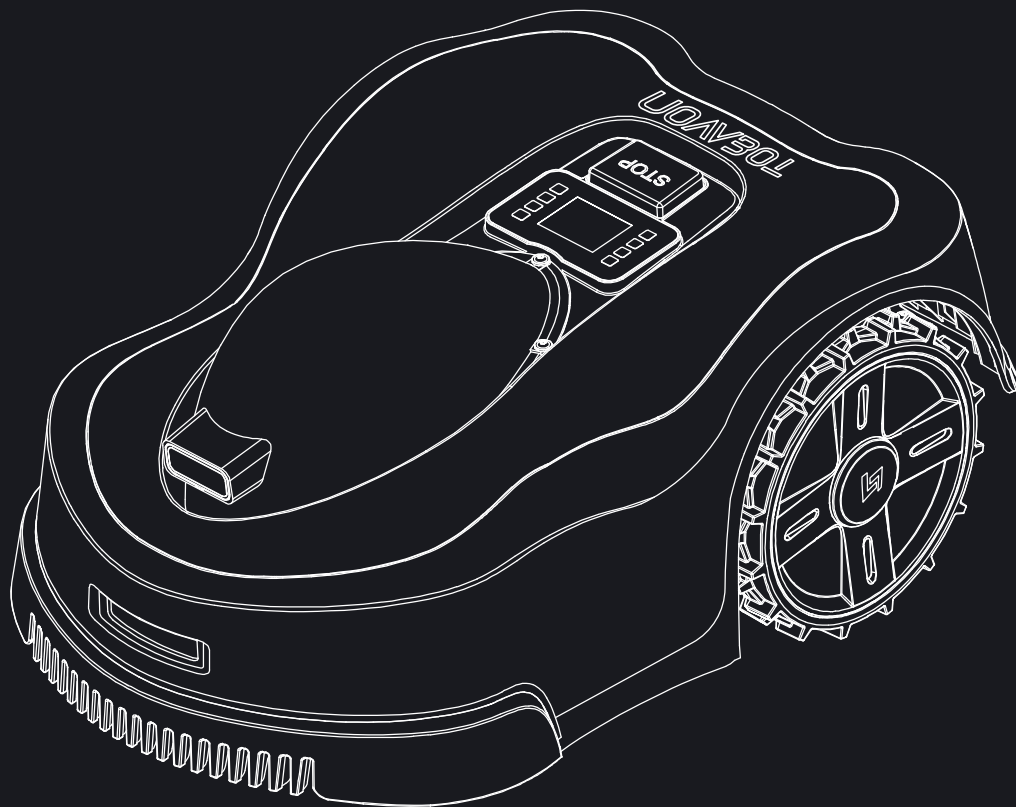


NOVABOT™

User Manual

*Please read the user manual carefully before using our product.



N1000/N2000

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1 Introduction

In the following section, we would like to help you better understand how NOVABOT works. NOVABOT is equipped with AI and several sensors. It can deal with various complicated scenes autonomously.

1 Multi-map mowing

NOVABOT can create multiple maps (currently supports up to three maps). And NOVABOT can choose to mow one lawn or mow several lawns in sequence. It can intelligently plan the mowing path and complete the mowing task.



3 Autonomous charging

When the battery is low, NOVABOT will pause the task autonomously and go back to the charging station to charge itself. When fully charged, NOVABOT will resume the unfinished mowing task of the day or stay in the charging station according to its mowing schedule.



5 Schedule

You can set mowing schedules and security schedules in NOVABOT APP so that NOVABOT can mow the lawn automatically or enable watchdog mode on a regular basis according to the schedules.



7 PIN code protection

The PIN code is used to prevent being stolen and operated by children or unauthorized people. When there is a machine malfunction or the STOP button is pressed, NOVABOT will lock itself. You can unlock it by entering the PIN code.



2 Intelligent mowing

NOVABOT also has the ability for intelligent mowing, using panoramic vision, inertial navigation, RTK positioning, and visual perception technology to achieve intelligent mapping, charging, mowing, and obstacle avoidance functions. NOVABOT also can adjust the mowing height to meet users' personalized needs.



4 Obstacle avoidance

NOVABOT can detect obstacles using AI cameras, avoiding interference from them. You can set the obstacle area in NOVABOT APP to avoid the machine driving in and affecting normal work.



6 No more need to collect grass clippings

NOVABOT leaves short clippings after mowing. There is no need to collect them, they will become fertilizer for the lawn.



8 Watchdog mode

NOVABOT will start security patrols near the door when you need them.

(such as: When you are on vacation/business trip or daily night, you can set watchdog mode. NOVABOT will turn on the flashing lights, whistle, and take real-time photos of the possible situations near the door and push them to app users.)



2 Safety First

WARNING

Read all safety warnings and all instructions carefully before doing any operation.

These documents should be saved for future use.

Who can't use this product

1. Never allow children, people with reduced physical, sensory, or mental capabilities or lack of experience and knowledge, or people unfamiliar with these instructions to use the machine, local regulations may restrict the age of the operator.
2. Not to allow children to be in the vicinity or play with the machine when it is operating.

Where this product can't use

1. Only use this product in the ways described in this manual.
2. Never leave anything that can be climbed over by product in the working area which may cause damage to the product or injury to people.
3. Keep any supply and extension cords away from the working area to avoid damage to the cords which can lead to contact with live parts.
4. When used in public areas, warning signs shall be placed around the working area of the machine. They shall show the substance of the following text: " Warning! Automatic lawnmower! Keep away from the machine! Supervise children!".

When this product can't use

1. Avoid using the machine and its peripherals in bad weather conditions, especially when there is a risk of lightning.
2. Timely check the working area to remove any foreign objects that may damage the product or be damaged by the product.
3. Timely inspect the product to make sure it's in good condition. Never operate a machine with a defective guard, a worn blade or a damaged cord, or any lost parts. And do not connect a damaged cord to the supply or touch a damaged cord before it is disconnected from the supply.
4. Only use peripherals that come with the original product, such as battery, charger. Any unofficial peripherals may lead to unexpected results.

What should be done to this product

1. Recommend connecting the peripherals only to a supply circuit protected by a residual current device (RCD) with a tripping current of not more than 30 mA.
2. Turn off the product and remove the plug from the mains before the following operations.
 - A. Lifting up the product or carrying it.
 - B. Any assembly or disassembly of the machine that is allowed in this manual, such as changing blades, and battery.
 - C. Clearing a blockage on the machine.
 - D. Checking, cleaning or working on the machine or charging station.
 - E. If the machine starts to vibrate abnormally, check for damage before restarting.
3. Press the STOP button immediately in case of abnormal vibrations and carefully check if there is anything stuck under the product. Clear it and restart the product. Contact the service center if the vibration persists.
4. Only touch blades when it's totally stopped and wear anti-cut gloves before changing blades.
5. In the event of leakage of electrolyte flush with water and seek medical help if contact with skin or eye.

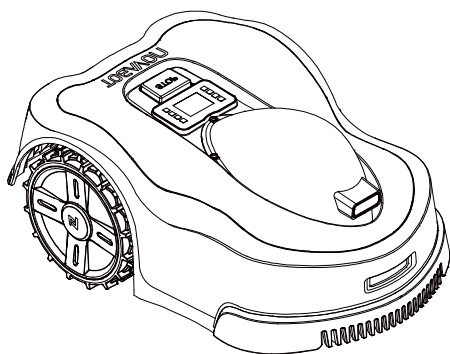
What can't be done to this product

1. Keep away from the product when it's working. Especially keep your hands and feet away from the rotating blades.
2. Don't overreach and maintain balance at all times, always be sure of footing on slopes, walk, and never run while operating the machine or its peripherals.
3. Don't put anything on the top of the product or its charging station.
4. Don't do any modifications to the product which may lead to unexpected results.
5. Don't dismantle any part that is not described in the manual.
6. Keep the battery in a safe place away from any dangerous objects that may cause dangerous problems objects, like fire, water, matter, and so on. Don't put the battery in a short-circuit condition.
7. For the purposes of recharging the battery, only use the detachable supply unit provided with this appliance.

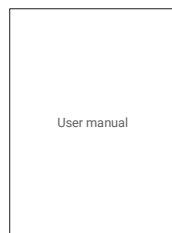
3 My NOVABOT

EN

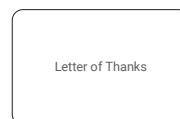
3.1 Unboxing



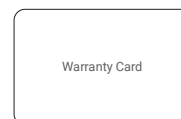
NOVABOT



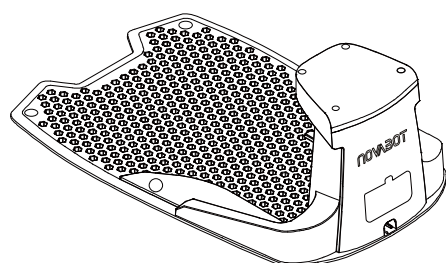
User manual



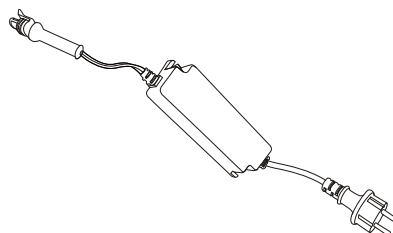
Letter of Thanks



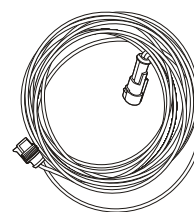
Warranty Card



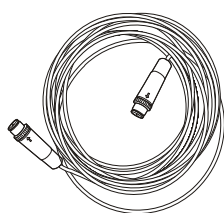
Charging station



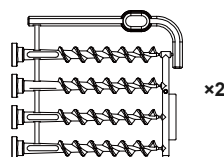
Power supply



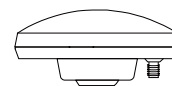
Extension cord



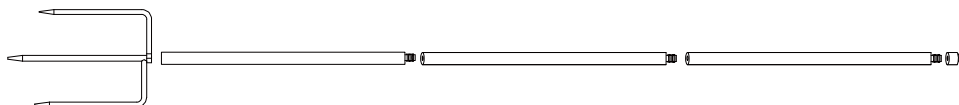
TNC Extension cord



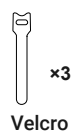
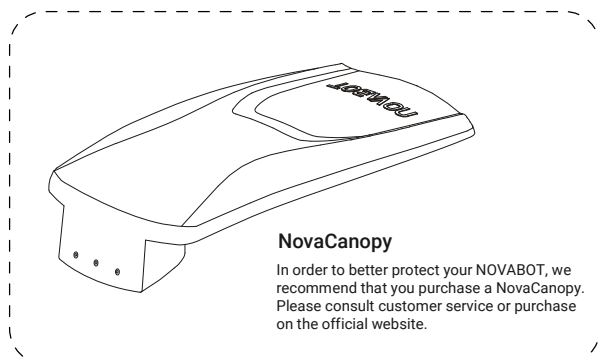
Screw and wrench set



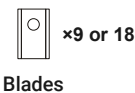
GNSS antenna



Bracket set



Velcro



Blades

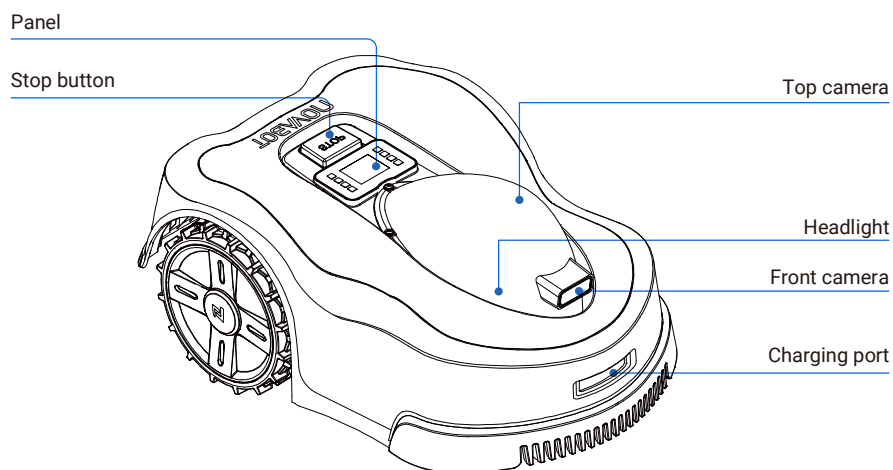


Extension cord pegs

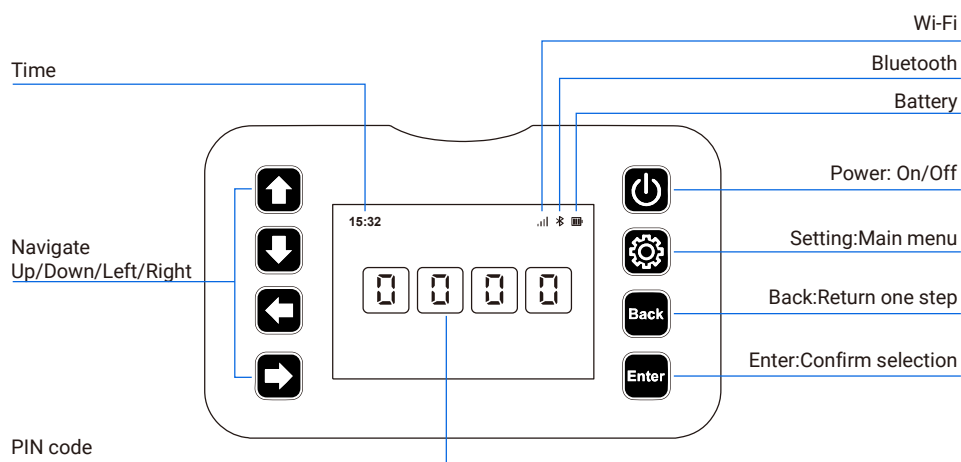


Bolts

3.2 Top view



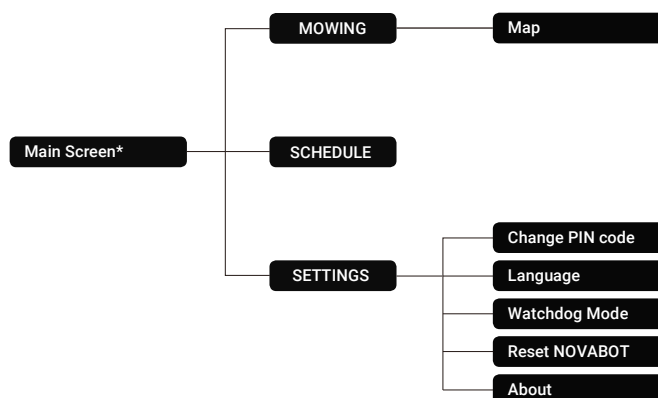
3.3 Control&Panel



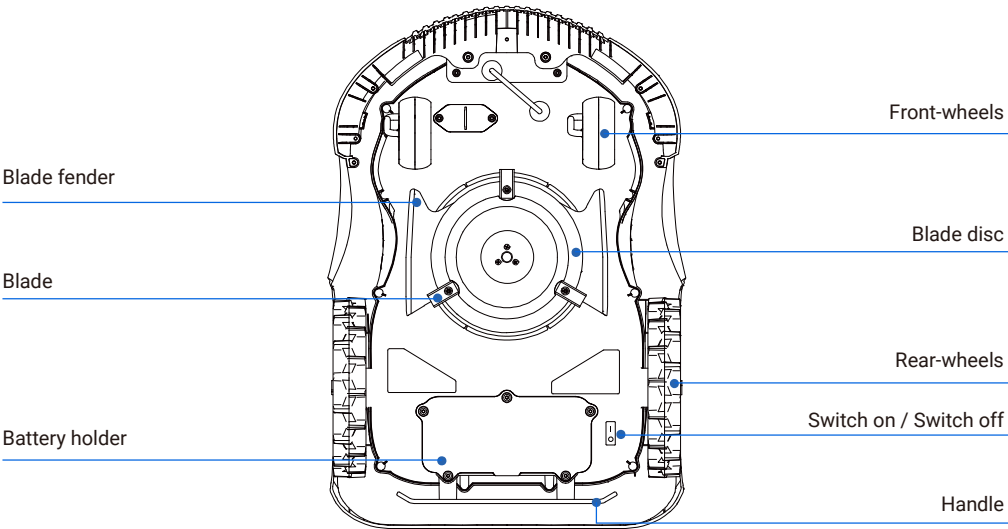
General Setting

1. Press → or ← select "Mowing", or "Schedule". Then press "Enter" to enter.
2. Press "Setting" to enter the functions selection.
3. Select the item you need by pressing ↑ or ↓ . Then press "Enter" to confirm the selection.
4. Press "Back" to return to the previous step.

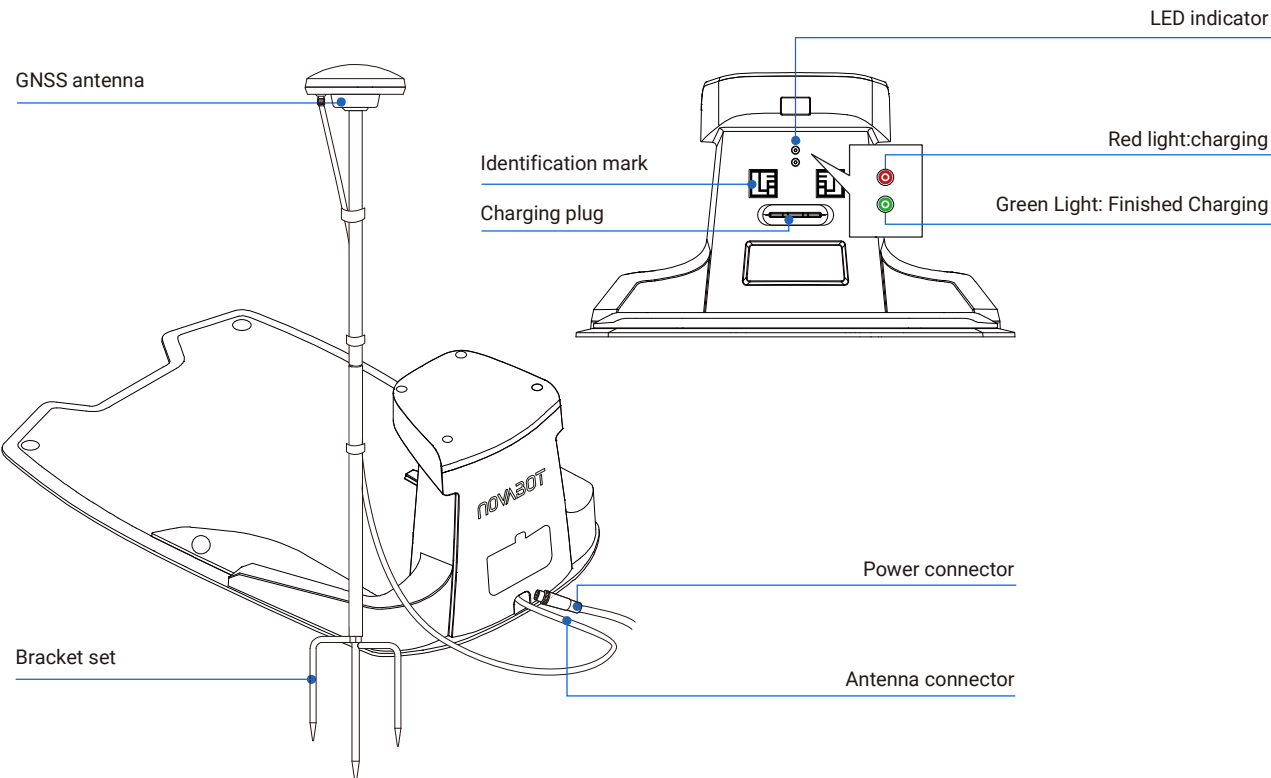
The frame of Functions on Control&Panel



3.4 Bottom view



3.5 Charging station & Receiver holder



3.6 Rear view - Symbols



WARNING: Read the user manual before operating the product.



WARNING: Keep a safe distance from the product when operating.
Keep your hands and feet away from the working blades.



WARNING: Disable the product before working on or lifting the product.



WARNING: Do not ride on the product. Do not put your hands or feet near or under the product.



Read operating instructions and safety notices.



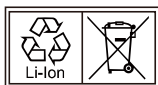
Preventing product from being incinerated or dumped in landfills.
Make sure to recycle the product according to local legal requirements.



Power supply unit.



Product Class III appliance.



Lithium Ion Battery. This product has been marked with the symbol relating to all batteries "collected separately" bag and battery pack. It will then be recycled or dismantled to reduce environmental impact. Batteries can be harmful to the environment and human health because they contain harmful substances.

4 Install and connect NOVABOT

⚠ ATTENTION

- Plan the installation area and mowing area in advance (including charging station location, obstacle area, home Wi-Fi distance, GPS signal distance, etc.)
- You can also download the NOVABOT APP to watch the video tutorial.
- After the installation is complete, the APP will automatically detect the status of the installation signal.

4.1 Download NOVABOT APP

- Download NOVABOT APP from Android or Apple app stores.
- After installing NOVABOT APP, please complete the registration and login.



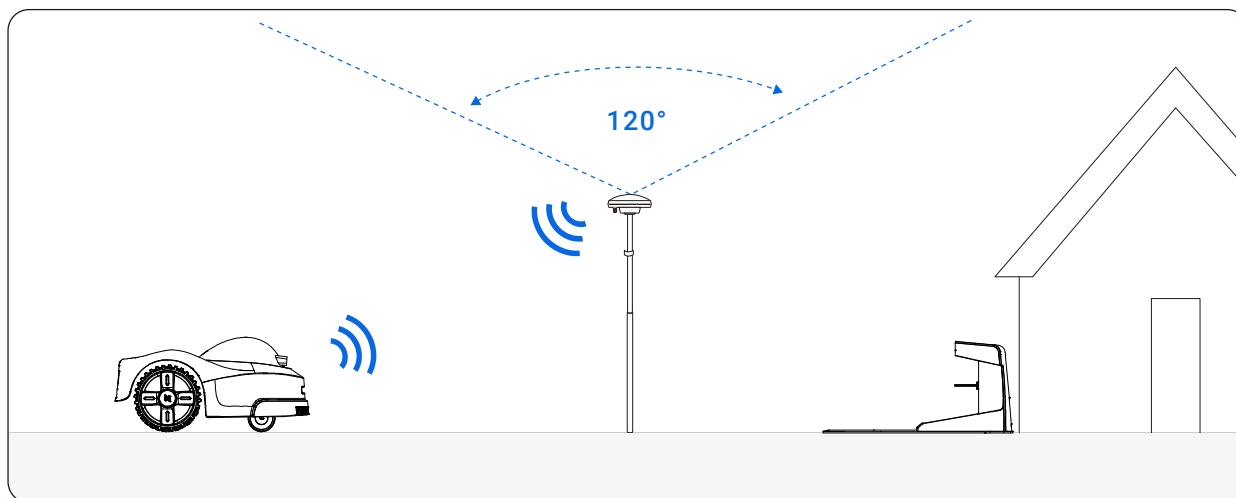
Tip

For safety reasons, when registering, the password you set needs to include uppercase letter, lowercase letter, symbol and number.

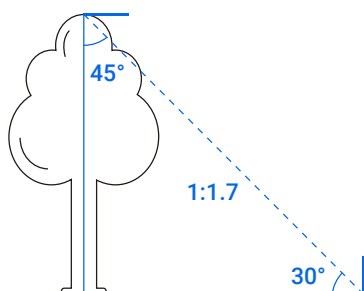
4.2 Plan your installation place

A. GNSS:

1. To have a good GPS signal, ensuring a good view of the working area of NOVABOT is necessary. Please keep 120° from the top of the GNSS antenna free of obstacles. Avoid lots of trees and large obstacles in the working area.

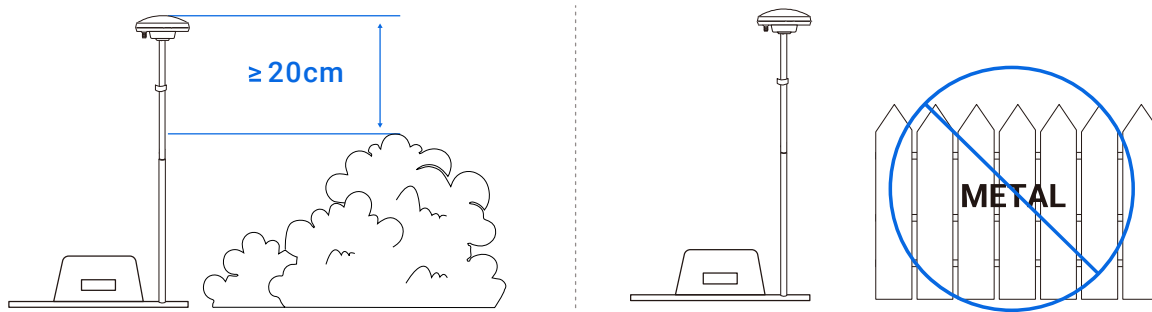


2. If there are tall trees/obstacles in the working area, it is recommended to keep the GNSS antenna position and the highest point of the obstacle within 30°.



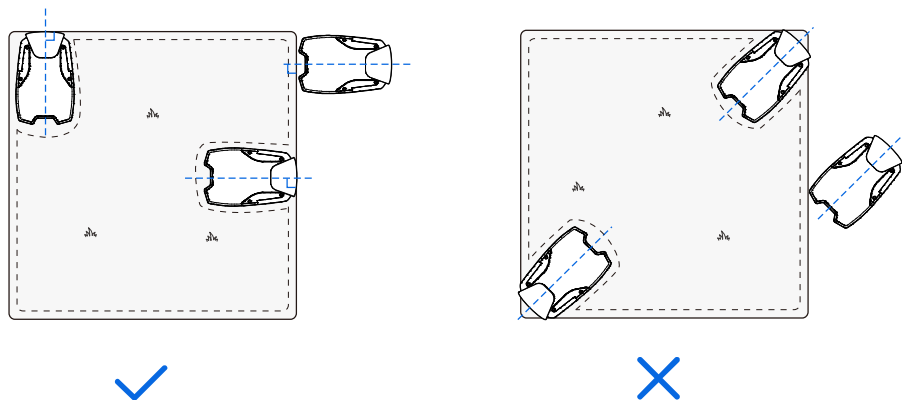
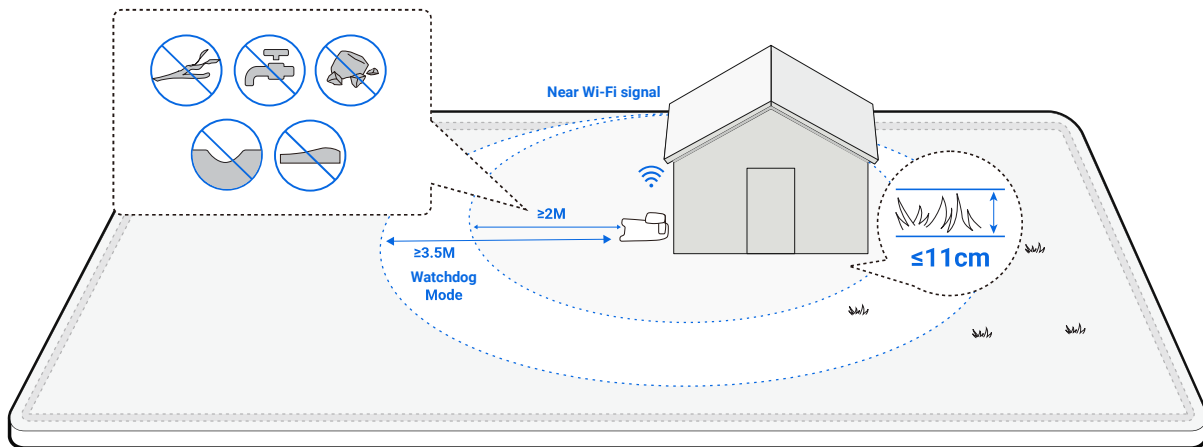
Obstacle Height	Recommended Installation Distance
1 m	1.7 m
2 m	3.5m
3 m	5 m
4 m	7 m
5 m	8.7 m

3. If the GNSS antenna is installed near a bush/low wall, the distance from the highest point of the antenna must be greater than 20cm.
4. Avoid metal objects nearby (metal fences, metal gates, etc.)



B.Charging station:

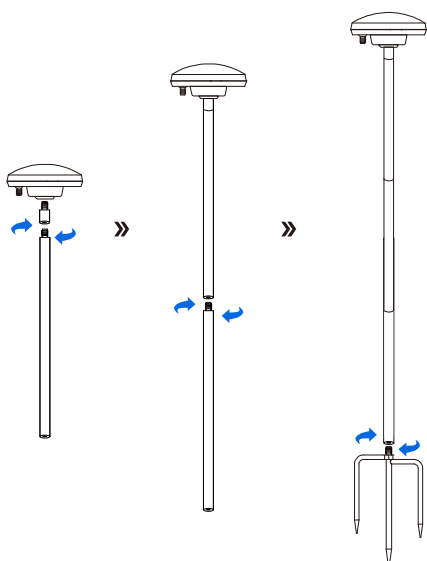
1. To keep a good charge, please install it on a flat lawn. Avoid slopes and potholes, and avoid the metal ground.
2. For a good network signal, it needs to be installed close to the home Wi-Fi signal.
3. There should be no obstacles and sprinklers within 2 meters of the charging station. If there is long grass, please clean it first.
4. If security functions are required, installing the charging station within a radius of 3.5m is recommended. You can ignore this information if you do not need security protection capabilities.
5. When installing the charging station, keep that facing the grass and perpendicular to the border of the lawn.



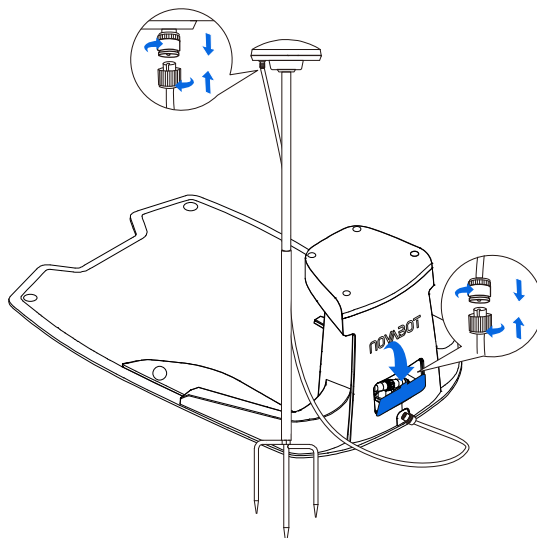
4.3 Assembly

A.GNSS:

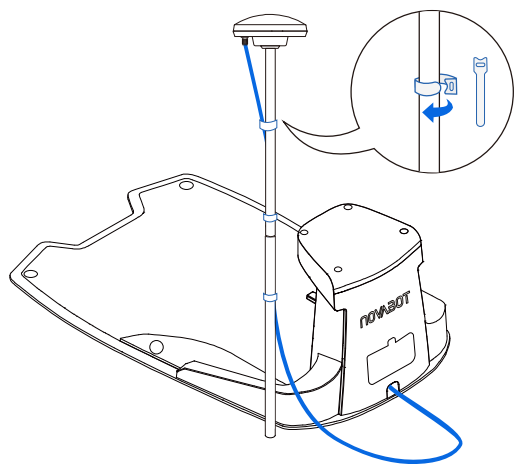
- 1 Assemble the bracket set.



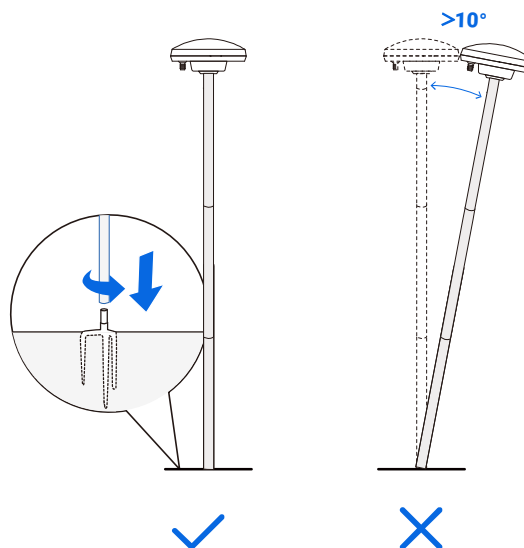
- 2 Open the case of the charging station. Install the GNSS antenna and TNC extension cord (install according to the actual needs of the family).



- 3 Secure the extension cord to the bracket with velcro.

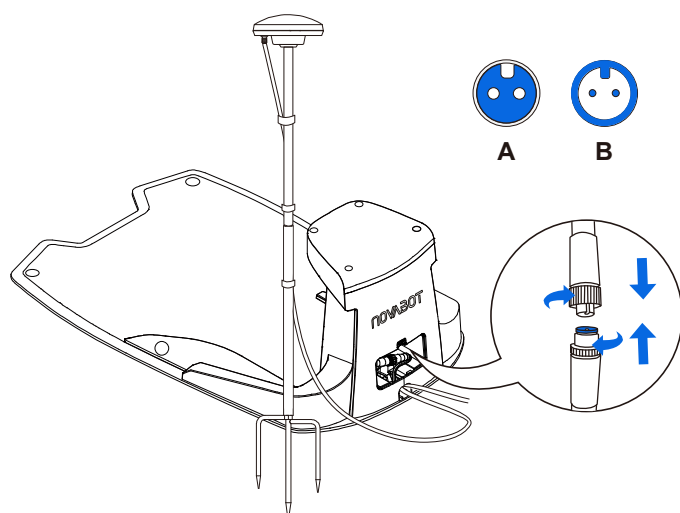


- 4 Insert the antenna vertically into the ground, avoiding slopes, pits, and metal ground. When installing, the angle with the ground cannot be greater than 10°.

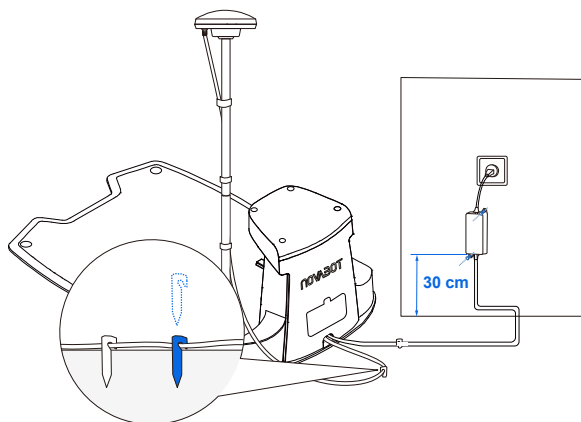


B. Charging station:

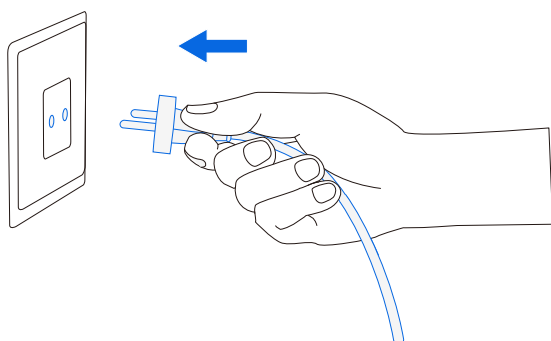
- 1** Align the charging station wire notch (a) with the groove (b).



- 2** For charging safety, it is recommended to install the power supply on the wall at least 30 cm away from the ground, and do not wrap it to avoid overheating.



- 3** Connect the power supply.

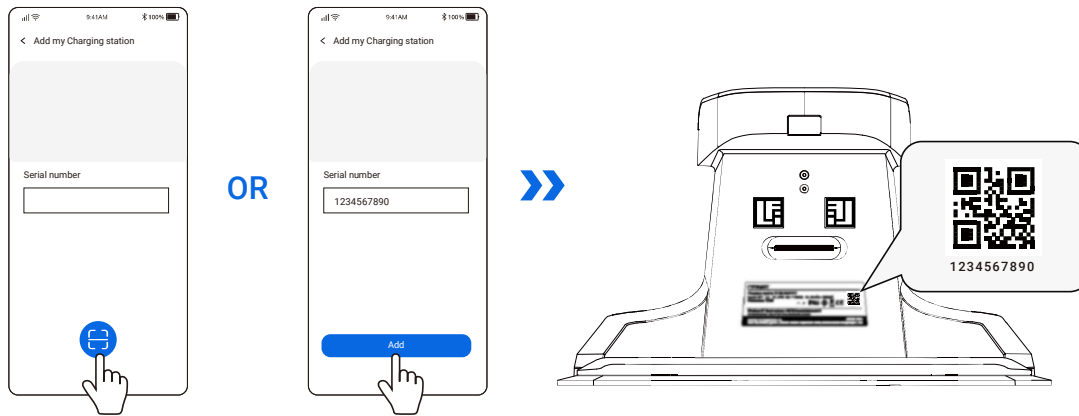
**Tip**

To better protect your charging station and NOVA30T, you can go to the APP store/official website to buy NovaCanopy.

4.4 Connect

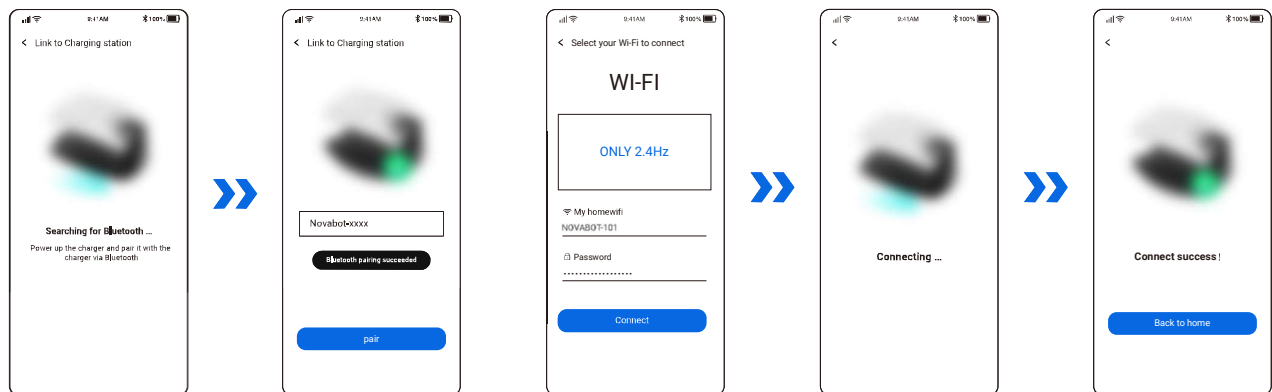
A.Charging station:

1. Scan/Enter the charging station serial number. And add the device to the APP.



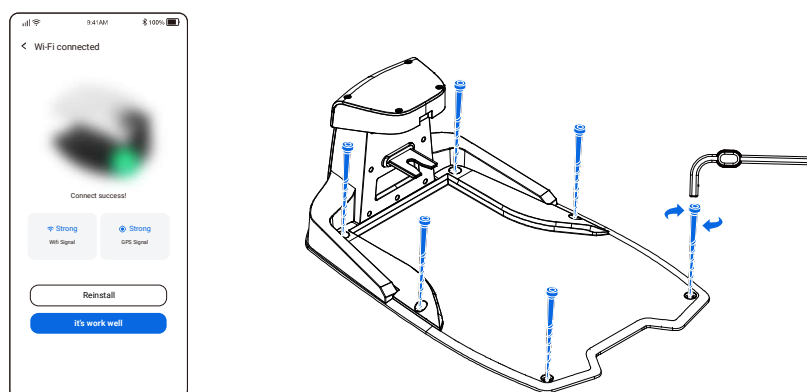
2. Turn on the mobile phone's Bluetooth and pair it with the charging station.

3. Enter your home Wi-Fi account and password.



4. The APP displays the charging station's current Wi-Fi and GPS status. (If a certain signal is poor, choosing another place to install it is recommended. At this time, you need to re-bind the charging station.)

5. Fix the charging station with a screw and wrench set. Install ground nails.

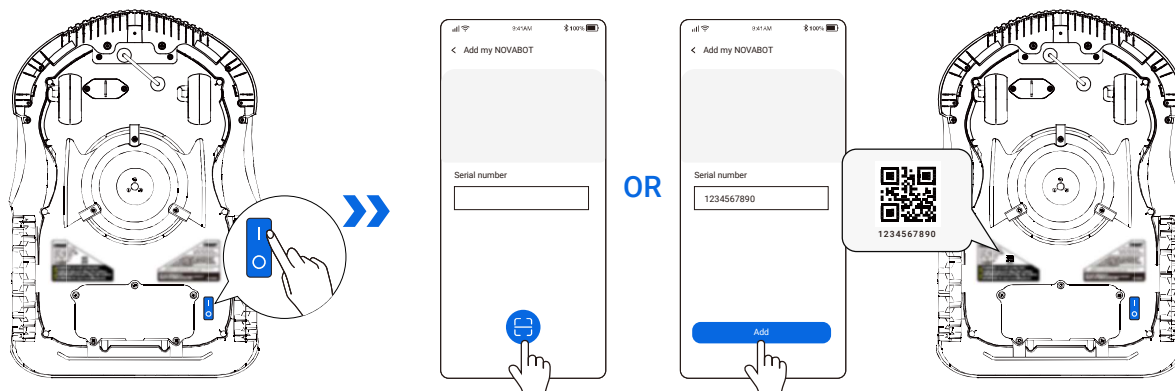


Tips

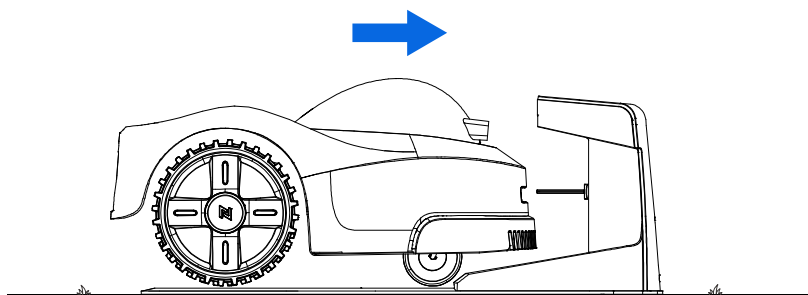
- After connecting, if Wi-Fi or GPS signal is low, you need to re-determine the location of the charging station.
- The NOVABOT Wi-Fi signal is 2.4GHz. If it does not match the home signal, please contact after-sales customer service.
- After the charging station is connected, if the signal and Wi-Fi are good, it is recommended not to move the GNSS and charging station.

B.NOVABOT:

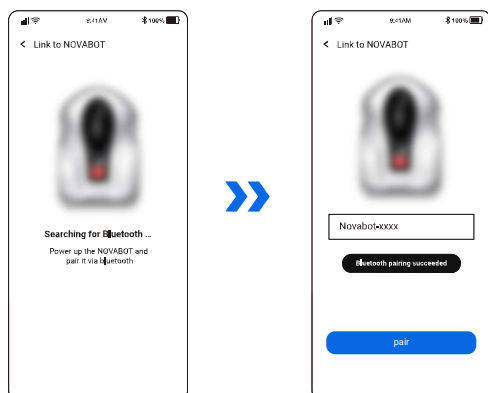
1. Turn on the bottom of the NOVABOT. Scan/Enter NOVABOT Serial Number and add the device to the APP.



2. Plug NOVABOT into the charging station to connect.

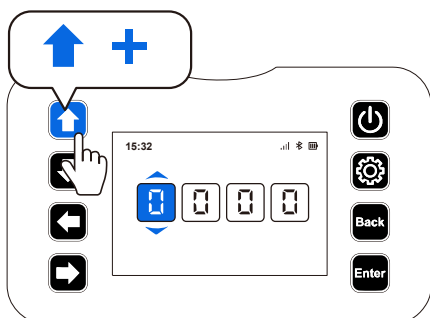


3. Turn on the mobile phone's Bluetooth and pair it with NOVABOT.

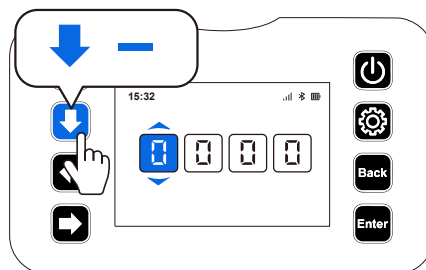


4. Set up a PIN code on the panel.

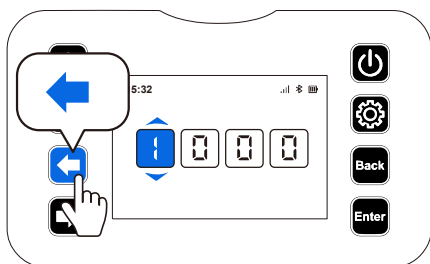
①



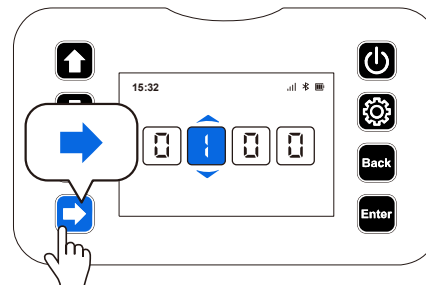
②



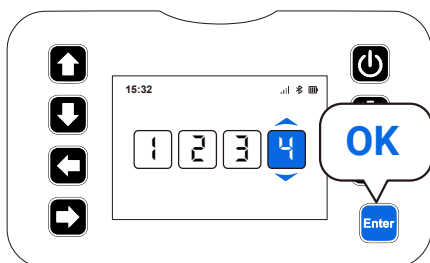
③



④



⑤



Tip

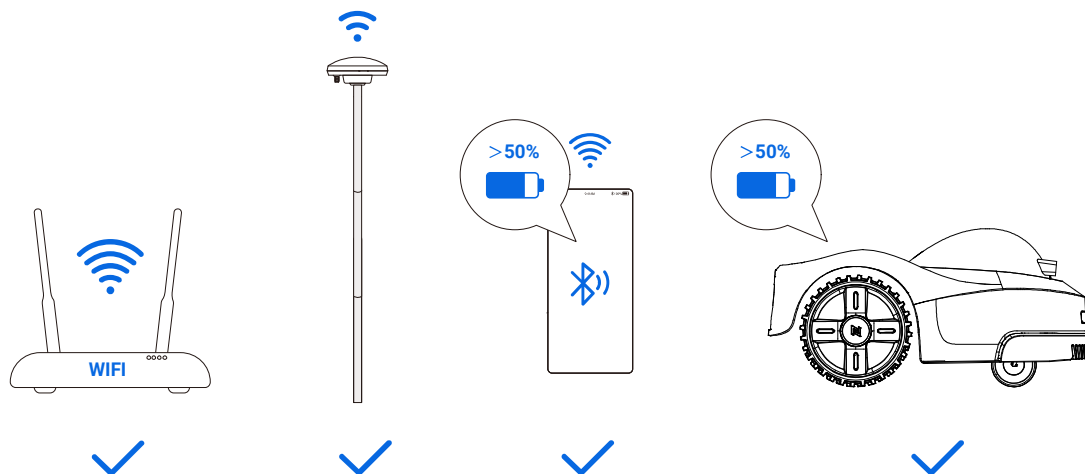
- To protect your NOVABOT's security, it is not recommended to use 4 same numbers as the PIN code.

5 Mapping and Mowing

5.1 Mapping

⚠ ATTENTION

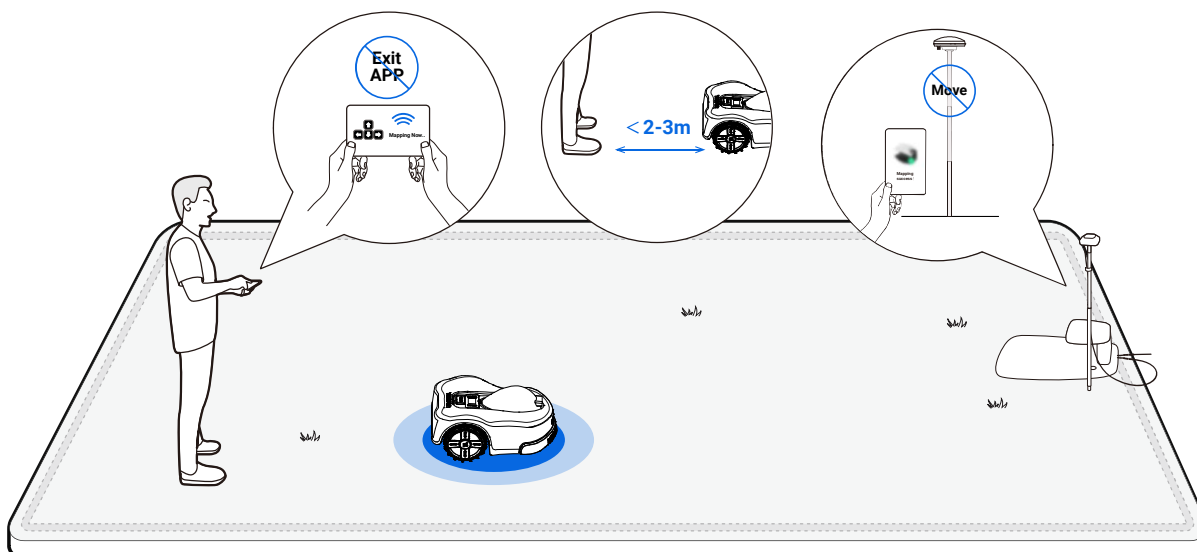
- Before mapping, you must carefully read the relevant video tutorials.
- In order to ensure the success of mapping, please make sure that the Wi-Fi signal, GPS signal, mobile phone, and NOVABOT power meet the mapping requirements. Among them, please provide more than 50% of mobile phone batteries and more than 50% for NOVABOT.



- Don't exit the current interface when mapping. This will result in failure.
- Please keep a distance of NOVABOT within 2-3M when mapping.
- If you encounter a mapping situation that can not be resolved, you can check Troubleshooting or consult after-sales customer service.

⚠ WARNING

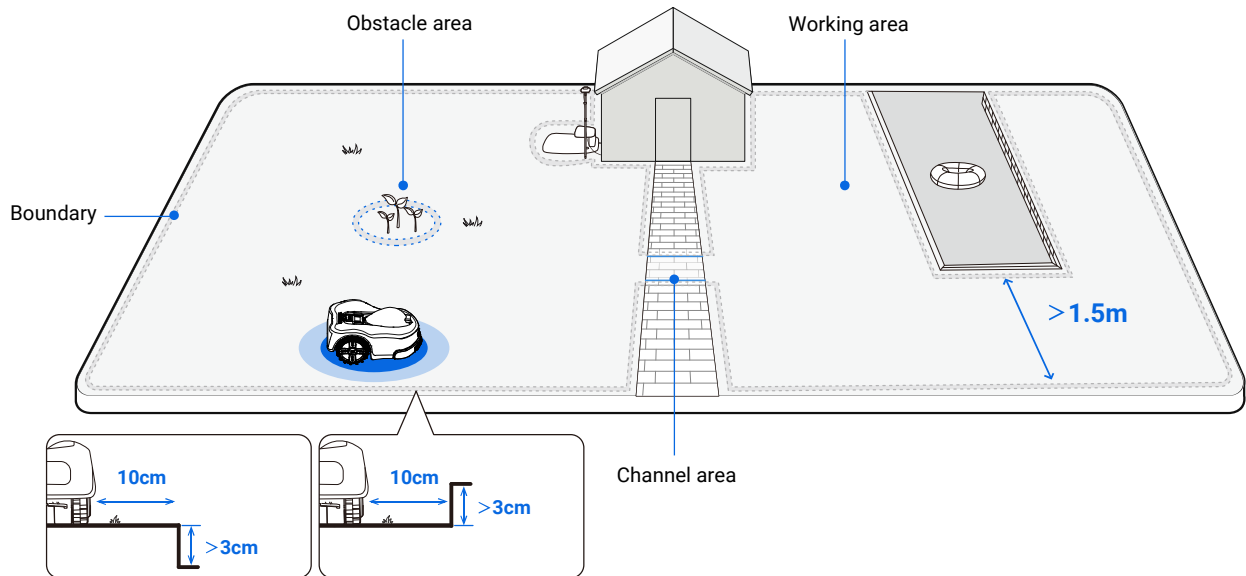
- After the mapping is successful, don't move the charging station and GNSS. If moved, remapping is required. Please proceed with caution.



Create a new map

⚠ ATTENTION

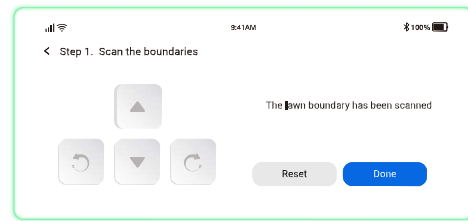
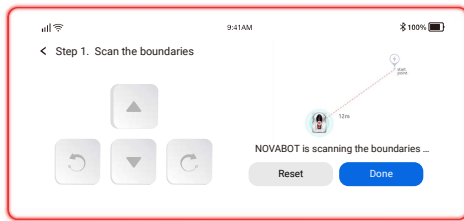
- Keep a distance greater than 10CM at the edge of the map.
- Do not map mowing areas smaller than 1.5M wide.



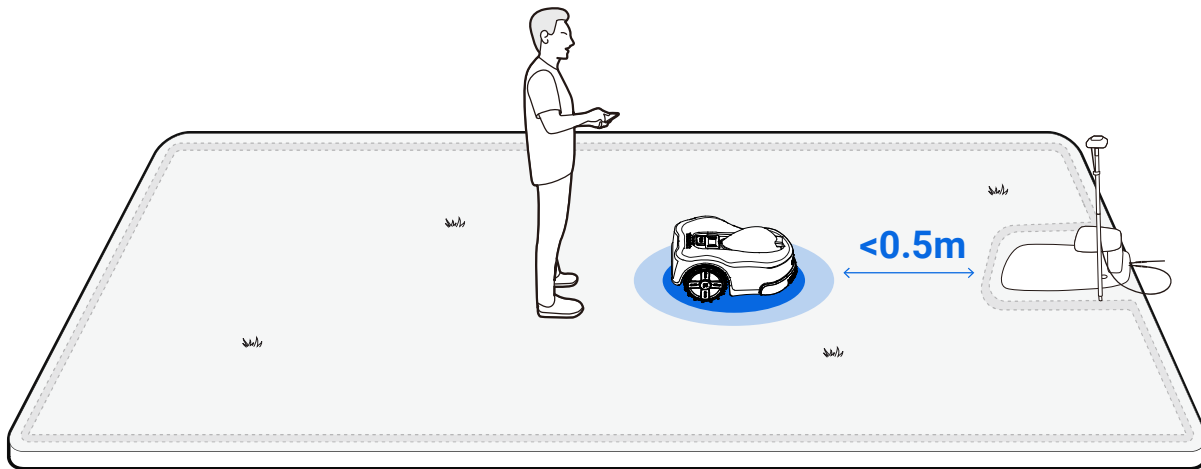
1. Open the Lawn interface entered by NOVABOT APP. Choose "Add new map".
2. NOVABOT will start checking the machine status. Mapping can only be done when the GPS signal, network, Bluetooth connection, and power meet the conditions.



3. Follow the instructions of the APP to perform remote mapping, and the border of the interface will turn red at this time.
4. Remote control NOVABOT back to the starting point, completes the mapping, the interface border turns green, and saves the map.



5. After the remote control NOVABOT is facing the charging station (not farther than 0.5M), click Confirm, and the machine will automatically return to the charging station. Complete the area network upload. (If the automatic return fails, you can switch to the remote control mode to make the NOVABOT back to the station)



6. Check whether the NOVABOT is facing the charging station. If not, NOVABOT position needs to be adjusted manually.

