

# ROBOTIC MOWER INSTALLATION



# **ROBOTIC MOWER**

**3 Years limited Warranty**



**Helpline: +41 43 5882245**

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# Warranty statement for *robotic mower*

If your robotic mower becomes defective due to faulty materials or workmanship within a period of 3 years from the date of purchase, we guarantee to:

- Replace or repair all defective parts, free of charge, or,
- Repair products free of charge, or,
- Replace the unit with a new or re-conditioned unit, free of charge.

Your warranty is subject to the following conditions :

- Registration on the APP within 30 days of purchase. (without registration ,only 24 months warranty will apply)
- Battery packs are guaranteed for a 12 months period only,regardless of online registration.
- The tool has not been misused,abused,neglected, altered, modified or repaired by anyone other than an authorized service center.
- Only genuine robotic mower accessories and parts have been used on or with the product.
- The tool has been subjected to fair wear and tear.
- The tool has not been used for trade or professional purposes.
- The tool has not been used for rental purposes.
- The tool has not sustained damage through foreign objects,substances or accidents.

Your warranty does not cover :

- Components that are subject to natural wear and tear caused by use in accordance with operating instructions.
- Unauthorized/improper maintenance/handling or overload is excluded from this warranty as are accessories such as bulbs, blades and bits, etc.

For guarantee claims, you will need to submit a registration document and proof of purchase in the form of a valid receipt that displays date and place of purchase.

This guarantee statement does not replace but is in addition to your statutory rights.

This warranty does not apply to accessories supplied with the tool.

This warranty applies only to the original purchaser and may not be transferred.

All repairs and replacement tools will be covered by the limited warranty for the balance of the warranty period from the date of the original purchase.

※ For exploded drawing and parts list, please visit [www.sk-robot.com](http://www.sk-robot.com)

# HELPLINE



En to help 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 blow.

**Model number:** \_\_\_\_\_

**Serial number:** \_\_\_\_\_

How to find model number and serial number.

**SUNSEEKER**<sup>®</sup> ROBOTIC LAWNMOVER  
RMA500M20V

20V Max.  $n_0=2800$ rpm 36Wh  $\Phi$ 18cm 8kg

IPX5 LWA

CAUTION—Do not touch rotating blade  
VORSICHT—Rotierende Klinge nicht berühren  
ATTENTION—Ne touchez pas la lame rotative

SN 2101 16800003 00000001 Made in China

ZHEJIANG SUNSEEKER INDUSTRIAL CO.,LTD  
988,Jinde Rd,Jiangdong Industrial Park, Jinhua,Zhejiang,321000,China

62dB

**HELPLINE**

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<b>COUNTRY</b>	<b>HELPLINE</b>	<b>AFTER SALES SERVICES ADDRESS</b>
<b>Germany;</b>	<b>12359639 XXX</b>	<b>XXXXXXXXXXXXX</b>

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<b>COUNTRY</b>	<b>HELPLINE</b>	<b>AFTER SALES SERVICES ADDRESS</b>
<b>Germany;</b>	<b>12359639 XXX</b>	<b>XXXXXXXXXXXXX</b>

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<b>Germany;</b>	<b>12359639 XXX</b>	<b>XXXXXXXXXXXXX</b>

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# 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. Periodically inspect the area where the machine is to be used and remove all stones, sticks, wires, bones, and other foreign objects.
- c. 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.
- d. 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 an 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**

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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.



## **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.

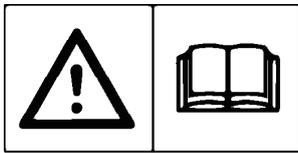
### ***SAFETY WARNINGS FOR BATTERY PACK INSIDE THE TOOL***

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.

***SHANGHAI SUNSEEKER ROBOTIC TECHNOLOGY CO.,LTD***

# SAFETY SYMBOLS

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



WARNING: Read the user instructions before operating the product.



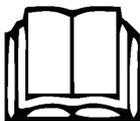
WARNING: Disable the product before working on or lifting the machine.



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.

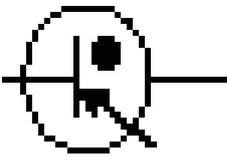
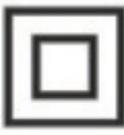
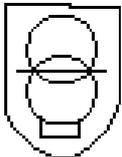


The low voltage cable must not be shortened, extended or spliced. Do not use a trimmer nearby the low voltage cable. Be careful when trimming edges where the cables are placed.

## *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.
	Recyclable mark.
	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.
	SMPS(Switch mode power supply unit)
	Double insulation.
	SMPS(Switch mode power supply unit) incorporating a short-circuit-proof safety isolating switching power supply.



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.

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# EC DECLARATION

We.

**SHANGHAI SUNSEEKER ROBOTIC TECHNOLOGY CO., LTD**  
**Rm. 301, 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 with battery charger CGF251, CGF253 and charging base CB03A .*

Function Cutting grass

Complies with the following Directives,

2006/42/EC, 2014/30/EU, 2014/35/EU, 2011/65/EU, 2000/14/EC amended by 2005/88/EC

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

– Conformity Assessment Procedure as per Annex V

– Measured Sound Power Level 61 dB(A)

– Declared Guaranteed Sound Power Level 62 dB(A)

The notified body involved

Name: Intertek Testing Services Shanghai

Address: Building No.86, 1198 Qinzhou Road (North), 20033 Shanghai, China

CertificatioNo.200902090SHA, 200902092SHA, 200902097SHA, 200902191SHA, 200902192SHA, 200902196SHA, 200902195SHA , 200902098SHA

*(RMA300M20V, RMA500M20V, RMA600M20V, RMA800M20V, CGF251, CGF253, LBF202, LBF204, CB01A)*

Standards conform to,

EN 50636-2-107:2015+A1:2018+A2: 2020

EN 60335-1:2012+A11:2014+A13:2017+ A1:2019 + A2:2019+ A14:2019

The person authorized to compile the technical file,

Name: Harry

General Manager

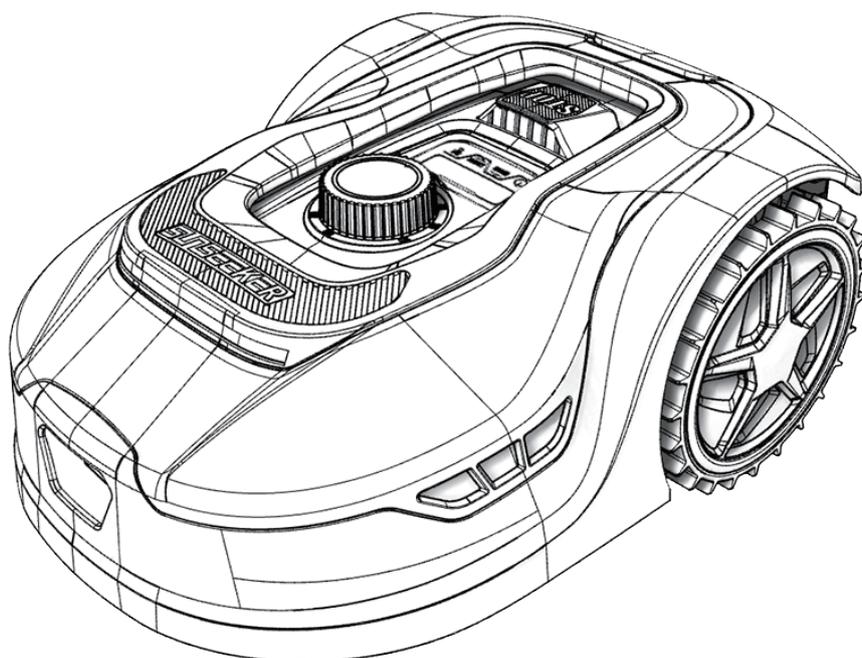
2020/11/05

Address Rm.301, 226 Gaoji Ra., SiJing Town, SongJiang District, Shanghai,China

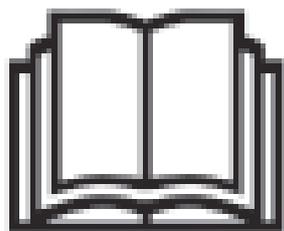
Signature: -----

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# ROBOTIC MOWER



**RMA301M20V, RMA501M20V, RMA601M20V, RMA801M20V, RMA1001M20V**  
**Installation guide EN**



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# 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](http://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.

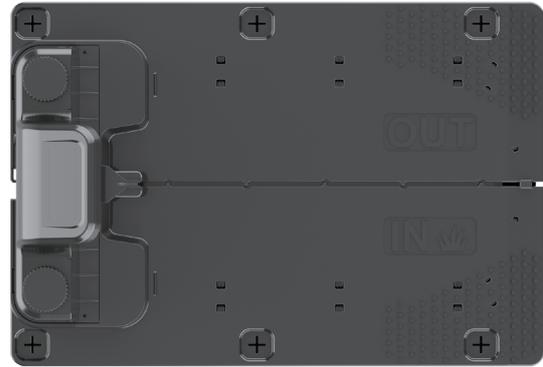
## Preparation

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 base and where the boundary wires should be routed.

# IN THE BOX(LIEFERUMFANG)



Robotic Mower



Changing Base



Base fitting nulls



Spare blades



Boundary wire reel



Wire pegs



Power adapter



Conector



Distance guide



Robotic Mower  
Installation



Robotic Mower  
Quick Installation

## From your shed



Scissors



Hammer



Tape

# Technical data and noise data

## Technical data

Type RMA301M20V, RMA501M20V, RMA601M20V, RMA801M20V, RMA1001M20V - designation of machinery, representative of Robotic Lawn mower

Model	RMA301M20V	RMA501M20V	RMA601M20V	RMA801M20V	RMA1001M20V
Robotic Mower technical data					
Cutting area	300m <sup>2</sup>	500m <sup>2</sup>	600m <sup>2</sup>	800m <sup>2</sup>	1000m <sup>2</sup>
voltage	20V max				
No load speed	2800rpm±100rpm				
Cutting diameter	180mm				
Cutting height	20-60mm				
Cutting height positions	5				
Maximum angle for work area, %	40				
Narrowest possible passage, m	0.8				
Battery type/model	LBF202 Lithium-ion/2.0Ah			LBF204 Lithium-ion/4.0Ah	
Charger time	120min		50min	90min	
Charger rating	CGF251 input 100-240V 50/60Hz,28W Output:20.5V--1.1A(IP67)		CGF253 input 100-240V 50/60Hz,76W Output:20.5V--3.0A(IP67)		
Noise (sound power)	<62dB (2000/14/EC amended by 2005/88/EC, Annex V)				
Weight	ca. 8kg		ca. 8.2kg		
Accessories					
Boundary wire	100m	130m	150m	170m	200m

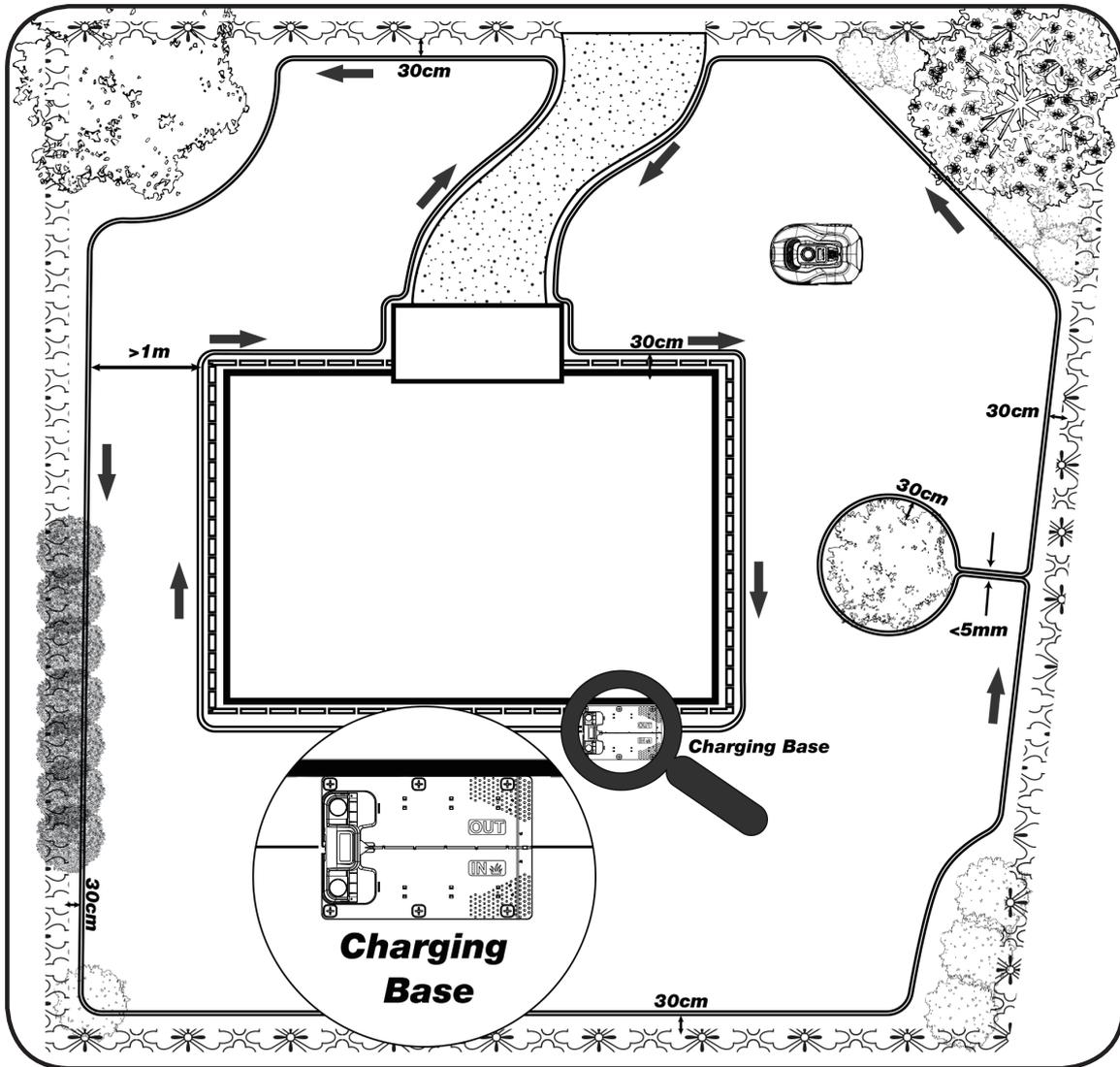
Wire pegs	130PCS	180PCS	200PCS	230PCS	250PCS
Blades	80201457-01(2.7g/pcs)	80201457-01(2.7g/pcs)	80201457-01(2.7g/pcs)	80201457-01(2.7g/pcs)	80201457-01(2.7g/pcs)
Charging Base	1	1	1	1	1
Battery pack	1(LBF202)	1(LBF202)	1(LBF202)	1(LBF204)	1(LBF204)
Charger	1	1	1	1	1
General date					
Mower protection	IPX5				
Charging station protection	IPX4				
Power supply	IP67				
APP	bluetooth 4.0	WIFI 2.4G +bluetooth 4.0			

\*Voltage measured at no load.initial battery voltage reaches voltage maximum of 20 volts.Nominal voltage is 18 volts.

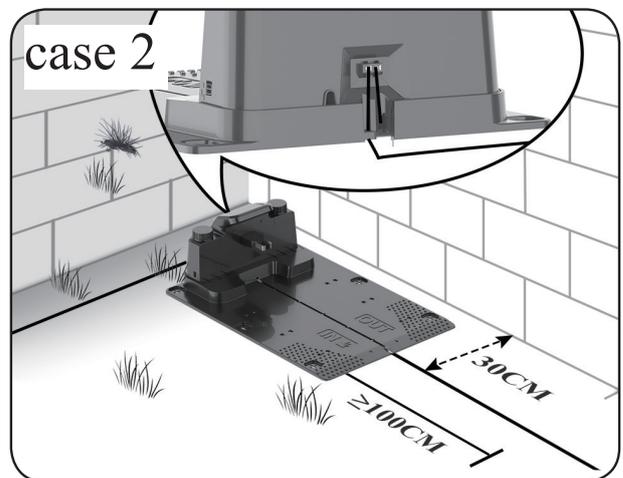
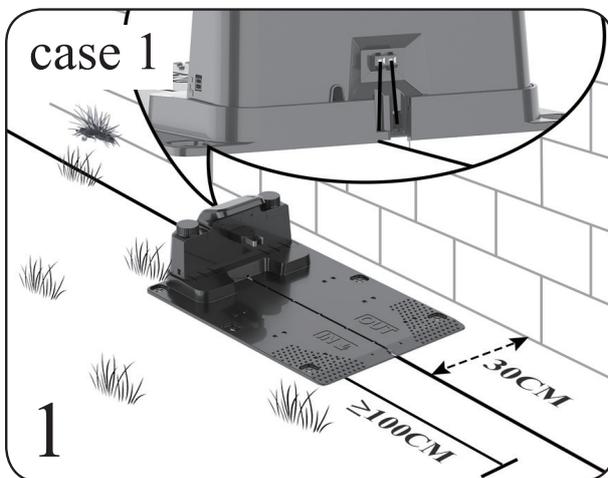
\*a degree of noise from the machine is not avoidable. Route noisy work is to be licensed and limits for certain periods. keep rest periods and they may need to restrict the working hours to a minimum. For their personal protection of people working nearby,an appropriate hearing protection shall be worn.

\*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 Base



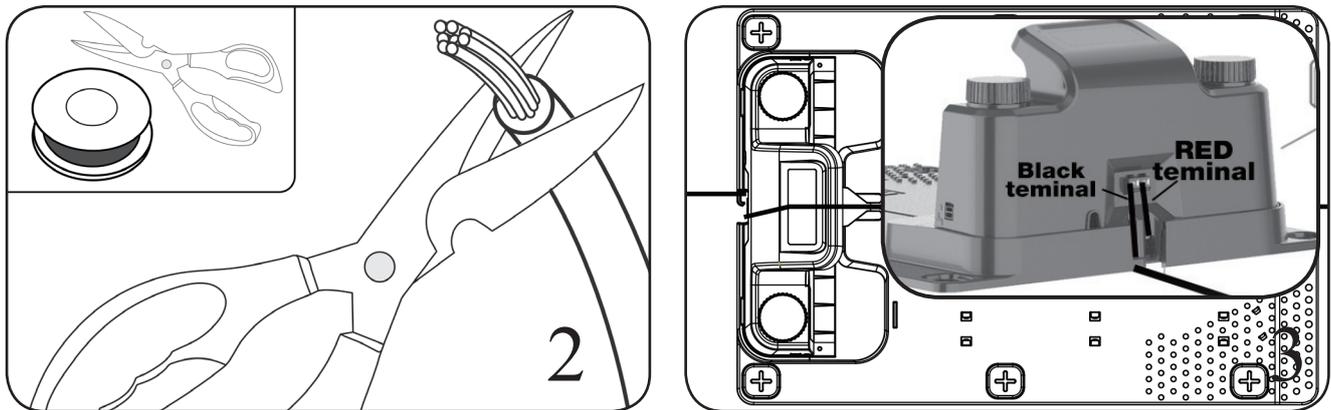
1.1 The charging base can be placed against Near the tool house OR house, when laying the boundary wire, leave at least 1m of straight wire with no obstacles front and back of the charging base.

NOTE: Boundary wire front and back of the charging base 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



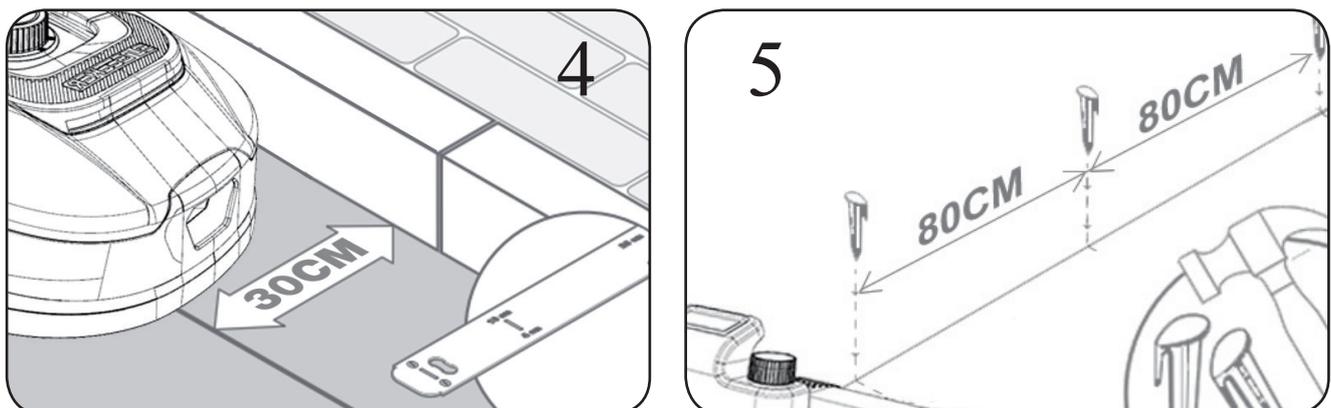
1.4 Boundary wire insert the wire terminal(RED)----it's an OUT side, then the boundary wire through the slot under the charging base plate.

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.

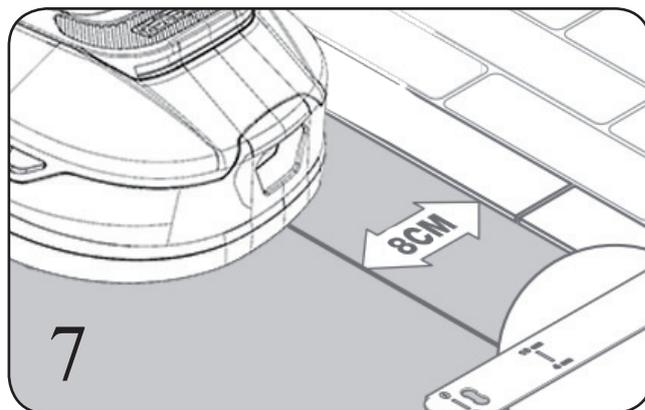
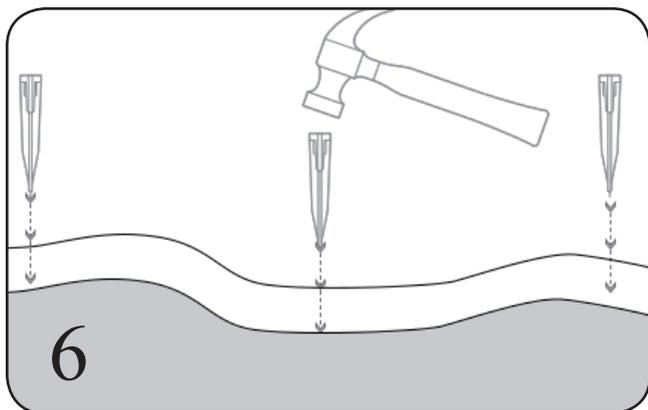
## 2. Installation Boundary wire(NOTE)

2.1 When laying the boundary wire, use the distance gauge to keep a 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.

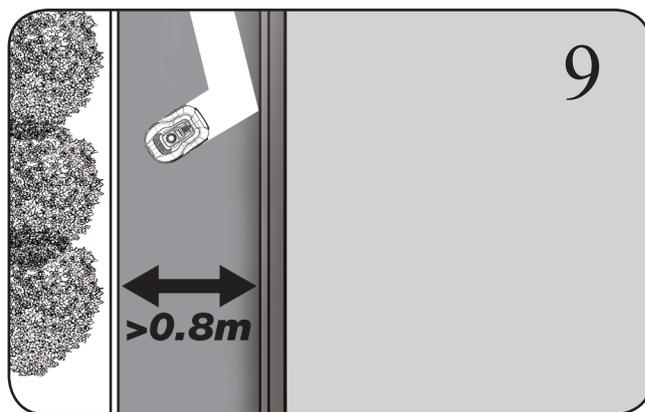
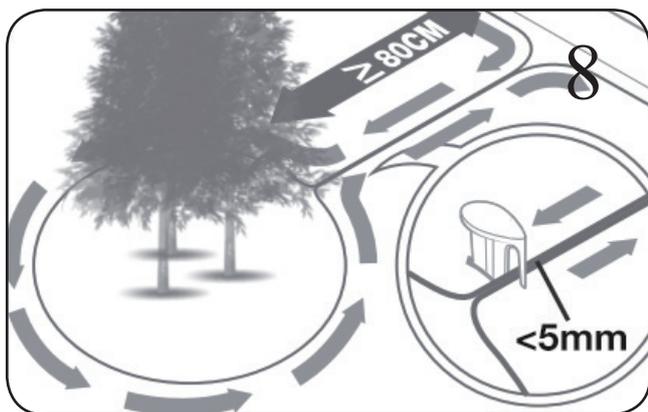


2.2 If an obstacle is level with ground and safe for mower to run over, such as a driveway or sidewalk, then only 8cm of space is needed between it and the boundary wire.

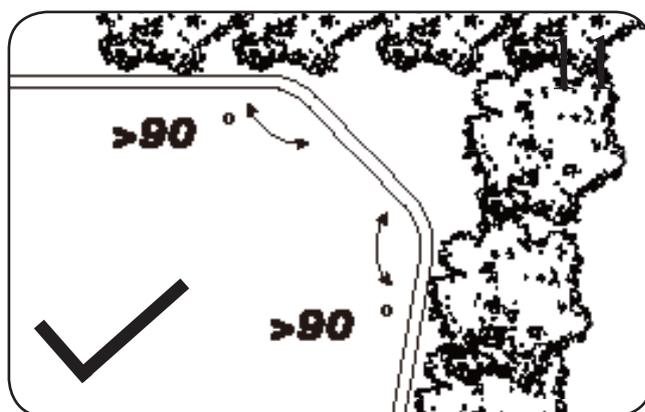
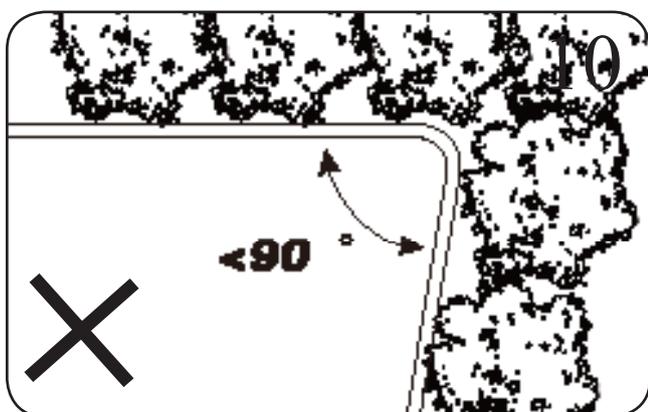


### 2.3 Island setting and narrow channel size requirements

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.

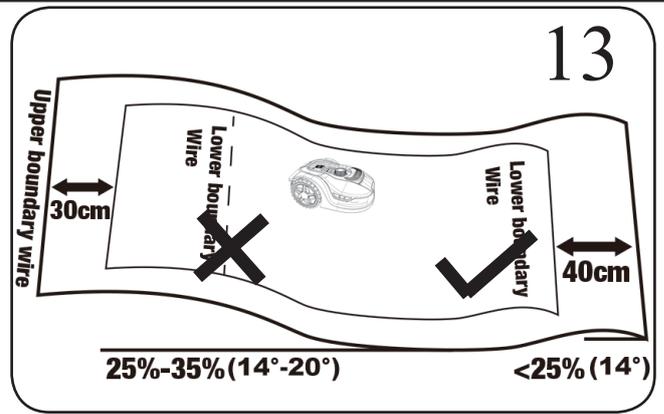
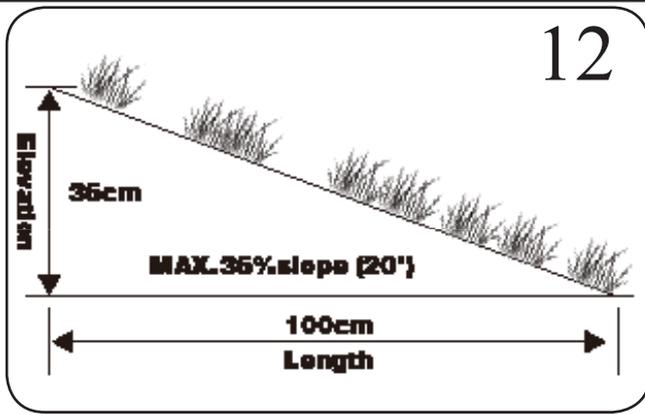


2.4 Ensure the boundary wire is perfectly straight in each corner, and all angles formed by the boundary wire are 90° or larger.



### 2.5 Slopes

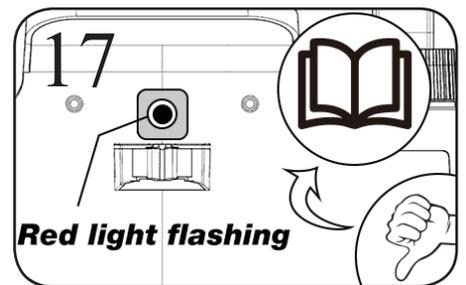
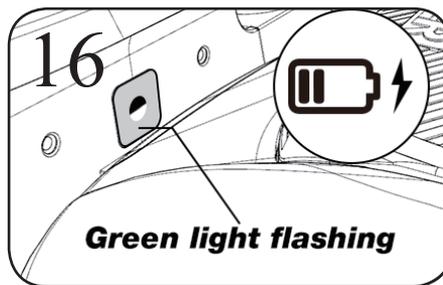
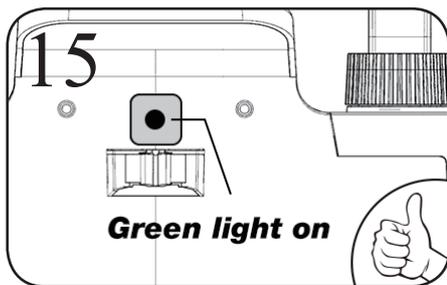
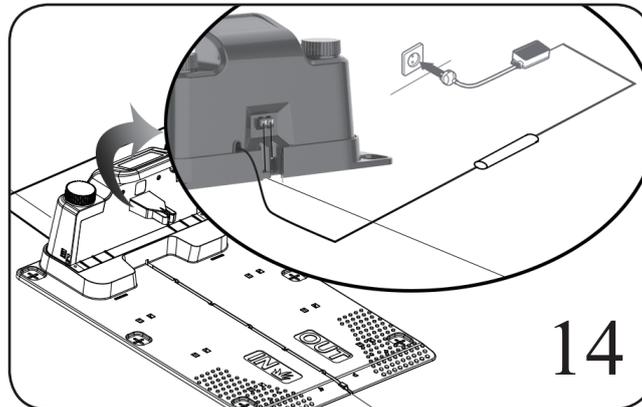
NOTE: your mower has the ability to safely climb slopes up to 35%(20°so just avoid areas steeper than this, How to calculate the slope of your lawn.



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

### 3. Connect charging base to the power source

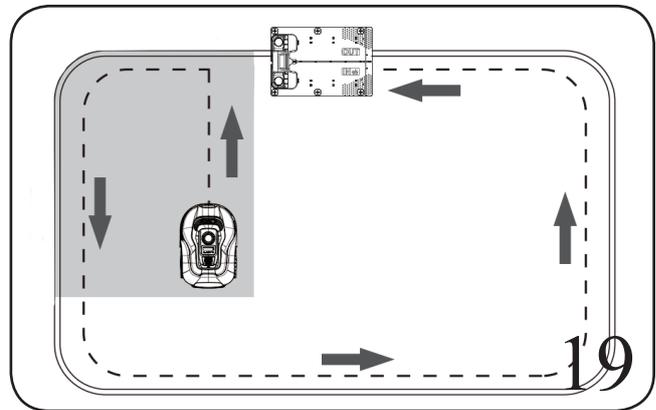
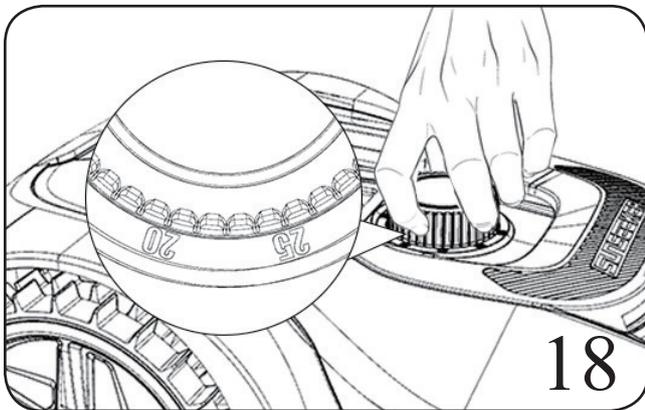
The power supply Plug in the voltage socket,if you laying boundary wire is right. The charging base LED light turn on and it always bright green, LED status in the grid below to make sure the connection is ok.



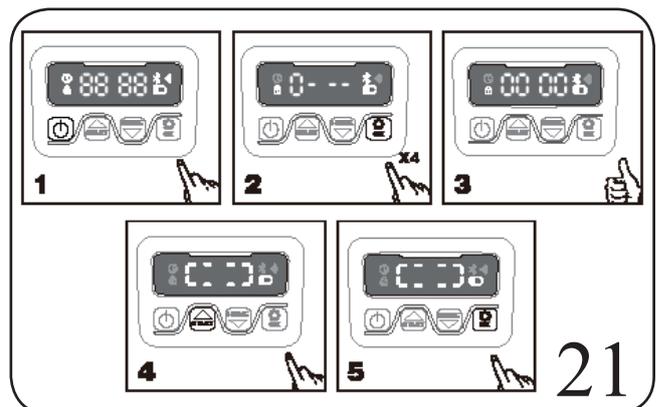
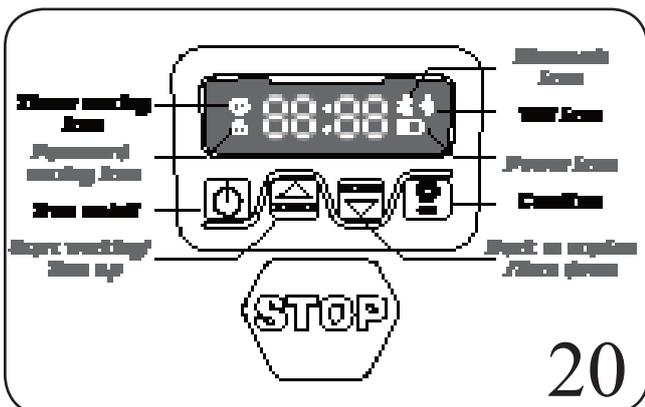
LED light status	illustrate	Action
Not turn on	There is no power	Confirm that the power cord is connected properly to the charger and that the charger is connected to a suitable power supply.
Green light on	Boundary wire is connected right; mower is fully charged	NA
Green light flashing	Mower is auto 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 base, the installation has been completed successfully!



#### 5. Quick use robotic mower ( Digital tube Interface)



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 base. Once charging is completed,

ROBOTIC MOWER will automatically resume mowing or it stay in the charging base 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,

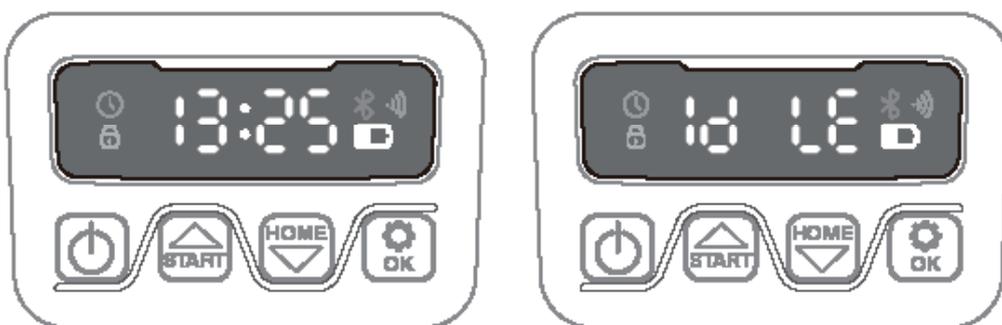
use  or  to select the number and press  to confirm. Then finish the date setting.

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 .

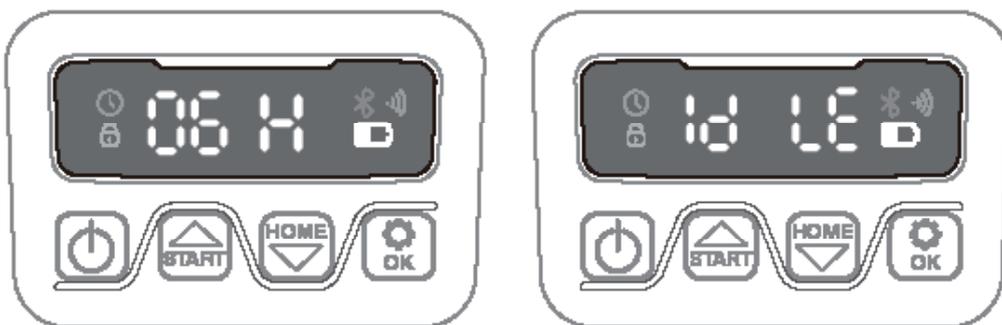
### 6.3 Change default start time

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 “” 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 “” 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, -05- is flashing, use  or  to select the number and press  to confirm. Then “” will be on the display.

## 7. Function and Error messages self-checking list

Display	Illustrate	Action
F1	Rain delay activated	No action is required.
E1	Mower outside working area	<ol style="list-style-type: none"> <li>1. Check whether the mower inside the working area,if it was.</li> <li>2. Check whether the charging base 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.</li> </ol>
E11	No Boundary signal	<ol style="list-style-type: none"> <li>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 base. If it was well connected to the clamps and the LED light still turns red, check whether the boundary wire is interrupted.</li> </ol>
E2	Wheel motor blocked	<ol style="list-style-type: none"> <li>1. Turn mower off; take mower to an area free of obstacles.</li> <li>2. Turn mower on. Press START then OK .</li> <li>3. 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.</li> <li>4. Remove any obstruction, turn mower upright, turn power on. Press START then OK.</li> </ol>
E3	Blade disc blocked	<ol style="list-style-type: none"> <li>1. Turn mower off.</li> <li>2. Turn mower upside down and check if there has something preventing the blade disc to rotating.</li> <li>3. Remove any obstruction.</li> <li>4. Turn mower upright and take it to an area with short grass or adjust the cutting height.</li> <li>5. Turn mower on. Press START then OK.</li> </ol>
E4	Obstruction sensors trigger not recovered	<ol style="list-style-type: none"> <li>1. Turn mower off.</li> <li>2. Take mower to an area in your lawn free of obstacles</li> <li>3. Remove the floating cover and check the cylindrical magnet on the floating cover. If there is no magnet, replace the floating cover.</li> <li>4. Turn power on. Press START then OK.</li> </ol>
E5	The mower is lifted up	<ol style="list-style-type: none"> <li>1. Turn mower off.</li> <li>2. Take mower to an area in your lawn free of obstacles .</li> <li>3. Turn mower on. Press START then OK .</li> <li>4. 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.</li> <li>5. Remove any obstruction, turn mower upright, turn power on. Press START then OK .</li> </ol>

E6	Rollover sensor has been triggered	1. Turn mower upright. Press START then OK .
E7	Tilt sensors has been triggered	1. Turn mower off. 2. Take mower to a flat ground in your lawn. 3. Turn mower on. Press START then OK .
E8	Charging docking unsuccessful	1. Check the Boundary wire on each side of the charging base 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 base for charging. After mower is fully charged, Press START then OK.
E10	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 START then OK . 3. 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.

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## 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](http://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](http://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.

## 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)

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### 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.

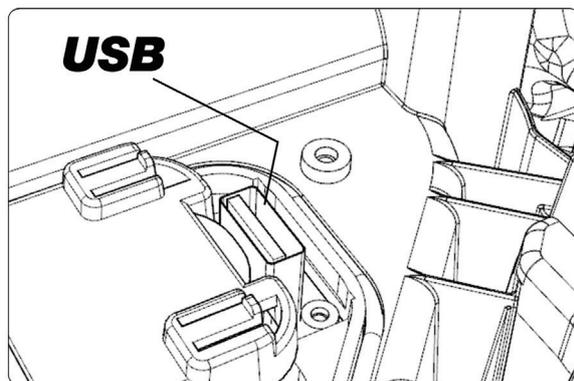
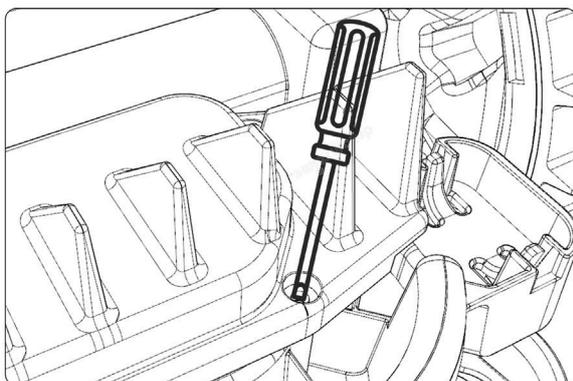
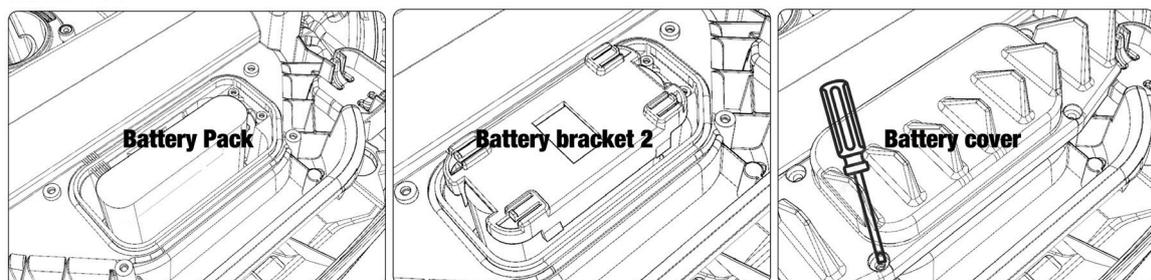
**WARNING: Protect the underside of Mower from water. NEVER store Mower upside down outdoors.**

### 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.



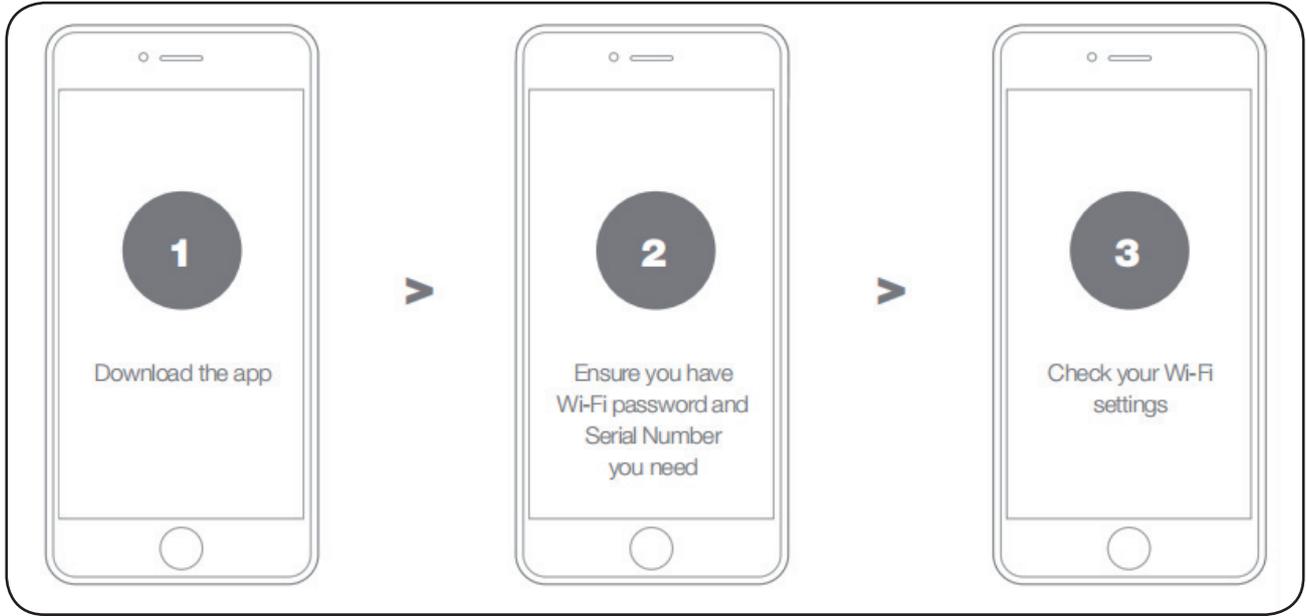
Q1

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# 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.



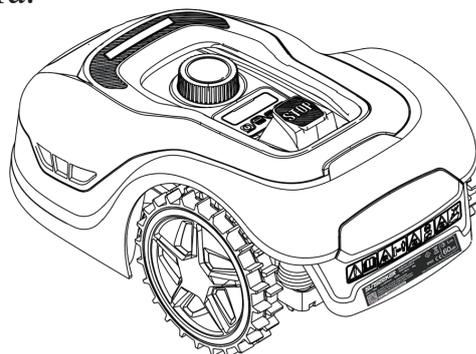
## 1. Download the app

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.

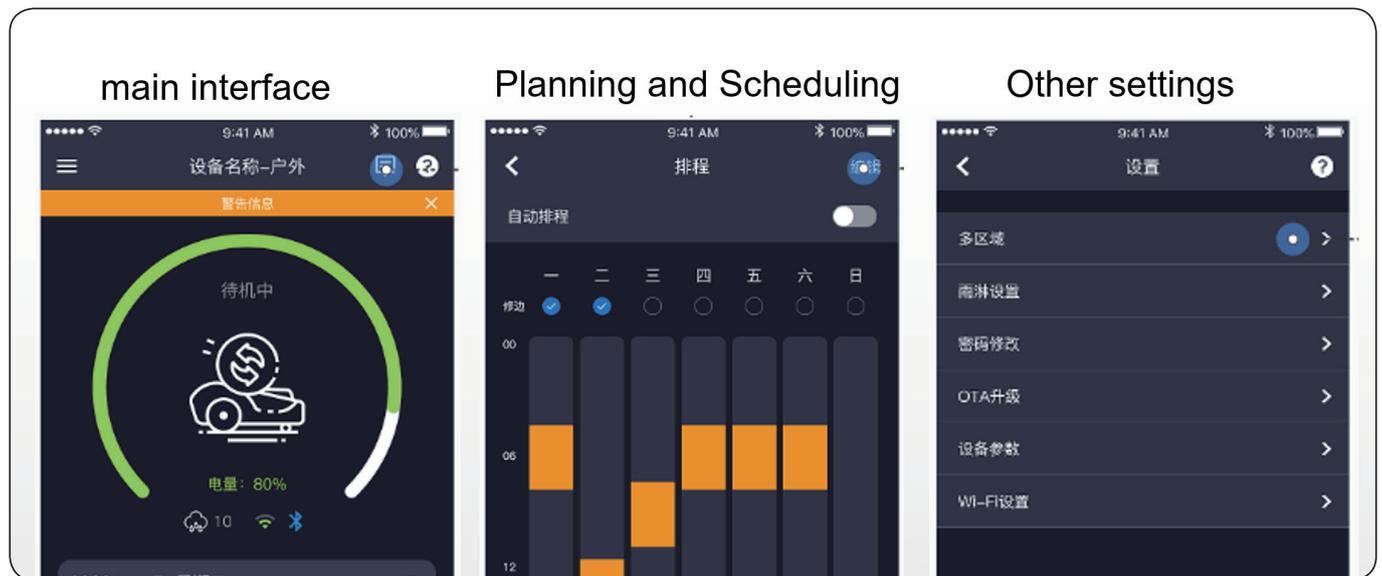


### 3. Check your WIFI settings

- 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

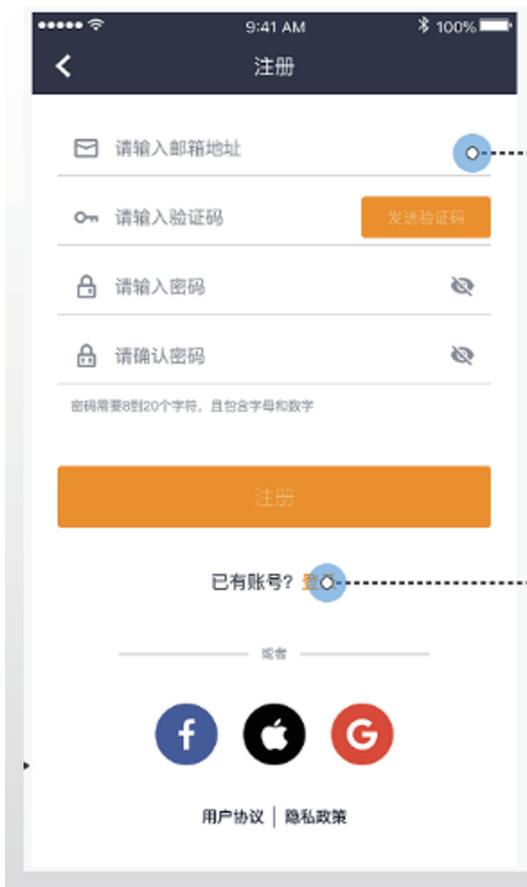
Launch the app and follow these instructions



## 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 optimism its performance

### 1.Register your account



### 2.Add mower use QR code



### 3. Input mower default password 0000



### 4. connection network(WIFI)

