

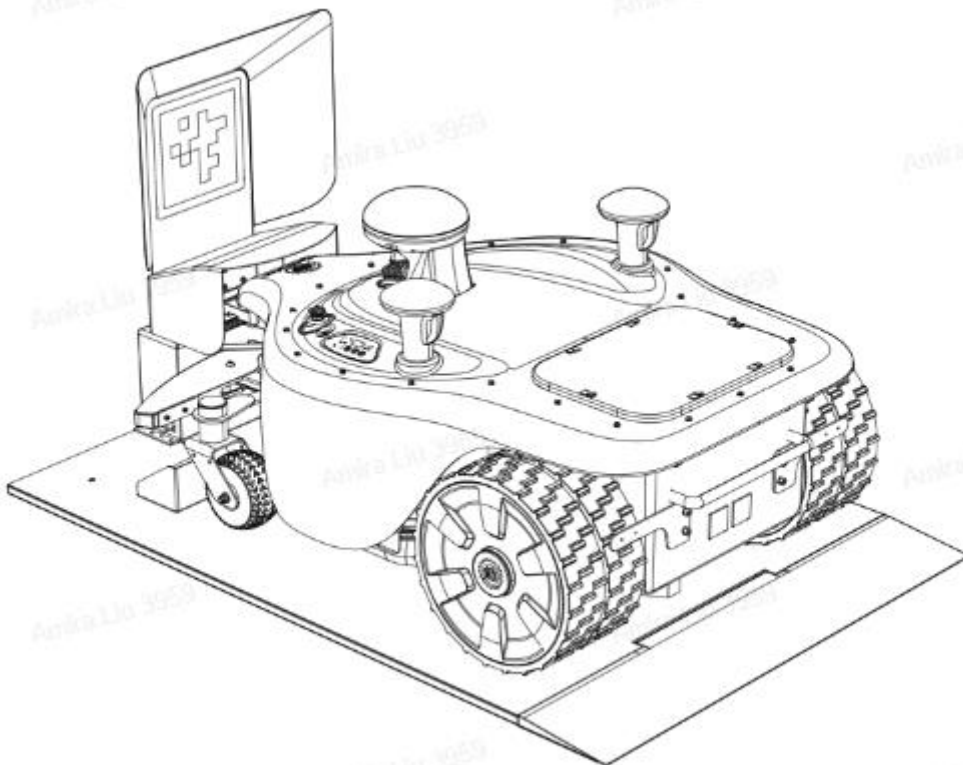
Sveaverken Thor Robotic Lawn Mower User Manual

Last edited: October/2025

Cover Page



Sveaverken Thor
Robotic Lawn Mower



Copyright Page

Copyright Notice

Copyright © 2025 Sveaverken. All rights reserved.

No Unlawful Use Permitted

No part of this manual may be reproduced, copied, distributed, transmitted, modified, translated, or otherwise exploited in any form or by any means, whether electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of Sveaverken.

Disclaimer

The information contained in this manual is for informational purposes only and is subject to change without notice. Sveaverken makes no representations or warranties, express or implied, regarding the completeness or accuracy of the information contained in this manual. Sveaverken shall not be liable for any damages arising from the use of this manual.

Updates

This manual is subject to change without notice. Sveaverken reserves the right to update the contents of this manual at any time without providing any prior notice or updates.

Trademarks

Sveaverken and the Sveaverken logo are trademarks of Sveaverken. All other trademarks mentioned in this manual are the property of their respective owners.

Contact Information

For more information about Sveaverken or its products, please visit our website at <https://www.sveaverken.com/>.

Versions

Version	Date	Amendments
V1.0	January 14 2025	First Version
V1.1	July 14 2025	Second Version
V1.2	October 27 2025	Third Version

Preface

- How to Use the Manual: Instructions on how to navigate and use the manual

effectively.

Legend			
 Warning	 Important	 Hints and Tips	 Reference

Introduction

The Sveaverken Thor is an advanced robotic lawn mower designed to provide efficient, autonomous lawn care for commercial lawns. This user manual covers the setup, operation, and maintenance of Thor.

Effective grounds maintenance requires a solution that balances precision, adaptability, and ease of management. Sveaverken Thor's triple compact cutting deck system, equipped with six pivoting razor blades per deck, is designed to handle a variety of mowing conditions with accuracy and efficiency. Combining autonomous mowing capabilities with a practical fleet management system, Thor helps maintain high standards across properties such as golf courses, sports fields, and public spaces.

With an advanced three-layer guidance system—RTK GNSS positioning, computer vision, and a 3D LiDAR sensor—Thor navigates complex environments and adjusts to obstacles while maintaining defined mowing patterns. The cloud-based fleet management platform allows for seamless coordination of multiple units, ensuring smooth integration into your existing operations and providing valuable data insights to support informed decision-making.

Key features:

Advanced Navigation

- Dual RTK GNSS, LiDAR, and vision navigation provide precise mowing in complex terrains, ensuring accurate coverage without boundary wires.
- Real-time obstacle detection allows for seamless operation in dense landscaping and irregular layouts.

Efficient Cutting Performance

- A 730mm cutting width covers more ground in less time, reducing overall mowing duration.
- Adjustable cutting height (20–100mm) adapts to different grass types and seasonal changes.
- Adaptive front axle and a floating cutting deck handle slopes up to 20°, ensuring smooth performance on uneven terrain.

Smart Energy Management

- A 2 kWh Rechargeable Lithium-ion Battery offers extended runtime, fast

charging, and improved sustainability.

- Optimized path planning enhances efficiency by minimizing redundant passes and reducing operational downtime.

Simplified Deployment

- Wire-free installation lowers setup costs and makes it easy to deploy across large and dynamic properties.

This manual will guide you through the initial installation, setting up the app, operating modes, maintenance procedures, troubleshooting, and technical specifications of the Sveaverken Thor. Follow the instructions carefully to ensure safe and optimal performance of your robotic lawn mower.

1.1 Safety Information

1.1 Safety Definitions

Warnings, cautions, and notes are used to highlight particularly important parts of the manual.

- **WARNING:** Indicates a risk of serious injury or death to the operator or bystanders if the instructions in this manual are not followed. Any loss or injury resulting from improper use shall be the responsibility of the user.
- **CAUTION:** Indicates a risk of damage to the product, other materials, or the adjacent area if the instructions in the manual are not followed.
- **Note:** Provides additional information that is necessary in a given situation.

1.2 General Safety Instructions

WARNING: Read the following warning instructions carefully before using the product.

Never stand, sit, or place objects on the mower or its charging station.

Read the Operator's Manual: Ensure you understand the instructions before using the product. Keep the manual for future reference.

Supervision and Instruction: This appliance is not intended for use by children or persons with reduced physical, sensory, or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning the use of the appliance by a person responsible for their safety. EU requirements allow this appliance to be used by children aged from 8 years and above and persons with reduced physical, sensory, or mental capabilities or lack of experience and knowledge, if they have been given supervision or instruction concerning the use of the appliance in a safe way and understand the hazards involved. Children shall

not play with the appliance. Cleaning and user maintenance shall not be done by children without supervision.

Operator Responsibilities: The operator assumes full responsibility for all accidents or hazards that occur to people or property while using this equipment. This responsibility includes proper installation, safe operation, and maintenance of all safety features. The operator must ensure all additional users are properly trained in safety procedures and must maintain constant supervision of the work area when the equipment is in use.

1.2.1 Work Area Safety

WARNING: Failure to follow proper safety procedures may result in injury or damage to property.

When operating in public areas, warning signs must be prominently displayed at all entry points to the work area. Each sign must clearly state: "Warning! Robotic lawn mower working! Keep away and supervise children and pets!" These signs must remain clearly visible throughout the operation and should be removed when the mower is not in use.

The work area must be completely cleared of people, especially children, and all pets before operation begins. No one should enter the work area while the mower is operating. All toys, recreational equipment, garden tools, and debris must be removed from the area before starting the mower.

When operating the mower in dusty environments, always wear a full-face mask or an appropriate dust mask.

Do not allow children or persons with physical or cognitive impairments to operate the mower.

Dispose of batteries in accordance with local regulations. Do not incinerate or expose to fire.

Never stand, sit, or place objects on the mower or its charging station.

1.2.2 Equipment Safety

The safe operation of this equipment depends on using only Sveaverken-recommended components and original Sveaverken batteries. The use of unauthorized parts may compromise safety features and void warranty protection. All safety features and warning labels must be maintained in good condition and replaced if damaged or illegible.

Power supply cables require special attention for safe operation. All cables must be routed outside the mowing area to prevent damage. The installation must include an appropriate Residual-Current Device (RCD) for electrical safety. Operators must inspect cables regularly for signs of wear or damage. If any cable becomes damaged during operation, immediately disconnect it from the power outlet and contact authorized service personnel for replacement. A damaged or worn cable presents a

serious electrical hazard and must never be used.

1.2.3 Operational Safety

The mower must be immediately powered off if any abnormal vibration occurs or if damage is detected. In the event of an accident or injury, seek immediate medical attention. Before performing any maintenance, clearing blockages, or examining the product, the mower must be completely powered off and all moving parts must come to a complete stop.

Never touch the blade disc or other moving parts until they have completely stopped moving. When maintenance is required, particularly when changing blades, proper protective gloves must be worn and appropriate tools must be used. This ensures both operator safety and prevents damage to the equipment.

1.2.4 Maintenance

WARNING: Always power off the product before maintenance.

Regular maintenance inspections must be performed weekly. This includes checking blade condition, verifying safety features are functioning properly, and ensuring warning signs remain visible and legible. The emergency stop function should be tested before each use.

Indoor storage is required when the mower is not in use. The storage area must be inaccessible to children, and the mower must be thoroughly cleaned before storage. All power connections should be disconnected during long-term storage.

1.2.5 Charging Station Safety

The charging station provided with your mower is specifically designed for this model. No other charging methods should be used. The station must be installed in a location that meets all clearance requirements and must be kept free of debris. During thunderstorms, disconnect all power and wiring from the charging station to protect the electrical components. After the storm passes, reconnect all wires carefully, ensuring proper connections.

1.2.6 Battery Safety

WARNING: Improper battery handling may result in fire or explosion.

Original Batteries: Use only original batteries recommended by Sveaverken. Product safety cannot be guaranteed with non-original batteries.

The mower must only be charged using the included charging station. In the event of battery electrolyte leakage, immediately flush the affected area with water or an appropriate neutralizing agent. If the corrosive liquid contacts eyes, seek immediate medical attention.

1.2.6.1 Maintenance and Storage

Regular maintenance inspections must be performed weekly. This includes checking blade condition, verifying safety features are functioning properly, and ensuring warning signs remain visible and legible. The emergency stop function should be tested before each use.

Indoor storage is required when the mower is not in use. The storage area must be inaccessible to children, and the mower must be thoroughly cleaned before storage. All power connections should be disconnected during long-term storage.

1.3 Understanding LiDAR Technology

1.3.1 Basic Principles

LiDAR (Light Detection and Ranging) is an advanced sensing technology that measures distances using laser light. The sensor emits rapid pulses of laser light that bounce off surrounding objects and return to the sensor. By measuring the time it takes for each pulse to return, the system calculates precise distances to objects and creates a detailed 3D map of its surroundings.

1.3.2 Application in the Sveaverken Thor

Thor's LiDAR sensor creates a detailed 3D map of your property during an initial setup period. This allows the mower to precisely track its location and plan the most efficient mowing routes, even in complex environments with trees, buildings, or irregular boundaries.

1.3.3 Primary Functions

1. Navigation and Mapping (in conjunction with the vision sensor and GNSS positioning)
 - Creates detailed yard maps with centimeter-level accuracy
 - Identifies boundaries, obstacles, and pathways
 - Enables precise position tracking during operation
2. Obstacle Detection (in conjunction with the vision sensor)
 - Recognizes fixed obstacles like trees and furniture
 - Detects moving obstacles in real-time
 - Maintains safe operating distances from identified hazards
3. With this data, Thor can plan paths for:
 - Efficient mowing patterns
 - Calculating optimal routes to charging station
 - Adapting paths to avoid obstacles

1.3.4 Technical Limitations

Environmental Constraints

1. Weather Conditions
 - Performance degrades in heavy rain or fog
 - Heavy dust or pollen may affect readings
2. Surface Properties
 - Highly reflective surfaces (water, glass, polished metal) can cause incorrect readings
 - Very dark or light-absorbing surfaces may be harder to detect
 - Transparent obstacles may not be properly identified
3. Operational Limits
 - Maximum effective range: 40 m @ 10% reflectivity, 70 m @ 80% reflectivity
 - FOV: Horizontal: 360°, Vertical: -7°~52°
 - Maximum mapping duration: 30 minutes per session

1.3.5 Safety Considerations

1.3.5.1 Laser Safety

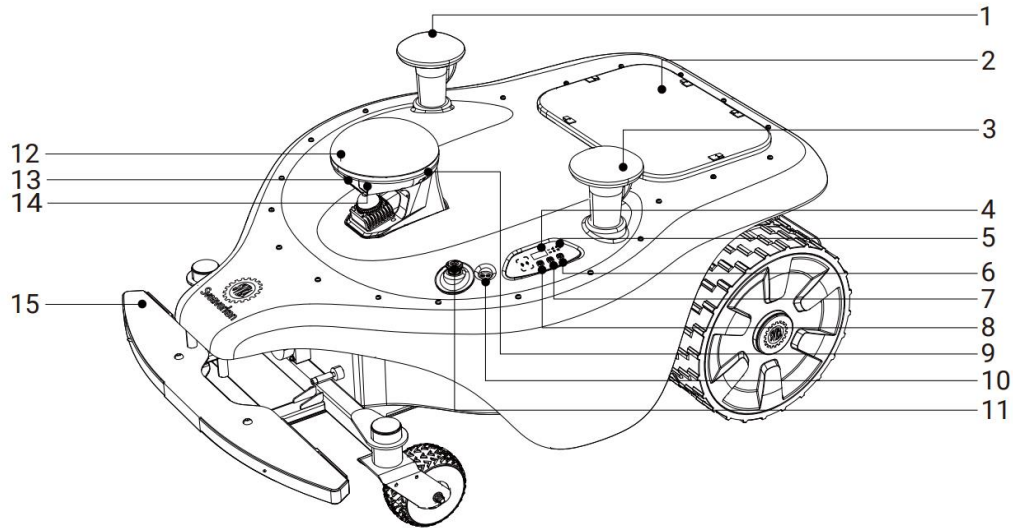
1. Classification
 - Class 1 laser system (eye-safe under all conditions)
 - Wavelength: 905 nanometers (invisible infrared)
 - Compliant with IEC 60825-1 safety standards
2. Operational Safety
 - Do not disassemble sensor housing
 - Avoid direct view into sensor aperture
 - Do not operate with damaged sensor covers

1.3.5.2 Performance Safety

1. Regular Maintenance
 - Clean sensor covers weekly with soft, dry cloth
 - Check for physical damage before each use
2. Operation Guidelines
 - Allow system to initialize fully before operation
 - Maintain clear line of sight to charging station
 - Avoid operation in severe weather conditions

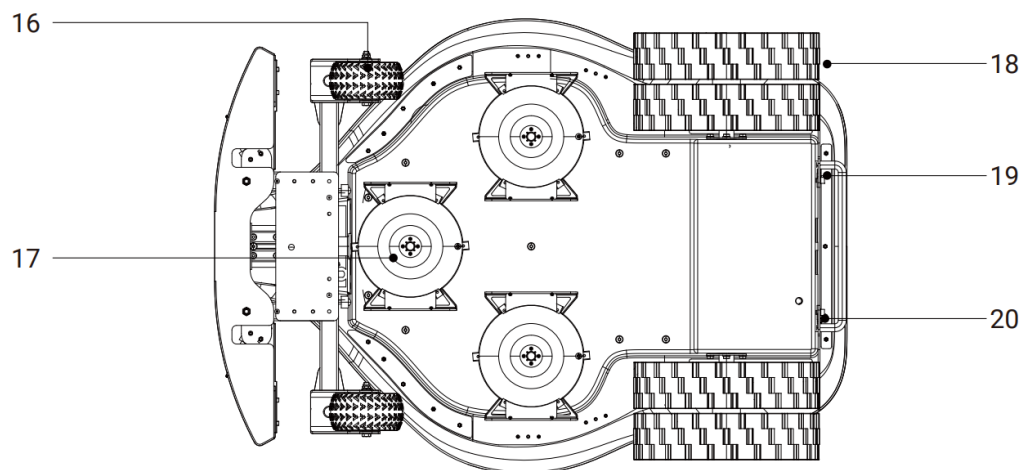
2. Technical Specifications

2.2.1 Robotic Lawn Mower



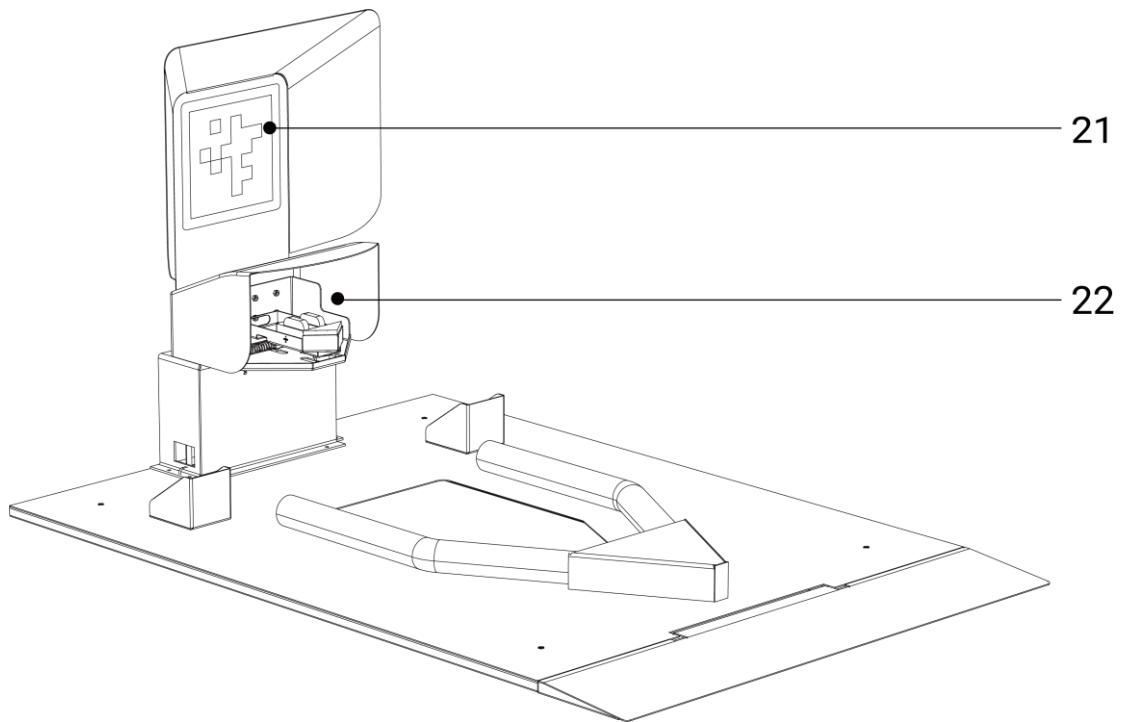
Number	Part
1	GNSS antenna
2	Battery compartment
3	GNSS antenna
4	Digital screen
5	Indicator light
6	Recharge button
7	OK Button
8	Blade speed button
9	SIM card slot
10	Rain sensor
11	Emergency stop button

12	LED Strip
13	Machine Vision Illumination
14	Vision Sensor
15	Safety Bumper



16	Front Wheel
17	Blade Deck
18	Drive Wheel
19	Charging Port
20	Power Button

2.2.2 Charging Station



21	April Tag
22	Charging Contact Plate

2.3 Specifications

2.3.1 Sveaverken Thor Robotic Lawn Mower

Module	Detailed Parameters	Imperial Unit E
Dimensions (LWH)	1400 mm * 1050 mm * 650 mm	55.1 in * 41.3 in * 25.6 in
Rear Drive Wheel Diameter	400 mm	15.7 in
Rear Drive Wheel Axle Distance	598 mm	23.5 in
Caster Wheel Size and Material	Rubber-sealed, Diameter 165mm	6.5 in (Rubber-sealed)
Caster Wheel Axle Distance	712 mm	28 in
Cutting Height	20 mm–100 mm	0.8 in–3.9 in
Cutting Width	730 mm (260 mm each)	28.7 in (10.2 in each)
Max. Slope	20°	46%
Lift Sensor	None	
Display Panel	Yes	

点击图片可查看完整电子表格

2.3.2 Charging station

Function	Detailed Parameters	Imperial Unit Equivalent
Dimensions (LWH)	1650 * 1100 * 890 mm	65.0 * 43.3 * 35.0 in
Ingress Protection Rating	IP64	
QR Code Panel	Yes	
Wheel brush	Supported	
Weight	25 kg	55.1 lbs

点击图片可查看完整电子表格

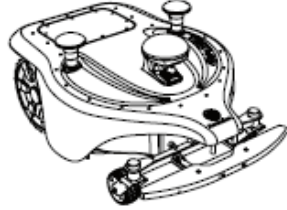
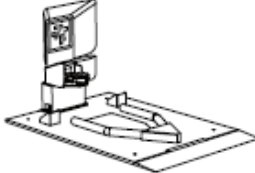
3. Preparation

3.1 In the box

Amira.Liu 3959

Packing List

* Check the materials against this packing list. In case that any item is not provided, contact Sveaverken or the local dealer.

No.	Name	Number	Illustration (for reference only)	Check
1	Robotic Lawn Mower	1		
2	Charging Station	1		
3	GNSS Receiver	1		
4	GNSS Receiver Bracket	1		
5	Emergency Charging Cable	1		
6	On-board Tools	1		
7	Quick Start Guide	1		
8	Certification	1		
9	Warranty Card	1		

4. Installation

WARNING: Read the Safety Information chapter before you install the product.

CAUTION: Use only original products and parts.

Components to Install

1. A robotic lawn mower that automatically mows the lawn
2. A charging station that includes a charging dock that connects to the power supply, and a weather shed that protects against rain and enables correct, automatic docking
3. Power supply, including a power adapter and cables
4. A mobile phone with the SveaMow app to connect, update, and set up the robotic lawn mower.

Download the SveaMow App



SveaMow is your go-to app for managing your Sveaverken robotic lawn mower.

- Easy Control: Pair, connect, and remotely manage your mower with a simple interface.
- Real-Time Updates: Get instant notifications on your mower's status and changes.
- Custom Schedules: Do a Quick Mow or set a mowing schedule.
- Task Analytics: Review task details for optimal lawn care.
- Fleet management: Control and monitor your robotic lawn mower fleet for ultimate mission flexibility.

Before setting up the mower, register for an account following app instructions.

Use an NTRIP-based network RTK account, acquire RTK positioning without setting up an antenna.

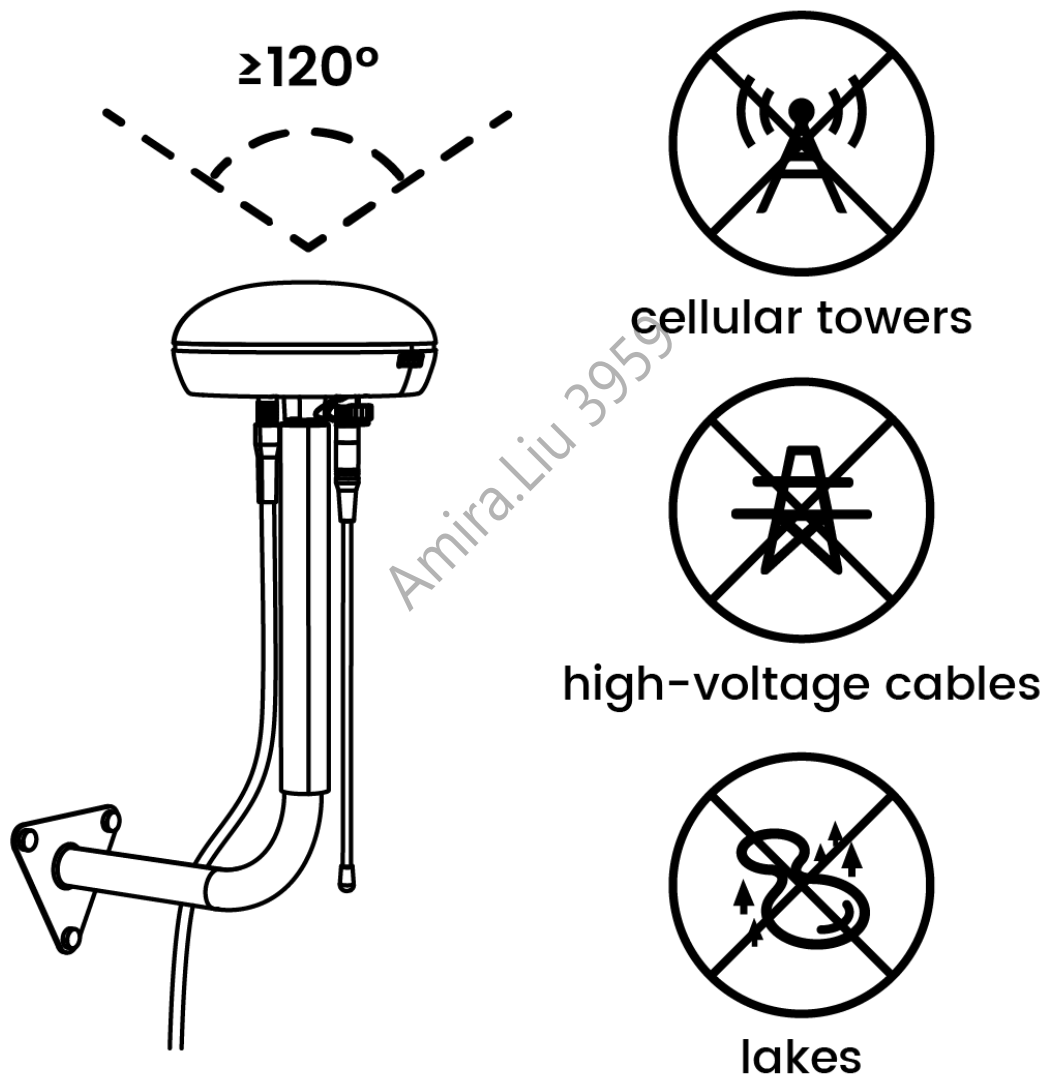
4.1 Setting up the RTK base station

For optimal performance, install the RTK base station in an open area to ensure clear satellite signal reception. Place the antenna on flat ground, a wall, or a rooftop. Ground placement is suitable for single-lawn use, but for multiple lawns, mounting on a wall or rooftop is recommended for better stability and coverage.

4.1.1 Installing the RTK antenna on a wall or a roof

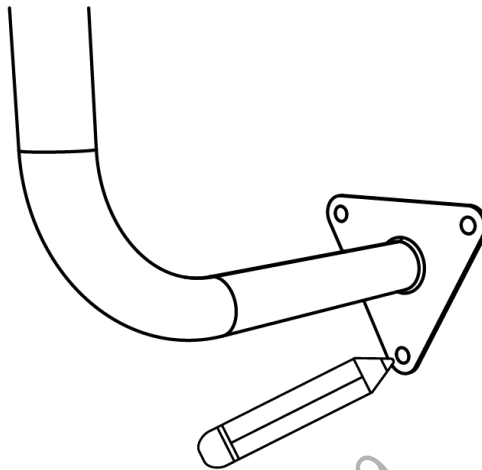
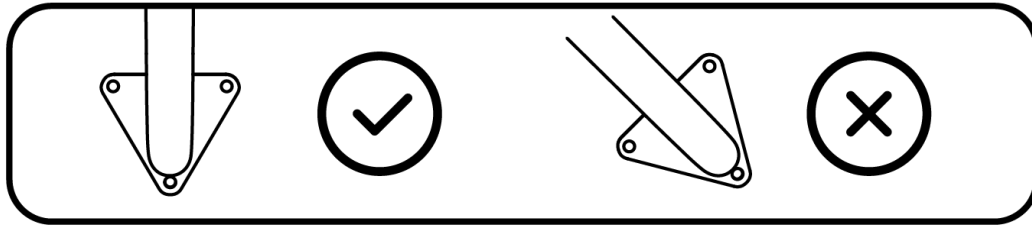
1. Find an ideal location for the RTK base station

- A flat spot with a 120 degree clearance above the RTK base station, free of any obstruction.
- Keep the antenna away (at least 500 meters/1600 ft) from cell towers, high-voltage cables, and bodies of water like lakes, as they may affect satellite signal reception.
- Install the RTK base station at least 500 meters away from cell towers, high-voltage cables, and lakes.

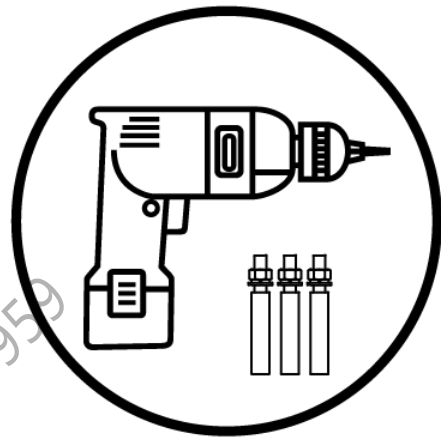
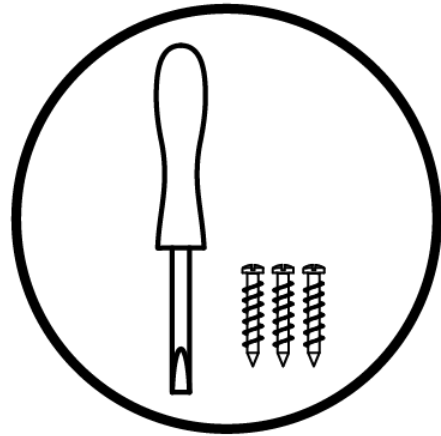
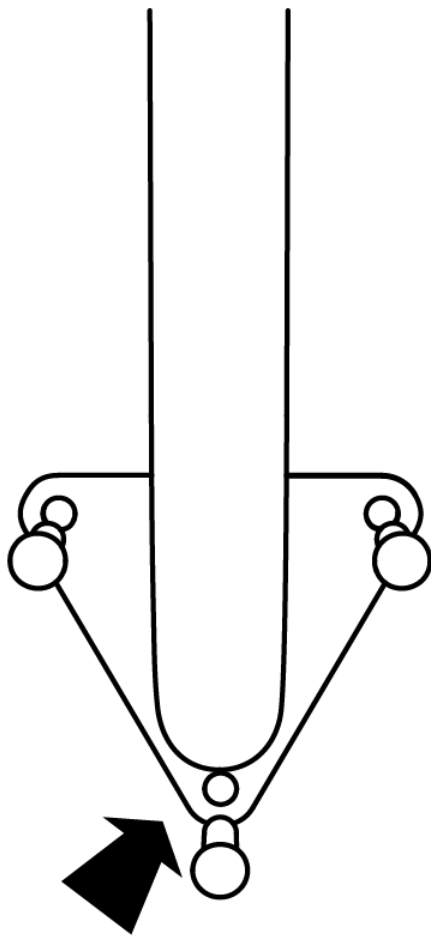


2. Mark the location of the wall mount.

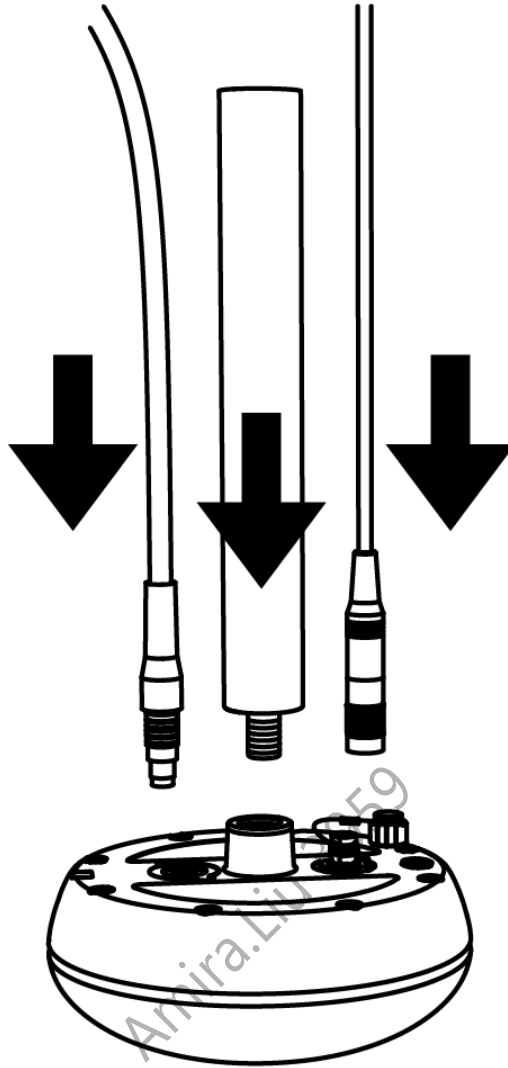
- a. Ensure the mount is securely installed. The RTK antenna should point vertically upward for best reception.



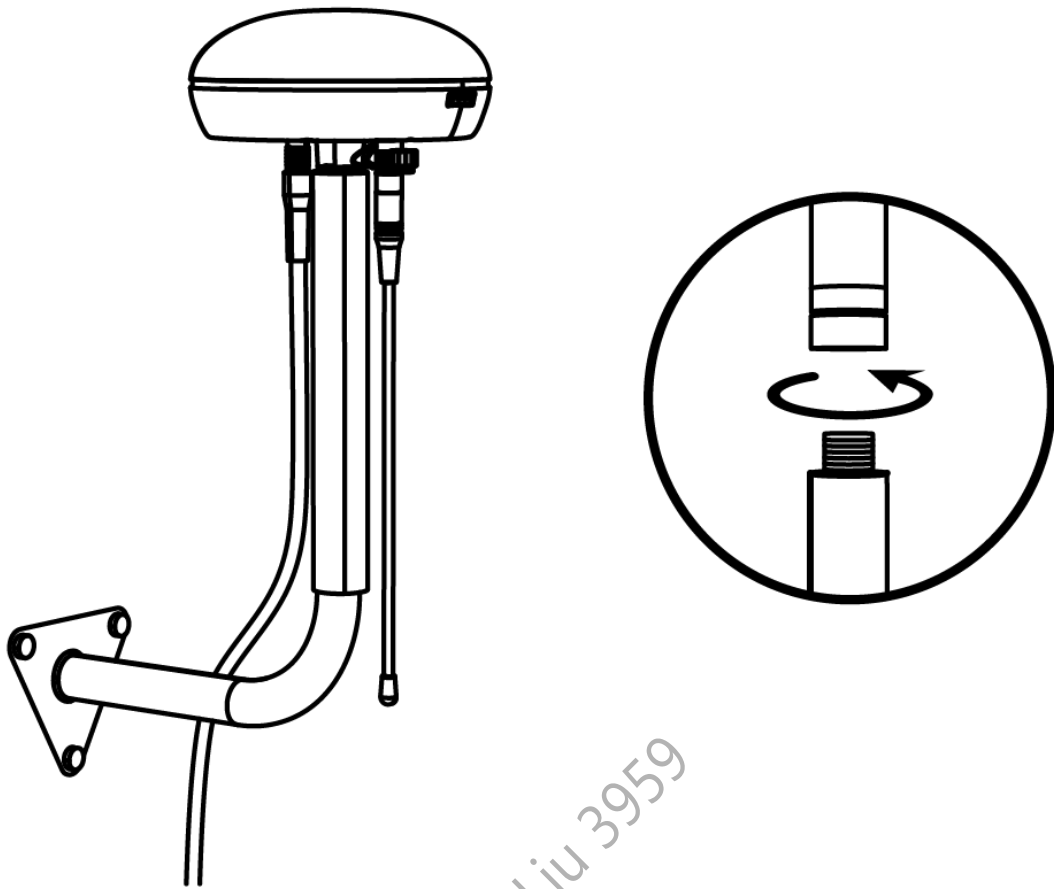
3. Select the appropriate screws based on the wall material and drill holes at the marked positions:
- a. **Wooden Wall:** Use M6 screws and a screwdriver.
 - b. **Concrete Wall:** Use M8 expansion screws and power tools (not included in the package).



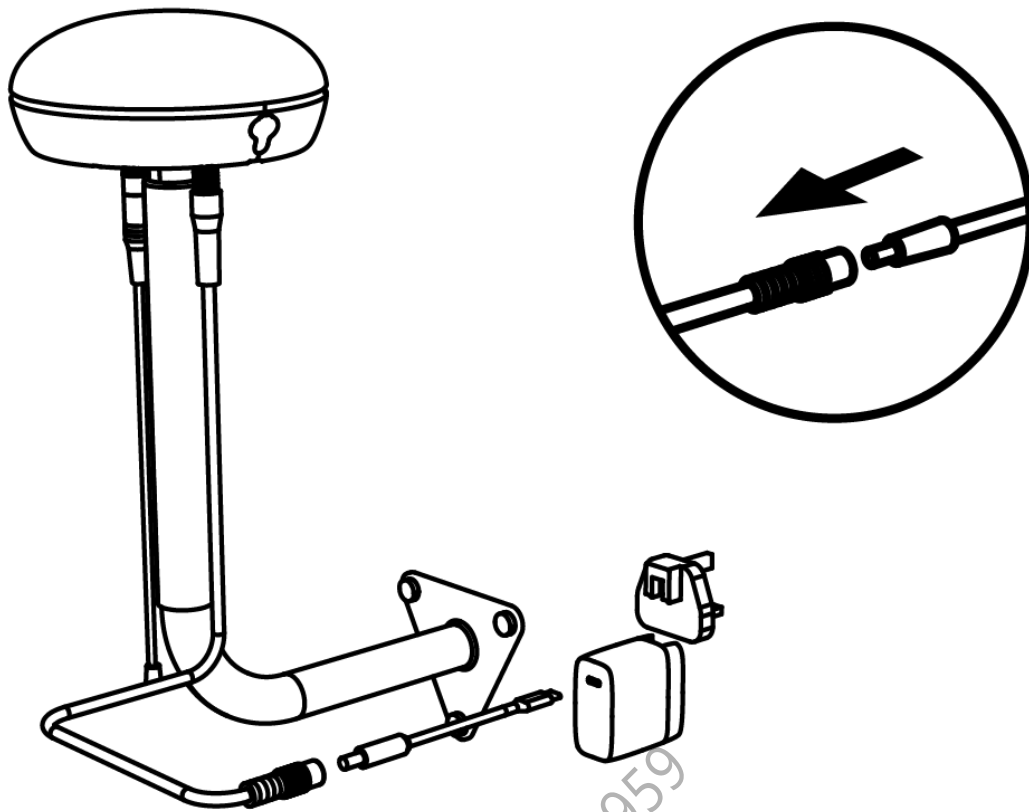
4. Attach the mounting pole, RF antenna, and 5 m power cable to the RTK base station.



5. Secure the mounting pole firmly.

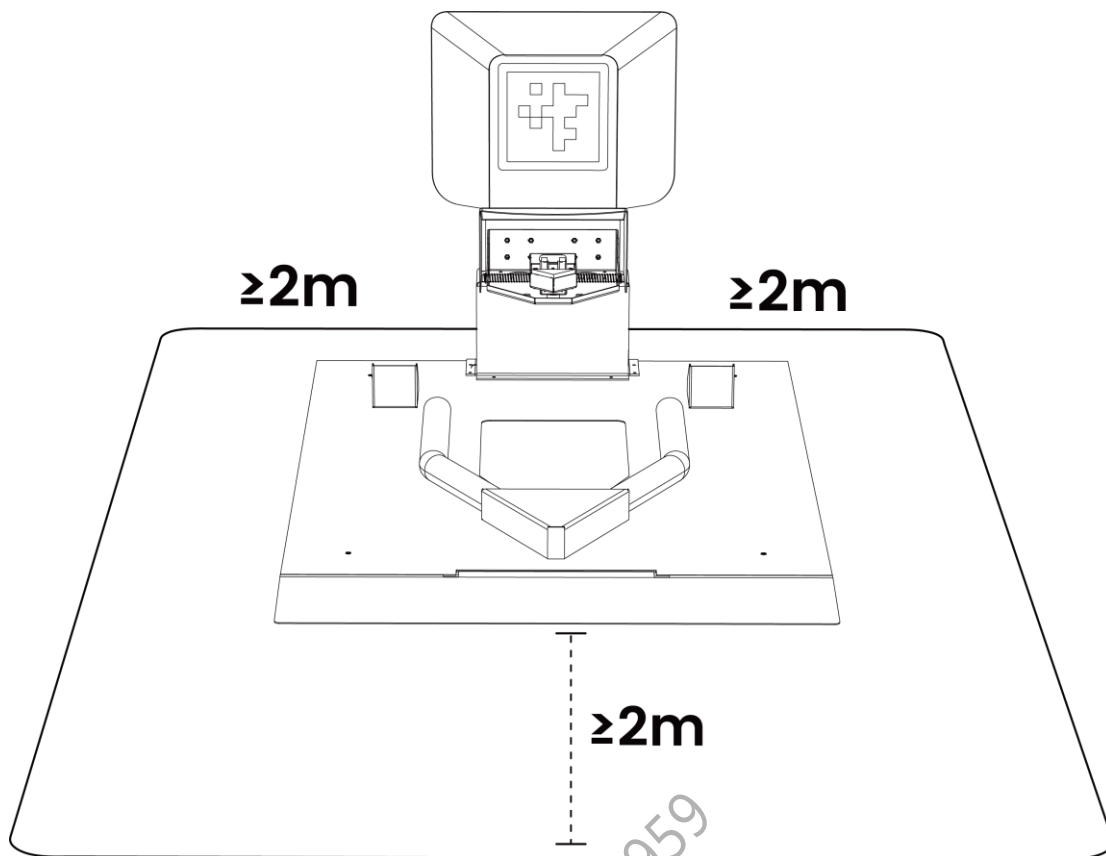


6. Connect the DC to USB-C cable, adapter, and power plug to an outlet, then power on the RTK base station.



4.2 Setting Up the Mower and Charging Station

1. Place the charging station on a flat, level surface.-Ensure a clear, level area of at least a 2-meter radius in front of it, free of hills, slopes, dips, holes, or obstacles.
 - a. Ensure the grass under the charging station is no taller than 5 cm (about 2 inches).

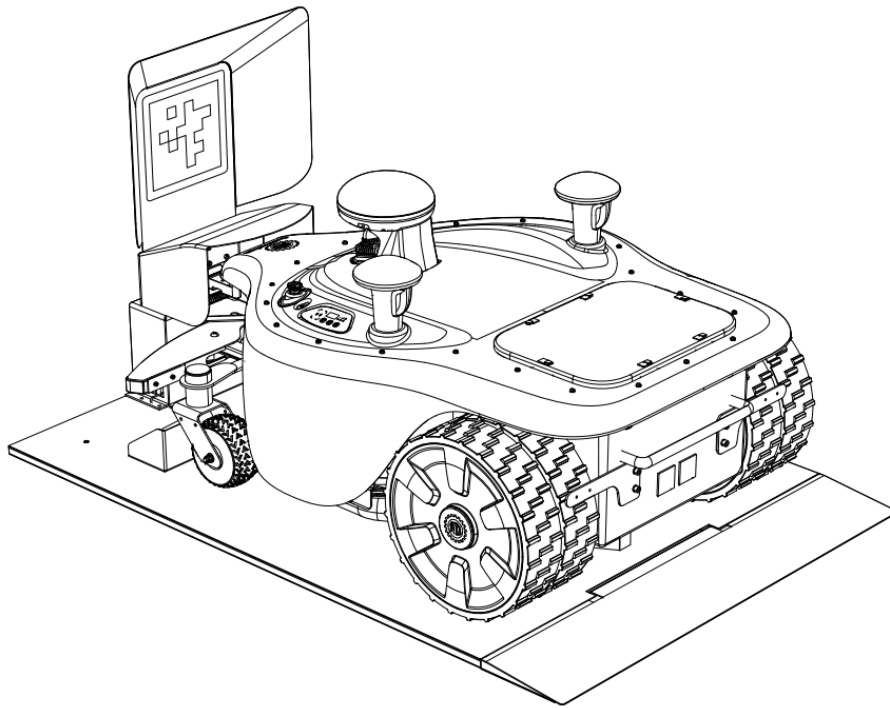


2. Secure the Charging Station to the ground.
3. Connect the power adapter and the power cord, then plug them into an outlet.

4.3 Docking the Mower

Once the charging station and RTK antenna are set up, dock the mower as follows:

- Press the button on the charging station and wait for the indicator light to flash green rapidly, indicating direct charging mode.
- Align the mower with the charging station as shown in the diagram and wait for it to power on.
- Once the mower is powered, turn on its main switch.



5. Basic Operations

5.1 Preparation

- Read and understand safety instructions before use
- Ensure charging station and RTK base station or NTRIP are set up
- Verify the mower is docked and charging
- Ensure a stable WiFi or mobile hotspot signal is available
- Ensure your phone's Bluetooth is turned on

5.2 Creating a SveaMow Account

5.2.1 Register and Log In

Once the app is downloaded, follow these steps to create an account.

5.2.1.1 Registering with Email

1. Tap **Sign Up**.
2. Enter your email address.
3. Tap **Send Verification Code** to receive a confirmation email (check your spam folder if not received).

4. Enter the verification code (valid for 10 minutes; if expired, request a new one).
5. Set a password (8-22 characters, including at least one lowercase letter and one number).
6. Agree to the Terms of Service and Privacy Policy.
7. Tap **Complete Registration** to log in.

19:59

<

Register

Hello from SveaMow!

Enter Email

Enter Verification Code Send

Enter Password

Finish registration and log in

☐ I understand [User Agreement](#) And [Privacy Policy](#)

5.3.2 Logging In

You can log in using:

- **Username (email) + password**, or
- **Username (email) + verification code**

After agreeing to the Terms of Service and Privacy Policy, tap **Log In** to access the main interface.

To change the app language, tap the language switch in the top right corner of the login screen.

19:59



Log in

Enter Password

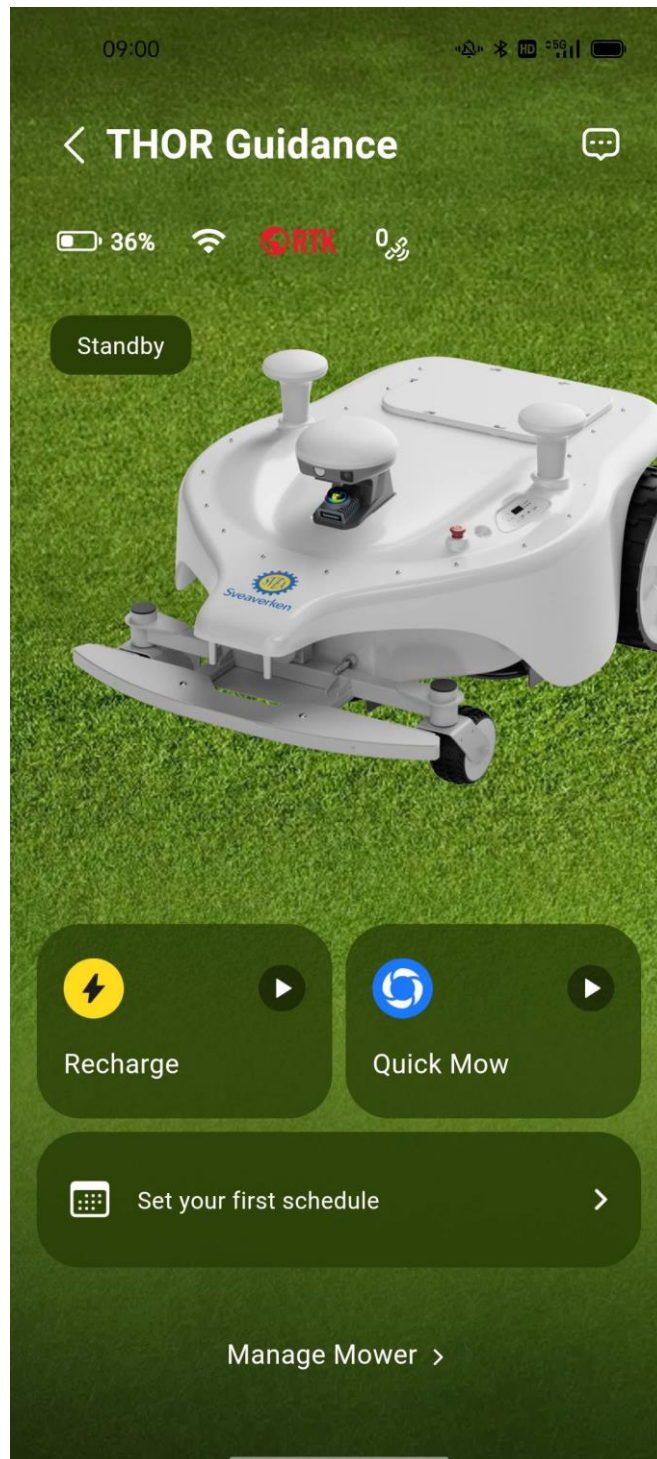
[Forgot Password](#)

Log in

Log in with verification code

☐ I understand [User Agreement](#) and [Privacy Policy](#)

5.4 Manage Mower



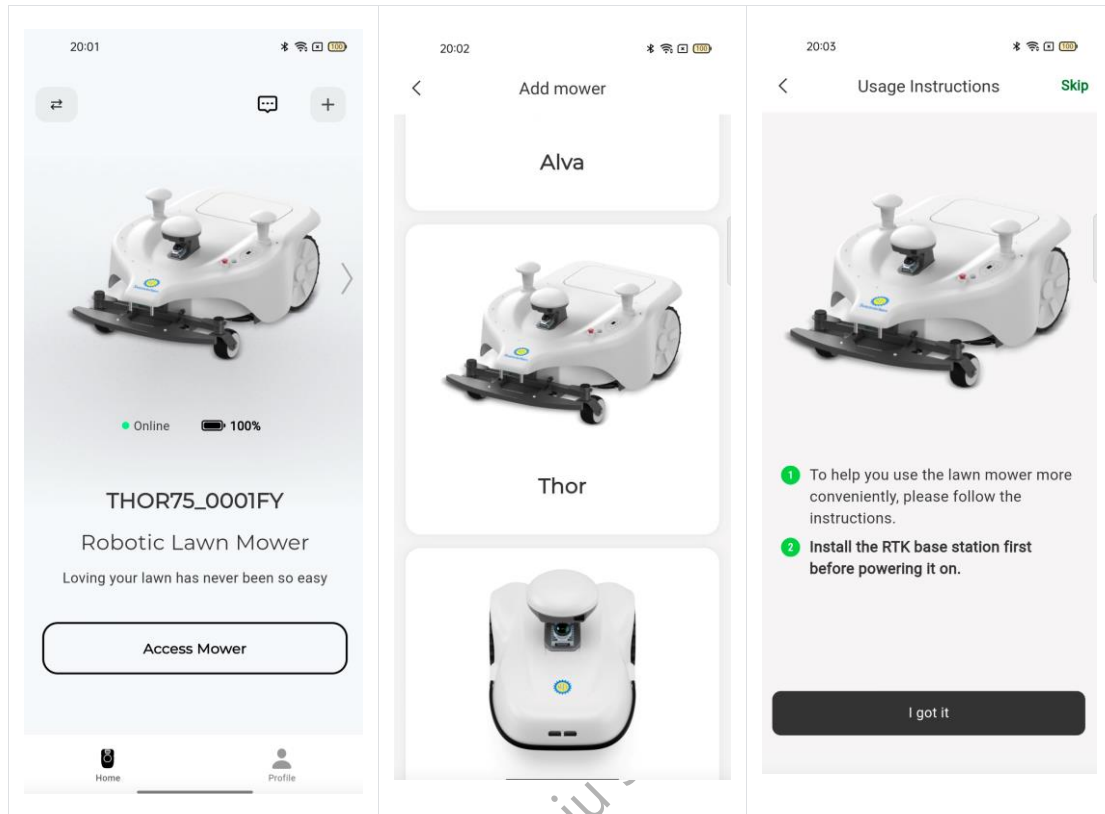
5.5 Adding a Mower

Note:

Ensure Bluetooth is enabled on your phone and that the mower is within 3 meters.

1. Tap **+ Add Device**.

2. Select **Thor**.
3. Follow the setup instructions.



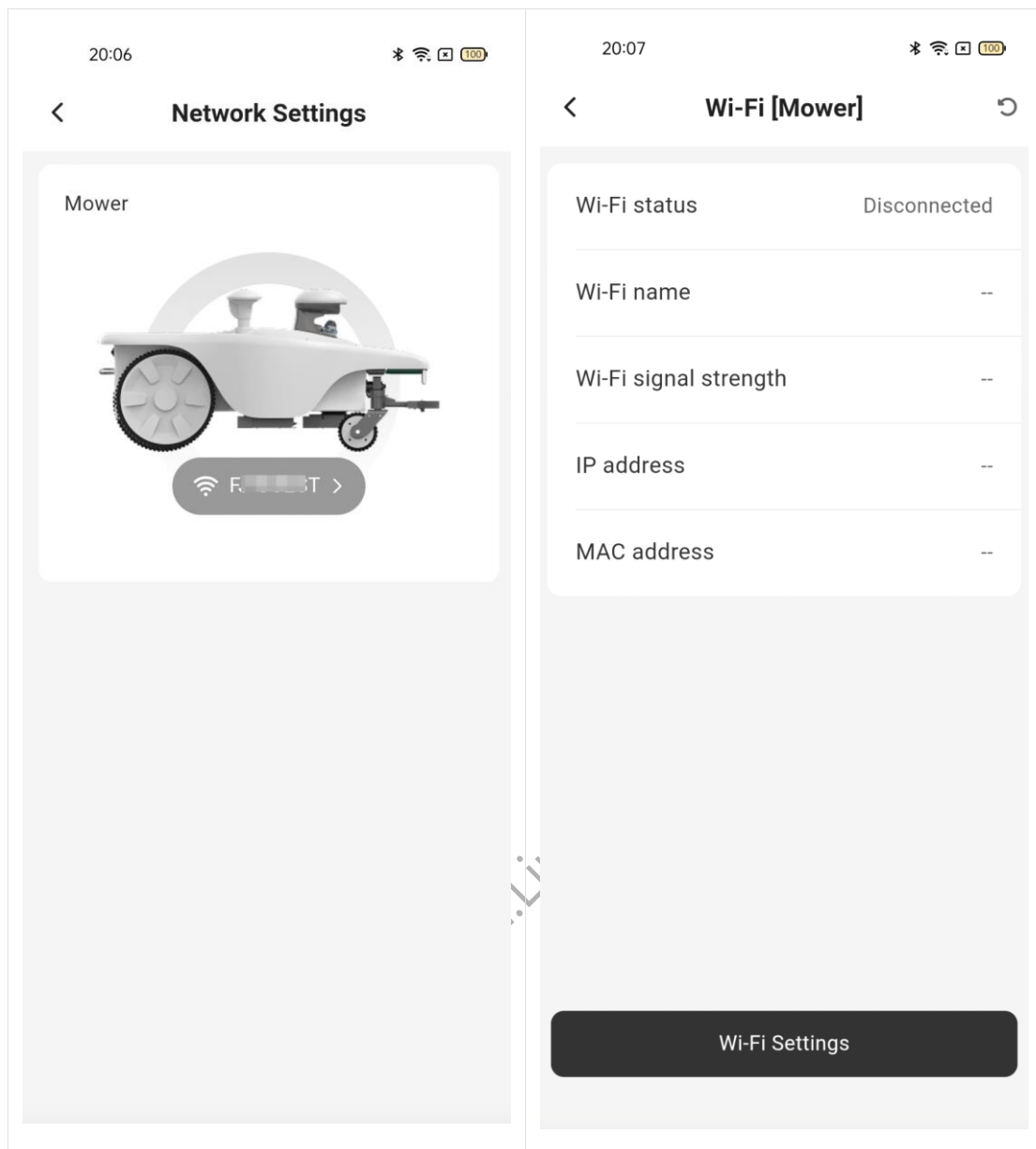
5.5.1 Connecting the Mower to Wi-Fi

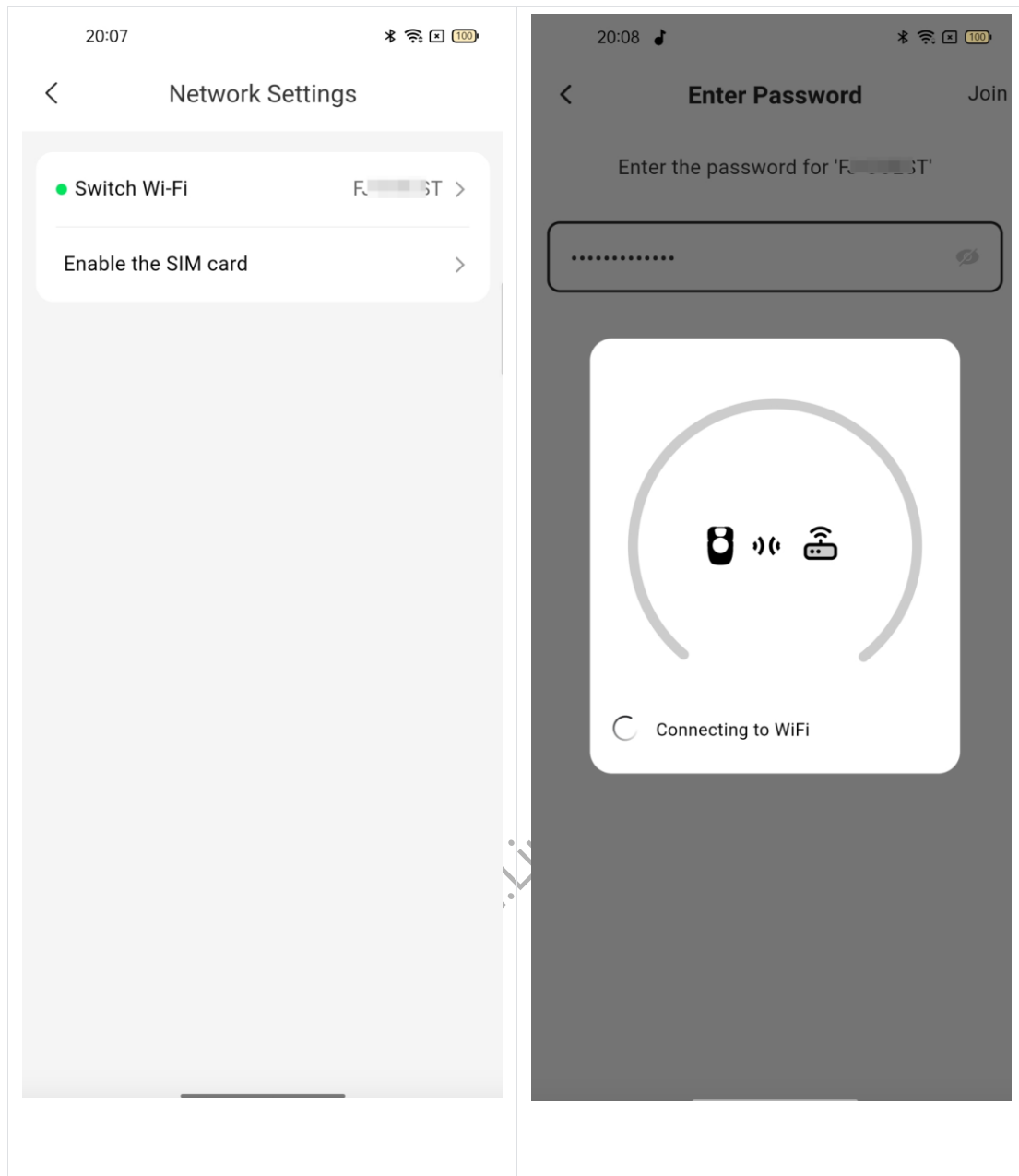
Important:

- The SveaMow robotic lawn mower only supports 2.4GHz Wi - Fi networks.。
- **For iOS devices, the mower must connect to the same Wi-Fi network as your phone. Ensure your phone is connected to the desired WiFi before pairing.**

When adding a mower for the first time, the app will guide you through Bluetooth pairing, followed by WiFi setup:

1. Enter or select the WiFi name.
2. Enter the WiFi password.
3. Tap **Finish**.



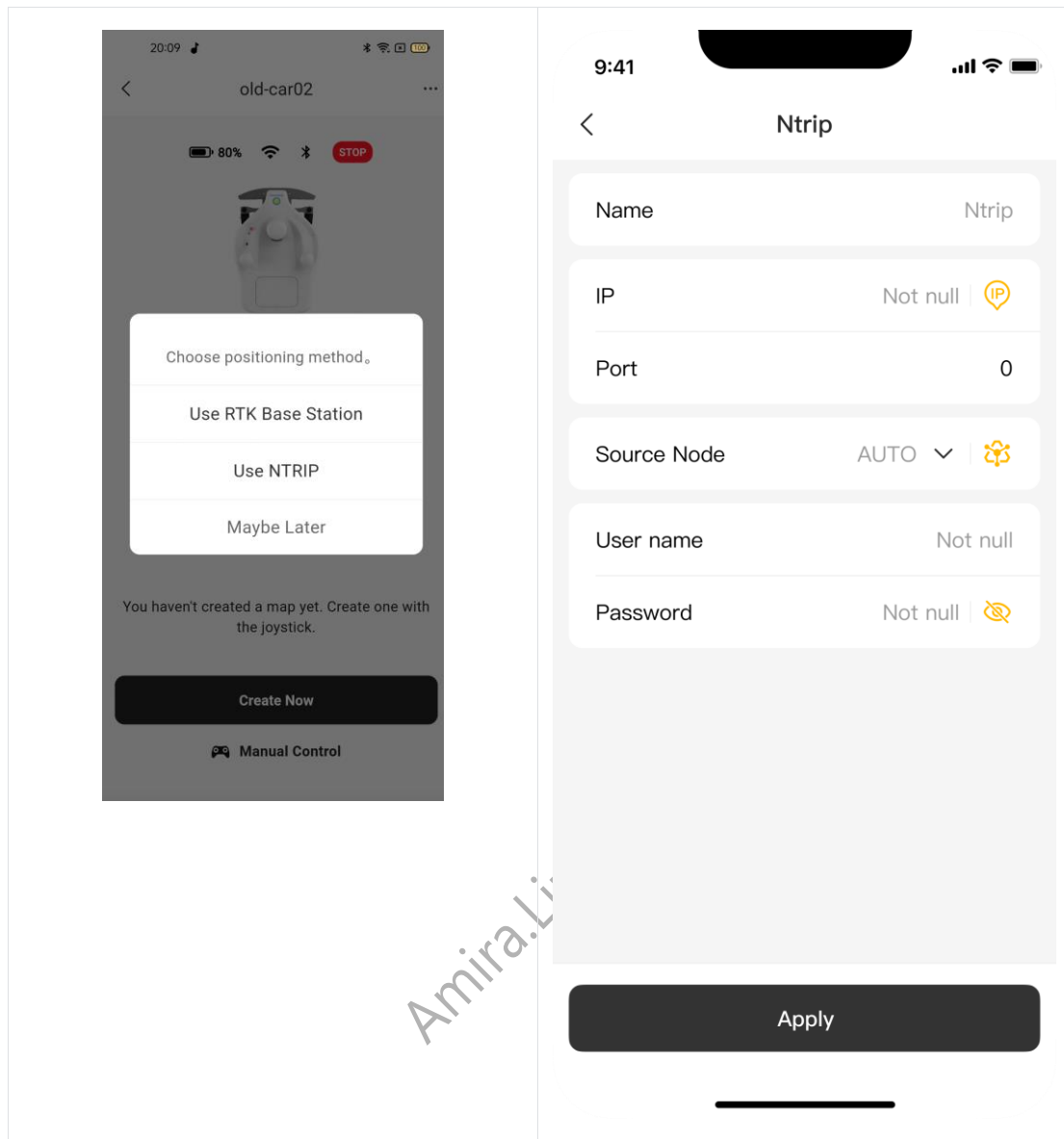


5.5.2 Setting Up RTK

Thor supports both NTRIP/network RTK and local RTK base stations.

5.5.2.1 Setting Up NTRIP

1. Select **NTRIP** as the RTK option.
2. Review the setup instructions.
3. Enter the required NTRIP account details.
4. Wait for the setup to complete.



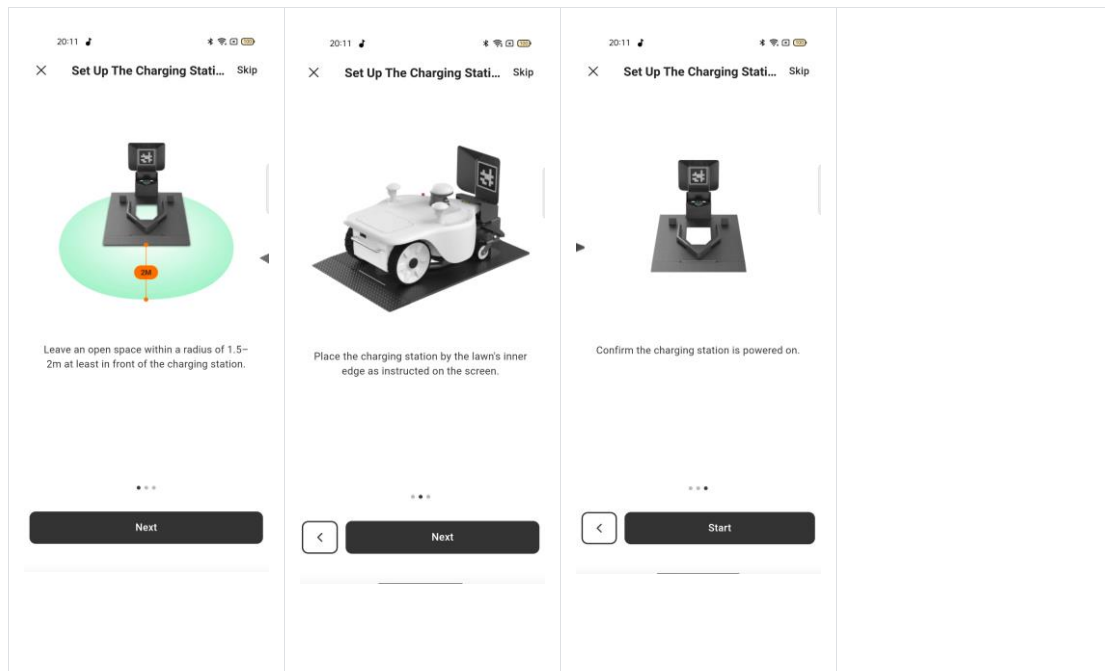
5.5.3 Setting Up the Charging Station

Before proceeding, ensure:

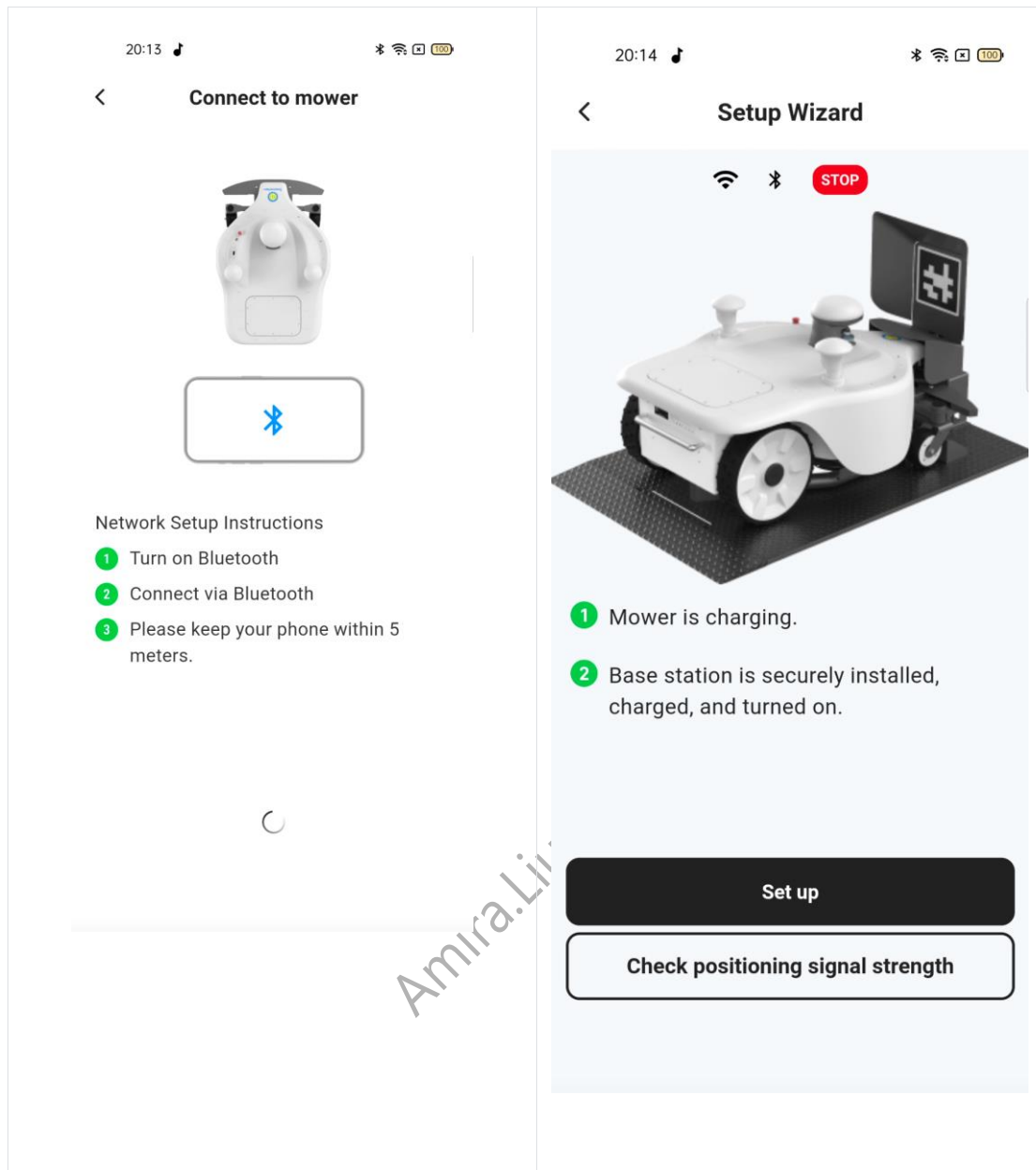
- The RTK base station is installed, powered on, and configured.
- Your phone is connected to the mower via Bluetooth.
- The mower is docked at the charging station.

Steps:

1. Select the charging station location.
2. Confirm readiness and tap **Start Setup**.
3. Wait for the setup to complete.



Amira.Liu 3959



5.6 Map Management

5.6.1 Mapping

Things to Know Before Mapping

Before mapping your lawn, ensure your work area is properly prepared:

1. Clear the Lawn
 - Remove all debris including toys, wires, and stones
 - Ensure no children or pets are present in the work area
 - Remove any other obstacles that could interfere with operation
 - Fill any muddy spots or holes in the lawn, or use anti-slip mats to improve

traction and prevent the mower from getting stuck.

2. Safety Clearances

- During mapping, please draw the boundary along the edge of the lawn. maintain a minimum clearance of 15 cm (6 inches) between the mower and any:
 - Walls
 - Fences
 - Ditches
 - Other fixed obstacles

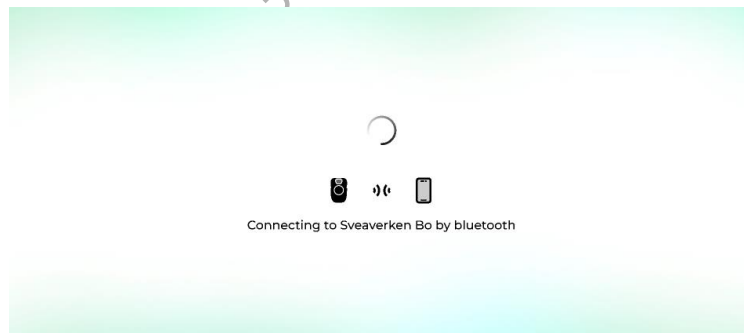
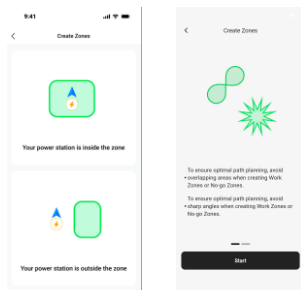
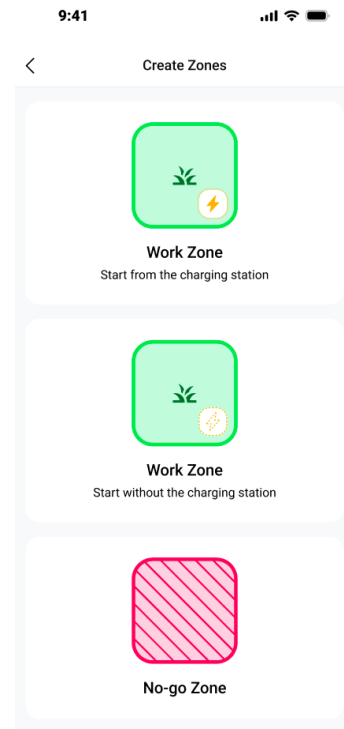
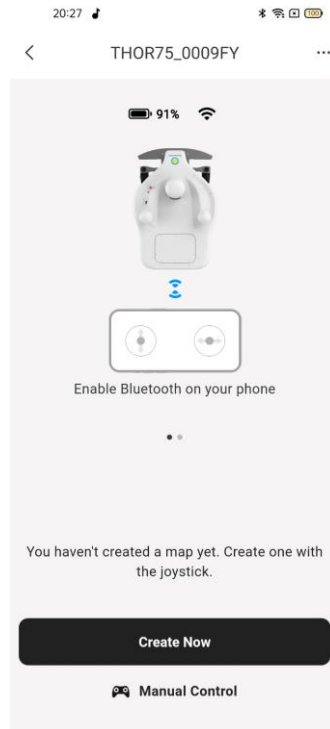
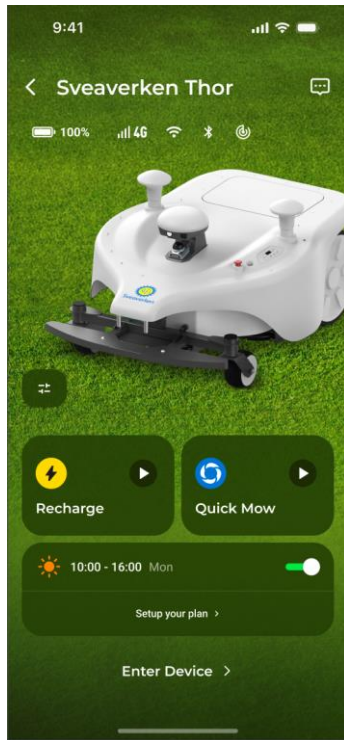
3. Operation Guidelines

- Verify all mower components are in working order, ensure all blades, bolts, and mower components are secure, not worn or damaged.
- Confirm the LiDAR sensor is clear of any dirt or debris.
- During mapping, remain within 3 meters (10 feet) of the mower to:
 - Maintain Bluetooth connectivity
 - Monitor operation
 - Respond quickly to any issues
- If needed, tap the *Eraser* button. The mower will retrace its path to remove the drawn boundary of the work area.

4. Check for firmware and software updates

Go to Manage Mower → 3 dots on the top right corner → Mower Information → Firmware Version and run the latest update before mapping.

☐ NOTE: Always inspect the mower and work area before each use to ensure safe operation.



5.6.1.0 Setting Up the Charging Station and Work Zone

Note:

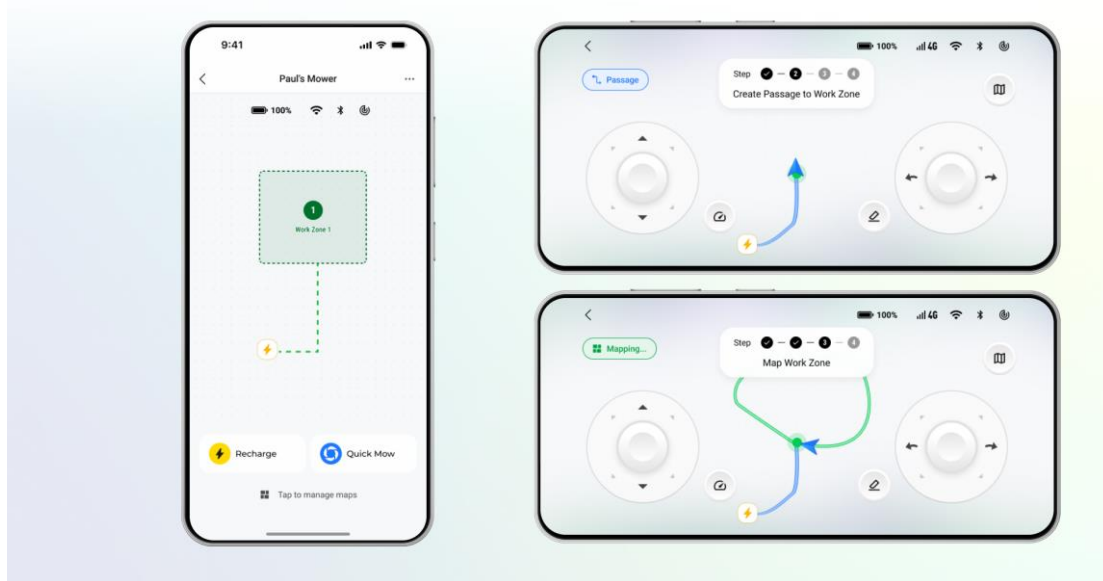
- If the charging station is placed **outside** the intended work zone, refer to the **External Charging Station Setup** section.
- If the charging station is placed **within** the intended work zone, refer to the **Internal Charging Station Setup** section.
- If the charging station location has not been marked yet, it will be recorded during the initial work area setup.
- Before mapping, the mower should have a fixed GNSS solution as indicated

by an app icon, the emergency stop button should be disengaged, and the battery level should be above 50%.

Tap to manage maps and then tap the **{+} button** to proceed.

5.6.1.1 Passage

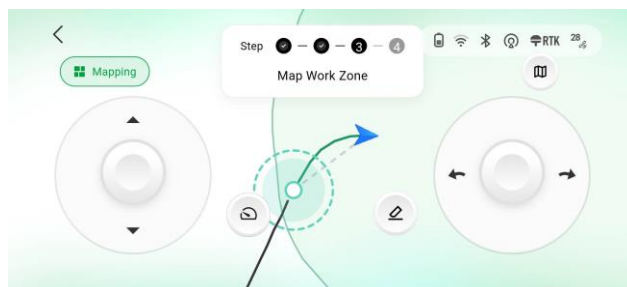
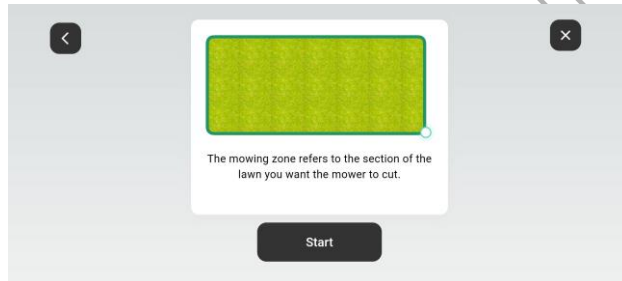
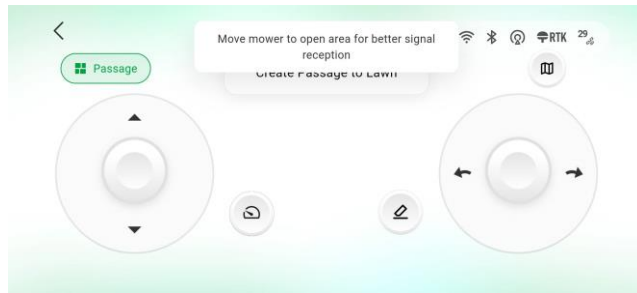
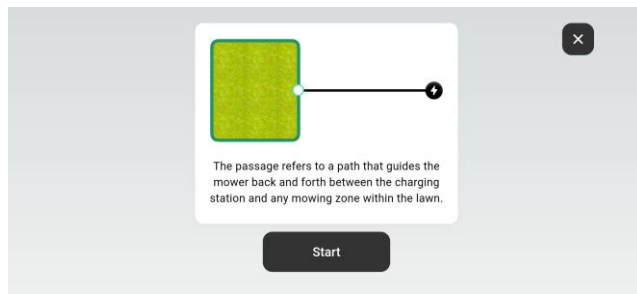
If the charging station is **outside** the intended work zone, a passage will be created to help the mower recognize its way from the charging station to the work zone.

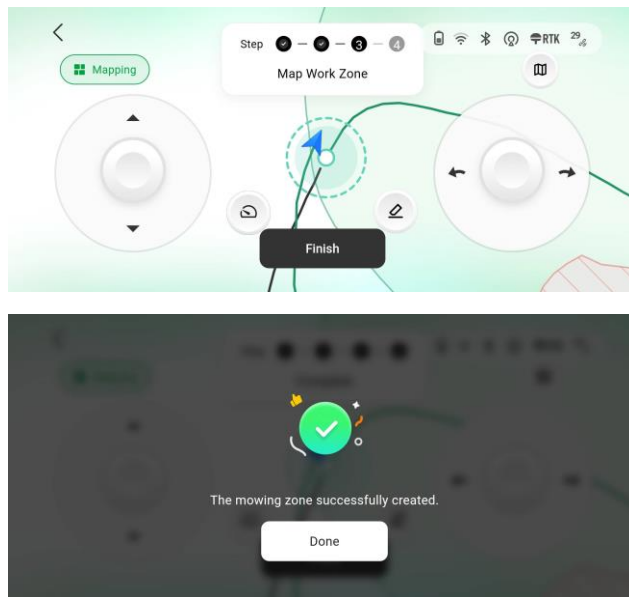


*This process creates a virtual passage that helps the mower understand where it needs to return to for charging. The mower needs to face the charging station while it's backing out to be able to return to the station accurately.

5.6.1.2 Create a Passage + Work Zone

1. Choose where your Charging Station is set up in relation to the Work Zone.
2. Drive the mower out of the Charging Station
3. Create a passage from the charging station to the starting point of the Work Zone
4. Drive the mower along the edge of the Work Zone
5. Make sure Bluetooth is on and the phone is within **3 meters / 10 ft** of the robotic lawn mower during the mapping process
6. Tap Complete and name the Work Zone





5.6.1.3 Create a Work Zone without a Passage

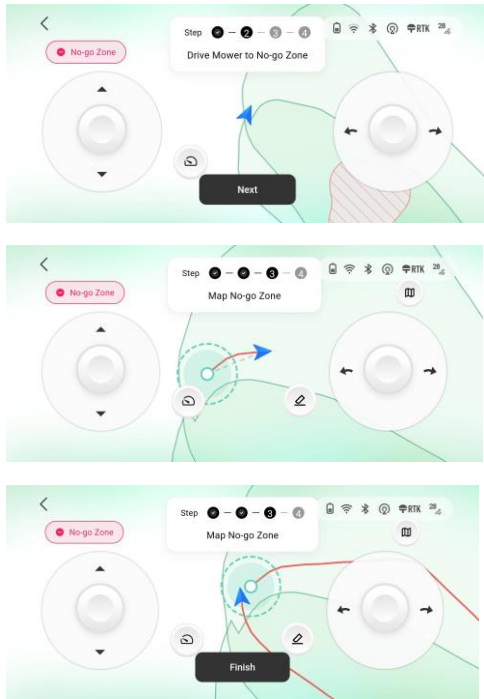
1. Choose where your Charging Station is set up in relation to the Work Zone.
2. Drive the mower out of the Charging Station
3. Drive the mower along the edge of the Work Zone
4. Tap Complete and name the Work Zone

5.6.1.4 Create a No-go Zone

For best mowing results, mark large permanent obstacles (trampolines, flower beds, swings) as No-go Zones. While the mower will avoid obstacles automatically, marking them improves path planning and edge coverage.

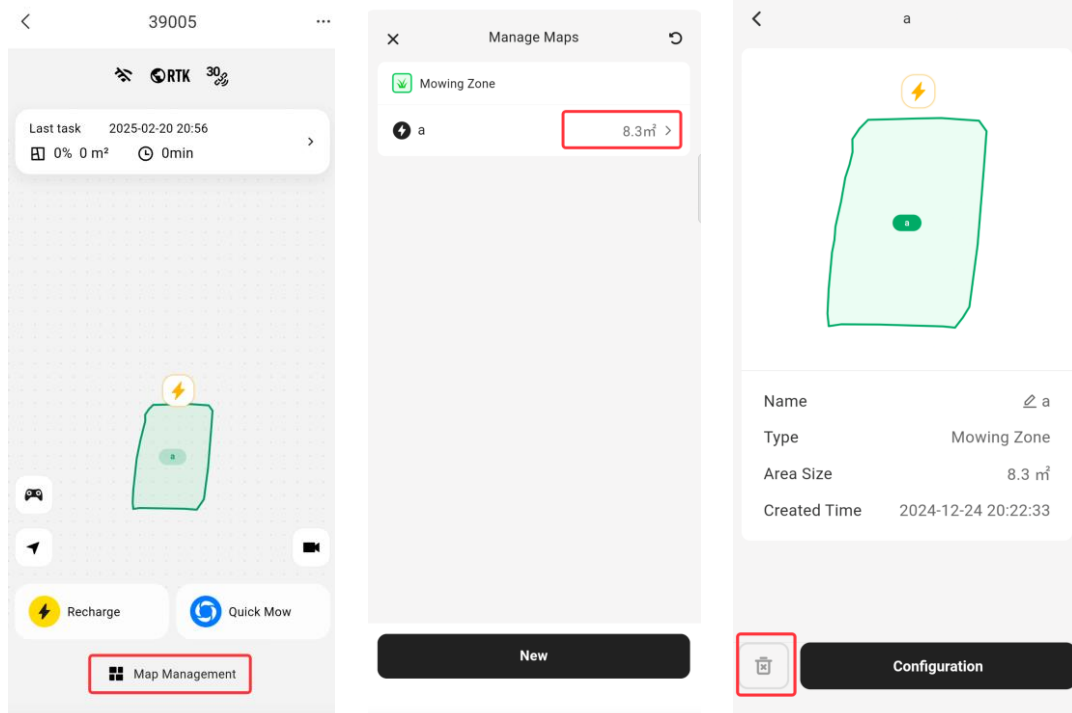
1. Select No-go Zone
2. Drive the mower out of the Charging Station
3. Drive the mower toward the No-go Zone, tap Start
4. Drive the mower around the zone where you don't want mowed.
5. Tap Complete and name the No-go Zone





5.6.2 Delete Map

- To delete a map: In the Manage Maps page, tap on the work zone, no-go zone, or charging station you wish to delete, then tap delete and confirm.
- Warning: Deleting the charging station will clear all saved maps of the current mower.



5.6.3 Do not move the RTK base station after creating zones

Moving the RTK base station after map creation will cause misalignment between the mapped and operational areas.

If relocation is necessary:

1. Delete the existing Charging Station point
2. Remap all zones

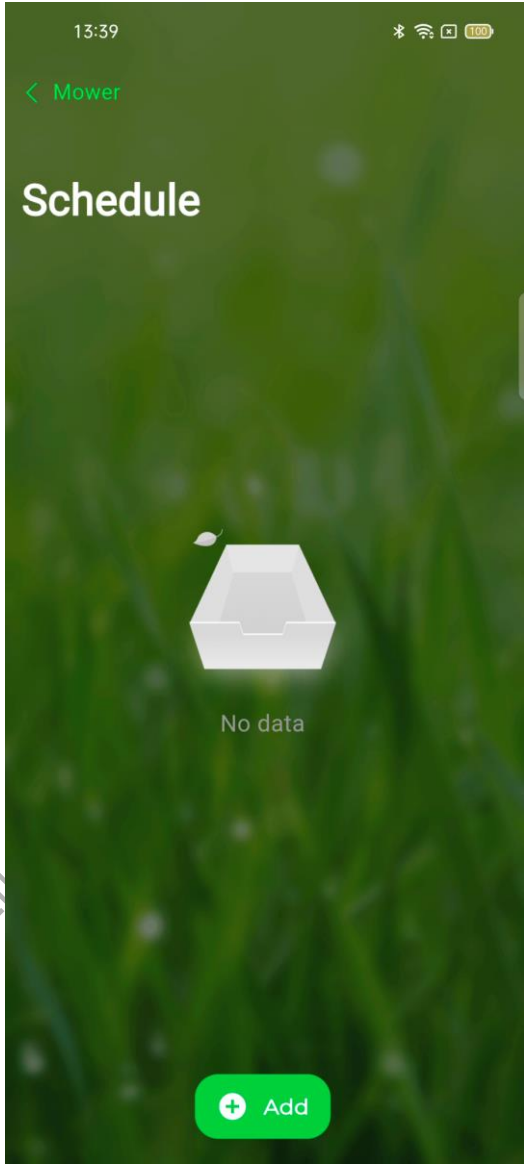
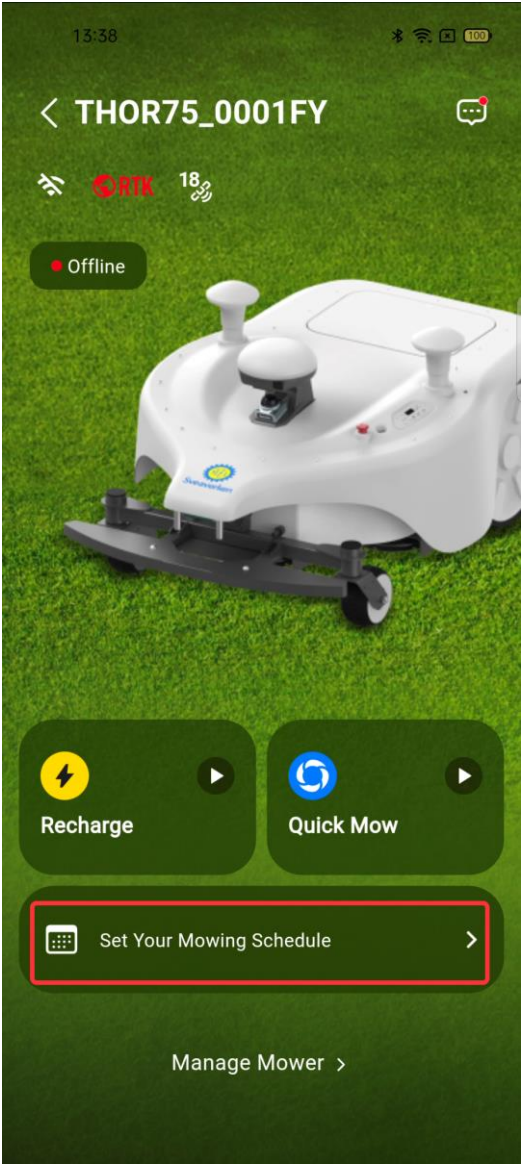
5.7 Schedule Mowing Tasks

Note:

Task scheduling is only possible after map creation is complete

Modifications to scheduled tasks during operation will not affect tasks already in progress

1. Tap **Set a mowing schedule**
2. Tap **Add**
3. Choose if you want the schedule to apply to all zones or select zones
4. Set the start time, repeats, and mowing parameters
5. Tap **Save**



9:41

✕ Edit Schedule

Start time

14:00

>

Repeat

Sun, Fri

>

Select zones

Clear

☐ Backyard

>

☐ Forecourt_1

>

☐ Forecourt_2

>

Cancel

Save

9:41

Repeat

Sunday

✓

Monday

Tuesday

Wednesday

✓

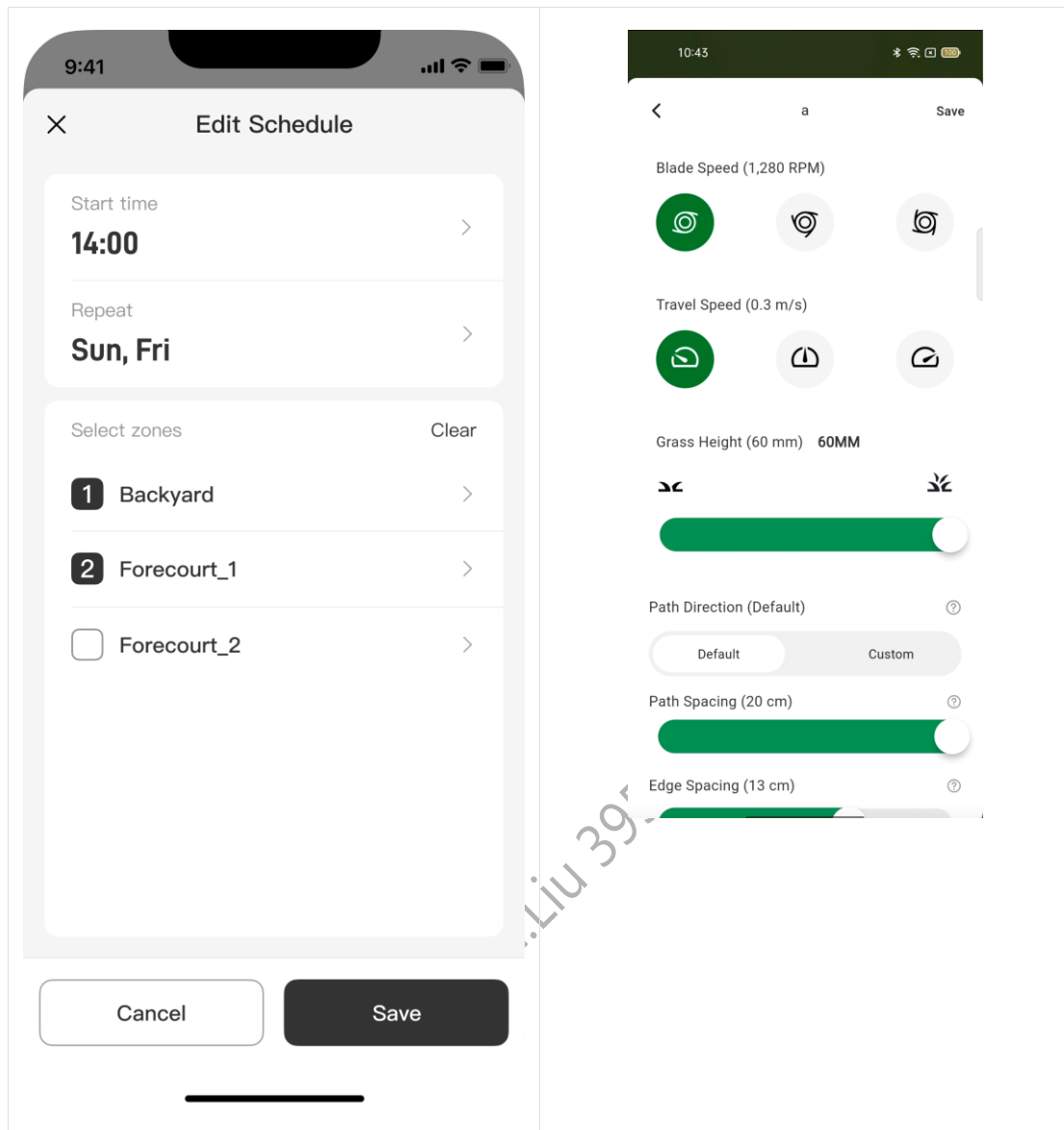
Thursday

Friday

Saturday

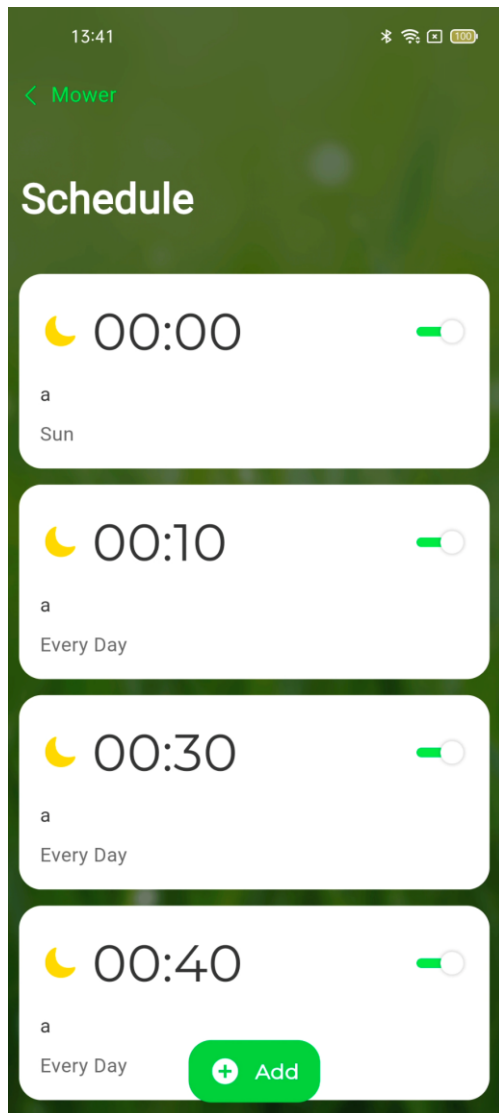
Cancel

Save



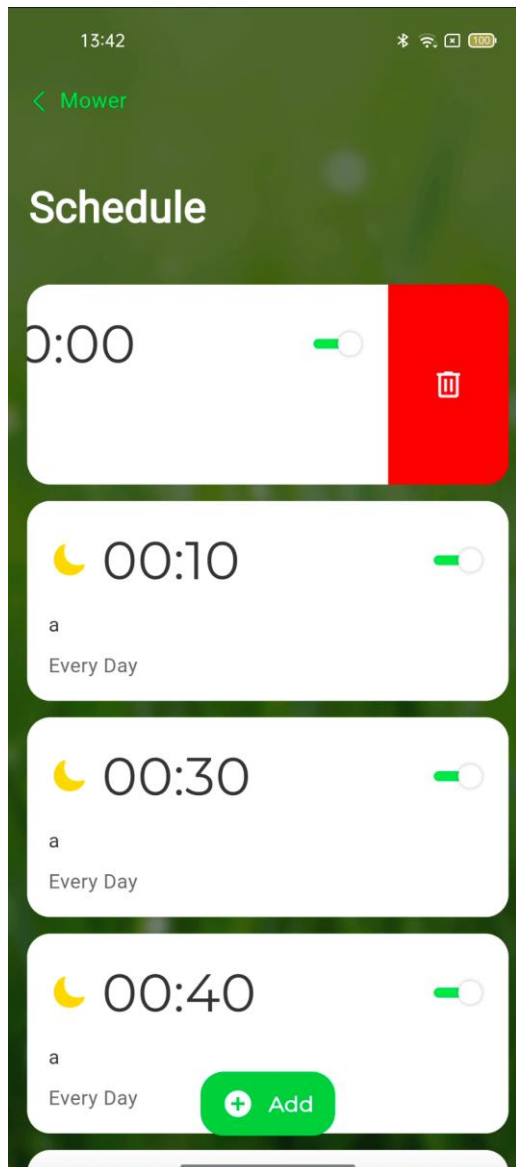
5.7.2 Modify scheduled tasks

1. Tap the scheduled task on the homepage
2. Tap the scheduled task item you want to modify
3. Edit the start time, repetition frequency, work zone, mowing configurations, and task intervals
4. Tap the {OK button} to save the scheduled task



5.7.3 Delete scheduled tasks

1. Tap Schedule on the homepage
2. Slide left to delete schedule
3. Confirm the deletion



5.8 Manual Remote Control Function

For your safety:

- Users must be 18 years or older.
- Always supervise children, pets, and valuable items to prevent accidents.
- Use the manual remote control with caution to avoid injury.
- Activating the manual remote control will interrupt any ongoing mowing task.

5.8.1 Before using the manual remote control function:

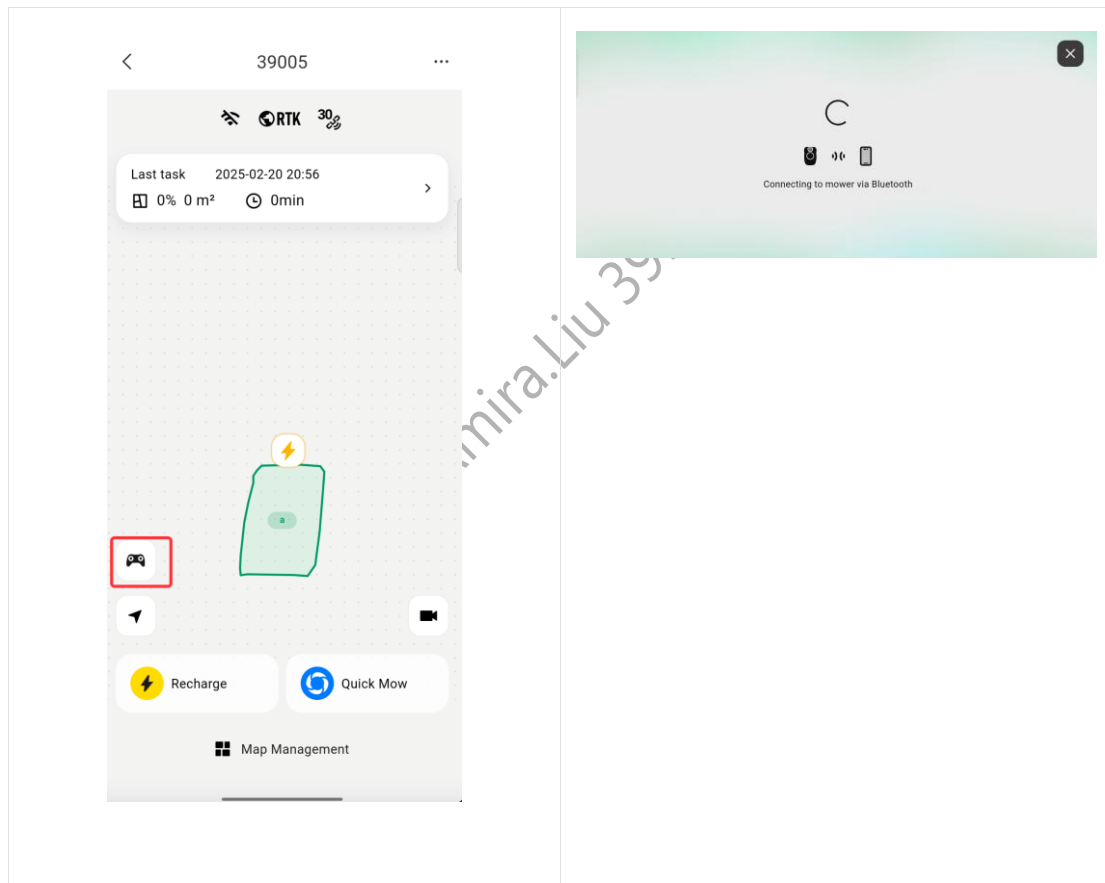
1. Ensure your phone's Bluetooth is turned on and that the phone is within **3 meters / 10 ft** of the robotic lawn mower.
2. Make sure the robotic lawn mower is powered on and the emergency stop switch

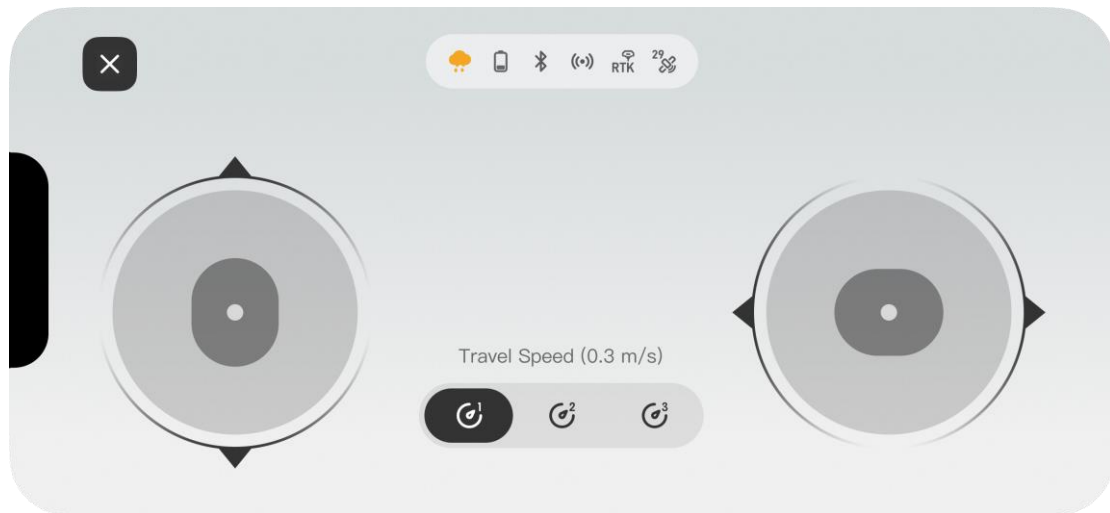
is disengaged.

5.8.2 To use the manual remote control function:

1. Open the app and tap the **remote control icon**.
2. The app will activate Bluetooth and connect to the robotic lawn mower. Once connected, you will enter the remote control page.
3. Use the virtual joystick to control the robotic lawn mower forward, backward, left, and right.
4. Tap the Speed Button to adjust the driving speed in manual remote control mode.

Note: Adjusting the speed in this mode **will not** affect the driving speed of the robotic lawn mower during automatic mowing.





5.8.3 Exiting Manual Remote Control

Tap the {X button} in the top left corner to exit the manual remote control mode.

5.9 Mowing tasks

- Ensure the mower is docked at the charging station and has sufficient battery.
- In case of any unexpected incidents during mowing, press the emergency stop button on the mower. The mower will immediately respond, pause the task, and shut off the blades.
- It is not recommended to mow the same area more than once per day, as this may damage the lawn.
- The mower supports a cutting height range of **20 mm to 100 mm**. It is recommended to set the cutting height to **two-thirds of the current grass height**.
- Avoid mowing the same area more than once per day, as this may damage the lawn.
- The mower supports a cutting height range of 20 mm–100 mm. For best results, set the cutting height to no less than two-thirds of the current grass height. If the grass exceeds 60 mm (2 inches), set the minimum cutting height to at least 40 mm (1.6 inches).

5.9.1 Quick Mow

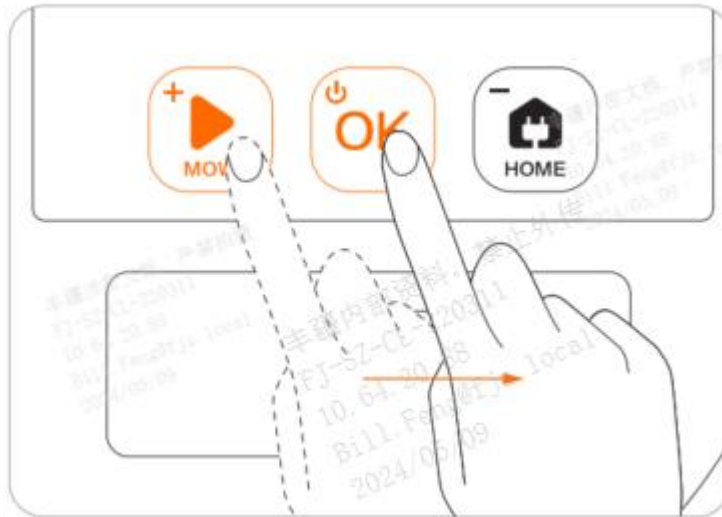
Via control panel

Note:

Starting a Quick Mow task using the control panel will initiate mowing for all mapped areas in the order they were created.

1. Enter the PIN code to unlock the control panel functions.

2. Tap the **[Mower]** button, then tap **[OK]**.
3. The mower will emit a "beep-beep" sound to confirm the command is received.
4. The mower will begin the mowing task.



Via SveaMow

Note:

Quick Mow tasks will send the mower to automatically mow all mapped areas in the order they were created.

You can start a Quick Mow task in two ways:

Method 1:

1. Long-tap **Quick Mow** on the homepage for 5 seconds
2. The mower will work on the last selected Work Zone

Method 2:

1. Tap on **Manage Mower** to choose a Work Zone
2. Long-tap **Quick Mow** for 5 seconds to start

5.9.2 Pause and end task

1. To pause a task, tap the pause button
2. Long-press the stop button to end
3. Tap **Recharge** to return the mower to the charging station
4. Pause or stop the recharge process with the pause and stop button



5.9.3 Resume task

- Using the {Blade Button} and {OK Button} on the mower's control panel



- Tapping the Continue button in SveaMow

5.9.4 NOTES:

If battery drops below 20% during mowing, the mower will:

1. Automatically stop mowing
2. Return to charging station
3. Resume mowing at the previous break point when battery reaches 80% (default setting)

5.10 Return to Charge

5.10.1 Auto-return to charge

Mower automatically returns to the charging station after:

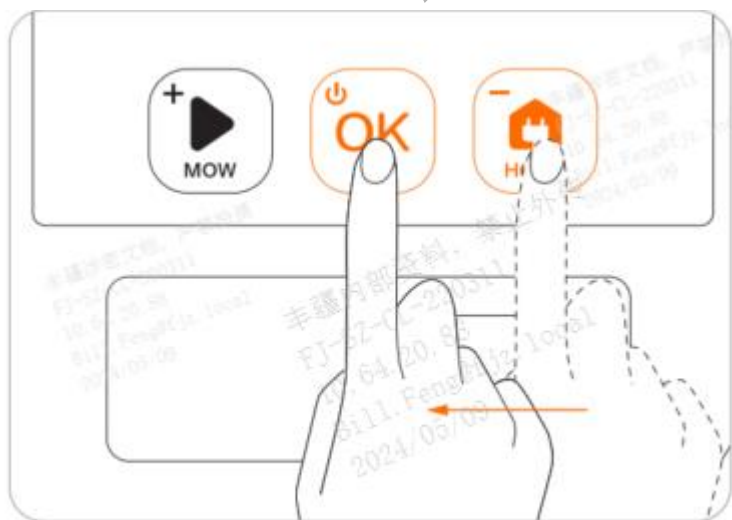
- Completing a mowing task
- Mower under the command to resume mowing later

Mower must be within mapped work zones and outside restricted zones

5.10.2 Manual Return

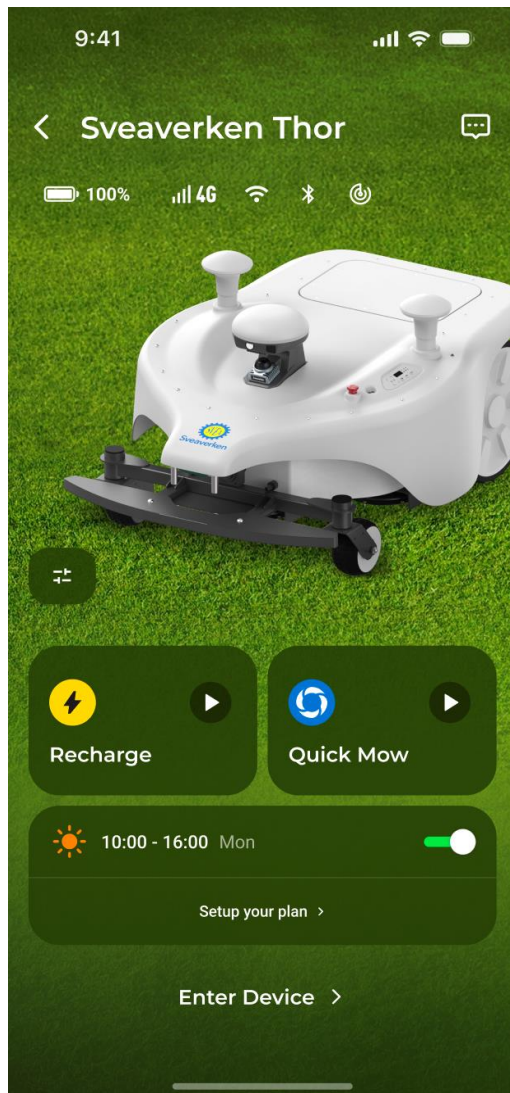
Via Control Panel

1. Unlock by entering the PIN
2. Press {Battery Button}, then {OK Button}
3. "Beep" confirms command receipt
4. Mower returns to charging station



Via SveaMow

1. Tap {Return to Charge} on homepage
2. Confirm action
3. Mower returns to charging station



5.11 Resume Mowing:

- If battery drops below 20%, mower auto-stops and returns to charge
- At 80% charge (default), mower returns to previous breakpoint and resumes mowing
- During recharge, status shows "waiting to resume"

App Controls:

- {STOP button}: Terminates resumption, preventing task recovery
- {START button}: Immediately restart mowing, even before full charge

Toggle Resume Mowing on/off (default: on)

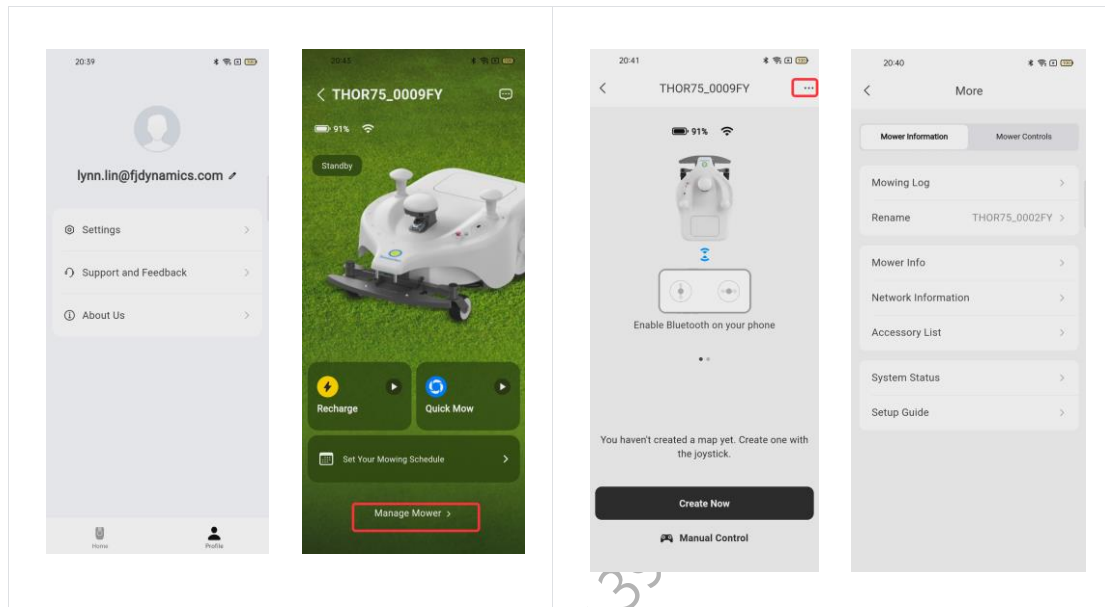
Set battery percentage for resuming work (default: 80%)

5.12 Message Center

Mower notifications and error messages appear here. Tap for detailed information.

5.13 Settings

Navigate to {My - Settings} to access the settings page.



5.13.1 Mower Name

View or edit the name of the mower.

5.13.2 Mower Information

Check details such as device type, serial number, and firmware version.

5.13.3 Accessory Maintenance

View information and details about the mower's accessories.

5.13.4 Network Information

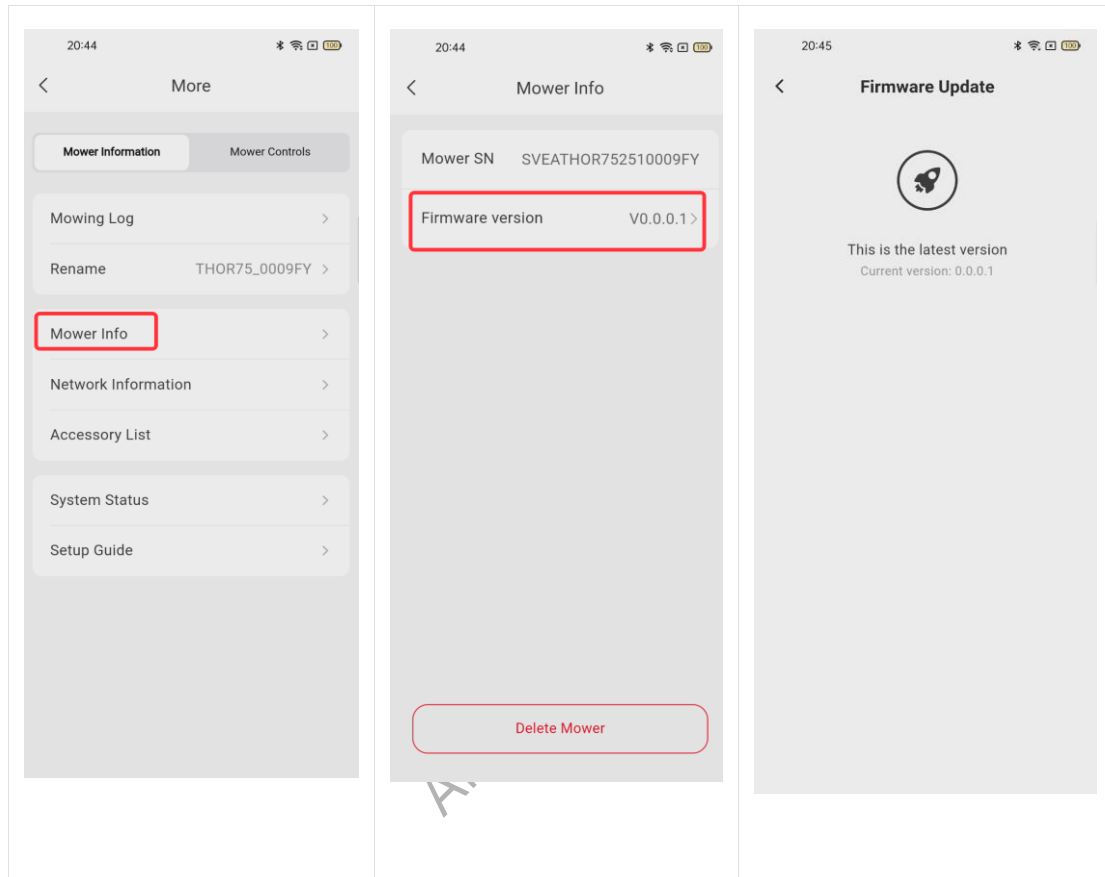
Check the mower's network connection status.

5.13.5 Firmware Update

- View the current firmware version and check for updates.
- If a new version is available, run it.
- It is recommended to always keep the firmware up to date.

Updating the Firmware:

1. Ensure the mower has sufficient battery and is not scheduled for a task in the next 30 minutes.
2. Confirm a stable WiFi connection.
3. Go to the firmware update section and tap **Update Now**.
4. Wait for the update to complete.



5.13.7 Mini RTK Receiver Mapping

5.13.7.1 Device Operation

As shown in the figure below, Long press the power button for 3s to turn on or off the device.

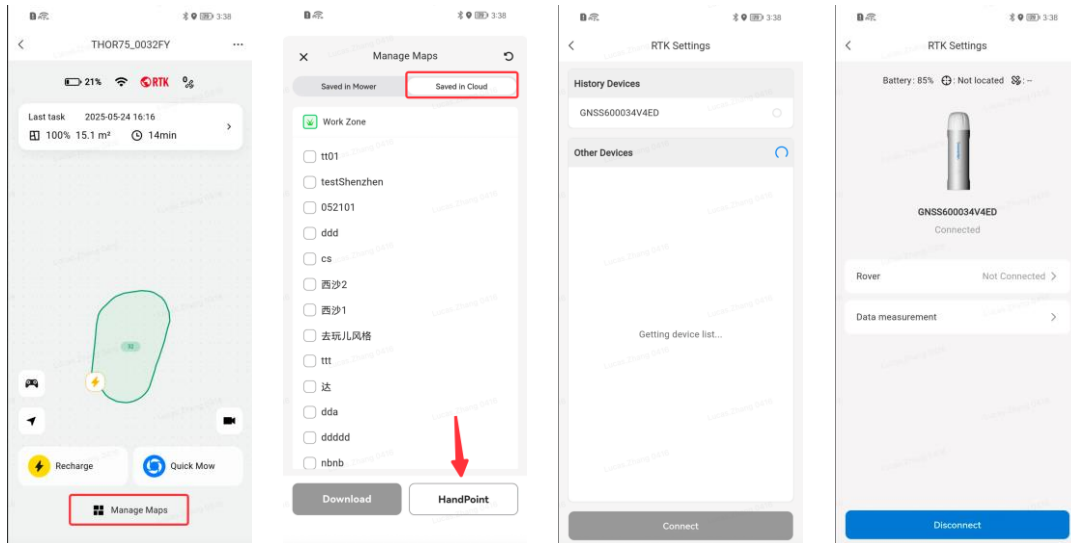
The satellite indicator flashes blue during operation, indicating that the device is not connected to the APP. After launching the app and connecting the device, a flashing red satellite indicator means the device has not yet achieved a fixed solution. Once you log into an NTRIP account or connects to a base station and obtains a fixed solution, the satellite indicator will turn solid green. The power indicator shows red while charging, when fully charged, the indicator turns blue.



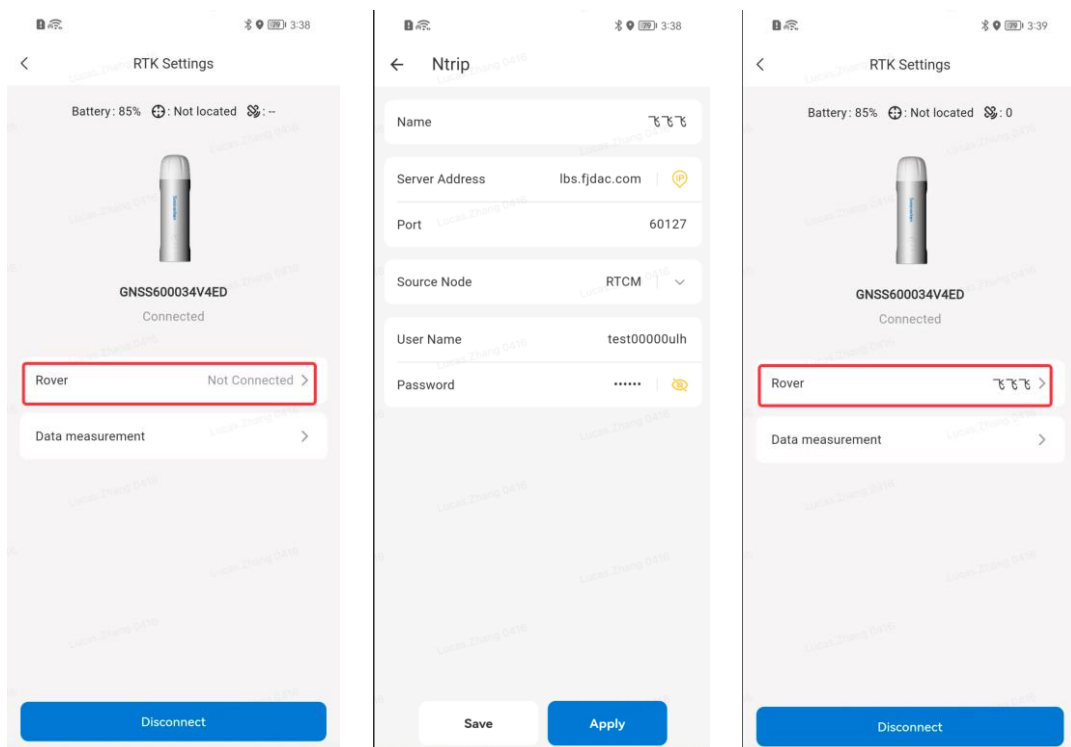
5.13.7.2 Mobile App Operation

In Ntrip mode, you can quickly create map information using a Mini RTK Receiver

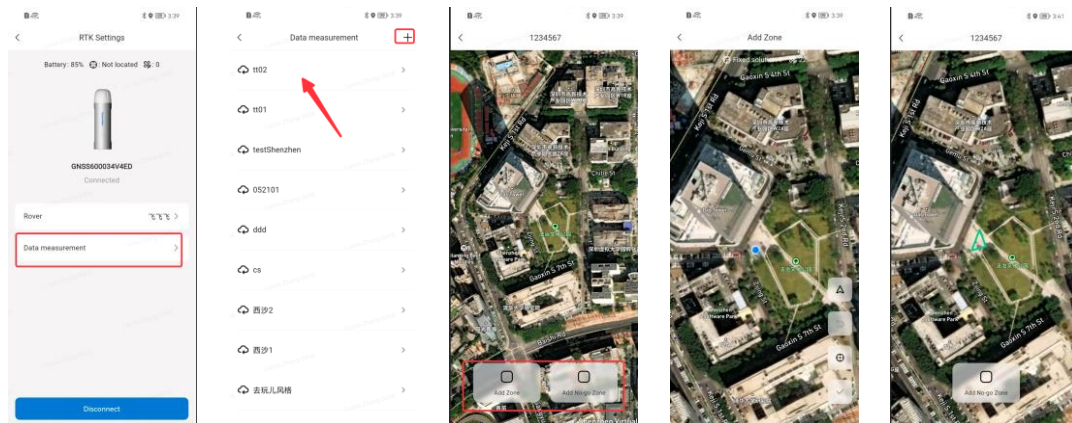
1. Establish a connection between the app and the Mini RTK Receiver



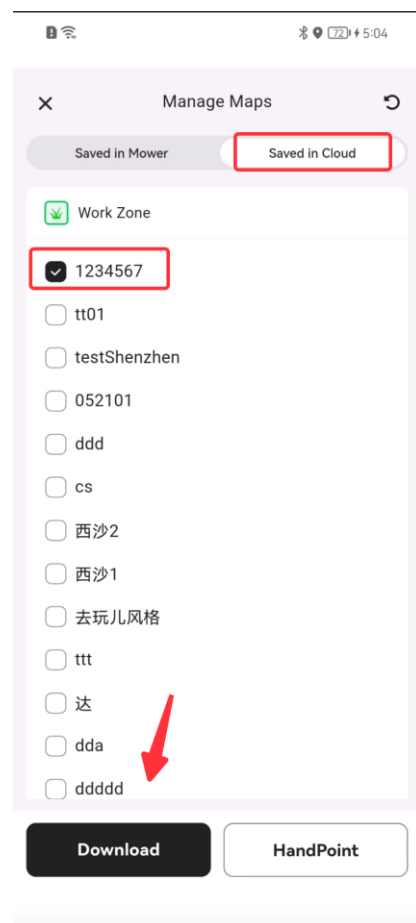
2. Configure Ntrip information for the docking device



3. Create a map using the Mini RTK Receiver



4. Synchronize map data to the vehicle computer



6. Care and Maintenance

6.1 Mowing Guidelines

- Choose flat ground for initial use
- Mow slowly and adapt technique to terrain size/shape

- Consider obstacles like trees, fences, and buildings

Recommendations:

- Optimal grass height for most scenarios: 50-80 mm (1.97-3.15 inches)
- Never cut more than 1/3 of plant height or 25 mm (0.98 inches)
- For tall grass:
 - Increase cutting height
 - Perform multiple passes
- Best time to mow: dry afternoons or evenings

6.2 Cleaning the cutting deck

For your safety, always wear heavy-duty gloves, long trousers, and work shoes when cleaning the cutter deck.

Be sure to follow the operating instructions and ensure the mower is completely powered off before cleaning. This prevents accidental startup and potential injury.

Clean the mower's exterior thoroughly using a soft brush or cloth. Avoid using alcohol, gasoline, acetone, or any corrosive or volatile solvents, as they may damage the product.

These substances can damage the mower's finish and internal components.

Chassis and Blade Disc

If the chassis and blade disc become dirty, clean them with a brush or hose. Do *not* use a pressure washer, as high-pressure water can penetrate the seals and damage electronic and mechanical components. Ensure the blade disc rotates freely and the blades can swing without obstruction.

Blade Mudguards

Periodically inspect the blade mudguards. If mud, grass clippings, or other debris accumulates on them, remove it with a dry brush or scraper.

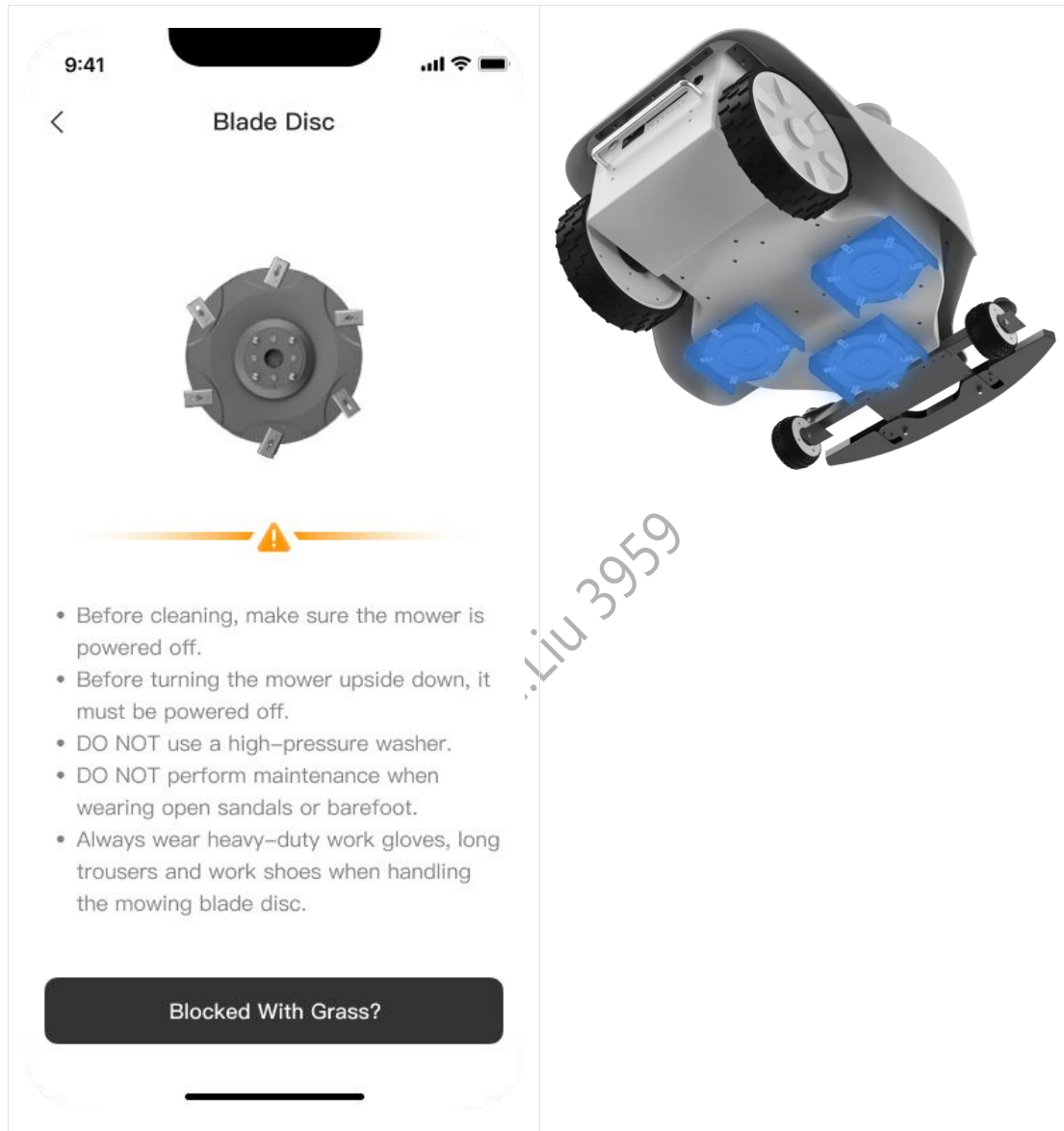
Clearing a Jammed Cutting Deck

If you suspect the cutter deck is jammed, use the deck lift function to inspect and clear it:

1. With the mower powered on and the mobile app open, navigate to Settings > Accessories > Cutting Deck and tap the "Jammed" button.
2. Once the Bluetooth connection is established, the cutter deck will extend to its maximum position.
3. After extension, power off the mower, lift the mower body, and check the cutter deck for obstructions.

4. Once cleared, lower the mower and power it on. The cutter deck will automatically return to its starting position.

Caution: Always wear heavy-duty gloves, long trousers, and work shoes when cleaning the cutter deck.



6.3 Installing and changing the cutting disc

7. Error

7.1 Error Messages

Message	Explanation	Suggested next steps
Couldn't start scheduled task.		
Scheduled mow has started.	Ready to mow!	
Mowing paused for a quick recharge.		
Position lost.	Drive the mower back to charge.	
I can't find my way back.		1. LiDAR signal issue, mower position unavailable. 2. Move the mower or drive it back to the Charging Station. 3. Ensure mower is charging properly. 4. Restart the mowing task.
All done! Going back to recharge.	Check out the new log entry!	1. LiDAR signal issue, mower position unavailable. 2. Move the mower or drive it back to the Charging Station. 3. Ensure mower is charging properly. 4. Restart the mowing task.
Firmware updated!	Mower is updated and ready to work!	
Help me get back to flat ground.	Mower lifted, return it to a flat place.	
I'm stuck!	Something's blocking the path. Blix can't keep going.	1. Front wheels are off the ground. 2. Mower stopped for safety. 3. Return mower to level ground manually or via app. 4. Flatten the lawn or keep the mower from this area to avoid issues. 5. If there is no actual fall risk, disable lift sensor in 'Mower Control.'
I'm stuck!	Something's blocking the path. Blix can't keep going.	1. Bumper sensor triggered by something that blocked the mower's path. 2. Resume task manually. 3. To prevent this, clear the mower's path during tasks.
Can't find where I'm going.	The Work Zone is deleted, check your maps and try again.	1. Obstacle blocking mower's path. 2. Return mower to Charging Station to restart task. 3. Ensure the Passage connecting the Charging Station and Work Zones is clear of obstructions.

		4. Do not block mower's movement directions during a task.
I'm lost!	Drive the mower back to the Charging Station and try again.	
I'm having trouble with path planning.	Restart the task.	
I'm stuck!	Mower is in a No-go Zone. Drive the mower back to the Charging Station.	
I'm lost!	Drive the mower back to the Charging Station and try again.	
My map is broken, I can't start a task.	Delete the Work Zone and re-map.	
It's raining, I'm taking a break!	Rain detected, task paused.	
Mower not at Charging Station.	Blix needs to be at the Charging Station before starting a task.	1. Rain detected, task paused, returning to Charging Station. 2. When break time's over, mower will resume task automatically. 3. Mowing is paused during rain to protect your lawn. 4. Dry the rain sensor to resume task immediately. 5. Disable rain sensor in 'Mower Control' if needed.
Heads up! We can't find your mower nearby.	Blix might be taken! Take a look now.	
Battery low (10%)	Bring me back to recharge.	
Battery low (5%)	Bring me back to recharge.	
Stopped!	Release the stop button to continue working.	
I'm stuck!	Get me back to flat ground.	
I can't charge.	Check the mower and charging station and try again.	1. Mower is stuck and can't self-rescue. 2. Please assist mower back to the Charging Station. 3. For slopes, install anti-slip wheel spikes for better traction.
Something's wrong with the vision sensor.	Restart mower. Contact support if issue persists.	
Battery error.	Restart mower. Contact support if issue persists.	
Control panel error.	Restart mower. Contact support if issue persists.	1. Restart the mower. 2. Try starting the task again; if issues persist, contact

		support. 3. Provide error code: [EC9111].
Something's wrong with the Cutting disc.	Restart mower. Contact support if issue persists.	1. Restart the mower. 2. Try starting the task again; if issues persist, contact support. 3. Provide error code: [EC9112].
Cutting disc error.	Press the STOP button, wait a few seconds, then release and try again.	1. Restart the mower. 2. Try starting the task again; if issues persist, contact support. 3. Provide error code: [EC9113].
Mower can't communicate with the left drive wheel.	Restart mower. Contact support if issue persists.	1. Press the 'Emergency Stop' button. 2. Release 'Emergency Stop' after 5s and check if mower resumes. 3. If issues persist, try restarting the mower. 4. Retry mowing; if issues persist, contact support. 5. Provide error code: [EC9114].
Left drive wheel error.	Press the STOP button, wait a few seconds, then release and try again.	1. Restart the mower. 2. Try starting the task again; if issues persist, contact support. 3. Provide error code: [EC9115].
Mower can't communicate with the right drive wheel.	Restart mower. Contact support if issue persists.	1. Press the 'Emergency Stop' button. 2. Release 'Emergency Stop' after 5s and check if mower resumes. 3. If issues persist, try restarting the mower. 4. Retry mowing; if issues persist, contact support. 5. Provide error code: [EC9116].
Right drive wheel error.	Press the STOP button, wait a few seconds, then release and try again.	1. Restart the mower. 2. Try starting the task again; if issues persist, contact support. 3. Provide error code: [EC9117].
Mower taking longer than expected to communicate with the VCU.	Give Blix 5 minutes. Restart if issue persists.	1. Press the 'Emergency Stop' button. 2. Release 'Emergency Stop' after 5s and check if mower

		resumes. 3. If issues persist, try restarting the mower. 4. Retry mowing; if issues persist, contact support. 5. Provide error code: [EC9118].
Mower taking longer than expected to communicate with the IMU.	Give Blix 5 minutes. Restart if issue persists.	1. If not resumed in 5 min, restart the mower. 2. Retry mowing; if issues persist, contact support. 3. Provide error code: [EC9119].
It's getting too hot here!	Blix will keep charging when it cools down. Keep the Charging Station away from direct sunlight.	1. If not resumed in 5 min, restart the mower. 2. Retry mowing; if issues persist, contact support. 3. Provide error code: [EC9120].
It's getting too hot here!	Beat the heat! Mow when it's cooler outside.	1. Mower too hot, charging disabled to protect batteries. 2. Keep the Charging Station away from direct sunlight. 3. Give the mower a few minutes to cool down. 4. Mow in cooler hours of the day to prevent heat stress on your grass.
Cutting disc is stuck	Press the STOP button and clean the cutting disc.	1. Mower too hot, charging disabled to protect batteries. 2. Keep the Charging Station away from direct sunlight. 3. Give the mower a few minutes to cool down. 4. Mow in cooler hours of the day to prevent heat stress on your grass.
Mower can't communicate with the LiDAR sensor.	Power off the mower, then restart and try again.	1. Power off the mower and clean the cutting deck. 2. Check for grass clogs on the cutting deck. 3. Clean regularly for optimal mowing results.
Something's wrong with the mower's Bluetooth connection.	Power off the mower, then restart and try again.	1. Remove mower from the Charging Station and restart it. 2. Push mower back to the Charging Station and retry mowing; if issues persist, contact support. 3. Provide error code: [EC9124].

Charging Station connection error	Power off the mower and charging station, then restart and try again.	1. Restart the mower. 2. Try starting the task again; if issues persist, contact support. 3. Provide error code: [EC9125].
		1. Restart the mower and the Charging Station. 2. Try starting the task again; if issues persist, contact support. 3. Provide error code: [EC9126].

In-app error illustrations:

Emergency Stop Button Pressed



Battery Error



Positioning Error



Bumper Triggered

59



Front Wheel Error



Drive Wheel Error



Cutting Deck Lifting Motor Error



Cutting Deck Motor Error

8. Warranty and Service

Warranty Coverage:

- Guarantees product free from material/workmanship defects under normal use
- Please refer to the latest documentation: user manual, quick start guide, maintenance info, specifications

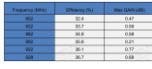
For End Users

- Two (2) year warranty on the robotic lawn mower and charging station
- One (1) year warranty on batteries
- The following components are not covered under warranty:
 - Front wheels
 - Back wheels
 - Cutting blades
 - Optional accessories

- Service and Repair Instructions
 - For routine maintenance, see Section 8 Maintenance and Care for more information.
 - Contact your Sveaverken authorized dealer for additional support.
- Sveaverken support can be reached at support@sveaverken.com

8.1 Antenna Information

Name	Model	Antenna Type	Antenna Gain	Center Frequency	Manufacturer	Address
4G Antenna	YF006BA	FPC On-Board Antenna	6 dBi	690 – 960 MHz ; 1710 – 2170 MHz ; 2300 – 2690 MHz	Quectel Wireless Solutions Co., Ltd.	Building 5, Shanghai Business Park Phase III (Area B), No.1016 Tianlin Road, Minhang District, Shanghai 200233, China
WIFI Antenna	2.4G and 5G/L=200mm/T he first generation	FPC On-Board Antenna	3dBi	2400---2500MHz/5150---5850MHz	Shenzhen Kexin Wireless Technology Co., Ltd	Building H, Hongyongli Industrial Zone, Shabeili, Baolong Street, Longgang District, Shenzhen

	of IPEX					
Bluetooth Antenna	2.4G WLAN Antenna	PCB On-Board Antenna	1.74dBi	2400-2500MHz	Shenzhen Aithinker Technology Co., Ltd	3-4/F, Building A, Dongfang Industrial Park, Nanlang Town, Zhongshan City, Guangdong Province, China
RTK Antenna	Full-range built-in antenna/SZY4N12A	Ceramic Antenna		GPS L1/L2/L5 BDS B1/B2/B3 GLO NAS S L1/L2 GALILEO E1/E2/E5a/E5b	SHENZHEN SKYCONNECT SATELLITE TECHNOLOGY CO., LTD	Unit 308, No. 2, Huamei Industrial Zone, Dongfang Community, Songgang Street, Bao'an District, Shenzhen, Guangdong Province
Radio Antenna	HYX0014-R219-(902-928MHz)-V3	FPC On-Board Antenna		902-928MHz	Shenzhen Heyixun Technology Co., LTD	Room 1903-1905, Building 2, Jiufang Square, Tiezi Road, Gongle Community, Xixiang Sub-district, Bao'an District, Shenzhen City, Guangdong Province, China

--	--	--	--	--	--	--

8.2 FCC Statement

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.

9.Working frequency

Model	Frequency
WIFI	2.4GHz-2.4835GHz
Blue tooth	2.402GHz-2.480GHz
4G	LTE-TDD: B1/B2/B3/B4/B5/B7/B8/B12/B13/B18/ B19/B20/B25/B26/B28 LTE-TDD: B38/B39/B40/B41 WCDMA: B1/B2/B4/B5/B6/B8/B19 GSM: B2/B3/B5/B8
Radio	902-928Mhz
Adapt	50/60Hz

10.Warning

1. For the cleaning or maintenance of the blade, please make sure to cut off the power supply before proceeding.
2. Please keep your hands and feet away when running. Turn off the machine and make sure the blade has completely stopped before approaching.
3. Please keep a safe distance during operation, especially paying attention to children and pets.
4. Make sure to turn off the machine before moving or maintaining it.
5. Charging stations should be installed in stable, level, dry and well-ventilated places.
6. Do not touch the metal contacts of the charging station as there is a risk of electric

shock.

11.Federal Communications Commission(FCC)

FCC Statement

Warning:

This device complies with Part 15 of the FCC Rules.

1.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.

2.This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

3. The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to operate the equipment.

4. Install and operate radiators at least 20 cm away from the human body in compliance with the FCC's radiation exposure limits for uncontrolled environments

12.ISED Statement

This device contains licence-exempt transmitter(s)/receiver(s) that comply

with Innovation, Science and Economic Development Canada's licence-exempt RSS(s).

Operation is subject to the following two conditions:

1. This device may not cause interference.
2. This device must accept any interference, including interference that may cause undesired operation of the device.

Cet équipement doit être installé et utilisé avec une distance minimale de 20 cm entre le radiateur et votre corps.

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

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme

aux CNR d'innovation, sciences et Développement économique Canada applicables aux

appareils radio exempts de licence, L'exploitation est autorisée aux deux conditions suivantes:

ntes:

3. L'appareil ne doit pas produire de brouillage;
4. L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

usceptible d'en compromettre le fonctionnement.