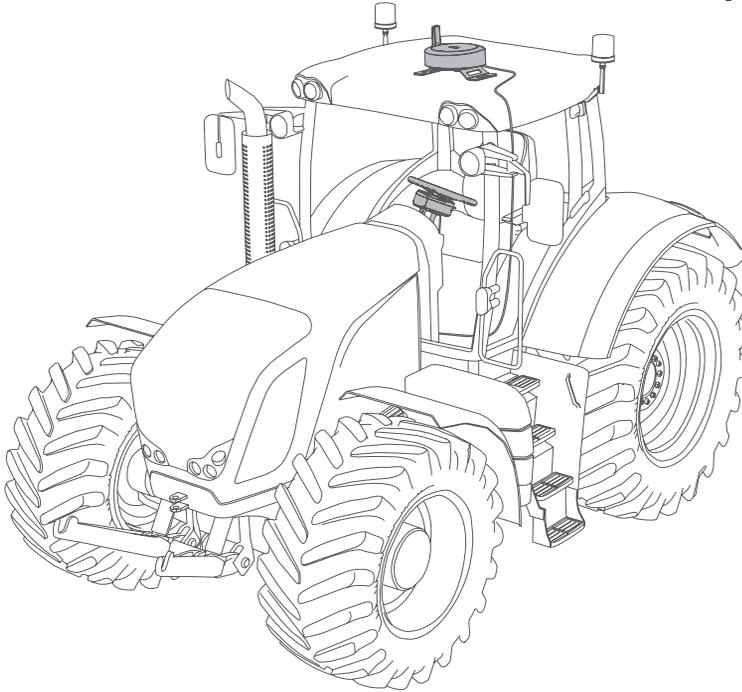


# XAG APC2 AutoPilot Console User Manual

Version 1.0 **EN**



## **To User**

Dear user, thank you for choosing XAG's product.

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**

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## Safety Guidelines

- The operator should hold a driver's license for operating agricultural machinery and strictly observe local laws and regulations on driving farm vehicles.
- It is mandatory to complete the operator training before using this product. Unauthorized operation is not allowed until training is completed.
- Make sure the farm vehicle is well-functioning and co-frequency interference is avoided before use.
- Check and make sure the device is in RTK status before use, otherwise it will be inoperable.
- While planning a route, it is important to consider the distance between the vehicle and the field boundary, as well as the forest zone. Set a safe distance from the field boundary.
- Make sure the console is securely attached to the top of the vehicle for a stable signal.
- Make sure the antennas are not obstructed by anything while using the console, or it may not work properly.
- If the RTK signal is weak, regain control of the vehicle immediately.
- The driver should not enter or exit the vehicle during autonomous operation.
- During autonomous driving, the driver should look ahead to identify obstacles and potential hazards. Be prepared to regain control of the vehicle as it approaches the destination. If the vehicle deviates from the planned route, immediately apply the brakes and stop the operation.
- Before applying autonomous driving in towing operations, it is recommended to start with manual driving to save resources and ensure safe operations.
- While planning the route with AB line mode in practice, please mark points based on the field shape to optimize land use.
- Never drive while drowsy, drunk or in a poor mental state so as to prevent accidents.
- Get acquainted with the driving environment, which should be kept clear of obstacles and crowds and free from hazardous conditions.
- The distance between the operating field and the base station should be always maintained within 20km.
- Stay clear of the machine while it is running. Never touch the spinning motor with your body or other components.
- Keep the product away from heat to avoid damage to the electronic device and other components.
- Never touch the spline under the middle of the steering wheel with any part of your body or other things to prevent personal injury and damage to the device.
- The "Vehicle Parameters" referred to herein is an example to help you fully understand how to use the product and where it can be applied, rather than the reference data under practical conditions. You should review and specify the parameters based on your specific conditions and requirements.

## Introduction

The XAG APC2 AutoPilot Console (hereinafter referred to as "APC2") applies to a wide range of tractors and rice transplanters, enabling driving assistance, high-precision RTK navigation, and timed and quantified operations. It responds accurately to dynamic changes in the soil and crops. By connecting to a smartphone or tablet, it becomes much easier to control the vehicle, alleviating the fatigue experienced by the operator. In addition, it can autonomously control the towed implement to precisely perform farming operations, including land preparation, soil loosening, and seeding. Operation records are synchronized in real time with the XAG Smart Agriculture System, making your every effort worthwhile.

## List of Items

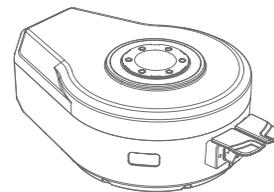
Please see that all of the following items are present when unpacking the box. Should there be any item missing, please contact your dealer.



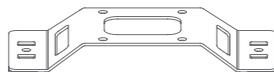
Console  
x 1



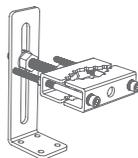
Steering Wheel  
x 1



Motor  
x 1



Mounting Bracket  
x 1



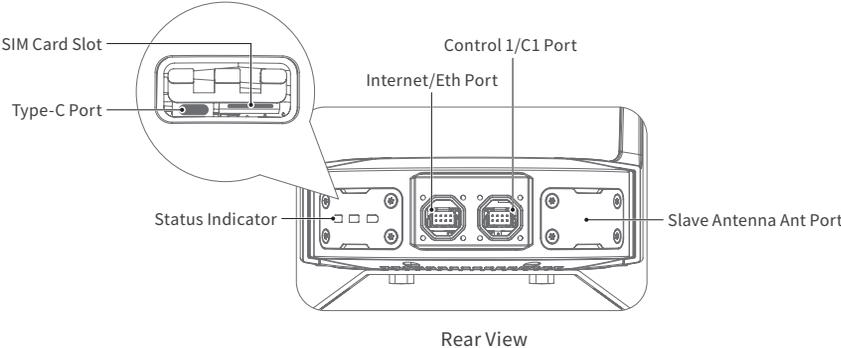
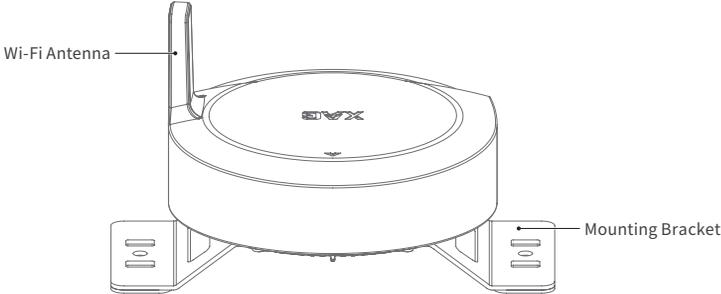
Motor Holder  
x 1



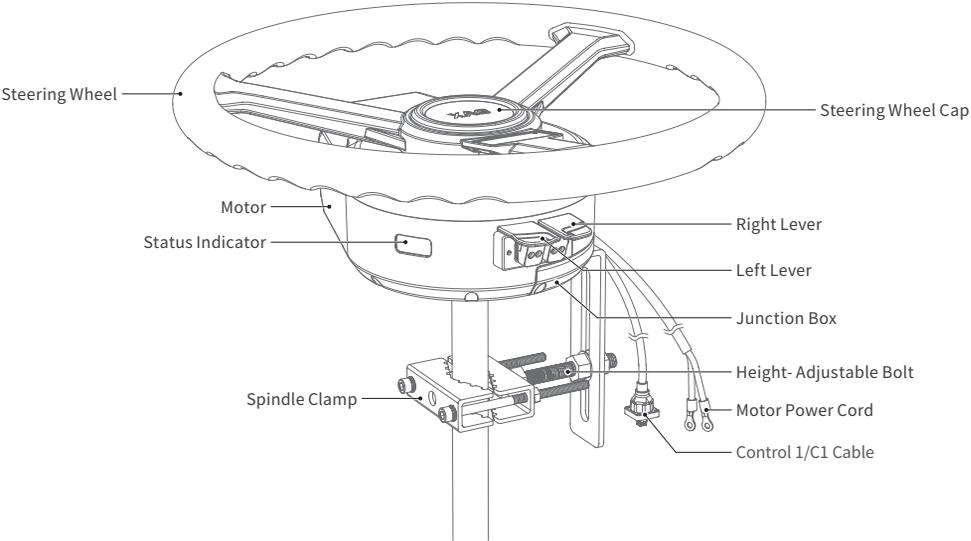
Screw Pack  
x 1

# Main Components

## Console



# Steering Wheel



# Installation

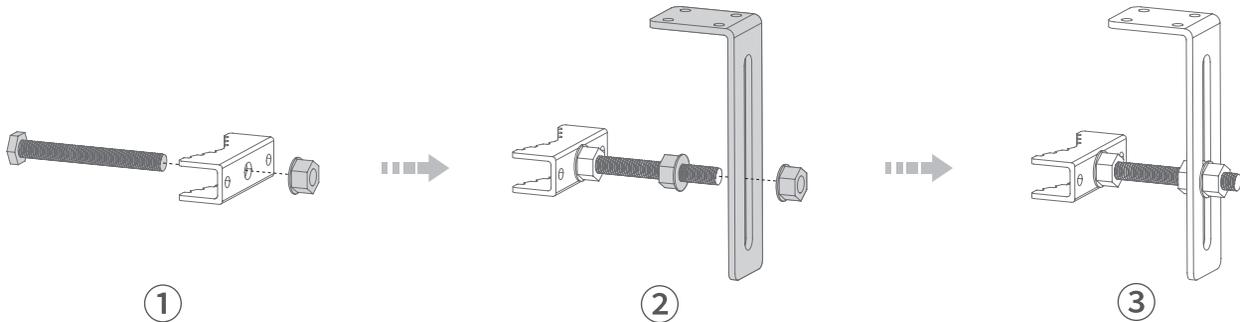
## Motor Holder

### Steps:

- ① Fix the clamp with an M10\*100 hex bolt and an M10 nut.
- ② Combine the L-shaped bracket with two M10 nuts and loosely tighten the holder.
- ③ Adjust each part to finish the preliminary assembly of the motor holder.

### Note

- ⚠ To prevent the bolts from loosening during use, it is recommended to apply thread adhesive to the three M10 nuts of the height-adjustable bolt before installation.



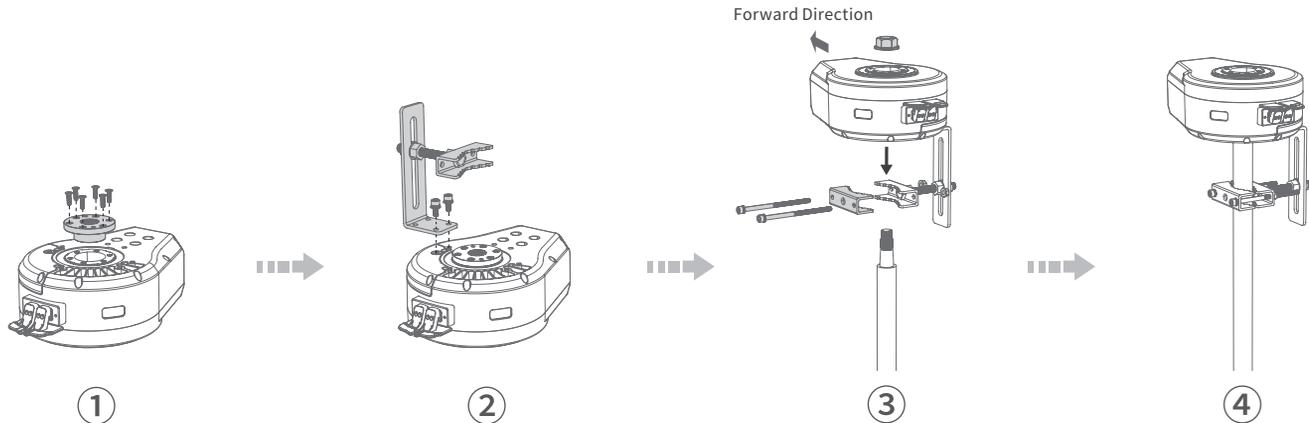
## Motor

### Steps:

- ① Attach the spline<sup>[1]</sup> to the motor with six M4\*20 screws.
- ② Attach the motor holder to the motor with two M6\*12 screws.
- ③ Attach the motor (with the left and right levers facing the driver's seat) to the vehicle motor spindle with the nut that comes with the vehicle, and then loosely tighten the other spindle clamp to the spindle with two M6\*120 bolts and two M6 nuts.
- ④ Tighten each part when everything is properly aligned.

### ⚠ Note

- ⚠ Please remove the original steering wheel and motor before installation.
- ⚠ Splines vary with each model of the vehicle, and you will need to buy the spline that matches the vehicle.



[1]: The spline is not included in the list of items. The spline model shown in the manual is for reference only. Please refer to the actual item for installation.

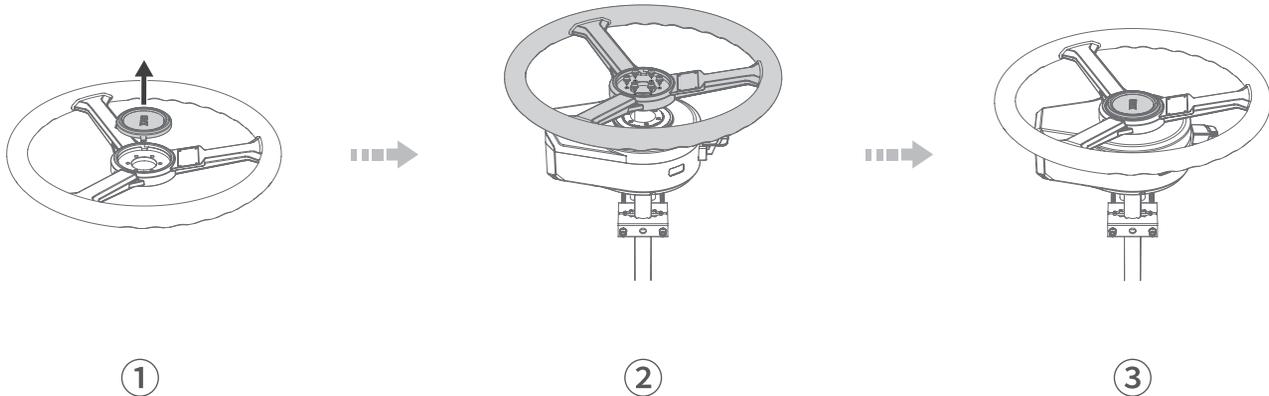
## Steering Wheel

### Steps:

- ① Remove the steering wheel cap.
- ② Attach the steering wheel to the motor with six M4\*20 screws.
- ③ Tighten the steering wheel cap.

### Note

-  Pay attention to the proper orientation when installing the steering wheel.



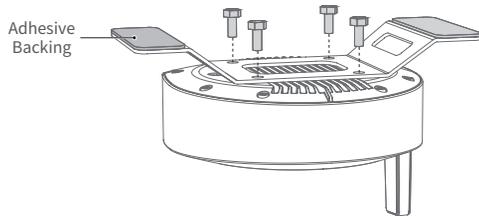
# Console

## Steps:

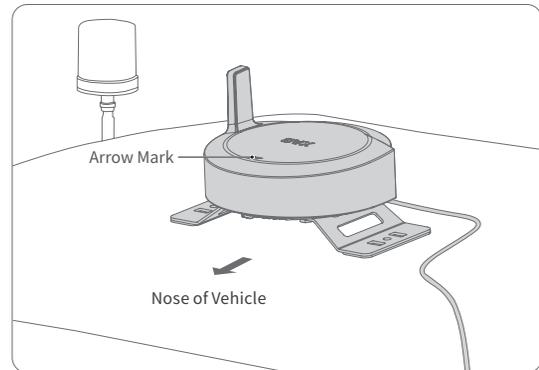
- ① Attach the mounting bracket to the console with four M6\*12 screws.
- ② Peel off the adhesive backing on the mounting bracket, and attach the console to the centerline of the vehicle (the arrow mark on the console points to the nose of the vehicle).

### Note

-  The centerline is taken on the width of the vehicle.
-  It is essential to secure the console in an unobstructed location.



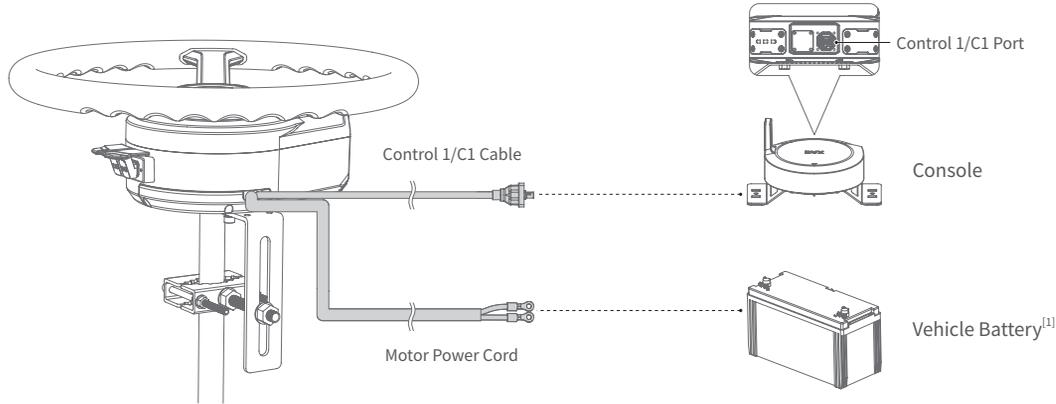
①



②

## Wiring Guide

Wire the cable harnesses of the motor to the appropriate ports on the console and the vehicle's battery as shown in the figure below.



[1]: The model vehicle battery is for reference only. Please refer to the actual item while wiring.

### Note

 When wiring the power cord to the vehicle battery, the red connector goes to the positive terminal of the battery, while the black goes to the negative.

## How to Use

### Download "XAG AutoPilot" App



Scan the QR code above with your Android smartphone or tablet to download/ install "XAG AutoPilot".

## Add a Device

### Activate APC2

Activation is required before using the APC2 for the first time. Please follow the steps below to activate it in the "XAG AutoPilot".

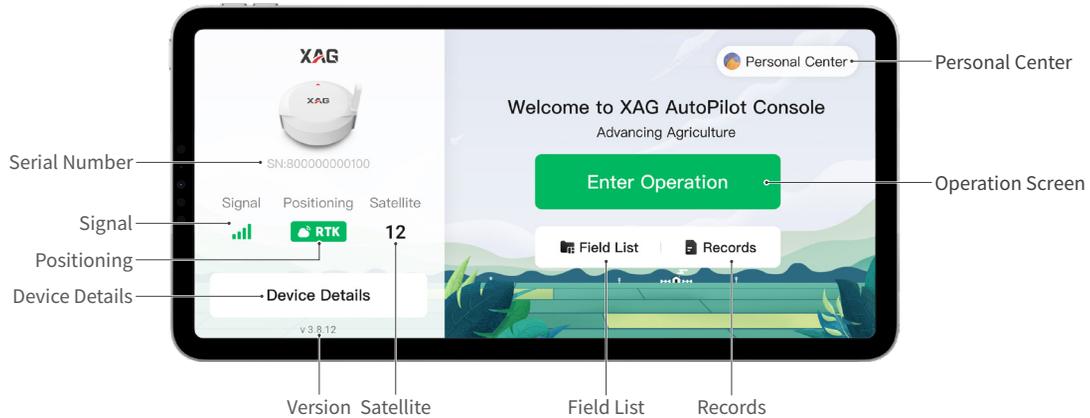
1. Open the "XAG AutoPilot", register with your mobile phone number, and log in to your account.
2. Go to the home screen, tap "Personal Center" - "My Devices" in the upper right corner, select "AutoPilot Console", and tap "Add a Device".
3. Scan the QR code on the activation card;
4. Name the device and tap "OK" to finish adding the device.

### Connect APC2

1. Turn on the APC2 and enable Bluetooth on your phone.
2. Go to the app's home screen and tap "Connect".
3. If it's your first time connecting the device, follow the app's instructions to grant Bluetooth permissions and adjust relevant settings.
4. Wait until the connection is successful, and you will see the status of the device.

# App Screen

## Home Screen (Main Screen)



**Serial Number:** Current AutoPilot Console's serial number

**Signal:** Current network status

**Positioning:** Current RTK positioning status

**Device Details:** Tap to enter Device Details screen

**Version:** Current App version

**Satellite:** Current number of satellites

**Field List:** Tap to enter Field Management screen

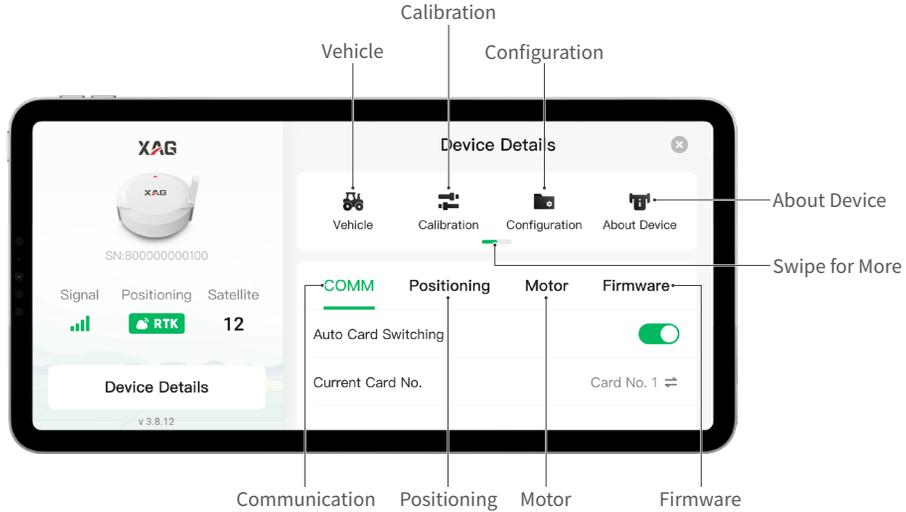
**Records:** Tap to view the vehicle's operation record

**Operation Screen:** Tap to enter Operation Settings screen

**Personal Center:** Tap to enter the Personal Center screen

## Device Details Screen

Go to the home screen, and tap "Device Details" to enter the Device Details screen.



**Vehicle:** Tap to enter Vehicle Management screen

**Calibration:** Tap to enter Calibration screen

**Configuration:** Tap to enter Configuration screen

**About Device:** Tap to view the details of AutoPilot Console

**Swipe for More:** Swipe left to select " 🚒 Alarm Record", tap to enter Alarm Record screen

**Firmware:** Tap to enter Firmware Update screen

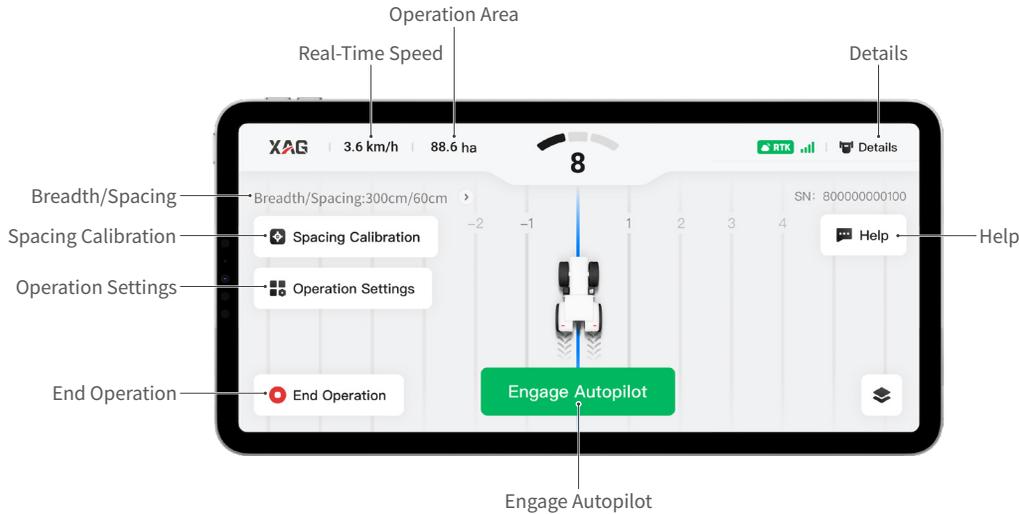
**Motor:** Tap to enter Motor Status screen

**Positioning:** Tap to enter Positioning Status screen

**COMM:** Tap to enter Communication Status screen

## Operation Screen

After setting operation parameters, tap "Enter Operation" to enter the Operation screen.



**Breadth/Spacing:** Tap to set the breadth/spacing

**Spacing Calibration:** Tap to calibrate the spacing

**Operation Settings:** Tap to set the translate route and interlaced U-turn

**End Operation:** Tap to end the current operation

**Engage Autopilot:** Tap to engage autopilot

**Help:** Tap to contact customer service and initiate a remote assistance request

**Details:** Tap to view device details

**Operation Area:** The area the vehicle has completed

**Real-Time Speed:** Current speed of the vehicle

## Firmware Update

Please make sure the firmware is up to date before use if the home screen shows "Firmware version is too old".

1. Open the "XAG AutoPilot", go to the home screen, and tap "Device Details" to enter the Device Details screen.
2. Select "Firmware" on the "Device Details" screen to enter the Firmware Update screen. Tap "One-tap Update" to update the firmware to the latest version. When the transfer is complete, restart the APC2 as instructed or return to the home screen, and wait for the update to complete.

## Create a Vehicle

Before starting operation, add the vehicle for operation to the vehicle list.

1. Open the "XAG AutoPilot" App, on the home screen, tap on "Device Details" to enter the Device Details screen. On the Device Details screen, tap on "🚗 Vehicle" to enter the Vehicle Management screen.
2. Tap on "New Vehicle" to enter the screen of editing vehicle data, fill in all the parameters of the vehicle, tap on "Save" in the upper right corner and enter the vehicle name.
3. After the vehicle is created, the vehicle and its information will be displayed on the "Vehicle" screen.

## Self-learning

To obtain the deviation values generated during installation and some data that cannot be obtained through actual measurements (such as motor transmission ratio, corner delay factor, etc.), the device installed for the first time needs self-learning before use.

1. Open the "XAG AutoPilot" App, on the home screen, tap on "Device Details". On the "Device Details" screen, tap on "🔧 Calibration", and then select "Self-learning".
2. Make sure the vehicle to be calibrated is exactly the one added in the App now.
3. Follow the instructions below and the prompts of the App to start self-learning.

### Instructions:

1. Park the vehicle in a place open and flat, and straighten the steering wheel.
2. Start the vehicle and drive forward. Tap on "Start Self-learning".
3. Then APC2 will start self-learning, take control of the vehicle and apply autopilot. This process will last for some time.
4. When the process is finished, stop the vehicle and wait for the completion of data processing.



- ⚠ The vehicle added and saved for the first time will be set as default.
- ⚠ Before calibrating APC2, please make sure that it is in RTK mode. Otherwise, it cannot be calibrated.

## Reference Line Operation

The reference line operation is divided into two modes: AB line operation and curve operation. The user marks a reference line in the operation area before operation. After the autopilot mode is enabled, the vehicle will start operation along the marked reference line in the operation area.

### AB Line Operation

1. Open the "XAG AutoPilot" App and tap on "Enter Operation" on the home screen.
2. Select "  AB Line" and tap on "New AB Line" (or select a straight route for operation from the "Route List").
3. Mark an AB line route in the operation area. AB line marking can be completed by marking by vehicle, marking by mapping instruments, and marking on an HD map (please refer to page 16 for marking modes).
4. Set the parameters such as breadth<sup>[1]</sup>and spacing<sup>[2]</sup>, and the App will automatically generate routes in the operation area.
5. Tap on "Start", and the vehicle will automatically enter autopilot mode and enter the route closest to its position.

### Curve Operation

1. Open the "XAG AutoPilot" App and tap on "Enter Operation" on the home screen.
2. Select "  Curve" and tap on "New Curve" (or select a curve route for operation from the "Route List").
3. Record a curve route in the operation area. Drive the vehicle to the starting point of operation. Tap on "New Curve" on the App, and drive the vehicle forward. APC2 will record a curve based on the route that the vehicle travels. After the curve recording is completed, tap on "Save", enter the curve route name, and save it.
4. Set the parameters such as breadth, spacing, and planning methods, and the App will automatically generate routes in the operation area.
5. Tap on "Start", and the vehicle will automatically enter autopilot mode and enter the route closest to its position.

[1]: "Breadth" refers to the actual operation width of the implement. Taking a planter as an example, breadth is the distance between the center points of the leftmost and rightmost seed holes on the implement.

[2]: "Spacing" refers to the distance between two adjacent routes. Taking a planter as an example, spacing is the distance between the center points of the closest seed holes in adjacent routes.

## Note

△ Curve planning includes equidistant planning and equiform duplication. Equidistant planning refers to having an equal spacing between curve routes while maintaining similar route shapes. Equiform duplication, on the other hand, involves maintaining the same shape between curves, with slight deviations in spacing.

## Create a Field

An operation field needs to be created before starting field operation. The following will introduce three ways to create an operation field: Mark by Vehicle, Mark by Mapping Instruments, and Mark on HD Map.

### Mark by Vehicle

Users can follow the steps below to generate an operation field by using the vehicle to mark points.

1. Open the "XAG AutoPilot" App, tap on "Field List" on the home screen, and then "  New" in the upper right corner of the Field List screen. Select "Mark by Vehicle" in the marking modes list.
2. Start the vehicle and drive it to the field boundary that needs point marking. Tap on "  Add Point" on the app, and mark boundary points of the operation field (tap on  /  to undo/redo points). Continue driving the vehicle to other boundary points and mark. After marking all the boundary points, tap on "Auto Close" on the app, and the system will automatically generate a field.
3. After marking the operation area, tap on "Save" in the upper right corner.
4. Complete the field information and tap on "OK" to save the field.

### Mark by Mapping Instruments

There are two mapping instruments: XAG Agricultural Control Stick 2 (hereinafter referred to as "ACS2") and XAG XRTK6 Ground Module; this manual will take ACS2 as an example.

1. Open the "XAG AutoPilot" App, tap on "Field List" on the home screen, and then "  New" in the upper right corner of the Field List screen. Select "Mark by Mapping Instruments" in the marking modes list.
2. Turn on ACS2 and wait for a few seconds until the third indicator light changes from "slow blinking green" to off, indicating that it is ready for use.
3. Select the bound control stick on the App. Press and hold  on ACS2 for 3 seconds to enter mapping mode, and the rightmost signal light will remain on.
4. Hold ACS2 and move to the field boundary that needs point marking. Tap on "  Add Point" on the app, and mark boundary points of the operation field (tap on  /  to undo/redo points). Continue holding ACS2 and moving to other boundary points and mark. After marking all the boundary points, tap on "Auto Close" on the app, and the system will automatically generate a field.

5. After marking the operation area, tap on "Save" in the upper right corner.
6. Complete the field information and tap on "OK" to save the field.

## Mark on HD Map

After the HD map is generated or imported, you can touch the screen to mark on the HD map and generate an operation field.

1. Open the "XAG AutoPilot" App, tap on "Field List" on the home screen, and then "New" in the upper right corner of the Field List screen. Select "Mark on HD Map" in the marking modes list.
2. On "Mark on HD Map" screen, tap on  in the bottom right corner to switch to HD map .
3. Tap on "Add Point", and mark boundary points of the operation field (tap on  /  to undo/redo points). After marking all the boundary points, tap on "Auto Close" on the app, and the system will automatically generate a field.
4. After marking the operation area, tap on "Save" in the upper right corner.
5. Complete the field information and tap on "OK" to save the field.

## Field Operation

Field operation has two modes: rice planting and harrowing. The system will automatically identify the current operation mode according to the type of the bound vehicle. It matches the corresponding operation mode to the user's different operation scenarios.

### Rice Planting Operation

1. The system shows the rice planting operation entrance based on the type of bound vehicle. On the home screen, tap on "Enter Operation" and select "Rice Planting." You can choose to create a new field for operation or select a nearby field for operation.
2. Set the parameters such as breadth, spacing, axle-to-plow distance<sup>[1]</sup>, and operation direction. Setting the operation direction is to mark the route direction of the central area of the field, so as to allow APC2 to plan the rice planting routes in the main operation area and the edge area. There are two ways to set the operation direction: "Mark by Vehicle" and "Select Point".

**Mark by Vehicle:** On the operation direction setting screen, select "Mark by Vehicle". Drive the vehicle to the starting point of the operation route and tap on "Point A" on the app. Drive the vehicle to the end point of the operation route and tap on "Point B". After that, tap on "OK".

**Select Point:** On the operation direction setting screen, select "Select Point". In the operation field area on the app, tap to select two boundary points to determine the operation direction.

3. After completing the parameter settings, tap on "Start" to start the rice planting operation.

## Harrowing Operation

1. The system shows the harrowing operation entrance based on the type of bound vehicle. On the home screen, tap on "Enter Operation" and select "Harrowing".  
You can choose to create a new field for operation or select a nearby field for operation.
2. Set the parameters such as breadth, axle-to-plow distance, and harrowing plan. There are two ways to set the harrowing plan: "Partition Harrowing" and "Whole Field Harrowing". "Partition Harrowing" refers to dividing the field into different operation areas by using the vehicle to mark points for individual harrowing plan. Drive the vehicle to the starting point of the partition line and tap on "Point A 📍" on the app. Drive the vehicle to the end point of the partition line and tap on "Point B 📍". After that, the partition line will be automatically generated on the field, dividing the current operation field into two separate areas.
3. After setting the harrowing plan, tap on "More Settings" to adjust parameters such as driving speed, safety clearance, overlap width, turning point count, etc., and enable smart harrowing, rectangular harrowing, and other related settings.
4. After completing the parameter settings, tap on "Start" to start the harrowing operation.

[1]: "Axle-to-plow distance" refers to the distance between the rear axle and the end of an implement.

## Operation Adjustment

### Breadth/Spacing

During the operation, you can tap on "Breadth/Spacing" on the Operation screen to modify the parameters if needed.

1. Tap on "Disengage" on the Operation screen to stop the vehicle. Then, tap on "Breadth/Spacing" on the left of the Operation screen.
2. Enter "Breadth" and "Spacing".

### Translate Route

During operation, you can use "Translate Route" to adjust AB line routes if needed.

1. Tap on "Disengage" on the Operation screen to stop the vehicle. Then, tap on "⚙️ Operation Settings" and select "Translate Route".
2. Tap on "Reset All" to automatically reset the route to where the implement's center axis is.
3. Tap on "Reset Single Line" to automatically translate the current route to where the implement's center axis is.
4. Tap on "Set Translational Distance" to set the distance for "Translate All" or "Translate Single Line".

## Interlaced U-turn

1. On the Operation screen, tap on "  Operation Settings" and select "Interlaced U-Turn".
2. Enable "Interlaced U-Turn" and enter the number of interlaced U-turns.
3. After completing the parameter settings, return to the Operation screen, and you will see the prompt "Interlaced U-turn enabled".
4. Tap on "Engage Autopilot", and the vehicle will start an interlaced U-turn.

## Spacing Calibration

Implement offset may occur upon installation or after long-term use, resulting in inconsistent spacing during autonomous driving. Spacing calibration would be necessary to correct any deviations.

1. You may tap "Disengage" on the app's Operation screen and park the vehicle in case of inaccurate spacing when the vehicle is on autopilot.
2. Tap "  Spacing Calibration" on the Operation screen.
3. On the quick Spacing Calibration screen, select "Left Spacing" or "Right Spacing" based on the vehicle's operating route, enter the spacing measured, and tap "OK" to complete the calibration.
4. After returning to the Operation screen, you will see a prompt showing "Spacing Calibrated".
5. Tap "Engage Autopilot" to resume operation. If inaccurate spacing reoccurs, you may repeat the steps of "Spacing Calibration" for optimal offset values.

### Note

- ⚠ For each spacing calibration, the system will check whether the straightness of the vehicle's trajectory is within a reasonable range. It is recommended that spacing calibration be done after the vehicle is completely on the route and moving straight.
- ⚠ The spacing should be the mean of what is measured at three different points.
- ⚠ Negative numbers are allowed in the Spacing field, indicating the overlap of trajectories.

## End Operation

Upon completion of operation, end the operation by tapping the "  End Operation" button in the bottom left after the vehicle stops.

## SAFETY WARNINGS

If a malfunction or error occurs during the use of the console, a voice prompt saying "Error; please check" will be triggered. Error messages will pop up on the app as follows.

- ⚠ Positioning system error. Pause the operation and wait until the positioning system is in RTK status. If this fails, please contact our after-sales support.
- ⚠ Motor connection error. Pause the operation and check whether there are loose wire connections. If this fails, please contact our after-sales support.
- ⚠ Motor overcurrent. Pause the operation. If the warning is not lifted automatically, exit operation and restart the console. If this fails, please contact our after-sales support.
- ⚠ Motor overvoltage. Pause the operation. If the warning is not lifted automatically, exit operation and restart the console. If this fails, please contact our after-sales support.
- ⚠ Motor undervoltage. Pause the operation. If the warning is not lifted automatically, exit operation and check whether the console is low on battery power or malfunctions. If this fails, please contact our after-sales support.

# Specifications

## Console

Model	XAPC2ABD-2.5RD XAG APC2 AutoPilot Console
Dimensions	115 × 202 × 150 mm
Steering Control	Electric steering wheel
RTK Positioning Accuracy (RTK FIX)	Horizontal: 1 cm+1 ppm Vertical: 1.5 cm+1 ppm
On-board Computer Processor Model	IMX8 mini
Operating Accuracy	Line accuracy ≤ 2.5 cm, spacing accuracy ≤ 2.5 cm
On-board Computer RAM	2 GB
On-board Computer Hard Drive	32 GB
On-board Computer OS & Software Versions	Linux 5.15.71, XAPC3.0
On-board Computer Display Size & Resolution	4-inch, 320×480
On-board Computer Port	Type-C
On-board Computer Data I/O Protocols	Wi-Fi protocol, CAN protocol, Ethernet protocol, Bluetooth protocol
RTK/GNSS Operating Frequency	Multi-band navigational receiver; GPS: L1C/A, L1/C, L2C, L5; BDS: B1C, B2a, B3b, B1I, B3I; GLO: L1, L2; GAL: E1, E5a, E5b;
GNSS Receiver Mainboard Firmware Version	Build7670
GNSS Receiver Channels	982 channels
GNSS Receiver Port	UART
GNSS Receiver Differential System	Single base station system
Positioning Update Rate	10 Hz
GNSS Receiver Antenna	Single antenna

Steering Controller Mainboard Firmware Version	2.0.0.2
Steering Motor Model	SW-ED12
Portable Base Station Signal Coverage	≥ 5 km
Radio Transmitter Frequency	LTE: 889-915 MHz 1710-1780 MHz 1880-1915 MHz 1920-1965 MHz 2300-2370 MHz 2575-2635 MHz BT: 2400-2483.5 MHz
Portable Base Station Radio Transmitter Power	≥ 2 W
Integration Components	Satellite antenna, controller, satellite receiver PCB module, and INS
IP Rating	IP67
Power Input	DC 12 V ~ 24 V
GNSS	BeiDou/GPS/GLONASS
Communications	Bluetooth, Wi-Fi, cloud connection
Wi-Fi Frequency Band	2.4 GHz
RTK Signal Loss Tolerance	10 min
Operating Temperature	-20 °C ~ 70 °C
Storage Temperature	-40 °C ~ 85 °C

## Motor

Dimensions	88 × 269 × 170 mm
Steering Wheel Diameter	400 mm
Rated Voltage	12 V
Max. Voltage	28 V
Insulation Voltage	500 VDC
Torque	Rated: 10 N·m, Max.: 20 N·m

# Disclaimer

1. Please read this Disclaimer carefully before using this product, as it has much to do with both operational safety and your legitimate rights and interests. You shall be deemed to have read through, acknowledged, understood, agreed to, and accepted all the terms and conditions as well as information stated herein upon the use of this product.
2. Not being a toy and with certain safety risks, this product is NOT suitable for those who are under 18 years old, or those who have not legally acquired agricultural vehicle licenses required by the existing laws and regulations in the area where the product is used. Please keep those who have not legally acquired agricultural vehicle licenses away from this product and be particularly cautious with people and animals present.
3. This product is an autopilot designed for agricultural machinery, one of the XAG APC AutoPilot Console series solely for agricultural use. Please carefully read this User Manual before using this product. When turned on as instructed in this User Manual, with all instructions on the pre-installed app followed, a properly functioning battery, and data indicated normal, this product will provide you with safe and satisfactory autonomous driving service.
4. User pledges to use this product within its field of use for legitimate purposes only and agrees to the terms and conditions herein as well as possible policies and norms formulated by XAG. User acknowledges, understands, and accepts that relevant records and data generated in the use of the product will be automatically uploaded and saved to XAG's server. XAG assumes no responsibility for any failure to store and analyze the records and data caused by unsuccessful uploads due to any reason attributable to the user.
5. XAG offers no guarantee that this product is compatible with all agricultural machinery. User shall evaluate and confirm this product's compatibility before use. XAG assumes no responsibility for all economic and legal issues arising therefrom.
6. XAG understands that user may have purchased insurance including but not limited to property insurance and third-party liability insurance for the agricultural machinery owned or used. User shall evaluate, confirm, and verify whether the use of this product on agricultural machinery violates the terms of the aforesaid insurance. XAG assumes no liability for all economic and legal issues resulting from user's violation of the aforementioned.
7. XAG understands that in accordance with laws and regulations, agricultural machinery under warranty enjoys warranty (after-sales) service. User shall evaluate and confirm whether the use of this product on agricultural machinery violates the terms of warranty service set by agricultural machinery manufacturers as well as the terms of warranty (after-sales) service provided by the agricultural machinery manufacturers. XAG assumes no responsibility for the aforesaid user's ineligibility to legitimately enjoy warranty (after-sales) service for agricultural machinery resulting from the use of this product.
8. Issues caused by user's unauthorized modifications to the autopilot or use of the autopilot on agricultural implements or machinery not specified in the User Manual are not covered by the warranty. Any economic or legal liability arising therefrom will be borne by the user.
9. To the maximum extent permitted by law, under no circumstances shall XAG offer any 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.

10. To the maximum extent permitted by law, XAG shall not be liable for any losses caused by user's improper operation. In addition, 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).
11. 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 for purchasing the product, except for the liability or amount to be borne by XAG otherwise stated in the legally binding final verdict or ruling by judiciary accounting for XAG's violation of laws and regulations or obligations.
12. On any account, the purchaser or user shall comply with the laws and regulations of the country and region where the product is used. XAG assumes no liability arising from the violation of laws and regulations by the purchaser or user.
13. 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.
14. To the extent permitted by law, XAG reserves the right for the final interpretation 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, User Manual, online app, etc., without prior notice.

## Warning

User is required to read through the User Manual and obtain a legal agricultural vehicle license or operator certificate accredited by XAG (or recognized by existing laws, regulations, and policies). Otherwise, improper operation of the product may cause serious injury to the user or others, or cause damage to the product and property loss. Safety awareness is of great importance during operation. This product is NOT suitable for those who are under 18 or over 60 (included) years old. Do NOT use the parts that are not provided or suggested by XAG. Please install and use the product in strict accordance with XAG's User Manual.

## FCC/ISED 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.

This equipment complies with FCC and Canada radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20cm between the radiator and your body.

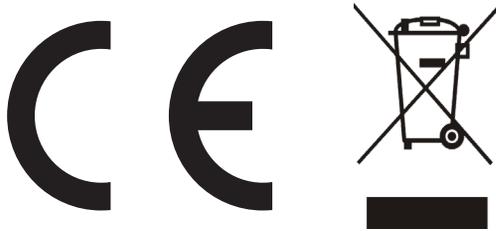
This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

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 complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) 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.

**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 [*XAG APC2 AutoPilot Console*] 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): 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*

## FCC Supplier's Declaration of Conformity

*Brand name / model number: APC2*

*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 LLC*

*Suppliers Address (FCC): 2235 79th Ave NE, Medina, WA 98039, USA*

*Suppliers phone number and / or internet contact information: +1 (503) 866-1228*

