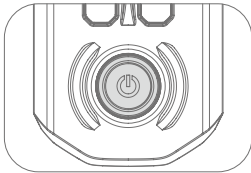
- ⚠ After take-off, the propeller will idle. Please stay away from the drone.
- ⚠ If the drone does not take off within 5 seconds after the propellers start to idle, it will lock automatically, and the propellers will stop.

Landing



- Press and hold  until the drone lands and the propellers stop. Alternatively, press and hold  and  at the same time to land the drone during flight.

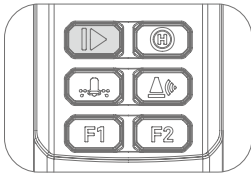
Joystick Lock



- Short press  to lock the joystick, and the joystick lock indicator will turn solid red;
Short press  to unlock the joystick, and the joystick lock indicator will turn solid red.

 When locked, the ACS4 joystick is disabled for directional control, ascending/descending, and left/right rotation.

One-Tap Operation

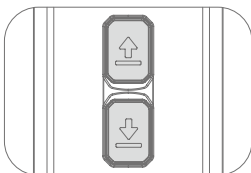


- Short press  once, followed by a long press to activate One-Tap Operation.

 One-Tap Operation allows the drone to take off and resume its previous task from the breakpoint.

 When the drone is on the ground and One-Tap Operation is activated, the propellers will idle. If the drone does not take off within 5 seconds after the button is released, it will automatically lock, and the propellers will stop.

Ascend/Descend

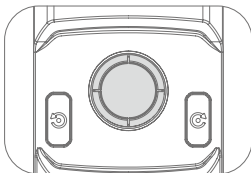


- Short press  /  to make the drone ascend/descend by a set altitude. Press and hold  /  for continuous ascent/descent.

 Ensure there are no persons within a 10-meter radius of the drone when maneuvering it upward or downward.

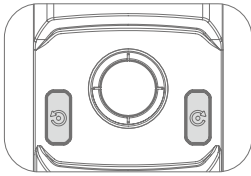
 When flying the drone manually, please make sure the nose of the drone is facing directly forward as you are.

Pitch/Roll



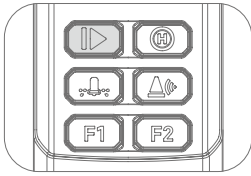
- After unlocking the joystick, you can control the pitch and roll of the drone with the joystick.

Heading Control



- Short press  /  rotate the drone left/right at a specific angle. Press and hold  /  for continuous left/right rotation.

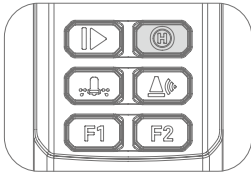
Hover/Resume



- Short press  to make the drone hover. Press and hold  to resume.

⚠ Resume/Pause operations are actions performed while the drone is in the air.

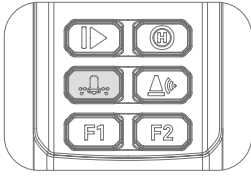
Return to Home (RTH)



- Press and hold  to activate RTH.

⚠ When performing RTH with the remote controller, make sure no one is under the return route.

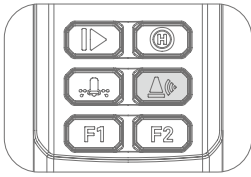
Start/Stop Spraying



- Press and hold  to start spraying. Short press  to stop spraying.

⚠ The drone cannot spray while hovering.

Enable/Disable Obstacle Avoidance



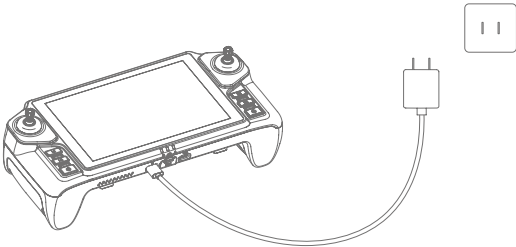
- Press and hold  to enable obstacle avoidance, and the indicator light will turn solid green. Short press  to disable obstacle avoidance, and the indicator light will turn off.

SRC5 Smart Remote Controller

Charging

Insert one end of the Type-C cable into the charging port of SRC5 Smart Remote Controller (hereinafter referred to as "SRC5") and the other end into the charging adapter, then connect the adapter to a power source.

While charging with the fast charger, the power indicator will blink rapidly and the buzzer will beep. The power indicator will turn solid green when the SRC5 is fully charged.

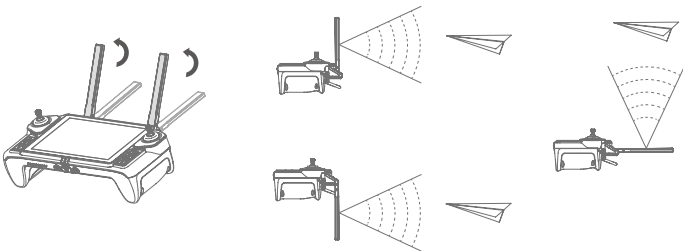


Note

⚠ When SRC5 is on, slow charging will only allow it to work at a certain battery level. For a full charge, please turn it off.

Unfold Antenna

Spread out the antennas and adjust them to the appropriate positions. Rotate the antennas clockwise to adjust the orientation.



Note

⚠ The signal strength varies depending on the position of the antenna. When operating the drone remotely, users can adjust the antenna orientation to optimize signal reception.

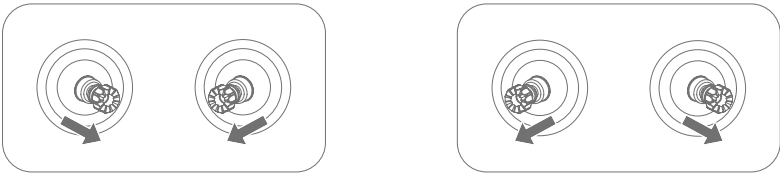
Power on/off

Power on: Press and hold the power button for 2 seconds, the power indicator light will turn solid and you hear the voice prompt "power on", it means the SRC5 has been successfully powered on.

Power off: Press and hold the power button for 2 seconds until all indicators turn off and you hear the voice prompt "power off".

Start Motors

Before take-off, you can start the motors by performing the following two joystick maneuvers. If the throttle is not applied within 3 seconds after releasing the joysticks, the motors will stop automatically.

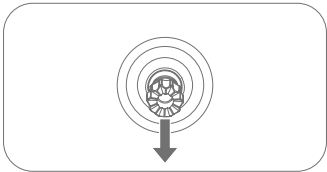


Warning

 Do NOT push the joysticks to start motors while the drone is flying because it will stop the motors and cause the drone to crash.

Stop Motors

After landing, pull and hold the throttle to the lowest position and the motors will stop after 1 second.



Hover & RTH

When the drone is flying, short press  on the remote controller to make the drone hover. Press and hold  to resume the operation.

When the drone is flying, press and hold  to perform RTH.

Warning

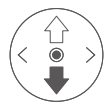
 If the joystick malfunctions or the drone becomes uncontrollable, press  to make the drone hover, and then press and hold  to bring it back.

Joystick Mode

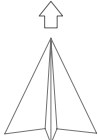
The Joystick Mode is divided into Japanese Hand, American Hand and Chinese Hand. The default mode is American Hand (Mode 2).

Japanese Hand (Mode 1)

Left Joystick



Forward



Backward



Turn Left



Turn Right



Right Joystick



Ascend



Descend



Left



Right



American Hand (Mode 2)

Left Joystick



Ascend



Descend



Turn Left



Turn Right



Right Joystick



Forward



Backward



Left



Right



Chinese Hand (Mode 3)

Left Joystick



Forward



Backward



Left



Right



Right Joystick



Ascend



Descend



Turn Left



Turn Right



How to Use

Download "XAG One" App



Android system users can scan the QR Code above to download/install XAG One.
iOS system users can search for "XAG One" in the App Store to download and install.

Add a Device

Add a Drone

For the first time use, you need to add the drone to XAG One by following the steps below.

1. Open XAG One, enter the phone number to register for an account and log in.
2. On the home screen (main screen), tap  in the upper right corner and select "Add a Device".
Alternatively, you can go to "Me" - "Device" - "  " to add the device.
3. Scan the QR code on the nameplate of the fuselage, or enter the serial number on the fuselage.
4. Set the device name and tap "Next".
5. Tap "View Device Details".
6. On the "Device Details" screen, find and select "Set as operation device" to designate this drone as the operation device. You have now successfully added the drone.

Add a Remote Controller

When using the ACS4 for the first time, you need to add it to XAG One by following the steps below.

1. Open XAG One, tap  in the upper right corner of the home screen (main screen), and select "Add a Device". Alternatively, you can go to "Me" - "Device" - "  " to add the device.
2. Scan the QR code on the ACS4 or enter its serial number to add the device.
3. Name your device and tap "OK" to complete the addition.

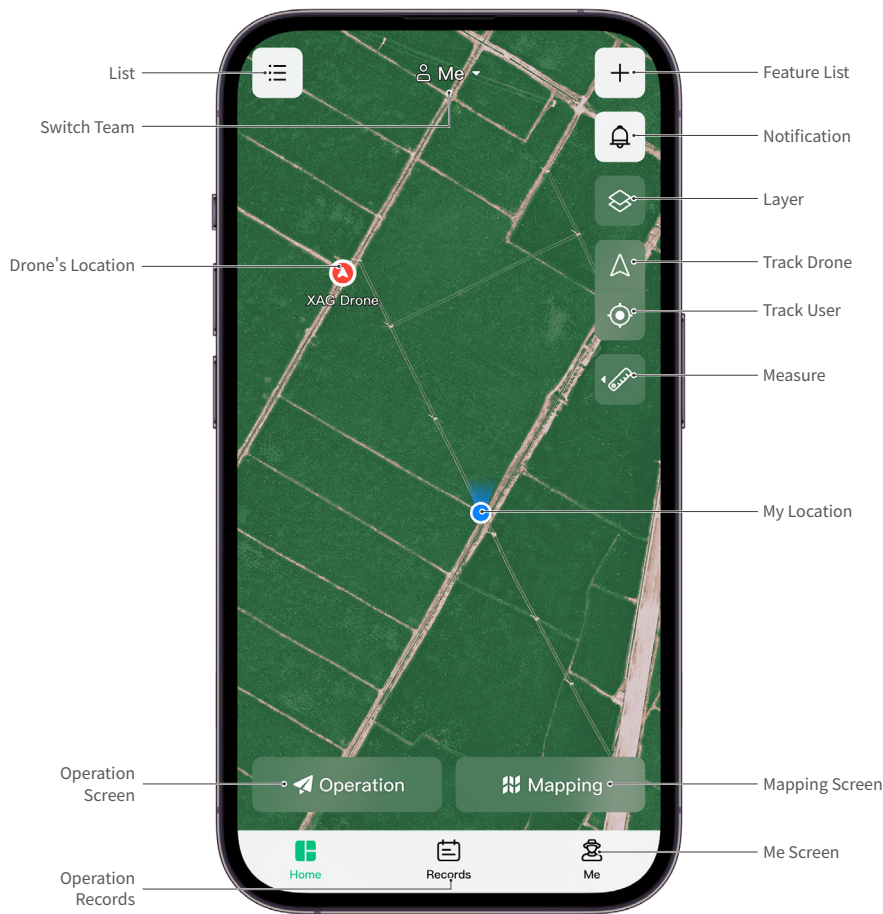
Bind a Remote Controller

Before using the remote controller to maneuver the drone, you need to bind it by following these steps.

1. Open XAG One, go to "Me" - "Device", and select the drone you want to bind with the remote controller from the device list.
2. Go to "Device Details" - "General" to tap "Bind Remote Controller".
3. Select the remote controller you want to bind and tap "Bind". Now you can operate the drone with the remote controller (refer to pages 15 to 21 on how to use it).

App UI

Home Screen (Main Screen)



List: View Field List, HD Map List, and Device List

Switch Teams: Tap to select the current team

Drone's Location: Drone's current location

Operation Screen: Tap to go to Operation Screen

Operation Records: Tap to go to Operation
Records Screen

Feature List: Tap to import data, add a device, etc

Notifications: Tap to view notifications

Layer: Tap to switch map modes

Track Drone: Access drone's current location

Track User: Access user's current location

Measure: Tap to measure the distance on the map

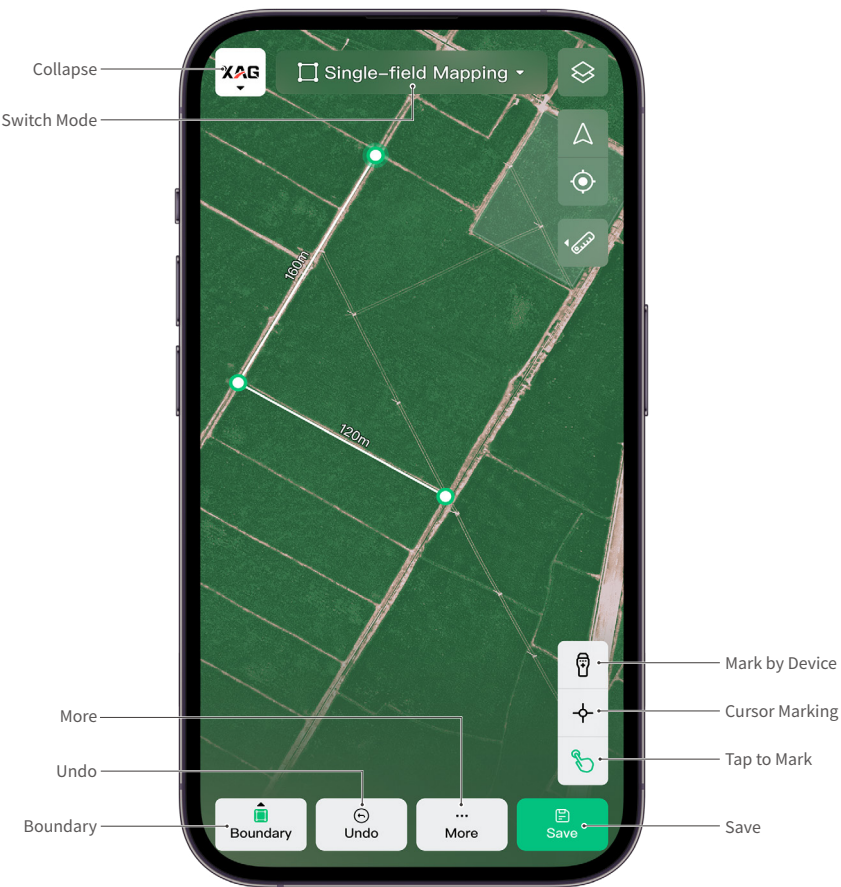
My Location: User's current location

Mapping Screen: Tap to go to Mapping Screen

Me Screen: Tap to go to Me Screen

Mapping Screen

Tap Home Screen (Main Screen) - "Mapping" to go to Start Mapping Screen.



Collapse: Tap to collapse the current screen

Switch Modes:Tap to select mapping modes (Single-field Mapping/Multi-field Mapping)

More:Other feature settings, such as enabling/disabling Mark with cross cursor marking or virtual keystroke marking, erasing mapping data, and remote controller operation guidance

Undo: Unmark the last boundary point

Undo: Unmark the last boundary point

Boundary:Tap to select a boundary type: field boundary, obstacle, or non-spraying zone

Mark by Device: Tap to switch to Fly to Mark, Mark by Remote Controller, or Mark by Rover

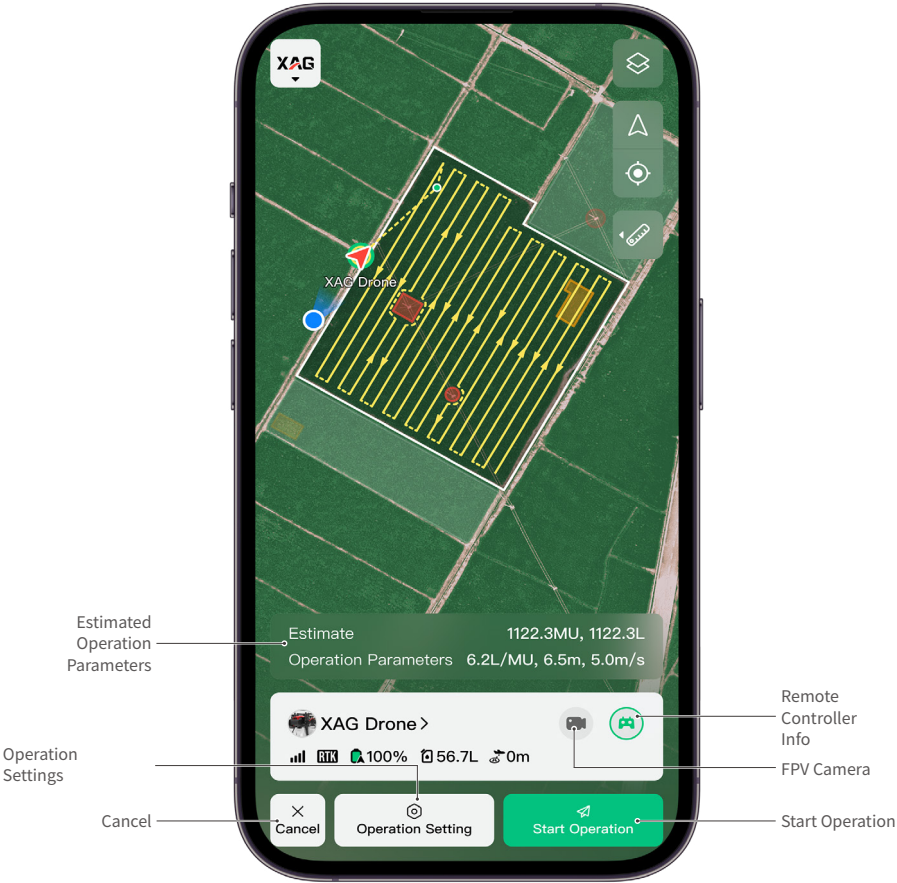
Cursor Marking: Tap to switch to Cursor Marking

Tap to Mark: Tap to switch to Tap to Mark

Save: Save the created field

Start Operation Screen

Tap Home Screen (Main Screen) - "Operation" to go to the Start Operation screen.



Estimation Operating Parameters: The size of the field to be sprayed and the amount of pesticide required; the operation speed, flight altitude, and flight speed of the drone

Operation Settings: Tap to set spraying parameters and route parameters

Cancel: Cancel current operation

Remote Controller Info:View remote controller information

FPV Camera:i.e. First-Person View. You can view the current flight perspective of the drone

Start Operation: Tap to start operation

Device Details

Tap "Me" - "Device" - "Select Drone" to view the device details of the corresponding drone.

- Tap "☰" to go to "General", where you can perform various operations including binding remote controller, sharing devices, managing cellular data, updating firmware, receiving fault warnings, viewing device logs, subscribing to safety protection services, viewing device information, and setting current operation device.
- Tap "📶" to go to "Communication System", where you can view the current network status (signal strength, signal-to-noise ratio, communication quality), and perform operator settings and network health diagnostics.
- Tap "📍" to go to "Positioning System", where you can view information like the drone's RTK positioning status, RTK reference, RTK latency, number of connected satellites, positioning accuracy, and heading accuracy, as well as switch and set positioning mode.
- Tap "🔋" to go to "Battery System", where you can view battery information such as remaining battery level, real-time voltage/current, battery temperature, cell voltage, and cycle counts, as well as set the remaining battery level threshold for automatic RTH.
- Tap "🌫️" to go to "Spraying System", where you can view the information such as the remaining amount of chemical in the liquid tank and the spraying flow rate, as well as perform operations such as discharging the remaining liquid, manual spraying test, general calibration, and test settings (flow rate and rotational speed of the nozzle).
- Tap "🌀" to go to "Propulsion System". In "Propulsion Motor", you can view the working status of the four motors, and perform the "Idle Test" and "In-situ Takeoff Test".
- Tap "📷" to go to "Sensor System", where you can enable/disable terrain following or obstacle avoidance, as well as configure the FPV camera settings.

Firmware Update

Before using the device, you must check if the firmware version is up to date. If not, make sure to install the latest version.

1. Open XAG One and tap "Me" - "Device". Select the drone or remote controller for the operation and go to Device Details. Tap "☰" to go to "General". Tap "Firmware Update" to check for updates.
2. When an update is available, tap "Download and Install". After the update is complete, tap "Finish" and return to Device List to see if all devices for the operation have the latest firmware. If not, repeat the above steps until all updates are complete.

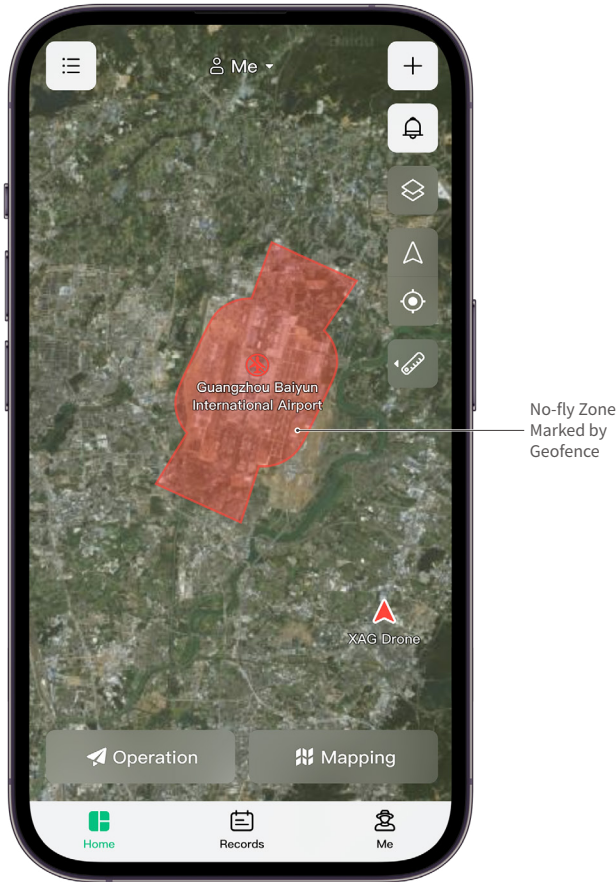
Flight Restrictions

Geofence

Geofence displays and updates information in real time within the fenced area, preventing drones from taking off from or flying into the restricted area. This ensures compliance with relevant laws and regulations. For special needs, users can apply to the relevant authorities for a flight permit in the restricted area to lift the flight restrictions for the requested zone.

- No-fly zones will be displayed on the map of XAG One. When operating or mapping in these areas, a warning message will be shown, and an error message will appear if a takeoff is attempted. The no-fly zones and license data will be updated every time you open the XAG One.

- Tap "No-fly Zone" in the Settings of the XAG One to view and update the no-fly zone version, check the number of no-fly zones, and add approved no-fly zones.
- For safety reasons, the drone's Geofence system imposes flight restrictions, preventing takeoff from or entry into the no-fly zone. It also limits the drone's altitude and travel distance to ensure safe operation. When GNSS is active, flight is constrained by no-fly zones, altitude, and travel distance. Otherwise, altitude is the only constraint.



Note

⚠ Flying in controlled airspace designated by national authorities is prohibited without approval from the air traffic management agency. This includes, but is not limited to, international borders, boundary zones, military restricted areas, military administrative zones, supervised locations, protected areas for critical military-industrial facilities, nuclear facility control zones, major water conservancy projects, and high-speed railways,

and other sensitive, protected, or regulated areas. Any violation of national laws and regulations will result in full legal and financial liability in accordance with the law.

- △ If your operation zone falls within a controlled area, you should request permission from local authorities and seek help from local dealers.

Create a Field

Before starting an autonomous operation, you need to create a field. This can be done in two ways: **Tap to Mark** or **Mark by Device**. Both methods will be introduced below.

Tap to Mark

After the HD map is generated or imported, you can generate fields by tapping on the HD map to mark them.

1. Open XAG One and tap "Mapping" on the home screen (main screen) to enter the Mapping screen. When you tap to mark,  in the lower right corner will be highlighted.
2. Tap the map to mark the boundary points of the field that needs operation (tap  at the bottom to undo a marked point). After marking all the boundary points, tap "Auto Close" (or directly tap the starting point), and the system will generate the field automatically.
3. Tap the "Field Boundary"  to switch to "Obstacle" or "Non-spraying Zone". Then tap to mark the boundary points of the obstacle or non-spraying zone.
4. Once you have marked the operation zone, tap "Finish" in the upper right corner.
5. Complete the field information and tap "Done" to save the field.

More

- Tap "More" at the bottom of the Tap to Mark screen to enable "Cursor Marking". Once enabled, a white cross cursor will appear on the Mapping screen. Drag the cursor to the boundary point of the field that needs operation, then tap  at the bottom to mark the point.

Mark by Device

Mark by Device comprises two methods: **Mark by Rover** and **Fly to Mark**. Both methods will be introduced below.

Mark by Rover

Users can use an RTK rover to mark points and generate fields. Please follow the steps below to complete point marking by rover. (This document uses the XRTK7 as an example).

1. Open XAG One and tap "Mapping" on the home screen (main screen) to enter the Mapping screen. Tap  in the lower right corner and select the bound XRTK7.
2. Take your XRTK7 to the intended field boundary and short press  to mark the boundary points. After marking all boundary points, tap "Auto Close" on the app (or press and hold ) , and the system will automatically generate the field.
3. Tap the "Field Boundary" icon  to switch to "Obstacle" or "Non-spraying Zone". Circle around the obstacle or non-spraying zone with XRTK7, and short press  to mark their boundary points (short press XX to unmark the point).
4. Once you have finished mapping the operation zone, tap "OK" in the upper right corner.
5. Complete the field information and tap "Done" to save the field.

Fly to Mark

For the P150 Max Agricultural Drone, Fly to Mark is available for field generation only when the drone is controlled by the SRC5. The steps are as follows.

1. Open the XAG One in the SRC5. Tap "Mapping" on the home screen (main screen) to enter the Mapping screen. Tap  in the top-right corner of the screen to select the drone for mapping and then tap "Use".
2. Fly the drone over the field that needs to be marked. Tap the FPV View on the screen to switch to FPV view window, short press button "L3" to mark the boundary points of the field (press and hold button "L3" to undo). Fly the drone to other boundary points and mark. After marking all the points, tap "Auto Close", and the system will automatically close the field boundary.
3. Tap the "Field Boundary" icon  in the app to switch between "Obstacle" and "Non-spraying Zone". Fly the drone around the obstacle/non-spraying zone, and short press button "L3" (press and hold button "L3" to undo) to mark the boundary points of the obstacle or non-spraying zone.
4. After mapping the operation zone, tap "Save" in the bottom right corner. Complete field information and tap "OK" to save the field.
5. Pilot the drone to a safe area and land it, or press and hold RTH button to make it return.

Manage Fields

After creating fields, users can edit fields and share fields in batches, or create standard/customized routes via Manage Fields.

Field Editing

Users can edit saved fields created using HD maps through Edit Fields.

1. Open the XAG One. On the home screen (main screen), tap  in the upper left corner, select the field to be edited, and tap "Manage Fields".
2. Tap "Edit Fields" and drag the boundary points to adjust them as needed. Create new boundary points via Tap to Mark, or tap  to create new points via Mark by Rover. Select a boundary point and tap XX to undo/delete it.
3. Tap , select "Obstacle" or "Non-spraying Zone", and drag the boundary points of the obstacle/non-spraying zone to adjust its range as needed. Create new boundary points via Tap to Mark, or tap  to create new points via Mark by Rover. Tap on the center of the obstacle/non-spraying zone and tap "Delete" to delete the whole obstacle/non-spraying zone.
4. After editing, save the field to complete the edits.

Batch Sharing

After creating fields, users may share multiple fields with others via Batch Sharing.

1. Open the XAG One, on the home screen (main screen), and tap  in the upper left corner to go to the Field List screen.
2. Tap "More" and select "Batch Field Sharing". Select multiple fields to be shared or tap to select multiple fields on the map, and tap "OK".
3. Enter the recipient account to share the fields with a friend, or share the fields with a team managed by the user.
4. Tap "OK" to complete batch field sharing.

New Standard/Customized Routes

After field mapping, users can create standard or customized routes via Manage Fields for applications in various scenarios.

1. Open the XAG One, tap  in the upper left corner of the "Fields" screen, select the field to be edited, and tap "Manage Fields".
2. Tap "Routes" in the bottom menu bar, and then tap "New" in the upper right corner - select a route type.
3. Select "Standard Route", and the system will automatically plan a standard route. Users can manually adjust route direction, route spacing, boundary safety clearance, and obstacle safety clearance. Select "Customized Route", and users can plan a route as needed. Tap the screen or  to mark points. Two consecutive points will connect and form a line, namely a segment. Multiple points connect in sequence and the drone will follow this route for operation.
4. Tap "Done" in the bottom right corner, enter the route name, and tap "OK" to save the route.

Note

- △ Routes with different types and parameters can be created in the same field, and users can select a proper route for flight operations.

Offset Correction

When the device/drone is not in RTK mode during point marking/flight operations, users can correct the locations of the field and drone using the Offset Correction feature to improve the positioning accuracy of the drone in operation.

Offset Correction in Autonomous Mode

1. Open the XAG One and tap "Operation" on the home screen (main screen).
2. Select the field to be operated on the map based on the prompts on the screen. Once the field is selected, lift the drone to the boundary of the field.
3. Tap "Offset Correction" on the left side of the screen to go to its settings. Tap the boundary point closest to the drone's position, adjust the boundary point on the Offset Correction settings screen until it is in the drone's position, or just drag the boundary point to the drone's position. And then tap "Offset to Drone". When the app shows "Offset Correction Done", tap "Done" to complete it.

Start Operation

After creating fields, start the drone for autonomous flight operations.

1. Open the XAG One, and tap "Operation" on the home screen (main screen).
2. Based on the prompts, select the field to be operated on the map. Once the field is selected, the menu bar below will display estimation operating parameters for the field and other drone-related information. Tap "Operation Settings" to customize the basic or advanced settings for spraying and routes as needed.
3. Tap "Start Operation" and confirm that all propeller blades are properly installed and unfolded with all clamps fastened. Make sure that no one is within 10 meters of the drone, and then slide right to confirm takeoff. The drone will take off automatically for spraying after it completes self-checking.

Basic Settings

Before an operation, tap "Operation Settings" in the menu bar at the bottom of the operation screen to access settings on the "Basic" screen.

- When there is an existing operation template for the field, tap the top left corner to select and apply the parameters of the existing template configuration. If it is the field's first operation without an operation template, after setting operation parameters, tap "Save as Template" in the top right corner. This will save the current operation configuration as a template for future use.
- Tap "Dosage & Droplet" under "Spraying Settings" and move the slider to set the drone's spray volume and droplet size. Tap "Spray During Lane Change" to select the status of nozzles during lane change: turn on both nozzles, turn on outer nozzles only, and OFF.
- Tap "Altitude & Speed" under "Routes" to adjust the drone's altitude and speed on the routes. Tap "Route Direction & Spacing" to adjust the direction, angle, and spacing of the routes. Tap "Safety Clearance" to adjust the uniform boundary safety clearance, special boundary safety clearance, and obstacle safety clearance.
- Tap "Altitude & Speed" under "Access Route" to adjust the drone's height and speed on the route. Tap the "Safety Zone Mode" button to turn on/off this mode.
- Tap "Terrain Following" to put the drone on radar terrain following mode.
- Tap the "Obstacle Avoidance" button to enable/disable obstacle avoidance.

Advanced Settings

On the "Operation Settings" screen, tap to switch to the "Advanced" screen to access related settings.

- Tap "Operation Range" and move the slider to adjust standard routes on the "Standard" screen. On the "Edge" screen, enable/disable edge application and access related settings.
- Based on actual needs, users can turn on "Waypoint Resumption", "3D Route Operation", "Fly Only", and "RTH & Empty Container" to adjust and optimize autonomous operation settings.

More

- During flight, tap "Hover" and the drone will hover at its current position. Tap "More" for landing, returning, or Tap & Go.
- Upon entering Tap & Go mode, the drone will hover at its current position. Drag the target range circle (green circle) on the map to move  to the desired position. Tap "Go to Tap & Go" and the drone will fly to the target position as planned. After the Tap & Go flight, tap "Exit" to return to the flight screen. Tap "Go to Operation" to exit Tap & Go and continue operation tasks.

Note

- △ Before operation, please make sure the RevoSpray/RevoCast system is installed.
- △ Before using others' operation templates, please make sure the parameters are correct.
- △ Before enabling 3D route operation, use RealTerra's "Mountain Mode" to generate 3D HD maps.
- △ During flight, operators must closely monitor the flight environment for any unsafe factors, ensuring that the drone is away from obstacles and crowds.
- △ During Tap & Go flight, the drone's obstacle avoidance will be disabled. Please be cautious. Before enabling Tap & Go, ensure that no obstacles are within the field.
- △ The effective range of the target position for "Tap & Go" is within a radius of 50 meters of the drone (i.e. the green circle).
- △ When the drone flies on routes, users can set the battery level for RTH (10%/15%/20%/25%) via the app. When the battery level is close to the preset value, the app will prompt "Low battery; returning". The drone will calculate the distance between its current position and the return point, and return automatically.

Multi-field Operation

When multiple fields need to be operated at a time, users can follow these steps to combine multiple fields for operation.

1. Open the XAG One, and tap "Operation" on the home screen (main screen) to get ready.
2. Select the fields for operation on the map and then tap on "OK".
3. Tap "Operation Settings" to access the basic or advanced settings for spraying and routes. Tap "Field Operation Order" in the advanced settings to adjust the order of the fields to be operated.
4. Tap "Start Operation" and confirm that all propeller blades are properly installed and unfolded with all clamps fastened. Make sure that no one is within 10 meters of the drone, and then slide right to confirm takeoff. The drone will take off automatically for spraying after it completes self-checking.

Note

- △ For a multi-field operation, up to 10 fields with a maximum total area of 13.33 hectares can be operated at a time.
- △ Multi-field operations usually involve complex environments. To ensure flight safety, it is advisable to enable radar obstacle avoidance.
- △ Before multi-field operation, all obstacles within the entire white area of the map need to be mapped to ensure flight safety.

Emergency Propeller Stop

In the event of an unexpected emergency or a risk of uncontrollable collision during operation, the user may activate the "Emergency Propeller Stop" function when the surrounding environment is confirmed to be absolutely safe. This will immediately cut off power to the propellers and cause the drone to descend in free fall. To activate the Emergency Propeller Stop, the user may follow the steps below:

1. Open the "XAG One" app and tap "Operation" on the home screen (main screen).

2. On the "Operation" screen of the drone, tap "More", then tap the " ⓧ Emergency Stop" icon.
3. Read the "About Emergency Propeller Stop", then tap "I acknowledge the risk. Proceed".
4. Slide the on-screen slider at the bottom to activate the "Emergency Propeller Stop".

Operation Records

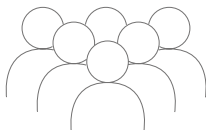
After operation, users can view field conditions via operation records. Operation data can be accessed through three different views: "My Operations", "Team Operations", and "Device Operations". Take "My Operations", for example.

1. Open the XAG One, and tap "Operation Records" on the home screen.
2. On the "Operation Records" screen, the total area, spray volume, spread amount, and duration of operation for the most recent time period will be displayed for the current account. Tap a specific day to expand details, view all the operation records for that day, and perform conditional filtering. Tap "More Dates" to select a date range and view the operation data report during that period.
3. Tap ↻ in the top right corner for local operation data on the drone and app.
4. Tap ⋮ in the top right corner to "Migrate Operation Records".
5. Tap the top left corner to switch between "Team Operations" and "Device Operations".

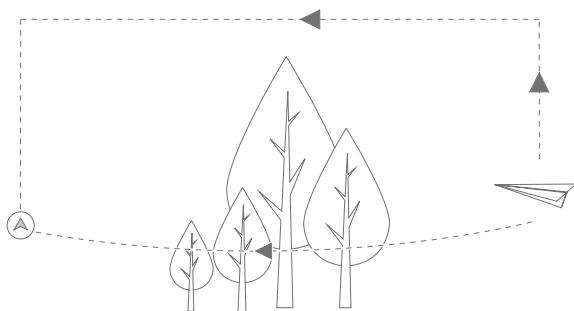
Note

- ⚠ "My Operations" displays the current account's all operation data, including data from the team; suitable for operators. "Team Operations" provides operation data for the entire team; suitable for team leaders and managers. "Device Operations" allows users to view operation data based on the devices they own, including data generated during sharing.
- ⚠ Users can switch to team from the home screen. After switching to team, mapped fields, and operation records will automatically be attributed to the team and shared within the team.

Safe Parking



- The return point should be in an open area far from buildings and crowds. Make sure that the drone's return trip is free of obstacles.



- When the drone is flying back, the operator should monitor the environment around it and steer it away from any obstacle found on the route.
- Power off the drone once it lands safely.

Operation Template Sharing

After operation, users can share the operation parameter configurations of the fields via "Operation Template Sharing".

1. Open the XAG One and tap "Operation Templates" on "Me" screen.
2. Select an operation template to view and edit its parameter configuration.
3. Tap "Share" and enter the recipient's account to share the template with a friend.
4. Tap "OK" to complete the sharing.

Device Sharing

Users (device owners) can share the use of a device with other users through device sharing, while the owner still possesses the device.

1. Open the XAG One, and tap "Me" - "Device" to get to the device list.
2. Select the drone to be shared, enter the "Device Details" screen, and tap "Device Sharing".
3. Enter the recipient's account, set the duration for sharing, and tap "OK".
4. Make sure the account is correct, and tap "OK". After the drone is shared, information on the shared device, recipient account, and duration will be displayed on the screen. Tap "Stop Sharing" to withdraw the use of device.

Note

-  Device owner will not be able to use the device when it is shared.
-  Device owner will not be able to withdraw the use of a device in operation.

Maintenance

After each use, clean the spray parts and surface of the drone in a timely manner. Regular drone maintenance is required.

Post-operation Cleaning

Pesticides are caustic and could corrode the device, shortening its lifespan. Clean the device timely after each use. The cleaning steps are as follows.

Detergent: soapy water or laundry powder/water mixture

- ① Fill the liquid tank with soapy water or the laundry powder/water mixture. Start spraying to clean pesticide residues in the spraying system.
- ② Fill the liquid tank with clean water and start spraying until all tubes are drained to wash off residual soapy water or the laundry powder/water mixture in the spraying system, avoiding damage to other objects during transportation or storage.
- ③ Wring out a damp rag and wipe the surface of the drone to remove pesticide stains and mud. Empty the liquid tank and drain the tubes if you need to transfer the drone or will not use it for an extended period.

Regular Maintenance

Wear and tear as well as malfunctions in/of the device could occur as a result of ordinary use. Regular maintenance ensures that the device performs at its best in farming activities with fewer malfunctions and improved efficiency. Maintenance steps are as follows.

A. Airframe

- ① Check if any screw on the airframe is loosening or missing.
- ② Check if the components including landing gears, fuselage, arms, motors, and antennas are secure.
- ③ Check if the connectors of each component are firmly in position, if they have oxidized, and if the battery plug is deformed.
- ④ Check breakages and cracks on the airframe and its components. Check if the beams of the drone are bent out of shape or cracked, if the fasteners joining the arms and motors together are secure, if the arms are bent and twisted, or if the parts on the arms are at a proper angle.
- ⑤ The drone should be cleaned regularly and thoroughly, especially those hard-to-clean spots including the liquid tank socket and battery plug on the airframe.

B. Propulsion System

(1) Propeller

- ① Check by sight if the propeller clamps are cracked or deformed, and if the blades are loosening, damaged, bent out of shape, or softened.
- ② Check if the blades and clamps are properly joined.
- ③ Check if the setscrews holding the clamps and motors are missing or loosening.
- ④ Wipe the propellers clean with a damp rag.

(2) Motor

- ① Remove the propellers and clean the motors with an air blow gun.
- ② Rotate the motors and check whether the bearings wobble or make noise.

- ③ Check by sight if the enameled wires of the motors are damaged or broken.
- ④ Gently rock the motors and see if they are firmly fixed on the motor mounts.
- ⑤ Check the connectors and cables between motors and ESCs.

(3) ESC

- ① Remove the power plugs of the ESCs and check if the metal parts are deformed or oxidized.
- ② Check if the setscrews on the ESCs are missing or loosening.
- ③ Check if there is any dirt including pesticides on the heat dissipation part of the ESCs.

C. RevoSpray System

The spraying system requires calibration in the case of a large error (beyond plus or minus 5%) caused by chemical corrosion, thick pesticides, replacement of parts and impellers, etc. Calibration needs to be done with clean water in the liquid tank. If the health index remains unusual after calibration, check whether the impellers and spray tubes are in good condition. Replace the parts that shrivel, lose elasticity, or are out of shape/seriously worn.

(1) Impeller Pump

- ① Take apart the impeller pump and check the wear between the impeller and pump casing. Replace the impeller or pump casing if it is seriously worn.
- ② Check if the connectors of the RevoSpray system have come loose or oxidized, etc.
- ③ When the impeller pump is unable to function, check if there is enough liquid in the tank. The impeller pump could run dry without adequate liquid in the tank, triggering its anti-dry-running protection. Please add a proper amount of clean water to the tank before operation.
- ④ Remove the impeller pump cover and check if there is any accumulation of caked powder or viscous chemicals between the impeller and pump casing that prevents the impeller from rotating properly. If so, remove the impeller and clean it with clean water.
- ⑤ For every 666.67 hectares of operation, one to two months of continuous operation, or when not in use for a long time, the gears inside the gearbox need to be regularly added heat-resistant lubricant for maintenance.

(2) Smart Liquid Tank

- ① Check the sealing ring of the liquid inlet
- ② Unscrew the cap, clean dirt off the filter, and check if the inner tubes are in good condition.

D. Power System

(1) Battery

- ① If the battery shows single blinking green after flight, charge it to 50%-60% in time for storage. Batteries not charged timely before storage could be less active, damaged or even have a shortened lifespan.
- ② Batteries not in use for an extended period should be charged and discharged every three months to be kept active.
- ③ When the battery is swelling, leaking, deformed, or having exterior damage, stop using it immediately and contact XAG or any XAG after-sales service center in time.
- ④ NEVER transport any potentially unsafe battery that is swelling, leaking, or having visible exterior damage.

- ⑤ Check by sight the exterior of the battery. If there is any damage, send it to any XAG after-sales center.
- ⑥ Do NOT charge the battery in a damp environment.
- ⑦ Do NOT insert or remove the battery when it is on, or its socket could be damaged.
- ⑧ Handle the battery with care; NEVER take it apart without permission.

(2) Supercharge Station

Items		Maintenance Tips
Oil	Check Oil Level	Check the oil level before each use; the oil level should fall between the MIN and MAX marks on the oil dipstick
	Change Oil	Change oil after 20 hours of first use along with subsequent changes every 50 hours
Air Cleaner	Check	Check the filter element of the air cleaner and the oil level in the oil reservoir before each use
	Clean	Clean the air cleaner every 50 hours or every 20 hours in dusty areas
Spark Plug	Replace	Replace it every 500 hours
Valve Lash	Adjust	Adjustment of valve lash by after-sales professionals is required every 500 hours
Fuel Tank & Filter	Clean	Clean the fuel tank and filter every two years
Oil Tube	Replace	Replace it in the case of aging or cracking

(3) Power Socket

Poor contact, short circuits or sparking could occur in the battery, charger or socket as dust, liquid, or other foreign objects can stick to the power socket during use. Before and after the use of a power device, users should check and clean each component including the battery plug and socket, ensuring that the power socket remains clean, dry and free of foreign objects.

E. Sensor System

After crop protection operations, clean the FPV camera lens of the sensor system. Gently wipe away any pesticide residue, stains, or debris from the lens. When the drone is stored for an extended period, regular cleaning and maintenance of the FPV camera lens are required. Before new operations, ensure that the camera lens is free of dust for smooth operations.

F. Device with Lithium Batteries

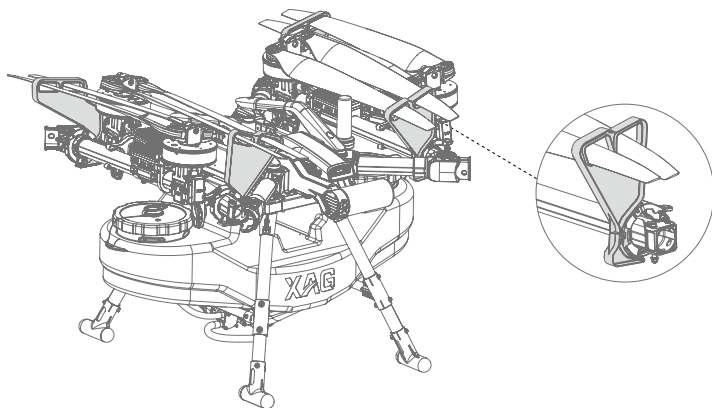
When not used for an extended period, in addition to the Battery, devices with lithium batteries including remote controllers should also be charged to 50% to 60% every two months for storage.

Device Storage

Devices like batteries, drones, remote controllers and chargers should be stored in a dry place with a temperature between 10°C and 30°C . Do NOT store devices in leaky or damp places.

Transportation

Fold the propeller blades of the drone and fasten them with blade holders for transportation. Meanwhile, fasten the drone with a safety belt. Make sure the drone is secure during transportation.



Note

-  For long-distance transportation, remove the spray rods of the drone before transportation.
-  Before transporting the drone, clean and empty its spraying system and drain all the liquid tubes, to avoid damage to other devices during transportation.
-  Pesticide packaging and sewage must be collected for proper disposal to avoid pesticide hazards and environmental pollution.
-  NEVER place batteries in the drone for transportation.
-  During transportation, do NOT drive while tired; devices should be stored separately with good air circulation to avoid poisoning by inhalation of pesticides.
-  Please make sure the blade holders with silk-screened marks M1 to M4 are securely fitted into the correct arm clamps during installation.

Appendix

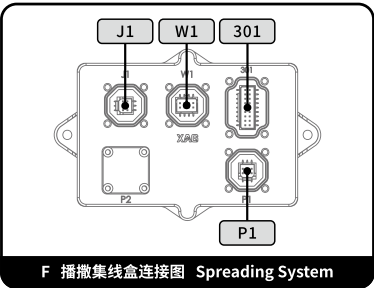
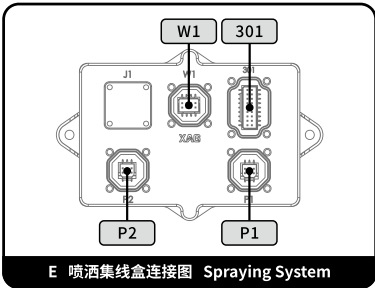
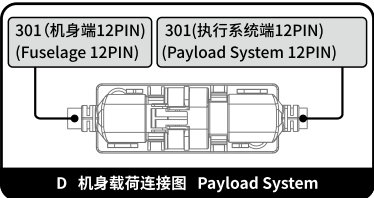
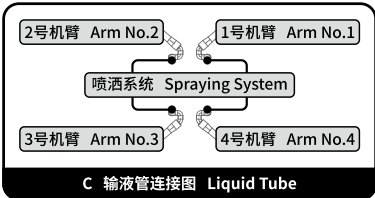
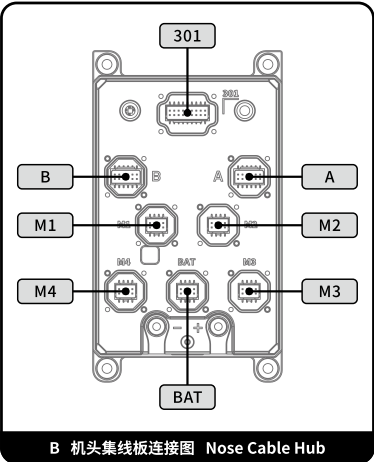
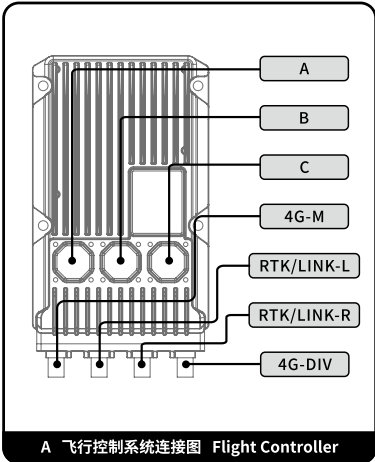
Indicator Description

Determine the drone's current status by checking the arm lights (ESC indicators). Details are as follows.

Arm Light (ESC Indicator)	Description
Solid Green	In operation
Solid White	File system mounting failed
Blinking Red (slow)	Taking off / landing
Blinking Cyan (slow)	Updating main ESC
Single Blinking Red	Positioning error / dramatic satellite loss
Single Blinking Green	Attitude Mode
Single Blinking Blue	Manual Mode
Single Blinking Purple	Initialization failed or preheating
Blinking Red (fast)	Sensor error
Blinking Blue (fast)	Propulsion system error
Blinking Cyan (fast)	Main ESC requesting an update
Blinking Purple (fast)	Underlying controller formatting/incorrect parameters
Blinking Yellow (fast)	First low voltage; battery level: 20%
Double Blinking Red	Flight in Safe Mode; App or remote controller disconnected from drone
Double Blinking Red & Green	Weak positioning signal
Triple Blinking Red	Second low voltage; battery level: 10%
Triple Blinking Green	Auto Positioning Mode; good positioning signal
Alternating Blinking Red/ Green/Blue	Unlocking
Breathing Blue	1. Weak communication signal (air) 2. No communication signal (ground)
Breathing Red	Entering, returning, or avoiding/bypassing obstacles

模块接线指引

XAG 极飞科技



注意
CAUTION

1.禁止在通电状态下, 拆装任意模块。
Never disassemble or assemble any module while powered on.

2.所有模块安装完毕后, 才可启动电源。
Do NOT turn the power on until all modules are installed.

3.接线时保持接线头、接头槽、密封圈洁净。
Keep connectors, ports, and sealing rings clean when wiring.

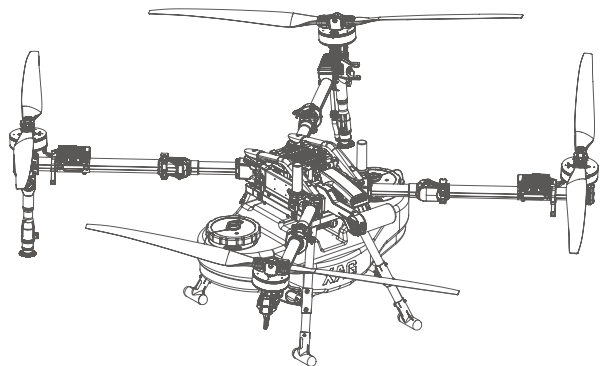
4.安装输液管时, 请勿压折。
Make sure tubes are not crushed or twisted when assembled.

XA.COM

WIRING QUICK GUIDE

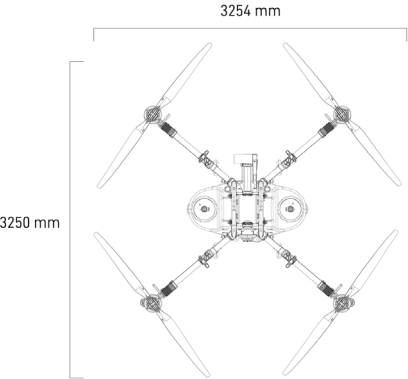
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Specifications

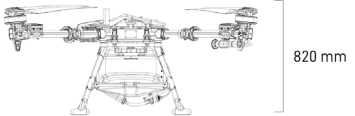


P150 Max Agricultural RPA

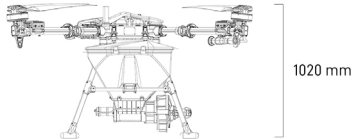
Model	3WWDZ-U80AH
Flight Control System ^[1]	SuperX5 Ultra (Cloud RTK)
IP Rating	IPX6K
Arm Material	Aluminium alloy
Diagonal Wheelbase	2335mm



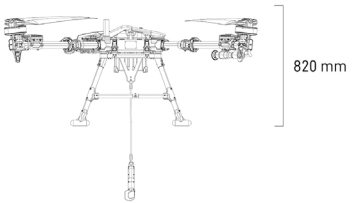
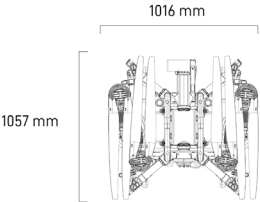
With XAG RevoSpray 5



With XAG RevoCast 5



With XAG RevoSling



Propulsion System

Motors	
Stator Dimension	145mm x 26mm
Max Tension	56KG / Motor
KV	68RPM / V
Power	4850W / Motor
ESCs	
Model	XESC-F360
Max. Continuous Working Current (30s)	140A
Max. Output Current (30s)	380A
Foldable Propellers	
Quantity	4
Propeller Material	Carbon fibre composite
Dimension	63 inches
Diameter	1600mm

Flight Parameters

Empty Weight ^[2] (No Container or Battery)	32.00 Kg
Empty Weight ^[2] (Empty Container + Battery)	56.00 Kg (With RevoSpray P5) 60.00 Kg (With RevoCast P5 & No Spray Rods)
Max Take-off Weight (Full Container + Battery)	136.00 Kg (With RevoSpray P5) 140.00 Kg (With RevoCast P5 & No Spray Rods)
Max Take-off Weight	149.00 Kg
Hovering Time ^[2]	20.0min (Take-off weight of 56kg @20000mAh x 2) 5.1min (Take-off weight of 136kg @20000mAh x 2)
Max. Operating Speed ^[3]	20.0m/s (With Good GNSS Signal)
Max. Operating Height	120m
Max. Flight Distance	2 km
Max. Wind Resistance	<6m/s
Operating Ambient Temperature	0° C to 40° C

Hovering Accuracy Range (With Strong GNSS Signal)	RTK Enabled: ±10cm (Horizontal) ±10cm (Vertical) RTK Disabled: ±0.6m (Horizontal) ±0.3m (Vertical) (Radar Enabled ±0.1m)
Operating Frequency	2.400 GHz ~ 2.4835 GHz; 5.725GHz ~ 5.850GHz
Transmission Power (EIRP)	2.400 GHz ~ 2.4835 GHz ≤ 33 dBm (FCC) ≤ 20 dBm (CE/SRRC/MIC)
High Precision Navigation	5.725 GHz ~ 5.850 GHz ≤ 33 dBm (FCC) ≤ 30 dBm (SRRC) ≤ 14 dBm (CE)
2G Operating Frequency	≤ 600s (With RTK Delay)
2G Max. Transmit Power	CE: DCS 1800: 1710.2 ~ 1784.8MHz GSM900: 880.2 ~ 914.8MHz
3G Operating Frequency	Class 1 (30dBm) for DCS1800 Class 4 (33dBm) for EGSM900
3G Max. Transmit Power	CE: WCDMA Band 1 1922.4 ~ 1977.6MHz WCDMA Band 8 882.4 ~ 912.6MHz WCDMA Band 5 824.2 ~ 848.8MHz
4G Operating Frequency	Class 3 (24dBm) for WCDMA bands Band 1: 1922.5 MHz ~ 1977.5 MHz; Band 3: 1710.7 MHz ~ 1784.3 MHz; Band 5: 869.7 MHz ~ 893.3 MHz; Band 7: 2502.5 MHz ~ 2567.5 MHz; Band 8: 880.7 MHz ~ 914.3 MHz; Band 20: 834.5 MHz ~ 859.5 MHz; Band 28: 704.5 MHz ~ 746.5 MHz; Band 38: 2572.5 MHz ~ 2617.5 MHz; Band 40: 2302.5 MHz ~ 2397.5 MHz; Band 41: 2498.5 MHz ~ 2687.5 MHz;
4G Max. Transmit Power	Class 3 (25dBm) for LTE bands
GNSS Frequency	Primary Antenna: BDS: B1L, B3L, B1C, B2b-PPP GPS: L1C/A, L2P(Y), L2C, L5 GLONASS: G1, G2 Galileo: E1, E5a, E5b, E6 QZSS: L1C/A, L2C, L5, L6d, L6E, L-Band Secondary Antenna: BDS: B1L, B3L GPS: L1C/A, L2P(Y), L2C Galileo: E1, E5b QZSS: L1C/A, L2C

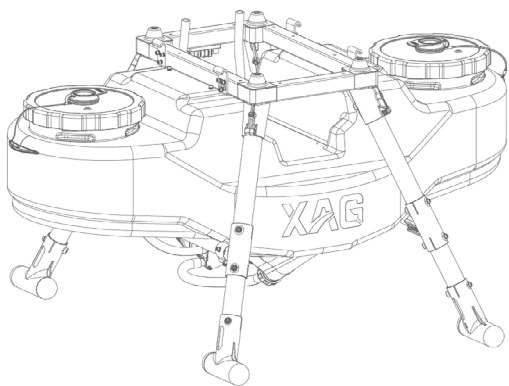
FPV Cameras

Operating Voltage	24V
Resolutions	1920 x 1080
Frame Rate	30fps
Coding Format	H.265
Focal Length	1.83 mm
Image Sensor	1/2.7-inch CMOS-RGB Image sensor, Effective Pixels: 5MP

Obstacle Sensor & Avoidance System^[4]

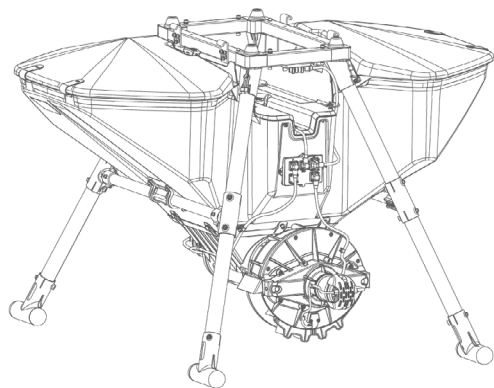
4D Imaging Radar		
Model	RD2488_25	
Operating Frequency	24GHz	
Operating Voltage	24V	
Power	< 15W	
Sensing Range	1.5m ~ 100m	
Sensing Mode	Beamforming, 4D Imaging	
Sensing Parameters	Azimuth, Pitch, Distance, Speed	
Field of View (FOV)	Horizontal:	±40°
	Vertical:	±115°
Safety Limit Distance	2.5m	
Working Conditions ^[4]	Min. Relative Height: ≥ 1.5m Max. Relative Speed: ≤ 13.8m/s	
Obstacle Avoidance Mode	Horizontal obstacle bypass Vertical obstacle bypass	
Terrain Following Altitude Hold Range	1.0m - 30m (Relative Height from Vegetation)	
Terrain Following Max. Gradient	45° (@Flight Speed ≤ 2m/s)	

RevoSpray P5 System



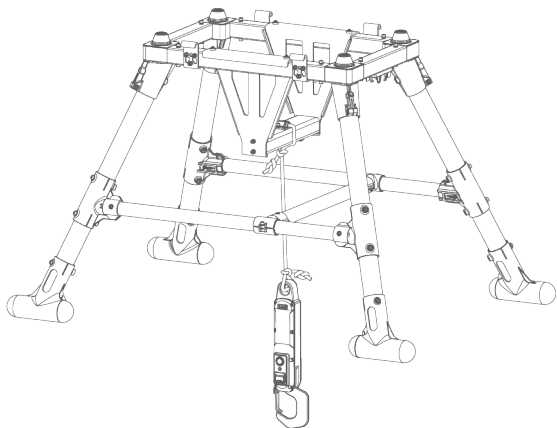
Liquid Tank		
Material	Plastic (PE)	
Volume	80L	
Sensor	Liquid Level Sensor	
Centrifugal Atomizing Nozzles		
Nozzle Type	Centrifugal	
Quantity	2	
Spray Bar Length	1789mm	
Rotational speed of Spray disc	1500RPM - 16000RPM	
Spray Swath ^[4]	5m - 10m (Subject to Flight Speed, Height, Dosage, Environment and etc.)	
Droplet Size	60µm - 500µm	
Flexible Impeller Pump		
Quantity	2	
Voltage	50V	
Pump Type	Flexible Impeller Pump ^[6]	
Flow Rate ^[5]	0.5L - 16.0L/min	(Single Pump)
	1.0L - 32.0L/min	(Both Pump)

RevoCast P5 System



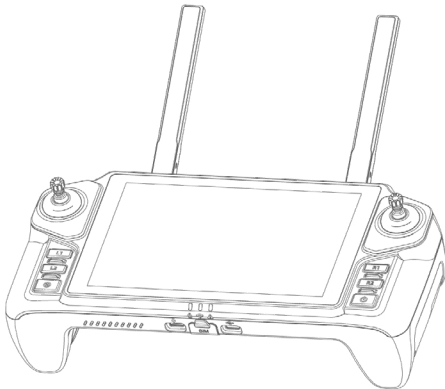
Model	M4RCP115BH
Dimension	1119mm x 1012mm x 743mm
Net Weight	14.00Kg
IP Rating	IP65
Rated Capacity	115L
Rated Load	80Kg
Quantity of Screw Feeder	1
Max. Rotational Speed	17000 rpm
Operating Ambient Temperature	0° C to 40° C
Storage Ambient Temperature	0° C to 40° C
Spread Swath	5m - 9m (Subject to Flight Height, Seed's Weight & Shape, Dosage, Environment and etc.)
Applicable granule Size	1 - 10mm (Dry Solid Granule)
Spread Amount Accuracy	±10% (Subject to Granule type and moisture)
Compatible Aircraft	XAG® P150 Max Agricultural Drone

RevoSling System



Model	M4XRSP80A
Dimension	859mm x 595mm x 532mm (Landing Gear) 300mm x 76mm x 59mm (Smart Hook)
Net Weight	5.60 Kg
IP Rating	IP65
Rated Load	80Kg
Required Rope Length	5 ~ 15m
Charging Voltage / Current	5V/2A
Operating Ambient Temperature	10° C to 45° C
Storage Ambient Temperature	-20° C to 60° C
Compatible Aircraft	XAG® P150 Max Agricultural Drone
Compatible Remote Controller	XAG® SRC5 Remote Controller

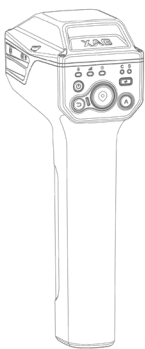
SRC5 Remote Controller



Model	M3SRC5AH	
Dimensions	260mm x 140mm x 89mm	
Weight	1.2 Kg	
Operating System	Android	
Battery Capacity	20000mAh (3.65V)	
Charging Protocol	Supports QC Charging protocol	
Charging Ambient Temperature	5° C to 40° C	
Operating Ambient Temperature ^[8]	-10° C to 40° C	
Storage Ambient Temperature	-20° C to 55° C	Less than a Month
	-20° C to 45° C	One to three months
	-20° C to 25° C	Three months to one year
Charging Voltage / Current	5V=3A, 12V=2.5A, 15V=3.0A	
Max Transmission Distance ^[9] (Unobstructed, free of interference)	SRRC: 2000 Meters FCC: 2000 Meters CE/MIC: 1000 Meters	
Voice Prompt	Yes	
Screen Brightness	1200 cd/m2	
Screen Resolution	1920 x 1200	
Screen Size	7.02 inches	
Screen Frame Rate	60 fps	
Compatible Aircraft	XAG® P150 Max Agricultural Drone	
Operating Frequency (Wi-Fi)	2.400 - 2.4835 GHz; 5.725 - 5.850GHz	

Effective Isotropic Radiated Power (Wi-Fi)	2.400 GHz ~ 2.4835 GHz ≤ 33 dBm (FCC) ≤ 20 dBm (CE/SRRC/MIC)
	5.725 GHz ~ 5.850 GHz ≤ 33 dBm (FCC) ≤ 30 dBm (SRRC) ≤ 13.98 dBm (CE)
Operating Frequency (Bluetooth)	2402 MHz ~ 2480 MHz
Effective Isotropic Radiated Power (Bluetooth)	≤ 10 dBm
2G Operating Frequency	CE: GSM900: 800 – 915 MHz 925 – 960 MHz DCS1800: 1710 – 1785 MHz 1805 – 1880 MHz FCC: GSM850; PCS1900 ANATEL: GSM850, GSM900, GSM1800, GSM1900
2G Max. Transmit Power	Class 1 (30 dBm ± 2 dB) for DCS1800 Class 4 (33 dBm ± 2 dB) for GSM900
3G Operating Frequency	CE: WCDMA Band 1 1920 – 1980 MHz 2210 – 2170 MHz WCDMA Band 8 880 – 915 MHz 925 – 960 MHz FCC: WCDMA B2, WCDMA B4 KCC: WCDMA B1 ANATEL: WCDMA B1, WCDMA B2, WCDMA B5, WCDMA B8 MIC: WCDMA B1, WCDMA B5, WCDMA B6, WCDMA B8, WCDMA B19
3G Max. Transmit Power	Class 3 (24dBm + 1/-3 dB) for WCDMA bands
4G Operating Frequency (LTE)	CE: LTE B1, LTE B3, LTE B7, LTE B8, LTE B20, LTE B28, LTE B38, LTE B40 FCC: LTE B2, LTE B4, LTE B5, LTE B7, LTE B25, LTE B26, LTE B38, LTE B41 KCC: LTE B1, LTE B3, LTE B5, LTE B7, LTE B8 ANATEL: LTE B1, LTE B3, LTE B5, LTE B8, LTE B25 LTE B26, LTE B28, LTE B39, LTE B40, LTE B41 MIC: LTE B1, LTE B3, LTE B5, LTE B8, LTE B18 LTE B19, LTE B26, LTE B41
4G Max. Transmit Power	Class 3 (23 dBm ± 2 dB) for LTE bands
GNSS Frequency Band	BDS: B1 GPS: L1C GLONASS: L1 Galileo: E1

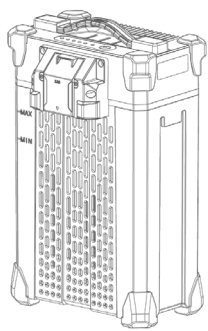
XRTK7



Model	M3RTK7AH	
Dimensions	222mm x 112mm x 75mm	
Weight	0.55 kg	
Battery Capacity	10000mAh / 3.65V	
IP Rating	IP65	
Vibration	Yes	
Voice Prompt	Yes	
Charging Protocol	Supports PD/QC Protocol	
Charging Voltage / Current	5V=3A, 12V=1.5A	
Charging Ambient Temperature	5° C to 40° C	
Operating Ambient Temperature ^[8]	-10°C to 45°C	
Storage Ambient Temperature	-20° C to 55° C	Less than a Month
	-20° C to 45° C	One to three months
	-20° C to 25° C	Three months to one year
Charging Voltage / Current	5V=2A, 9V=1.5A, 12V=1.5A	
Max Transmission Distance ^[9] (Unobstructed, free of interference)	2000 Meters	
Operating Frequency (Wi-Fi)	2.4 GHz: 2412 MHz ~ 2462 MHz (FCC)	
	2412 MHz ~ 2472 MHz (CE)	
	5.8 GHz: 5745 MHz ~ 5825 MHz	
2G Operating Frequency	CE: DCS 1800: 1710.2 ~ 1784.8MHz	
	GSM900: 880.2 ~ 914.8MHz	

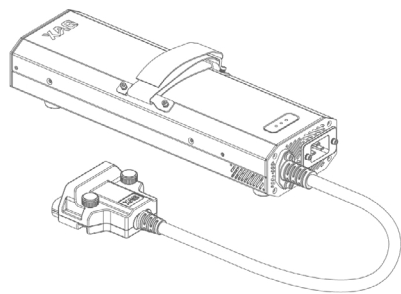
2G Max. Transmit Power	Class 1 (28dBm) for DCS1800 Class 4 (35dBm) for EGSM900
3G Operating Frequency	CE: WCDMA Band 1 1922.4 ~ 1977.6 MHz WCDMA Band 8 882.4 ~ 912.6 MHz WCDMA Band 5 824.2 ~ 848.8 MHz
3G Max. Transmit Power	Class 3 (24dBm) for WCDMA bands
4G Operating Frequency	Band 1: 1922.5 MHz ~ 1977.5 MHz; Band 3: 1710.7 MHz ~ 1784.3 MHz; Band 5: 869.7 MHz ~ 893.3 MHz; Band 7: 2502.5 MHz ~ 2567.5 MHz; Band 8: 880.7 MHz ~ 914.3 MHz; Band 20: 834.5 MHz ~ 859.5 MHz; Band 28: 704.5 MHz ~ 746.5 MHz; Band 38: 2572.5 MHz ~ 2617.5 MHz; Band 40: 2302.5 MHz ~ 2397.5 MHz; Band 41: 2498.5 MHz ~ 2687.5 MHz;
4G Max. Transmit Power	Class 3 (25dBm) for LTE bands
Effective Isotropic Radiated Power (EIRP)	2412 MHz to 2472 MHz: <20 dBm (CE) 5745 MHz to 5825 MHz: <14 dBm (CE) 2402 MHz to 2480 MHz: <7 dBm (CE)
Bluetooth Protocol	Bluetooth LE V5.2
Operating Frequency (Bluetooth 5.2)	2402 MHz ~ 2480 MHz
GNSS Frequency	BDS: B1L, B1C GPS: L1C/A, L1C, L2C, L5 GLONASS: G1, G2 Galileo: E1, E5a, E5b
Positioning Accuracy (Good RTK Signal)	Horizontal: <5.0cm + 1ppm (RMS) Vertical: <7.5cm + 1ppm (RMS)

Smart Battery



General Information	
Model	M1PPA141050AH
Dimensions	192mm x 139mm x 315mm
Weight ^[10]	Approx. 7.1 kg
Battery Type	Lithium Polymer (LiPo) Battery
Performance Specifications	
Rated Capacity	20,000 mAh
Energy	1050 Wh
Rated Output	52.50V / 140A
Max Charging Current	120A
Environmental Specifications	
Operating Temperature	10° C to 45° C
Charging Temperature	10° C to 40° C
Storage Temperature	10° C to 30° C
IP Rating ^[11]	IP65
Compatibility	
Compatible Aircraft	XAG® P150 Max Agricultural Drone
Compatible Chargers	XAG® CM13600S Battery Charger
	XAG® CM15300D Battery Charger
	XAG® CM210600 Battery Charger

Battery Charger



Model	M2CM13600CH
Compatible Battery	XAG B141050 Supercharge Battery XAG B13970S Supercharge Battery
Dimensions	346.00mm x 109.00mm x 73.00mm
Weight	Approx 3.9 Kg
Operating Temperature	-20° C to 40° C
Cooling Mode	Forced Air cooling
Input Voltage	AC 100-120 Vac 50/60 Hz 15.0A AC 220-240 Vac 50/60 Hz 16.0A
Output Voltage	59.92 Vdc = 21A 59.92 Vdc = 55A
Output Power	35A (Max)/1300 W (100-120 Vac 50/60 Hz) 80A (Max)/3400 W (220-240 Vac 50/60 Hz)
Compatible Batteries	XAG® B141050 Supercharge Battery XAG® B13970S Supercharge Battery XAG® B13960S Supercharge Battery

- [1]: Flight Control System Manufacturer is supplied and manufactured exclusively by Dongguan Xaircraft UAS Technology Co., Ltd.
- [2]: The data presented is based on tests conducted under controlled laboratory conditions. Actual performance may vary due to factors such as environmental conditions, operational settings, and the drone's maintenance status.
- [3]: Flight speed must adhere to all applicable local laws and regulations.
- [4]: The effectiveness of the obstacle sensing and avoidance system, including its effective range, avoidance accuracy, and bypassing capabilities, can be diminished by environmental factors such as lighting, rain, fog, and the material, shape, and location of objects. The system is designed with specific functions: downward sensing assists in terrain-following altitude flight and is not intended for general obstacle detection below the aircraft. Forward and side sensing facilitates obstacle avoidance but cannot reliably detect thin linear obstacles (e.g., wires, cables) or moving objects. It is the operator's sole responsibility to visually identify, mark and avoid these hazards. Furthermore, the system's safeguards are calibrated for operations at or below 13.8 m/s. Any collision that occurs while the aircraft is traveling at a speed exceeding 13.8 m/s is explicitly the responsibility of the operator. For collisions at or below this speed that result in damage, warranty eligibility is contingent upon a diagnostic analysis of the flight logs. This analysis must confirm the cause was a non-human system malfunction and that the incident occurred in an environment free of the aforementioned challenging obstacles (wires, moving objects, etc.). Should the analysis indicate operator error, presence of undetected linear obstacles, failure to avoid moving objects, a collision with a ground-based obstacle, or operation above the specified speed limit, the responsibility for damages will be borne by the operator and will not be covered under warranty.
- [5]: The recorded spray width of 8 meters was achieved under specific conditions: a flight altitude of 3 ± 0.5 meters, a flight speed of 3 m/s, and a single pump flow rate of 5 L/min. This data is for reference purposes only.
- [6]: As used herein, the term "flexible impeller pump" shall be construed to mean and refer specifically to a positive displacement pump utilizing a single-piece, elastomeric impeller with integral, radially-oriented flexible vanes, also commonly known as a "flexible vane pump."
- [7]: The actual minimum flow rate may vary based on route spacing, flight speed, environmental conditions, and other operational factors. For precise details, please refer to the XAG One app.
- [8]: The equipment's battery performance may decline when operating in ambient temperatures below -5°C.
- [9]: This data is based on outdoor tests conducted in unobstructed, interference-free environments. Actual effective range may vary under different conditions and is provided for reference only.
- [10]: Battery weight may vary slightly between different production batches.
- [11]: The batteries have been tested under controlled conditions to be splash-resistant and water-resistant. However, this protective performance is not permanent and may diminish over time due to normal wear and usage.

FCC Compliance Notice

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This equipment should be installed and operated with a minimum distance of 20cm between the radiator and your body.



⚠ This product can expose you to chemicals including Pb which is know to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

FCC Supplier's Declaration of Conformity

Brand name / model number: 3WWDZ-U80AH

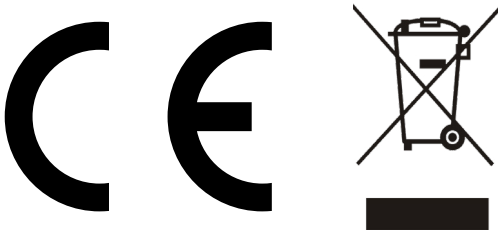
This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Suppliers Name(FCC): Pegasus Spray Inc

Suppliers Address (FCC): 2265 116th Ave NE, Suite 110, Bellevue, WA 98004, United States

Suppliers Email Address: arthur@pegasusrobotic.com

EU Compliance Statement:Guangzhou Xaircraft Technology CO.,LTD.All Rights Reserved.hereby declares that this device is in compliance with the essential requirements and other relevant provisions of the RED Directive. This equipment must be installed and operated in accordance with provide instructions and the antenna used for this transmitter must be installed to provide a separation distance of at least 20cm from all persons and must not be co-located or operation in conjunction with any other antenna or transmitter.End-users and installers must be provide with antenna installation instructions and transmitter operating conditions for satisfying RF exposure compliance.



Warning: Operation of this equipment in a residential environment could cause radio interference.

“Hereby, *[Guangzhou Xaircraft Technology CO.,LTD.]*, declares that this *[P150 Max Agricultural Drone]* is in compliance with the essential requirements and other relevant provisions of 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address: www.xa.com/en/service/downloads”

Suppliers Name(EU): NIK ELECTRONICS LTD

Suppliers Address (EU) : Sofia, 11B Brussels Blvd., fl.13

Suppliers phone number and / or internet contact information: 00359899952228

Note: To ensure EMC safety, install one large ferrite ring on the harness 301 at the drone's nose cable hub, and one small ferrite ring on the harness 301 at the central cable hub.

KCC Warning Message

이 기기는 업무용 환경에서 사용 할 목적으로 적합성 평가를 받은 기기로서 가정용 환경에서 사용하는 경우 전파 간섭의 우려가 있습니다 .

Declaração ANATEL

Este equipamento não tem direito à proteção contra interferência prejudicial e não pode causar interferência em sistemas devidamente autorizados.Para maiores informações, consulte o site da ANATEL – (www.anatel.gov.br).

