

RLM01 Quick Start Guide Brochure V2.1 - EN

新结构

Step 1 - Install the APP

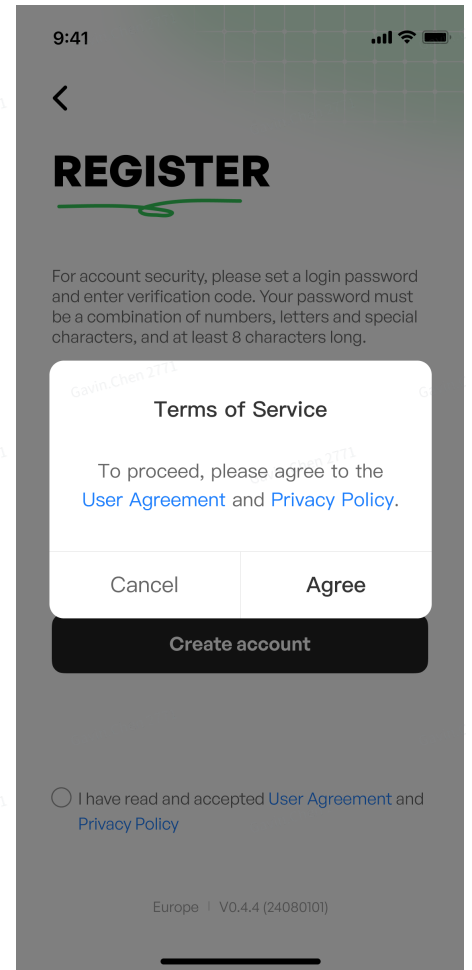
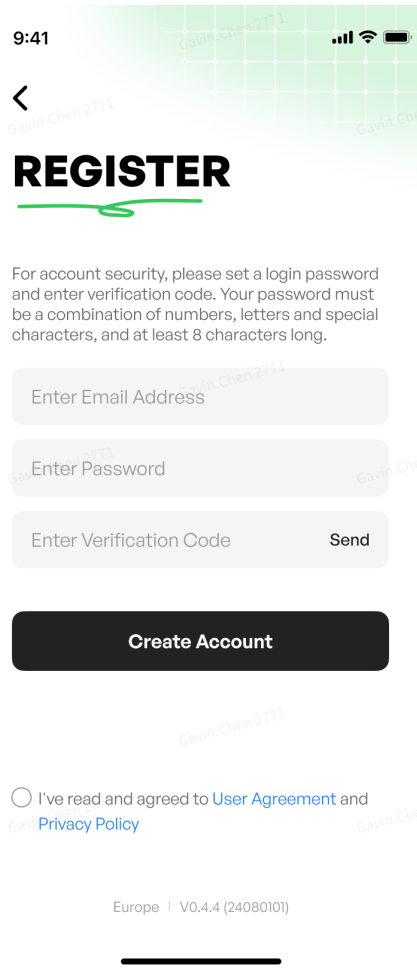
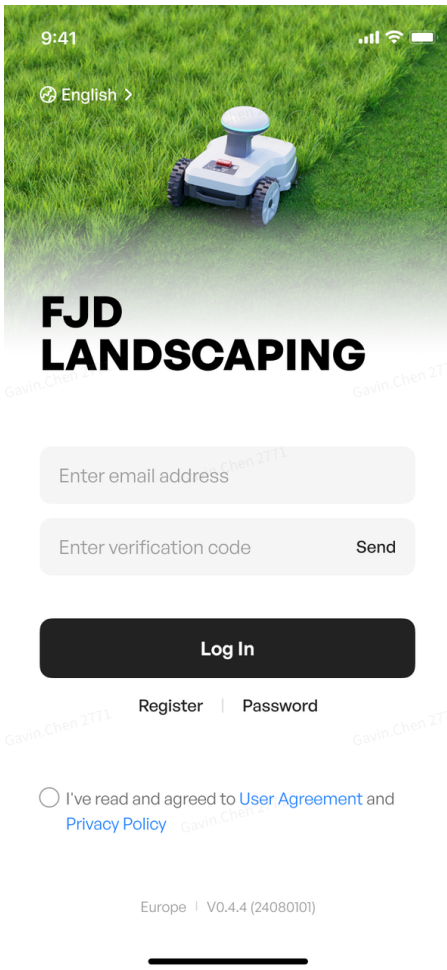
Download APP



- For Android and iOS users, scan the QR code on the left to download the FJD Landscaping APP. For iOS/Android users, scan the QR code below to download the FJD Landscaping APP.
- The tablet configured with RLM01 has already installed the APP.

Step 2 - Registration and Login

- Please open the APP, click "Register", and follow the on-page instructions to register your personal account and log in.

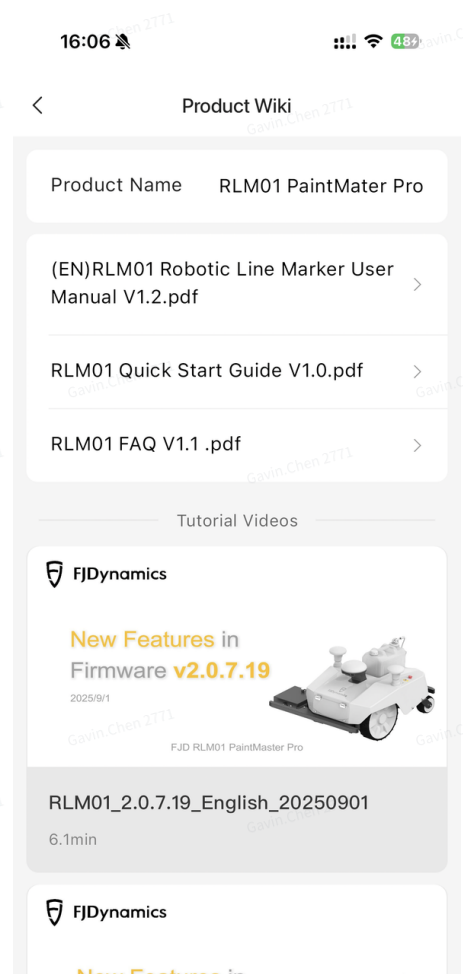
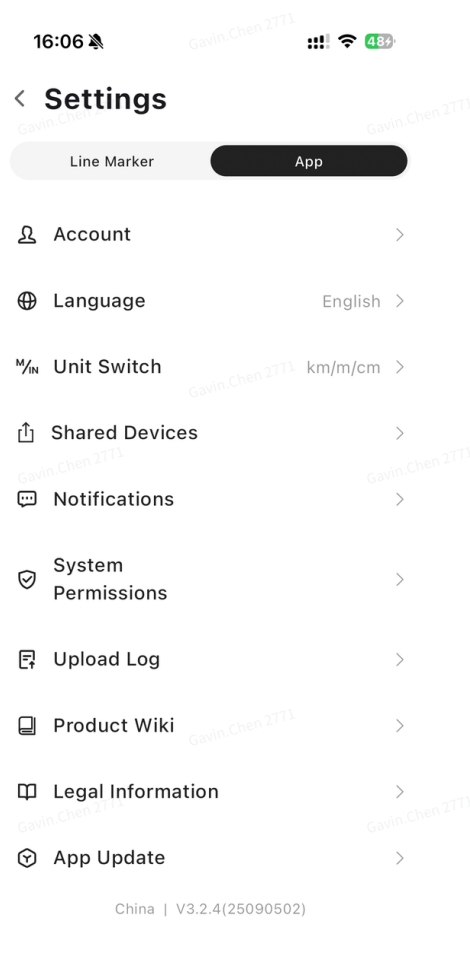
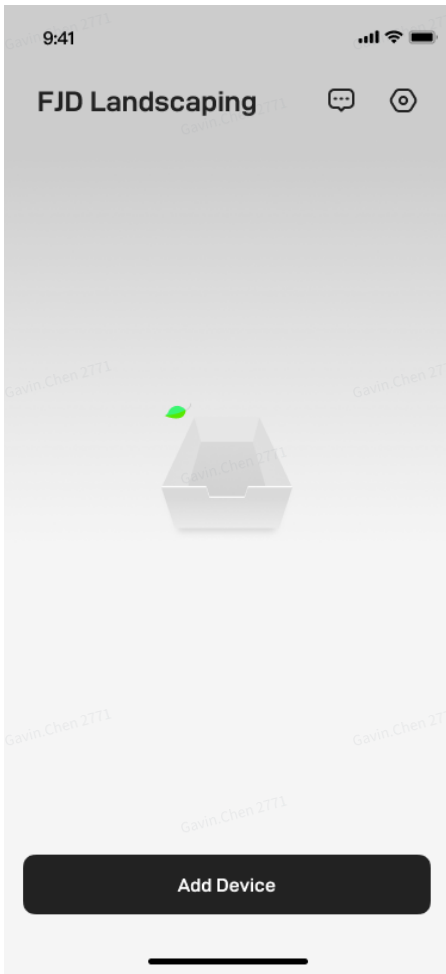


Step 3 - View Product Wiki



If you encounter any problems during use, you can visit [Product Wiki] to find solutions.


- After completing the login, enter the home page and click the "Settings" icon in the upper right corner.
- Select "APP", then click "Product Wiki" in the list below.
- After entering, you can view the user manual, frequently asked questions, usage guide videos, etc. of RLM01.




Step 4 - Install the nozzle assembly

! Park the line marking machine in a level and clean area, prepare a pair of gloves, and organize and arrange all the components of the line marking machine kit and installation tools properly

1. Accessories

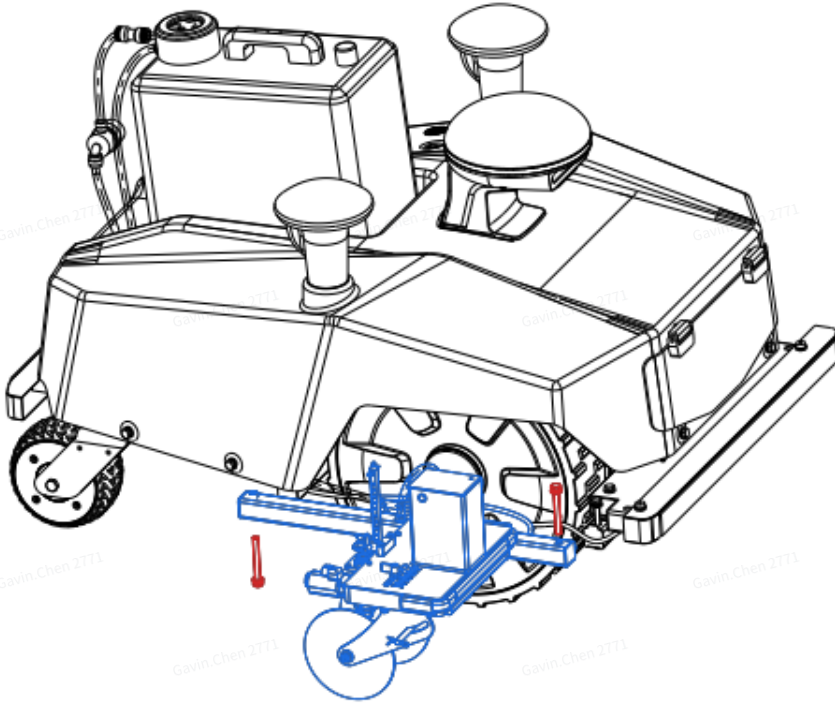
 The toolbox contains all the accessories for RLM01. Please open the toolbox and check the quantity against the accessory list.

2. Install

 For detailed installation steps, please refer to the video tutorial in the [Product Wiki] section of the FJD Landscaping APP.

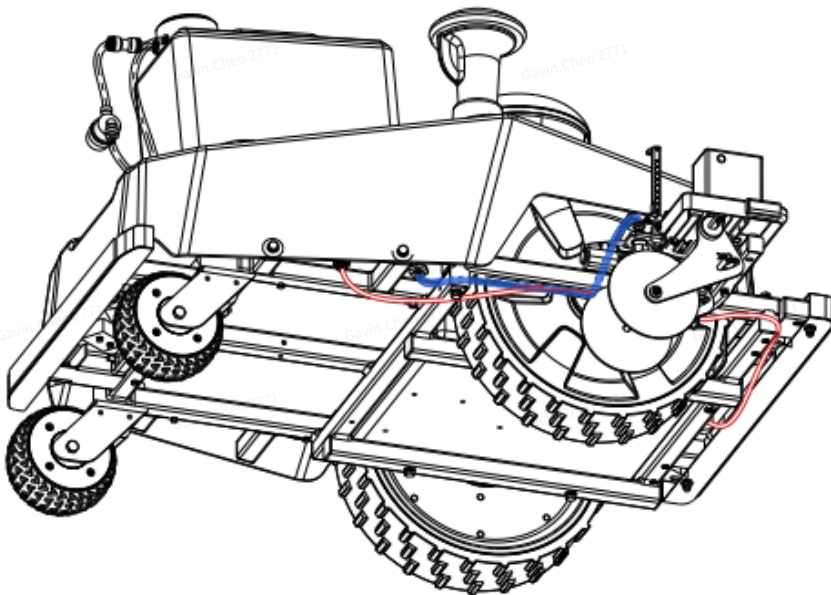
2.1 Install the nozzle assembly

- Find two M8*70mm hexagon head bolts in the toolbox and secure the nozzle assembly to the frame.



Num	Name	Qty
1	Hexagon Head Bolt	2

- Connect the power cord and water pipe to the quick-release interface at the bottom of the vehicle body.



Step 5 - Power On Test



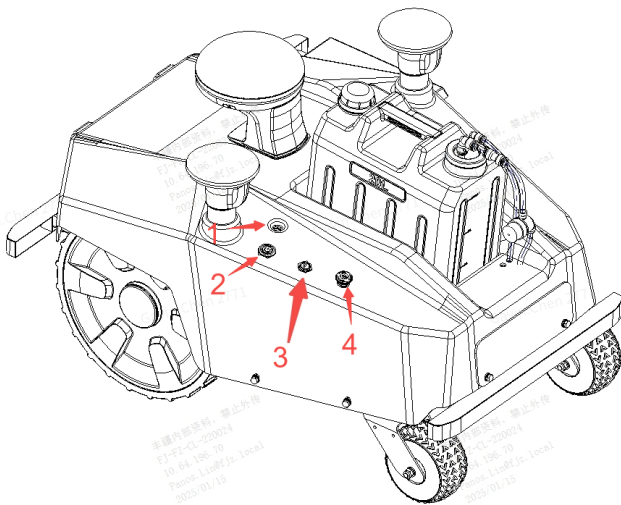
Before turning on the device, please ensure that the battery is fully charged and correctly installed in the battery compartment of the vehicle head.

1. Turn on/off power



- Press the power button. The indicator light turns on, indicating the device is powered.
- Press the power button again, and the indicator light turning off indicates that the device has been powered off.

2. Introduction to Sensors and Switches



- 1) Raindrop sensor, which can send prompt messages to the APP when it rains.
- 2) Power switch.
- 3) Paint/Exhaust Switch.
- 4) Emergency stop switch: When the emergency stop switch is pressed, the drive wheel motor and pump are powered off and stop working. Rotate the button clockwise to clear the emergency stop signal and restore the normal power supply state.

3. Test the spray system



- **Select paint.**
 - The paint should be water-based, harmless to the grass on the sports field, and comply with local laws and regulations.

- There are two types of paint: ready-to-use and water-dilutable. When spraying, the paint density needs to be ≤ 1.2 . For the water-dilutable paint, the recommended paint-to-water ratio is 1:4 (i.e., one part of the stock solution diluted with four parts of water), and it should be stirred for at least 3 minutes to ensure the paint and water are fully mixed.



- Air purge and painting test.**
 - Before painting, purge the air for 15 seconds, then spray paint for 5 seconds to ensure all pipes are filled with paint and free of air.
 - Function of the paint spray control :

Switch left	Air purge
Switch right	Spray
Switch middle	OFF

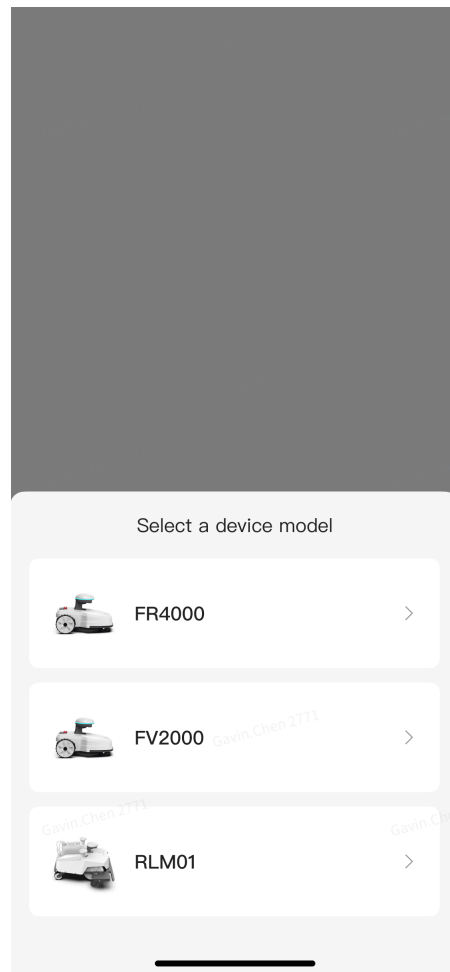
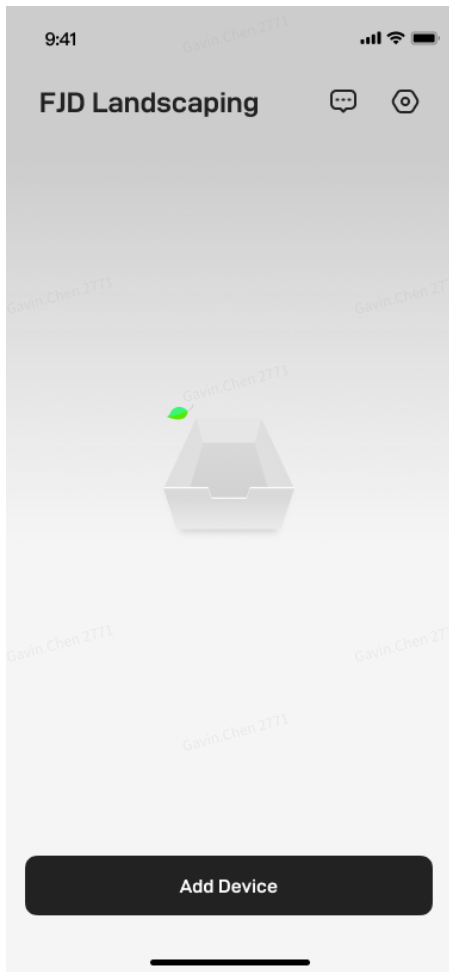
Step 6 - Network Configuration and Binding

1. Add the Line Marking Robot

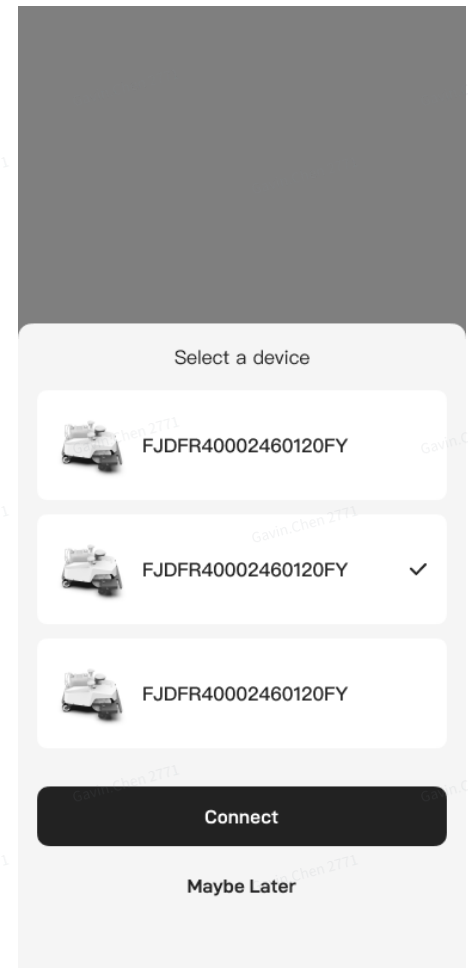


Please ensure that Bluetooth is enabled on your phone or tablet, connected to the network, and the distance to RLM01 is less than 5m. For detailed steps, please refer to the APP [Product wiki].

- Tap the "Add Device" button.
- Select "RLM01" from the options.

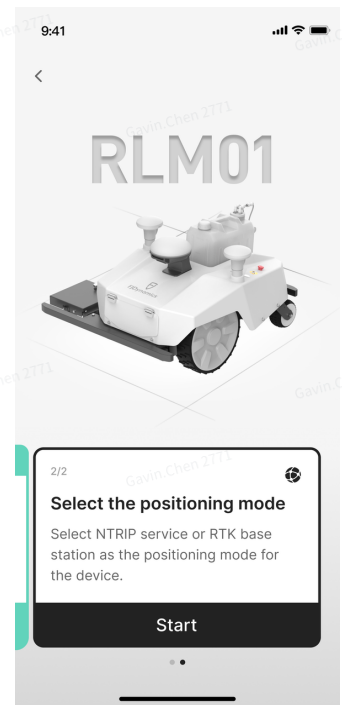
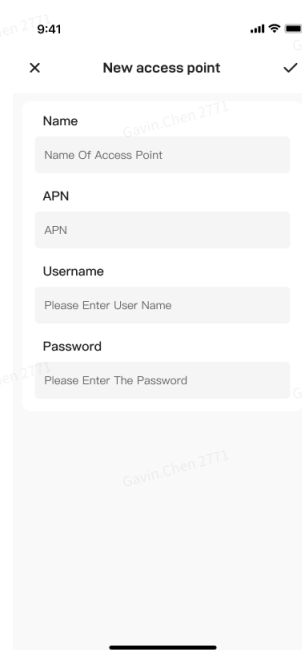
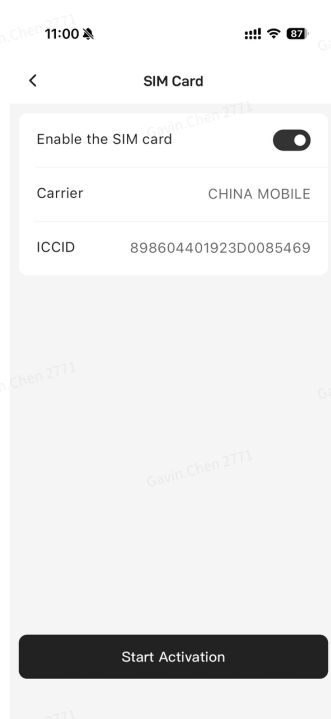
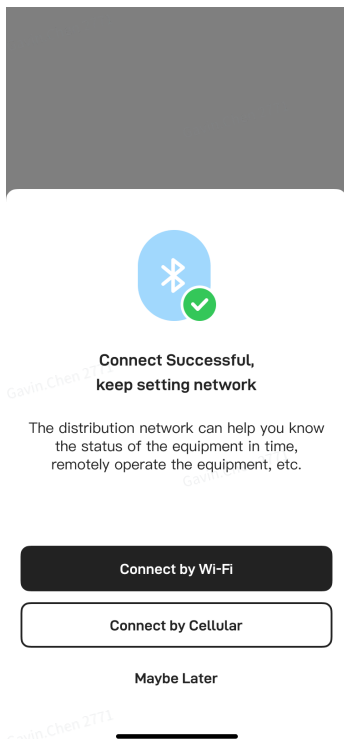



- The SN of the device can be viewed on the packaging box or the back of the battery compartment.



2. Connect the Line Marking Robot to the network

- After completing the Bluetooth connection, select the Wi-Fi (2.4G) or "Cellular Network" (4G) option to configure the network.
- When choosing 4G network connection, first click the "Enable" icon.
- Note: Some SIM cards may require manual APN configuration to be used.
- After completing device activation, you may skip the positioning settings for now. Please click "Back" in the top-left corner.



 For details on the positioning configuration, please refer to Section 8 of this instruction.

Step 7 - Remote-Control RLM01

- Click the "Remote Control" icon in the lower left corner to enter the remote control mode. When attempting to remotely control the device for the first time, please first move the device to an open area and maintain a certain distance from it.
- The left joystick controls forward and backward movement, while the right joystick controls left and right turns.






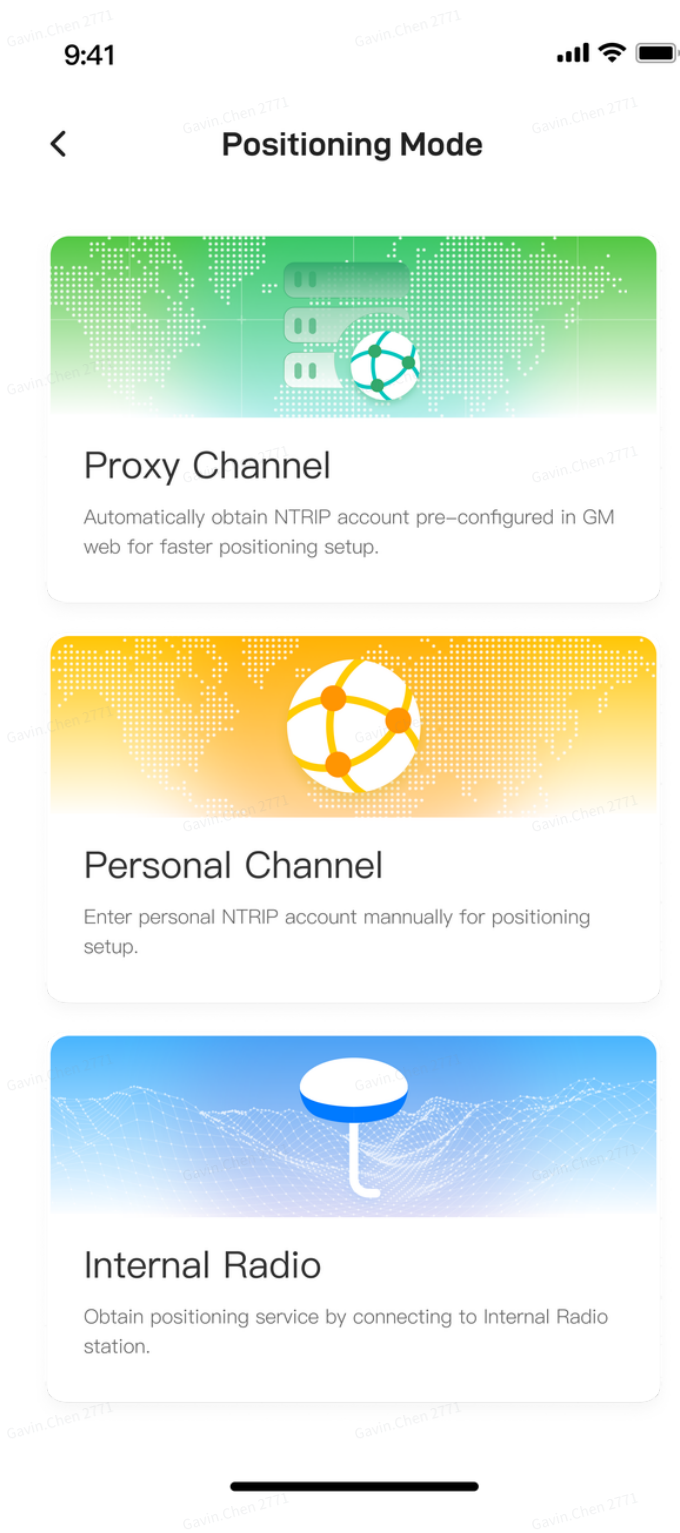
- The driving speed can be adjusted from 1 to 3 gears at the bottom of the screen. Please familiarize yourself with the operation in the low gear before using the high gear.



Step 8 - Positioning Configuration

 When using RLM01 for tasks such as calibration, marking points, or line marking, please ensure that you are in an environment with good network and satellite signals (unobstructed sky) throughout the process. For detailed tutorials, please refer to [Product wiki].

Your device uses RTK high-precision positioning technology and currently supports 3 RTK positioning service options.



1. Proxy Channel (Default): Binds your CORS account and device in the cloud. Selecting this channel automatically retrieves the account login from the cloud, allowing quicker positioning configuration. If this channel has not been activated yet, please contact support staff to configure it for your device on the GM platform.
2. Personal Channel: Achieve positioning configuration by manually entering the CORS account on the APP. You can purchase an account from a local CORS service provider.
3. Internal Radio: Achieves positioning configuration by connecting to the FJD base station (self-deployment required).

Step 9 - Sprayer Calibration

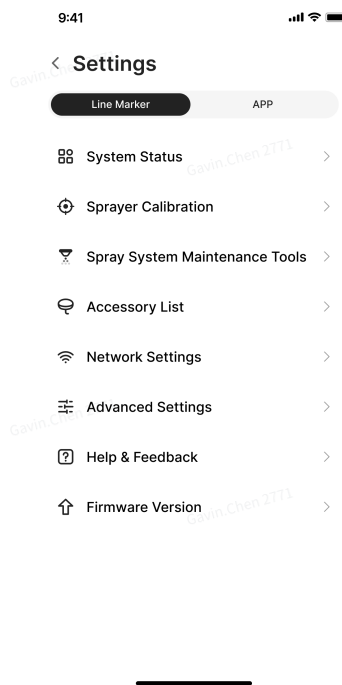


Before using the device for the first time, please perform calibration first to ensure perfect right angles and arcs. Before performing calibration, please remotely control the device to a flat and open ground, preferably no smaller than 6m x 6m, with unobstructed satellite signals; confirm that the paint/water volume is sufficient and the paint spray on the device is on the "off" position. For specific operations, please refer to the APP [Product wiki].

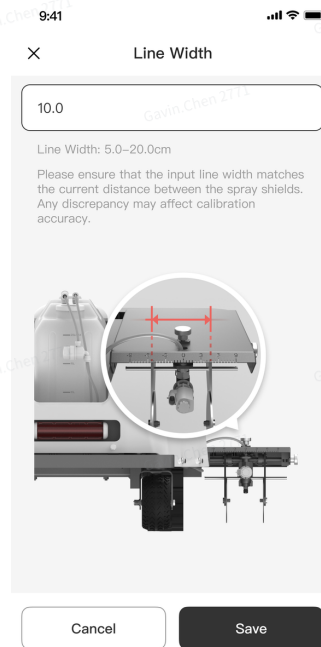
- Click the "Settings" button in the upper right corner of the home page.



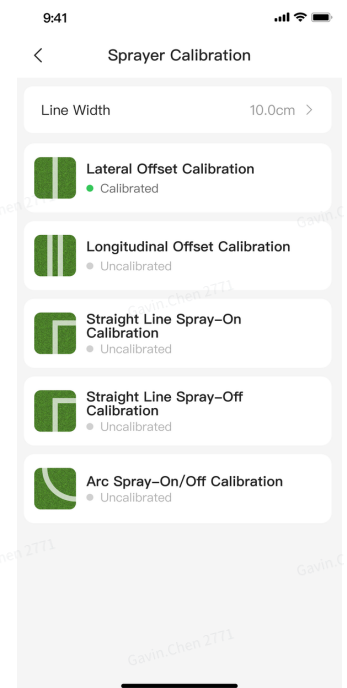
- In the line marker settings list, select "Sprayer Calibration".



- Enter the required line width, commonly 10cm or 12cm, and click "Save".

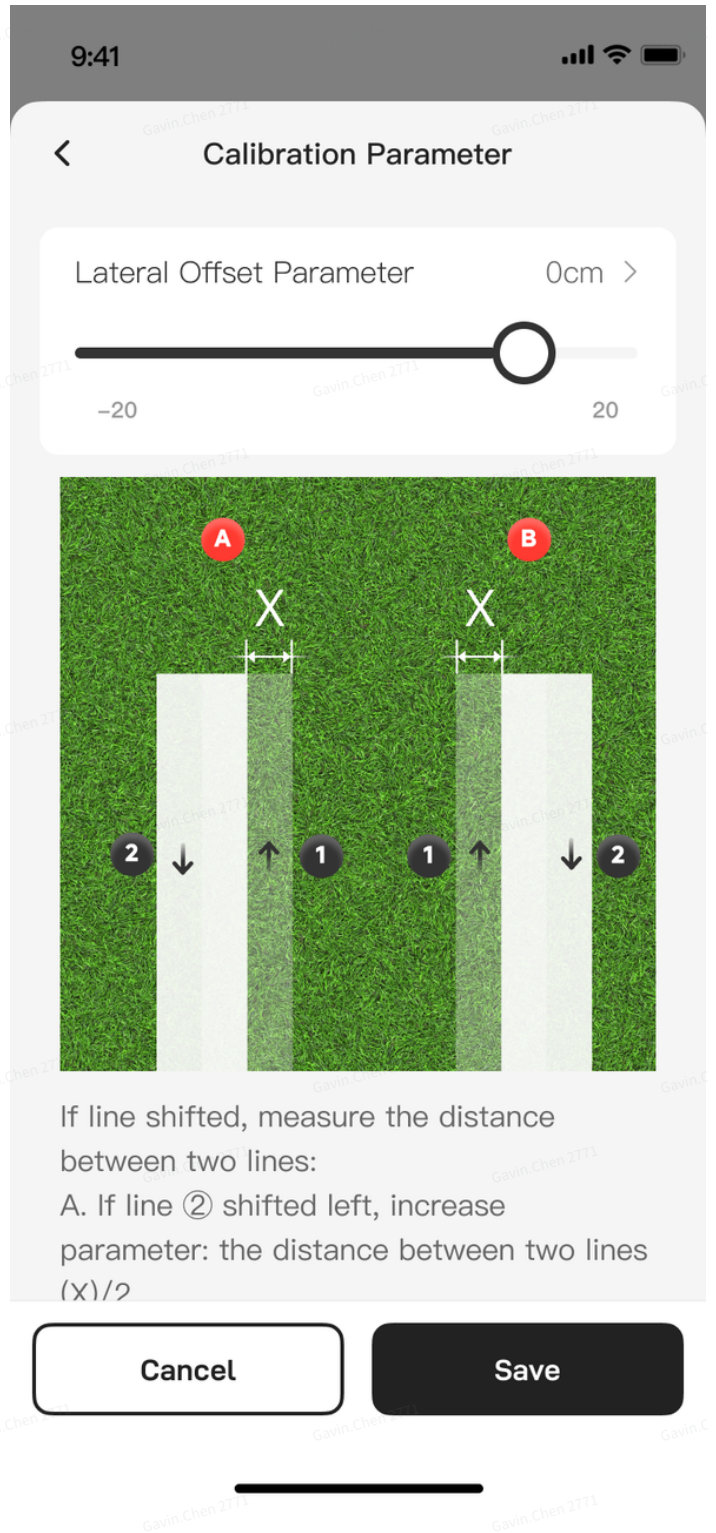
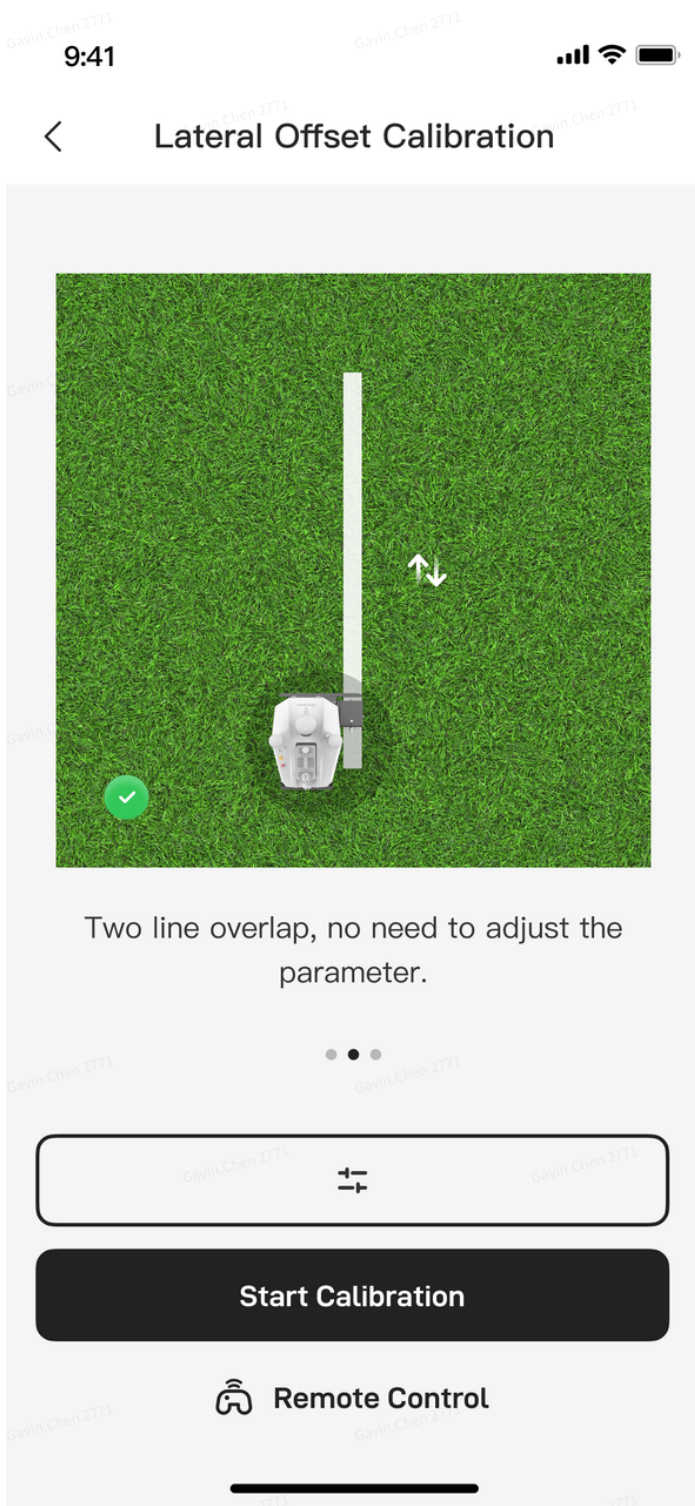


- Sprayer calibration consists of 5 items. Please click and enter them in sequence to complete all items.



- Click "Start Calibration", and the device will automatically execute the preset task. After the task is completed, click the "Parameter Settings" option to enter the parameter adjustment page.

- Compare the actual results with the illustration, adjust the parameters according to the instructions, and click "Save". Repeat the above steps until the line marking results meet the standard.



Step 10 - Create a Map

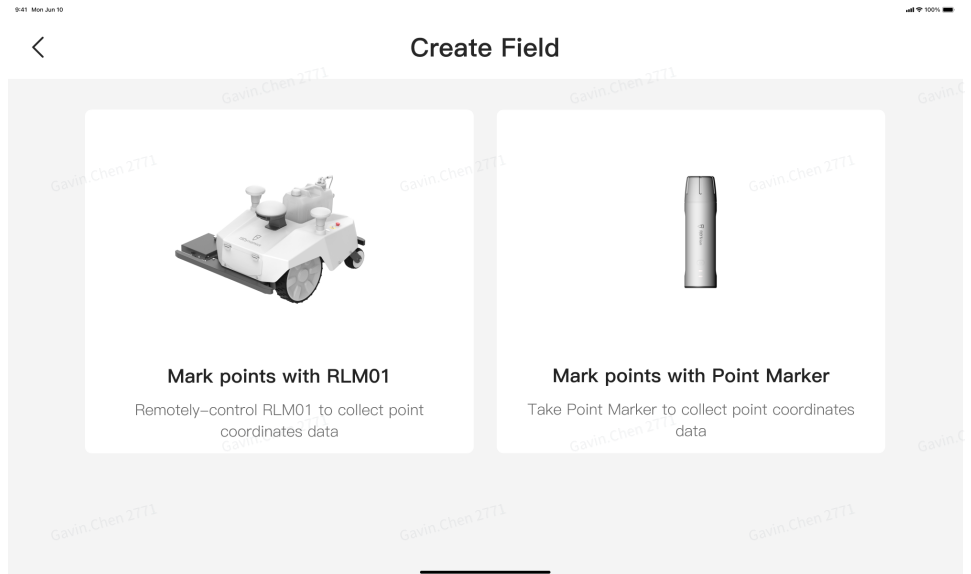


When performing point marking with the RLM01, please ensure that the device is always in an environment with good network and satellite signals (unobstructed sky). The RLM01 must remain within 5 meters of your phone or tablet to ensure proper Bluetooth connection. For specific operations, please refer to the APP [Product wiki].

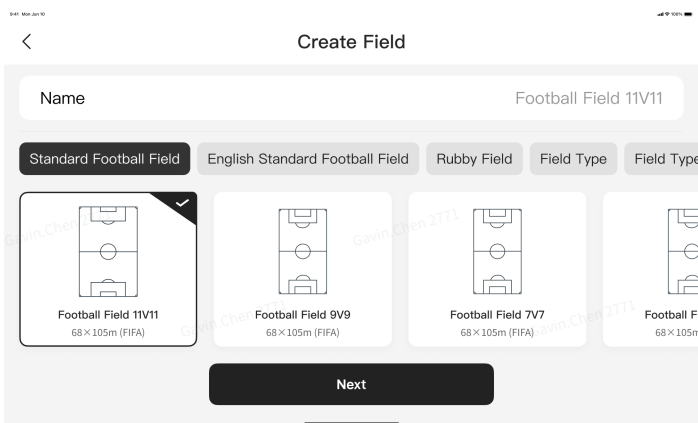
- Click the "Create" button on the home page.



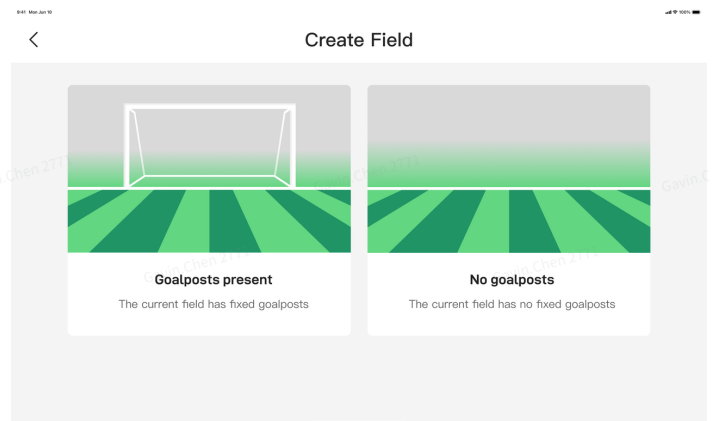
- You can choose either the RLM01 or V4E dotter to collect coordinates and create a map. If you do not have the V4E device, please select "Mark points with RLM01" and remotely control the RLM01 to the designated positions to collect coordinates.

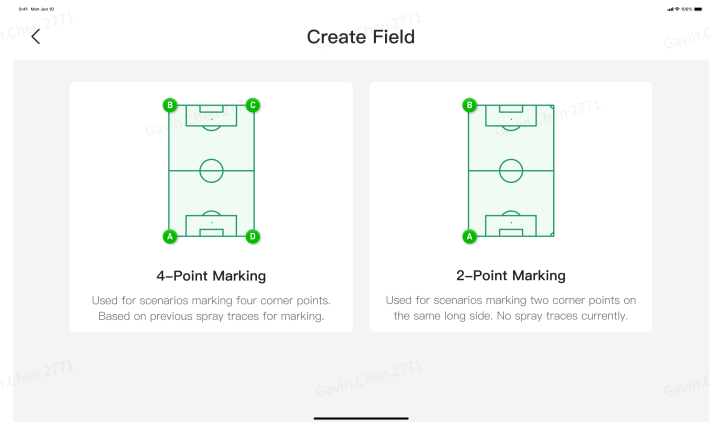
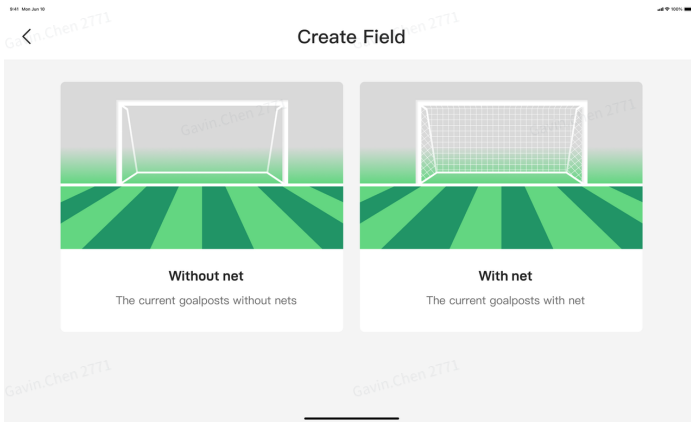


- Select a field template as needed and customize the map name.



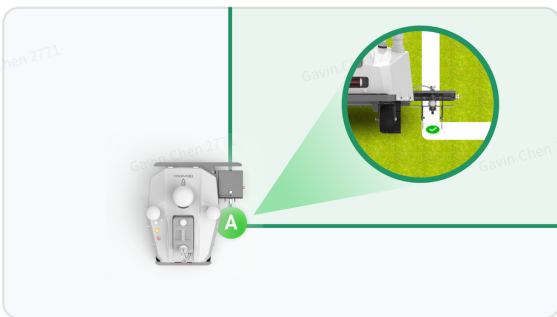
- Follow the on-screen prompts to choose options that match the actual conditions of your field.





- After entering the point marking page, please carefully view the example animation, align the nozzle with the target position according to the method shown in the illustration, and collect coordinates.

Tips



Remotely control the device to the target point, ensuring the nozzle is aligned with it.

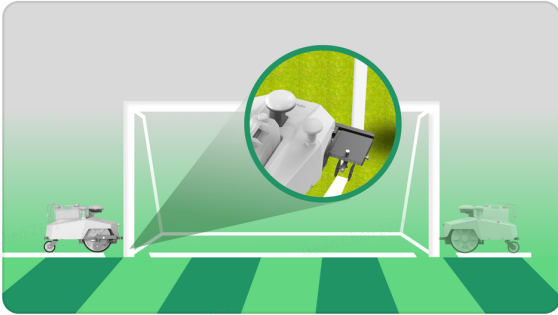
Confirm

- Please remotely control the device to the corresponding location on the field according to the instructions in the upper right corner. After the device icon on the APP stops drifting, click the "Mark" button at the bottom of the page to record the point.
- If you need to re-mark the previous point, you can click the "Undo" button to revert the operation.



- After all point markers are completed, click the "Finish" button to complete the drawing creation.

Tips



When marking goalpost, ensure the front bumper lightly touches the outside of the goalpost, with the nozzle aligned parallel to it.



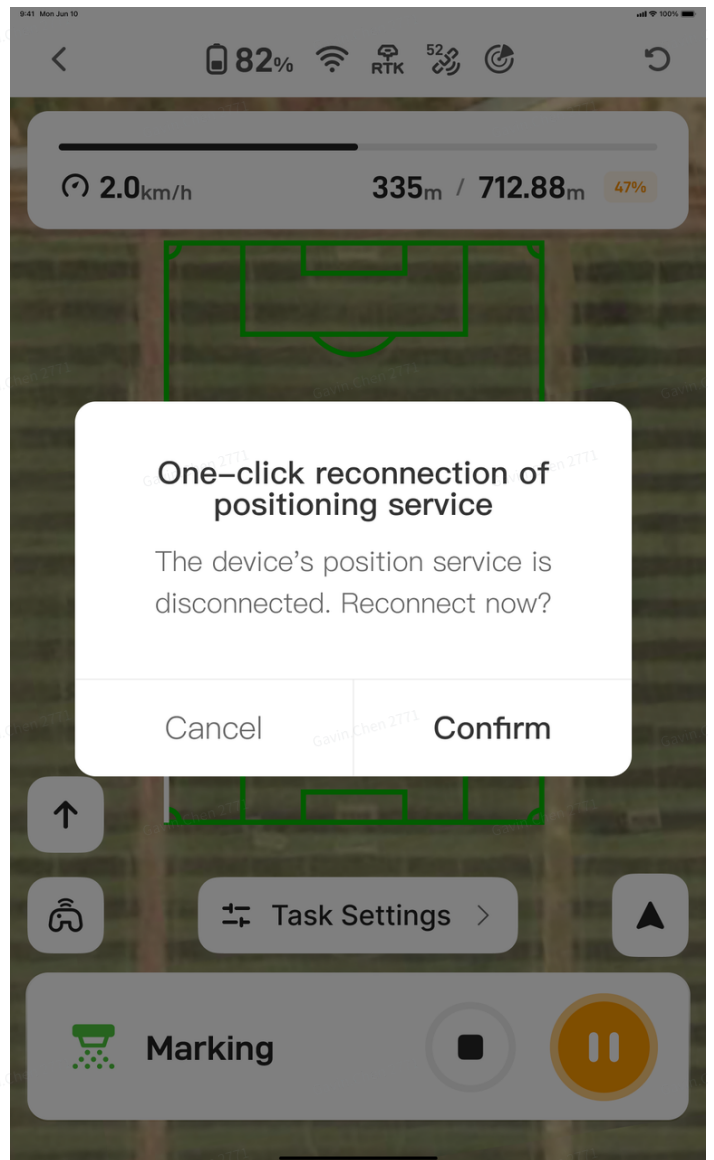
Confirm

Step 11 - Start Task



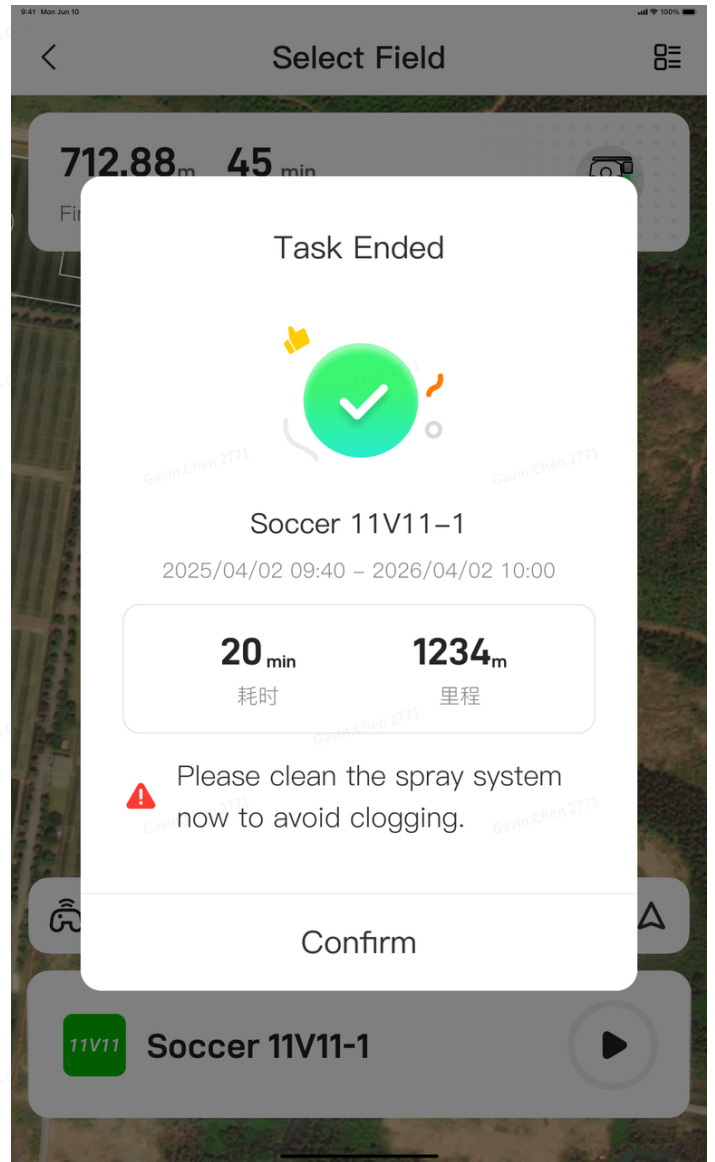
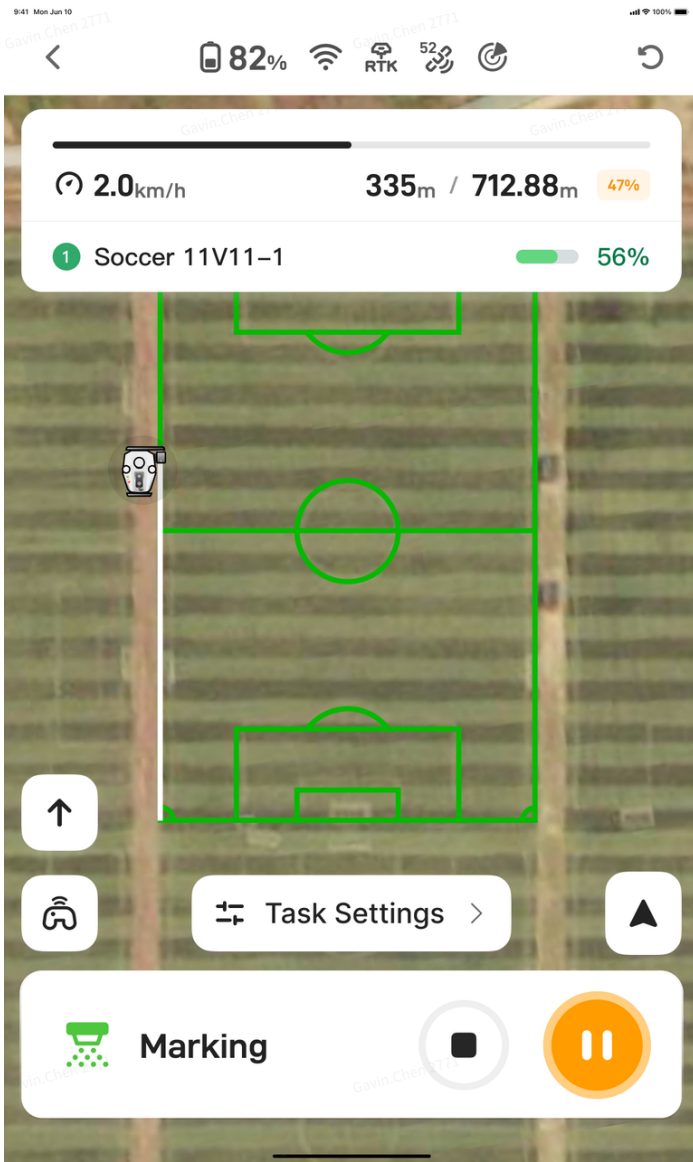
Before starting a task, please ensure that the RLM01 network is connected, the RTK signal is normal, and the entire process is in an environment with unobstructed sky.

- After completing the map creation, you can enter the task preview page. Click the "Start Task" button to begin the task.
- Click "Confirm" to reconnect the positioning service of RLM01 with One-click.



- After starting the task, you can view the progress on the page. Click the "Pause" button, and the task will pause. Click the "Stop" button, and the task will save the progress and terminate.

- You can also adjust parameters such as spray pressure and vehicle speed in the [Task Settings] option. For details, please refer to the relevant tutorials in the [Product wiki].



Step 12 - Cleaning



To prevent paint clogging, it is recommended to complete the cleaning within 15 minutes after each painting session. For specific operations, please refer to the APP [Product Wiki].