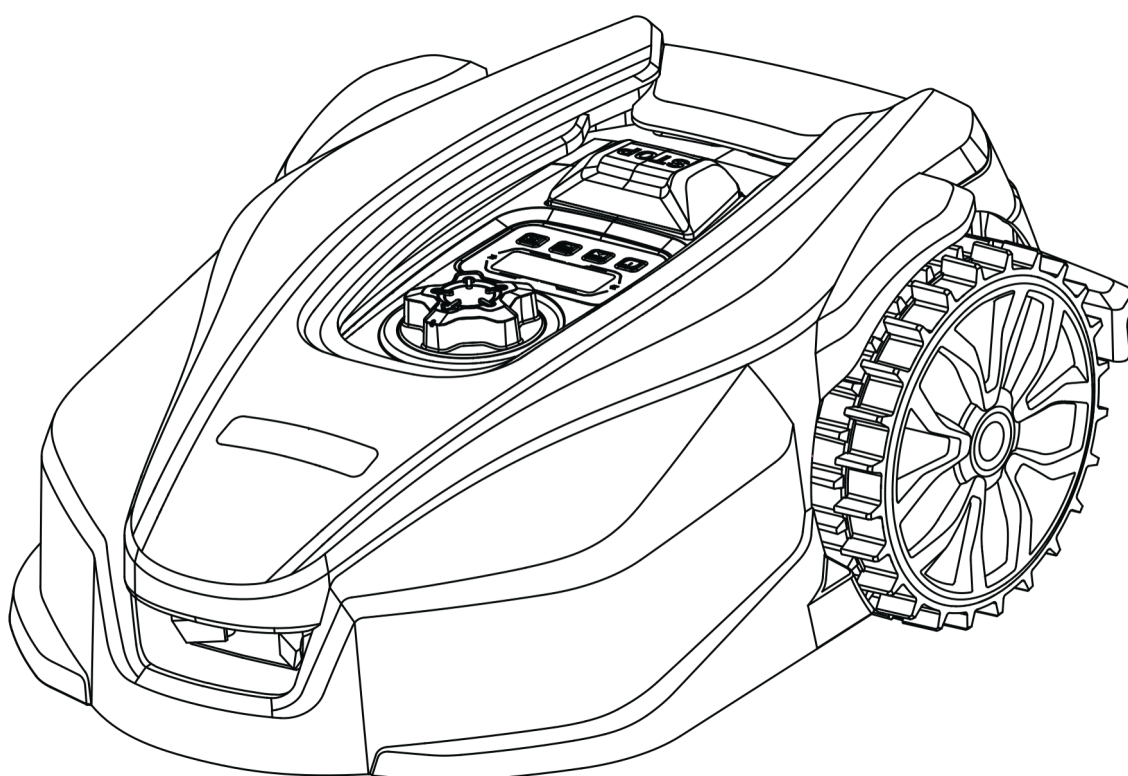




HAHN A SYN s.r.o.
Lelkova 186/4
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Hahn & Sohn GmbH
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93413 Cham
Deutschland
hahn@hahn-sohn.de

MANUAL



AUTOMATIC MOWER CEDRUS

MODEL NUMBER: **C-MOW-M6+; C-MOW-M12+**

SERIAL NUMBER:

Both the model number and serial number can be found on the main label.
Please keep both numbers and keep them in a safe place for later use.



ROBOTIC MOWER



SAFETY INSTRUCTIONS



1. General

This annex presents safe operating practices for all machine types covered by this standard. The instruction handbook should include, where appropriate, the substance of the following clauses of this annex. It should also include information concerning noise levels and any necessary warnings, together with the following:

IMPORTANT

READ CAREFULLY BEFORE USE
KEEP FOR FUTURE REFERENCE

2. Safe operating practices

2.1 Training

- a. Read the instructions carefully. Be familiar with the controls and the proper use of the machine.
- b. Never allow people unfamiliar with these instructions or children to use the machine. Local regulations may restrict the age of the operator.
- c. The operator or user is responsible for accidents or hazards occurring to other people or their property.

2.2 Preparation

- a. Ensure the correct installation of the automatic perimeter delineation system as instructed.
- b. Make sure your grass is no longer than 4" or 100mm, if longer, use a regular mower or grass trimmer to cut it.
- c. Periodically inspect the area where the machine is to be used and remove all stones, sticks, wires, bones, and other foreign objects.
- d. Periodically visually inspect to see that the blades, blade bolts and cutter assembly are not worn or damaged. Replace worn or damaged blades and bolts in sets to preserve balance.
- e. On multi-spindle machines, take care as rotating one blade can cause other blades to rotate.

3. Operation

3.1 General

- a. Never operate the machine with defective guards, or without safety devices, for example deflectors and/or grass catchers, in place.
- b. Do not put hands or feet near or under rotating parts. Keep clear of the discharge opening at all times.
- c. Never pick up or carry a machine while the motor is running.
- d. Remove (or Operate) the disabling device from the machine

-
- before clearing a blockage;
 - before checking, cleaning or working on the machine.

3.2 Additionally when the machine is operating automatically

Do not leave the machine to operate unattended if you know that there are pets, children or people in the vicinity.

3.3 Additionally when using the manual controller

- a. Mow only in daylight or in good artificial light.
- b. Avoid operating the machine in wet grass.
- c. Do not operate the machine when barefoot or wearing open sandals. Always wear substantial footwear and long trousers.
- d. Always be sure of your footing on slopes.
- e. Use extreme caution when reversing the machine towards you.
- f. Always switch on the motor according to instructions with feet well away from the blade(s).

4. Maintenance and storage

- a. Keep all nuts, bolts, and screws tight to be sure the machine is in safe working condition.
- b. Check the grass catcher frequently for wear or deterioration.
- c. Replace worn or damaged parts for safety.
- d. Ensure that only replacement cutting means of the right type are used.
- e. Ensure that batteries are charged using the correct charger recommended by the manufacturer. Incorrect use may result in electric shock, overheating or leakage of corrosive liquid from the battery.
- f. In the event of leakage of electrolyte flush with water/neutralizing agent, seek medical help if it comes into contact with the eyes, etc.
- g. Servicing of the machine should be according to manufacturers' instructions.

5. Definition below must be outlined in the User Manual:

To satisfy RF exposure requirements, a separation distance of 25 cm or more should be maintained between this device and persons during device operation. To ensure compliance, operations at closer than this distance is not recommended. The antenna used for this transmitter must not be co-located in conjunction with any other antenna or transmitt.



Battery Pack and Charger

Before charging, read the instruction. ensure your charger is matching the local AC supply, ensure the connection between the battery charger and battery pack is right models, Longer life and better performance can be obtained if the battery pack is charged when the air temperature is between 18°C and 25°C, Do not charge the battery pack in air temperatures below 5°C, or above 40°C. This is important as it can prevent serious damage to the battery pack.

SAFETY WARNINGS FOR BATTERY PACK INSIDE THE TOOL

1. Do not dismantle, open or shred battery pack.
2. Do not short-circuit a battery pack. Do not store battery packs haphazardly in a box or drawer where they may short-circuit each other or be short-circuited by conductive materials. When battery pack is not in use, keep it away from other metal objects, like paper clips, coins, keys, nails, screws or other small metal objects, that can make a connection from one terminal to another. Shorting the battery terminals together may cause burns or a fire.
3. Do not expose battery pack to heat or fire. Avoid storage in direct sunlight.
4. Do not subject battery pack to mechanical shock.
5. In the event of battery leaking, do not allow the liquid to come into contact with the skin or eyes. If contact has been made, wash the affected area with copious amounts of water and seek medical advice.
6. Seek medical advice immediately if a cell or battery pack has been swallowed.
7. Keep battery pack clean and dry.
8. Battery pack gives its best performance when it is operated at normal room temperature (20 °C ± 5 °C).
9. Recharge only with the charger specified by Mower. Do not use any charger other than that specifically provided for use with the equipment. A charger that is suitable for one type of battery pack may create a risk of fire when used with another battery pack.
10. Do not use any battery pack which is not designed for use with the equipment.
11. Keep battery pack out of the reach of children.
12. Retain the original product literature for future reference.
13. Dispose of properly.
14. Exhausted batteries are to be removed from the appliance and safely disposed of.
15. If the appliance is to be stored unused for a long period, the batteries should be removed.
16. do not use modified or damaged batteries.

SAFETY SYMBOLS

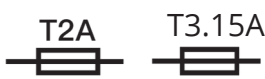
These symbols can be found on the product. Study them carefully

	WARNING: Read the user instructions before operating the product.
	WARNING: Disable the product before working on or lifting the machine.
	WARNING: Keep a safe distance from the machine when operating. Keep your hands and feet away from the rotating blades.
	WARNING: Do not ride on the machine. Never put your hands or feet close to or under the machine.
	Use a detachable power supply as defined on the rating label next to the symbol.
	CE conformity mark.
	Noise emission to surroundings. The product's emissions are set out in Technical data on page XX and on the rating plate.
	It is not permitted to dispose this product as normal household waste. Ensure that the product is recycled in accordance with local legal requirements.
	The low voltage cable must not be shortened, extended or spliced. Do not use a trimmer nearby the low voltage cable. Be careful when trimming edges where the cables are placed.

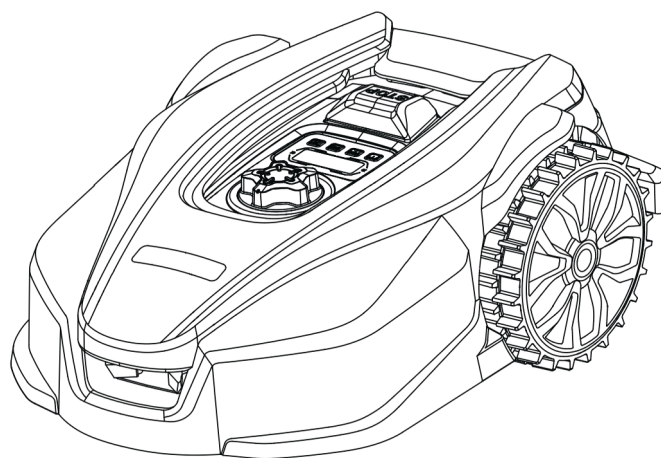
Symbols on battery pack

	Read the user instructions.
	Do not discard the battery into fire and do not expose the battery to a heat source.
	Do not immerse the battery into water.
 Li-ion	Recyclable mark.
 Li-ion	It is not permitted to dispose this battery pack as normal household waste. Ensure that the battery pack is recycled in accordance with local legal requirements.

Symbols on charger

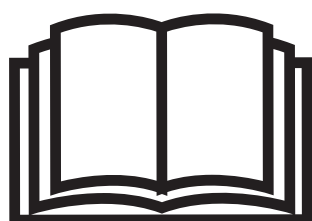
	Read the user instructions.
	Fuse
	Double insulation.
	It is not permitted to dispose this battery pack as normal household waste. Ensure that the battery pack is recycled in accordance with local legal requirements.

ROBOTIC MOWER



RMM400N20V、RMM600N20V、
RMM900N20V、RMM1200N20V

Installation guide EN



Original instructions

WARNING: Read all safety warning and all instructions, Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.

Carefully read the instructions for the safe operation of the machine, save all warnings and instructions for future reference.

How to install your robotic lawnmower The installation of your robotic lawnmower is easy. The entire process only takes a little time, depending on the size of your garden. You can watch the installation demo video at www.sk-robot.com

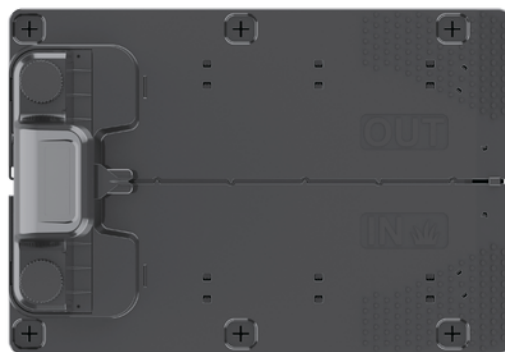
Robotic lawnmower mow Your lawnmower is designed to mow regularly, maintaining a healthy and better lawn than before, Depending on the size of your lawn, your lawnmower may be programmed to operate at any time or frequency with no restrictions, it is here to work for you.

Preparation Before starting the installation process, read through this entire installation guide carefully. Sketch the working area, including all obstacles, to make it easier to see the ideal positions for the charging station and where the boundary wires should be routed.

IN THE BOX(LIEFERUMFANG)



Robotic Mower



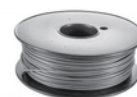
Charging Station



Base fitting nails



Spare blades



Boundary wire reel



Wire pegs



Power adapter



Distance guide



Robotic Mower
Installation



Robotic Mower
Quick Installation

From your shed



Scissors



Hammer



Tape measure

Technical data and noise data

Technical data

Type RMM400N20V, RMM600N20V, RMM900N20V, RMM1200N20V - designation of machinery, representative of Robotic Lawn mower.

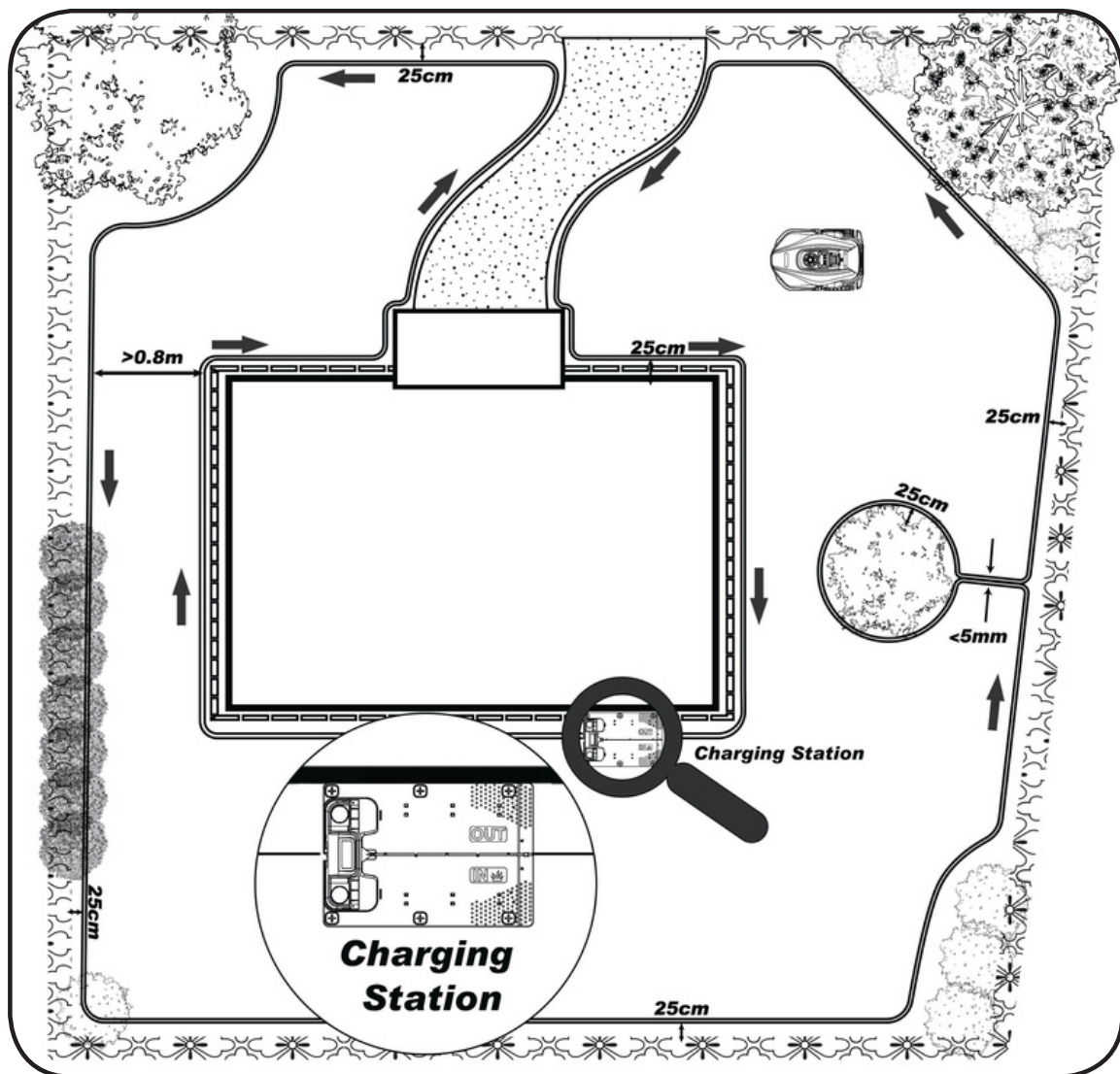
Model	M6+	M12+
Robotic Mower technical data		
Cutting area	600m ²	1200m ²
voltage	20V max	
No load speed	2500±100rpm	
Cutting diameter	200mm	
Cutting height	20-60mm	
Cutting height positions	9	
Maximum angle for work area	42%	
Narrowest possible passage	0.8m	
Battery type/model	LBF2025 Lithium-ion 2.5Ah	LBF205 Lithium-ion 5.0Ah
Charger time	120min	90min
Charger rating	CGF251 Input 100-240V 50/60Hz,28W Output:20VDC 1.1A(IP67)	CGF253 Input 100-240V 50/60Hz,76W Output:20VDC 3.0A(IP67)
Noise (sound power)	58dB	
Weight	ca. 7.3kg	ca. 7.5kg

Accessories

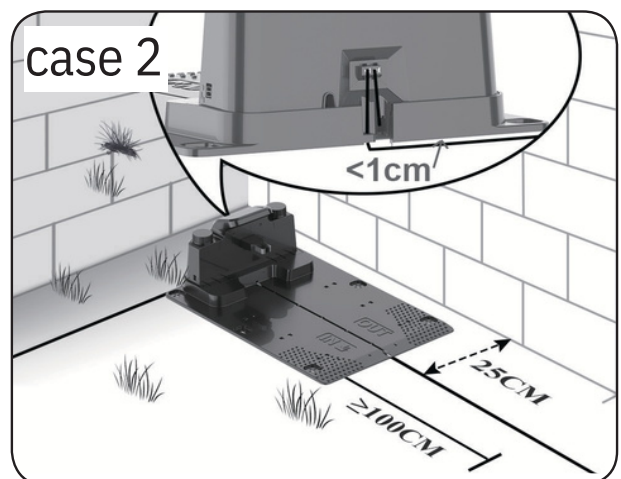
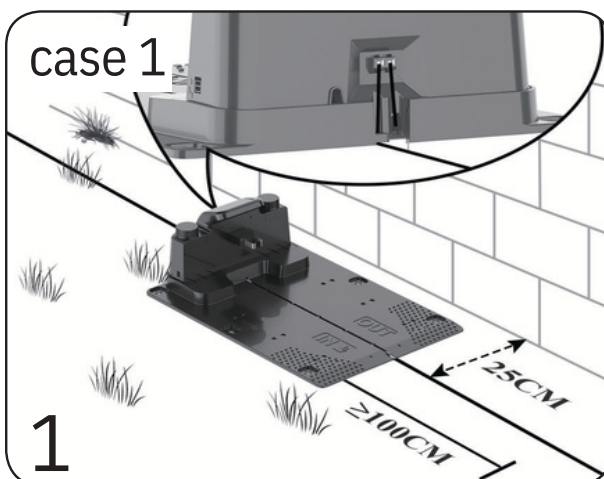
Boundary wire	130m	200m
Wire pegs	180PCS	250PCS
Blades	6PCS	6PCS
Charging Station	1PC (CB03A)	1PC (CB03A)
Charger	1PC (CGF251)	1PC (CGF253)
Battery pack	1PC (LBF2025)	1PC (LBF205)
General date		
Mower protection	IPX5	
Charging station protection	IPX4	
Power supply	IP67	
APP	WIFI 2.4G +bluetooth 4.0	
Radio technologies		
Supported Radio Technologies	Frequency Band	Max declared Output Power (EIRP)
SRD	0-148.5kHz	≤62.45 dBuA/m at 10 m
WIFI	2400-2483.5MHz	≤20 dBm
Bluetooth	2400-2483.5MHz	≤20 dBm

*Voltage measured at no load.initial battery voltage reaches voltage maximum of 20 volts.Nominal voltage is 18 volts. *a degree of noise from the machine is not avoidable. Route noisy work is to be licensed and limits for certain periods. keep rest periods and they may need to restrict the working hours to a minimum. For their personal protection of people working nearby,an appropriate hearing protection shall be worn. *We recommend that you purchase genuine accessories listed in the above list from the sames store that sold you the tool. Refer to the accessory packaging for further details. Store personnel can assist you and offer advice.

Installation



1. Installation of Charging Station



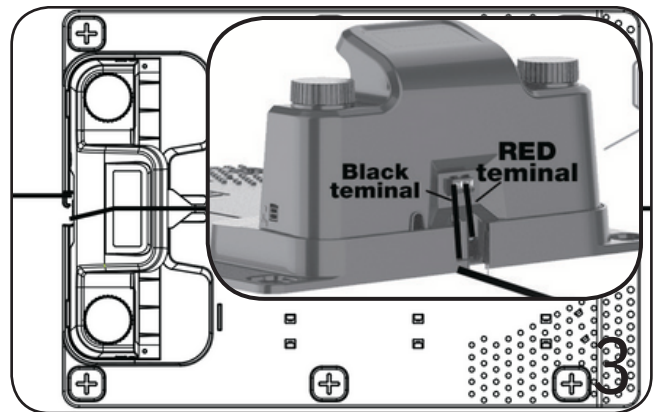
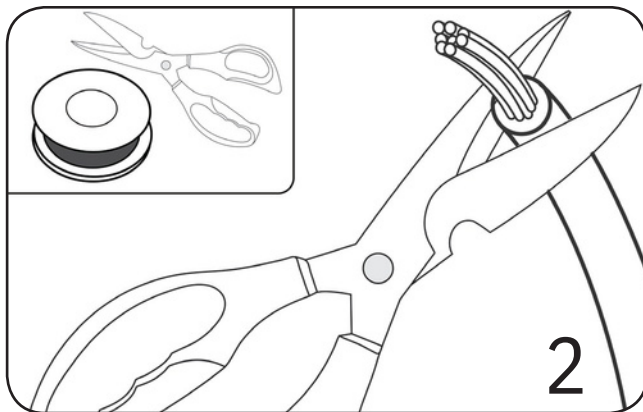
1.1 The charging station can be placed against Near the tool house OR house, when laying the boundary wire, leave at least 1m of straight wire with no obstacles front of the charging station.

NOTE: Boundary wire front of the charging station should be straight for 1m without corners or obstacles to ensure proper docking.

The charging station must be positioned on relatively level ground. it must not be positioned on an inclined surface or anywhere that makes its plate bend.

1.2 We recommended the Power supply placed the wall at least 25cm height, and the power supply cord is outside the mower working area.If not, you may bury it if desired.

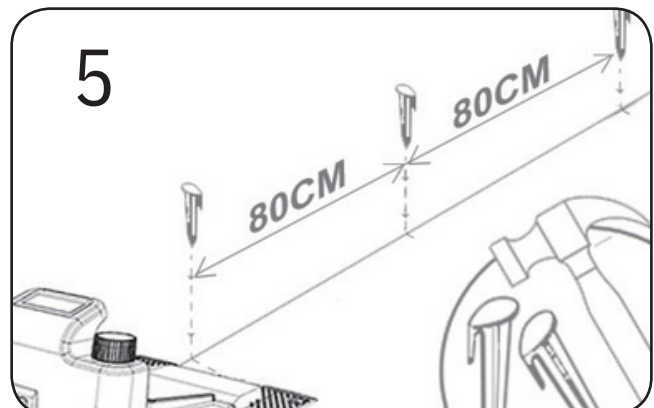
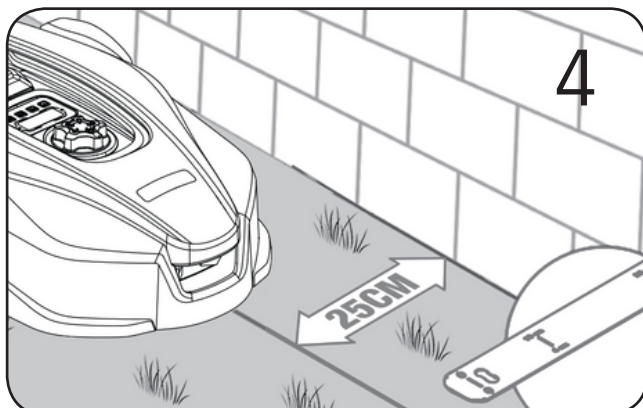
1.3 Stripping boundary wire about 10mm one end



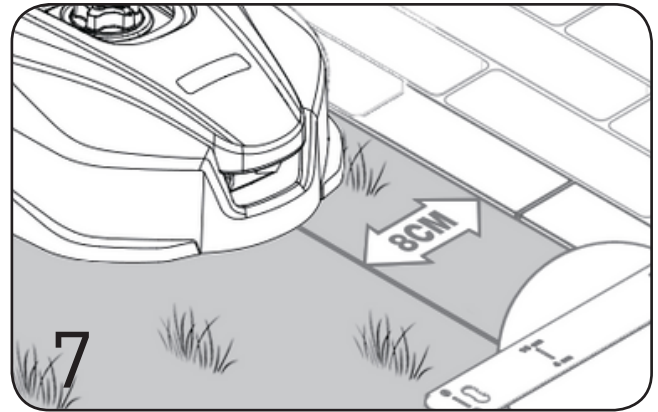
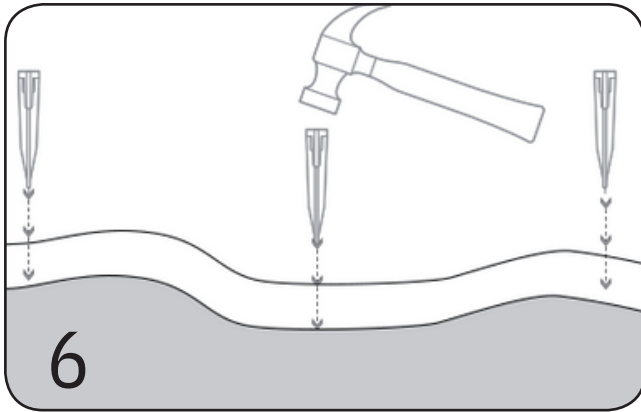
1.4 Boundary wire insert the wire terminal(RED)----it's an OUT side, then the boundary wire through the slot under the charging station plate. 1.5 When you laying boundary wire the working area loop, cut off unnecessary wire, Stripping boundary wire about 10mm the other end, insert the other wire terminal(Black)--it's an IN side.

2.Installation Boundary wire(NOTE)

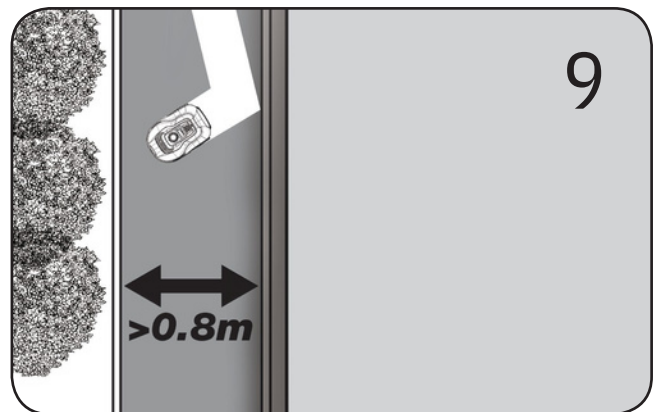
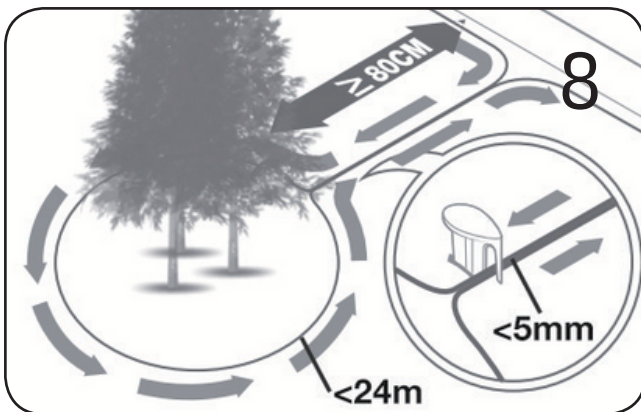
2.1 When laying the boundary wire, use the distance gauge to keep a 25cm* space between the wire and perimeter, Each wire peg should be placed around 80cm apart, use the provided distance gauge to ensure proper installation. The ground is uneven area, the peg density can be increased appropriately. NOTE: the maximum permitted length for the boundary wire is 300m.



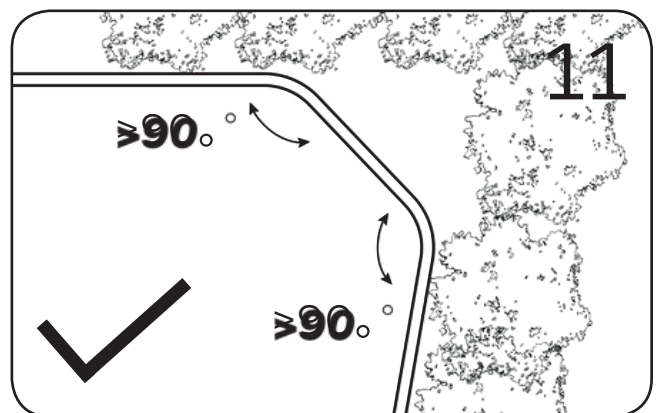
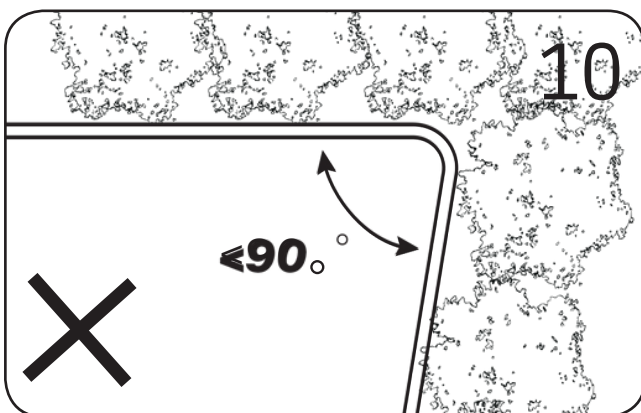
2.2 If an obstacle is level with ground and safe for mower to run over, such as a driveway or sidewalk, then only 8cm of space is needed between it and the boundary wire.



2.3 Island setting and narrow channel size requirements NOTE: if you don't want mower to go your lawn area. such as flower/shrubs/tree and so on, you can laying the boundary wire set island. As shown in the figure 8, the mower can pass through a narrow passage 0.8 m wide.

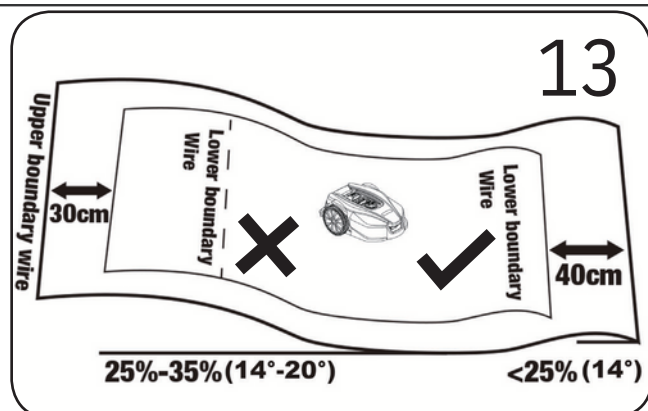
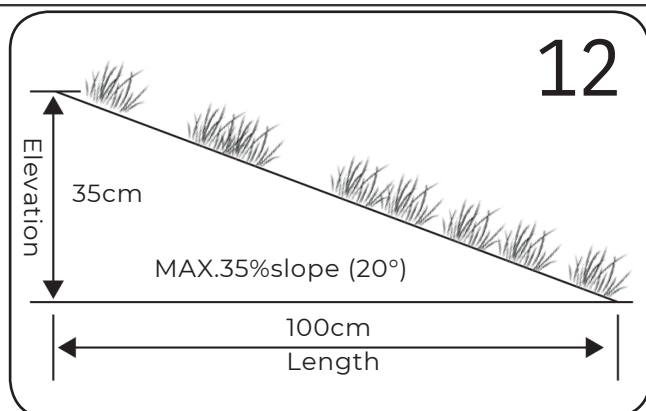


2.4 Ensure the boundary wire is perfectly straight in each corner, and all angles formed by the boundary wire are 90° or larger.



2.5 Slopes

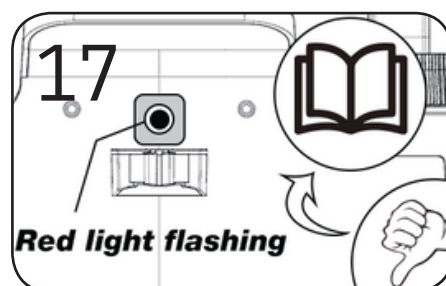
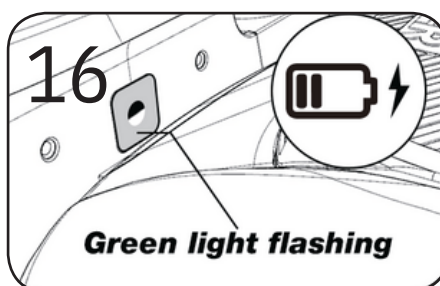
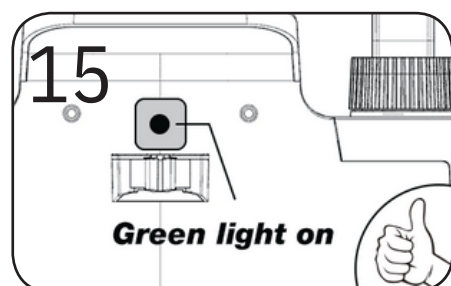
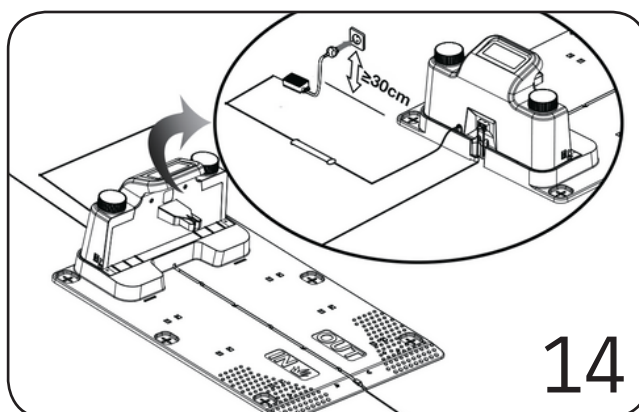
NOTE: your mower has the ability to safely climb slopes up to 35%(20°so just avoid areas steeper than this, How to calculate the slope of your lawn.



The boundary wire on slopes as shown in the figure 12,13.

3.Connect charging station to the power source

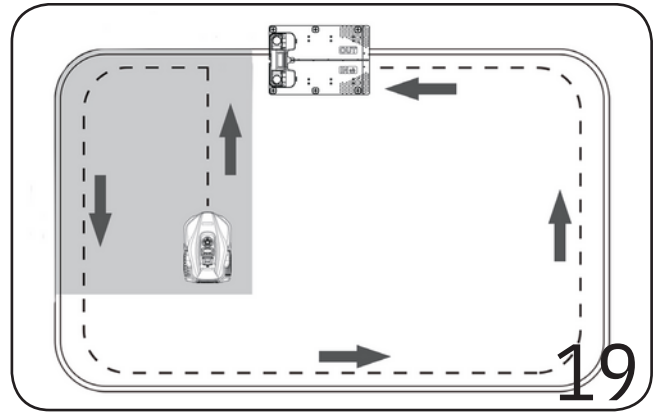
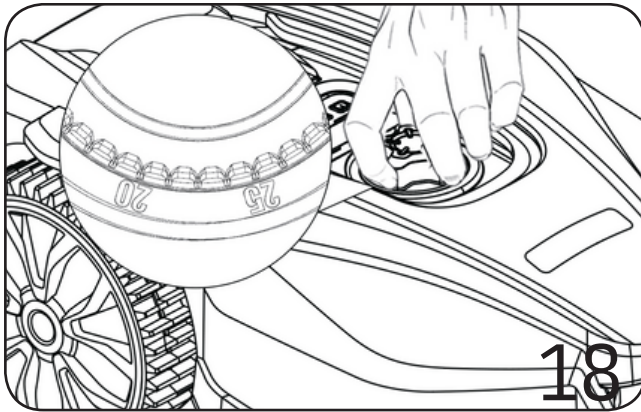
The power supply Plug in the voltage socket,if you laying boundary wire is right. The charging station LED light turn on and it always bright green, LED status in the grid below to make sure the connection is ok.



LED light status	illustrate	Action
Not turn on	There is no power	Confirm that the power cord is connected properly to the charger and that the charger is connected to a suitable power supply.
Green light on	Boundary wire is connected right; mower is fully charged	NA
Green light flashing	Mower is auto charging	NA
Red light flashing	Boundary wire is not connected; OR boundary wire is breaking	Check the two ends of boundary wire connected the wire terminal is reliable. Check the boundary wire is not break.

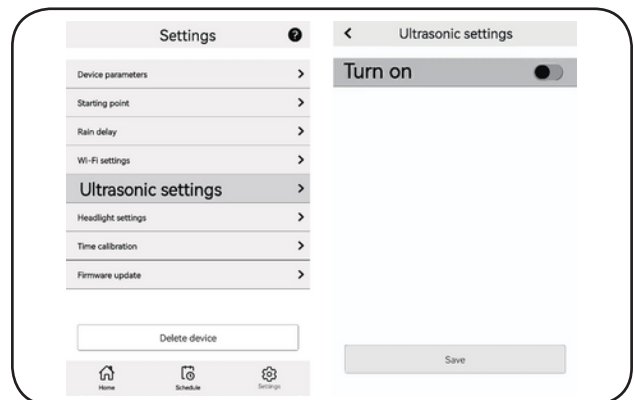
4. Test the installation

Adjust the cutting height to its maximum level(60mm)for first mow. Place your mower inside the working area, work for a while, then check boundary wire properly, check whether the mower go back to the charging station along the boundary wire. When the mower successfully returns to the charging station, the installation has been completed successfully!

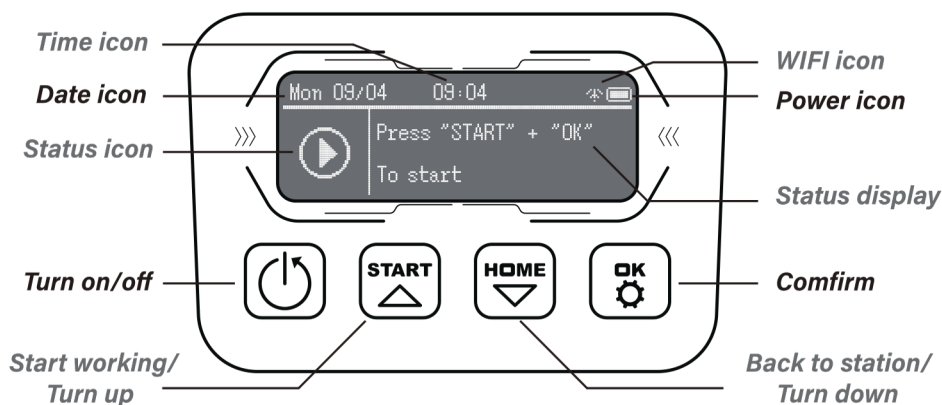


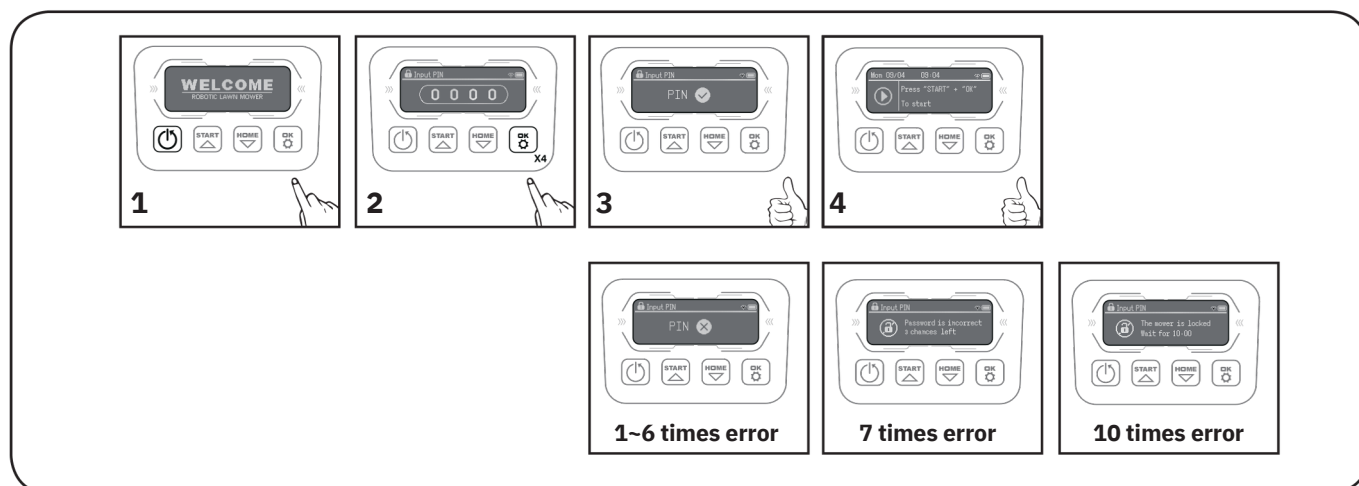
5. Quick use robotic mower (Digital tube Interface)

ATTENTION! When the first time using if the grass higher than 120mm, advice turn OFF ultrasonic function on APP. After the first cutting, you can turn ON the ultrasonic function. Operation as follows, APP setting, find "ultrasonic setting", then close "turn on".



After the 1st cutting if the grass more than 120mm height, open "turn on". Alternatively, the ultrasonic function can be turned on and off through LED screen operation, as detailed in 6.1.3 Ultrasonic Operation Settings below.





1)After the boundary wire installation, you can start using ROBOTIC MOWER (Please refer to Installation Guide for boundary wire installation). 2)Press POWER ON/OFF until ROBOTIC MOWER turns on. For the first use, input the default PIN code 0000 by pressing OK for four times when the number 0 is blinking. (The PIN code can be changed, please refer to “Setting” in the Installation Guide).

NOTE: ROBOTIC MOWER will turn off if it does not receive any input within 30 seconds after it is turned on. When an incorrect password is entered 7 times, the first digit on the upper left of the LCD screen displays the "lock" icon and "Input PIN", while the middle of the screen displays "Password is incorrect 3 chance left". You can press OK to re-enter it immediately, or wait for 2 seconds and automatically jump to re-enter it. When the incorrect password is entered 10 times, the LCD screen displays "The motor is locked Wait for 09:59". After the countdown to locking is completed, switch to the password input interface.

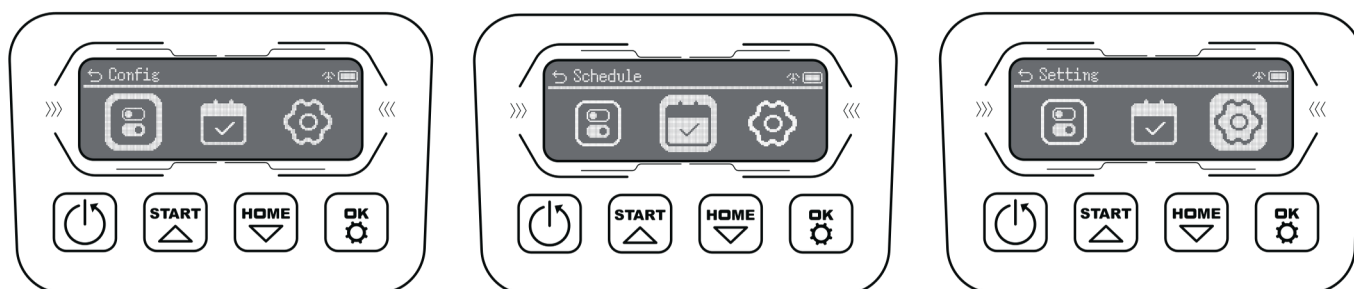
3)Press START, then press OK to start mowing. 4)Press HOME then OK the robot will back to charging station. ROBOTIC MOWER will work continuously until reaching low battery power level and then it will return to the charging station. Once charging is completed, ROBOTIC MOWER will automatically resume mowing or it stay in the charging station according to the mowing schedule.

6. Setting

Setting interface

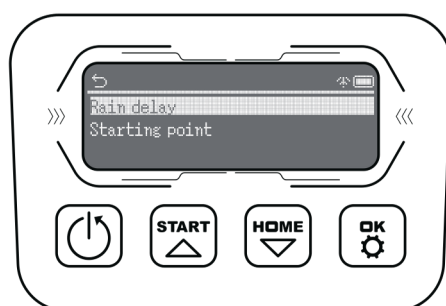
Press and hold the Start/Home/OK key for 3 seconds to enter the setting interface. The left side of the LCD screen displays the "Function Settings" icon - the middle displays the "Schedule Settings" icon - the right side displays the "Other Settings" icon; At this point, the "start" key is the "↑" key, the "home" key is the "↓" key, the "ok" key is the "OK" key, and the "⏻" key is the "Cancel" key. When the cursor is on the "Function Settings" icon, the upper left corner of the LCD screen displays "config", the cursor is on the "Schedule Settings" icon, the upper left corner displays "schedule", the cursor is on the "Other Settings" icon, and the upper left corner displays "setting".

Note: The icon  displayed on the interface is in an open state and  in a closed state. The circular pattern is open on the right and closed on the left.



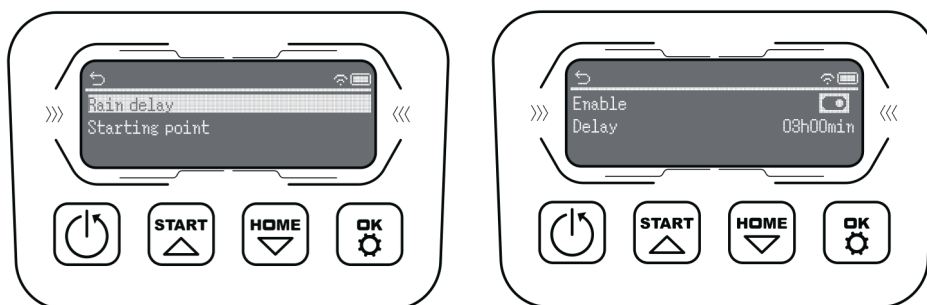
6.1 Function Setting

In the setting interface, place the cursor on the "Function setting" icon and press the OK button. The LCD screen will display "Rain delay - Starting point" from top to bottom;



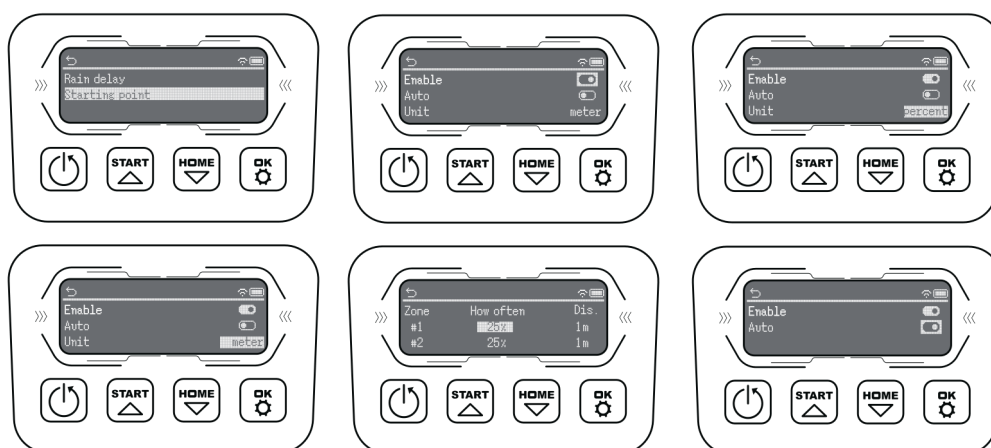
6.1.1 Rain Delay Setting

With the cursor in " Rain delay ", press the "OK" button to enter the rain delay setting. If the machine's rain delay is turned on, the LCD screen will display the default rain delay time. Click the "OK" button to turn off the rain delay; If the machine rain shower is not turned on - click the "OK" button to turn on the rain shower delay. At this time, press the "start" and "home" buttons to move the cursor. After pressing the "OK" button, the cursor flashes and the time can be adjusted by pressing the "start" and "home" buttons. Click the "OK" button again to confirm and press the " " button to return to the previous level.



6.1.2 Starting Point Setting

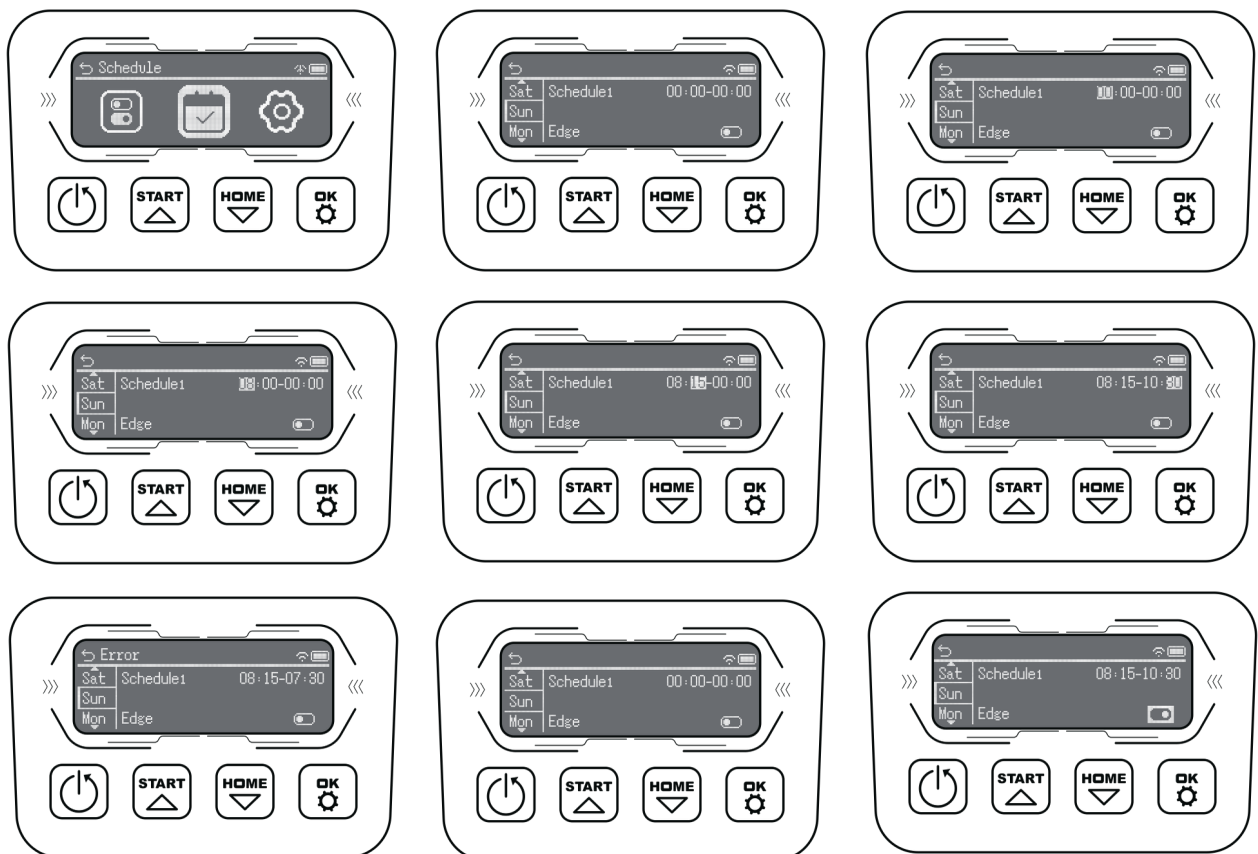
With the cursor in "Starting point", press the "OK" button to enter the starting point setting. If the machine's starting point is opened, the LCD screen will display the default starting point setting. Click the "OK" button to close the starting point; If the starting point of the machine is not turned on - click the "OK" button to turn on the starting point. At this time, press the "start" and "home" buttons to move the cursor. When the cursor moves to the "unit" line, press the "OK" button to switch to the "meter/center" mode. Press "home" to continue moving down. When the cursor moves to the "How often"/"Dis" column, press the "OK" button to flash the cursor, and then click "start and home" to increase up and down, Long press to quickly increase/decrease, click the "OK" button again to confirm. If the machine is equipped with an automatic starting point function: add an "Auto" line, press the "OK" button to "turn on/off", and press the " " button to return to the previous level. If 'Auto' is turned off, press the 'start' and 'home' keys to move the cursor, referring to the operation without configuring 'Auto'.



6.2 Scheduling Settings

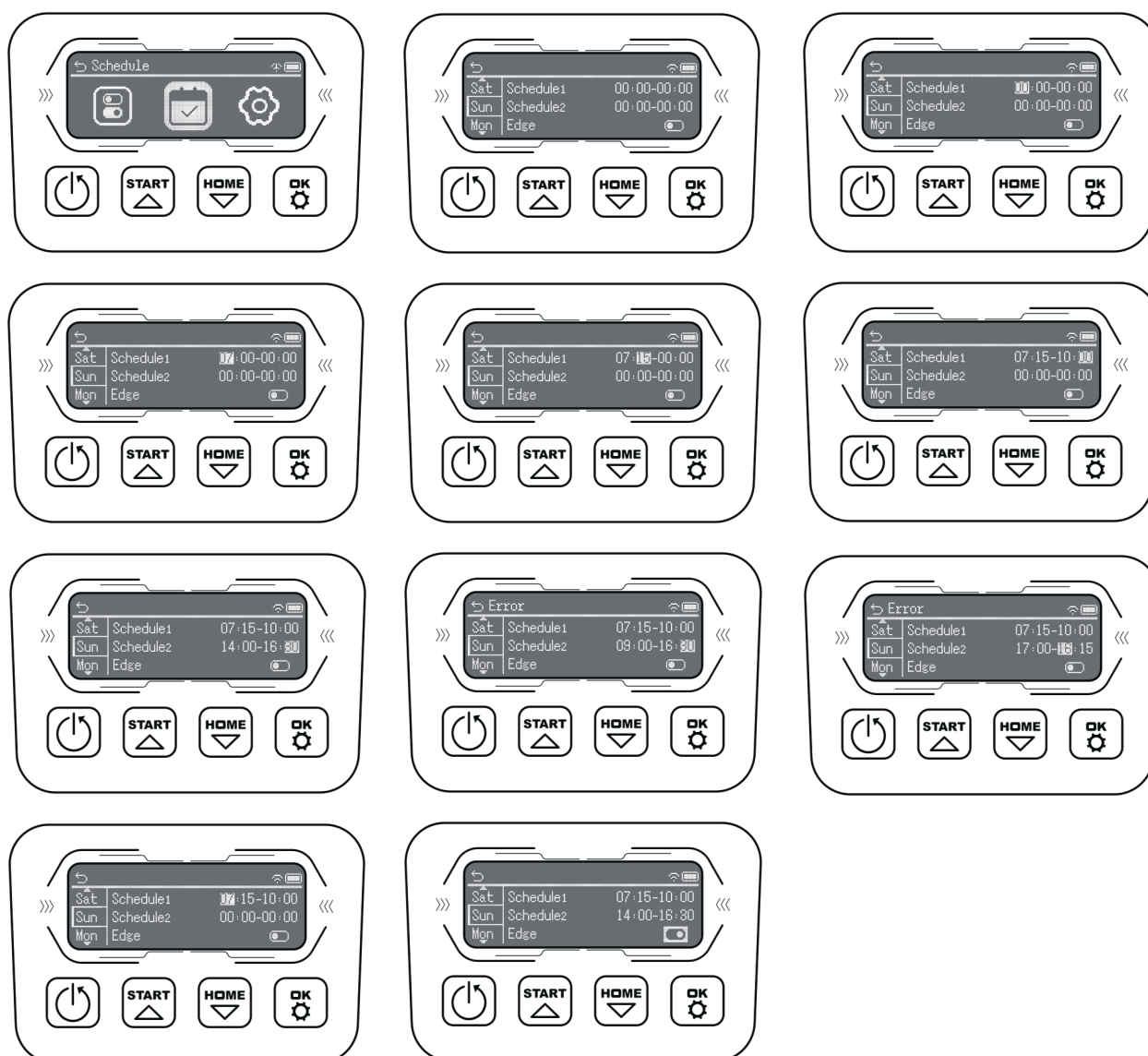
6.2.1 Manual Single Scheduling

In the settings interface, place the cursor on the "Scheduling settings" icon and press the "OK" button to enter the scheduling settings page. On the left side of the LCD screen, the default cursor is Sunday, and on the right side, the "00:00-00:00" (self set time) single scheduling and trimming on/off icons are displayed; At this point, press the "start" and "home" keys to move the cursor to select the day of the week. After confirmation, press the "OK" key to enter the time setting. Press the OK key again, and the corresponding number of the cursor will flash. After that, modify the time through "start" and "home", and press "OK" again to confirm the modified time. Press "1" to increase or decrease the hours, and "15" to increase or decrease the minutes. If the modified time is abnormal, the upper left corner of the LCD screen displays "Error". At this time, press the " " button to return to the previous level, and then press the " " button to change the set time to "00:00-00:00". After setting the time, you can move the cursor to the Edge line and press the "OK" button to perform edge trimming work as soon as possible during working hours.



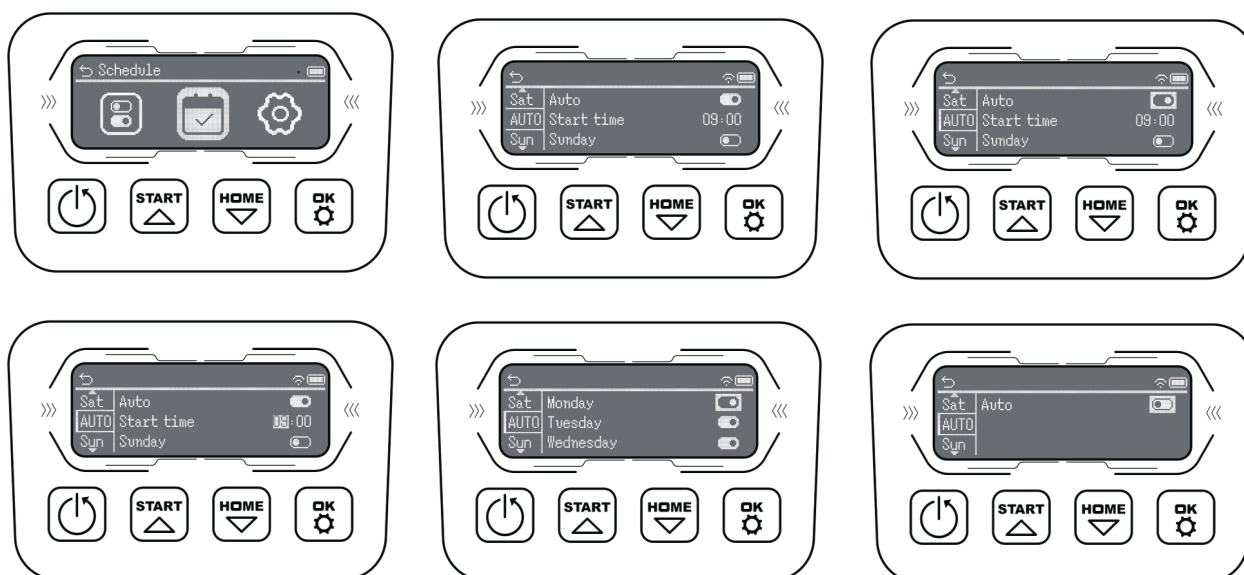
6.2.2 Manual Dual Scheduling

In the setting interface, place the cursor on the "Scheduling setting" icon and press the "OK" button to enter the scheduling setting page. On the left side of the LCD screen, the default cursor is Sunday, and on the right side, the "00:00-00:00 00:00-00:00" (self set time) dual scheduling and trimming on/off icons are displayed; At this point, press the "start" and "home" keys to move the cursor to select the day of the week. After confirmation, press the "OK" key to enter the time setting. Press the OK key again, and the corresponding number of the cursor will flash. After that, modify the time through "start" and "home", and press "OK" again to confirm the modified time. Press "1" to increase or decrease the hours, and "15" to increase or decrease the minutes. If the modified time is abnormal, the upper left corner of the LCD screen displays "Error". At this time, press the  button to return to the previous level, and then press the  button to change the set time to "00:00-00:00". After setting the time, you can move the cursor to the Edge line and press the "OK" button to perform edge trimming work as soon as possible during working hours.



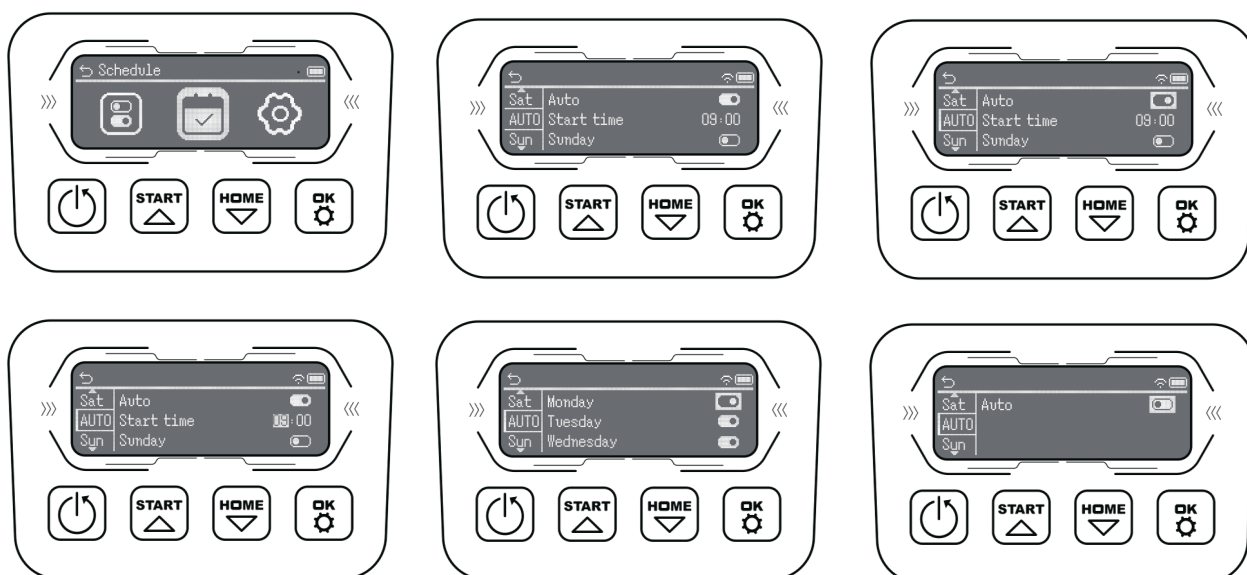
6.2.3 Automatic Single Scheduling

In the settings interface, place the cursor on the "Scheduling settings" icon and press the "OK" button to enter the scheduling settings page. On the left side of the LCD screen, "Week" and "Auto" are displayed, and the cursor defaults to "Auto". Press the "OK" key to move the cursor to the right and use the "start" and "home" keys to move the cursor to the "Auto" line. Click the "OK" key to turn on/off automatic scheduling, move to the "Start time" line, modify the start time through "start, home, ok", and move to "Week". Press the "OK" key to select whether to work on that day, Press the " " key to return to the previous level. If manual single schedule control is carried out, it is necessary to turn off the automatic mode and make corresponding settings. The setting operation is consistent with the manual single scheduling operation



6.2.4 Automatic Dual Scheduling

In the setting interface, place the cursor on the "Scheduling setting" icon and press the "OK" button to enter the scheduling setting page. On the left side of the LCD screen, "Week" and "Auto" are displayed, and the cursor defaults to "Auto". Press the "OK" key to move the cursor to the right and use the "start" and "home" keys to move the cursor to the "Auto" line. Click the "OK" key to turn on/off automatic scheduling, move to the "Start time" line, modify the start time through "start, home, ok", and move to "Week". Press the "OK" key to select whether to work on that day, Press the " " key to return to the previous level. If manual dual scheduling control is carried out, it is necessary to turn off the automatic mode and make corresponding settings. The setting operation is consistent with the manual double scheduling operation



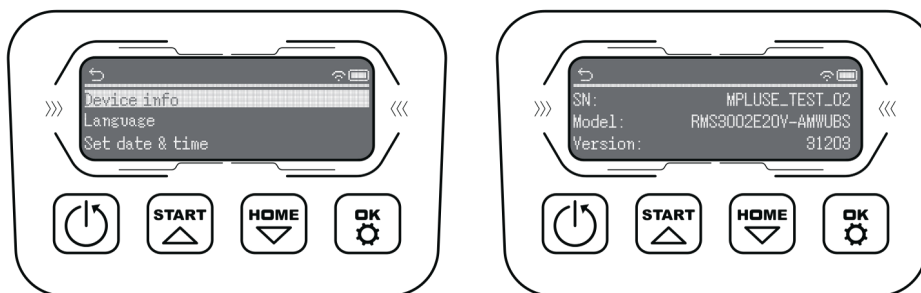
6.3 Other Settings

In the settings interface, with the cursor on the "Other settings" icon, press the "OK" button, and the LCD screen will display "Device info - Language – Set date & time - Change Pin code - ECO - Rest " from top to bottom. Press the " " button to return to the previous level.



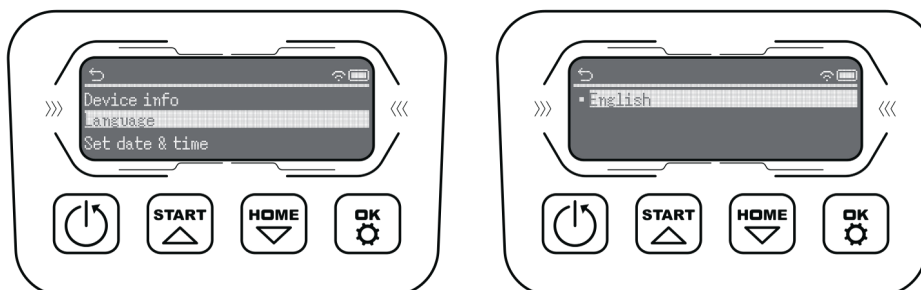
6.3.1 Device Information

When the cursor is in "Device Info", press the "OK" key to enter the machine information interface. LCD screen displays machine information; Click the " " button to return to the previous page.



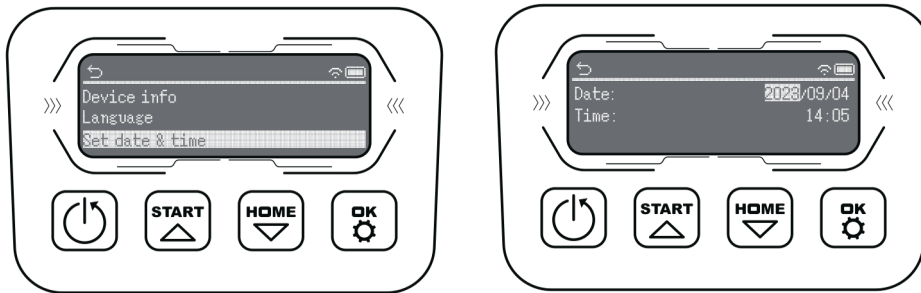
6.3.2 Language Setting

When the cursor is in "Language", press the "OK" button to enter the language setting interface. LCD screen displays languages from different countries; Click the " " button to return to the previous page.



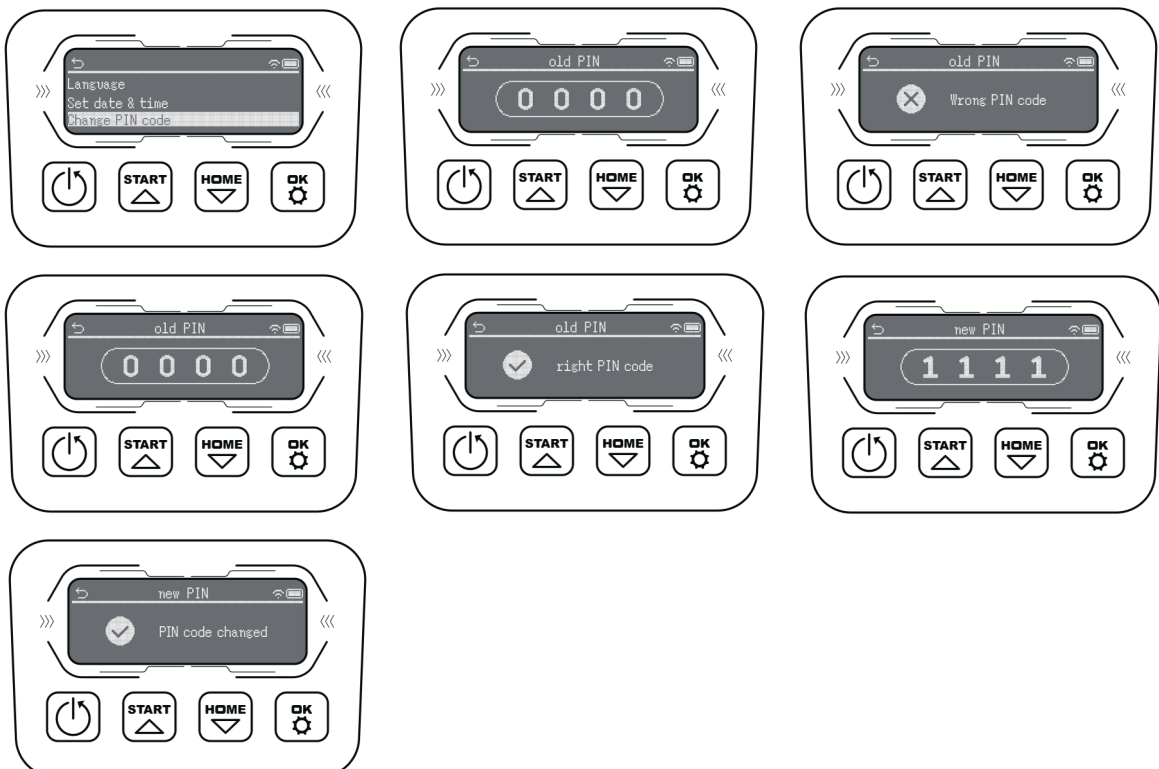
6.3.3 Time Setting

When the cursor is in "Set date & time", press the "OK" key to enter the time setting password interface. The LCD screen displays the time set by the machine; Press the "start" and "home" keys to move the cursor. At this time, press the "OK" key and the cursor will flash. Adjust the time through "start" and "home", click the "OK" key again to confirm, and click the " " key to return to the previous page.



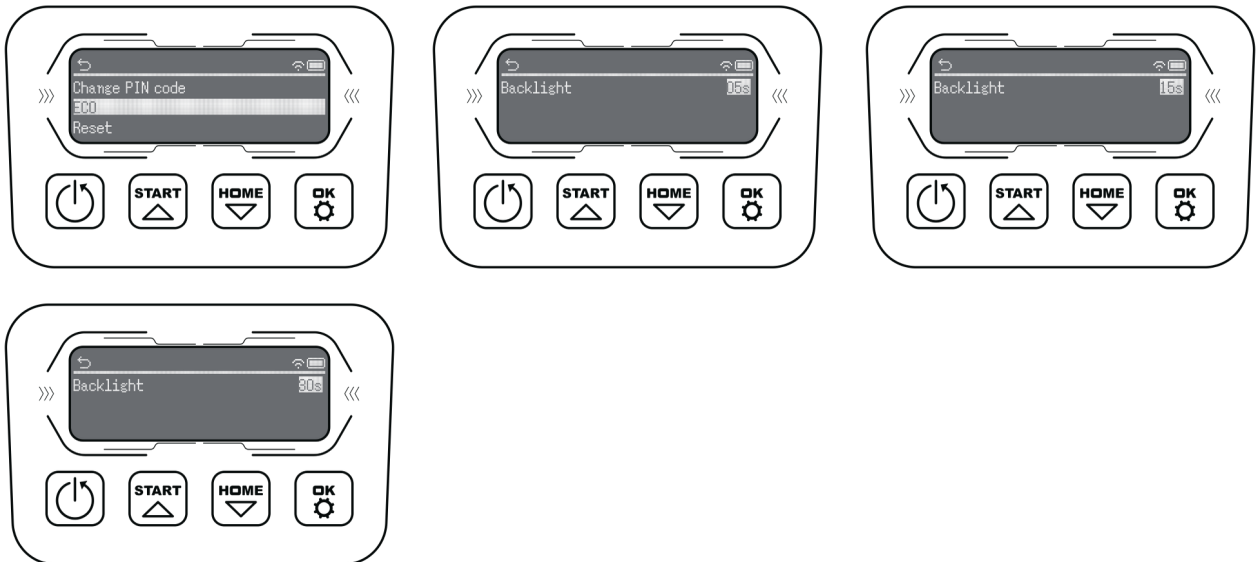
6.3.4 Password Setting

When the cursor is in "Change Pin code", press the "OK" button to enter the password setting interface. The LCD display requires the input of an old password. At this time, press the "start" and "home" buttons to change the number, and press the "OK" button to confirm. If the old password is entered incorrectly, a prompt of "Wrong PIN code" will be displayed and the interface for entering the old password will be redirected; If the old password is correct, a prompt of "Right PIN code" will be displayed and you will be redirected to the new password input page. After entering the new password, press the "OK" key and display "PIN code changed" before returning to other settings pages.



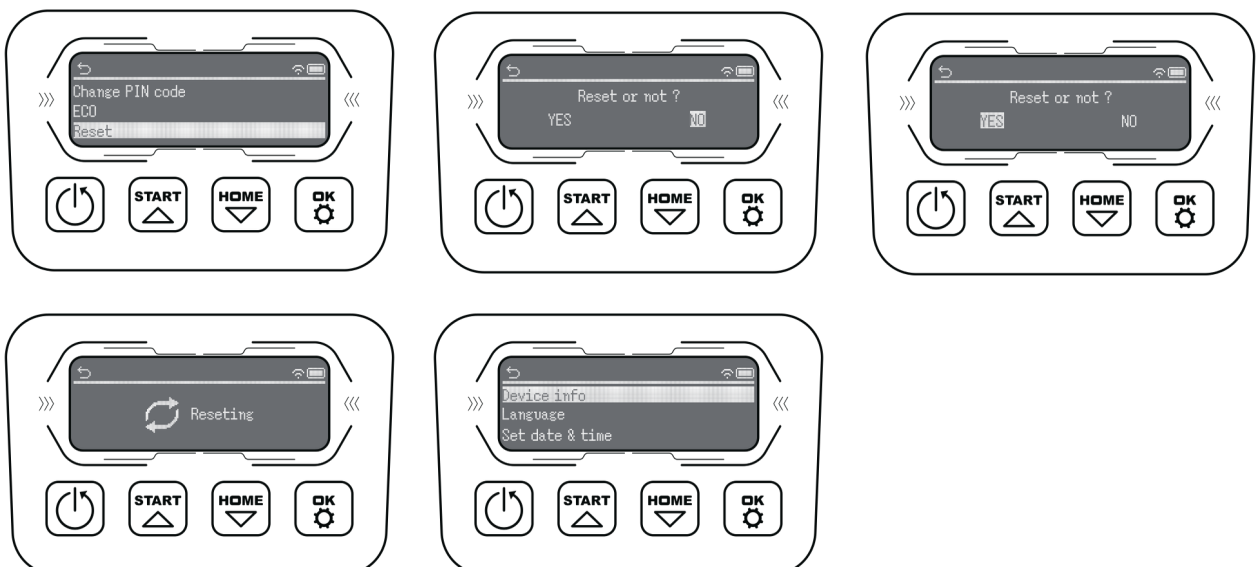
6.3.5 Automatic Screen Extinction Setting

When the cursor is in "ECO", press the "OK" button to enter the automatic screen extinction setting interface. At this point, after pressing the "OK" key and the cursor flashes, the "05/15/30s" three gears can be adjusted using the "start" and "home" keys. Press "OK" again to confirm the modification. According to the time set for automatic screen shutdown, the LCD screen will automatically shut down after "05/15/30s".



6.3.6 Restore Factory Settings

When the cursor is in "Reset", press the "OK" key to enter the reset machine page; At this point, a prompt box "Reset or not YES NO" will pop up on the LCD screen, and the cursor will default to "NO". At this time, adjust the cursor position through "start" and "home". Click the 'OK' button in the 'NO' option to return to the 'Other Settings' page; Click 'OK' in the 'YES' option to display the 'Resetting' and 'Reset' icons in the middle of the LCD screen. After resetting, you will also return to the 'Other Settings' page.



7.Function and Error messages self-checking list

Display	Illustrate	Action
E1	Mower outside working area	1. Check whether the mower inside the working area,if it was. Check whether the charging station is properly connected to the charger and the charger is connected to a suitable power supply,if they are properly connected, the boundary wires are clamped incorrectly and must be reversed.
E11	No Boundary signal	1. If mower inside working area, check the charging station LED light, if it turns red, it means that the boundary wire was not well connected to the clamps on the charging station. If it was well connected to the clamps and the LED light still turns red, check whether the boundary wire is interrupted.
E2	Wheel motor blocked	1. Turn mower off; take mower to an area free of obstacles. Turn mower on. Press START then OK . If the error message is still displayed, turn power off; turn mower upside-down and check if there has something preventing the wheels from rotating. Remove any obstruction, turn mower upright, turn power on. Press START then OK.
E3	Blade disc blocked	1 Turn mower off. - Turn mower upside down and check if there has something preventing the blade disc to rotating. - Remove any obstruction. - Turn mower upright and take it to an area with short grass or adjust the cutting height. - Turn mower on. Press START then OK.
E4	Obstruction sensors trigger not recovered	1 Turn mower off. - Take mower to an area in your lawn free of obstacles - Remove the floating cover and check the cylindrical magnet on the floating cover. If there is no magnet, replace the floating cover. - Turn power on. Press START then OK.

E5	The mower is lifted up	1 Turn mower off. Take mower to an area in your lawn free of obstacles . Turn mower on. Press START then OK . 2 If the error message is still displayed; turn power off; turn mower upside-down. Check if there has something preventing the front wheels axle sliding. Remove any obstruction, turn mower upright, turn power on. Press 3 START then OK . 4 5
E6	Rollover sensor has been triggered	1. Turn mower upright. Press START then OK .
E7	Tilt sensors has been triggered	1 Turn mower off. Take mower to a flat ground in your lawn. 2 Turn mower on. Press START then OK .
E8	Charging docking unsuccessful	3 1. Check the Boundary wire on each side of the charging station should be straight for 1m without corners or obstacles to ensure proper docking. 2. The charging station must be positioned on relatively level ground. it must not be positioned on an inclined surface or anywhere that makes its plate bend. 3. Manually dock mower in the charging station for charging. After mower is fully charged, Press START then OK.
E14	Cutting area is out of limit	1 Turn mower off. Rearrange the boundary lines,reduce the cut area to the 2 declared range. 3. Turn mower on. Press START then OK. Or switch to a larger model.
BP	Battery pack temperature protection	1. Check the battery temperature. the temperature is too high, wait until the temperature has cooled down. if the temperature is too low, wait untill the temperature >5 centigrade, Press START then OK . 2. If the error message is still displayed, replace a new battery. Restart mower. Press 3. START then OK . If the error repeatedly occurs, contact a service agent for help.
EE	Error unknown	1. Restart mower. Press START then OK. If the error message is still displayed, contact a service agent for help.

8. Software update

The software can be updated when new versions are available. The latest software can be downloaded from our website: www.sk-robot.com. Update via USB. See below for download and installation instructions: (1) Locate the latest software version at: www.sk-robot.com. Save the file to an empty FAT32 formatted USB (flash drive). Delete any other files on the drive and check the format. If the drive is not formatted in FAT32, please reformat the drive.

(2) Place Mower on a secure and level surface. Press  to turn off your Mower

(3) Insert the USB drive (flash drive) in the port. (See Fig. Q1) (4) Turn Mower on. The update will begin automatically. Wait until the display shows OK, then remove the USB drive (flash drive) and tightly close the protective cover. (5) The manual included with your Mower is based on the default software at the time of production. Some new features/functions in the new version may not exist in the manual. (6) Software updates can also be made through the app.

9. Maintenance

Your Mower works hard and needs to be cleaned and checked from time to time. Some parts will require replacement as they become worn. Switch off the machine before carrying out any service or maintenance. Here's how to take care of your Mower.

9.1 Keep it sharp

WARNING: Before cleaning, adjusting, or replacing the blades, turn your Mower OFF and put on protective gloves.

WARNING: When fitting new blades, make sure you replace all the blades. It's not mandatory to replace all screws if they are in good condition, if the screw has been damaged or unable to be fixed, then need new screw for mount the blade. This is important to ensure blade retention and balance the blade turning disc. Failure to use new screws could cause serious injury.

Each cutting blade will last up to 2 months when it is programmed to mow everyday. Always check to see if the blades are chipped or damaged and replace them if they are. When the cutting blades are dull and worn out, they should be replaced with the spare blades provided with your Mower. Spare blades are also available at your nearest Mower retailer.

Before attempting to replace your Mower blades, turn the power off and put on protective gloves.

IMPORTANT: After screwing the blade to the blade disc, make sure the blade is able to spin freely

9.2 Keep it clean

WARNING: Before cleaning, turn your Mower OFF. Put on protective gloves before cleaning the blade turning disc, you can clean with low pressure water(<1Mpa)

9.3 Winter hibernation

Your Mower will live longer and healthier if it is allowed to hibernate. So even though it is troublesome, we recommend storing your Mower in your shed or garage during the winter. Before you prepare your Mower for winter hibernation, we recommend you:

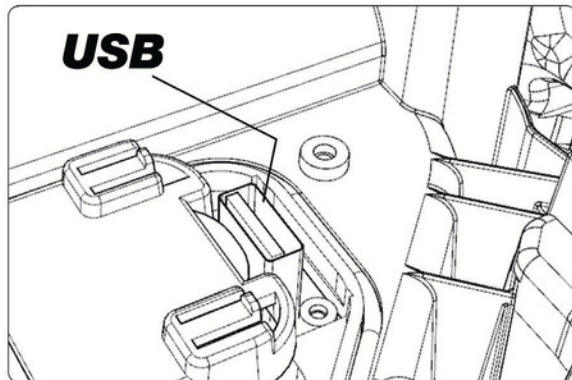
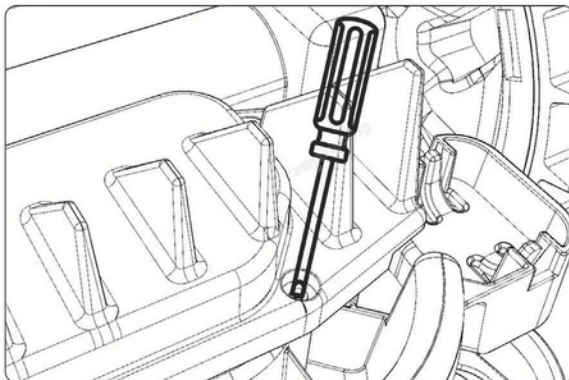
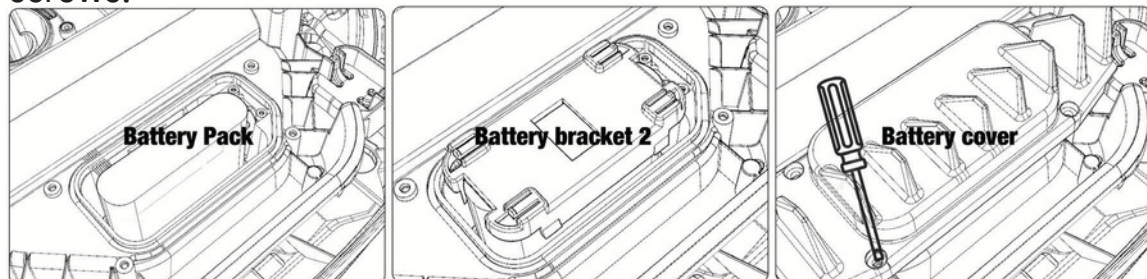
1. Thoroughly clean your Mower.
2. Fully charge the battery and remove it from Mower.
3. Turn power off.
4. To maximize the battery life, fully charge the battery and remove it from Mower before storage during winter.

WARNING: Protect the underside of Mower from water. NEVER store Mower upside down outdoors.

9.4 Replacing the battery

WARNING: Power off before attempting any adjustment, replacement or repair. Before replacing the blades, turn your Mower OFF and put on protective gloves. If you need to replace the battery, follow these steps:

1. Turn your Mower upside down.
2. Remove the screws on the battery cover. Remove the battery cover.
3. Lift out the old battery carefully. Press the latch and release the connectors.
NOTE: Do not pull by the cables. Hold the connectors and release the latch.
4. Connect a new original battery by attaching the connectors until they click into position.
5. Fit the battery as shown, Place the cover back in its position and tighten the screws.

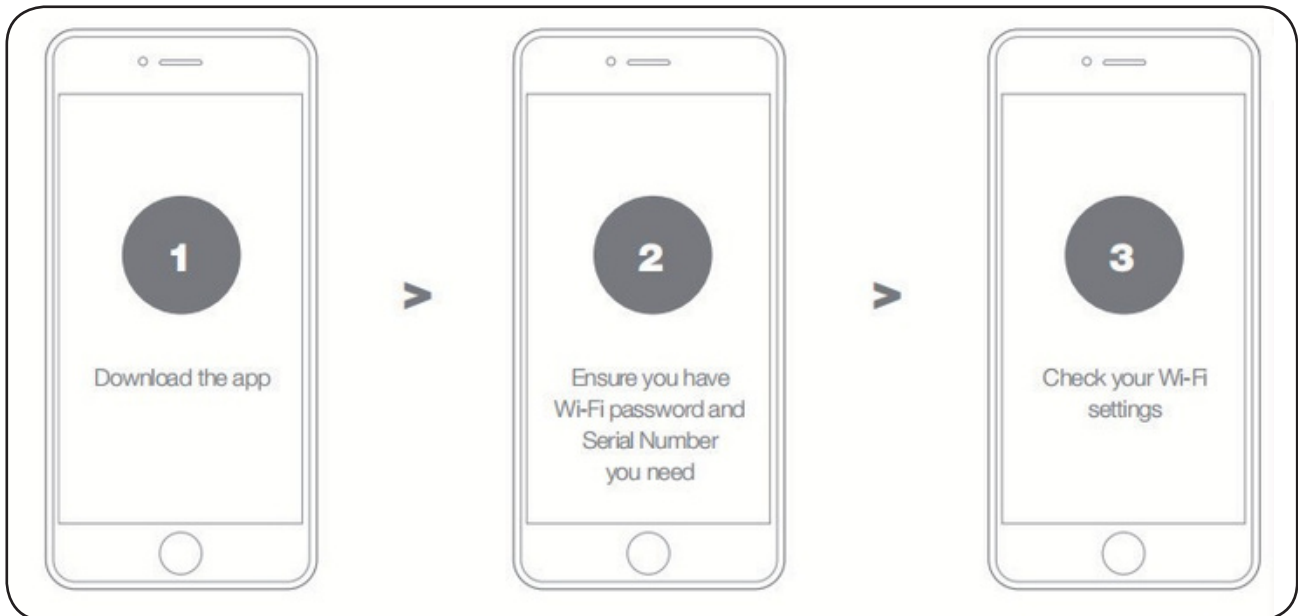


Q1

APP AND IOT

Why connect mower

Robotic mower is an IOT(internet of things)device. To get full functionality out of your mower and keep it always updated to the latest software, it must be connected to the internet via your WIFI 2.4G or bluetooth 4.0.



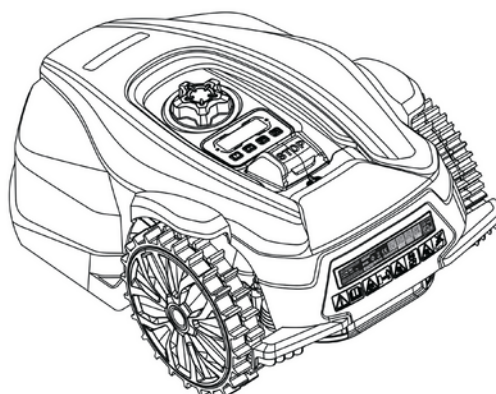
1.Download the app

Download the free mower app first, get it from Android (4.4.2 or higher) or App stores (iOS 11 or higher).



2.Ensure you have:

- Your WIFI network password.
- Mower serial Number. it can be found in the label under the rear bonnet of the machine.
- If you don't want to type the serial Number, input it by scanning the QR code with your phone's camera.

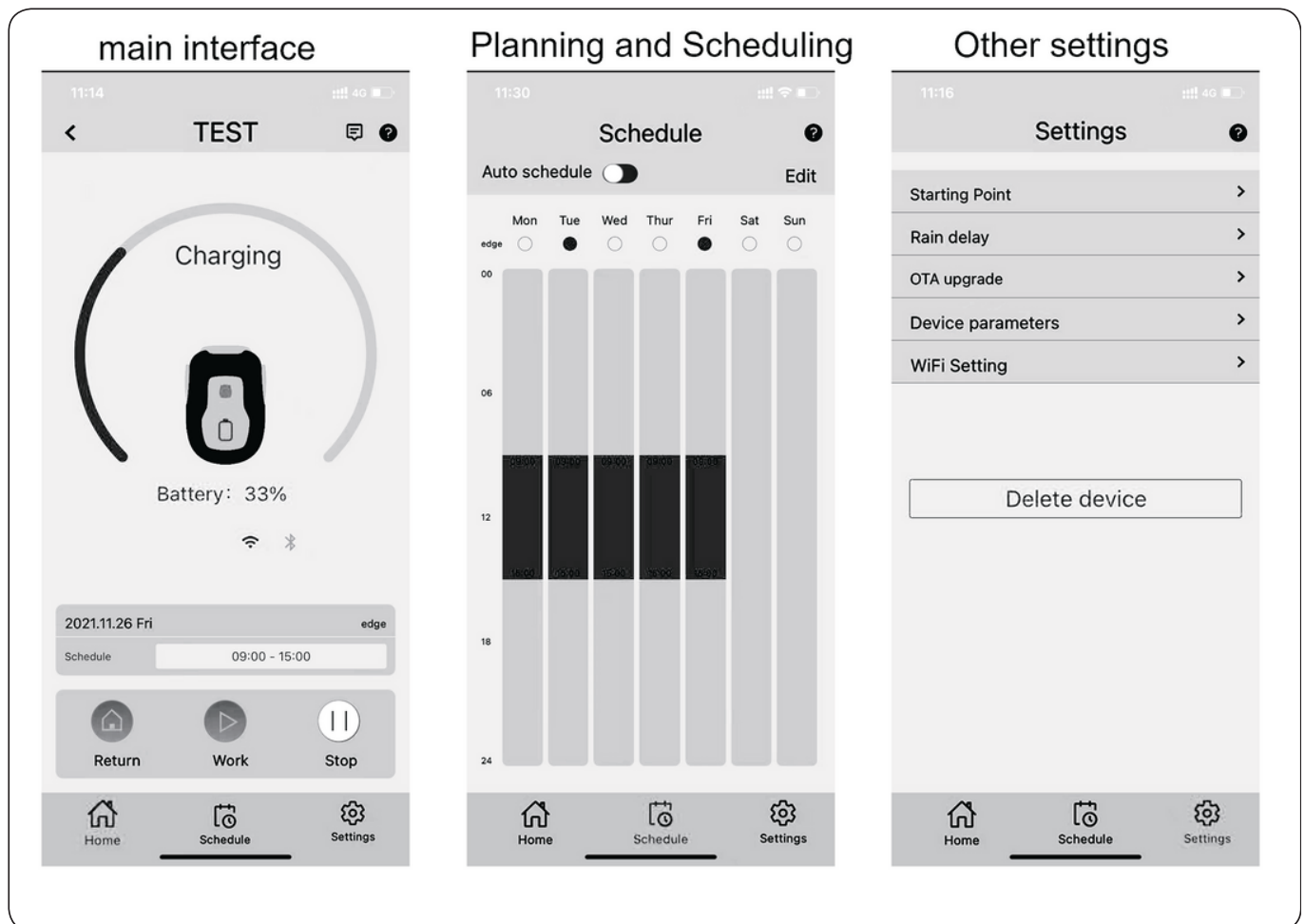


3. Check your WIFI settings

- Mower works only with 2.4GHz.
- Make sure your mower and your phone are in the same router environments.
- Make sure the distance between you mower, phone and you router as close as possible during connection.
- NOTE: when mower moves to an area of your lawn with poor or no WIFI signal, instructions sent from the app will only be executed when mower return to an area with good signal.

HOW TO CONNECT MOWER TO THE INTERNET

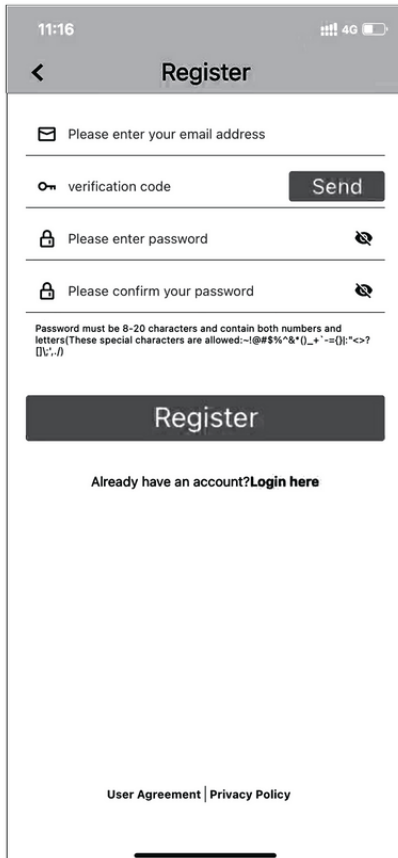
Launch the app and follow these instructions



MOWER APP NOT A SIMPLE REMOTE CONTROL

Don't think at it as a remote control, the app is an integral part of the mower advanced ecosystem based on cloud computing, once connected, mower can access its unique auto scheduling instructions from the cloud and is able to download the latest software to optimize its performance

1.Register your account



11:16 4G

< Register

Please enter your email address

verification code

Please enter password

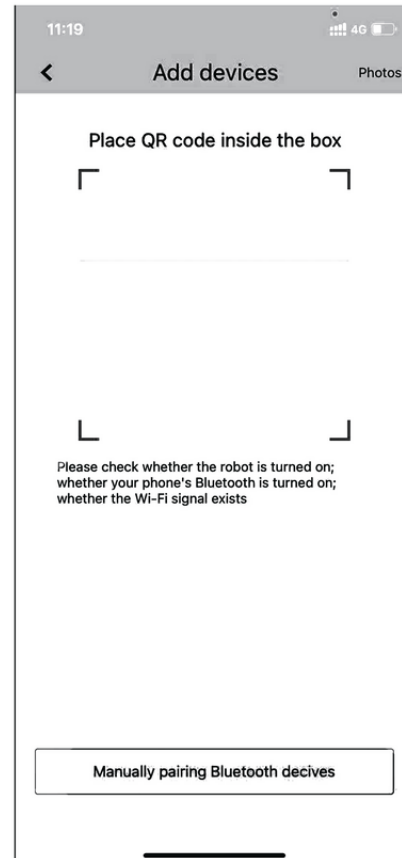
Please confirm your password

Password must be 8-20 characters and contain both numbers and letters(These special characters are allowed:~!@#\$%^&*()_+~=:{};"<>?[]\|.,/))

Already have an account? [Login here](#)

[User Agreement](#) | [Privacy Policy](#)

2.Add mower use QR code



11:19 4G

< Add devices Photos

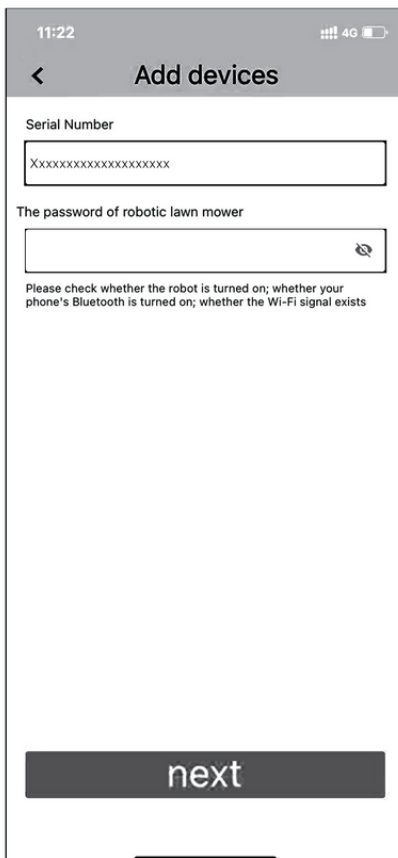
Place QR code inside the box

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Please check whether the robot is turned on;
whether your phone's Bluetooth is turned on;
whether the Wi-Fi signal exists

3. Input mower default password 0000



11:22 4G

< Add devices

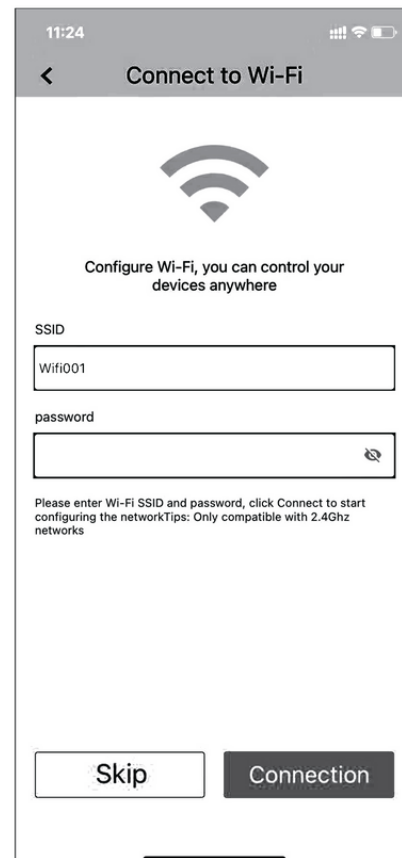
Serial Number

Xxxxxxxxxxxxxxxxxxxxxx

The password of robotic lawn mower

Please check whether the robot is turned on; whether your phone's Bluetooth is turned on; whether the Wi-Fi signal exists

4. conection network(WIFI)



11:24

< Connect to Wi-Fi



Configure Wi-Fi, you can control your devices anywhere

SSID

Wifi001

password

Please enter Wi-Fi SSID and password, click Connect to start configuring the network.Tips: Only compatible with 2.4Ghz networks