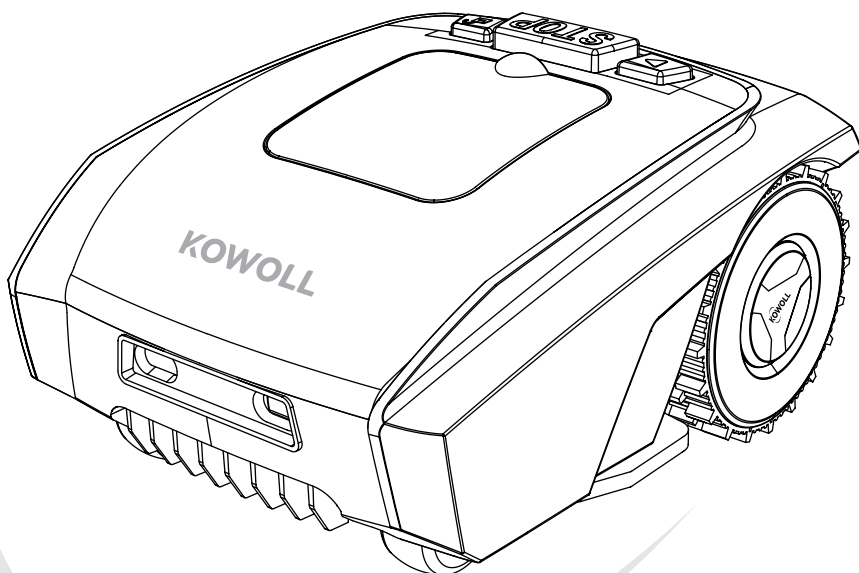




# Mowerbot Model

## User Manual



✉ [support@kowoll-garden.com](mailto:support@kowoll-garden.com)

MODEL: M18EX

# Thank you for choosing

The robot mower is designed for freeing your hands as much as possible so you can enjoy more time with your family and never have to feel anxious about expensive labor costs anymore.

We are always committed to providing our customers with the most cost-effective robot mowers and the best service. If you need any technical support, please contact us in any time.

We're here to help:

**E-mail: [support@kowoll-garden.com](mailto:support@kowoll-garden.com)**

**Helpline: 888-932-2764**

**WhatsApp:**

Scan this code to start a WhatsApp chat with KOWOLL TEAM.



# Contents

## 1 Safety warnings

Before First Use  
Preparation  
Symbols and Decals

## 3 What's in the box

Description of Products

## 5 Preparing your lawn for the Robot Mower

## 7 Installing the charging station

## 11 Repairing the boundary wire

## 12 Operation

Basic Operation  
Charging and Testing  
Signal Selection

## 14 Technical Data

## 16 Maintenance and Storage

Maintenance  
Battery Life  
Winter Storage  
Cleaning the Mower  
Reversing or replacing the blades  
Software Update  
Recycling and End-of-life Disposal

## 19 Troubleshooting

## 22 Limited Warranty

# Safety warnings

## Before First Use

- Read all safety warnings and all instructions. Make yourself familiar with the controls and the proper use of the machine. Please keep the instructions safe for later use.
- Operate the ON/OFF switch before working on or lifting the machine to make sure you have turned it off.
- DO NOT touch rotating blades that can cause injury. The blades are sharp. Beware of severing toes or fingers. Wait until the machine completely stopped before touching them.
- Keep a safe distance to the product when operating, and make sure that bystanders are not injured by foreign objects being thrown away.
- DO NOT ride on the machine. Children should be supervised to ensure that they do not play with the machine.
- DO NOT dispose of this product at will. It can cause injury to the environment.
- Ensure no exits are blocked or obstructed by the machine.
- DO NOT leave the machine to operate unattended if you know that there are pets, children or people in the vicinity.
- Carefully check the area where the tool is to be used for wildlife and pets. Wildlife and pets may be injured while the machine is in operation. Thoroughly check the working area and remove any stones, sticks, wires, bones and foreign objects. When using the machine, ensure that no wildlife, pets or small tree stumps are hidden in the dense grass. Avoid using at dusk or in the dark to reduce the risk of encountering animals.

## Preparation

- Periodically inspect the area where the machine is to be used and remove all stones, sticks, wires, bones, and other foreign objects. The Limited Warranty does not cover damages caused by objects left on the lawn.
- DO NOT run any live mains cables in the working area. If a mains cable becomes entangled in the robotic mower it must be isolated before any attempt to remove it.

- Ensure the correct installation of the charging station and boundary wire as instructed in this manual.
- Before each mowing session, check that all parts of the mower can function normally. DO NOT use the lawn mower if the outer casing is damaged. The blade may accidentally cut you or you may be injured by debris thrown off by the blades.
- Avoid mowing in bad weather conditions especially when there is a risk of lightning, heavy rain or snow. It is recommended to mow in dry weather.
- DO NOT operate the machine when barefoot or wearing open sandals. Always wear substantial footwear and long trousers.
- Warning signs shall be placed around the work area if the product is used in public areas. The signs shall have the following text: Warning! Automatic lawn mower! Keep away.

## Symbols and Decals

Please study the symbols on the product and labels carefully and understand their meaning:



### WARNING

Read instruction manual before operating the machine. accidents.



### WARNING

DO NOT touch rotating blade.



### WARNING

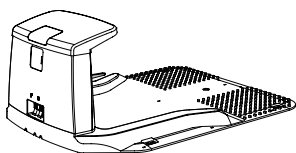
WARNING-DO NOT ride on the machine.



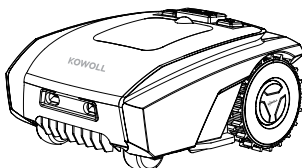
### WARNING

Operate the disabling device before working on or lifting the machine.

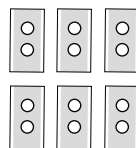
# What's in the box



Charging Station



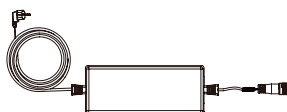
Packinglist Robotic Mower



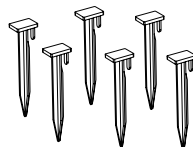
Spare Blades x 6



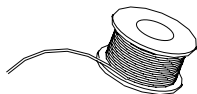
3m Extension cord



Switching Power Supply



Wire Pegs x 200



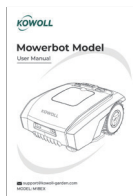
Boundary Wire\*100m x 2



Wire Connector x 4



Quick Guide



User Manual

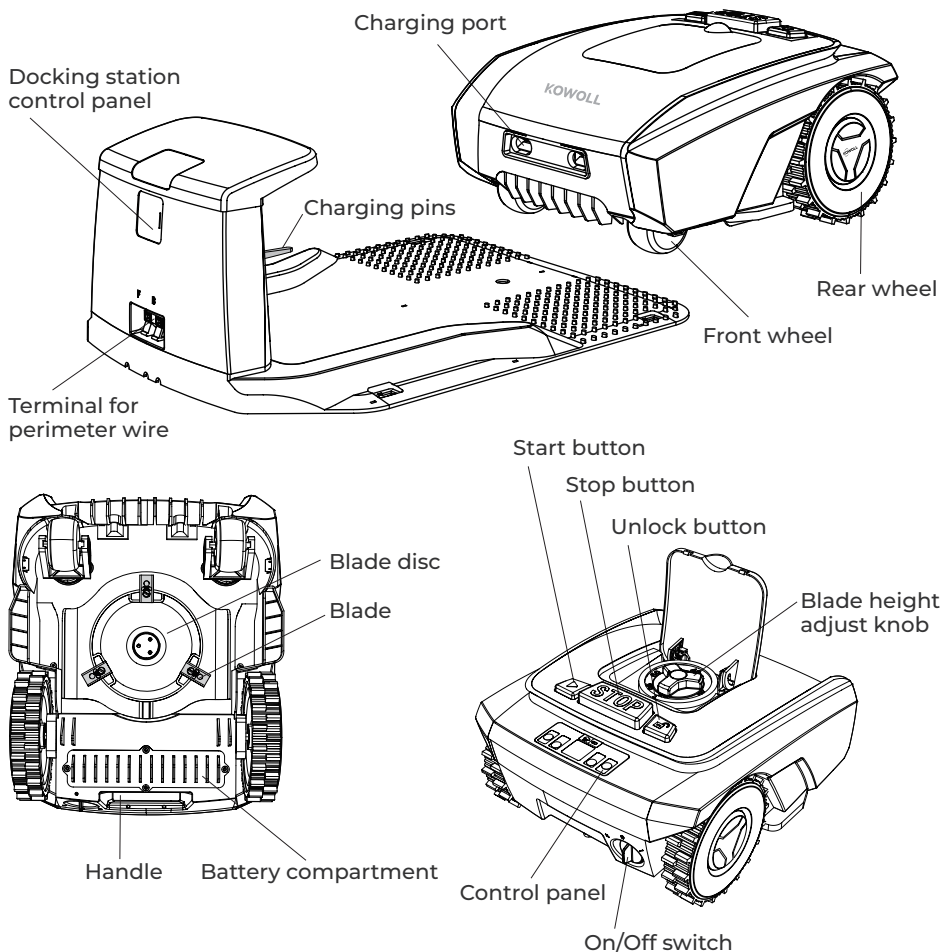


APP Manual



There is a handy ruler you can press out of the carton that will help you measure 40cm all around your garden.

# Description of Products



## Start button

Start the mower (First START button, then OK button:Abnormal removal, continue to work).

## Stop button

Stop the mower.

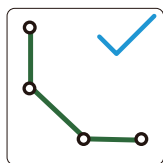
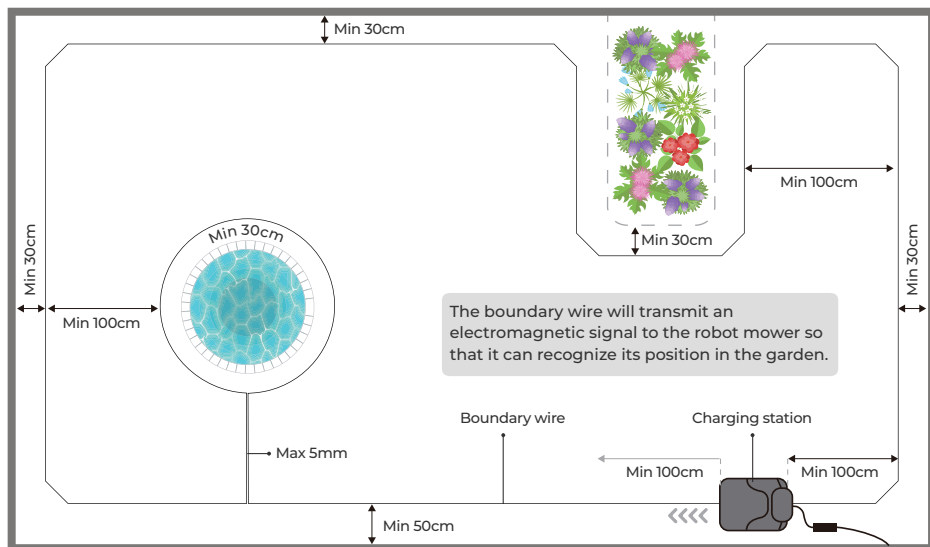
## Unlock button

Interlock with STOP button, press this button will unlock the stop model.

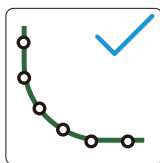
## Blade height adjust knob

Adjust the height of the blade disc to set the height of your lawn.

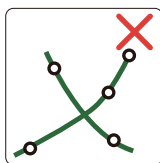
# Preparing your lawn for the Robot Mower



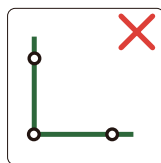
Obtuse angles



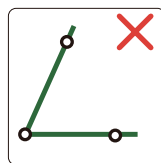
Curves



Don't cross wires

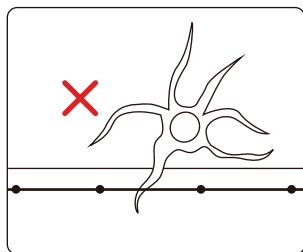


No right angles

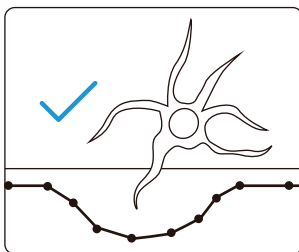


No acute angles

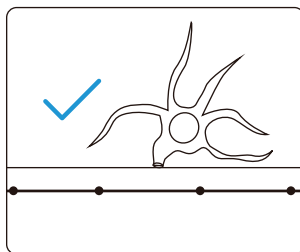
## Rectifying or avoiding problem areas Obstacles such as tree roots on lawn



If a tree root is protruding into the perimeter of your cutting area it would present a problem for the mower.



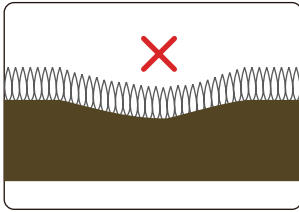
One solution is to take the perimeter around the tree root, leaving this area unmowed.



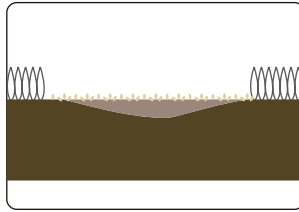
Alternatively, cut the tree root back with a saw and fill any resulting uneven surface, then set the perimeter over it.



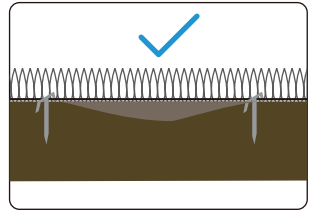
## Excessively uneven areas of lawn



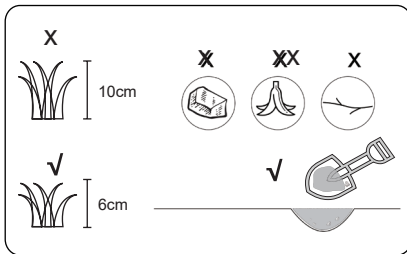
A deep enough dip in the surface of your lawn will also present problems, possibly causing the mower's wheels to lose their grip and skid.



If you don't want to avoid mowing this area, it's best to fill it with soil, compact it down and re-seed it with grass.



If the area is on the perimeter line this can be pegged out as normal. If it is within the mowing area it should no longer be a problem.



Periodically inspect the area where the machine is to be used and remove all stones, sticks, mains cables, bones and other foreign objects. If there are any potholes or bumps in the lawn, please fill /shovel them in.

**There may be parts of your garden which will be challenging, and it will change direction on making contact with things like:**

- Posts and poles (e.g. washing lines)
- Fences and walls around trees

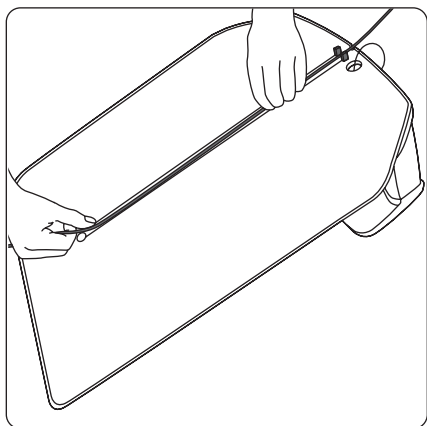
**But it will need to be kept away from:**

- Dug borders
- Trees with exposed roots
- Flower beds
- Ponds and water features
- Excessively uneven terrain

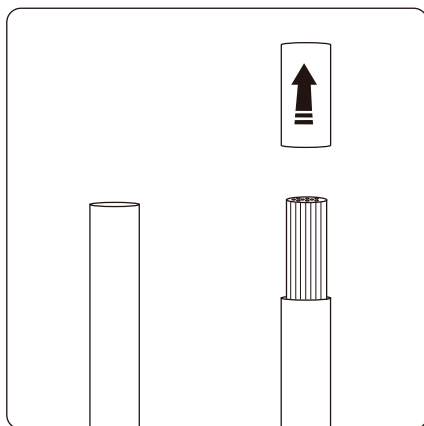
The wire must be kept taut and never be allowed to loop or cross over itself. Ideally if ground is particularly uneven the wire can be buried up to 30mm deep and pegged down to secure. This can be achieved easily with a manual edging tool. If this is not desired or possible then the wire should be firmly pegged around the garden with pegs at a minimum of 1m intervals, keeping the cable taut to avoid it being cut by the mower, more so at corners and over uneven terrain. The cable should be positioned a minimum of 30cm from the edge of the garden, as the mower will overlap the wire, although it will not stray past it.

On corners the wire should not be laid at a sharp angle or right angle, but curved or a series of obtuse angles. It should be noted that due to this set up some areas of the lawn will not get mowed such as outside the perimeter edges. These can be maintained using a suitable grass trimmer. If the ground where the wires are to be laid is particularly dry and the soil hard from lack of rain, it will help to thoroughly water the garden before attempting to lay your perimeter wire.

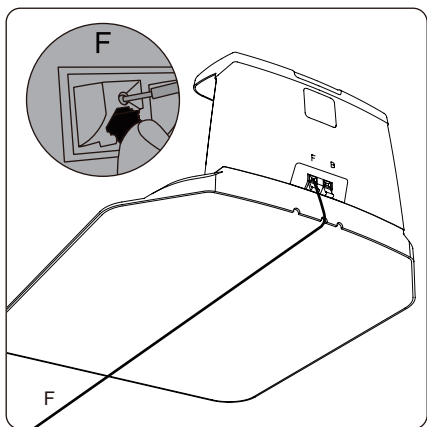
## Installing the charging station



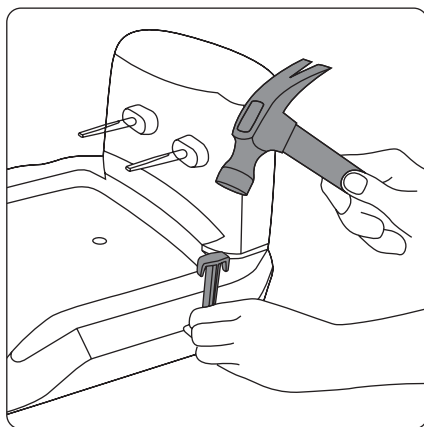
- 01.** Please install Boundary Wire the perimeter in the slot of the bottom of the charging station.



- 02.** Trim the wire head to expose the metal part.

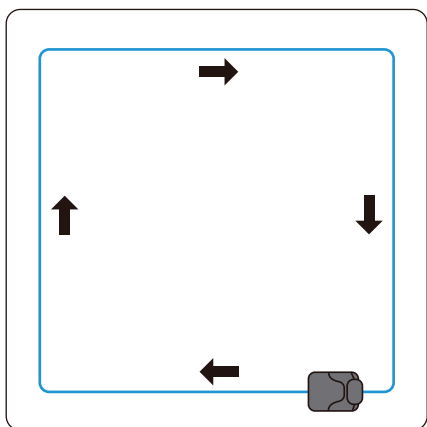


- 03.** Insert it into the "F" interface.

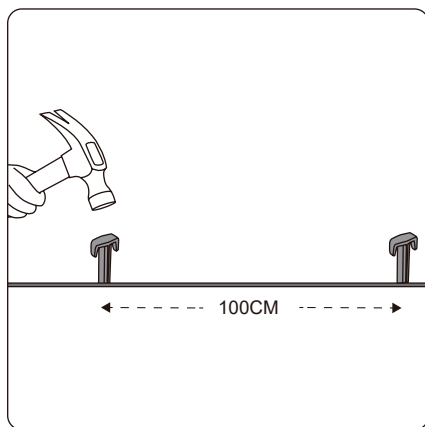


- 04.** Install the pegs to fix the station.

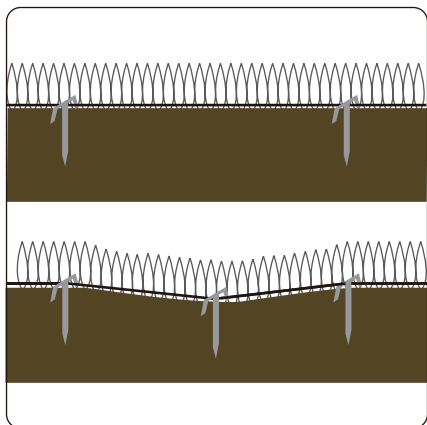
Note: Install the charging station on a soft and flat surface. Do not place the charging station too close to a slope, such as at the top of a hill or the bottom of a furrow. Avoid left and right inclination in excess of 5 degrees.



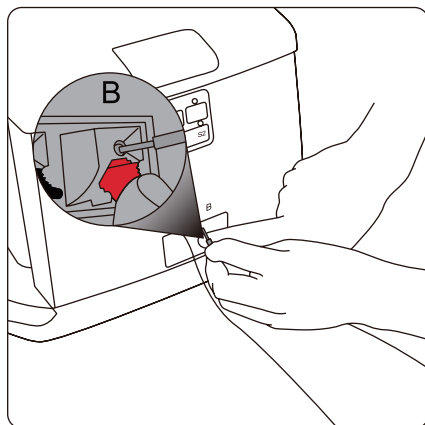
- 05.** The exit of the charging station should be deployed in a clockwise direction.



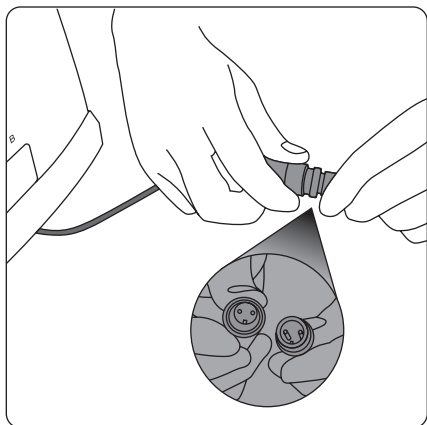
- 06.** To set your mowing area, please lay at least one stake per 100cm.



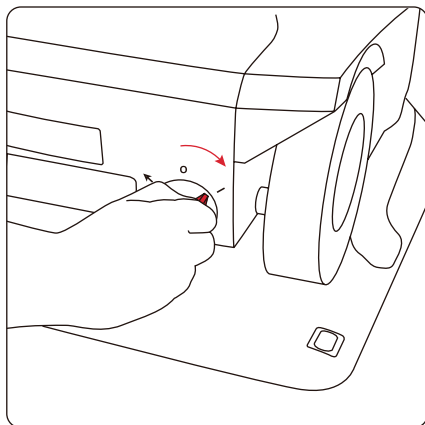
- 07.** The perimeter wire must be kept tight. If it is loose it may well end up being cut by the mower as it passes over it. If the wire passes over a moderate dip in the lawn, more pegs will be required to keep the wire firmly pegged at ground level, or it risks being cut.



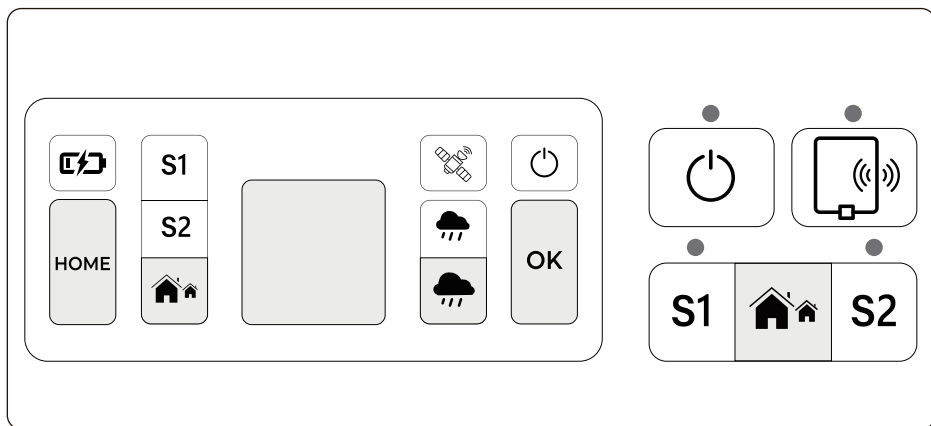
- 08.** Trim the wire head to expose the metal part and insert it into the "B" interface.



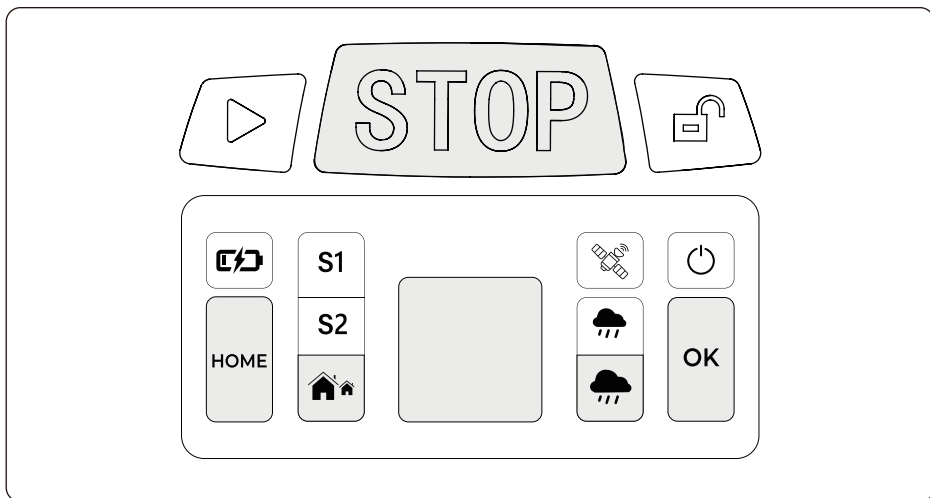
09. Please connect to the power cord.



10. Place the mower on the charging pile and turn the switch to the right to start the device, you can see the indicators will light up.



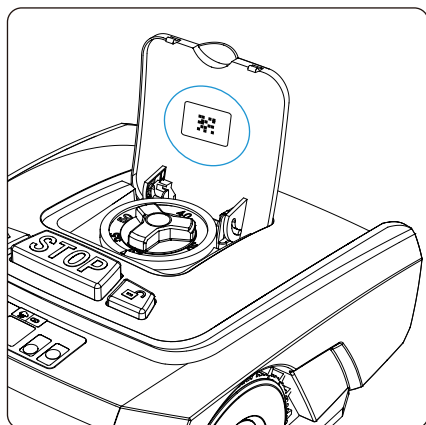
11. Please check whether the signal indicator on the mower is consistent with that on the charging station. If not, please adjust it to be consistent (**both S1 or S2**).



12. Press "STOP" button to stop working; start mowing:press Unlock button>press Start button>click OK button.

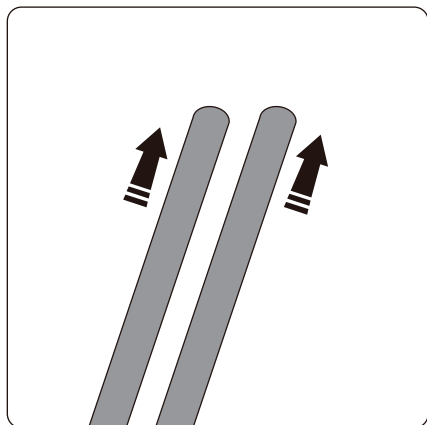


13. APP: Scan the QR code to download the KOWOLL 18E App, support iOS and Android.

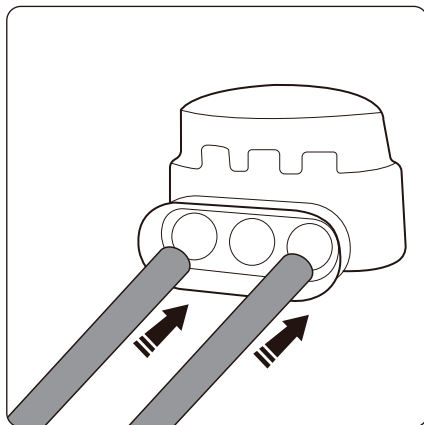


14. Download the "Kowoll" App, you can use the App to control the mower by scanning the QR code on the machine.

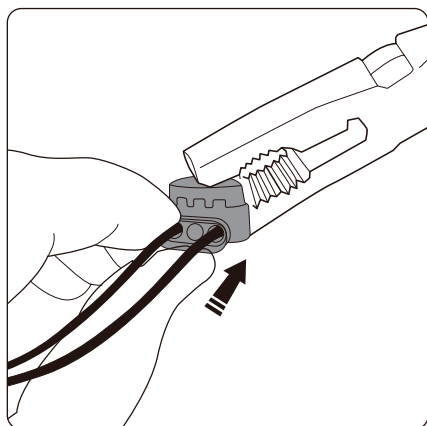
# Repairing the boundary wire



If the boundary wire gets cut or breaks for any reason (indicated by solid red light on charging station), you need to locate and repair it. You will need to use one of the splicing clips provided. First take up the slack in the wire so there is some overlap.



The clip has two channels in it. Push one end into one channel and the other end into the other. The wire needs to go right in.

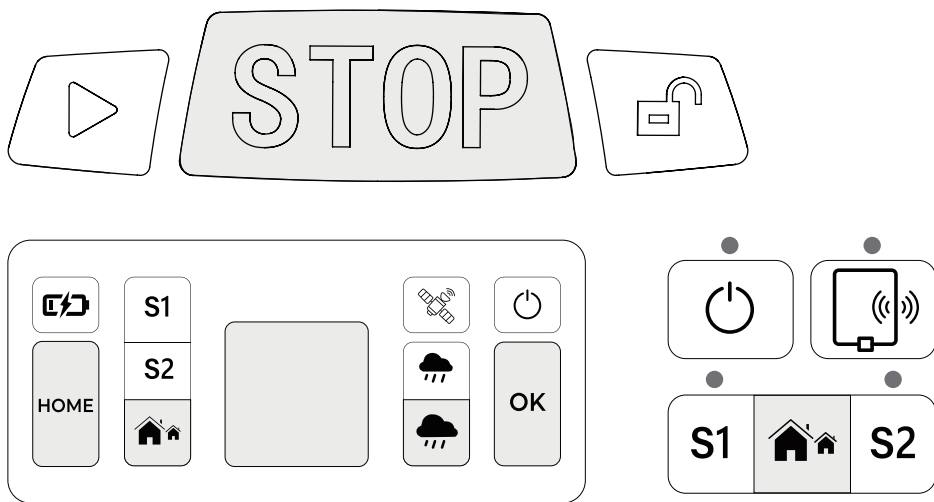


Taking a pair of pliers, crimp the metal tab onto the inserted wires. This will form a connection between the wires.


When the boundary wire is repaired the signal indicator light on the charging pile will light up. If the light is still out there are more breaks in the loop, which will need locating and repairing.

# Operation

Once the relevant preparations have been made, learn how to control your mower!



## START button

Start the mower (First START button , then OK button **OK**: Abnormal removal, continue to work)

## STOP button

Press this button **STOP**, the mower will stop immediately.


## Unlock button

Unlock button  Interlock with STOP button **STOP**, press this button will unlock the stop model.


## HOME button

First HOME button **HOME**, then OK button **OK**: the mower will return to charging station.

## Signal select button


Signal select button  Select signal either S1 or S2. Signal indicator LED will remain on when the S1/S2 is selected.

## Rain sensor button

Rain sensor button  Switch rain sensor On/Off. The indicator light is on to allow the device to work in rain; If the light is off, the device will return to the charging pile after detecting rain.

## OK button

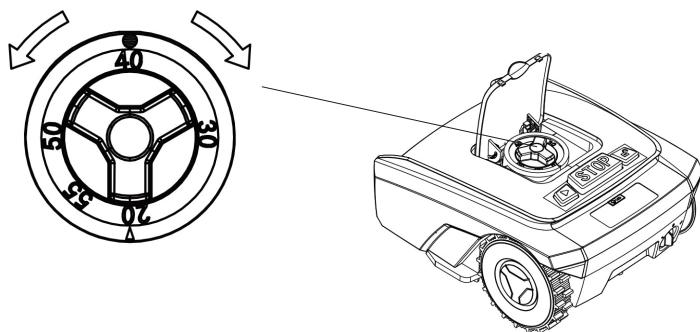
OK button **OK** Used with the Start/Home button.

GPS signal indicator  LED will remain on only when the GPS signal is normal.



# Basic Operation

## Cutting height adjustment

The cutting height can be adjusted by rotating the height adjustment knob. Cutting height range from 20mm- 55mm.



## Start mowing

Press unlock button  , START button  and OK button **OK** in order, then the mower will start mowing.

## Return to charging station

Press unlock button  , then press HOME button **HOME** and OK button **OK**

## Stop the robotic mower

It is allowed to stop your robotic mower by pressing the STOP button in any situations. The stop button has the highest priority, the robotic mower will stop immediately in any case.




## Charging and Testing

After the successful connection of the charging station and boundary wire , test the robotic mower's function. (If the mower is too power-low to start, place the mower in the charging station. Make sure the charging is successful. )

Check the LED regularly to ensure fixing the boundary wire has not affected the connection and the signal indicator on the mower is consistent with that on the charging station (both S1 or S2).

Then place the mower in the working area, a few meters beside the docking station. Set the main power switch to "ON".

Press the buttons,unlock  home **HOME** and OK **OK** in order, a few seconds later,the mower should automatically return to the charging station by locating and following the boundary wire in anti-clockwise direction. If the mower fails to dock correctly, move the docking station to a more suitable location.

**Note:**

*Successful docking and charging indicates that you have found a suitable position for the docking station. You should now drive the fixing pegs into ground fully.*

## Signal Selection

There are two signals which can be selected, S1 and S2. Make sure the mower and charging station are using the same signal.

If your neighbour is using the same mower, ensure that both products are using different signals. Please refer to the section of "Signal setting" in order to select signal S1 or S2 for your installation.

## Technical Data

Once the relevant preparations have been made, learn how to control your mower!

Basic Information	Product Name	Robotic Mower
	Brand	KOWOLL
	Dimensions (Length × Width × Height)	46x37x22cm
	Net Weight (Battery Included)	8.3kg

Mower Parameters	Material	Plastic
	Working Capacity (Per Full Charge )	1000 m <sup>2</sup>
	Typical Mowing Time (Per Full Charge )	150min
Working Conditions	Cutting Width	18cm
	Cutting Height	20-55mm
	Charging Time	150min
	GPS Working Mode	Yes
	Working Temperature	0°C ~40°C
	IP Rating	IPX5
	Max. Incline Inside Working Area	18° (33%)
Connectivity	Bluetooth	Y
	Wi-Fi	Y
Battery Pack	Battery Type	Lithium-Ion
	Nominal Capacity/Energy	4.4Ah
Power Adapter	Input Voltage	100-240V~50/60Hz
	Output Voltage	22V
	Output Current	2.5A

# Maintenance and Storage

Maintenance that is not mentioned in these instructions must be carried out by a servicing agency authorised by the manufacturer. Only original parts are permitted.

## Maintenance

Check and clean your robotic mower regularly and replace worn parts if necessary. Preferably use a dry brush, a damp cloth or a sharpened wooden piece. Never use flushing water. Following these maintenance instructions can extend your robotic mower's service life.

## Battery Life

The battery of the robotic mower is maintenance-free, with an estimated life of more than 1 years (depending on working conditions and user's habits).

## Winter Storage

During winter, keep your mower, docking station and power supply in a dry place. We recommend a shed, garage or preferably store them indoors.

Prepare your device for winter storage as follows:

01. Fully recharge the battery.
02. Set the mains power switch to "OFF".
03. Deeply clean your robotic mower.
04. Unplug the power supply from the mains outlet.
05. Disconnect the power supply from the charging station.
06. Disconnect the boundary wire from the charging station. Lift up the charging station and clean. The boundary wire can remain outside. However, it is imperative to protect the wire from corrosion. We recommend a water-free grease or suitable sealing tape. If available, repack the product in the original packaging. Alternatively, our service centre offers a winter service for your device, which include a check-up guide of all parts and a software upgrade.

## Preparing for spring

After winter storage, please clean the charging contacts on both the mower and the docking station.

Use a fine abrasion paper or a brass brush which will help to achieve the best charging efficiency and avoid any charging interference.

# Cleaning the Mower

## Cleaning the mower body:

As your robotic mower is battery powered, you should pay attention when cleaning. Remove rough dirt with a soft brush. Then use a manual water spray with mild household detergent for intensive cleaning. Last, wipe off any residue with a moist rag after cleaning.

## Cleaning the underside:

Ensure the main power switch is in OFF position. Wearing protective gloves when handling or working near sharp blades. Turn the robotic mower upside down. Clean the blade disc and frame using a soft brush or damp cloth. Rotate the blade disc to make sure that it can move freely.

## Clean the contact pins and the charging strips:

Use wire wool, metal cleaner or very fine grade emery paper, clean the contact pins and the charging strips on your mower and docking station. Remove any debris, leaves, or grass clippings around the contact pins and charging strips to ensure efficient charging.

# Reversing or replacing the blades:

## WARNING!

Ensure the robotic mower is completely shut off for any adjustment or replacement of the blades. Always wear protective gloves.

## WARNING!

To ensure maximum cutting efficiency and safety, always use recommended original blades and screws when replacing.

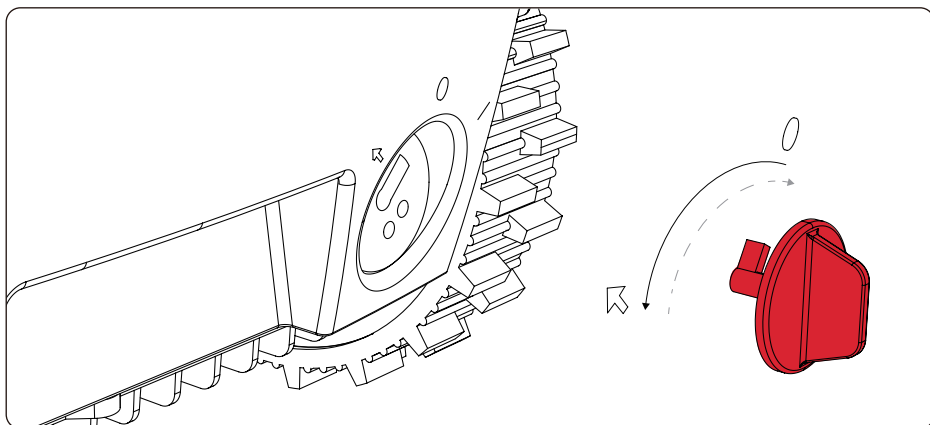
Your robotic mower has three blades, fixed to the blades disk. Unless damaged by hard obstacles, these blades can last for up to five months of everyday use. Weekly inspection of the blades and the fixing screws is advised. Note that the blades are double edged. In case the first side becomes blunt, loosen the screw and turn the blade upside down and re-fix. Check that the blade can move freely.

A set of spare blades is included with the package. More blades are available to purchase via customer support or online store.

To ensure the best performance of your machine, always replace all three blades at the same time. Only use spare parts recommended by manufacturer.

## Take out the Key

Turn left to the arrow, pull it up and then turn right to take out the key.



## Software Update

Should your machine need a software update, contact our customer service team for more information.

## Recycling and End-of-life Disposal

DO NOT dispose of this product as domestic waste. For recycling information, contact the local domestic waste service, the local municipality, or the point of sale.

### WARNING!

DO NOT dispose of this product in a landfill, by incineration, or by mixing with household trash. Danger or serious injury can occur because of the electrical components.

### NOTICE: INSURANCE

YOUR INSURANCE POLICIES MAY NOT PROVIDE COVERAGE FOR ACCIDENTS INVOLVING THE USE OF THIS PRODUCT. TO DETERMINE IF COVERAGE IS PROVIDED, PLEASE CONTACT YOUR INSURANCE COMPANY OR AGENT.

# Troubleshooting

Type	Error	How to solve
Product	<b>Cannot charge with charging station</b>	<p>1.Check that the boundary wire in front and underneath the charger are in a straight line.</p> <p>2.Check that whether the charging station's location is suitable as explained in this manual.</p>
	<b>The Mower runs in circles unusually</b>	<p>1.Verify that no power cable runs parallel and in close proximity the boundary wire. If necessary, reposition the boundary wire.</p> <p>2.Check if a front wheel is stuck.</p> <p>3.If a neighbor has a similar robotic mower, the signal may be interfered. Try to reset the signal of the charging station and the mower to the alternative boundary signal.</p> <p>4.Driving motor may be damaged, please contact customer support.</p>
	<b>The mower is noisy</b>	<p>1.Inspect the fixing screw of blades; tighten if necessary.</p> <p>2.Inspect and replace the blades if necessary.</p> <p>3.Grass may be too high. Try to increase the cutting height, or mow the lawn with a traditional lawnmower first.</p> <p>4.Cutting motor failure, please call after sales service.</p>
	<b>No response after pressing START button and OK button</b>	<p>1.Check if the mower has already completed the programmed working time for that day.</p> <p>2.Press the UNLOCK button.</p>

Type	Error	How to solve
Application	<b>Wire sensor polarity reversed!</b> The perimeter wire is set in the opposite terminal of the charging station.	Press the “Reset” button. Reset the perimeter wire. See chapter “Encircling obstacles” for details.
	<b>Reconfirm boundaries?</b> The perimeter wire is set wrong which cannot be detected by the mower.	Press the “Confirm” button. Reset the perimeter wire. See chapter “Encircling obstacles” for details.
	<b>Unable to leave !</b> The mower is in trouble to get through the working area.	Press the “Reset” button. Check if there are any bumps or potholes. DO NOT allow the mower mowing there again before making them flat.
	<b>There are obstacles on the path !</b> The mower is in trouble with some obstacles on the path.	Press the “Reset” button. Move the obstacles from the path.
	<b>Out !</b> The mower is not in the boundaries.	Press the “Reset” button. Stop the mower and move the mower into the working area , restart it.
	<b>Boundary inspection time out !</b> The mower impacting the obstacles causes the walk time out during the recharging procedure.	Press the “Reset” button. Move the obstacles from the recharging path.
	<b>Abnormal power loss !</b> The battery of the mower is losing power.	Press the “Reset” button. Recharge the mower.

Type	Error	How to solve
Application	<b>Mower has been flipped !</b>	Stop the mower and rotate the mower, restart it.
	<b>Left-wheel motor failure !</b>	Stop the mower and contact the specialist to repair it.
	<b>Right-wheel motor failure !</b>	Stop the mower and contact the specialist to repair it.
	<b>Wired sensor signal loss!</b>	Stop the mower and contact the specialist to repair it.
	<b>Emergency stop!</b>	Press the "Reset" button. Restart the mower.
	<b>Location error !</b>	Restart the mower.
	<b>Mowing Motor failure !</b>	Stop the mower and contact the specialist to repair it.
	<b>Battery temperature too high !</b>	Stop the mower and wait 40min at least to restart the mower.
	<b>Mower lifted !</b>	The mower is lifted to check for foreign objects at the bottom.



# Limited Warranty

**NOTICE: PLEASE READ THIS LIMITED WARRANTY AND ARBITRATION AGREEMENT AND KEEP THIS AGREEMENT FOR FUTURE REFERENCE.**

This Limited Warranty covers only defects of any material or quality of the Product and components when the Product and components thereof are being used under normal and ordinary conditions. In the event that a defect covered by this Limited Warranty occurs, Kowoll and/or other Kowoll Parties in its sole discretion will repair or replace the defective Product or components thereof in accordance with this Limited Warranty. The applicable Limited Warranty Period for the Limited Warranty commences on the date of the original purchase of the Product from either of Kowoll, Kowoll's authorized reseller, Kowoll's authorized distributor, or an authorized Dealer (each a "Kowoll Dealer" or collectively the "Kowoll Dealers").

	Limited Warranty Period
Mower Body	2 years
Battery	1 year

[www.kowoll-garden.com](http://www.kowoll-garden.com)

**MANUFACTURER:**

Wuxi JunChuangFei Satellite Technology Co.,Ltd

**ADDRESS:**

No. 28-60-1, Nanhu Middle Road, Binhu District, Wuxi City, P.R.China

**Helpline: (888)-932-2764**