

# P40 Agricultural Drone

## User Manual

Version 1.4 **EN**

## **To User**

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

## **Contact Us**

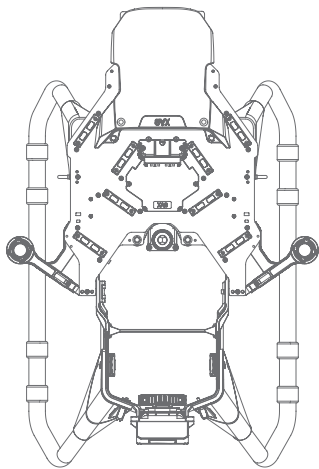
If you have any questions about this document, please contact our Technical Support team via email:  
[info@xa.com](mailto:info@xa.com)

## Safety Guidelines

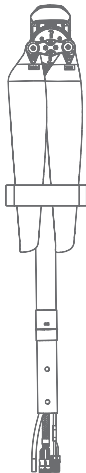
- Please make sure that the drone operator has passed the drone operation training programme and obtained a drone pilot certificate prescribed by laws and regulations where the product is used in advance. Never operate the drone without permission unless otherwise provided.
- Observe the surroundings, ensure a safe distance from the obstacles and the crowd as well as eliminate unsafe conditions including environmental factors like bad weather and extreme temperatures before operation.
- NEVER operate while drowsy, drunk or in a poor mental state so as to prevent accidents.
- Keep the product away from heat to avoid damage to the electronic device and other components.
- Instead of operating alone, the beginner should seek help from a veteran beforehand and operate the drone accompanied by the veteran.
- Please operate within maximum takeoff weight to avoid dangers caused by overload.
- It is a MUST to do the pre-flight inspection and eliminate co-frequency interference prior to operation.
- Stay away from the operating machine. Do NOT touch the spinning propellers with your body or other components. Loose clothing is NEVER allowed as it should get caught in the spinning propellers easily and cause injury.
- For safety purposes, it is NOT recommended to install the propellers until finishing the trial run of the drone and inspections of the remote control devices, motors and other modules.
- NEVER install/remove any module or insert/extract circuit while the power is on.
- NEVER take the human body or animal, whether still or moving, as an obstacle for the obstacle avoidance experiment.
- NEVER impede, intervene or impact the drone with the human body, animal or any other object.
- Should there be adverse weather conditions like a strong wind, rain, snow and hail, hover the drone and return to home as soon as possible. Weather not permitting, hover the drone and fly towards a nearby safe place.
- Drone operator shall strictly comply with relevant laws and regulations where the product is used, including but not limited to the flight height, flight area and visual line of sight.

## List of Items

Please check that the following items are all present when unpacking the box. Should there be any item missed, please contact your dealer.



Airframe  
×1



No.4 Arm  
Module  
×1



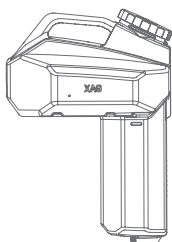
No.3 Arm  
Module  
×1



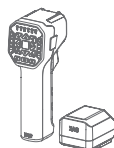
No.2 Arm  
Module  
×1



No.1 Arm  
Module  
×1



Smart Liquid Tank (20L)  
×2



ACS2G ControlStick<sup>[1]</sup> (X4 RTK Ver)  
×1



RealTerra (optional)  
×1



Tool Kit  
×1



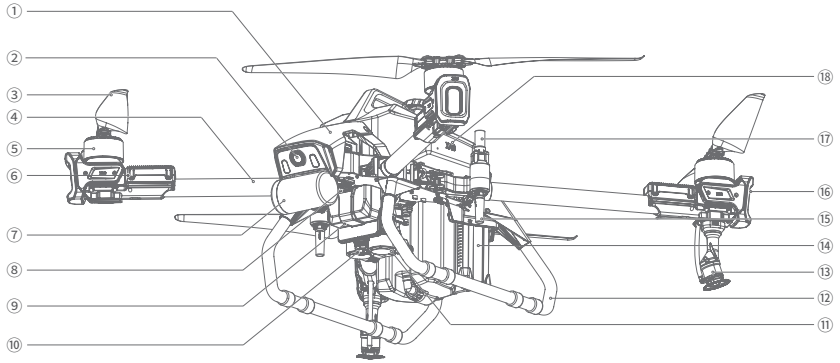
USB-Type-C Cable  
×1

[1]: ACS2G ControlStick namely ACS2G Remote Control.



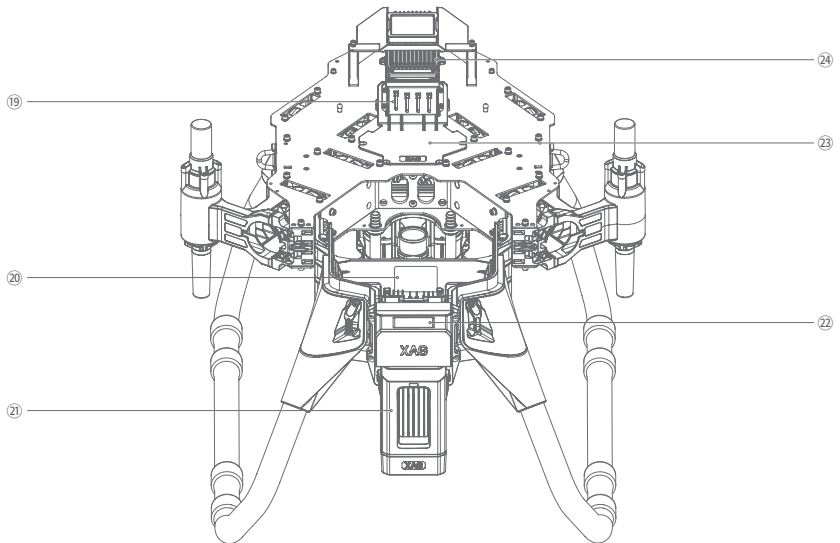
# About P40 Agricultural Drone

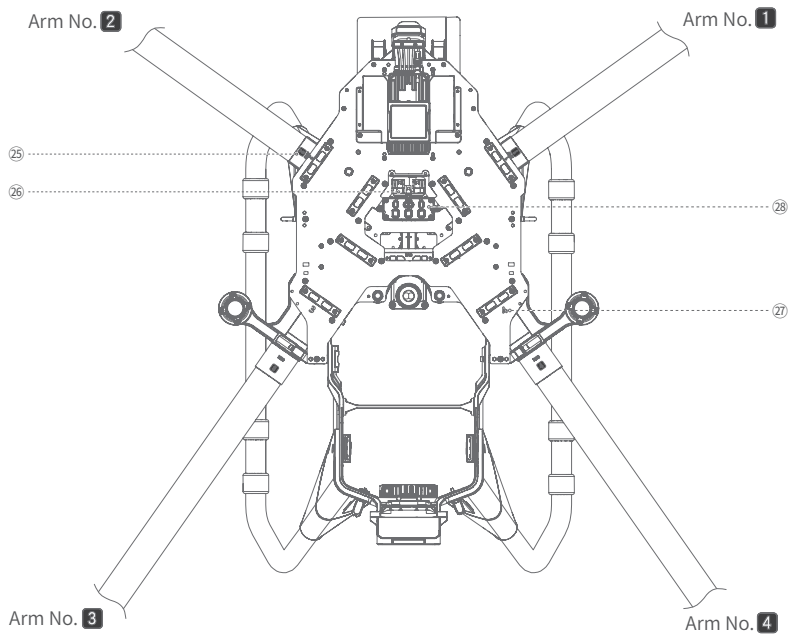
The main components of P40 Agricultural Drone are as follows:



(Above) Figure 1: Airframe Module Structure 1

(Below) Figure 2: Airframe Module Structure 2





(Below) Figure 3: Airframe Module Structure 3

- |                                     |                             |                                       |
|-------------------------------------|-----------------------------|---------------------------------------|
| ① Head Cover                        | ⑪ Peristaltic Pump          | ⑳ RealTerra System                    |
| ② PSL Camera                        | ⑫ Landing Gear              | ㉑ Flight Status Indicator             |
| ③ Propeller                         | ⑬ Nozzle                    | ㉒ Central Cabin Cover                 |
| ④ Arm                               | ⑭ Smart Battery             | ㉓ Super X4 Intelligent Control System |
| ⑤ Motor                             | ⑮ 2.4GHz Antenna            | ㉔ Arm Position Number                 |
| ⑥ ESC (Electronic Speed Controller) | ⑯ Spraying Status Indicator | ㉕ Spraying Hub                        |
| ⑦ Dynamic Radar                     | ⑰ RTK Antenna               | ㉖ Airframe Position Number            |
| ⑧ Terrain Sensor                    | ⑱ Liquid Tank               | ㉗ ESC Hub                             |
| ⑨ Spraying Hub Housing              | ⑲ Liquid Tank Sensor Patch  |                                       |
| ⑩ Searchlight                       | ㉘ Airframe Nameplate        |                                       |



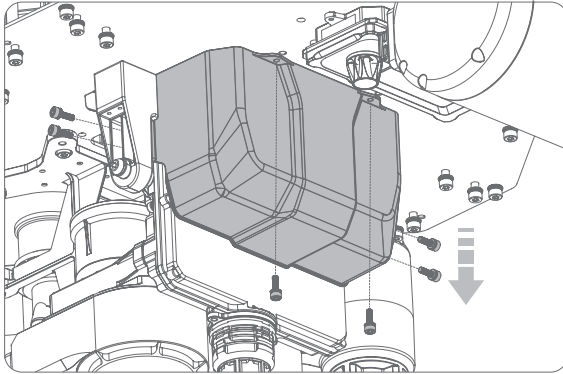
There are labels on the upper plate of the airframe and the aluminium sleeves of arms. The numbers correspond to the position numbers of arms. 1 for **1**; 2 for **2**; 3 for **3**; 4 for **4**.

# Airframe Assembly

## Preparation

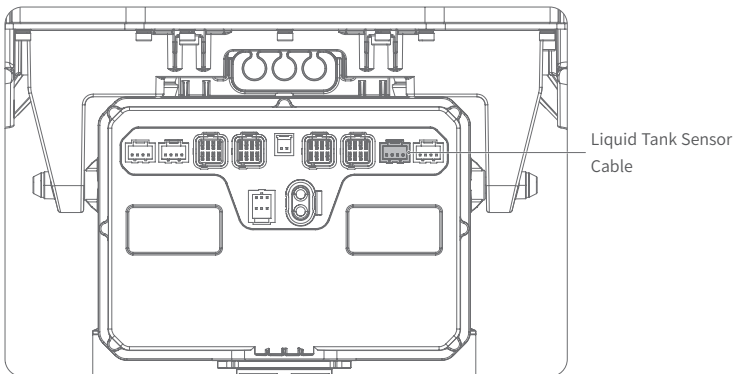
### Remove Spraying Hub Housing

Remove Spraying Hub Housing by unscrewing its 6 screws (2 on the top and 2 on both left side and right side)

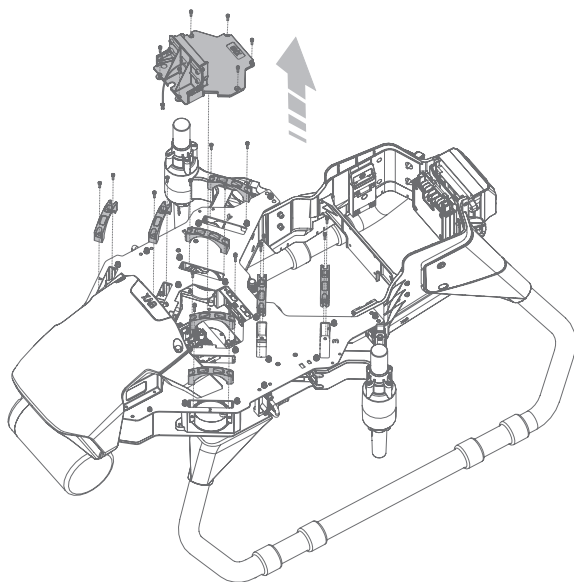


### Remove Central Cabin Cover and Arm Bracket

Pull off the Liquid Tank Sensor Cable on the Spraying Hub.

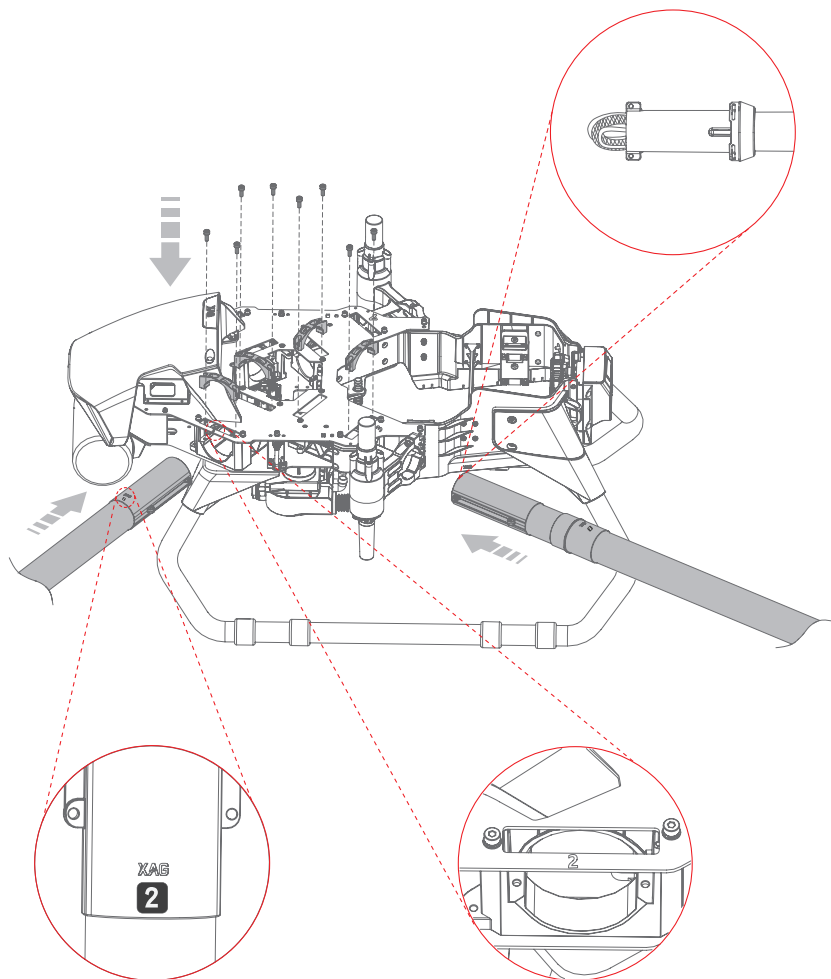


Remove 8 Arm Brackets and Central Cabin Cover.



## Arms Assembly

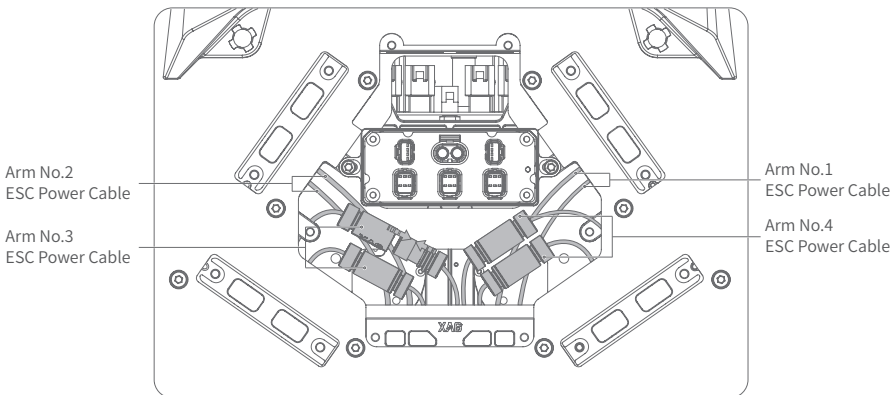
Put the wire into the Arm. By matching the Arm Position Number to the Airframe Position Number, insert the Arm into the Airframe and fit the Arm Bracket.



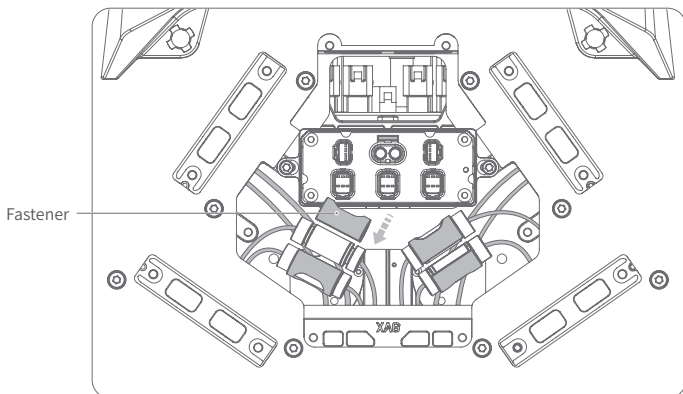
## Cable Connection

### Connect ESC Power Cables

Upon Arms assembly, push the ESC Power Cables of Arm No.1 & No.2 into the hole of the Bottom Central Compartment and connect to those of arm No.3 & No.4. (The red connector fits only to the other red connector while the black one connects to the other black one).



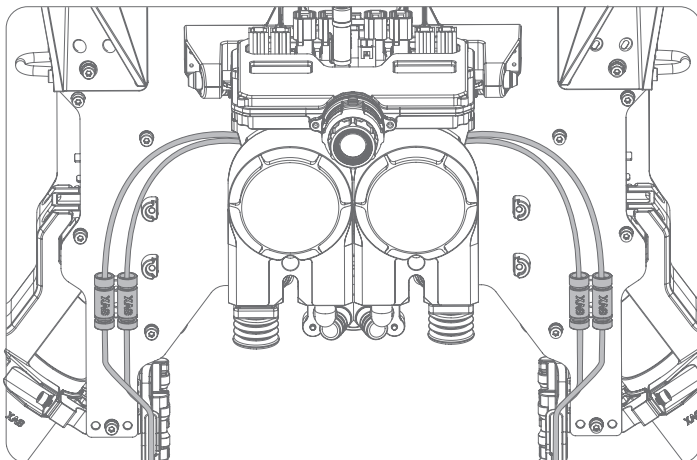
Lock ESC Power Cables of Arm No.3 & No.4 with Fastener.



### Warning

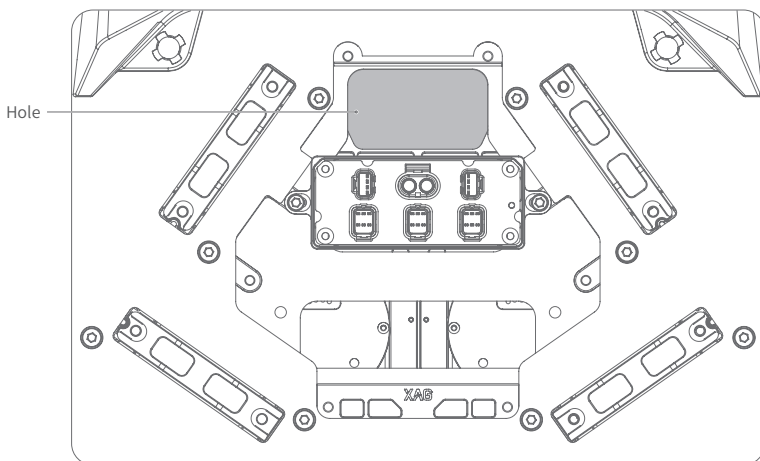
⚠ Please remove the Fastener preceding connection of ESC Power Cables of Arm No.1 & No.2 and lock the Fastener back upon connection lest the connector get loose.

Tighten connectors on both sides with cable ties upon the connection between Power Cables of Arm No.1 & No.2 in the Bottom Central Compartment. (The red connector fits only to the other red connector while the black one connect to the other black one)



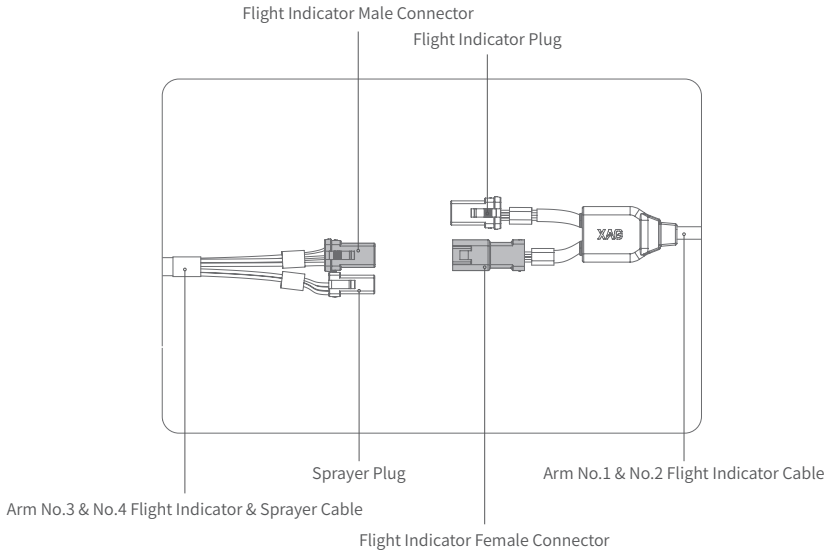
#### Connect Signal Cable of Flight Indicator and Sprayer

Pull the Flight Indicator Signal Cables of Arm No.1 and Arm No.2, plus those of the lights and sprayers of Arm No.3 and Arm No.4 through the hole on the Spraying Hub to the Bottom Central Compartment.



### Connect Male and Female Connectors of Flight Indicator

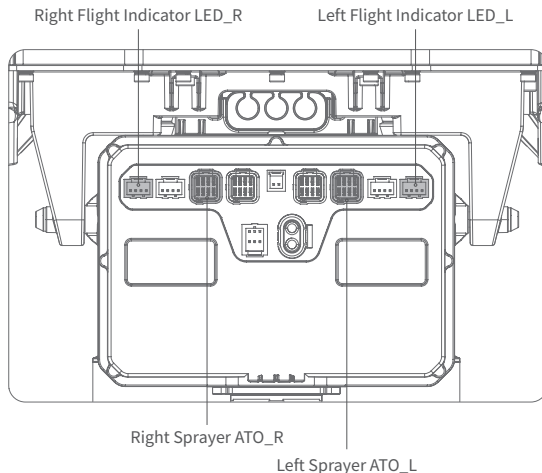
Before connecting the Flight Indicator Signal Cables, match the Female Connector of Arm No.1 to the Male Connector of Arm No.4 and match the Female Connector of Arm No.2 to the Female Connector of Arm No.3.



### Connect Cable of Flight Indicator and Sprayer

Upon connection of Flight Indicator Signal Cables between Arm No.1 & No.4 and Arm No.2 & No.3, insert the Flight Indicator Plug of Arm No.1 and that of Arm No.2 into Right LED Indicator LED\_R and Left LED Indicator LED\_L respectively.

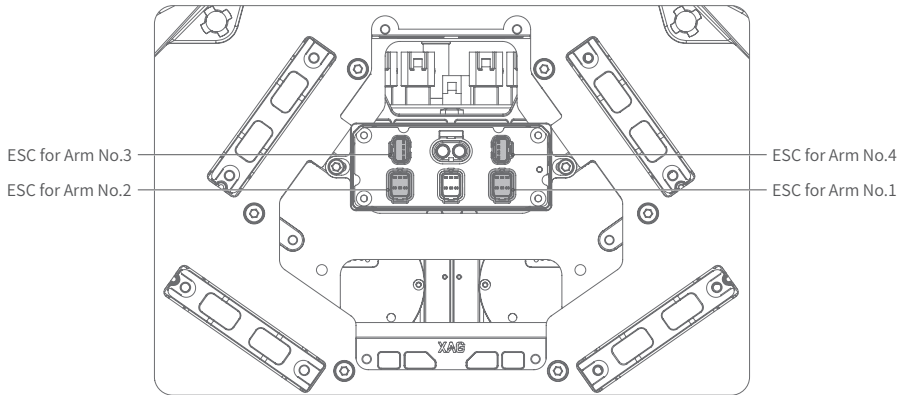
Insert sprayer plug of Arm No.3 and that of Arm No.4 into Left sprayer ATO\_L and Right sprayer ATO\_R respectively.





### Connect ESC Signal Cable

Connect ESC Signal Cable inside the Arm to ESC hub.

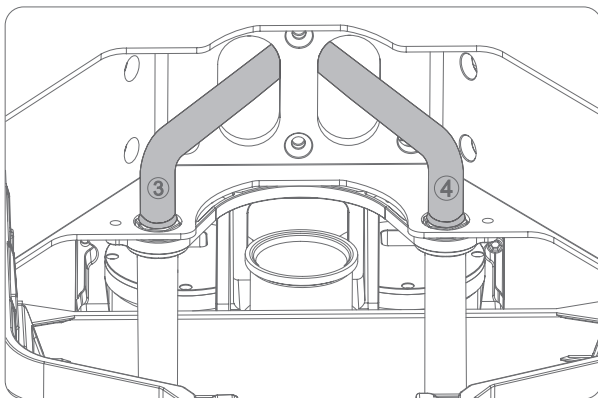


### Warning

⚠ NEVER swap the ESC Signal Cables between M1 and M2, M3 and M4, as incorrect connection may cause flight accidents

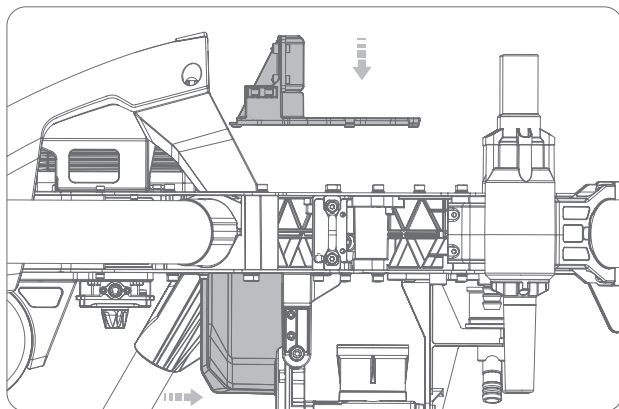
### Connect Liquid tube

Pull the Liquid Tube inside Arm No.3 & No.4 through the hole as shown below and connect it to the Peristaltic Pump.

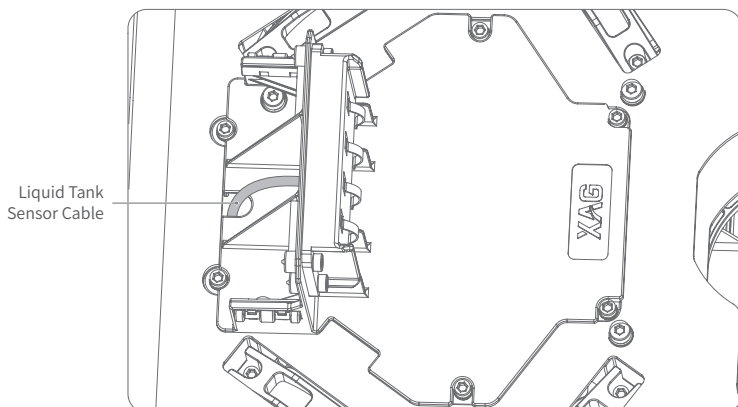


## Reassembly of Removed Parts

Fit the Spraying Hub Housing and Central Cabin Cover.

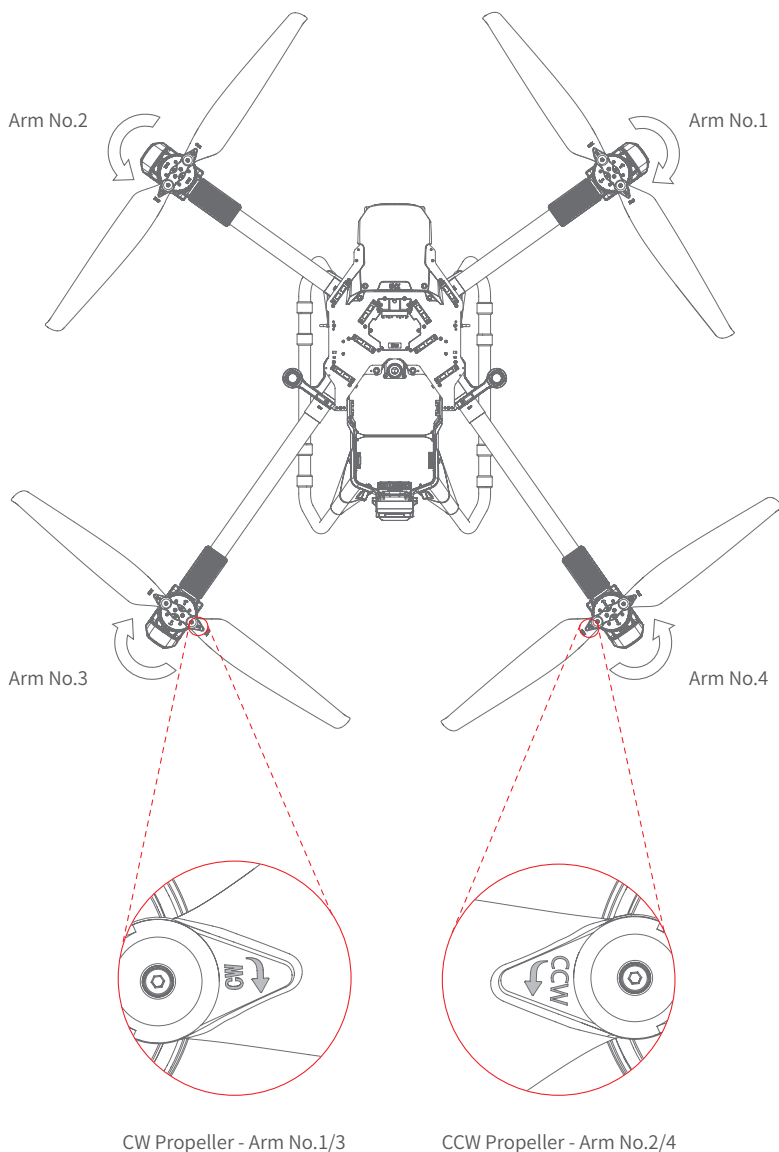


When fitting the Central Cabin Cover, put the Liquid Tank Sensor Cable correctly and connect it to the Spraying Hub. (Please refer to Page 4 for the exact place).



## Unfold Propeller

After unfolding all the propellers, check whether the model of propeller, which could be seen between clamp and blade, corresponds to the Arm Number. CW Propellers correspond to Arm No.1 & No. 3, while CCW Propellers correspond to Arm No.2 & No.4.

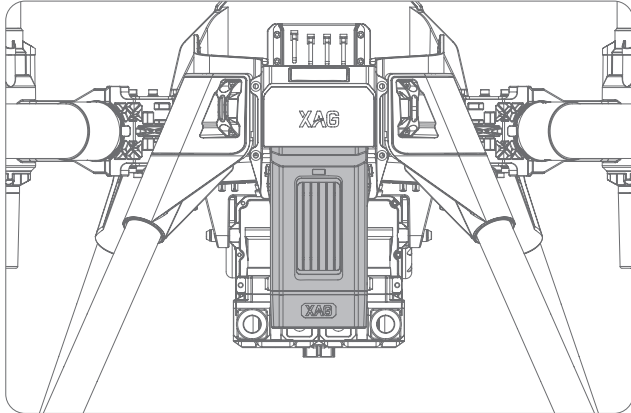
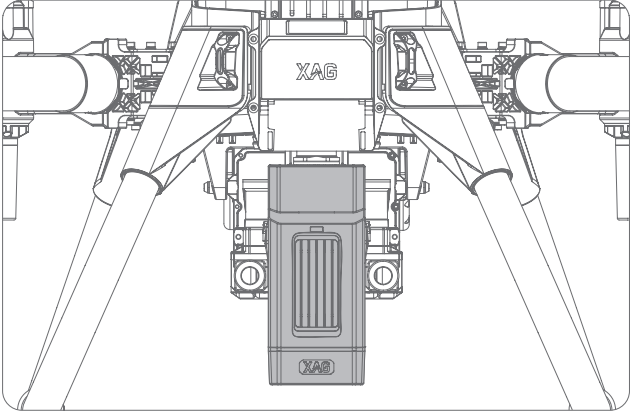


### Warning

**⚠ NEVER swap the CW and CCW Propellers, as incorrect installation may cause flight accidents.**

## RealTerra Installation

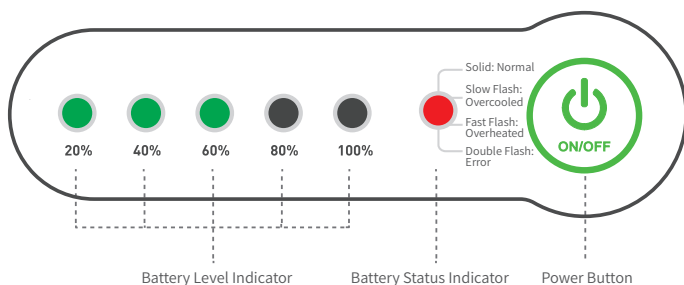
Insert the RealTerra into the RealTerra Slot until hearing a clicking sound.



## Smart Battery Preparation

### About Indicator / Button

There are 1 power button and 6 indicators on the smart battery screen.

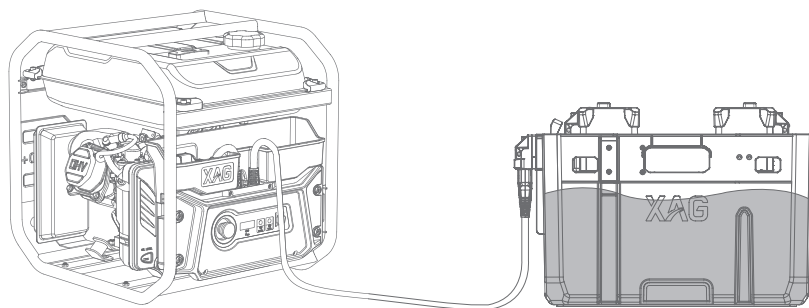


### Switch On/Off Battery

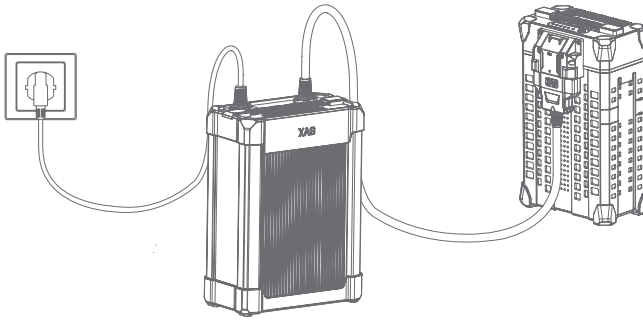
Long-press twice to switch on/off the battery. After connecting the drone or the charger, long-press the battery button for at least 1 second until all the battery level indicators flash synchronously. Then long-press for another second until the battery beeps and the status indicator is ON/OFF, which means the battery switches on/off successfully.

### Charge Battery

Please charge the battery with GC4000+ Auto SuperCharge Station or Intelligent SuperCharger. When reaching full charge, the battery will switch off and the Auto SuperCharge Station or the Intelligent SuperCharger will stop charging automatically.



Charge with Auto SuperCharge Station



Charge with Intelligent SuperCharger

### Check Battery Level

When the battery is OFF, short-press the power button once to check the battery level.  
 When the battery is ON, the battery level indicators will be on solid.

LED Behaviour		Description
1 Light Flashing	●○●○●○●○	0%-10%
1 Light Solid	●○●○●○●○	10%-30%
2 Lights Solid	●●○●○●○●○	30%-50%
3 Lights Solid	●●●○●○●○●○	50%-70%
4 Lights Solid	●●●●○●○●○●○	70%-90%
5 Lights Solid	●●●●●○●○●○●○	90%-100%

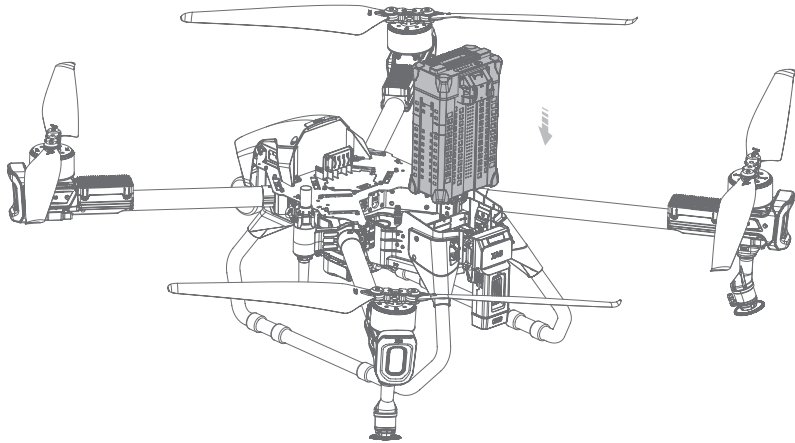
### Check Battery Status

When the battery is on, check the battery status on the screen.

LED Behaviour		Status	Description
2 Lights Double Flash	●●●○●○●○●○	Fault Lock	Battery locked for the low battery, please contact tech support to unlock the device.
3 Lights Double Flashing	●●●○●○●○●○	Remote Lock	Battery locked remotely, please contact tech support to unlock the device.
4 Lights Double Flashing	●●●○●○●○●○	Anti-dismantling Lock	Failed to verify cell identification, please contact tech support to help check.
2/3 Alternate Flashing Lights	●●●○●○●○●○	Over current Protection	Protection triggered by overcurrent, please contact tech support to unlock the device.
2/4 Alternate Flashing Lights	●●●○●○●○●○	Dual-battery Power on Disabled	Dual-battery power on disabled, voltages of both batteries should be roughly equal before use.
LED Behaviour		Status	Description
Red Light Solid	■■■■■■■■■■	Normal	Normal
Flashing Red Light (rapid)	●●●●●●●●●●	Overheated	Protection triggered. Charging/Discharging not allowed
Flashing Red Light (slow)	●●●●●●●●	Overcooled	Charging protection triggered for low temperature. Please keep the battery above 10°C
Red Light Double Flashing	●●●●●●●●	Failure	Stop using immediately

## Battery Installation

Insert Battery into the Battery Compartment cautiously until hearing a clicking sound.



### Warning

- ⚠ Smart battery should be fully charged and used in strict accordance with instructions preceding Drone operation.
- ⚠ Battery should be charged with the charging device specified by XAG. Otherwise, user shall assume all the economic and legal responsibilities arising therefrom.
- ⚠ Intelligent SuperCharger is available to purchase separately. If necessary, please contact your local dealer.

## Precautions for Battery Use

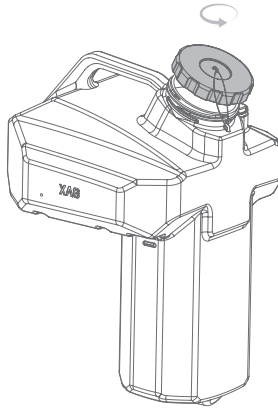
- NEVER insert/remove the battery when it is ON, or it may cause damage to the interface.
- It is a MUST to check and update to the latest battery firmware and software version preceding operation. Loss caused by failing to do so shall be borne by the user.
- An optimal ambient temperature range for the battery is from 10 °C to 45 °C . Chances are that fire, even explosions will happen at a temperature over 45°C .
- NEVER connect the cathode and anode with a wire or other metals, as this will cause a short circuit.
- For heat dissipation, the battery should be immersed into pure water instead of corrosive liquids within the maximum and minimum level indicated for NO more than 60min, or else the battery will get damaged for having water leak inside.
- Please always keep the interface clean and clean the liquid or foreign matters off it promptly. Otherwise, it will cause poor contact, contributing to energy loss or failure to charge.
- Please handle the battery with care and do NOT take it apart, pierce the housing or apply pressure to it, including but not limited to behaviours such as sitting/standing on the battery, stacking heavy items on it and the like.
- Please regularly check the components like the battery interface and the plug before use. NEVER clean the charging device with alcohol or other combustible liquids. NEVER use the damaged charging device.
- Please place the battery and charging device on even ground with no combustible materials around while charging. NEVER leave the battery unattended while charging in case of an accident.
- For your safety, keep a minimum of 30cm distance between the battery and the charger, and between two batteries, lest too much heat lead to the charger or battery failure, even causing dreadful consequences like a fire.
- Please make sure the battery is fully charged prior to each operation. NEVER operate at full capacity preceding completion of charging.
- NEVER use batteries provided by manufacturers other than XAG, or to dismantle/replace the battery without permission. If necessary, please contact XAG or the authorized dealer. For the battery incidents, technical faults or other accidents caused by using a battery or accessories provided by non-XAG manufacturers, the user shall be held responsible for all the consequences arising therefrom.
- If one green light flashes at the end of the operation, please charge the battery to 40%~60% before storage. Failing to do so may damage the battery or impact battery life. Fully discharge and recharge the battery every 90 days to maintain battery health.
- The battery should be stored at 10~30°C in a dry place instead of a wet or moist environment.
- Avoid moisture while charging the battery. Warranty does NOT cover any damage caused by problems not attributable to the product quality like damaged battery housing.
- The battery is waterproof and splashproof under controlled experiment. However, rather than being permanent effective, the protection may get weaker due to wear and tear.
- Please STOP using the batter swollen, leaking, deformed or with appearance damage instantly and contact XAG or the dealer without hesitation.
- The liquid inside the battery is highly corrosive. In case of contact with skin or eyes, flush with fresh water and seek medical attention instantly.
- To protect our environment, please properly dispose of the battery as required by the local laws and regulations.



## Liquid Tank

### Infusion

Twist the Cap counterclockwise to open the tank. Upon infusion, screw the Cap clockwise till tight.

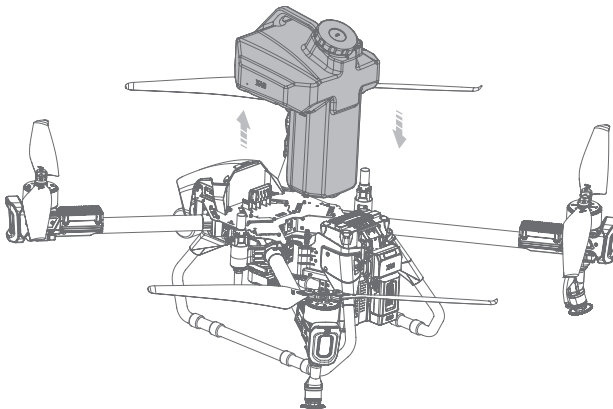


### Warning

⚠ To protect the parts from chemical splash damage, direct pesticide infusion is NOT allowed when the tank is installed on the Drone.

### Tank Removal/Installation

Pick up with force/put down with care to remove/install the Liquid Tank.



### Warning

- ⚠ Please DO handle the tank with pesticide inside with care.
- ⚠ Emptying liquid tank/granule container beforehand to enhance the efficiency of aerial mapping is recommended.
- ⚠ A drone installing RealTerra is unable to spray or spread.

# APP Interface Introduction

## "Field" Tab (Main)



Device List: Full device list

Operator: Operator's location

"Field" Tab: Main field options tab

Functions: New fields, New fields group,  
New HDMAP, Import data, Bind  
devices

Map Layers: Select map type

Focus on Aircraft: Centre screen on aircraft

Focus on Operator: Centre screen on  
operator

Measure: Measure distance

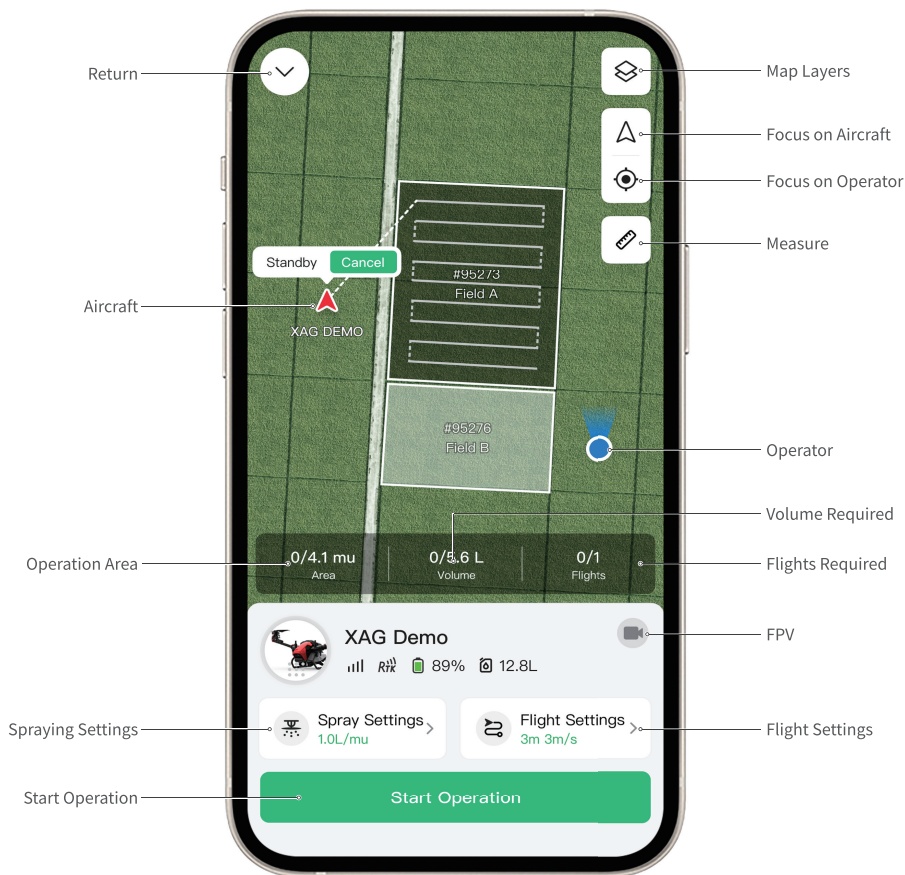
Aircraft: Aircraft's location

"Operation" Tab: Main operation options  
tab

"My Account" Tab: Main account options tab

## "Operation" Tab

Tap on "Operation" tab to view the operation options.



Return: Return to "Field" Tab (Main)

Operation Area: Area of selected field

Spraying Settings: Spraying settings

Start Operation: Start operation

Volume Required: Estimated volume required  
for current operation

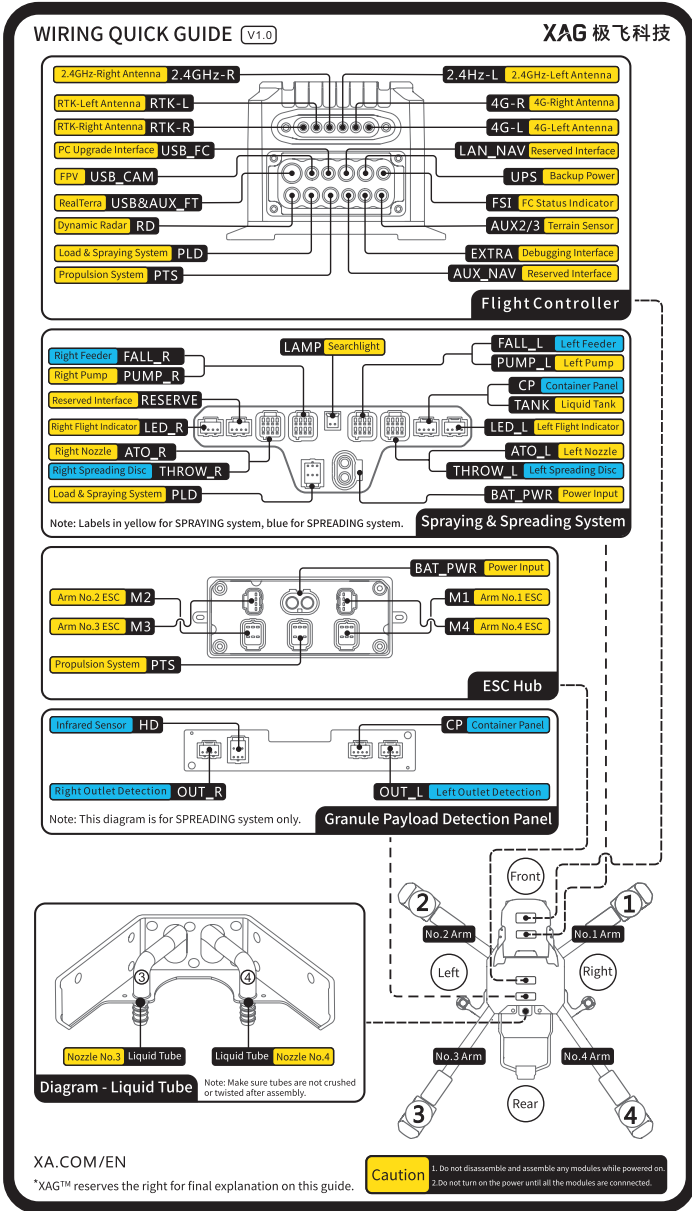
Flights Required: Estimated flights required  
for current operation

FPV: First-person-view camera

Flight Settings: Flight settings

# Appendix

## Wiring Quick Guide


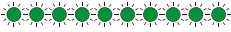



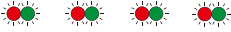




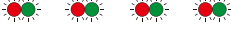




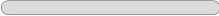


⚠ The guideline in this page is applicable for all the connections of P40 Agricultural Drone.

## Description of Status Indicator








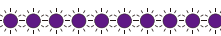



### Super X4 Intelligent Control System Indicator

Get to know the current status of the drone by checking Super X4 Intelligent Control System Indicator. Details are as follows:

RTK Indicator		Description
Flashing Green Light (slow)		Normal
Flashing Green Light (rapid)		Insufficient satellites (<16), heading accuracy: <2°
Flashing Red Light (slow)		RTK timeout exceeding 10s
Flashing Red Light (rapid)		Exit RTK, no differential signal, no heading
Solid Red Light		Not searching for satellites, not positioning, no output from board
Red/Green Light Alternate Flashing(slow)		Initialization/Configuration
Red/Green Light Alternate Flashing(rapid)		Firmware Update
Wireless Communication Indicator		Description
Flashing Green Light (slow)		Communication module normal, DLS receiving and processing data
Flashing Green Light (rapid)		Communication module normal, no data received
Flashing Red Light (slow)		Initialization normal, serial port disconnected
Flashing Red Light (rapid)		Interface disconnected, initialization failed
Red/Green Light Alternate Flashing		Pairing. Indicators will become Green Light Fast Flash whether the pairing is successful or not
Cloud Communication Indicator		Description
Cloud Communication Indicator		Cloud communication connected
Cloud Communication Indicator		Cloud communication disconnected
System Status Indicator		Description
Solid Green Light		System normal
Solid Red Light		System anomalous
Dim		Check tail light











## Flight Indicator

There are one Arm light the side of each motor mount, Details are as follows.

Arm Light		Description
Solid Green Light		Spraying
Illumination Green		Spraying paused for line changing
Solid Red Light		Idling or obstacle avoidance in process
Illumination Red		Departure or RTL
Solid Cyan Light		Initializing firmware update
Flashing Cyan Light (rapid)		Downloading firmware
Flashing Purple Light (slow)		Subsystem update
Flashing Purple Light (rapid)		Transmitting subsystem firmware
Illumination Blue		No signal from flight controller
Flashing Blue Light (rapid)		Spray system offline
Solid Yellow Light		System crash

## Flight Status Indicator

Get to know the current status of the drone by checking the Flight Status Indicators (Tail Lights). Details are as follows.

Tail Lights		Description
Red/Green Light Alternate Flashing(slow)		Weak GPS signal
Double Flashing Green Light		Strong GPS signal
Triple Flashing Green Light		GPS route mode
Flashing Red Light(slow)		Fly in safe mode <sup>[1]</sup> /Taking off or landing
Solid Red Light		Powered on, Flight Control initialization incomplete or heating up
Flashing Purple Light(rapid)		Flight Control formatted or parameter anomalous
Flashing Blue Light(rapid)		Propulsion system detected as anomalous
Flashing Red Light(rapid)		Sensors (excluding IMU) anomalous, GPS malfunction or low heading accuracy
Flashing White Light(rapid)		IMU failure
Triple Flashing Red Light		Low voltage alert

[1]: UAV will enter safe mode when UAV is under manual control, but lost the telecommunication of remote controller. UAV will hover and then return to take off point automatically.

## Specifications

### P40 Agricultural Drone

Model	3WWDZ-20BH
Flight Control System	SuperX 4
Symmetrical Motor Wheelbase	1560mm
Dimensions	1280×1280×550mm
Empty Weight	29.1kg
Rated Takeoff Weight	49.1kg
Maximum Takeoff Weight	49.1kg
Protection Rating	IP67
Recommended Operating Temperature	-10~40°C

### Flight Parameters

Wi-Fi Operating Frequency	2.400GHz-2.4835GHz
Wi-Fi Maximum transmit power	MAX 20dBm
Maximum Thrust-Weight Ratio:	1.6
2G Operating Frequency	CE: GSM 900: 880 – 915 MHz, 925 – 960 MHz; DCS 1800: 1710 – 1785, 1805 – 1880 MHz FCC: GSM850; PCS1900
2G Maximum transmit power	Class 4 (33dBm ±2dB) for EGSM900, Class 1 (30 dBm ±2 dB) for DCS1800
3G Operating Frequency	CE: WCDMA Band I: 1920 – 1980 MHz, 2210 – 2170 MHz; WCDMA Band VIII: 880 – 915 MHz, 925 – 960 MHz FCC: WCDMA B4 ; WCDMA B2 KCC: WCDMA B1
3G Maximum transmit power	Class 3 (24dBm +/-3dB) for WCDMA bands
4G Operating Frequency	CE: Band1、Band3、Band7、Band8、Band20、Band28、Band38、Band40 FCC: Band2、Band4、Band5、Band7、Band12、Band13、Band25、Band26、Band38、Band41 KCC: Band1、Band3、Band5、Band7、Band8
4G Maximum transmit power	Class 3 (23dBm ±2dB) for LTE-TDD bands
GNSS Operating Frequency	GPS: L1/L2; GLONASS: L1/L2; BDS: B1/B2; Galileo: E1/E5b
Hovering Precision (good GNSS signal)	RTK Enabled: ±10cm (horizontal), ±10cm (vertical) RTK Disabled: ±0.6m (horizontal), ±0.3m (vertical) (radar enabled: ±0.1m)
Continuous High Precision Navigation Time without Signal	≤ 600s
Hovering Duration	15min (with No-load @20000mAh & Takeoff Weight: 29.1kg) 6.5min (with Full-load @20000mAh & Takeoff Weight: 49.1kg)
Maximum Flying Speed	10m/s
Maximum Flying Height	30m
Maximum Flight Distance	2000m
Wind Force Recommended	≤ 3m/s

## RevoSpray System

### Smart Liquid Tank

Volume	20L
Sensor	Liquid Level Sensor

### Nozzle

Quantity	2
Rotational speed of spray disc	1000~16000rpm/min
Atomizing Size	60-400 $\mu$ m
Spray Width	5~10m

### Peristaltic Pump

Quantity	2
Voltage	50V
Maximum System Flow Rate	10L/min
Maximum flow rate (single pump)	5L/min

### XAG RealTerra

Image Sensor	1/2.3inch 12M CMOS Sensor
Lens	FOV 112° 2.7mm/16.8mm (35mm Equivalent)
Mechanical Shutte	1/200-1/2000s
Image Format	JPG
Power	10W
Optimum Operating Temperature	10~40°C

### PSL Camera

Dimensions	50 x 36.7 x 29mm
Video Resolution	720P/1080P
Video Coding Format	H.264
Frame Rate	30fps
Focal Length	2.75mm
Image Sensor	1/2.95inch 2M CMOS Sensor

## Obstacle Sensing & Avoidance System

### Dynamic Radar

Model	RD2426
Voltage	24~60V
Power	6W
Operating Frequency	24.05-24.25GHz
EIRP	$\leq$ 20dBm
Sensing Mode	Millimeter-wave Imaging, MIMO
Sensing Parameters	Obstacle's Position, Distance, Direction of Motion, Relative Velocity
Field of View (FOV)	Horizontal $\pm$ 40° ; Vertical $\pm$ 45°



Relative Height of Safe Obstacle Avoidance	$\geq 1.5\text{m}$
Relative Speed of Safe Obstacle Avoidance	2.5m (Distance between the propeller tip and obstacle after the Drone brakes and hovers stably)
Relative Speed of Safe Obstacle Avoidance	$\leq 8\text{m/s}$

#### Terrain Sensor

Model	TR24S100
Voltage	5.8V
Power	1.5W
Sensing Mode	Millimeter-wave
Operating Frequency	24.05-24.25GHz
EIRP	$\leq 17\text{dBm}$
Height Measurement Range	0.5~100m
Fixed Height Range	1~30m
Protection Rating	IP67

#### Propulsion System

##### Motor

Model	A25
Stator Size	80 x 25mm
KV Value	85RPM/V
Maximum Tension (Single Motor)	20kg
Rated Power (Single Motor)	1500W

##### Electronic Speed Controller

Model	VC13180
Maximum Continuous Operating Current	180A
Maximum Operating Voltage	56.6V

##### Foldable Propeller

Model	P40128
Diameter × Screw Pitch	40 x 12.8inch

##### Tilt Servo

Rated Voltage	DC50V
Operating Voltage	DC25V-55V
Rated Torque	150Kg·cm@50V
Rated Current	0.5A@50V
No Load Speed	400°/second

#### Communication & Control System

##### ACS2G Agricultural Control Stick

Compatible with	XAG® V40 Agricultural Drone, XAG® P40 Agricultural Drone
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Operating Frequency	2.4GHz
Power Consumption	4W (without RTK module), 8-9W (with RTK module)
Ambient Operating Temperature	-20~60°C
Ambient Charging Temperature	5~45°C

## Power System

### Smart SuperCharge Battery

Model	B13960S
Type	13S Lithium polymer battery
Rated Capacity	20Ah (962Wh)
Rated Output	48.1V/120A/5500W
Fast Charge	56.55V/50A/2800W
SuperCharge	56.55V/80A/4500W
Ambient Charging Temperature	10~45°C

#### Note

- ⚠ The effectiveness of the Obstacle Sensing & Avoidance System depends on the obstacle's material, location, shape, size, etc. Please ensure the drone is always in your sight during operation. Pay close attention to the drone and use the ControlStick to avoid obstacles when necessary.

## FCC/ISED Compliance Notice

This device complies with Part 15 of the FCC Rules and ISED licence-exempt RSS standard.. 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.

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

Cet appareil est conforme à la section 15 du règlement de la FCC et à la norme RSS sans licence ISED. Son utilisation est soumise aux deux conditions suivantes:

- (1) Cet appareil ne doit pas causer d'interférences nuisibles, et
- (2) Cet appareil doit accepter toutes les interférences reçues, y compris celles susceptibles de provoquer un fonctionnement indésirable.

Tout changement ou modification non expressément approuvé par la partie responsable de la conformité peut annuler le droit de l'utilisateur à utiliser l'équipement.

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.

## RF Exposure Information

Aircraft complies with FCC/ISED radiation exposure limits set forth for an uncontrolled environment. In order to avoid the possibility of exceeding the FCC/ISED radio frequency exposure limits, human proximity to the antenna shall not be less than 20cm during normal operation.

For Remote Controller (model:ACS2G), SAR tests are conducted using standard operating positions accepted by the FCC/ISED with the device transmitting at its highest certified power level in all tested frequency bands, although the SAR is determined at the highest certified power level, the actual SAR level of the device while operating can be well below the maximum value. Before a new model is available for sale to the public, it must be tested and certified to the FCC/ISED that it does not exceed the exposure limit established by the FCC/ISED, Tests for each product are performed in positions and locations as required by the FCC/ISED. For Handheld operation, this device has been tested and meets the FCC/ISED RF exposure guidelines when used with an accessory designated for this product or when used with an accessory that contains no metal.

For body worn operation, Remote Controller (model:ACS2G) has been tested and meets the FCC/ISED RF exposure guidelines when used with an accessory designated for this product or when used with an accessory that Contains no metal and that positions the handset a minimum of 0 cm from the body.

Non-compliance with the above restrictions may result in violation of RF exposure guidelines.

## Informations sur l'exposition RF

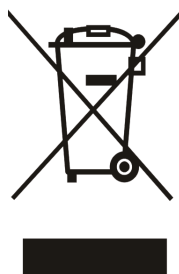
L' aéronef est conforme aux limites d' exposition aux rayonnements FCC/ISEDc établies pour un environnement non contrôlé. Afin d'éviter tout risque de dépassement des limites d'exposition aux radiofréquences FCC/ISEDc, la proximité humaine de l'antenne ne doit pas être inférieure à 20 cm en fonctionnement normal.

Pour le contrôleur à distance (modèle ACS2G), les tests SAR sont effectués sur des positions de fonctionnement standard acceptées par la FCC/ISEDc, le dispositif émettant à son niveau de puissance certifié le plus élevé dans toutes les bandes de fréquences testées, bien que le SAR soit déterminé au niveau de puissance certifié le plus élevé, le niveau de SAR réel de l'appareil en cours d'utilisation peut être bien inférieur à la valeur maximale. Avant qu'un nouveau modèle ne soit disponible à la vente au public, il doit être testé et certifié conforme par la FCC/ISEDc qu'il n'excède pas la limite d'exposition établie par la FCC/ISEDc. Les tests de chaque produit sont effectués à requis par la FCC/ISEDc. En mode portatif, cet appareil a été testé et respecte les directives d'exposition RF de la FCC/ISEDc lorsqu'il est utilisé avec un accessoire conçu pour ce produit ou avec un accessoire ne contenant pas de métal.

Pour le fonctionnement sur le corps, la télécommande (modèle ACS2G) a été testée et répond aux directives d'exposition RF de FCC/ISEDc lorsqu'elle est utilisée avec un accessoire conçu pour ce produit ou avec un accessoire ne contenant pas de métal et positionnant le combiné au minimum de 0 cm du corps.

Le non-respect des restrictions ci-dessus peut entraîner une violation des consignes d'exposition aux RF.

**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 [P40 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](http://www.xa.com/en)

Suppliers Name(EU): DRONEUA AGRICULTURE EUROPE Sp. Z O.O.  
Suppliers Address (EU) : 21-007 Melgiew, Janowice 144 str., Poland.  
Suppliers phone number and / or internet contact information: (093)4575757

## KCC Warning Message

**해당무선설비는전파혼신가능성이있으므로인명안전과관련된서비스는할수없음**

## FCC Supplier’ s Declaration of Conformity

Brand name / model number: 3WWDZ-20BH  
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 (USA) : HOMELAND SURVEILLANCE AND ELECTRONICS LLC  
Suppliers Address (USA) : 122 LIVE OAKS BLVD.CASSELBERRY, FL 32707  
Suppliers phone number and / or internet contact information: 46-2381710

## Disclaimer

01. Please read this User Manual carefully before using the product, as it has much to do with both operational safety and your legitimate rights and interests. You shall be deemed to know, understand, agree and acknowledge all terms and conditions as well as content stated herein upon activation of this product.
02. Not being a toy, plus for certain safety risks, this product is not suitable for those who are under 18 years old, or those without a UAS operator certificate accredited by XAG or existing laws, regulations and policies. Please keep the children away from this product and be particularly cautious while there are children present.
03. This product is an XAG V-series multi-rotor unmanned aerial vehicle solely designed for agricultural use. With activation in accordance with the User Manual, properly functioned battery and data indicated as normal, it will provide you with safe and satisfactory plant protection service.
04. You commit to use this product only for a legitimate purpose and acknowledge the content stated herein as well as possible formulation and amendment of policies and norms by XAG. You understand, acknowledge and accept that flight records and data during operation will be automatically uploaded and saved to XAG's server as well as licitly collected and stored by XAG. XAG assumes no responsibility for the failure to store and analyze the flight records and data caused by the unsuccessful upload due to any reason attributable to you.
05. To the maximum extent permitted by law, under no circumstances shall XAG offer an implicit or explicit guarantee for this product, including but not limited to implicit guarantees pertaining to vendibility, fitness for a particular use, or non-infringement.
06. To the maximum extent permitted by law, XAG shall not be liable for all losses caused by your improper operation. Also, XAG shall not be liable for any indirect, consequential, punitive, accidental, special or exemplary damages, including any loss incurred as a result of your purchase, use, or inability to use the product (even if you have been advised of the possibility of such loss).
07. To the maximum extent permitted by law, under any circumstances, the liability or compensation amount from XAG to you for all damages, losses, and litigation arising therefrom will not exceed the amount that you paid to XAG or XAG accredited distributor for purchasing the product.
08. On any account, the purchaser or user shall comply with laws and regulations of the country and region where the product is used. XAG assume no liability arising from the violation of relevant laws and regulations by the purchaser or user.
09. As exclusion clauses may be prohibited by laws in some countries, your rights in different countries may vary. This does not imply that the content contained in this Disclaimer is necessarily invalid.
10. To the extent permitted by law, XAG reserves the rights for final explanation and revision of the terms and conditions stated herein. XAG also has the right to update, modify or terminate these terms and conditions via its official website, the Instruction Manual/User Manual, online APP, etc., without prior notice.

## Warning

Users are required to read the full Instruction Manual and obtain UAS operator certificate accredited by XAG (or existing laws, regulations, and policies). Otherwise, it may cause serious injury to yourself or others, or cause damage to the product and property loss. Safety awareness is of paramount importance during operation. This product is not suitable for children. Do NOT use the parts that are not provided or suggested by XAG. Please install and use the product by strictly following XAG's instructions.



info@xa.com



@XAGofficial



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This Manual is subject to update without prior notice.

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