

ROBOTIC MOWER INSTALLATION

ORIGINAL INSTRUCTION

Read the operator's manual carefully and make sure that you understand the instructions before you use the product.



ROBOTIC MOWER

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2 Years limited Warranty

 **Helpline:+XXXXXXXXXX**

HELPLINE



In order to speed up your helpline telephone enquiry, we'd like you to provide your robotic mower model number and serial number before you call the helpline. You can write the model number and serial number below.

Model number: _____

Serial number: _____

How to find model number and serial number.

model number





serial number






SAFETY SYMBOLS

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






	<p>WARNING: Read the user instructions before operating the product.</p>
	<p>WARNING: Disable the product before working on or lifting the machine.</p>
	<p>WARNING: Keep a safe distance from the machine when operating. Keep your hands and feet away from the rotating blades.</p>
	<p>WARNING: Do not ride on the machine. Never put your hands or feet close to or under the machine.</p>
	<p>Use a detachable power supply as defined on the rating label next to the symbol.</p>
	<p>CE conformity mark.</p>
	<p>Noise emission to surroundings. The product's emissions are set out in Technical data on page XX and on the rating plate.</p>
	<p>It is not permitted to dispose this product as normal household waste. Ensure that the product is recycled in accordance with local legal requirements.</p>
	<p>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.</p>

	Class 3
	DC current

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.
 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.
	Use only detachable power supply model CGF251 supplied in package

SAFETY INSTRUCTIONS**1. General***IMPORTANT*

READ CAREFULLY BEFORE USE
KEEP FOR FUTURE REFERENCE

Intended Use

This garden product is only intended for lawn mowing, automatically cutting garden grass at any time of day and night. Any usage beyond the intended purpose may pose hazards, potentially causing harm to individuals and/or damage to property. Improper use encompasses, but is not limited to, transporting people, children, or animals on the machine; being transported by the machine; using the machine to pull or push loads; and employing the machine for cutting non-grass vegetation. It is imperative to adhere strictly to the specified guidelines to ensure safety and prevent accidents. The machine must only be operated by persons who are well rested and in good physical and mental condition.

Not Intended Use

By persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. If your health is impaired, you should consult your doctor to determine whether working with the machine is possible. The machine should not be operated after the consumption of alcohol, drugs or medications which impair reactions.

This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.

**WARNING:**

Children should be supervised to ensure that they do not play with the appliance.

Do not touch moving hazardous parts before these have come to a complete stop.

Residual risks- In order to prevent injuries, wear protective gloves and eye goggles when conducting maintenance or replacing the blades.

The cable between the power supply unit and charging station must not be extended.

Caution – risk of accident:

The robotic mower is intended for automatic lawn care. Its use for other purposes is not permitted and may be dangerous or result in damage to the machine. It is not

permissible to make any modifications to the machine that could lead to increased noise emissions. For safety reasons, the machine software must never be modified or tampered with. Particular care is required during use in public green spaces, parks, sports fields, along roads and in agricultural and forestry businesses. It is not permitted to transport objects, animals or persons, particularly children, on the machine. Never allow persons, particularly children to ride or sit on the robotic mower. Due to the physical danger to the user, the machine must not be used for the following applications (incomplete list):

- for trimming bushes, hedges and shrubs,
- for cutting creepers,
- for the care of lawn roofs and balcony boxes,
- for shredding or chipping tree or hedge cuttings,
- for clearing paths (vacuuming, blowing),
- for levelling earth mounds, e.g. mole hills.

2. Safe Operating Procedures

2.1 General safety instructions

- a. Read the operator's manual carefully and make sure you understand the instructions before you use the product. Keep for future reference.
- b. This appliance is not intended for use by children or persons with reduced physical, sensory or mental capabilities (that could affect a safe handling of the product), or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. However, EU requirements allows this appliance to be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge, if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.
- c. Do not touch moving hazardous parts, such as the blade disc, before it has come to a complete stop.
- d. The product must only be used with the equipment recommended by SARP. All other types of use are incorrect.
- e. Be aware that the operator or user is responsible for accidents or hazards occurring to other people or their property. Do not use the product when persons, especially children, or animals are in the work area.
- f. Warning signs must be put around the work area of the product if it operates in public areas. The signs must have the text that follows: Warning! Automatic lawn mower! Keep away from the machine! Supervise children!
- g. Set the product to OFF before you clear a blockage, do maintenance or examine the product, and if the product starts to vibrate abnormally. Examine

the product for damage before you start the product again. Do not use the product if it is damaged.

2.2 Electrical Safety Instructions

- a. Do not place the power cord from the outlet or the power cord from the base in the work area. This could damage the cables.
- b. When you connect the power supply to the power outlet, use a residual-current device (RCD) with a tripping current of maximum 30 mA.
- c. Do not connect a damaged cable or plug, or touch a damaged cable, before it is disconnected from the power outlet. Disconnect the plug from the power outlet if the cable becomes damaged while in operation. A worn or damaged cable increases the risk of of electrical shock. A damaged cable must be replaced by service personnel.
- d. Only charge the product in the included charging station.
- e. Use only original batteries recommended by SARP. Product safety cannot be guaranteed with other than original batteries. Do not use non-rechargeable batteries.
- f. Incorrect use may result in electric shock, overheating or leaking of corrosive liquid from the battery. In the event of leakage of electrolyte, flush with water/neutralizing agent. Get medical aid if corrosive liquid comes in your eyes.

2.3 Electrical Safety Instructions

- a. Do not install the charging station in a location where there is a risk of stagnant water or flooding.
- b. Do not install the charging station, including any accessories, within 60 cm of any combustible material. In the event of a malfunction, the charging station and the power supply may overheat and create a potential fire risk.
- c. Do not place the power supply on the ground but at a height of at least 30 cm so that there is no risk of it being put in water.

2.4 Safety instructions for operation

- a. Do not use the product if the STOP button does not work.
- b. Always turn off the product when not in use. The product can only start when you enter the correct PIN code
- c. Do not allow the product to collide with people or animals. If a person or animal interferes with the product, stop using it immediately. SARP recommends that you operate the product when the work area has no activity.
- e. Make sure that there are no objects such as stones, branches, tools or toys on the lawn. The blades can be damaged if it hits an object.
- f. Keep your hands and feet away from the rotating blades. Do not put your hands or feet near or below the product when it is set to ON.
- g. Do not lift the product or move it when it is set to ON.
- h. Do not let the product operate when there is standing water in the work area. For example when heavy rain forms pools of water.
- i. Do not use the robot at the same time as an automatic watering system. **READ CAREFULLY BEFORE USE KEEP FOR FUTURE REFERENCE.**

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 an machine while the motor is running.
- d. Replace defective parts
 - 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.

- a. Shut off power of the mower
 - after striking a foreign object to inspect the machine for damage;
 - if the machine starts to vibrate abnormally, and to check for damage before restarting;
- b. Do not connect the power supply to an electrical outlet if the plug or the cable is damaged. Do not connect or touch a damaged cable before it is disconnected from the power supply. A damaged cable can lead to contact with live parts
- c. To connect the machine and/or its peripherals only to a supply circuit protected by a residual current device (RCD) with a tripping current of not more than 30 mA.

Disconnect the boundary wire from the charging station and store the charging machine in bad weather conditions especially when there is a risk of lightning

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).

If manually press the STOP button, press the HOME+OK button or the START+OK button on the mower screen to restart the mower.

Shut the power of mower

- before lifting or carrying the machine,
- before transporting the machine,
- before removing blockages.

- before carrying out any work on the mowing blade,
 - before checking or cleaning the machine,
 - after hitting a foreign object or if the robotic mower begins to vibrate excessively.
- In these cases check the machine, in particular the cutting unit (blade, blade shaft, blade fastening), for damage and carry out the necessary repairs before restarting and working with the machine.



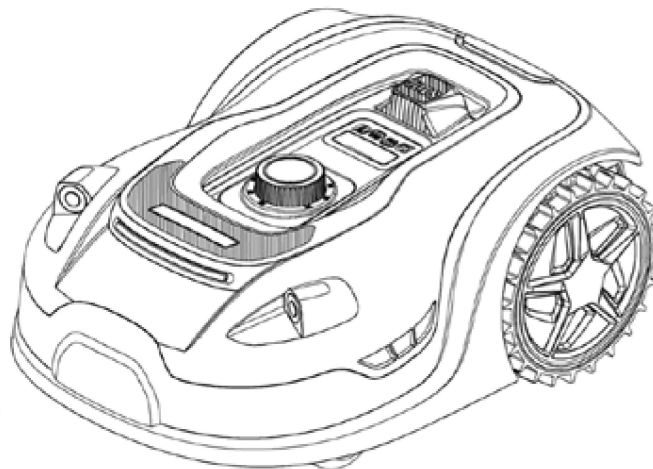
Battery Pack and Charger

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

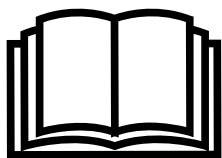
1. Do not dismantle, open or shred battery pack.
2. Do not short-circuit a battery pack. Do not store battery packs haphazardly in a box or drawer where they may short-circuit each other or be short-circuited by conductive materials. When battery pack is not in use, keep it away from other metal objects, 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. Battery pack gives its best performance when it is operated at normal room temperature (20 °C ± 5 °C).
8. 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.
9. Do not use any battery pack which is not designed for use with the equipment.
10. Keep battery pack out of the reach of children.
11. Retain the original product literature for future reference.
12. Dispose of properly.
13. If the appliance is to be stored unused for a long period, the batteries should be removed.
14. do not use modified or damaged batteries.

ROBOTIC MOWER



RMA1201L20V(U), RMA1202L20V(U), RMA1501L20V(U), RMA1502L20V(U),
RMA1601L20V(U), RMA1602L20V(U), RMA2001L20V(U), RMA2002L20V(U),

Installation guide EN



Original instructions

WARNING: Read all safety warnings 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.

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.

When operating the robotic mower in public places, signs with the following notice must be affixed around the mowing area:

"Warning! Automatic lawn mower! Keep away from the machine! Children must be supervised!"

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



Robotic Mower



Charging station



Base fitting nails



Spare blades



Boundary wire reel



Wire pegs



Power adapter



Distance guide

From your shed



Scissors



Hammer



Tape measure

Technical Data And Noise Data

Technical data

Type RMA1201L20V(U), RMA1202L20V(U), RMA1501L20V(U), RMA1502L20V(U), RMA1601L20V(U), RMA1602L20V(U), RMA2001L20V(U), RMA2002L20V(U) - designation of machinery, representative of Robotic Lawn mower

Model	RMA1201L20V(U)	RMA1202L20V(U)	RMA1501L20V(U)	RMA1502L20V(U)	RMA1601L20V(U)	RMA1602L20V(U)	RMA2001L20V(U)	RMA2002L20V(U)
Technical Data								
Cutting area	1200m ²	1500m ²	1600m ²	2000m ²				
Voltage	20V max							
Noload speed	2300±100rpm							
Cutting dia	220mm							
Cutting height	20-60mm / 40-80mm(U)							
Cutting height positions	5							
Max angle for working area	35%							
Narrowest passage	0.8m							
Battery model	LBF204 Lithium-ion/4.0Ah				LBF205 Lithium-ion/5.0Ah			
Charger rating	CGF3625 input:100-240V/50-60Hz, 90W output:36V-2.5A(IP67)	CGF253 input:100-240V/50-60Hz, 76W output:25V-3.0A(IP67)	CGF3625 input:100-240V/50-60Hz, 90W output:36V-2.5A(IP67)	CGF253 input:100-240V/50-60Hz, 76W output:25V-3.0A(IP67)	CGF3625 input:100-240V/50-60Hz, 90W output:36V-3.0A(IP67)	CGF253 input:100-240V/50-60Hz, 76W output:25V-3.0A(IP67)	CGF3625 input:100-240V/50-60Hz, 90W output:36V-3.0A(IP67)	CGF253 input:100-240V/50-60Hz, 76W output:25V-3.0A(IP67)
Charge time	60min	60min	75min	75min	75min	75min	75min	75min
Noise(sound power)	LwA,d : 52 dB(A) according to OND 2000/14/EC; LpA,d: 41 dB(A), KpA: 3dB(A)							
Weight	ca. 11Kg							
Super Wi-Fi	Yes							
Ultrasonic obstacle detective	Yes							
Led-headlight	Yes							
Accessories								
Boundary wire	200m						250m	
Wire pegs	250pcs	280pcs	280pcs	320pcs				
Blades(model number: 80201457)	6pcs (2.7g/pc)							
Charge base	1(CB02A)	1(CB04A)	1(CB02A)	1(CB04A)	1(CB02A)	1(CB04A)	1(CB02A)	1(CB04A)
Charger	1(CGF3625)	1(CGF253)	1(CGF3625)	1(CGF253)	1(CGF3625)	1(CGF253)	1(CGF3625)	1(CGF253)
General data								
Mower protection	IPX5							
Chargestation protection	IPX4							
Charger protection	IP67							
App	Wifi 2.4G+Bluetooth 4.0							

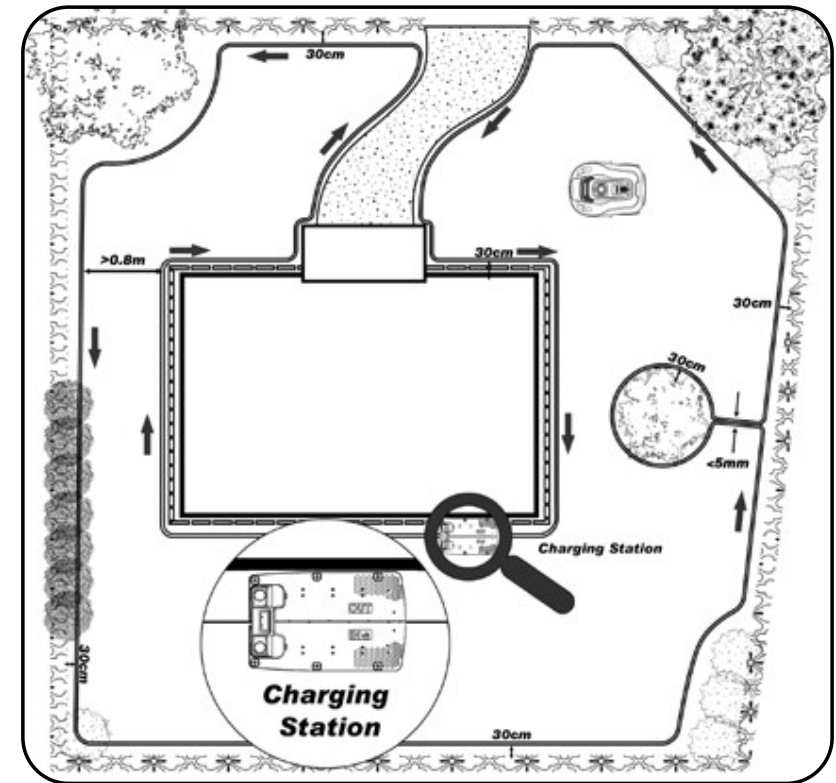
Radio technologies		
Supported Radio Technologies	Frequency Band	Max declared Output Power (EIRP)
SRD	0-148.5kHz	≤62.45 dBuA/m at 10 m
WIFI	2400-2483.5MHz	≤20 dBm
Bluetooth	2400-2483.5MHz	≤20 dBm
2/3/4G	GSM900/1800	33.97 dBm
	GPRS900/1800 eGPRS900/eGPRS1800	33.50 dBm
	eMTC	24.03 dBm
	NB-IoT	25.00 dBm

1.NOTES: Voltage measured at no load. initial battery voltage reaches voltage maximum of 20 volts. Nominal voltage is 18 volts.

2.NOTES: A degree of noise from the machine is not avoidable. For their personal protection of people working nearby, an appropriate hearing protection shall be worn.

3.NOTES: We recommend that you purchase genuine accessories listed in the above list from the same 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

Warning – dangers caused by electrical current

Only use an original power supply unit.

The power supply unit must not be used:

- if it is damaged or worn,
- if the cables are damaged or worn.

Check the power cable in particular for damage and ageing. Maintenance and repair work on power cables and power supply units must only be performed by specially qualified technicians.

Danger of electric shock!

Do not connect a damaged cable to the mains and only touch a damaged cable once it has been disconnected from the mains. The electric cable on the power supply unit must not be modified (e.g. shortened). The cable between the power supply unit and

Original Instructions

docking station must not be extended. The power supply unit and cable must not be left on wet ground for prolonged periods.

Danger of electric shock!

Damaged cables, connectors and plugs, or electric cables which do not conform with regulations may not be used.

Always ensure that the power cables used are adequately protected by a fuse.

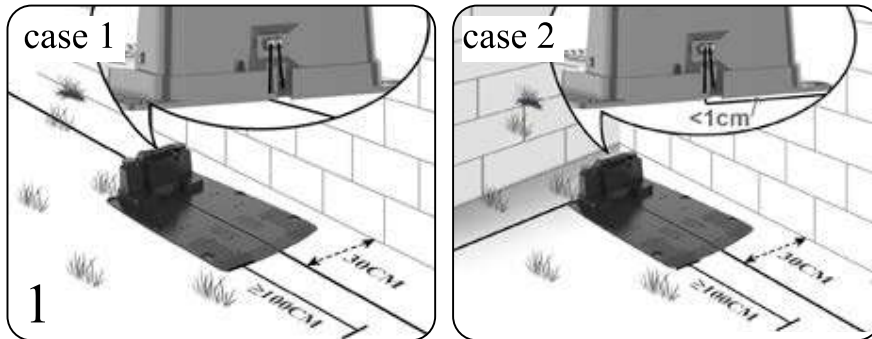
Detach electric cables at the plug and socket and not by pulling on the electric cable.

Only connect the machine to a power supply that is protected by means of a residual current-operated protective device with a release current of a maximum of 30 mA.

Your electrician can provide further information.

If the power supply unit is connected to the mains supply outside a building, the socket must be approved for outdoor use. Your electrician can provide further information about country-specific legislation.

It must be noted that current fluctuations can damage the machine when it is connected to a power generator.



Original Instructions

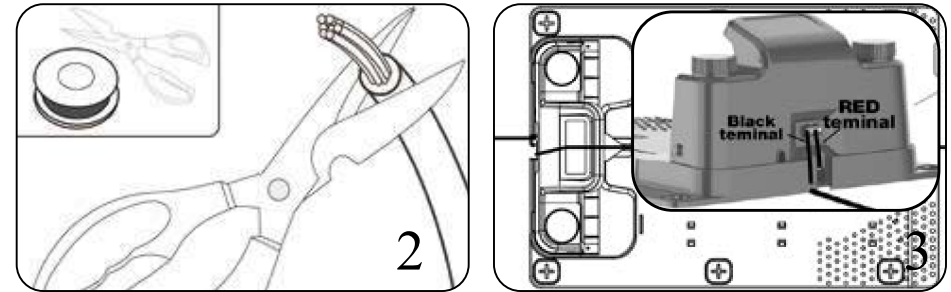
1.1 The charging station can be placed near the tool house OR house, when laying the boundary wire, leave at least 1m of straight wire with no obstacles front of the charging station.

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 30cm 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



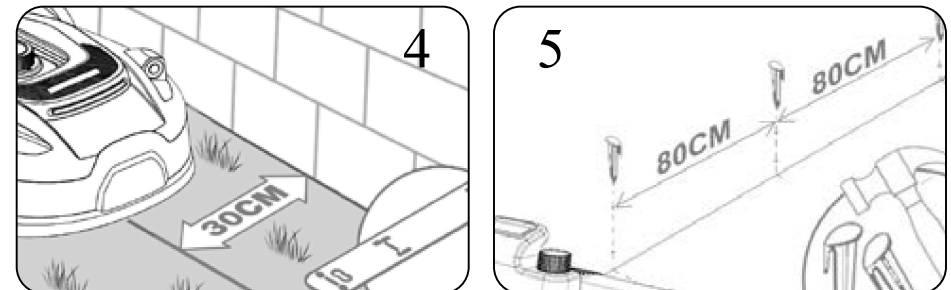
1.4 Boundary wire insert the wire terminal (RED color in red)---it's an OUT side, then the boundary wire through the slot under the charging station plate.

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 of Boundary wire (NOTE)

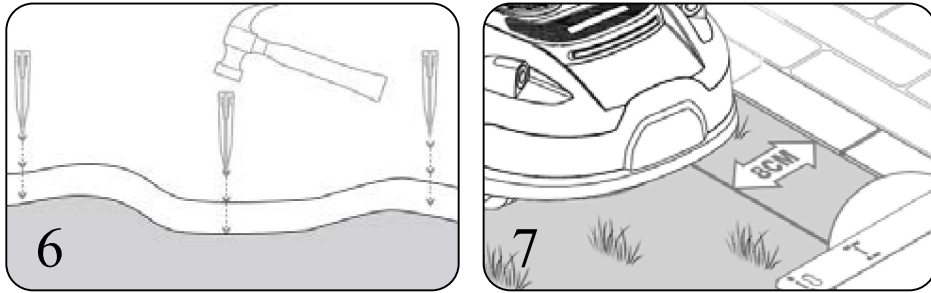
2.1 When laying the boundary wire, use the distance gauge to keep a 30cm* space between the wire and perimeter, Each wire peg should be placed around 80cm apart, use the provided distance gauge to ensure proper installation. The ground is uneven area, the peg density can be increased appropriately.

NOTE: the maximum permitted length for the boundary wire is 300m.



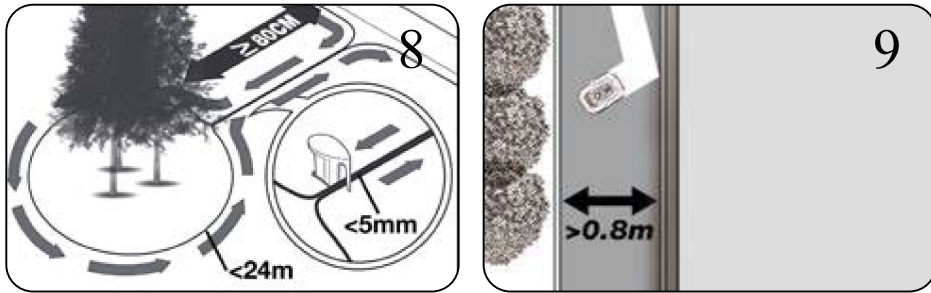
Original Instructions

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.

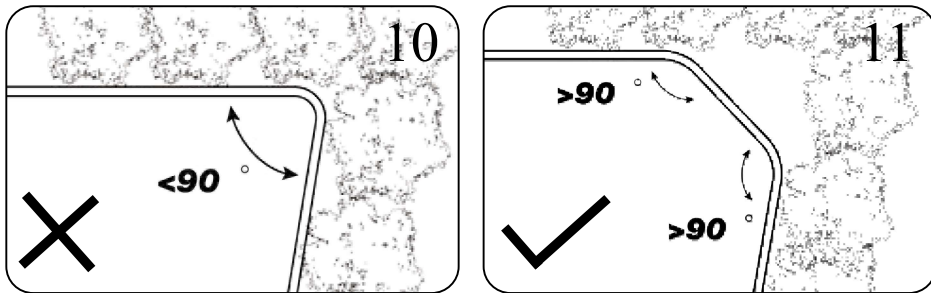


2.3 Island setting and narrow channel size requirements

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 9, the mower can pass through a narrow passage 0.8 m wide.



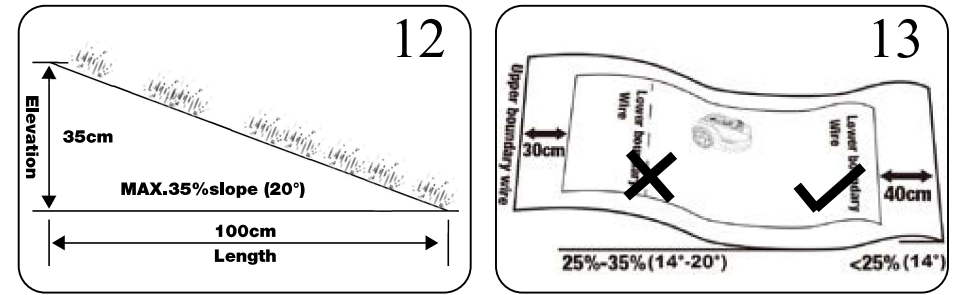
2.4 Ensure the boundary wire is perfectly straight in each corner, and all angles formed by the boundary wire are 90° or larger.



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.

Original Instructions



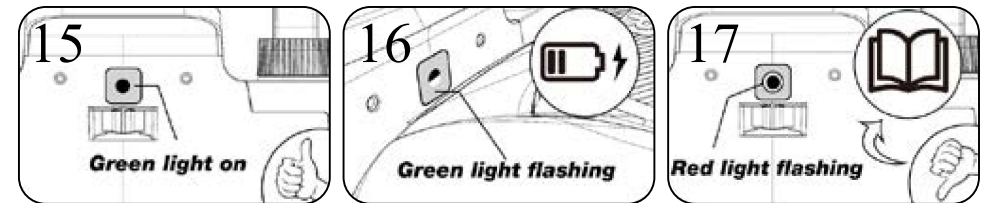
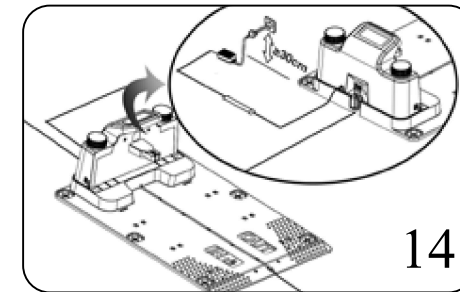
The boundary wire on slopes as shown in the figure 12,13.

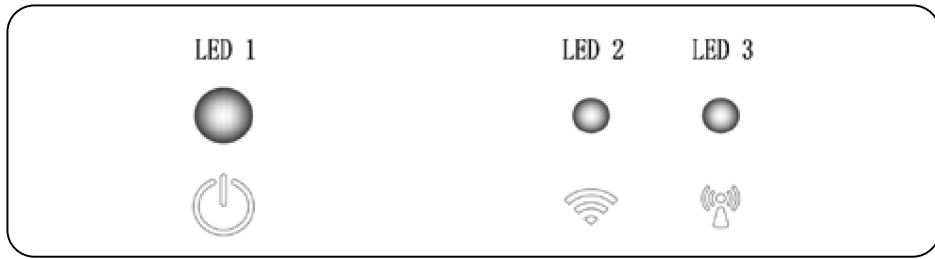
NOTES: 1.If the boundary wire is arranged on the slope, the slope of the wiring area shall not be greater than 35%, and the location of the boundary wire shall not be less than 30cm from the boundary.

2.If the boundary wire is arranged under the slope, the slope of the wiring area shall not be greater than 25%, and the location of the boundary wire shall not be less than 40cm from the boundary.

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	Meaning	Solution	
LED 1	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	/
	Green light flash	Mower is auto charging	/
	Red light flash	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.
LED 2	Not turn on	Wi-Fi Disconnected	Restart the charging station charging station.
	Green light on	Wi-Fi Connected	/
LED 3	Not turn on	Super-Link Disconnect	Redock the mower.
	Green light on	Super-Link Connected	/
	Green light flash	Super-Link Connecting	/

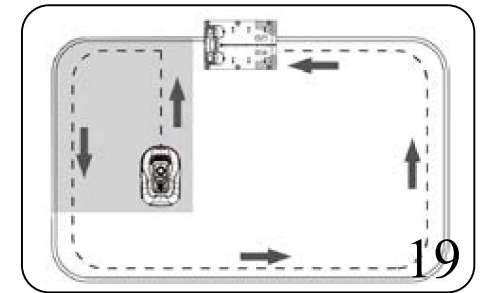
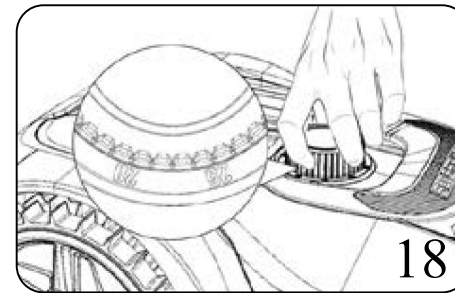
NOTES:1.In order to reduce energy consumption, the boundary signal is turned off when the mower is charging. When the mower leaves the charging station, the signal will restore.

2.In order to extend the battery life, the mower will stop charging after charging to 100% and will restart charging when the voltage is reduced to 95%.

4. Test the installation

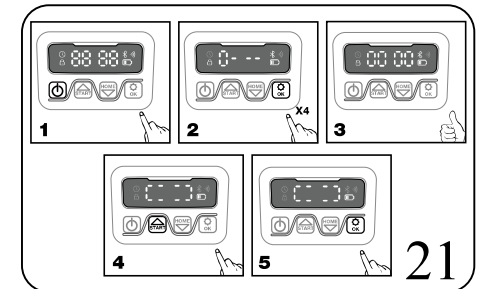
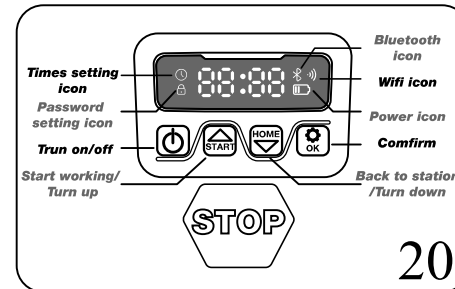
Adjust the cutting height to its maximum level(60mm)for first mow. Place your mower inside the working area, work for a while, then check boundary wire properly, check whether the mower go back to the charging station along the boundary wire. When the mower successfully returns to the charging station,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

NOTE: The LED 3 should turn on when the mower has returned back to the charging station. Please redock the mower if the LED 3 does not turn on. If the LED 3 still does not turn on, contact a service agent for help.



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".



- 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.

If you enter wrong PIN code ten times, ROBOTIC MOWER will raise a beeping alarm and then turn off.

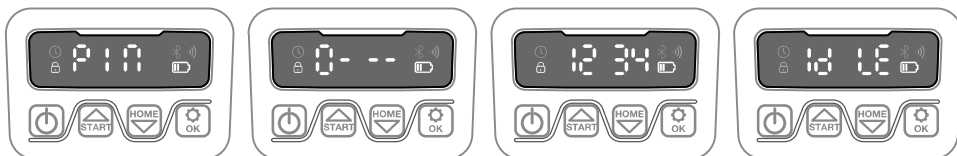
- 3) Press [START] then press [OK] to start mowing.
- 4) Press [HOME] then [OK] the robot will back to charging station.

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

6.1 Change PIN code

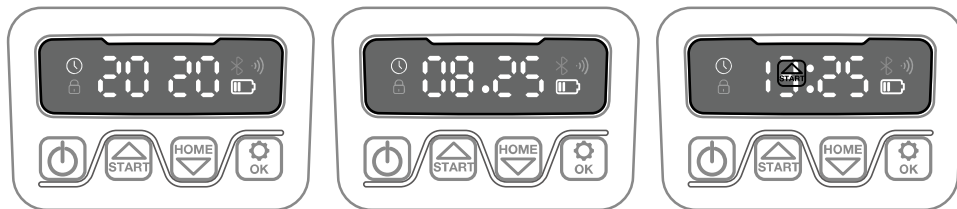
To change the PIN code, keep pressing and buttons at the same time for 3 seconds. The icon will blink, "PIN 1" will flash, that means you need to enter the old PIN. After the "PIN 1" is displayed, the first number will blink. use or to select the number and press to confirm. The next number will blink. Use the same method to enter your old PIN. Now you can set your new PIN. For example, the new PIN code is set to be 1234. After enter your old PIN, "PIN2" will flash and the first number will blink again. Use the same method to enter your wanted new PIN code (in this example, 1234). Then "12 34" will be on the display. Your PIN code has been changed successfully.



Only for reference

6.2 Set year, date and time

Set year, date and time are compulsory setting items. If you don't set these items, it will influence the schedule time in the following setting. These items should be set in the order of year, date and time. For the year setting, keep pressing for 5 seconds until the icon and a number are blinking on the display, for example, 2020. Use or to select the year you want. Then press to confirm to finish the year setting.



Only for reference

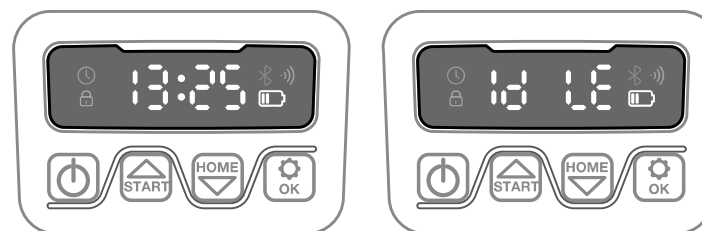
Meanwhile, the icon will flash again and a number will be displayed to indicate the date, for example, 08.25, meaning August 25. When is flashing, use or to select the number and press to confirm. Then finish the date setting.

Meanwhile, the icon will flash and the time will be displayed, for example, 13:25. When is blinking, use or to select the number and press to confirm.

Now the time setting is completed, on the screen, it will show .

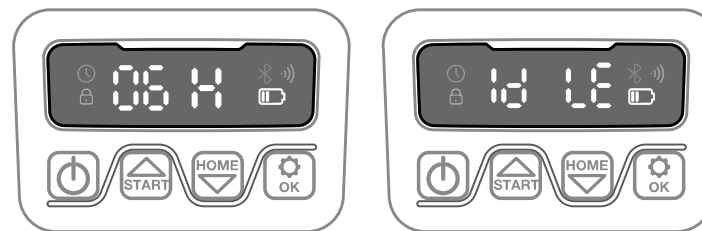
6.3 Change default start time

The default start time of 9:00 can be changed to anytime by pressing and buttons at the same time for 3 seconds, For example if you want to change the time to 13:25, When is flashing, use or to select the number and press to confirm, Then "12 34" will show on the display and your mower will start mowing from 13:25, at the same time you will hear a beep.



6.4 Change default Mowing time per day

The default cutting time is 8 hours per day, you can change it to 1-24 hours. keep pressing buttons for 3 seconds, For example if you want to change to 06H, When is flashing, use or to select the number and press to confirm. Then "12 34" will be showed on the display. Then your mower will mow 6 hours per day, at the same time you will hear a beep.



6.5 Change default mowing time per week


The default cutting time per week 5 day, you can be change to 3 or 7 day, keep pressing and buttons for 3 seconds, For example change to 3day per week, is flashing, use or to select the number and press to confirm. Then "12 34" will be on the display.

6.6 Change default setting of raining sensor/multi-zone/head-light/ultrasonic

Keep pressing for 3 seconds, then "RAIN" will be showed on the display, you can switch to "ZONE" or "LED" or "ULT" by pressing and button. Press to enter the settings interface. Then "ON" or "OFF" will be showed, you can change the settings by pressing and button and press to confirm.

7. Software update

The software can be updated when new versions are available. The latest software can be downloaded from our website. Update via USB. See below for download and installation instructions:

- (1) 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 USB, 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.

8. Maintenance

Risk of injury!

Carefully read the section " Safety instruction" , particularly the subsection "Maintenance and storage" , and follow all safety instructions exactly before performing any maintenance or cleaning operations on the machine. Activate the disabling device prior to any maintenance or cleaning work. Disconnect the mains plug before performing any maintenance operations on the docking station.

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.

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.

8.1 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 (model number: 80201457) . 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 1 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. refrain from coming into contact with moving hazardous components until they have come to a complete stop.

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

The cable between the power supply unit and charging station must not be extended.

Warning.

To maintain a safe environment and prevent potential hazards, you must keep the power cable, power supply unit, extension cord, and any other electric cables unrelated to the product outside the cutting area. This precautionary measure is crucial for preserving a safe distance from hazardous moving parts and preventing damage to cables that may come into contact with live components.

8.2 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)

8.3 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. Turn power off.
3. To maximize the battery life, fully charge the battery before storage during winter.

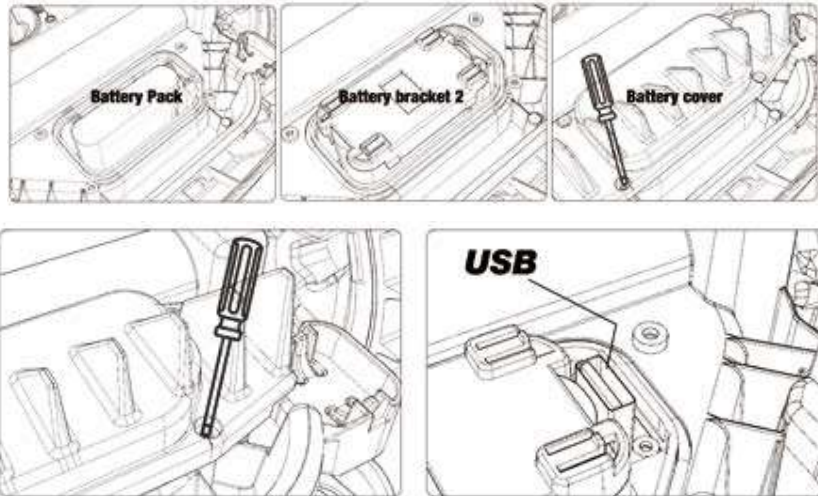
WARNING: Protect the underside of Mower from water. NEVER store Mower upside down outdoors.

8.4 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

8.5 Transport

Risk of Injury

Before transporting, Carefully read the section " Safety instruction" , and follow all safety instructions exactly. Always shut off the power before handling.

Lift and carry the robotic mower at the rear carry handle (1). Ensure that the mowing blade always faces away from your body and that there is sufficient distance between the mowing blade, particularly your feet and legs.



Trouble Shooting

Display	Illustrate	Action
E1	Mower outside working area	<ol style="list-style-type: none"> 1. Please place the mower inside the boundary wire 2. Check the red and black connector wires are not reversed. 3. If the error persists, contact after-sales service.
E2	Wheel motor blocked	<ol style="list-style-type: none"> 1. Turn mower off; take mower to an area free of obstacles. 2. Turn mower on. Press START then OK . 3. If the error persists, turn power off; turn mower upside-down and check if there has something preventing the wheels from rotating. 4. Remove any obstruction, turn mower upright, turn power on. Press START then OK.
E3	Blade disc blocked	<ol style="list-style-type: none"> 1. Turn mower off. 2. Turn mower upside down and check if there has something preventing the blade disc from rotating. If cutting disc or motor is damaged, please contact after-sales service to replace it. 3. Remove any obstruction. If the 4. Turn mower upright and take it to an area with shorter grass or adjust the cutting height higher. 5. Turn mower on. Press START then OK
E4	Bumper sensor always activated	<ol style="list-style-type: none"> 1. Turn mower off. 2. Take mower to an area in your lawn free of obstacles 3. Remove the cover and check the magnet on the back of cover. If there is no magnet, contact after-sales service to replace the cover. 4. If magnets are in place, check that the rubber connection between the cover and the mower is firm. If loose, please retighten 5. Turn power on. Press START then OK.
E5	The mower is lifted up	<ol style="list-style-type: none"> 1. Turn mower off. 2. Take mower to an area free of obstacles . 3. Turn mower on. Press START then OK . 4. If the error persists; turn mower off; 5. Turn mower upside-down. Check if there has something preventing the front wheels rotating. 6. Remove any obstruction, turn mower upright, turn mower on. Press START then OK .
E6	Upside down	<ol style="list-style-type: none"> 1. Turn mower upright. 2. Press START then OK. 3. If error persists, please contact after-sales service.

E7	Angle sensor always activated	<ol style="list-style-type: none"> 1. Turn mower off. 2. Check that the slopes of the grounds are not exceeding than required limits. 3. Take mower to a flat ground. 4. Turn mower on. Press START then OK 5. If error persists, please contact after-sales service.
E8	Docking error	<ol style="list-style-type: none"> 1. Check if there is a 1 meter straight wire ahead of the charging station. 2. Check that the charging station is placed in flat position 3. Check that the charging station is not bent 4. If error persists, please contact after-sales service.
E9	Trapped	<ol style="list-style-type: none"> 1. Place mower to an area free of obstacles. 2. If error persists, please contact after-sales service
BP	Battery protection	<ol style="list-style-type: none"> 1. Check the battery temperature. If the temperature is too high, wait until it cooled down. If the temperature is too low, wait until the temperature higher than 5 °C. 2. If the error persists, contact after-sales service.
E11	No boundary signal	<ol style="list-style-type: none"> 1. If mower inside working area, check the charging station light, if it turns red, it means that the boundary wire was not well connected to charging station. 2. If it was well connected and the light still turns red, check whether the boundary wire is broken. 3. If the error persists, please contact after-sales service
E12	Battery error	Please contact after-sales service to change battery
E13	Charging error	<ol style="list-style-type: none"> 1. Check if the charging head/pole is clean 2. If the error persists, please contact after-sales service to change charger
E14	Exceeds usable area	<ol style="list-style-type: none"> 1. Decrease mower working area to stated in the manual 2. If the error persists, please contact after-sales service
EE	Error unknown	<ol style="list-style-type: none"> 1. Restart mower 2. If the error persists, please contact after-sales service
LOCK	Continuously entering wrong passwords	<ol style="list-style-type: none"> 1. Please keep the mower ON and wait for 10 minutes. 2. After 10 minutes you can enter your password again. 3. If you forgot your password, please contact after-sales service.

Electrical Wire Tangled or Damaged

Wear electrical gloves to unplug the power cord.

1. Unscrew the knob between the extension cord and the adapter.
2. Purchase a new adapter of the same model from us and replace it.
3. Restart the machine.

Instructions on how to proceed in case of abnormal vibrations:

Turn off the machine.

Flip the robot 180 degrees.

Check the condition of the blades for damage or malfunction.

We recommend replacing all three blades.

Flip the machine back over start working.

Installation and settings

- Does my garden need to have complete Wi-Fi coverage?

If possible, try to ensure complete Wi-Fi coverage in the garden.

If complete coverage is not possible, at least make sure there is Wi-Fi coverage at the location of the base station. This allows the machine's information to be transmitted from the base station to the app and vice versa.

**Note that when binding the base station, it is essential to ensure that the machine is connected to the internet.*

- What should I do if the QR code cannot be recognized?

If the QR code cannot be scanned, you can still bind the machine through Bluetooth connectivity.

Operation:

- Why does the machine occasionally encounter obstacles?

Bad weather, such as fog or rain, can affect visibility. In poor lighting conditions, or if the light is very strong. The obstacle is in a blind spot.

- After pressing the stop button on the machine, how can I restart it?

For safety reasons, when the machine is in stop mode, to restart, press "start+ok" or "home+ok" on the screen.

- Why does the machine sometimes suddenly make a turn in obstacle-free areas?

If the grass is too tall, the machine may identify tall grass as an obstacle. Ensure the grass length is within the machine's allowed cutting range.

Weak signals in the area may cause the machine to stop moving forward for safety, leading to a change in direction.

Technical Features

- Role of the Rain Sensor, and What Does Delay Represent?

Although the machine can cut in the rain, it is not recommended. Wet ground can cause mud to stick to the wheels and result in poor cutting quality as wet grass is difficult to cut and tends to stick to the blade disc.

Bluetooth and Network:

- Why Can't the Robot Connect to Wi-Fi?

Ensure the router is operating on a 2.4GHz frequency.

The phone and the machine should be connected to the same network.

Confirm Bluetooth and location permissions are enabled on the phone.

Check if the Wi-Fi icon on the machine's screen is lit.

Check if the Wi-Fi icon on the app is lit.

If the Wi-Fi icon on the station is lit, but not on the machine, try moving the machine closer to the router then attempt connection again.

- Why Can't I Find the Device When Searching in Bluetooth?
Search for the device in the app, not in the phone's Bluetooth device list.
Make sure to enable location permissions when connecting via Bluetooth.
- Why is Location Permission Needed?
This is a requirement of the phone's system settings; we do not use your location information.
- Can I Connect the Machine to a Hotspot Network?
Yes

Software Updates:

- How Do I Know if the Robot Needs an Update?
You will receive notifications in the app if there are new software updates.
- Can I Upgrade the Machine Using a USB Flash Drive?
Currently not allowed or recommended.
- Why Should I Update Firmware?
We consistently update features and firmware to enhance user experience and optimize functionality. It is recommended to regularly check for and update your firmware to ensure you benefit from the latest improvements and have the best possible user experience.

Maintenance:

- How Should I Store the Machine in Winter?
It is recommended to store the machine indoors during winter. Before storage, ensure the machine is fully charged and turned off.
- Can I Wash the Machine with Water?
Ensure all screws are tightly secured before cleaning the machine.
Use a regular water hose for cleaning; avoid using a high-pressure water gun to prevent potential damage.
- How Often Should I Replace the Blades?
For lawns that haven't been serviced by the robotic lawnmower before and have longer grass, consider replacing the blades every 1-2 months.
In the case of continuous use for lawns where the grass length remains consistently controlled, the blades are expected to last for an extended period due to the maintained grass height.

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.

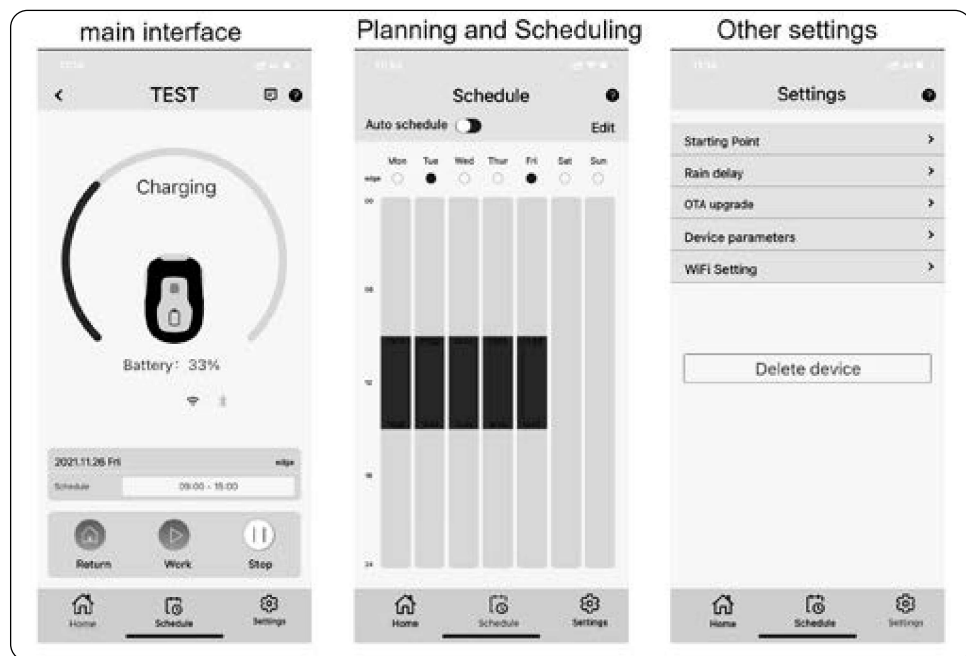


3. Check your WIFI settings

- Mower works only with 2.4GHz.
- Make sure your mower and your phone are in the same router enviroments.
- Make sure the distance between you mower, phone and you router as close as possible during connection.
- NOTE: 1. 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. 2. When the mower is connected to Wi-Fi, the LED 2 light at the charging station should turn on synchronously.Otherwise, restart the charging station.

HOW TO CONNECT MOWER TO THE INTERNET

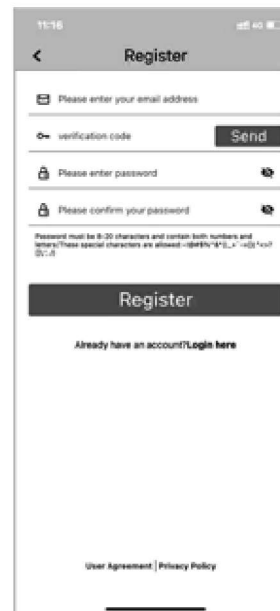
Launch the app and follow these instructions



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 optimism its performance

1.Register your account



2.Add mower use QR code

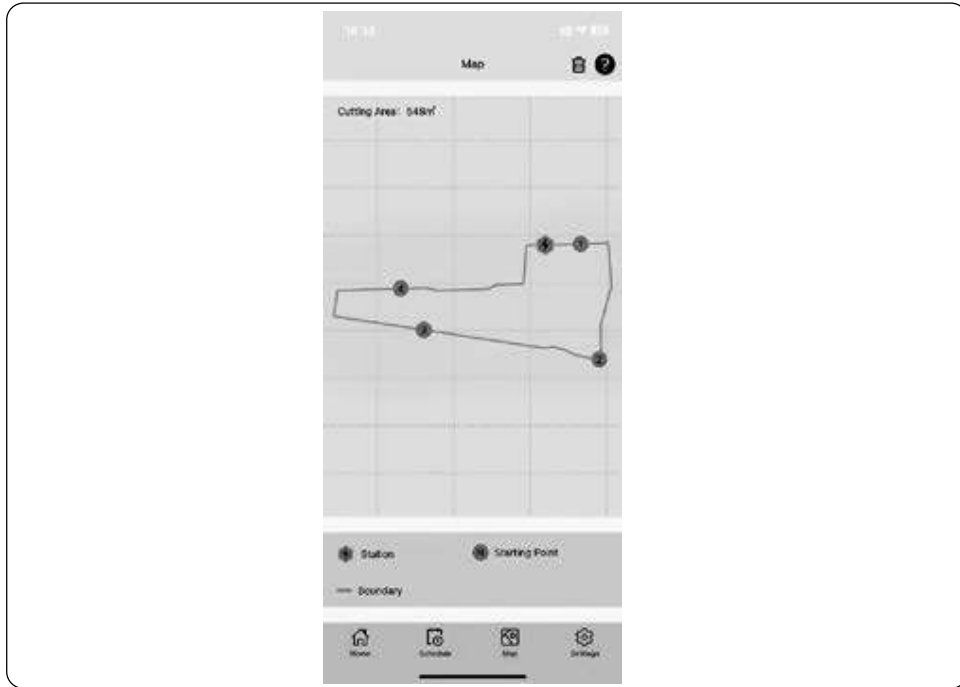


3. Input mower default password 0000

4. conection network(WIFI)



NOTE: Thanks to Map function, the app can give calculation of yard size, as well as adjust starting point on simulated boundary wire quickly.



EC DECLARATION

We.

SHANGHAI SUNSEEKER ROBOTIC TECHNOLOGY CO., LTD
3rd floor , 226 Gaoji Ra., SiJing Town, SongJiang District, Shanghai, China
Declares and assumes liability that the product:

Description Robotic Lawnmower

Model NO.: RMA301M20V, RMA501M20V, RMA601M20V, RMA801M20V,
RMA1001M20V, RMA310S20V, RMA510S20V, RMA311S20V, RMA511S20V
with battery charger CGF251, CGF253 and charging station CB03A .

Function Cutting grass

Complies with the relevant provisions of Directives 2006/42/EC, 2011/65/EU,
2006/66/EC, 2014/53/EU and has been developed and manufactured in accordance
with the versions of the following standards valid on the date of manufacture:

EN 50636-2-107, EN 60335-1 Ed 5, EN

55014-1, EN 55014-2, EN 61000-3-2, EN61000-3-3

2000/14/EC amended by 2005/88/EC

– Conformity Assessment Procedure as per Annex III

– LpA: 44dB(A) KpA: 3dB(A)

– LwA: 55dB(A) KwA: 3dB(A)

ETSI EN 301 489-52 V 1.1.0 (2016-11)

ETSI EN 301 511 V 12.5.1 (2018-02)

ETSI EN 303 413 V 1.1.1 (2017-12)

ETSI EN 301 489-52 V 1.1.0 (2016-11)

ETSI EN 301 511 V 12.5.1 (2018-02)

ETSI EN 303 413 V 1.1.1 (2017-12)

*The notified body [ITS RED Intertek SEMKO AB, Torshamnsgatan 43,
164 22 Kista, Sweden], has reviewed the conformity according to Annex III
Module B of the Directive 2014/53/EU and issued the following
EU type examination certificate: [SE-RED-2100087 Ed.4]*

The person authorized to compile the technical file:

Name: Harry

General Manager

2021/12/30

Address: 3rd floor, 226 Gaoji Ra., SiJing Town, SongJiang District, Shanghai,China

Signature: -----