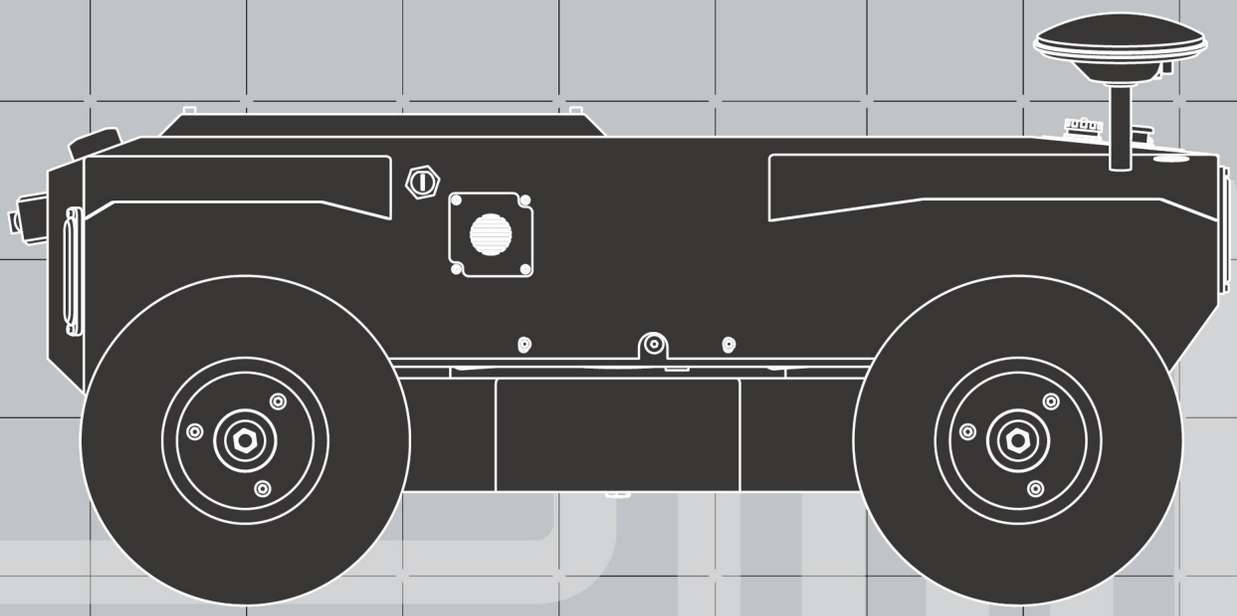
WANJI



WANJI Intelligence

Intelligent All-Electric Lawn Mower User Manual

Unlock a New Intelligent Lawn Mowing Experience

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Welcome!

Thank you for choosing the **WANJI R1** Series Smart Lawnmower!

With the precise integration of the NAV-L3 (High-Precision MEMS Positioning and Navigation Control System) and excellent obstacle surmounting capability, the WANJI Intelligence lawn mower can easily handle various types of lawns.
Equipped with intelligent App connectivity and an intuitive control panel, the device requires no tedious boundary wire laying and is extremely easy to operate.

1. Overview

1.1 Product Introduction

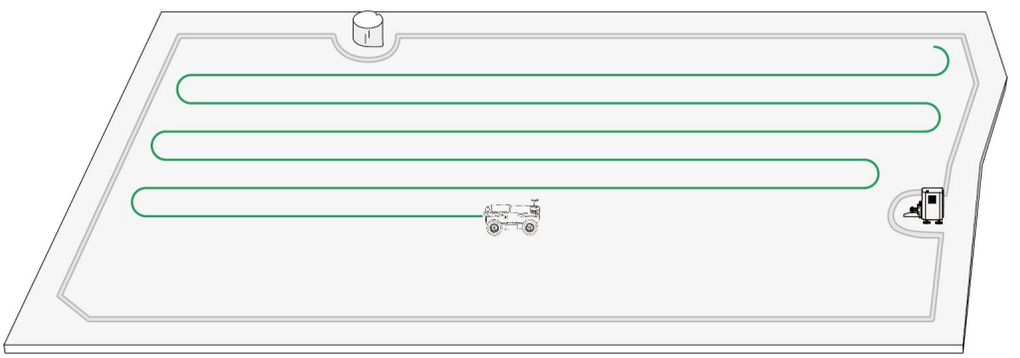
WANJI R1 Series

The WANJI R1 is an intelligent, fully electric robotic mower developed by Jining Wanji Intelligent Equipment Co., Ltd., featuring single- or dual-camera configurations for intelligent path planning. Its four-wheel differential steering system enables precise control, supporting zero-turn manoeuvring, obstacle crossing and slope climbing, with a maximum operating speed of 6 km/h(3.7 mph). With remote control and remote alerts, the R1 supports unattended operation across a wide range of terrains and over 100 application scenarios, including agricultural weeding, orchards and woodland, land clearing and landscaping. The distributed blade design, combined with an adjustable cutting deck, delivers a cutting width of 79 cm(31.1in) and an adjustable cutting height from 2 to 10 cm(0.8–3.9 in). Powered by a removable lithium iron phosphate battery, each unit provides up to 2 hours of runtime and covers up to 4,000 m²(~1 acre) per charge. With low environmental impact, low noise, low operating costs and high efficiency, the WANJI R1 brings intelligent automation to modern outdoor operations.

The WANJI R1 features an advanced intelligent mowing system and virtual boundary technology, eliminating the need for tedious perimeter wire installation. It is simple to operate and manage, giving you more free time while delivering a pristine lawn every time.
What's in the Box: 1× WANJI R1 Robotic Lawn Mower, 1× Charger (or optional Charging Station), 1× Remote Controller, 2× GNSS Antennas, and the WANJI R1 App. The mower and GNSS antennas synchronously receive satellite signals to precisely pinpoint the machine's real-time position and work zones.

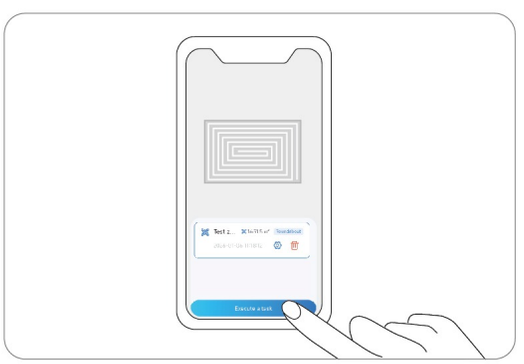
Lawn Mowing Robot

This intelligent lawn mowing robot is powered by a lithium-ion battery pack. You only need to define the boundary of the working area through the intelligent operation App on your mobile phone, and the robot will automatically complete the lawn mowing work within the boundary. The mowing path is accurately planned by algorithms based on the shape of the working area to achieve optimal mowing efficiency. (For the charging pile version, if the battery power is insufficient before completing the mowing task, the robot will automatically return to the charging base to recharge; when the power is sufficient, the device will resume work from the breakpoint until all tasks are completed.)



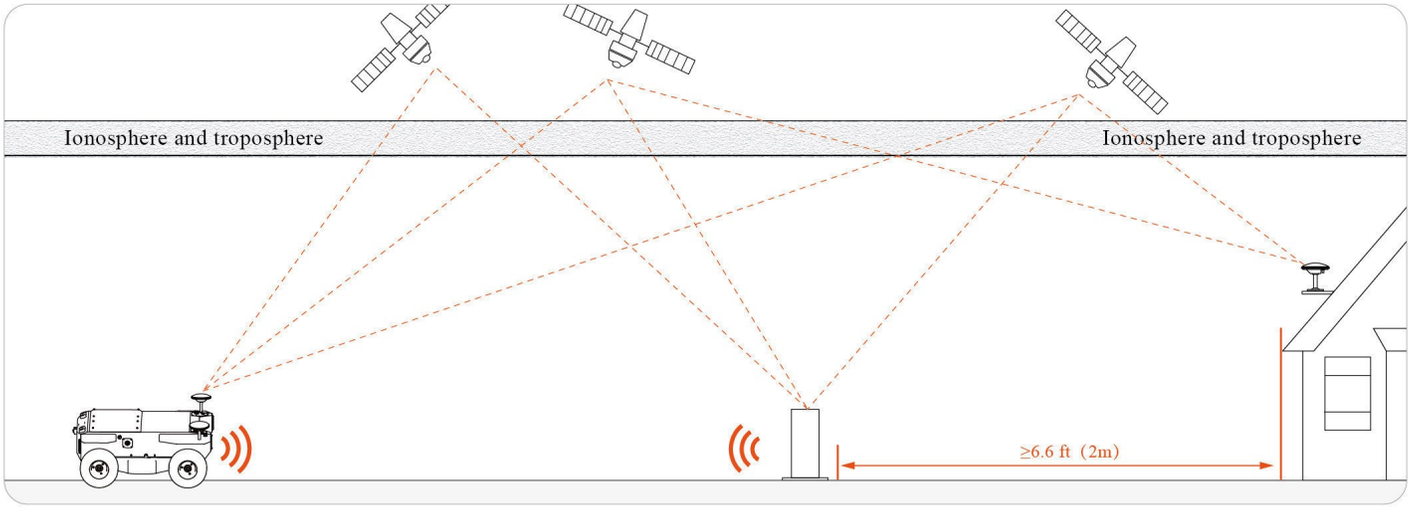
SmartNavi App

The application program is an important part of the WANJI R1 system. You can complete system installation and working area settings according to the interactive guidance displayed in the application. At the same time, you can also adjust the lawn mower parameters, customize the working area, check the working status of the lawn mower, and remotely control the lawn mower through the App. In addition, you can obtain the latest and most comprehensive official help and support content through the application program.



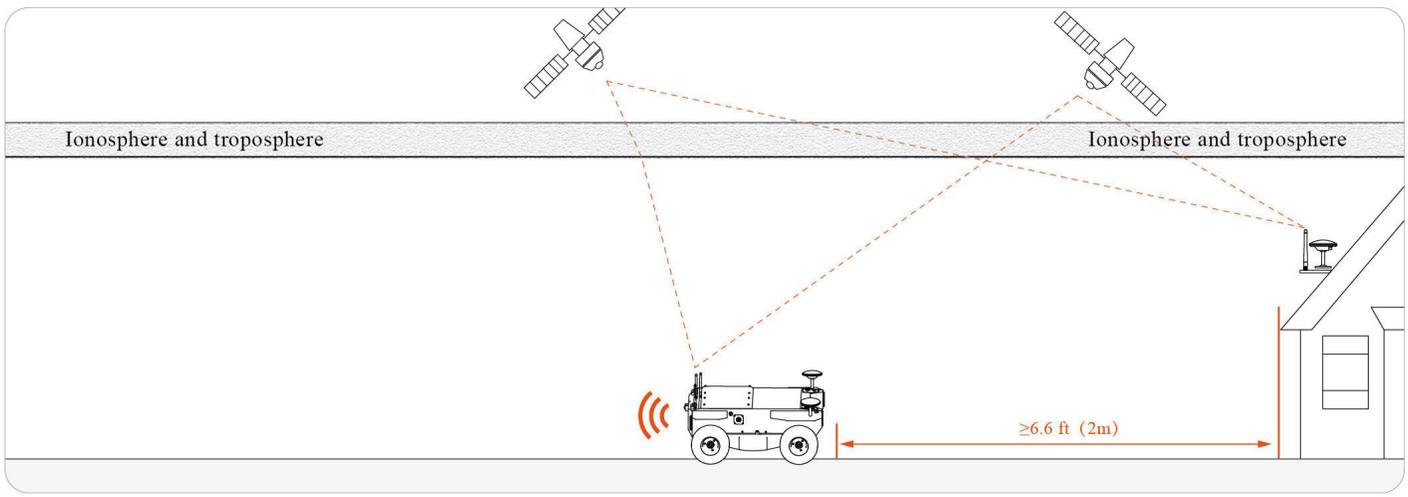
1.2 Working Principle of WANJI R1

Network Version



NAV-L3 (High-Precision MEMS Positioning, Navigation, and Control System) is the proprietary high-accuracy positioning technology of the WANJI R1 mower. This technology leverages satellite positioning and integrates data from various sensors through algorithmic fusion to enhance positioning accuracy and fault tolerance. The mower achieves autonomous positioning via satellite signals, and its antenna also receives satellite signals. By comparing satellite signals received by the antenna and the mower, it minimizes transmission errors (such as shifts caused when signals traverse the ionosphere), elevating positioning accuracy to the centimeter level. Additionally, data from sensors like radar is integrated into this system via the WANJI R1's data fusion algorithm, further enhancing its adaptability across diverse environments. The NAV-L3 system enables precise operation zones without requiring boundary wires. Simultaneously, the system optimizes mowing paths within the designated area through algorithmic planning, achieving a systematic mowing effect that maximizes the mower's operational efficiency.

Radio Version



The autonomous operation system of the radio version mobile robot takes radio communication as the core of the data link and realizes environmental perception and motion control through multi-sensor information fusion. Its working process is as follows: the remote control console sends working area parameters and task instructions via radio, and after receiving them, the robot performs real-time positioning and constructs a local environmental model combined with predefined boundary information. The control unit runs path planning algorithms based on the fused data, generates speed closed-loop control signals to drive the actuator, and periodically transmits position coordinates and equipment status back via radio. The system adopts spread spectrum communication technology to ensure link stability, and suppresses positioning drift through sensor redundancy and filtering algorithms, ultimately achieving high-precision area coverage operations in network-free environments.

This architecture meets the autonomous mowing requirements for robotic lawn mowers on lawns ranging from 1000 to 5000 m². (approx. 0.25 to 1.2 acres) relative to the starting origin, while supporting breakpoint resume and remote emergency stop (e-stop) functions.

1.3 Safety Warnings

Important Notes

Please read carefully before use and keep it properly for future reference.

1) Be sure to install and operate the WANJI R1 (referred to as the "lawn mower" in this manual) in accordance with the instructions. The complete user manual and the latest usage materials can be accessed on the official website: www.wanji-imp.com

2) Using the mower for purposes other than lawn mowing may result in serious injury. To avoid the risk of injury, carefully read and understand all warnings and precautions. Note that following the instructions and warnings in this manual reduces risks but does not eliminate all risks. The operator or user is responsible for accidents or hazards involving others within their work area.

3) The WANJI R1 is equipped with various safety sensors, but there are still safety risks. Please choose a time when there are no people or pets on the lawn for mowing, and inform neighbors of the relevant accident or danger risks. If the lawn mower is used on public lawns, or if your lawn is connected to neighboring areas or streets, please set up protection or fences for the lawn, or post warning signs around the working area. The sign content is: Warning! Automatic Lawn Mower! Keep Away! Supervise Children!

4) Do not attempt to repair or manually adjust the lawn mower without authorization. Any unauthorized modification may affect the operation of the equipment, cause serious injury or property damage, and may invalidate the limited warranty. Only use accessories and attachments certified by the manufacturer.

5) The manufacturer recommends that the user age be 18-70 years old. Before operating the equipment, be sure to receive necessary operation training.

⚠ Warnings

Do not allow children, persons with physical/sensory/mental impairments, persons lacking relevant experience and knowledge, or persons unfamiliar with the content of this manual to operate this lawn mower. Local regulations may impose restrictions on the age of the operator.

Preparation Before Mowing:

• Regularly inspect all parts of the lawn mower to ensure they are functioning properly.

• For the best mowing effect, it is recommended to operate in dry weather. Mowing in rainy weather is likely to cause grass clippings to adhere to the body, and the lawn mower may slip. It is strictly prohibited to perform mowing operations in severe weather such as heavy rain, thunderstorms, or snowfall.

• Regularly inspect the area to be mowed and remove stones, branches, wires, bones, and other foreign objects. The limited warranty service will not cover equipment damage caused by foreign objects left in the lawn.

•To avoid equipment damage, the lawn mower must be kept at least 1 meter (3 feet) away from sprinkler heads during operation. The lawn mower and sprinkler devices are prohibited from working at the same time; the operation periods of both should be reasonably set to stagger the working time.

• Do not allow children to touch power supply devices, charging bases, blades, battery compartments, and other parts with gaps such as wheels.

⚠ Warnings

It is strictly prohibited to operate this equipment and its related peripheral accessories when the protective cover is damaged, the guard plate is missing, or the power cord is damaged or aging.

During Mowing Operations

• Keep away from rotating blades! Do not put hands or feet under or near the blades.

• Beware of flying foreign objects! Keep a safe distance from the lawn mower during operation.

• If it is known that there are pets, children, or other people near the working area, do not let the equipment operate unattended.

• When the operator works on slopes, be sure to ensure a stable footing. When operating this equipment and its peripheral accessories, walk slowly and do not run.

⚠ Warnings

• It is strictly prohibited to allow children to approach or tamper with the lawn mower while the equipment is running.

• Do not lift the lawn mower or ride on it while the equipment is running.

• The slope of the working area must not exceed 20°; do not perform mowing operations in areas with excessive slopes.

• If the lawn mower emits abnormal noises or alarm prompts, press the emergency stop button immediately.

• If the equipment vibrates abnormally, turn off the lawn mower, place it on a flat surface, and let it stand for about 30 seconds before restarting. If the abnormal condition still persists, please contact the authorized after-sales service center for handling.

• Do not touch the dangerous parts until they have completely stopped running.

Safe Usage Specifications

• It is strictly prohibited to operate or charge the lawn mower outside the temperature range of 0−40°C (32−104°F). High and low temperature environments will not only reduce equipment performance but may also cause safety accidents.

• Do not place any objects on the lawn mower or charging base.

• It is recommended that adults perform regular maintenance on the lawn mower (see the "Maintenance" chapter of the user manual for details).

• Regularly inspect the warning devices to ensure they are functioning properly. Relevant devices include base station indicator lights and mowing indicator lights.

• Before charging, please read the "Charging Method" chapter of the user manual. Improper operation may cause electric shock, equipment overheating, or leakage of corrosive liquids.

• Only use the original battery pack or the battery pack of the model specified by Blackbird R1 officials. Each lawn mower is equipped with one battery pack with a rated capacity of 48ah. Battery pack replacement must be contacted with the after-sales service center and operated by professional and technical personnel.

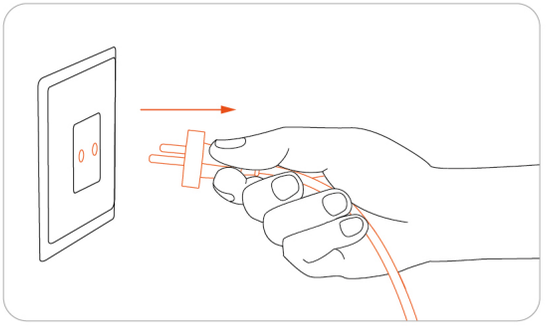
• Do not use non-rechargeable batteries. When charging, only use the detachable power adapter that comes with this equipment.

• Do not disassemble or pierce the battery case. Keep away from metal objects to prevent short circuits, and keep away from fire sources, heat sources, and direct sunlight.

• For the disposal method of batteries and electrical waste, you can consult household waste disposal agencies, local or regional waste management departments, or the equipment purchase store.

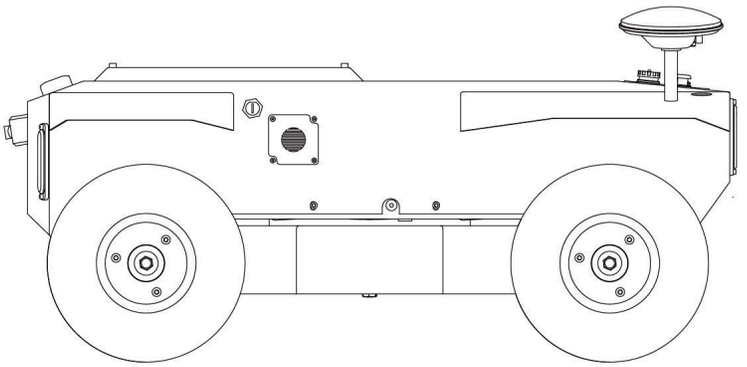
• Be extra careful when replacing blades; be sure to wear protective gloves to prevent scratches caused by the blades.

• If the power adapter cable or extension cord is damaged or tangled during use, first disconnect the connection to the power socket, then perform the untangling operation. When unplugging the power plug, hold the plug itself and do not pull the cable to avoid danger. Cable repair or replacement must be contacted with the after-sales service center and handled by professional and technical personnel.

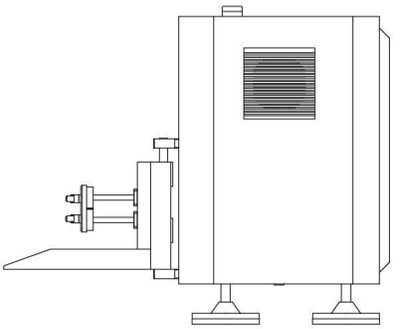


1.4 Package Contents

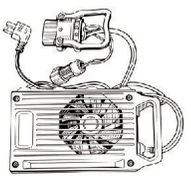
If any accessories are missing or have quality defects, please contact after-sales service in a timely manner. It is recommended to retain the packaging materials for future transportation.



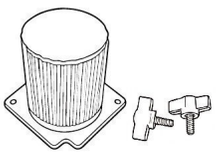
WANJI R1 lawn mower



Charging pile (optional)



Charger

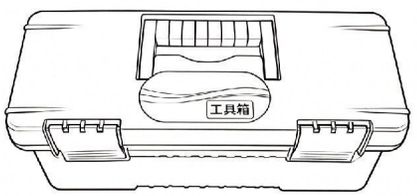


Air filter



Remote control

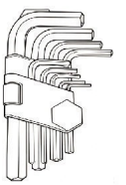
- Toolbox kit



Toolbox



Spare screw accessories

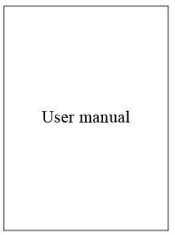


Hex wrench



Emergency stop button assembly

- User materials



User manual

- Network version base station kit



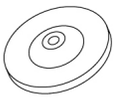
4G antenna



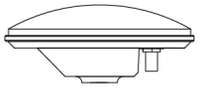
WiFi antenna



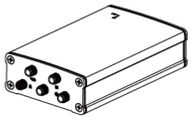
Connecting rod



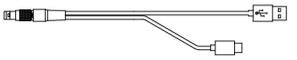
Strong magnetic base



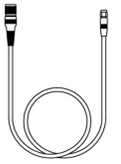
Base station mushroom head



Positioner



Remo connection line (one to two)



Base station connection cable

- Radio version base station kit



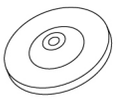
4G antenna



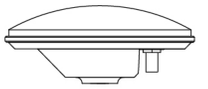
WiFi antenna



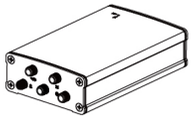
Connecting rod



Strong magnetic base



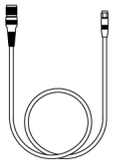
Base station mushroom head



Positioner



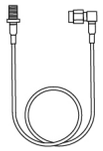
Remo connection line (one to two)



Base station connection cable



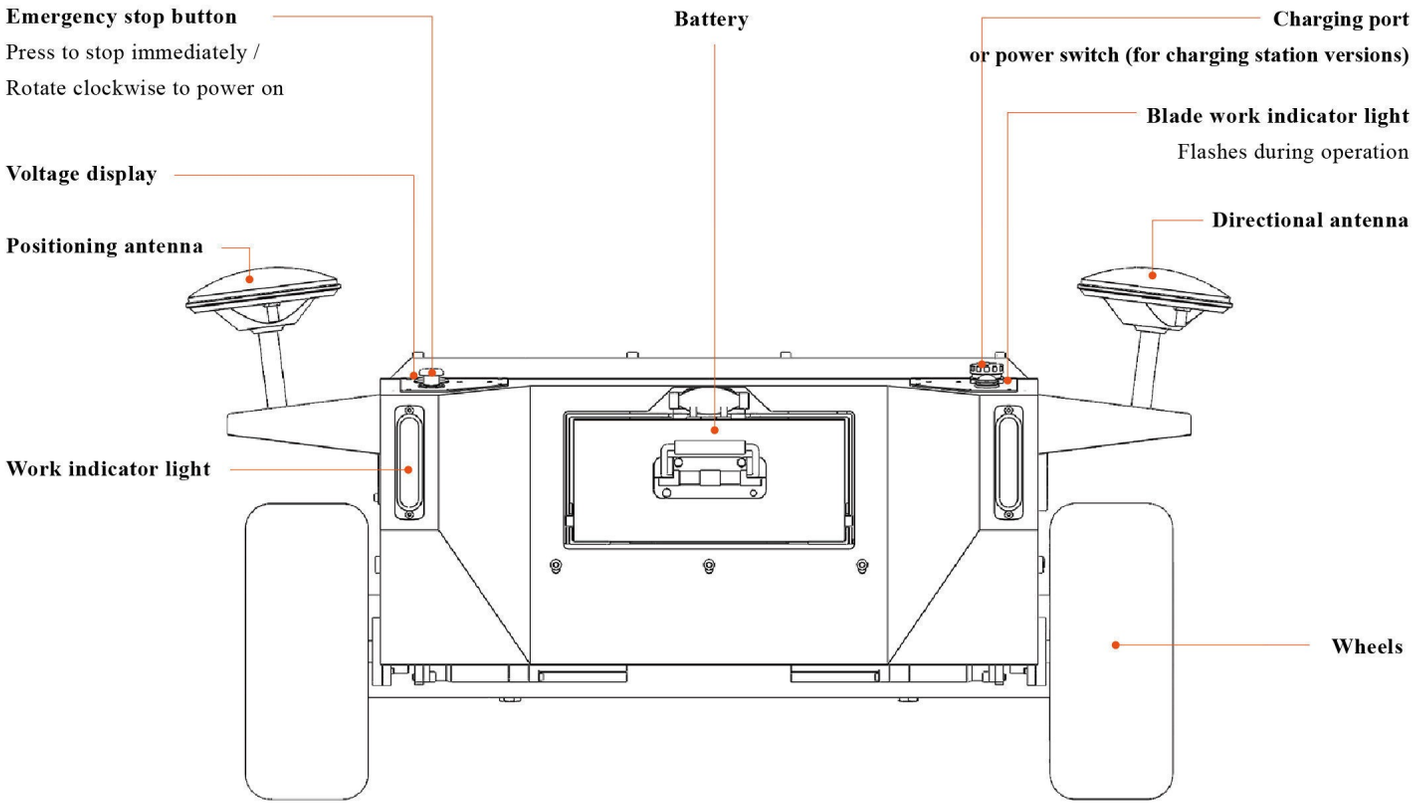
Radio antenna



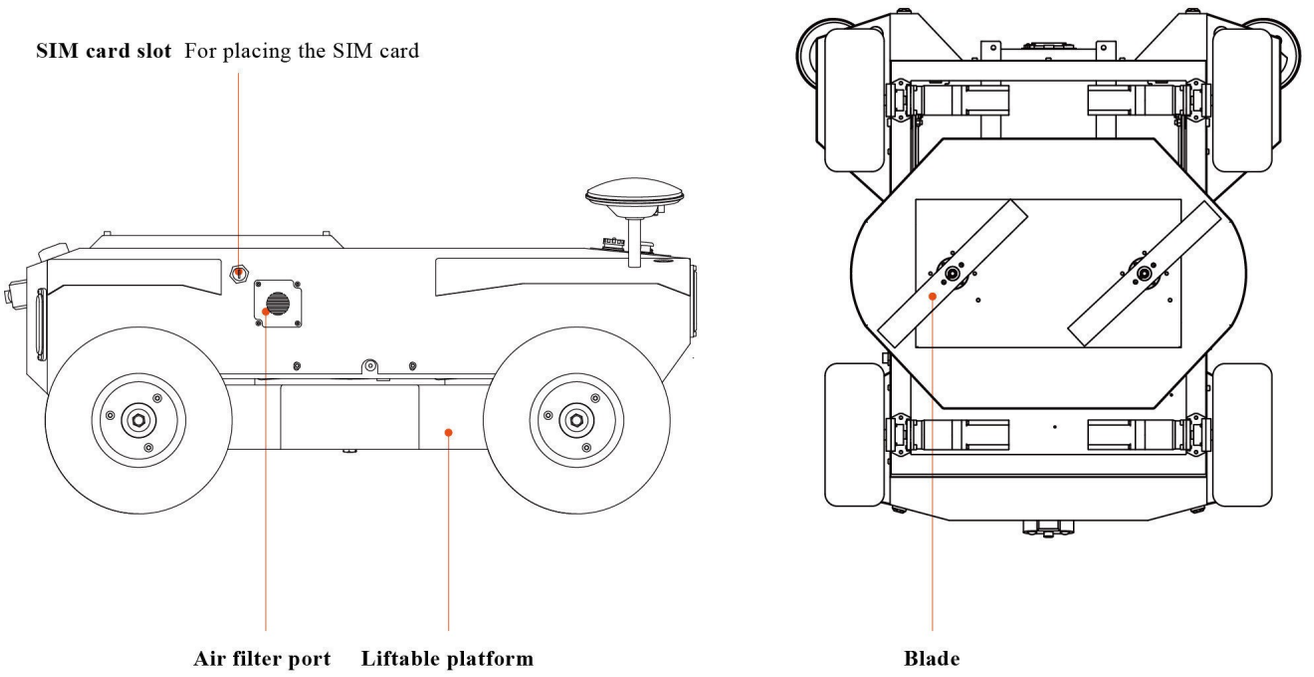
Radio connection cable

1.5 Parts and Functions

Lawn Mower



The buttons on the control panel are used to perform basic operations of the mower. The power display shows real-time voltage readings. The mower body incorporates a built-in GNSS positioning antenna. In addition to the external GNSS antenna connected to the base station, the mower body also features a GNSS directional antenna to enhance positioning accuracy. For details, refer to Section 1.2: How the WANJI R1 Works. Rotating the emergency stop button to the right instantly powers on the mower. Pressing it again powers off the entire unit. Radar sensors detect obstacles to prevent collisions. Pressing the emergency stop button immediately halts the mower's operation and blade rotation. The rear indicator lights display specific patterns during operation to alert users of the device's current status.



Remote Control

Cutter switch
Turn left to stop
Turn right to open
(If the machine shut down abnormally last time, please first turn left to turn off the scissor and then turn it on)

Warning light
Close upwards
Open downwards

Upward: Manual high gear
Downward: Manual low gear

Front and rear walking joystick

Do not press the highlighted button

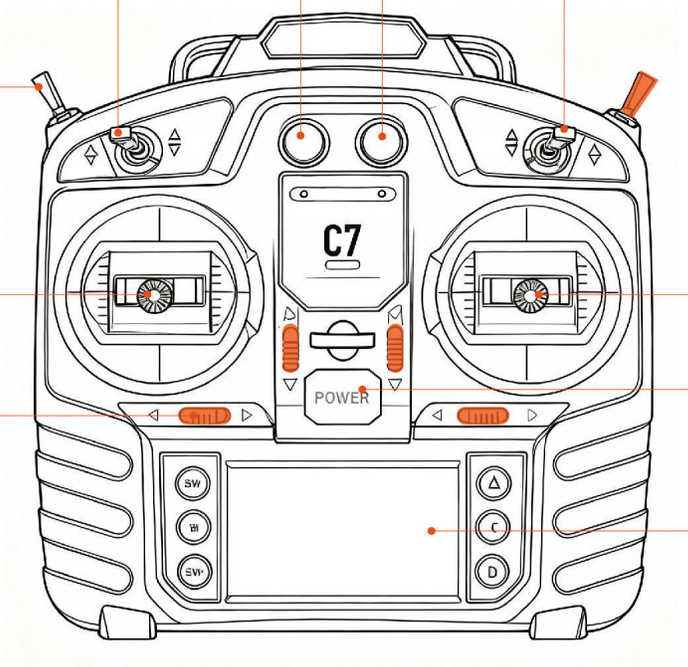
Turn left：**Navigation**
In the middle: **Safe**
Turn right: **Manual**

Cutting table height adjustment
Upward: Rise
Middle: Stop
Downward: Descend
(2-second pause)

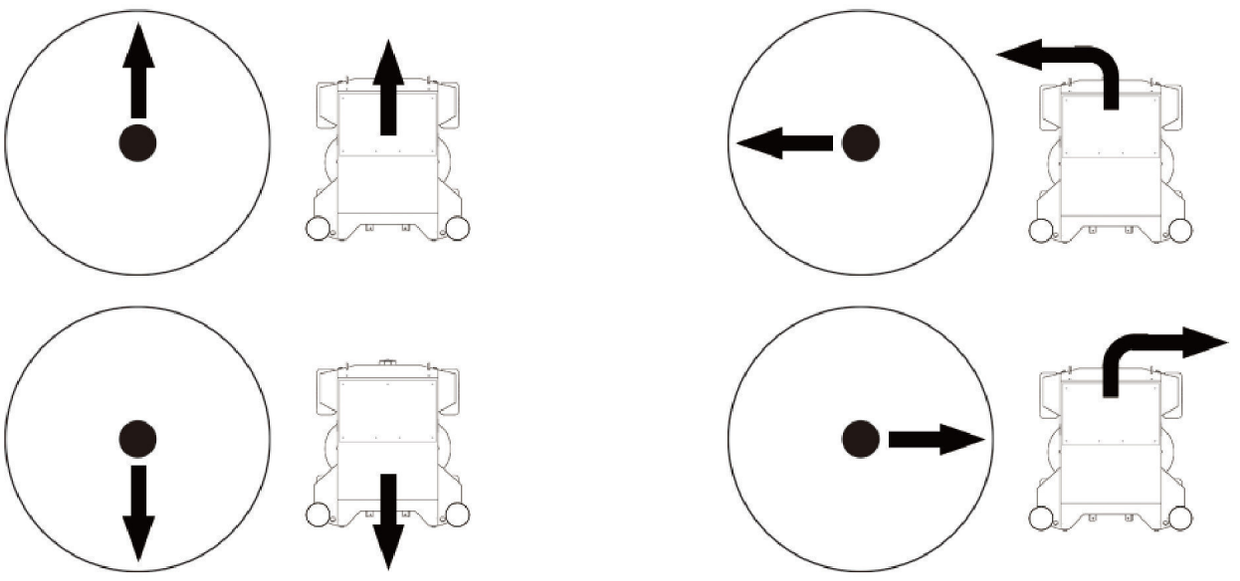
Left and right movement joystick

Power On/Off

Display screen



The left joystick of the remote control controls the forward/backward movement and differential steering of the machine, and the right joystick controls the left/right movement and differential steering of the machine. The direction of the joystick corresponds to the movement direction of the machine as shown in the figure below:



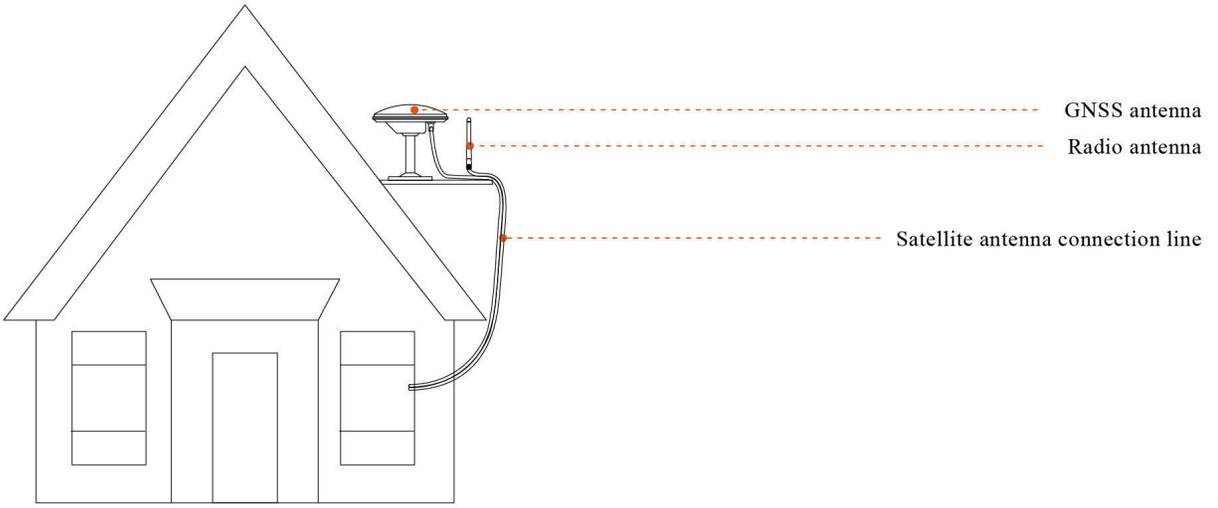
Display

	Meaning	
Power Display	**Voltage**	Maximum charging voltage: 54.6V Required charging voltage: 43-45V Charging current: ≤15A

Control

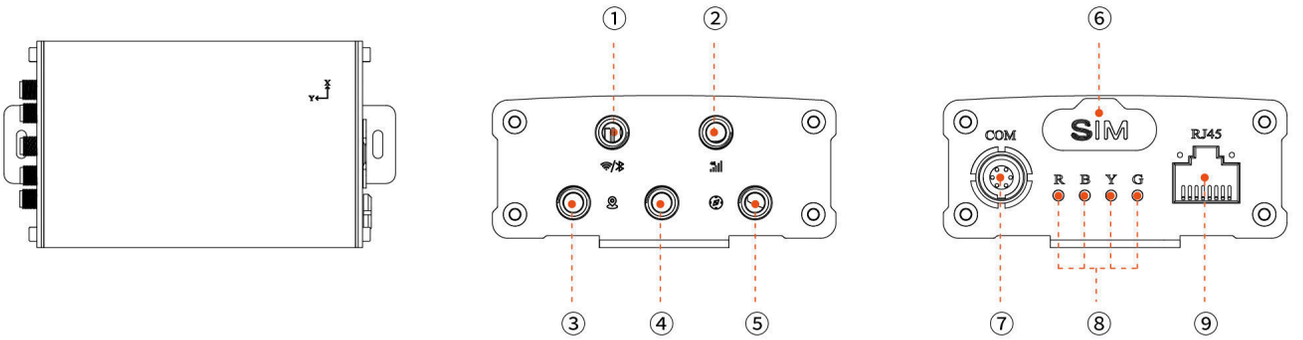
Operation	Description	
Power On	Standard Edition	Turn the emergency stop button to the right to “power on,” and the machine's power indicator light will illuminate.
	Charging Pile Edition	Turn the emergency stop button to the right, then press the power switch to turn it on. The power indicator light will illuminate.
Power Off	Standard Edition	Press the emergency stop button to shut down.
	Charging Pile Edition	Press the emergency stop button and the power switch simultaneously to “power off.”
Remote Operation		Press and hold the remote control's power button for 2 seconds to “power on.” Move the joystick to control the mower's direction.
Header Height Adjustment		Adjust the cutting deck height: move up to raise, stop in the middle, and move down to lower.
Start Mowing		Blade switch: turn to the right to start mowing, turn to the left to stop mowing.

GNSS Antenna and Radio Antenna



• GNSS antenna: Receives satellite signals to improve the positioning accuracy of the lawn mower.

• Radio antenna: Enhances the strength of radio signals between base stations and mobile stations.

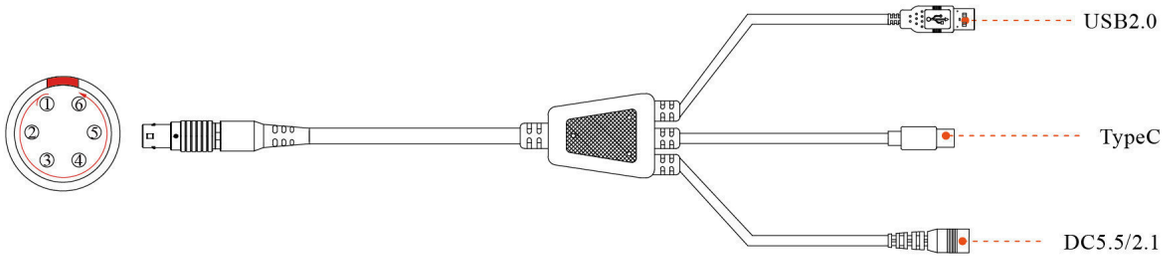


Serial Number	Interface Name	Meaning
①	Wireless/Bluetooth	External network data
②	4G antenna	Obtains 4G network signals
③	GNSS antenna interface (positioning)	GNSS position source
④	Radio antenna interface (not available for network version)	Increases radio signal strength
⑤	GNSS antenna interface (directional)	Directional point for GNSS direction data
⑥	MICRO SIM card (4G full network)	Inserts operator SIM card to obtain network
⑦	I/O	Serial port and USB communication
⑧	Indicator light	Displays various working statuses through different colors
⑨	Network port	External network data

Indicator Color	Status	Meaning
Red (R)	Flashes once per second	Effective positioning
Blue (B)	Steady on	Enter RTK fixed positioning
Orange (Y)	Steady on	Registered to LTE network
	Flashing	Not registered to the network
Green (G)	On for 0.2 seconds, off for 1.8 seconds	Normal connection status
	On for 1.8 seconds, off for 0.2 seconds	Standby
	On for 0.125 seconds, off for 0.125 seconds	Data transmission status

Lemo Connection Cable (One-to-Three)

① Communication port
② Communication port
③ GND
④ USB-DP
⑤ USB-DM
⑥ VCC

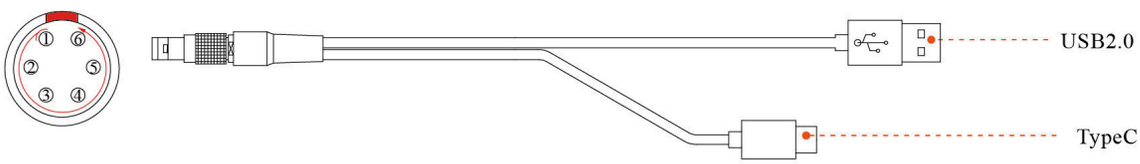


1.Equipped with Lemo to Type-A (USB) and Type-C cables. The USB interface adopts the standard USB2.0 protocol, which is used for the use and testing of systems such as Linux and Windows. The USB2.0 has a built-in USB-to-serial chip; please install the corresponding CH340 driver for the system before use. The Linux kernel has a built-in driver and can be used by direct plug-in.
2. The Type-C interface adopts the TTL serial protocol (3.3V level), which is used for embedded devices such as single-chip microcomputers. For wiring definition, please refer to the Type-C definition below for wiring.

		Function	Remarks
USB2.0	D-	USB2.0	Internal wire color: White
	D+	USB2.0	Internal wire color: Green
	-	Power negative pole	GND
TypeC	RX	Serial version (RX)	Internal wire color: White
	TX	Serial version (TX)	Internal wire color: Green
	-	Power negative pole	GND
DC5.5/2.1	+	Power positive pole	Supports 12~24V input
	-	Power negative pole	GND

Lemo Connection Cable (One-to-Two)

① Communication port
② Communication port
③ GND
④ USB-DP
⑤ USB-DM
⑥ VCC



1.Equipped with Lemo to Type-A (USB) and Type-C cables. The USB interface adopts the standard USB2.0 protocol, which is used for the use and testing of systems such as Linux and Windows. The USB2.0 has a built-in USB-to-serial chip; please install the corresponding CH340 driver for the system before use. The Linux kernel has a built-in driver and can be used by direct plug-in.
2. The Type-C interface adopts the TTL serial protocol (3.3V level), which is used for embedded devices such as single-chip microcomputers. For wiring definition, please refer to the Type-C definition below for wiring.

		Function	Remarks
USB2.0	D-	USB2.0	Internal wire color: White
	D+	USB2.0	Internal wire color: Green
	-	Power negative pole	GND
TypeC	S	Shell shielding layer	Can be left unconnected, connected to -
	+	Power positive pole	Supports 5V input
	D-	Serial version (RX)	Internal wire color: White
	D+	Serial version (TX)	Internal wire color: Green
	-	Power negative pole	GND

1.6 Technical Parameters

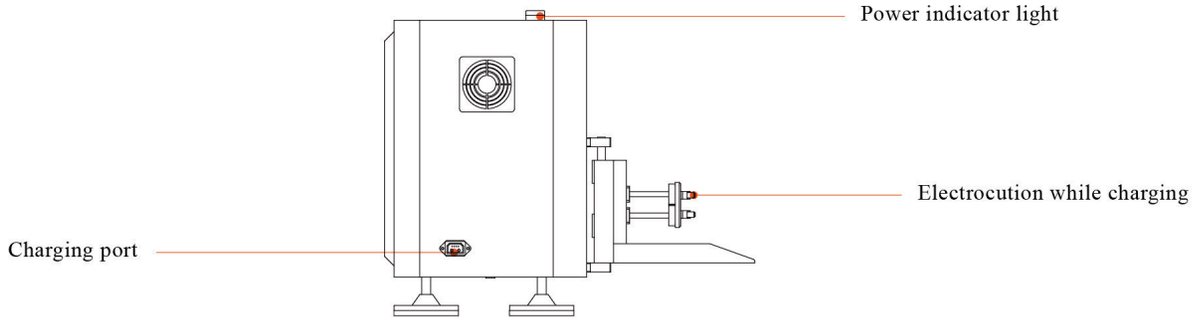
Category		Network Version	Radio Version
Basic Information	Product Name	WANJI R1 Intelligent Lawn Mower	
	Energy type	Pure Electric	
	Length * Width * Height	103*104*55cm (40.6 × 40.9 × 21.7 in)	
	Net weight	108kg (238 lbs)	
Lawn Mower Parameters	Protection level	IP54	
	Running speed	0-6km/h (3.7 mph)	
	Steepness of the slope	≤ 20° (36.4%)	
	Work efficiency (peak)	2000m2/h (Approx. 0.5 acres/h)	
	Cutting width	79cm (31.1 in)	
	Cutting platform lifting range	2-10cm (0.8–3.9 in)	
	Cutting knife rotational speed	3000rpm	
	Cutting knife power	850W*2	
	Travel power	400w Servo Motor*4	
	Control method	2.4G Remote Control/Autonomous Navigation	
	Working voltage	48V	
	Battery type	Lithium Iron Phosphate	
	Battery life	2h (48ah Battery)	
	Number of batteries	1	
	Battery replacement	Yes	
	Whether fast charging is supported	Yes	
	Charger	20A	
	Charging time	2.5h (Fast Charging Parameters)	
Lawn Mower Parameters	Single-point positioning accuracy	1.5m (4.9 ft)	
	RTK positioning accuracy	2cm (0.79 in) + 1 ppm	
	Orientation accuracy	0.2° (GNSS signal good, baseline length ≥3.3 ft)	
	Data update frequency	2~20Hz	
	Initialization time	Cold Start Time ≤25s	
	Entry method	4G/WIFI	
	Size	125.6x66.2x29.3mm (4.94x2.61x1.15 in)	
	Weight	185g (6.5 oz)	
	Material	Aluminum Alloy	
	Power	3.5W (Typical Value)	
	Working temperature	-40°F - 176°F	
	Storage temperature	-40°F - 176°F	
	Working voltage	5V / 12V	
	Walking speed	Supports speeds of up to 2 m/s (6.6 ft/s)	

Tested on a newly mowed lawn at full power in an ambient temperature of 25°C (77°F) at standard cutting speed. The product mows more per hour in open areas than divided small lawns. Working efficiency will decrease when the lawn is wet or the grass is long. The flatter the lawn surface, the higher the working efficiency.

1.7 Optional Accessories (Sold Separately)

Charging Pile

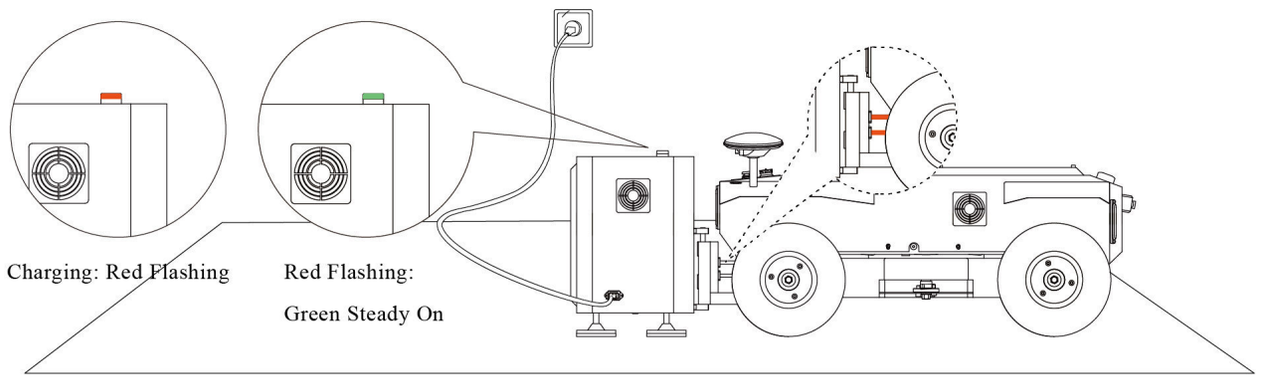
The charging pile is a supporting charging device for the intelligent lawn mower, which allows the lawn mower to automatically recharge, provide stable power supply, and feedback status through indicator lights. It supports outdoor durable design, is a key to realizing mowing automation, eliminating the trouble of manual charging, and improving efficiency and experience. (Use in temperatures above 0°C)



How to Use

Connect the power cord to the charging port of the charging pile, and insert the other end into the socket.

Remotely control the lawn mower to the charging pile for charging, ensuring that the charging strip of the lawn mower is closely attached to the charging strip of the charging base.

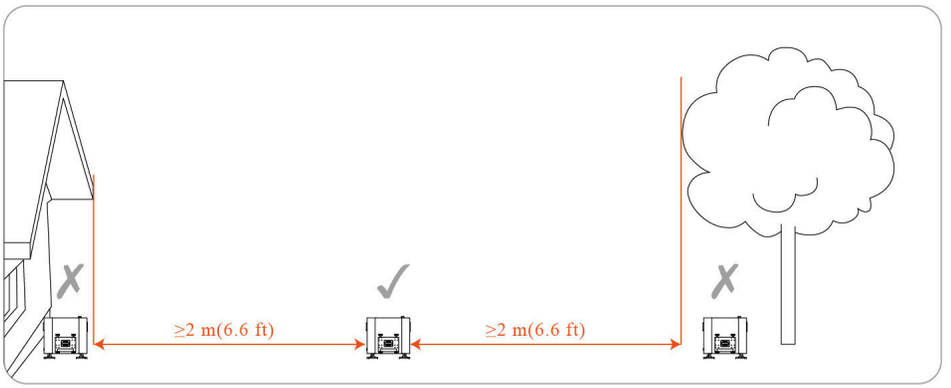


Charging Pile Location

The charging pile determines the position where the lawn mower parks for charging. If the charging pile is placed improperly, the lawn mower may fail to start mowing due to weak GPS signals. You can place the charging pile near the antenna, or ensure that there are enough visible satellites between the antenna and the lawn mower.

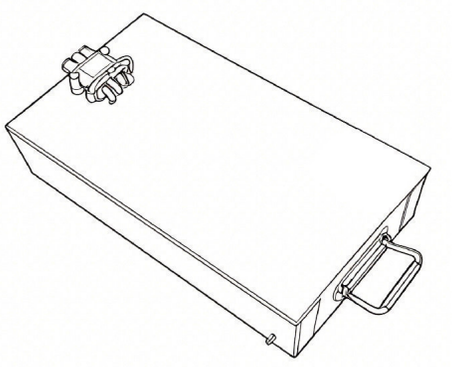
Please install the charging pile on a soft and flat ground. If placed outdoors, the charging pile should be at the same level as the lawn.

- Ensure that the sky view on the same side as the antenna is unobstructed.
- Install in an open area with no signal obstacles within a 2-meter (6.6-foot) radius.
- Do not cover the charging pile.
- Keep away from sprinklers, fountains, and other outdoor water supply systems.
- Keep away from substations, generators, water pump stations, and air conditioning equipment.



Battery

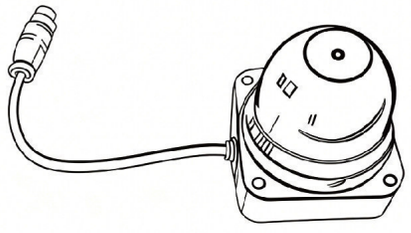
It is recommended to use two detachable batteries cyclically to avoid waiting for charging after a single battery is exhausted, realizing seamless connection between mowing and charging, thereby improving the continuous operation time and working efficiency of the equipment.

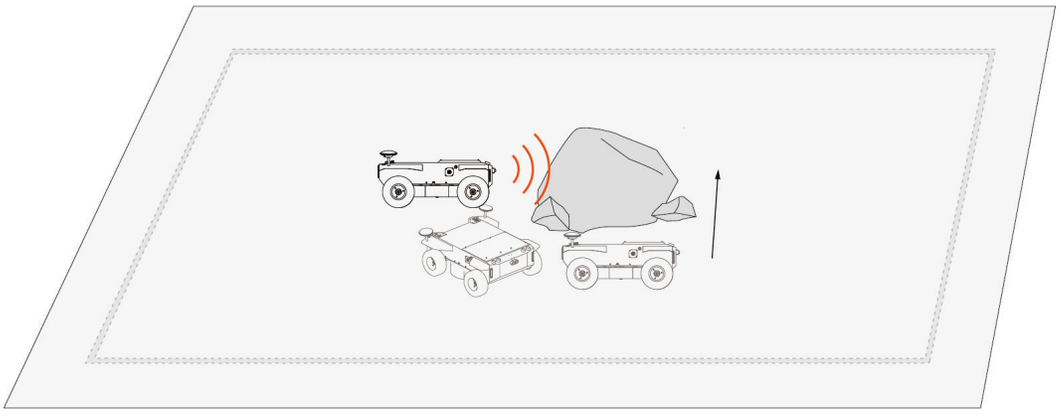


LiDAR

LiDAR precisely measures the distance between vehicles and obstacles by emitting laser beams into the surrounding environment and receiving reflected signals, generating high-precision 3D point cloud maps of the surroundings in real time.

The NAV-L3 system, integrated with LiDAR, clearly perceives the precise contours, size, and position of obstacles. Based on this information, it enables functions to stop or navigate around obstacles.





Industrial remote control

Emergency stop switch

Turn to the right

Cutter switch

Up: On

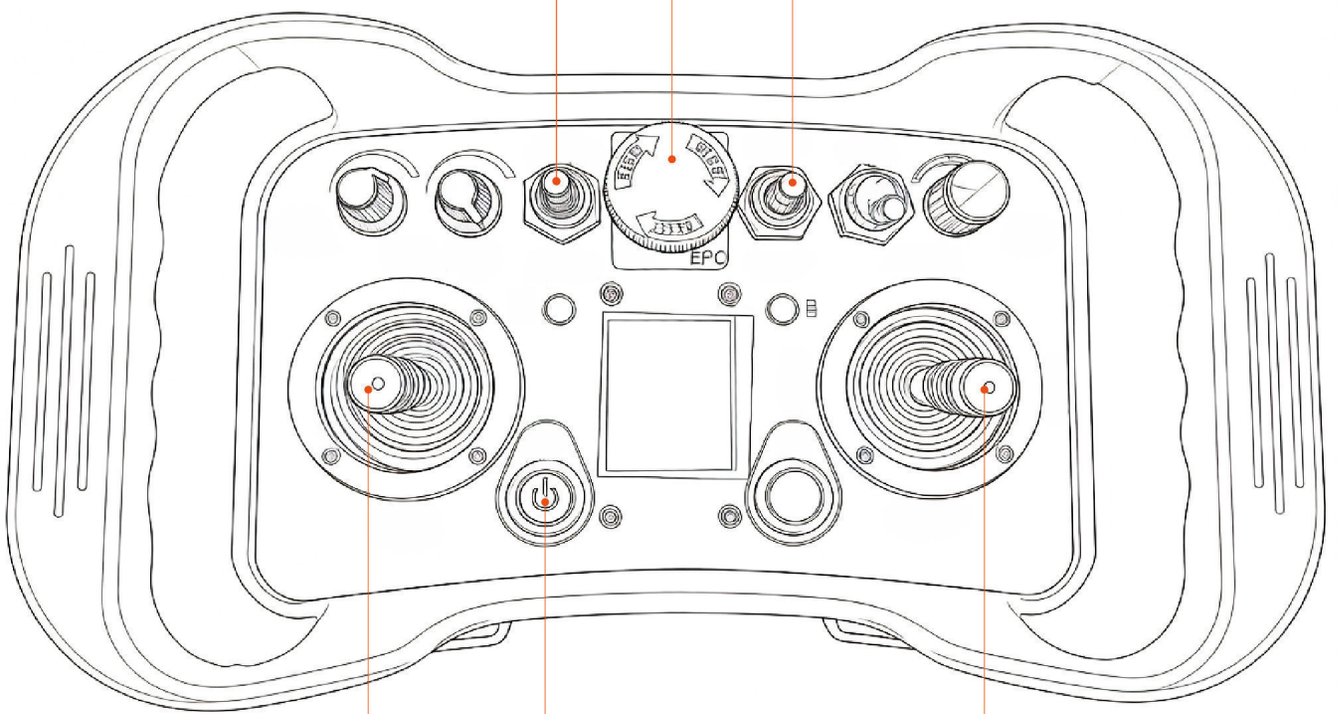
Down: Off

Cutting table height adjustment

Up: Raise

Middle: Stop

Down: Lower



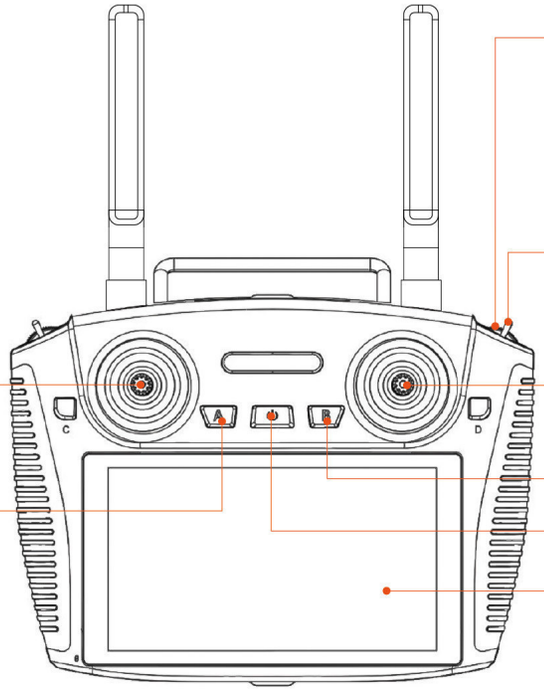
Front and rear walking joystick

Long press the power on/off button

Left and right movement joystick

YunZhuo G12 Remote Control

Equipped with a large-size display screen, it is mainly used to intuitively and conveniently remotely control the lawn mower and check the working status in real-time.



Cutting table height adjustment
Upward: Rise
Middle: Stop
Downward: Descend
(2-second pause)

Turn left：**Navigation**
In the middle: **Safe**
Turn right: **Manual**

Front and rear walking joystick

Left and right movement joystick

Light switch

Cutter switch
(If the system shut down abnormally last time, please turn on the A button again.)

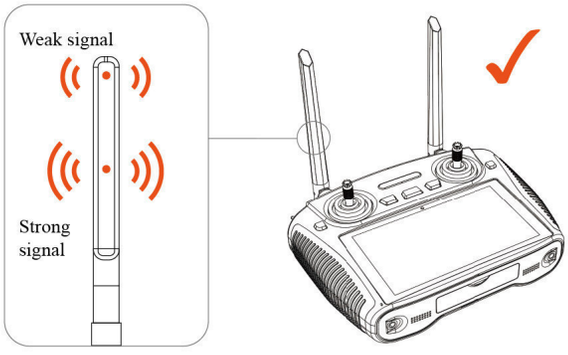
Long press the power on/off button

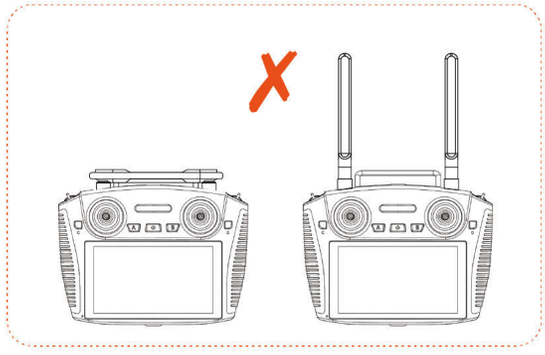
Display screen

How to Use

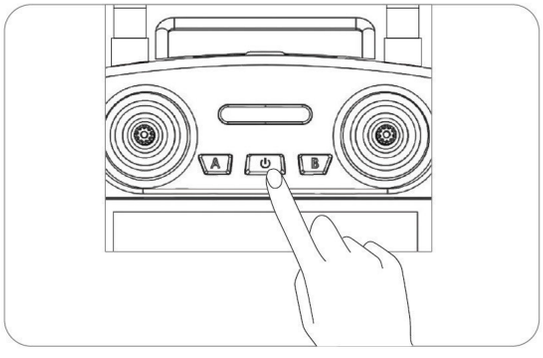
1. Unfold the antenna and point it vertically upward. As shown in the figure, the middle and lower part of the antenna is where the signal is strong, and it should face the direction of the lawn mower.

• Do not cross the antennas; folding and crossing will cause mutual interference between the two antennas, leading to signal abnormalities.
• Do not place it parallel to the remote control, as it will prevent the antenna signal from maximizing performance.

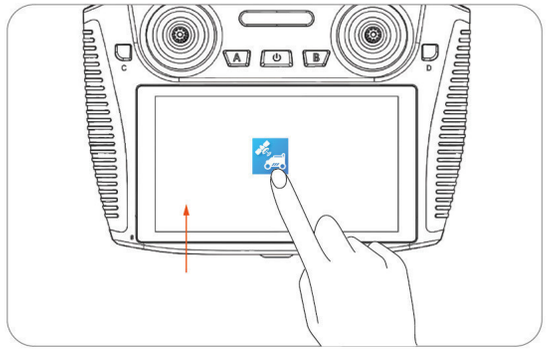




2. Long press the power button to turn on the remote control.

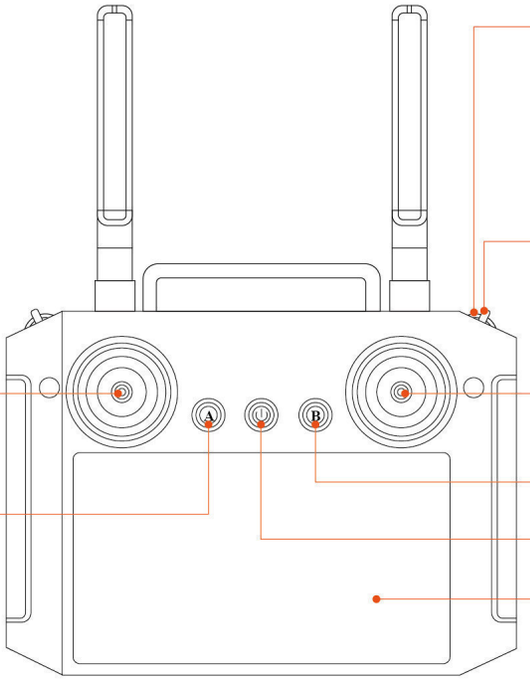


3. After power on, slide up from the bottom of the screen to the menu page, and click the "SmartNavi" App.



YunZhuo H12 Remote Control

Equipped with a large-size display screen, it is mainly used to intuitively and conveniently remotely control the lawn mower and check the working status in real-time.



Cutting table height adjustment
Upward: Rise
Middle: Stop
Downward: Descend
(2-second pause)

Turn left：**Navigation**
In the middle: **Safe**
Turn right: **Manual**

Front and rear walking joystick

Left and right movement joystick

Light switch

Cutter switch
(If the system shut down abnormally last time, please turn on the A button again.)

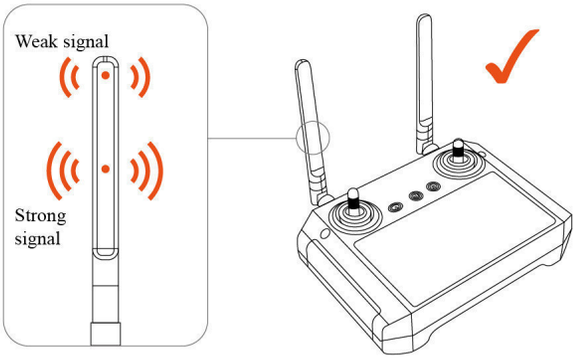
Long press the power on/off button

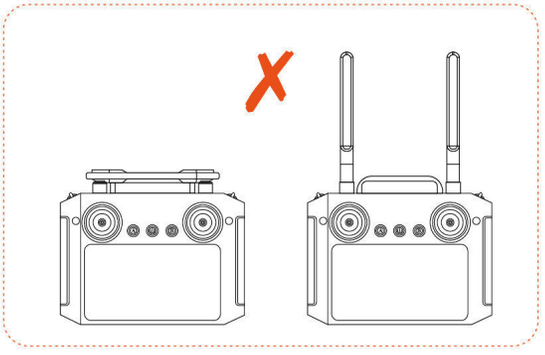
Display screen

How to Use

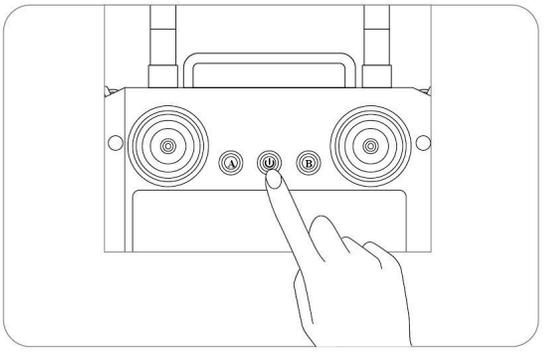
1. Unfold the antenna and point it vertically upward. As shown in the figure, the middle and lower part of the antenna is where the signal is strong, and it should face the direction of the lawn mower.

• Do not cross the antennas; folding and crossing will cause mutual interference between the two antennas, leading to signal abnormalities.
• Do not place it parallel to the remote control, as it will prevent the antenna signal from maximizing performance.

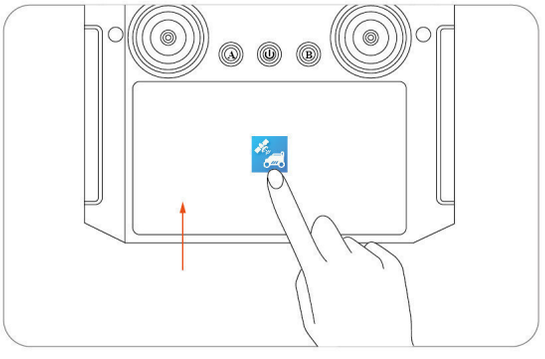




2. Long press the power button to turn on the remote control.

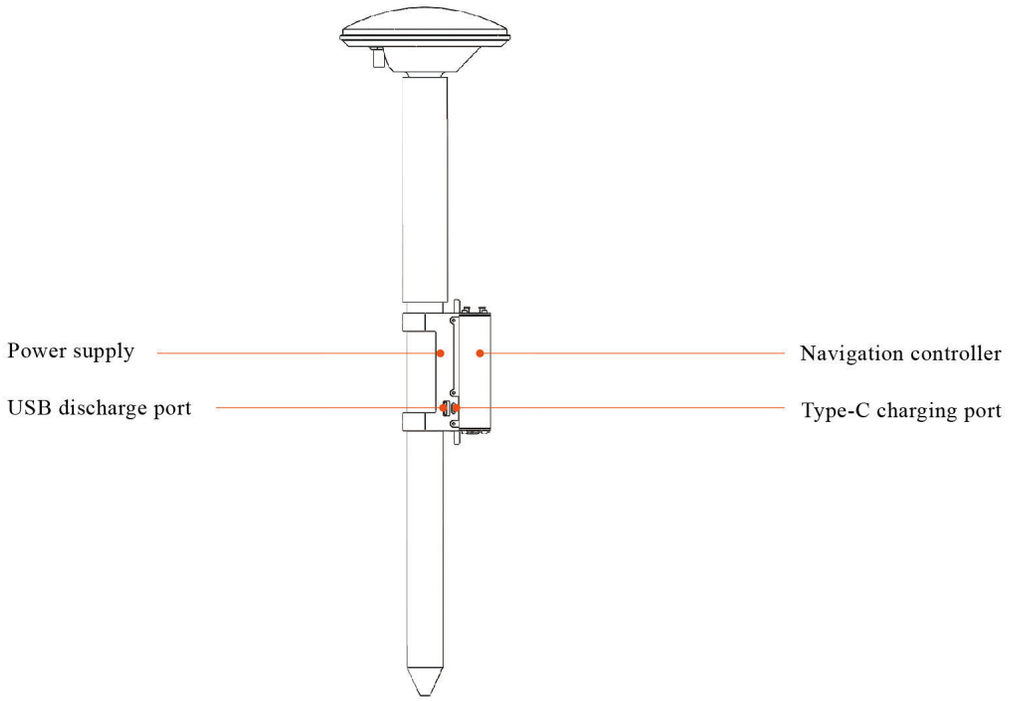


3. After power on, slide up from the bottom of the screen to the menu page, and click the "SmartNavi" App.



Handheld Point Marker

Through "on-site marking + data synchronization", the handheld point marker solves the detail problems that are difficult to cover by automatic mapping, allowing users to customize mowing plans more flexibly. It is a practical tool to improve mowing accuracy and personalization.



2. Installation and Mapping

2.1 Preparation Before Startup

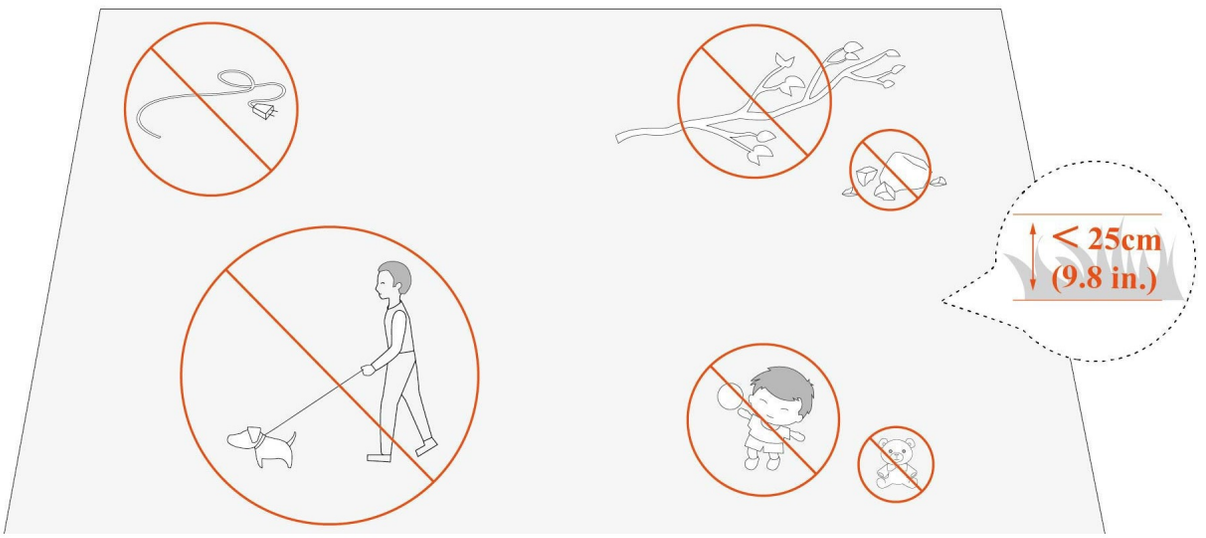
Prepare the Application Program (Network Version)

To ensure successful setup, please download and install the "SmartNavi" application program. You can also go to the Apple App Store (iOS system) to search for "SmartNavi". For Android systems, search for "SmartNavi" in Google Play. After installing the application program, please complete registration and login.

Note: During use, the application program will request Bluetooth, GPS positioning, and Wi-Fi network access pe use, it is recommended that you enable the above permissions.

Prepare the Lawn

Before using the lawn mower, ensure the grass height does not exceed approximately 9.8 inches (25 cm). Clear the lawn of stones, metal objects, thick branches, and other hard materials to prevent blade damage or hazards. Additionally, keep children and pets away from the work area during operation to ensure safety.

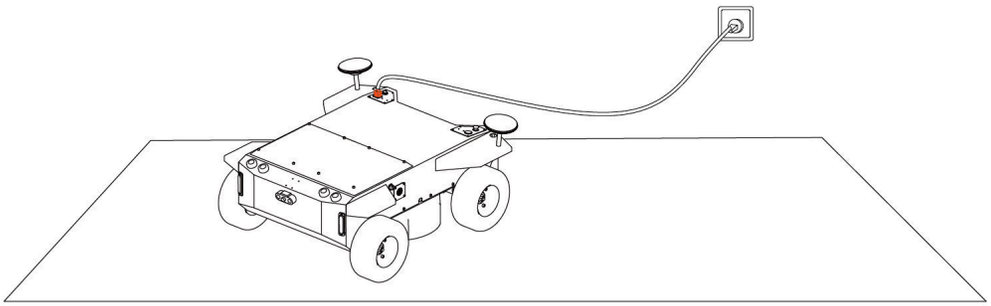


First Charging of the Lawn Mower

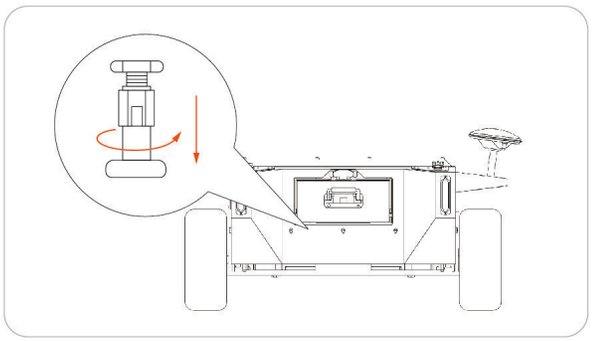
The battery power of the new lawn mower may be low after long-term storage. Please fully charge the lawn mower battery before first use. Or remotely control the lawn mower to the charging pile for charging (see "1.8 Optional Accessories - Charging Pile" for specific operations).

How to Charge

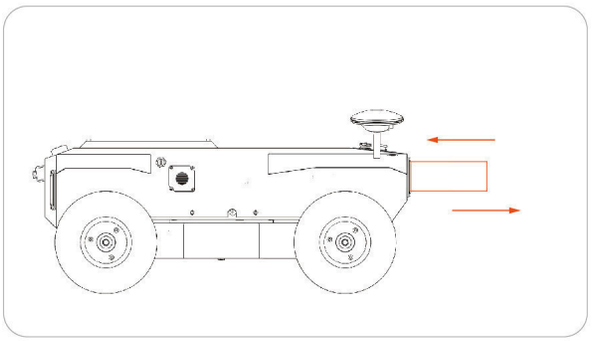
1. Open the charging port of the lawn mower, insert the plug into the charging port, and tighten the lock to prevent the plug from falling off. Insert the other end into the socket to start charging.（Maximum charging voltage: 54.6V Required charging voltage: 43-45V Charging current: ≤15A）



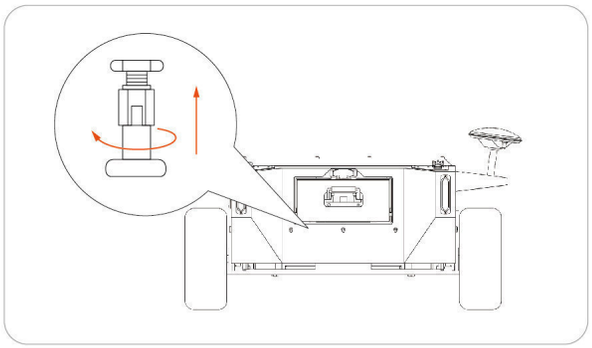
2. Turn off the power and shut down the lawn mower. Pull down the battery buckle and rotate it to the right to open.



3. Turn off the power and shut down the lawn mower. Pull down the battery buckle and rotate it to the right to open.

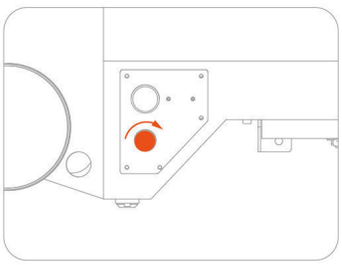


4. Rotate the battery buckle to the left and push up to close, completing the battery replacement.

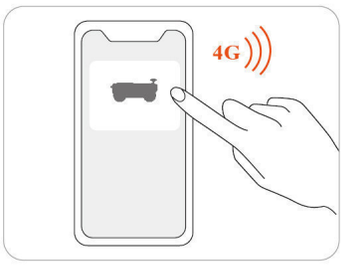


2.2 Start the Lawn Mower

1. Rotate the emergency stop button on the lawn mower clockwise to start the power supply. (For the charging station version, you must also press the power switch to turn it on.)



2. Connect the lawn mower via 4G network/radio network.



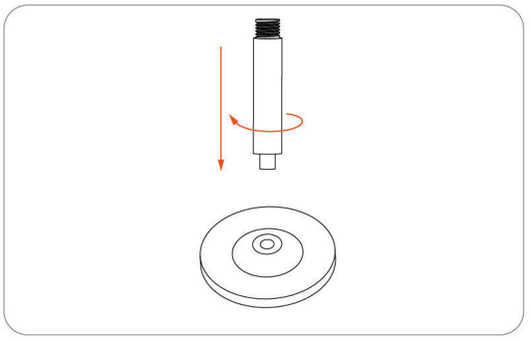
2.3 Install the Antenna

2.3.1 Base Station Installation

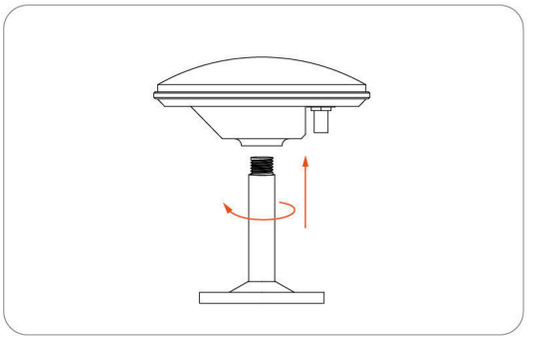
Base stations are primarily categorized into two types: network version and radio version. You may select the appropriate version based on your actual usage requirements.

Network Version Installation

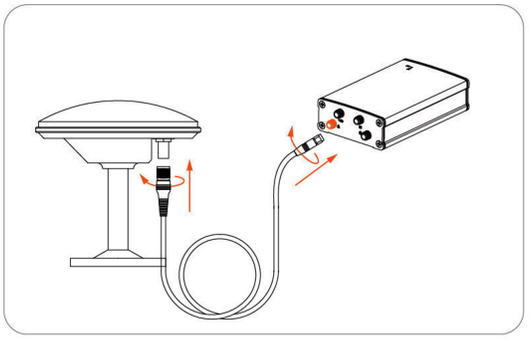
1. Screw the small end of the mushroom head connecting rod into the magnetic base.



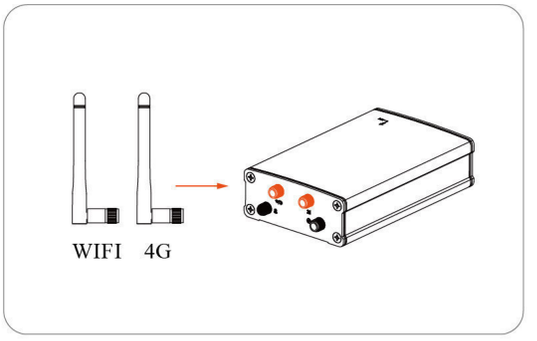
2. Screw the mushroom head into the connecting rod to complete the assembly of the antenna main body.



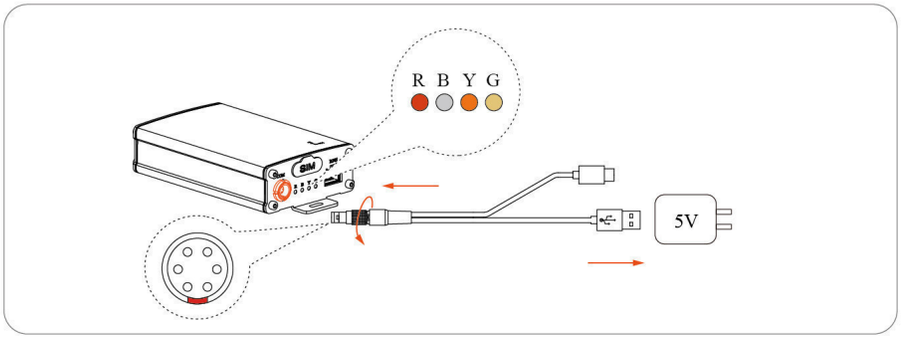
3. Insert the connecting cable plug into the mushroom head antenna. Insert the other end of the connecting cable into the locator interface.



4. Connect the 4G antenna and WIFI antenna to the locator.

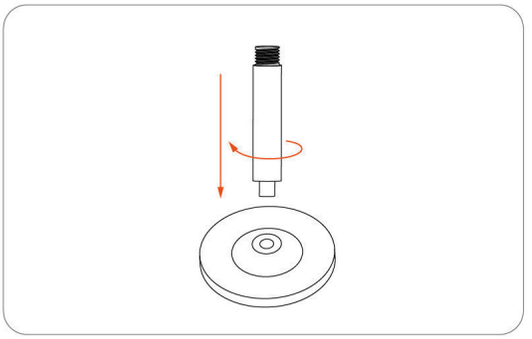


5. Connect the Lemo port of the power supply cable (red dot downward) to the locator. For the 4G version, insert the SIM card here. Insert the other end of the power supply cable into a 5V power supply. Wait for the Y light to be steady on, the G light to flash quickly, and the R light to flash, indicating that the signal is normal.

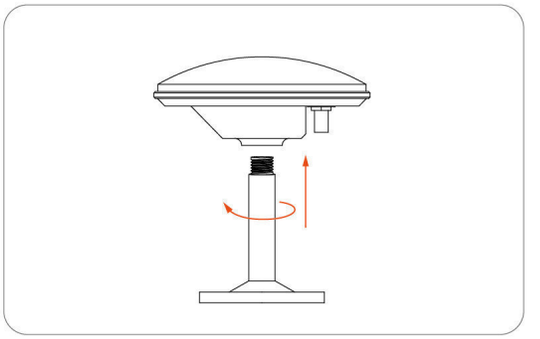


Radio Version Installation

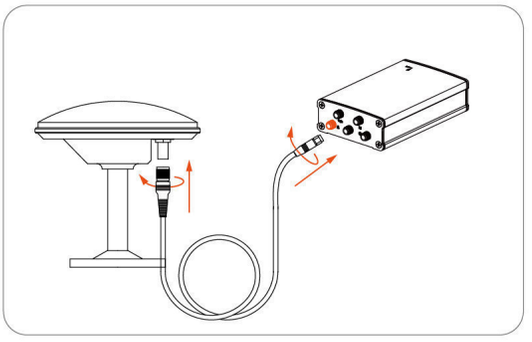
1 Screw the small end of the mushroom head connecting rod into the magnetic base.



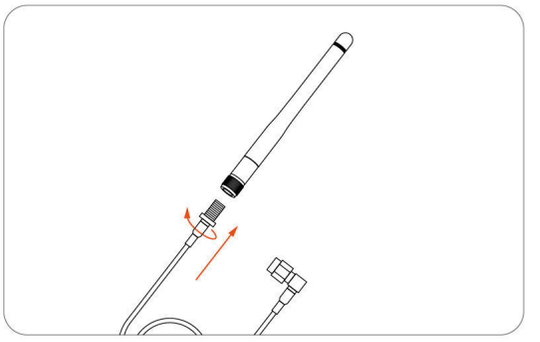
2 Screw the mushroom head into the connecting rod.



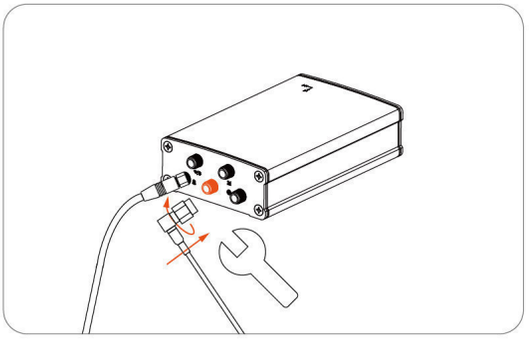
3 Insert the connecting cable plug into the mushroom head antenna. Insert the other end of the connecting cable into the locator interface.



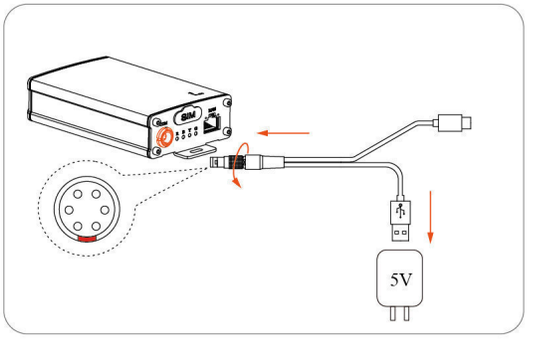
4 Connect the straight end of the radio connecting cable to the radio antenna.



5 Use a wrench to gently screw the right-angle end of the other end of the radio connecting cable into the locator interface.

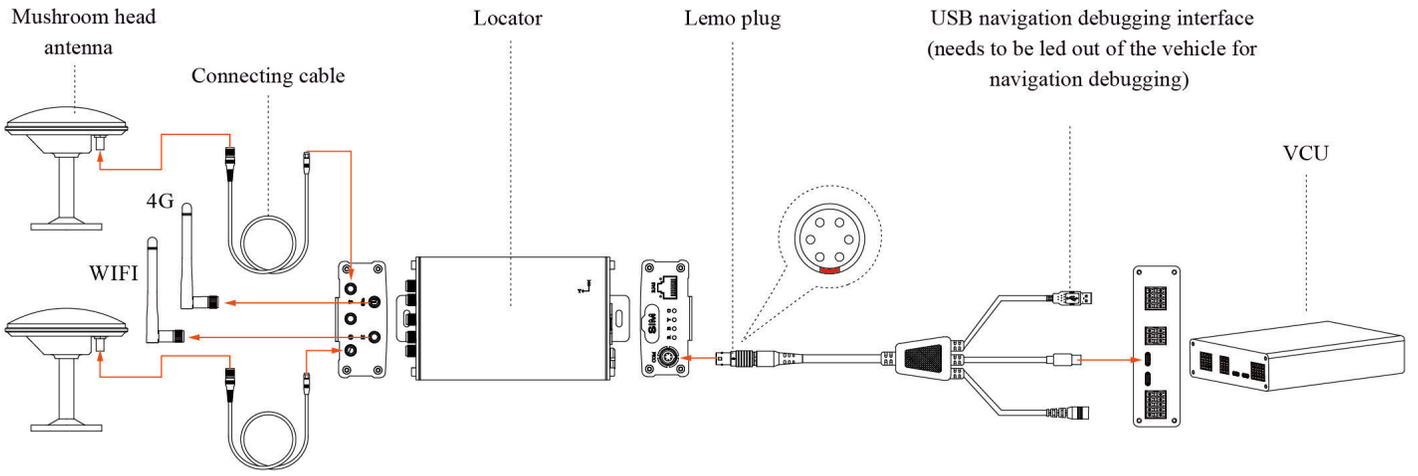


6 Connect the Lemo port of the power supply cable (red dot downward) to the locator, and insert the USB port of the other end into a 5V power supply.

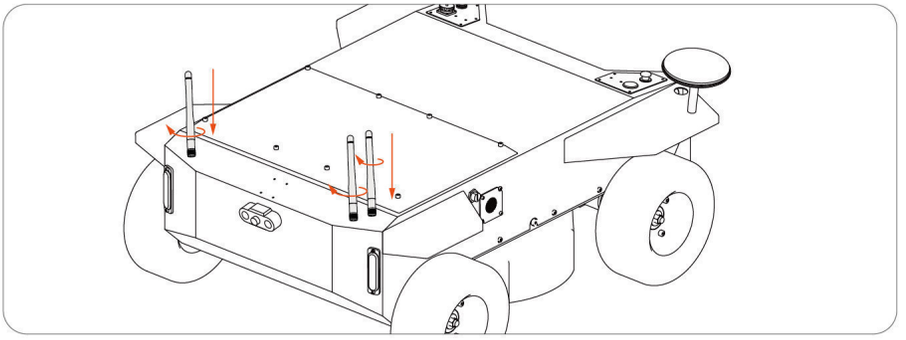


2.3.2 Mobile Base Station Installation

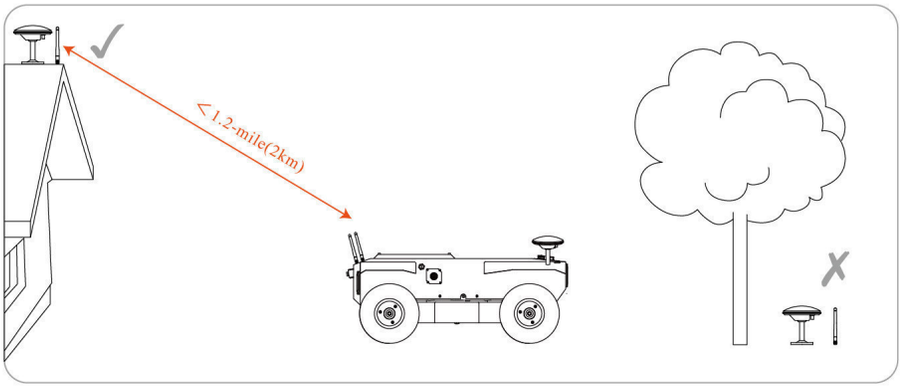
1. As shown in the figure, connect the mushroom head antenna, 4G antenna, WIFI antenna to the locator, and connect the locator to the VCU. (Installed before the lawn mower leaves the factory)



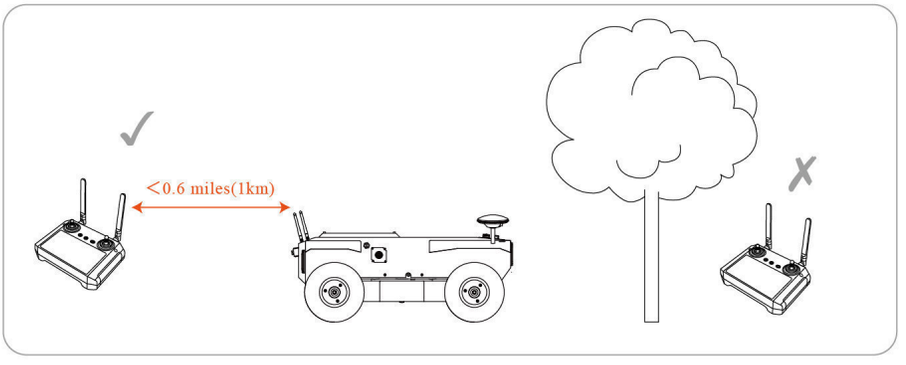
2. Insert the radio antenna and remote control antenna into the top of the lawn mower.



⚠ Ensure that the radio antenna on the mower maintains a direct line of sight with the base station's radio antenna, with no obstructions, and remains within a 1.2-mile(2km) distance.



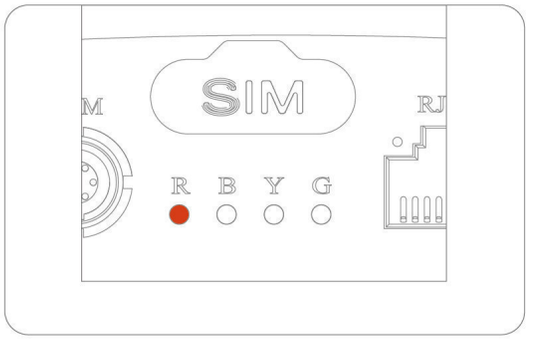
⚠ Ensure a clear line of sight between the receiver antenna on the mower and the remote control antenna, and keep the distance within 0.6 miles(1km).



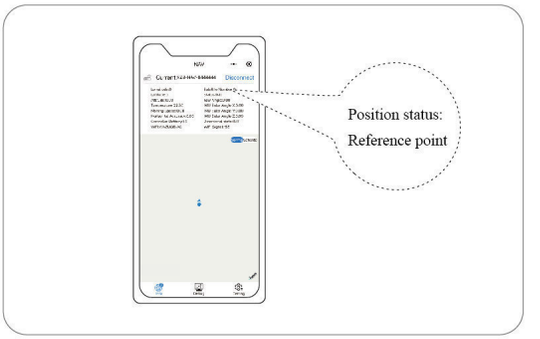
2.3.3 Antenna Inspection

Base Station Inspection

1. Power on the device and wait for the base station locator's red (R) indicator to flash (approximately 2 to 3 minutes).

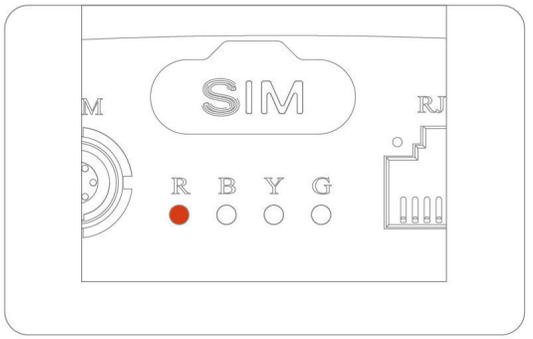


2. Check whether the positioning status of the mini-program base station is at the reference point(approximately 2 minutes after the red light flashes).

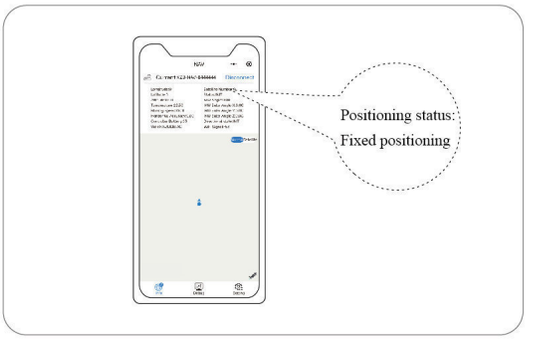


Mobile Base Station Inspection

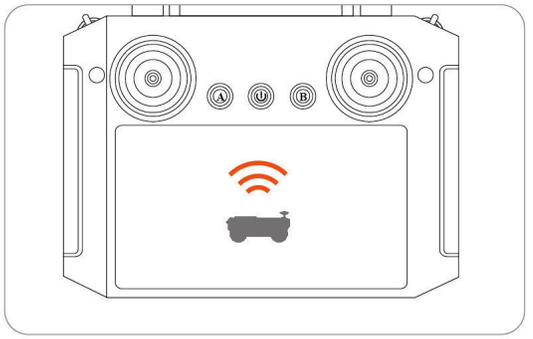
1. Power on the device and wait for the locator's red (R) light to flash (approximately 2 to 3 minutes).



2. Check whether the positioning status of the mini-program mobile site is fixed positioning(approximately 2 minutes after the red light flashes).



3. Check whether the devices are online in the remote control or the " SmartNavi" application on your mobile phone.



2.4 Location Selection

The basic principles for placing the antenna and charging pile are as follows:

1. Keep a certain distance from buildings, trees and walls (more than 2 metres/6.6 feet).
2. Position the antenna in an open area to ensure the signal is not obstructed (e.g. by tree canopies or parasols).
3. Place the antenna on flat, unpaved ground and ensure it is vertical. Do not install it on a slope.

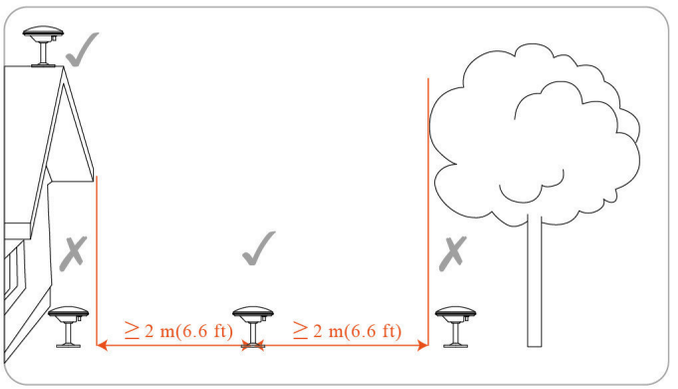
2.4.1 Antenna Location

Choosing the antenna location is one of the most important steps during setup. The antenna needs to be installed in a place where it can share as many visible satellites as possible with the device at any position. Otherwise, the device will be difficult to locate accurately during operation. For more information about visible satellites, please refer to Section 2.4.2 "Verifying location using satellite signal analysis software".

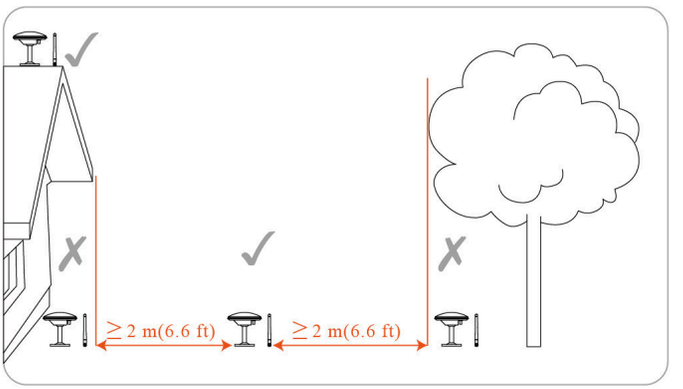
Guidelines for finding a suitable location:

• Try to choose an open area with no walls blocking the view around. Ensure that the sky directly above the antenna is not blocked by trees or roofs.

• If it is impossible to have a completely open area around, at least keep the southern sky unobstructed in the northern hemisphere and the northern sky unobstructed in the southern hemisphere. (If possible, try to keep the east and west sides free of obstacles.)

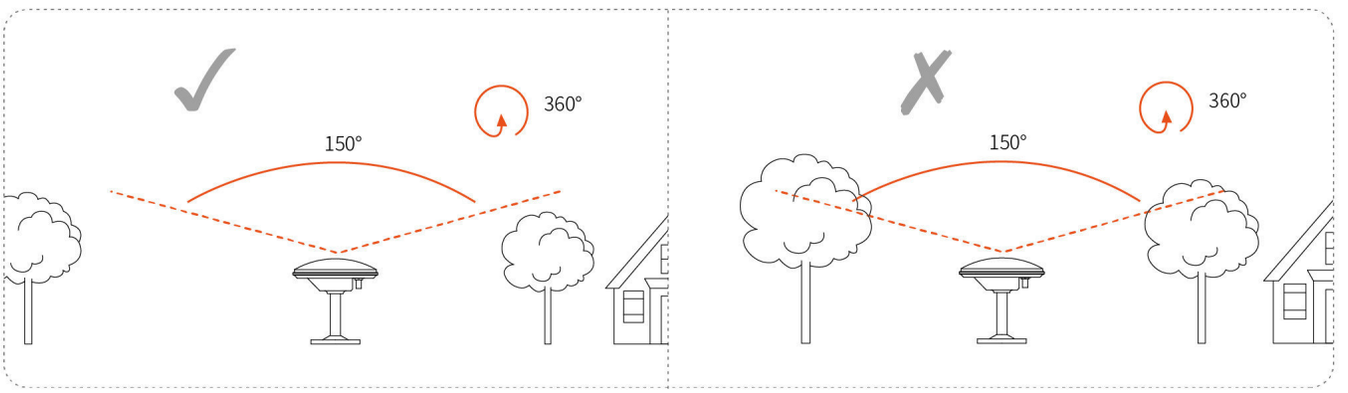


Web version

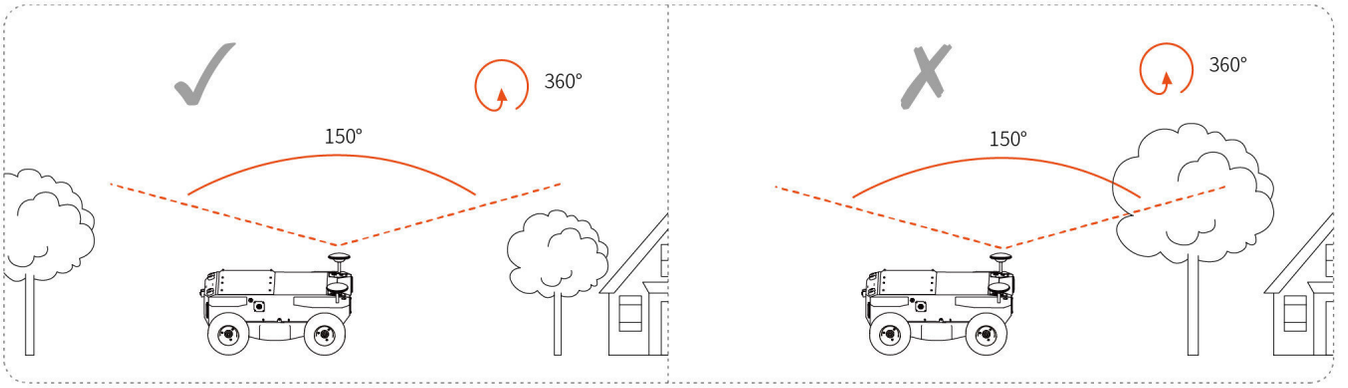


Radio version

Note: Ensure there are no obstructions within the 150° angle above the base station.



Note: Ensure there are no obstructions within the 150° angle above the rover station.

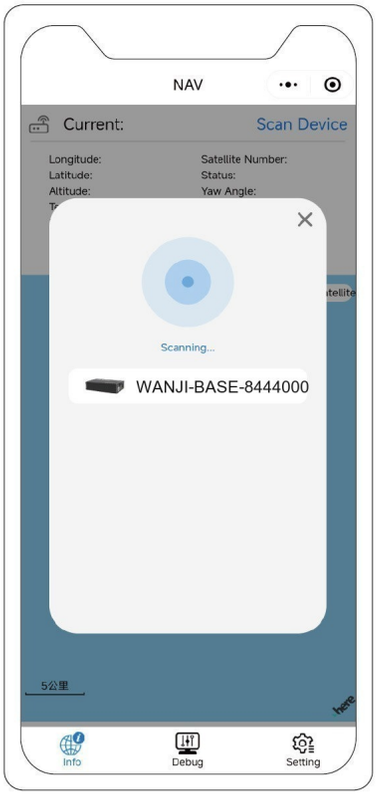


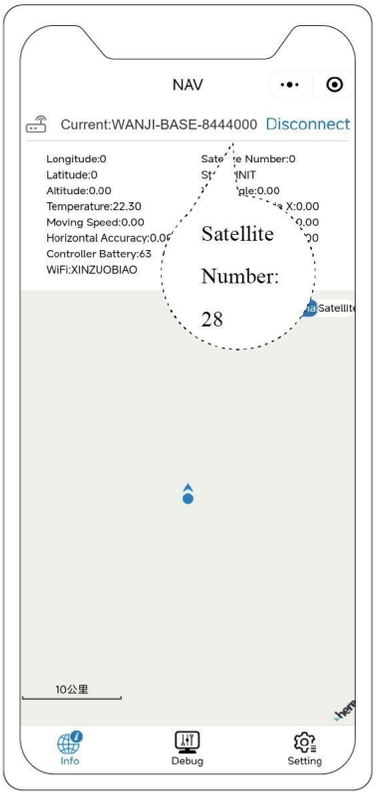
2.4.2 Verifying location using satellite signal analysis software

Satellite signal analysis software helps you check whether the antenna and charging point are installed in the correct positions.

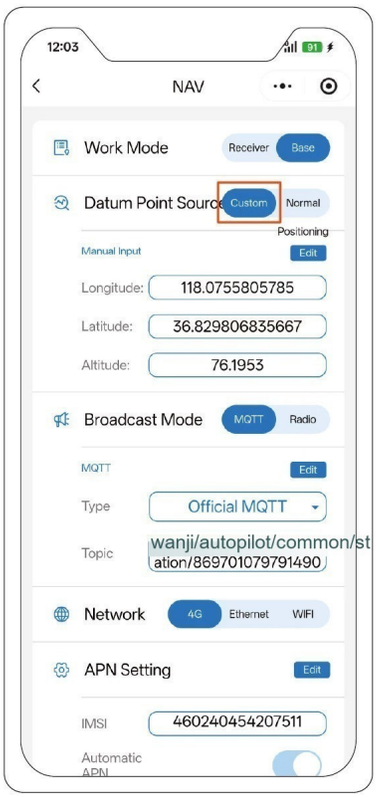
If the results indicate an adequate number of satellites, this confirms the antenna is properly positioned. If fewer than 22 satellites are detected, this means you need to relocate the antenna to a different spot. After relocation, check the satellite count again.

1. Click "Scan Device" to connect to the base station (starting with WANJI-BASE). After successful connection, the pop-up window will disappear, and you can view the number of satellites.





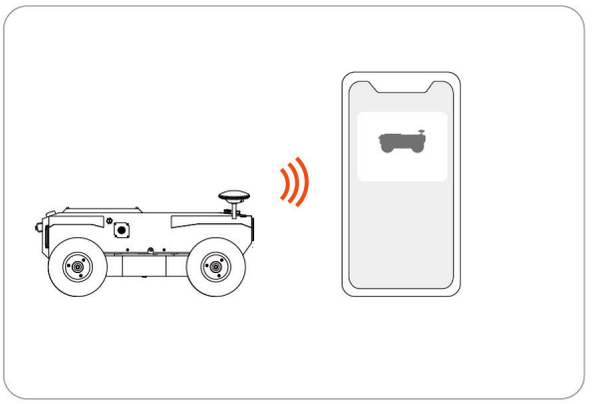
2. After completing base station testing and securing a fixed position, wait for the base station to enter the reference point. You can then switch to custom mode via the mini-program. This prevents map offset caused by base station power cycling. However, if the base station's position changes afterward, it will be unable to re-enter the reference point state.



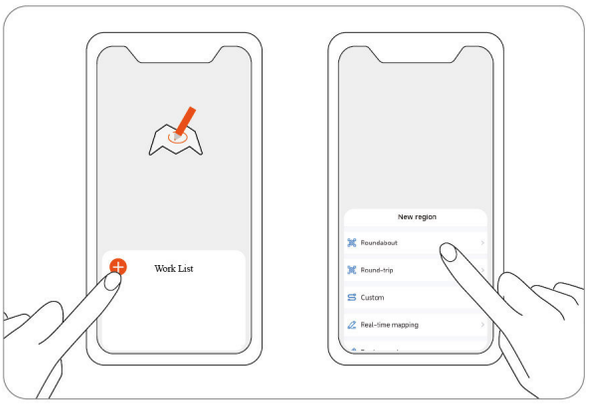
⚠ Please choose locations carefully. Once the map is saved, if the base station is reactivated or the GNSS antenna position is altered, you will need to create a new map or recalibrate the entire area based on the actual location of the return point.

2.5 Plan the Working Area

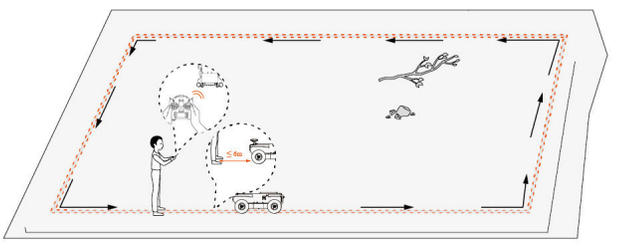
1. Turn on the lawn mower and the remote control. Your mobile phone and remote control will automatically establish a connection with the lawn mower via 4G network/radio. (For initial pairing, Bluetooth must be enabled and the device must be within 2 metres.)



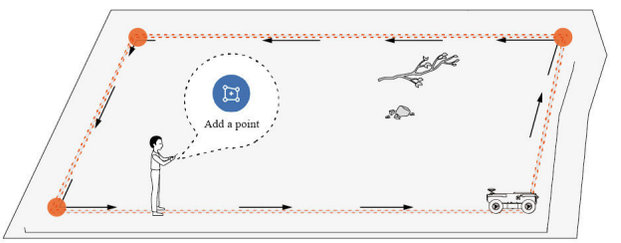
2. Enter the "Device Details" page, click the "+" icon in the operation list, select the corresponding route type (such as zigzag), and enter the new area page. For other route operations, please refer to the "Application Program Manual".



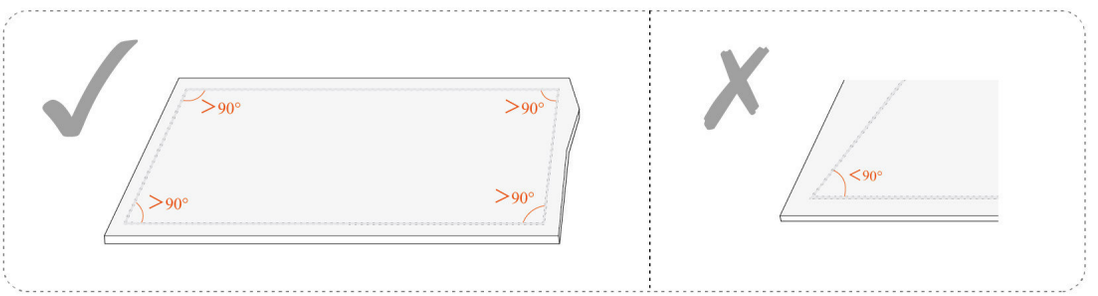
3. Find a suitable starting point at the edge of the lawn. Keep the mobile phone active and avoid switching to other applications. During mapping, keep the lawn mower within 6 meters (19.7 feet). If the device behaves abnormally, you can stop controlling the device at any time.



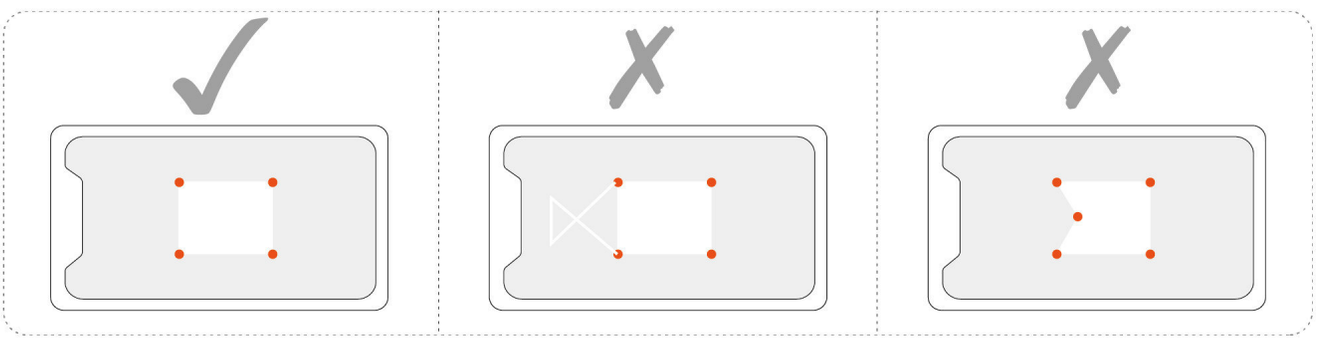
4. Use the remote control to move the machine to the inflection point of the area to be operated, and click the "Add Point" button. Add the endpoints of the working area in clockwise or counterclockwise order until all endpoints of the working area are completed. During the point marking process, you can undo the last recorded endpoint by clicking the undo button.



Angle: Ensure to drive in a straight line, with gentle turning angles not less than 90°.

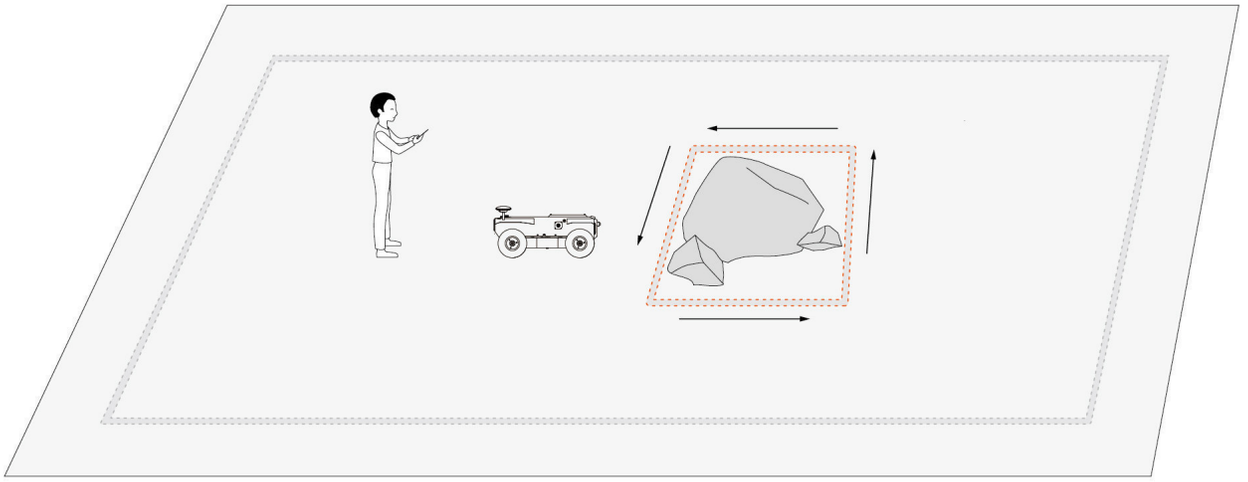


Note: Check the route to see if it exceeds the working area (the working area is the white area). If it exceeds the working area, please re-plan the working area. To ensure the operation effect, the working area should be as quadrilateral as possible, without large protruding and concave areas. If necessary, it can be divided into multiple areas.



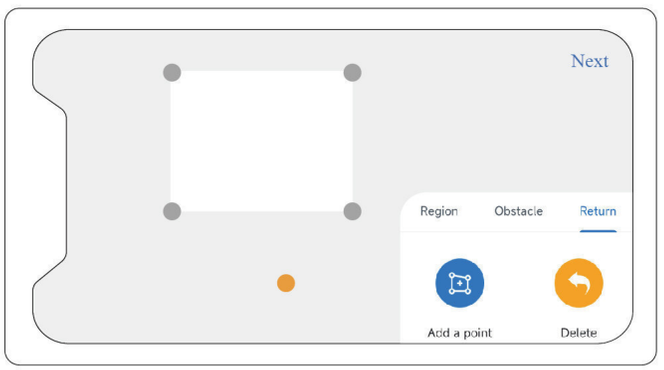
5 If there are hard obstacles in the lawn, such as large rocks or trees, you can set up no-go zones for the mower. (This setting is also required for obstacles after installing the LiDAR sensor on the device.)

Click “Obstacle Point,” use the remote control to move the machine to the obstacle's location, click “Add Point” to mark multiple corners of the obstacle one by one, then click “Done.”

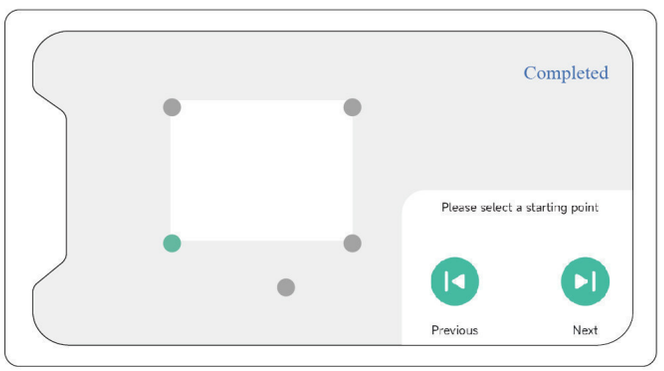


Note: When setting obstacles, keep the turning angle smooth, and the angle shall not be less than 90°. When setting islands, you also need to walk along the edge.

6 Click "Return Point", use the remote control to move the machine to the return position, click "Add Point", and click "Next" in the upper right corner.



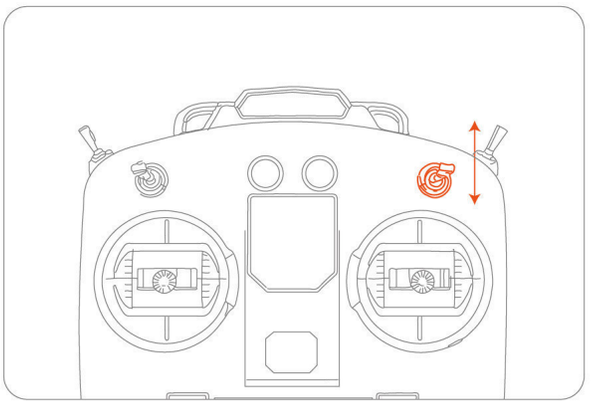
7 Set the starting point of the current working area. You can switch by clicking the white record point in the map or clicking the "Previous" and "Next" buttons below. Click the "Next" button in the upper right corner. Enter the operation name and click "Complete".



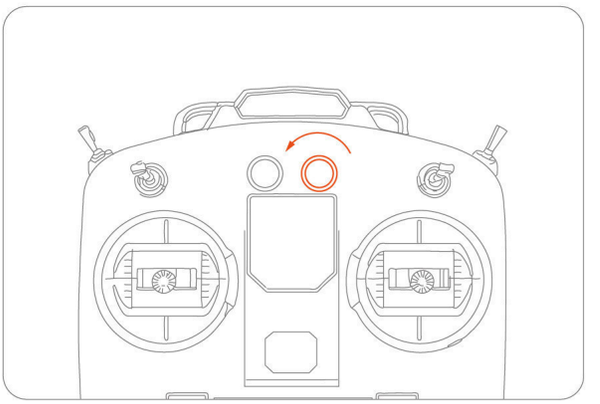
3. Daily Use

3.1 Lawn Mowing

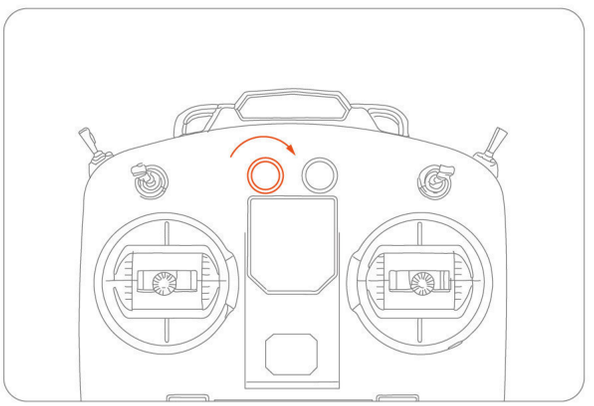
1. Adjust the mowing height: Use the remote control to turn on the mowing deck lift. Push up to lift, middle to stop, push down to lower (2-second pause).



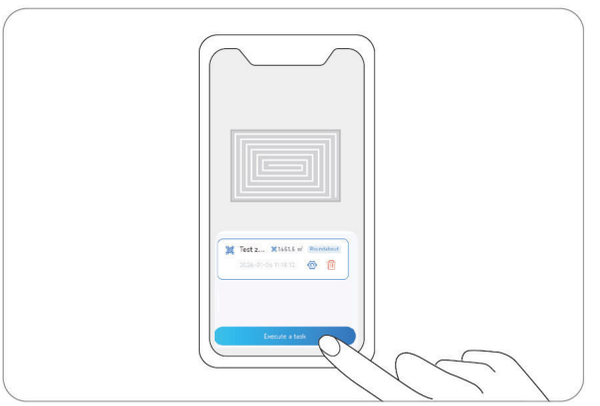
2. Select the operation mode on the remote control: Turn left for navigation operation.



3. Use the blade switch on the remote control: Turn right to turn on. (If abnormally shut down last time, turn left to turn off the blade first, then turn on)



4. Select the created working area in the mobile App and click "Start Operation" to make the lawn mower start automatic mowing.



3.2 SmartNavi App

3.2.1 Introduction

The SmartNavi App is an important part of the lawn mower. Through this App, you can:

1.Bind and activate the lawn mower.

2.Create a map (working area) containing multiple mowing areas.

3.Check the status and operation progress of the lawn mower, and remotely control the lawn mower to start, stop, etc.

4.View and modify the mowing operation settings (map management).

5.Unbind and retain or clear user data.

3.2.2 Download, Registration, and Login

1.Search for "SmartNavi" in the Apple App Store (iOS system) and download it. (For Android systems, please scan the QR code to download)

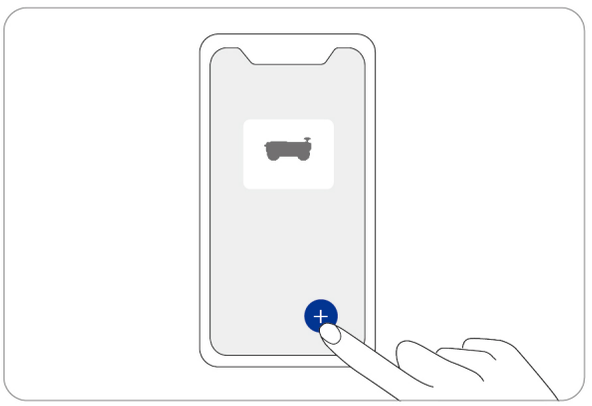
2.Register and log in to your account.

3.Turn on the Bluetooth function of the mobile phone and ensure that the mobile phone is within the network signal coverage.

3.2.3 Basic Operations

Bind the Lawn Mower

After registration and login, click "+" to add a device and bind the lawn mower to your account. For more information, refer to 2.2 Activate the Lawn Mower.



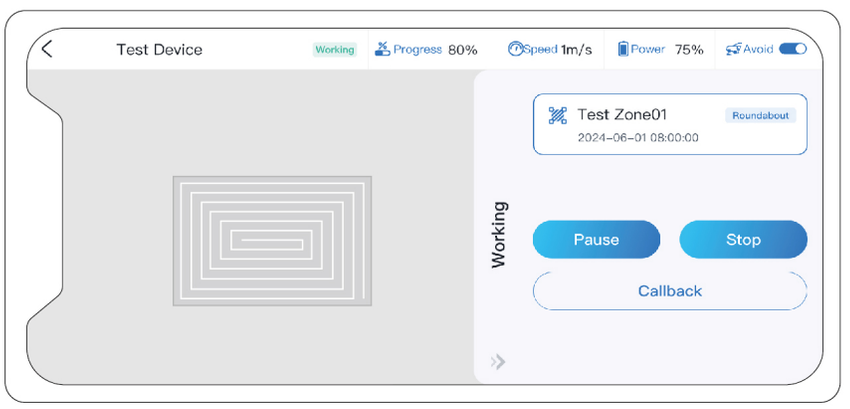
Create a Map

Before using the lawn mower to mow the lawn, you need to create a working area (map) through the intelligent operation App. Click "+" to add a new operation and follow the guidance in the App. For detailed steps and skills, refer to Section 2.5 "Plan the Working Area".

The map can also be edited or deleted on the device details page. For more information, refer to the "Application Program Manual".

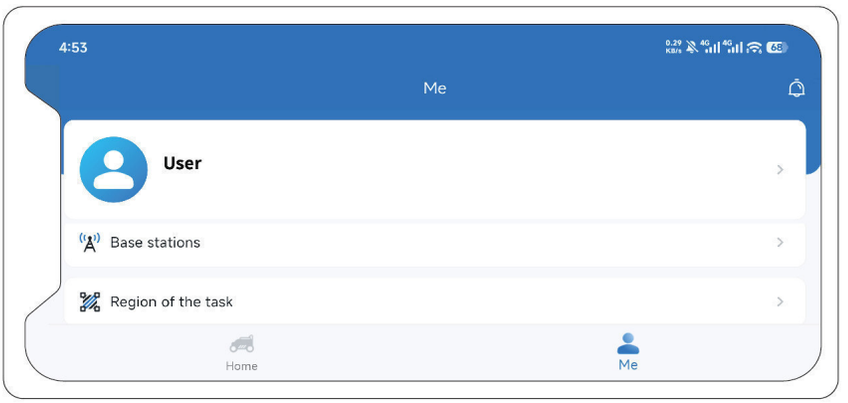
Check Device Status

The device details page displays the status, operation progress, and mowing tasks of the lawn mower. You can choose to view the working range of all areas or selected areas, and start/pause mowing tasks.



3.2.4 Personal Information

Click "My" to enter the personal page, browse and adjust the settings related to the intelligent operation App.



Account and Security

You can view the bound email address or mobile phone number, modify the password, and log out of the current account.

Language

Click "Settings" to enter the settings page. The default language is the same as the mobile phone system language. To modify the language, click "Language" and set it to Chinese/English.

4. Maintenance

To achieve better mowing results and extend the service life, please ensure that the lawn mower is clean and the blades are in good condition. It should be inspected and maintained by adults every week, and any damaged or worn parts should be replaced. It is strictly prohibited to perform maintenance operations while wearing open-toed sandals or barefoot. Always wear long pants and work shoes when maintaining the lawn mower.

4.1 Cleaning and Maintenance

Use a soft brush or soft cloth to thoroughly clean the exterior of the lawn mower. Do not use alcohol, gasoline, acetone, or other corrosive/volatile solvents for cleaning, as these substances may damage the appearance and internal structure of the lawn mower. To ensure correct parking, please regularly inspect and clean the debris and dirt on the charging pile (optional). Ensure that all connecting parts of the charging pile, extension cord, and power supply are unobstructed.

A. Chassis and Cutterhead

If the chassis and cutterhead are heavily soiled, they can be rinsed with a brush or water pipe. Do not use a high-pressure washer. At the same time, ensure that the cutterhead rotates smoothly and the blades can swing freely.

Note: High-pressure water flow may penetrate the seals and damage electronic and mechanical parts.

B. Blade Guard

Regularly inspect the blade guard. If dirt, grass clippings, or other foreign objects accumulate on the guard, remove them with a dry brush or scraper.

C. Rear Wheels

Regularly inspect and clean the rear wheels. If the wheel body is stuck, remove the dirt and lubricate it.

D. Front Wheels

Regularly inspect and clean the front wheels. Remove grass clippings or other foreign objects. If the tires are contaminated with dirt, rinse them with a water pipe.

E. Charging Port

Check if there is any residual grass clippings or dirt inside the charging port and clean it in a timely manner. Otherwise, poor contact may result in failure to charge.

⚠ Warning

- Before cleaning, ensure that the lawn mower is powered off.
- Before turning over the lawn mower, the power must be turned off.

4.2 Blade Replacement

If the lawn mower is used frequently, it is recommended to replace the blades and screws every 1-2 months to ensure safety and better mowing results. To ensure the safety of the cutting system, please replace both blades and their screws at the same time.

Wet grass is more likely to adhere to the blades and the bottom of the lawn mower, which may affect equipment performance and increase the frequency of cleaning. For the best results and to keep the lawn healthy, avoid mowing during heavy rain or when the lawn is excessively wet.

Grass clippings accumulating on the blades during mowing is normal. The blade design ensures that even with a small amount of clippings, it can rotate smoothly around the screws. Occasional clipping accumulation will not affect the lawn mower's ability to operate efficiently; its design ensures that the blades can work normally even with a small amount of long-term clipping accumulation.

Debris can be removed when replacing the blades, but it is not necessary to handle it immediately unless excessive debris adheres to the blades.

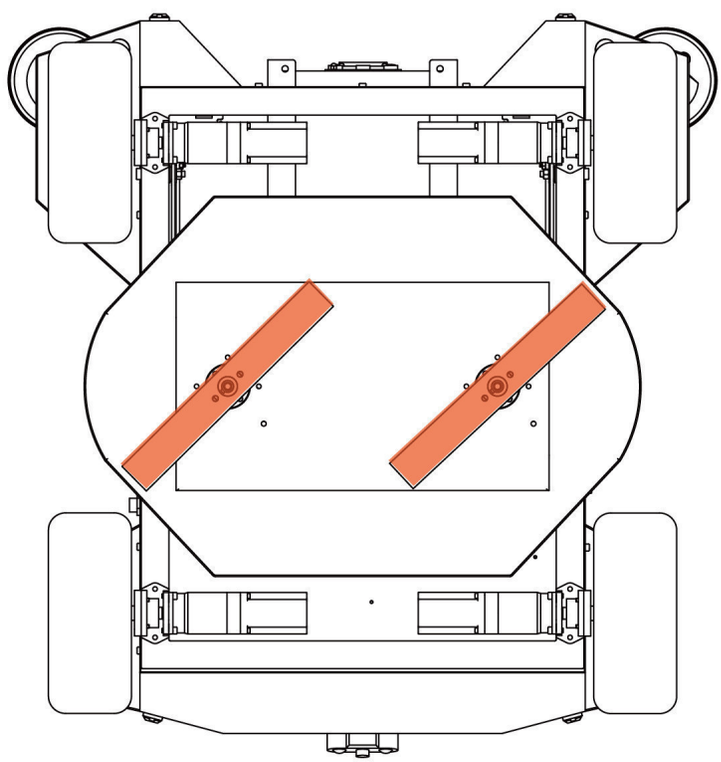
⚠ Warning

- Wear protective gloves when inspecting or maintaining the blades.
- Do not use an electric screwdriver to install or loosen the cutterhead. Only use the correct type of screws and original blades certified by the manufacturer.
- Do not reuse screws. This may cause serious injury.

How to Replace the Blades

1. Turn off the lawn mower.
2. To avoid scratches, place the lawn mower sideways on a soft and clean surface.
3. Use an Allen wrench to loosen the three screws.
4. Remove the screws and blades.
5. Tighten the new blades and screws. Ensure that the blades can rotate freely.

Note: Be sure to tighten the screws to prevent the screws from loosening and falling off when the cutterhead rotates and hits hard objects.
During mowing, the rotating cutterhead will generate centrifugal force, causing the blades to tilt outward. This outward tilt angle allows the blades to cut the lawn effectively.

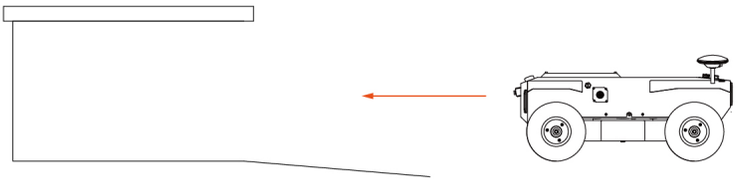


4.3 Transportation

To protect the lawn mower, use the original packaging for long-distance transportation. Before carrying, moving, or transporting the product, please turn off the power first. Handle with care during operation to avoid violent operations (such as heavy pressure).

Correct Moving and Transportation Method

Use the remote control to move the lawn mower into the original packaging.



4.4 Battery Maintenance

• After the lawn mower is out of use, charge the battery to 85% or higher before storage to avoid damage to electronic components due to over-discharging. For long-term storage, charge the lawn mower every 120 days.
• Battery damage caused by over-discharging is not covered by the limited warranty.
• Do not use or store the battery under extreme temperature conditions, i.e., higher than 50°C (122°F) or lower than -20°C (-4°F).
• When the temperature reaches 0°C (32°F)/53°C (127°F), the temperature protection mechanism will be activated. At this time, the battery cannot be charged, and charging can only be resumed when the temperature rises above 3°C (37°F)/drops below 49°C (120°F).
• When the battery temperature is too high or too low, the lawn mower will stop working.

Note: Battery life depends on the frequency of product use and total working time. When the running time per charge is significantly shorter than the normal level, or the lawn mowing effect is poor, please consider contacting after-sales service to replace the battery.

4.5 Power Supply

• Cut off the power supply:
- Before removing blockages;
- Before inspecting, cleaning, or operating the machine;
- After hitting foreign objects, check if the machine is damaged.
• Regularly inspect the power cord, plug, shell, and other parts. If any signs of damage or aging are found, stop using it immediately.

⚠ Warning

• Do not use a damaged power adapter. If the power cord is damaged, it must be replaced by the manufacturer, its service agent, or a person with equivalent qualifications to avoid danger.
• Do not connect a damaged power cord to the power adapter, or touch the damaged power cord or extension cord before the power cord is unplugged from the socket. A damaged power cord may cause contact with live parts.
• Do not use the power adapter for other products or batteries, otherwise, it may cause personal injury, fire, or electric shock risks. Non-original batteries cannot guarantee product safety.
• Do not charge the battery if it leaks.
• Keep the power cord away from moving dangerous parts to avoid damage to the power cord leading to contact with live parts.

4.6 Storage

- Before storage, turn off the power of the lawn mower and charge the battery to 85% or higher to avoid permanent damage caused by over-discharging.
- Store in a cool and dry indoor place. Direct sunlight and extreme weather (high or low temperature) will accelerate the aging of parts and may cause permanent damage to the battery.
- Keep the lawn mower, charging pile, and power supply away from heat sources (such as stoves, radiators, etc.) or chemicals. The power supply should be moisture-proof and placed in a well-ventilated place.

⚠ Warning

When there is a risk of thunderstorms, please unplug the power cord from the power socket. Disconnect all cables and wires connected to the charging pile. Reconnect them after the thunderstorm risk is eliminated.

4.6.1 Winter Storage

To ensure optimal performance and service life, it is recommended to properly store your lawn mower during the winter inactivity period. Correct storage can protect the equipment from harsh winter environments and ensure that it functions properly when activated in spring. Low-temperature environments (including freezing temperatures and snowfall) may damage the precision parts of the lawn mower. Please follow the steps below:

Prepare Required Tools

Silicone positioning pins for marking the position of the charging pile (optional), screwdriver, lawn mower packaging box, and packaging materials.

Store the Lawn Mower

1.Move the lawn mower away from the charging pile. Note: Ensure that the lawn mower has at least 85% battery power remaining.

2.Turn off the power of the lawn mower.

3.Disconnect the power cord and antenna connection.

4.Wear protective gloves, thoroughly clean the body with a brush, and let it dry.

Store the Charging Pile

1.Disconnect the power cord.

2.Unscrew the ground fixing screws of the charging station.

3.Mark the installation position with silicone positioning pins.

4.Clean the surface with a brush and dry the charging pile.

5.Store the charging station.

Antenna Storage Guide

If the antenna is installed on the wall or roof, cover it with a plastic bag or cover for protection.

4.6.2 Spring Reactivation

To restore your lawn mower and all its installation configurations, follow the steps below in spring:

1.Remove all covers from the lawn mower.

2.Ensure that the charging pile is clean and free of dust. Remove the silicone positioning pins marking the position and tighten the fixing screws to the ground.

Note: The deviation between the new installation position and last year's position should not exceed 2 inches(5cm).

3.Reconnect the cables disconnected in winter. Check if the cables are damaged or broken and repair them as needed.

4.Check the sharpness of the blades and replace them if necessary. Check and clean the camera lens to ensure normal operation.

5.Finally, turn on the power of the lawn mower and test whether the device is bound to the application program and operates normally.

4.7 Recycling and Disposal

Do not dispose of this product as household waste. For recycling information, please contact your household waste disposal service agency, municipal department, or point of sale.

⚠ Warning

Do not dispose of this product in landfills, incinerate it, or mix it with household waste. Due to the electronic components contained in the product, it may cause danger or serious injury.

5. Common Problems and Troubleshooting

<table>
<tr><th colspan="2">Problem Type</th><th colspan="3">Troubleshooting Methods</th></tr>
<tr><td rowspan="15">Positioning Deviation</td><td rowspan="4">Base Station Inspection</td><td rowspan="3">Is the red indicator light flashing?</td><td colspan="2">Is the mushroom head connected and pointing to the unobstructed sky?</td></tr>
<tr><td colspan="2">Are both ends of the mushroom head connecting cable loose?</td></tr>
<tr><td colspan="2">Is the base station positioning connector damaged (excessive shaking)?</td></tr>
<tr><td>Check the base station positioning status in the WeChat mini program.</td><td colspan="2">Enter the "Working Mode" page under "Settings" in the WeChat mini program. Check if the reference point source is customized and the mushroom head has been moved.</td></tr>
<tr><td rowspan="11">Receiver Inspection</td><td colspan="3">Is the power supply of the receiver normal?</td></tr>
<tr><td rowspan="11">Check the positioning status in the WeChat mini program.</td><td rowspan="3">Init</td><td>Is the positioning and directional mushroom head connected and pointing to the unobstructed sky?</td></tr>
<tr><td>Are both ends of the positioning and directional mushroom head connecting cable loose?</td></tr>
<tr><td>Is the positioning and directional connector damaged (excessive shaking)?</td></tr>
<tr><td rowspan="3">point positioning</td><td>Are the base station and receiver radio antennas installed, and are there no obstructions directly above both antennas?</td></tr>
<tr><td>Is the radio antenna and connector damaged?</td></tr>
<tr><td>Enter the "Working Mode" page under "Settings" in the WeChat mini program to check if the frequency of the base station and receiver is consistent.</td></tr>
<tr><td rowspan="5">Differential positioning / Floating-point positioning</td><td>Is there only one base station supplying power currently?</td></tr>
<tr><td>The sky above the positioning and directional mushroom head is obstructed and not in an open area.</td></tr>
<tr><td>Check whether the number of satellites visible to the base station is less than 22.</td></tr>
<tr><td>The distance between the radio base station and the receiver exceeds 1.2 miles(2 km).</td></tr>
<tr><td>The distance between the network base station and the receiver exceeds 18.6 miles(30 km).</td></tr>
<tr><td colspan="2" rowspan="2">Unable to Power On</td><td colspan="3">Insufficient battery power, Replace with a fully charged battery and try again.</td></tr>
<tr><td colspan="3">Battery temperature is too low or too high: Use in an environment of 0-40°C.</td></tr>
<tr><td colspan="2" rowspan="2">Unable to Charge</td><td colspan="3">Poor contact, Clean the battery charging contacts.</td></tr>
<tr><td colspan="3">Check if the battery indicator light is on.</td></tr>
<tr><td colspan="2" rowspan="2">Remote Alarm</td><td colspan="3">High temperature and overheating, Move the machine to a cool and ventilated place to dissipate heat.</td></tr>
<tr><td colspan="3">Low battery, Charge or replace with a fully charged battery.</td></tr>
<tr><td colspan="2">weak signal</td><td colspan="3">Move the machine to an open environment to connect.</td></tr>
<tr><td colspan="2" rowspan="4">Radio Version Remote Control Shows Offline</td><td colspan="3">Is the antenna of the remote control receiver installed?</td></tr>
<tr><td colspan="3">Is the distance between the remote control receiver and the remote control greater than 2,600 feet(800m)?</td></tr>
<tr><td colspan="3">Is there an object obstruction in the straight line between the antenna of the remote control receiver and the remote control?</td></tr>
<tr><td colspan="3">Open the H12Pro assistant software, click the frequency pairing button to check if the remote control is connected to the device. You can repeat the operation of turning on/off the remote control and the device. If the problem still cannot be solved, please contact after-sales service.
Note: Under no circumstances should you click the "Start Frequency Pairing" button.</td></tr>
</table>

6. Three Guarantees Certificate

Return and Exchange Policy

1.7-Day Return Policy

Within 7 days from the date you receive the purchased product, if the product has non-human-induced faults and is confirmed as product performance faults by the Jining Wanji Intelligence after-sales service center through inspection, you can enjoy free return service.

2.15-Day Exchange Policy for Quality Issues

Within 15 days from the date you receive the purchased product, if the product has non-human-induced faults and is confirmed as product performance faults by the Jining Wanji Intelligent after-sales service center through inspection, you can enjoy free exchange service.

Warranty Policy

Within the warranty period, if the product has non-human-induced faults and is confirmed as product performance faults by the Jining Wanji Intelligent after-sales service center through inspection, you can enjoy free repair service.

Notes

• This after-sales policy only applies to mainland China (excluding Hong Kong, Macau, and Taiwan regions).

• Returns, exchanges, or repairs shall be handled with valid invoices and Three Guarantees certificates. Please keep the purchase documents properly.

• For returns and exchanges, please ensure that the product, gifts, original packaging, and purchase documents are intact and complete.

• Before sending for repair, please confirm the fault and repair requirements with online customer service or the seller.

Warranty Period for the Whole Machine and Various Components

Type	Warranty Content	Warranty Period
Whole Machine	Lawn mower (including built-in lithium iron phosphate battery); remote control; power cord	1 Year

Circumstances Not Covered by Free Warranty

1.The product has been repaired, inspected, disassembled, etc., by institutions or personnel not authorized by Jining Wanji Intelligent.

2.Misuse, collision, negligence, liquid ingress, accidents, modifications, incorrect use of non-original accessories, or artificial operational errors or faults such as tearing or altering labels caused by failure to use the product in accordance with this manual.

3.Normal wear and tear, and consumable parts (such as tire wear, shell scratches, etc.).

4.Damage caused by force majeure.

5.Damage caused by improper storage (such as cockroach infestation, animal bites, etc.).

6.The warranty period has expired (accessories purchased separately are covered by free warranty for three months from the date of receipt).

7.Product performance faults of this product and its accessories caused by human factors.

▼ The three-guarantee card can be cut along this line.

Product Warranty Card

User Name	Product Name and Model
Contact Phone	Product Serial Number
Mailing Address	Date of Purchase

Maintenance Record

	Maintenance Date	Fault Description and Replaced Accessories	Maintenance Center	Maintenance Engineer
1				
2				

7. Contact Us

Manufacturer: **Jining Wanji Intelligent Technology Co., Ltd**

Jining City, Shandong Province, China

Service Website: **www.wanji-imp.com**

Technical Support Email: **info@wanji-imp.com**