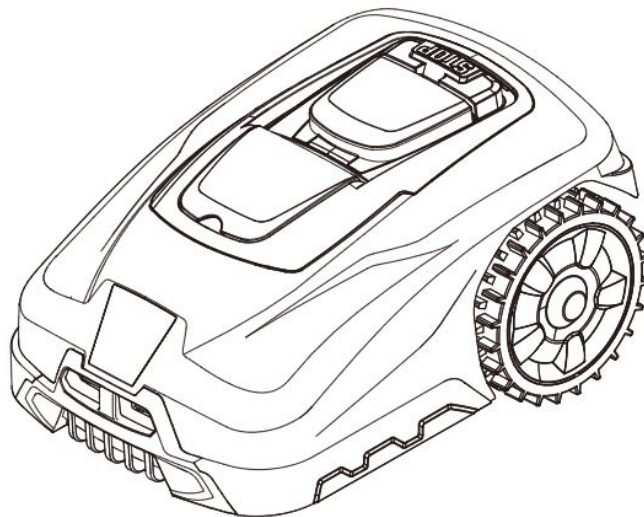




**MODELS: MOWBOT800 (DYM220601)
MOWBOT1200 (DYM220602)**

OWNER'S MANUAL



MowBot - Robotic Lawnmowers
Henton and Chattell Ltd., London Road, Nottingham NG2 3HW UK
www.mowbot.co.uk

Please read this manual carefully prior to assembling and operating the Mower. It is dangerous to operate this product without being familiar with these instructions. Keep this manual in a safe place and have it ready for future reference.

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Chapter 1- Safety Instruction

IMPORTANT

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.

**The Robotic Mower is to be used only for mowing the garden lawn.
Any other use is deemed to be a case of misuse.**



WARNING: The product can be dangerous if used incorrectly

WARNING: Do not use the product when persons, especially children, or animals are in the work area.

WARNING: Keep your hands and feet away from the rotating blades. Never put your hands or feet close to or under the product when the motor is running.

1.1 Safe operating practice

Training

1. Read the instructions carefully, make sure you understood them fully. Be familiar with the controls and the proper use of the machine.
2. Never allow children, persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge, or people unfamiliar with these instructions to use the machine.
3. Local regulations may restrict the age of the operator.
4. The operator or user is responsible for accidents or hazards occurring to other people or their property.

Preparation

1. Ensure the correct installation of the perimeter boundary system as instructed.
2. Periodically inspect the area where the machine is to be used and remove all stones, sticks, wires, and other debris which could cause damage to the machine or surrounding areas.
3. 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.
4. On multi-spindle machines, take care as rotating one blade can cause other blades to rotate.

Operation

1. Do not operate the Robotic Mower if any safety feature or any part is damaged, worn out or inoperable.
2. Keep hands and feet away from the cutting blade and other moving parts.
3. Never pick up or carry the Robotic Mower while the motors are running.
4. Do not leave the Robotic Mower unattended if you know that there are pets, children or people in the vicinity.
5. Never mow while people, especially children or pets are nearby.
6. Always switch off the main power switch on the mower before lifting it up or plan to complete any adjustments.
7. Do not touch the blade before it has completely stopped rotating.

8. Use the Robotic Mower for lawn mowing only.
9. Keep all guards, shields, safety devices, and sensors in place. Repair or replace damaged parts, including warning labels.

Transportation

To safely move from or within the working area:

1. Press the red STOP button to stop the Robotic Mower.
2. Ensure that the main power switch is selected to OFF position before you lift up your Robotic Mower.
3. Close the top covers, and carry the Robotic Mower on the rear handle, the blade disc must be directed away from your body.

IMPORTANT! It is recommended to keep the original packaging for shipping purposes.

IMPORTANT! After turning on the Robotic Mower, always re-set the current day and time, otherwise unexpected operation of the Robotic Mower may occur.

Maintenance and Special Instructions

1. Always switch off the main power switch of the Robotic Mower before clearing blockages/ checking/ cleaning/ working on it or replacing the blades. Never attempt to service or adjust the Robotic Mower while it is in operation.
2. In case of abnormal vibrations, stop the mower, switch off the main power switch and check for any damage to the blades. Replace worn or damaged blades to preserve balance. If vibration continues, contact a service centre.
3. Use thick / heavy gloves when inspecting or servicing the blades.
4. Do not perform maintenance when barefoot or wearing open sandals. Always wear suitable work shoes and long trousers;
5. Replace worn or damaged parts for your safety.
6. Use only original parts and accessories. It is not permitted to modify the original design of the Robotic Mower. All modifications are made at your own risk and void the warranty.
7. Keep all nuts, bolts and screws tight to be sure the machine is in safe working condition.
8. **Warning!** When there is a risk of a lightning, disconnect the perimeter wire from the base station, and unplug the transformer plug from the power source.

Batteries

1. Do not open or damage the battery pack.
2. The battery pack should be replaced only by a service dealer.
3. The battery pack contains electrolytes. In case of an electrolyte leakage from the battery pack, the following actions must be taken:
 - Skin contact: Wash off the contact areas with water and soap immediately.
 - Eye contact: Flush the eyes with plenty of clean water immediately for at least 15 minutes, without rubbing.
 - Seek medical advice immediately.
4. Ensure that the battery pack is 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.

Charger

1. The socket-outlet should be installed near the charger station and should be easily accessible.
2. This transformer is short-circuit proof and safety-isolated.
3. The external flexible cable or cord of this unit cannot be replaced; if the cord is damaged, the unit must be exchanged completely.
4. Do not open the charger, to avoid electrical shock. Only qualified service personnel should repair the charger.
5. Protect the charger from humidity.

6. Disconnect the equipment from the power supply before cleaning. Do not use any liquid or aerosol cleaner.
7. The charger should be placed on a stable surface. A drop may cause damage.
8. If the equipment is not used for a long time, disconnect it from the power supply to avoid damages from voltage peaks or lightning strikes.
9. If one of the following situations occurs, the equipment must be checked by a qualified service personnel
 - Plug is damaged.
 - Liquid has penetrated into the equipment.
 - Equipment has been exposed to humidity.
 - Equipment has been dropped and/or is damaged.
 - Equipment has obvious signs of breakage.
 - Equipment does not work well or you cannot get it working according to this manual.
10. The fuse of the product cannot be replaced.

Product end of lifetime

1. The Robotic Mower and its accessories must be properly recycled at the end of its lifecycle to protect the environment.
2. Do not dispose of the Robotic Mower or any other part of it (including the charger, battery & base station) as unsorted municipal waste.
3. Ask your local dealer about recycling.
4. Do not throw the battery pack in a fire.

1.2 The Robotic Mower safety features

1. Anti-theft/ disabling device
The Anti-theft/ disabling device system function will prevent anyone from using or operating the Robotic Mower unless they have the valid code. You will be prompted to enter a four-digit code of your choice to use as your personal security code.
2. Lift sensor
In case the Robotic Mower is lifted during blade operation to more than 20°, the blade will immediately stop rotating.
3. Tilt sensor
In case the Robotic Mower is tilted up from any side towards a vertical position, the blade will stop immediately.
4. Obstruction sensor
The Robotic Mower detects obstacles in its way during operation. If the Robotic Mower collides with an obstacle, the Robotic Mower will stop movement in that direction and reverse away from the obstacle.
5. Emergency stop button
Pressing the STOP button will stop the Robotic Mower and the blade immediately.
6. Main power switch
Switching off the main power switch turns off any operation. Switch off before lifting the Robotic Mower and for completing any maintenance.
7. Sealed battery
The battery that operates the Robotic Mower is completely sealed and will not leak any type of fluids, regardless of its position.
8. Base station/ perimeter switch and perimeter wire
The Robotic Mower cannot operate without a perimeter wire installed and activated through the base station. If the perimeter wire is not connected correctly or is damaged, the Robotic Mower will stop operating.

1.3 Safety symbols

Symbols on the Robotic Mower



WARNING - Read user instructions before operating the machine.

The device can be dangerous if incorrectly used.

Read and understand these operating instructions before use.



WARNING - Keep a safe distance from the machine during operation.

Keep your hands and feet away from the rotating blades.

Never place your hands or feet close to or under the device.



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

Ensure the main power switch is in the “OFF” position before carrying out any inspection and / or maintenance.



WARNING - Do not ride on the machine.

CAUTION - Do not touch the rotating blades.

Do not place any objects on the mower.



Attention! Don't wash the underneath of the mower



Return any discarded batteries to your local dealer or recycling point.

It is not permitted to dispose of this product as normal household waste. Check with your local authority or retailer for recycling advice.



Guaranteed sound power level value is 66 dB

IPX4

The machine is protected against the ingress of water

CE

CE Marking - The product meets the regulations of the European Community.

III

Protection class III

Symbols on the charger



Safety alert



WARNING – To reduce the risk of injuries, read the instruction manual



Protection class II



Waste electrical products should not be disposed of with household waste. Please

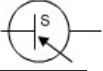
recycle where facilities exist. Check with your local authority or retailer for details.



3.15A time-lag fuse link



Short-circuit-proof safety isolating transformer
Main unit power supply switch



In accordance with the applicable European directives on safety standards

Symbols on the battery pack



Safety alert



Volts



Recycle



Please read the instructions carefully before starting the machine



Electrical waste must not be disposed of with household waste. Check with your local authority or retailer for recycling advice.



Do not expose to rain or damp conditions.

1.4 Lightning protection

A lightning strike will cause a current surge and destroy your robotic mower.

Do not place the charging station under tall trees.

During lightning, unplug the charging station and disconnect the boundary wire if possible.

Important: Do not use the Robotic Mower during lightning.

Chapter 2 – Technical data

Model number	Mowbot800 (DYM220601)	MowBot1200 (DYM220602)
Max. cutting area	800 m ₂	1200 m ₂
Electrical power system		
Battery	lithium-ion battery.	lithium-ion battery.
	28 V / 2.5Ah.	28 V / 3.0Ah.
Charger/ power supply	input 100-240 V AC, 50/60Hz, Output 28 V DC, CC1.8A(IP65)	input 100-240 V AC, 50/60Hz, Output 28 V DC, CC1.8A(IP65)
Typical mowing time on one charge	80min for 2.5AH	100min for 3.0AH
Working system		
Rated voltage	24 V DC	24 V DC
No-load cutting speed	3100/min	3100/min
Cutting width	180 mm	180 mm
Replacement cutting blade	part no 2125300015	part no 2125300015
Cutting height, min-max ⁽¹⁾	20 mm - 60 mm, variable	20 mm - 60 mm, variable
Number of blades	3 (pivoting)	3 (pivoting)
Motors	3 (brushless)	3 (brushless)
Slopes	up to 35% (20°)	up to 35% (20°)
Charging system		
Charging current	1.8 A	1.8 A
Charging time	100min for 2.5AH	120min for 3AH
Recommended operation time per day⁽²⁾ related to garden size		
300 m ₂	4 hours	4 hours
500 m ₂	6 hours	6 hours
General data		
Mower protection	IP X4	IP X4
Charging station protection	IP X4	IP X4
Power supply	IP 67	IP 67
Mower weight	9.1 kg with battery	9.1 kg with battery
Charging station weight	2.6 kg	2.6 kg
Mower size, LxWxH	565x 395 x 277 mm	565x 395 x 277 mm
Package size, LxWxH	710 x 510 x 310 mm	710 x 510 x 310 mm
Gross weight	18.5 kg	18.5 kg
Wireless connection		
Bluetooth module	BT 4.0 low energy	BT 4.0 low energy
App	For Android and iOS	For Android and iOS
Noise		
Sound pressure level at the operator's position:	L _{pa} :49.6dB(A), k=3 dB(A)	L _{pa} :49.6dB(A), k=3 dB(A)
Measured sound power level:	L _{wa} :62.7dB(A) ,k=2.38 dB(A)	L _{wa} :62.7dB(A) ,k=2.38 dB(A)
Guaranteed Sound power level:	66 dB(A)	66 dB(A)

⁽¹⁾ The Robotic Mower is suitable for a maximum of 60 mm grass height. In taller grass, the Robotic Mower might stop. Cut the lawn to less than 60 mm using a normal mower, or adjust the cutting height to a suitable position.

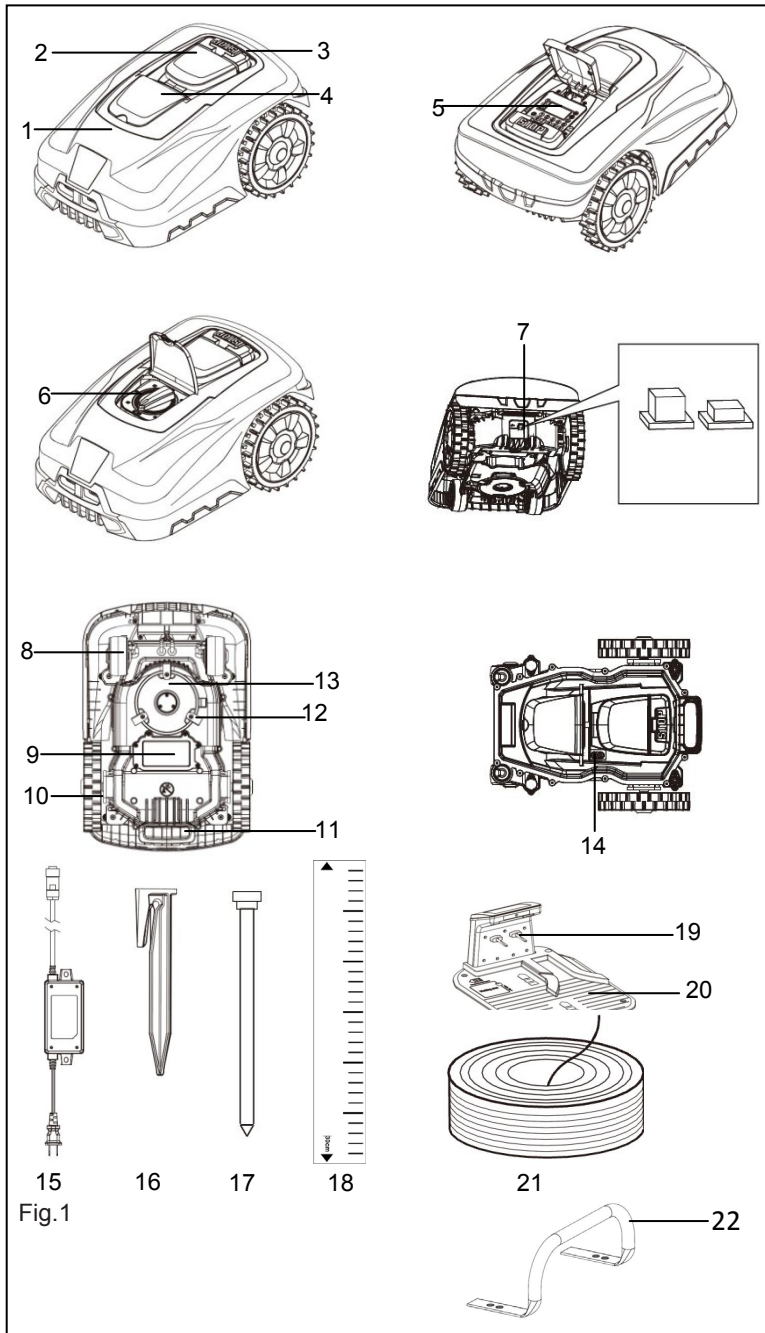
⁽²⁾ The recommended time per day stated in this specification is just for reference. It depends on the condition of blades, the type of the grass being cut, the growth condition, humidity, and the slope in the lawn area. Trees, flower beds, paths and slopes affect the mowing efficiency.

Chapter 3- Understanding the Robotic Mower

Thank you for purchasing our Robotic Mower. Over the next few pages, the Robotic Mower will be explained in further detail considering the operation procedure.

3.1 Packaging contents

Please inspect all packaging contents as follows:



1.	Robotic Mower	12.	Blades (3 pcs+3pcs)
2.	LCD display cover	13.	Blade disk
3.	Stop button	14.	Rain sensor
4.	Cover for height adjust knob	15.	Charger
5.	LCD display & keyboard	16.	Fixing peg (for boundary wire)
6.	Height adjustment knob	17.	Fixing nail (for charging station)
7.	Main power switch	18.	Measurement ruler
8.	Front wheel	19.	Charging pin
9.	Battery cover	20.	Charging station / Base station
10.	Rear wheel	21.	Boundary wire
11.	Carrying handle	22.	Base plate bumper

3.2 The Robotic Mower basic operating principles

The Robotic Mower chooses its direction randomly, which means it will mow your garden completely, without leaving behind any uncut parts in the area you have defined within the boundary wire.

Once the Robotic Mower detects a correctly installed boundary wire, it will turn around and head in a different direction inside the area. Any objects you wish to protect within the boundary, such as a garden pond, trees, furniture or flower beds, can also be protected with the boundary wire. It must form one complete circuit loop.

If the Robotic Mower meets an obstacle inside its working area, such as a person, a tree or a pet, it will stop, move backwards and turn to mow in another direction. If you have a corridor inside your lawn, your Robotic Mower will be able to work on it if it is at least 1.2 meters wide (80 cm between the boundary wires) and maximum of 8 meters long. (Fig.2A)

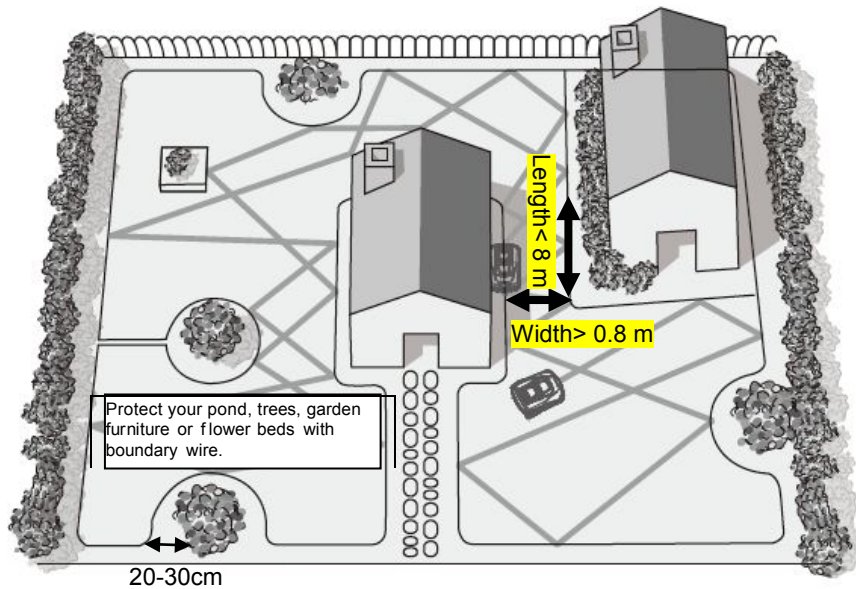


Fig.2A

Helix cutting mode

The robotic mower will enter a helix or spiral mowing function, when it determines this would be the most efficient cutting method. (Fig.2B)

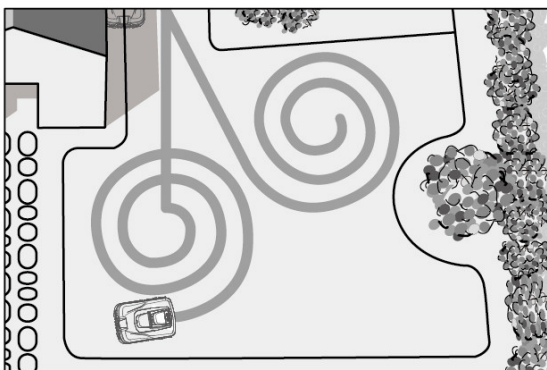


Fig.2B

3.3 Cutting height adjustment

The Robotic Mower has continuous cutting height settings between 20 mm and 60 mm. If the grass is higher than 60 mm, please cut the grass down to a maximum of 60 mm, otherwise the load on the mower will be too great and the cutting efficiency will suffer. Use a normal lawn mower or a grass trimmer to cut to the required height. Once the installation is completed, the cutting height can be adjusted to a suitable setting. Always start in a high cutting position and lower in small steps until your desired height. You'll find the height adjustment knob by opening the cover for height adjustment knob.

Note: Do not attempt to raise or lower the cutting height during mowing.

Chapter 4 – Installation guide

This chapter explains how to install the Robotic Mower, please read this completely before you start the installation.

4.1. Introduction

We recommended you to make a sketch of your lawn, including all obstacles and how these should be protected. It makes it easier to find a good position for the charging station and to correctly place the boundary wire around your garden perimeter protecting bushes, flower beds etc. You will also need some tools, a hammer and wire stripping pliers.

4.2. Perimeter islands

- Use the Boundary wire to define areas inside the working area by creating islands around obstacles that cannot withstand a collision, for example, flower beds and fountains. Furthermore, fence out all shock-sensitive objects and garden ponds (Fig.3A).
- Continue unrolling the wire, moving from the edge towards the object to be protected.
- Peg the perimeter wire clockwise around the protected objects.
- Completely fence the island out and return to the spot where you left the lawn's edge.
- The wires leading to and returning from the Island should be parallel and very close, but not crossing each other.

Fix both wires, to and from the island, on the ground together with the same pegs.

- Following the above instructions to remove objects from the mowing area, your Robotic Mower will cross the two parallel wires, but not cross the single wire around the objects.
- Minimum distance between islands: 1m (3.3ft). Otherwise, define jointly as one island (Fig.3B).

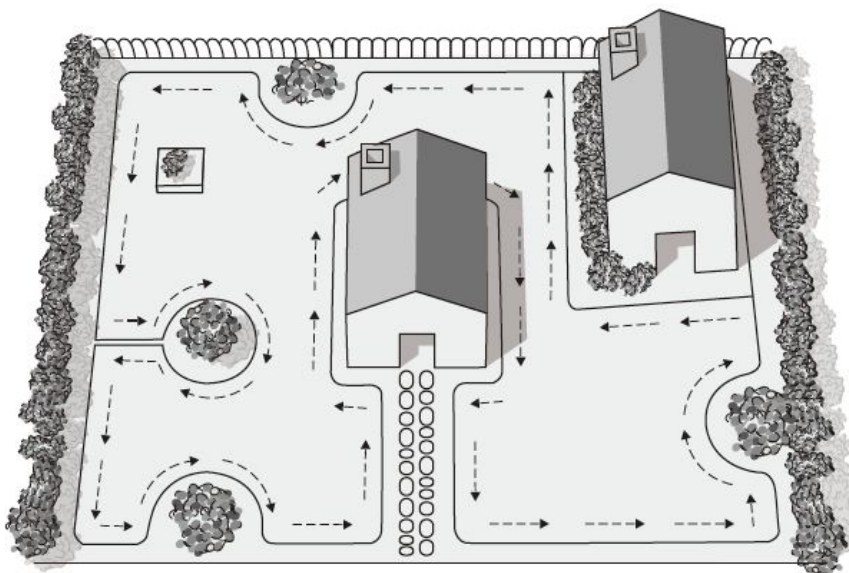


Fig.3A

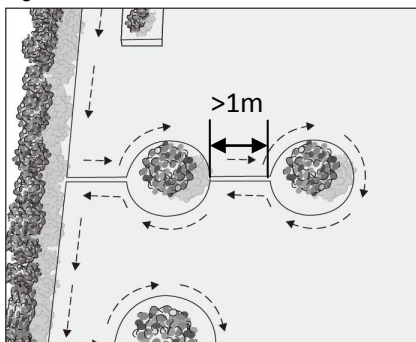


Fig.3B

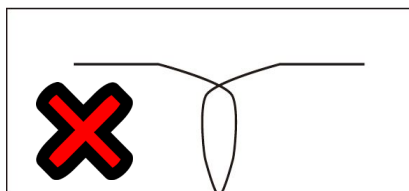


Fig.4

Note! DO NOT cross the boundary wires
Boundary wires must not cross each other (Fig.4).

4.3. Boundary wire

You may choose to either install the boundary wire above or below the soil of the lawn. A mixture of installations is acceptable as well. It is recommended to cut the lawn as low as possible where the wire will be installed beforehand.

- Installation on the soil

Attach the boundary wire onto your lawn with pegs. This makes adjusting the boundary wire possible during the first few weeks of operation. Place the boundary wire firmly onto the ground, fastening it to the ground with the provided pegs. Make sure that the Robotic Mower cannot cut the wire at any point. The wire will not be visible after a few weeks. Place the pegs at intervals of 1 m between each other.

- Installation in the soil

Cut a groove in the ground with an edge cutter or straight spade. Place the boundary wire in to a maximum depth of 5 cm, if you wish to install the wire below the lawn soil. This allows you to scarify or aerate the lawn in the future without damaging the boundary wire.

- Important!

Hard or dry ground may cause pegs to break when driving them in. Water the lawn if it is very dry prior to the wire installation.

NOTICE: Damage to the boundary wire are not covered by warranty.

- Important! The boundary wire should be installed 30cm from the edge of the perimeter

When the Robotic Mower approaches any boundary wire, the sensors which are installed in the front part of the mower will detect it, but before turning around, the Robotic Mower will overrun the boundary by approximately 20 to 30 cm, so please use this information when you create the layout of your boundary. The wire should be 30cm from the edge or obstacle. (Fig.6).

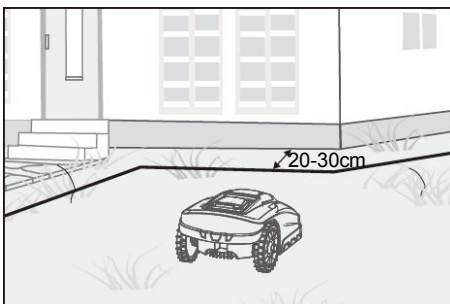


Fig.6

- Repairs / Joining the boundary wire

For repairs and joining boundary wires the 3M™ Scotchlok™ Electrical IDC 314 connectors are recommended. These are corrosion resistant and do not require the wires to be stripped. Insert both wire ends in the connector. Check that the wires are fully inserted into the connector so that the ends are visible through the transparent area on the other side of the connector. Now press down the button on top of the connector fully. Use polygrip pliers to completely press down the button on the connector.

- Obstacles higher than 100 mm

Fixed obstacles higher than 100 mm, such as trees, walls, fences, garden furniture, etc, are recognized by the impact sensors. The Robotic Mower will stop, drive backwards and then turn around to cut in another direction (Fig.7). Soft, unstable and fragile obstacles must be protected by creating a boundary island around them.

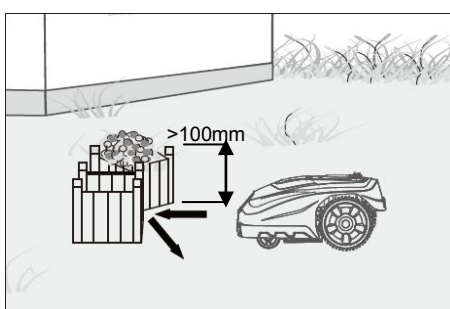


Fig.7

- Trees

The Robotic Mower treats trees as common obstacles, but if some roots of the tree are exposed in your garden and lower than 100 mm, this area should be protected in order to prevent the tree root, cutting blades or rear wheels profile damage. (Fig.8)

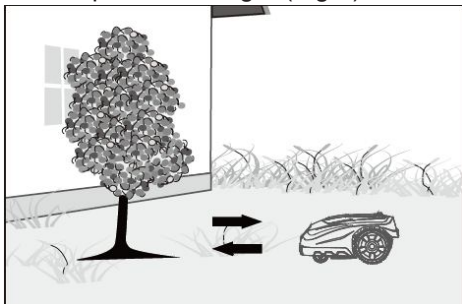


Fig.8

- Stones, gravel or rocks

If there are rocks, gravel or stones situated within the cutting area, this is also an obstacle and needs to be protected as the Robotic Mower could ride upwards on it or become stuck. Do not allow the Robotic Mower to operate on graveled areas. (Fig.9)

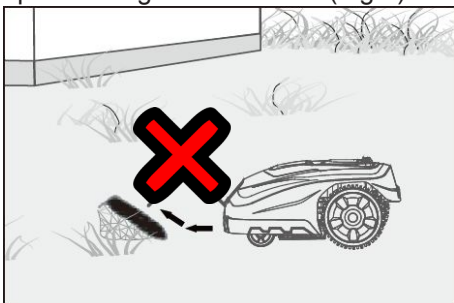


Fig.9

- Slopes

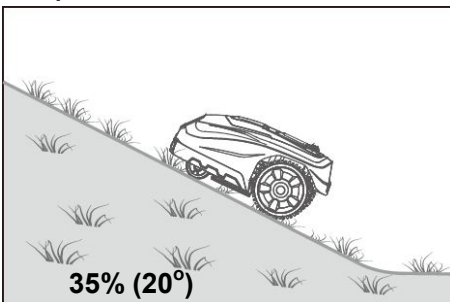
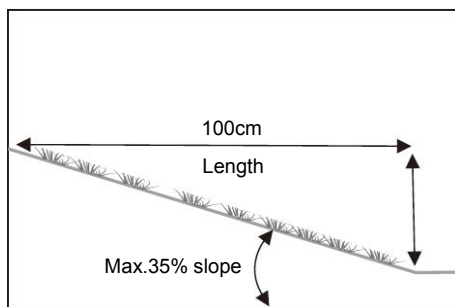


Fig.10

The Robotic Mower is able to climb slopes up to 35% (20°), but avoid areas steeper than this. (Fig.10)
How to calculate the slope of your lawn. (Fig.11)



Slope level in this example:

$$\frac{35 \text{ cm (elevation)}}{100 \text{ cm (length)}} = 35\% \text{ (slope)}$$

Fig.11

Placement of boundary wire on slopes

The upper boundary wire should not be placed on slopes steeper than 35% (20 degrees). The upper boundary wire should have a distance of at least 30cm between any obstacles. The lower boundary wire should not be placed on slopes steeper than 17% (10 degrees). The lower boundary wire should have a distance of at least 40cm between any obstacles when it is positioned on a slope that is 17%. (Fig.12)

Note: the lower boundary wire cannot be laid across a slope steeper than 17%, or the Robotic Mower will slip and cross outside the wire, especially when the grass is wet.

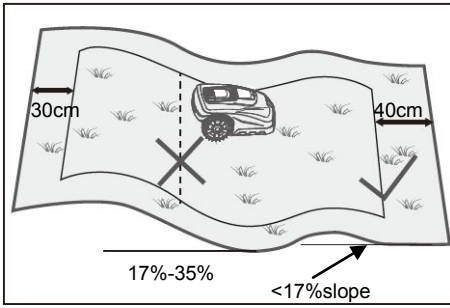


Fig.12

Paths, Driveways and Roads

Exclude elevated pavements with a boundary wire loop. Place the wire around 20-30 cm away (Fig.13).

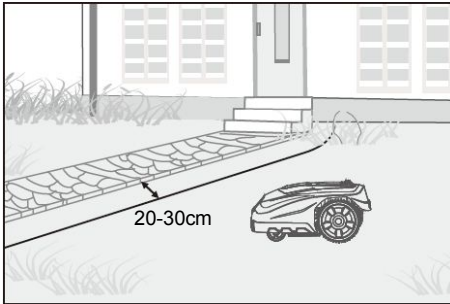


Fig.13

Even pavements don't need to be excluded. The Robotic Mower can drive over. The boundary wire is allowed to cross the pavement. Beware of loose loops in the wire. The Robotic Mower may cut the wire (Fig.14).

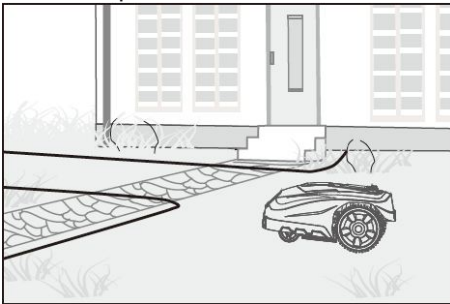


Fig.14

4.4. Charging station

Firstly, locate the best position for your charging station, consider the nearest outdoor electricity socket as this needs to be plugged in (or your Robotic Mower won't work). Please make sure it is flat, dry, without magnetic fields and without obstacles in the front of charging station (Fig.15).

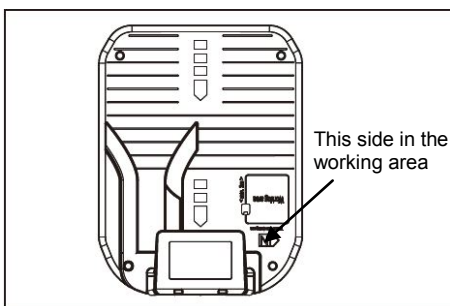


Fig.15

The charging station should have at least 2 meter space in front to make sure the Robotic Mower can smoothly return to the base station. (Fig.16A) Choose a shadowy spot as the battery prefers to be recharged in a cool place.

When starting to peg the wire, first leave about 1 meter extra wire for potential adjustment, peg the wire along the boundary. When finishing laying out, do not leave the wire box or extra wire loop on the boundary wire, leave another 1 meter extra wire and then cut the boundary wire. (Fig.16B/Fig.16C)

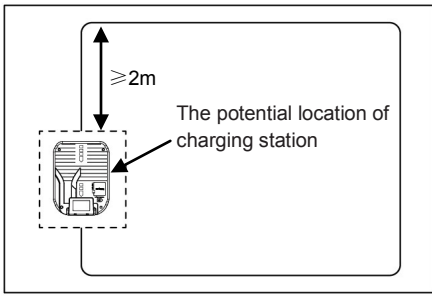


Fig.16A

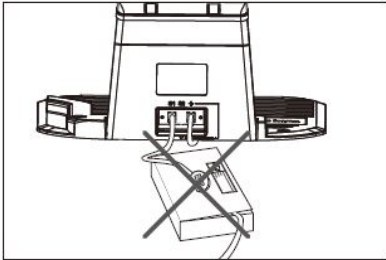


Fig.16B

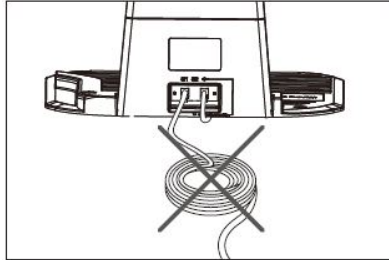


Fig.16C

Locating the charging station

After working, when your Robotic Mower's battery voltage is low, the Robotic Mower will automatically return to the charging station by following the boundary wire anti-clockwise. After a full recharge, your Robotic Mower will start again with its next cutting sequence (if within your set worktime window) (Fig.17A/Fig.17B).

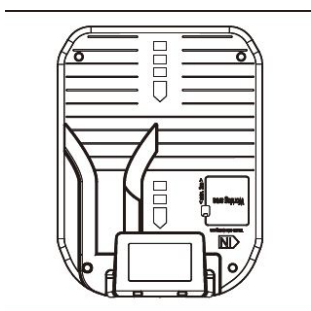


Fig.17A

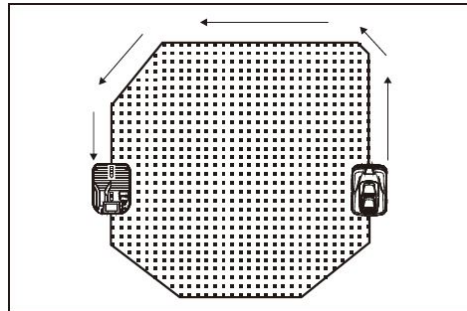


Fig.17B

Note! The charging station area should be flat. Do not locate near a pond or stairs.

NOTICE: Your robot does not have stairs or pond sensors.



Pay attention to protect the extension cable!

Please fix the charging station on a horizontal place.

Before connecting to your power socket, finish all boundary layout work.

4.4.1 Prepare the boundary wire for the charging station

After laying the boundary wire you will need a wire stripper (Fig. 18A). Expose 10-15mm of the metal threads for connection to the charging station (Fig.18B).

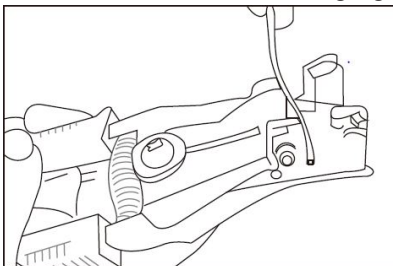


Fig.18A

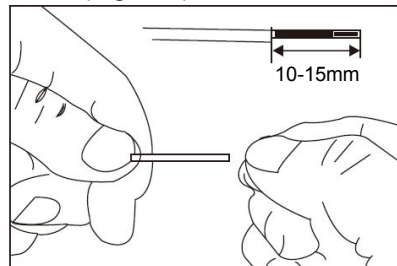


Fig.18B

4.4.2 Connect the charging station with the boundary wire

The wire leading to the front of the charging station must be thread underneath the base, using the cable holders on the station's underside. Connect it to the connector **marked "+"**, and connect the rear boundary wire to the connector **marked "S1"** (Fig.19A/ Fig.19B).

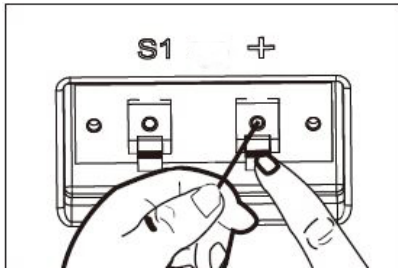


Fig.19A

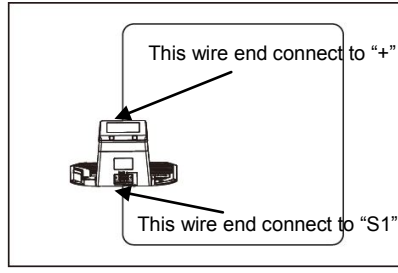


Fig.19B

4.4.3 Connect the charging station to the charger

1. Before connecting the charger station to the electric power supply, make sure that the mains supply voltage is 100-240V~50/60Hz.
2. Plug the charger directly into an electrical outlet. Ensure the power cord is not frayed or cut and safe to use. Never carry anything by or pull on the power cord.
3. Do not operate a damaged charger. Replace damaged cords or charger immediately at an authorized service center
4. Do not charge in wet locations. Do not charge at temperatures above 45°C or below 0°C.
5. Keep the Robotic Mower and charger away from water, heat emitters or chemicals. Be careful not to damage the charger cord - by keeping it away from sharp edges.
6. Connect the charger to the charging station. Align the notch on the power cord connector with the groove on the adaptor connector (Fig.20).

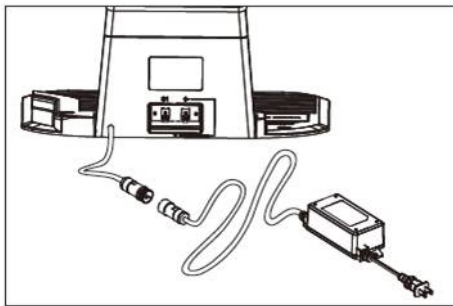


Fig.20

Once these connections are made, plug in the power supply. There is a LED indicator on the charging station – after proper installation, it should flash a constant green light. If the LED is off, check the power connections. If the LED is on but not constant green, refer to the trouble shooting guide below (Fig.21).

	LED	description	solution
1	Light off	No power	Check power supply
2	Constant Green light on	Ready for mowing (Battery fully charged, Boundary wire OK)	Correct connection
3	Flashing Green	Boundary cut off or connected wrongly	Change the two wire ends and check if the boundary wire has a break somewhere.
4	Red	Battery on charge	Await full charge or set "Start" – "OK".

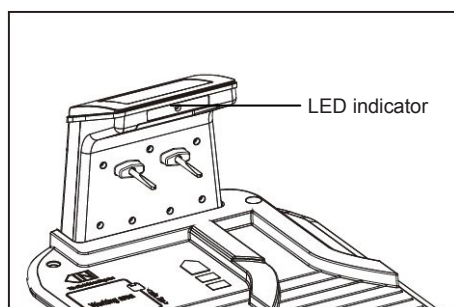


Fig.21

4.5 Charging Information

The device will return to the charging station in one of the following situations:

1. You press the Home button and close the LCD cover.
2. The battery capacity decreases to less than 30%. After a full charge, it will go back to work or wait in the base station until the next work time window is reached.
3. The red LED indicator on the station indicates the battery is on charge.
4. The constant green LED indicator on the station indicates the battery is fully charged. If in the scheduled working time, the Robotic Mower will leave the station and start the automatic working process; otherwise it will stay on the station.

Note: If your Robotic Mower for some reason cannot return to the charging station, it will try again by returning to lawn area and find the Boundary wire, then follow same procedure.

Note: If the battery temperature is higher than 45°C, the device will stop charging to protect the battery. After the temperature has been reduced, charging will automatically resume.

Note: If the Robotic Mower's system control board temperature is higher than 90°C, the Robotic Mower will stop working, and go back to charging station. After the temperature has been reduced, the work process will restore according to your settings.

Note: If the battery power is fully consumed while the device has not driven to the charging station, the Robotic Mower cannot be started (the screen remains off). Please take the Robotic Mower back to the station and put it on the charging position; keep the main power switch ON. The Robotic Mower will be charged automatically.

4.6 Turn on and test the installation

A constant green LED on the charge station indicates the border wire is set up correctly. Next please check that the boundary wire pegs are fully hammered down and flush to the lawn surface.

Now place your Robotic Mower into the working area, next to the charging station.

Press the main power switch to "ON" (Fig.22).

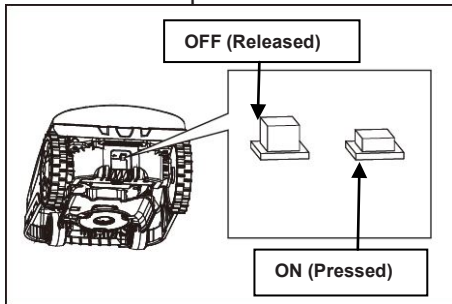


Fig.22

Now open the display cover, press the power button for three seconds. After a short boot of the operating system, enter the PIN code "1-2-3-4", confirm with "OK", press the HOME key and then close the LCD cover. Now your Robotic Mower should follow the wire in an anti-clockwise direction returning to the charging station and dock into charging position. The Robotic Mower will start to fully charge. If the Robotic Mower fails to dock, it may be necessary to adjust the charging station position until the Robotic Mower docks without any problems. (Fig.23)

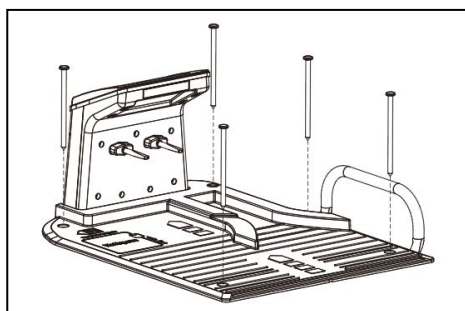
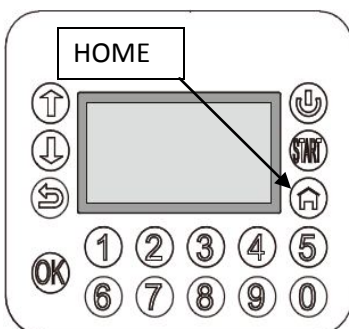


Fig. 24

Stop moving at any time

If you want to stop the Robotic Mower at any time during cutting, please press the red STOP button. Once the STOP button is pressed, the Robotic Mower will stop and wait for your further commands. The Robotic Mower will not start to work until you have entered your PIN and closed the LCD cover.

4.7 Secure the charging base

Once the Robotic Mower has been successfully tested, checking that that the mower docks correctly, use a hammer and knock down the fixing nails fully to secure the base. Remember: Take care to ensure the wire is not kinked or damaged. (Fig.24).

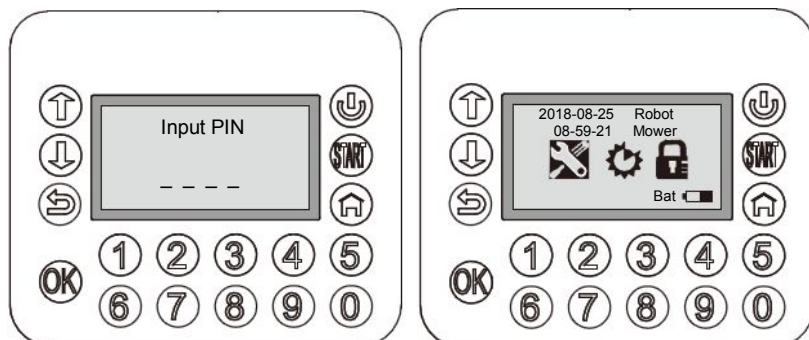
Chapter 5 – Programming

IMPORTANT! PLEASE SET THE DATE AND TIME FIRST

5.1 Control panel

The Robotic Mower has already been pre-programmed in the factory to standard settings, but these can be changed as required. Even though factory settings will suit the majority of gardens, it'll be worthwhile to familiarize yourself with the available options.

After powering on the Robotic Mower, it will be locked with a factory-set PIN code “1-2-3-4”. Press the numbers, then the Robotic Mower will be unlocked. The main operation menu will be displayed.



IMPORTANT

Key options:



Cursor up/ back key: On each keystroke, the cursor moves upwards or left.



Cursor down/ forward key: On each keystroke, the cursor moves downwards or right.



Return key: On each keystroke, the cursor returns to the previous screen or the settings are cancelled.



OK key: Confirm settings.



Home key: Send the Robotic Mower to the charging station (to be followed by “OK” key).

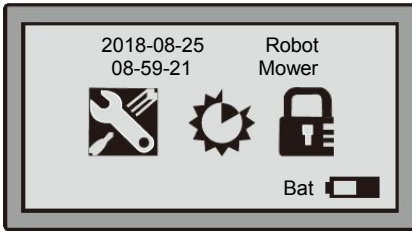


Start key: Press the Start key and close the LCD cover, the Robotic Mower will start the working cycle.



Power Key: Ensure the status of main power switch on the back underside is “ON”. Then this power key starts or shuts down the mower. Push for 3 seconds.

5.2 Mainoperation menu overview



General Setting.

Includes "set data and time", "mow in the rain", "language", "secondary areas" and "information";



Function setting

Includes "set work time", "boundary cut" and "WIFI Setting";



Change PIN.

5.3 Battery



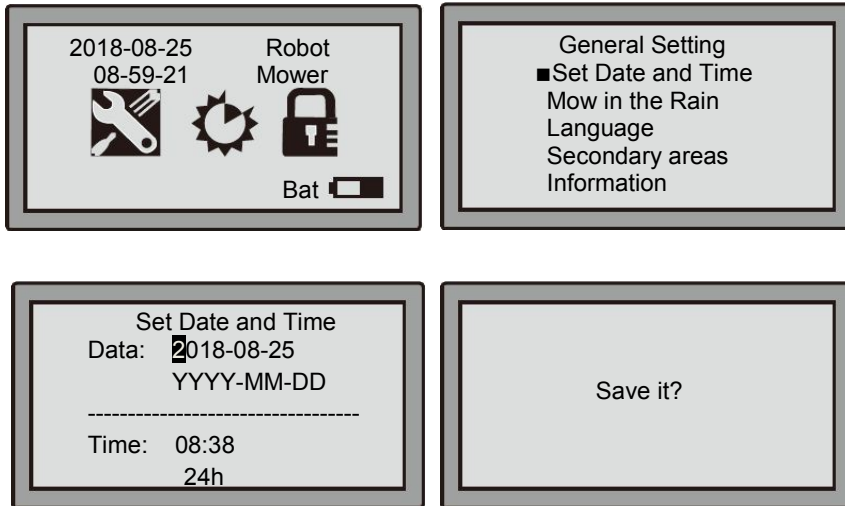
Battery is fully charged.






Battery capacity is around 30% left.




5.4 Settings



5.4.1 Set Date and Time



Step 1: Move the cursor to the general setting , then press the OK button .

Step 2: Move the cursor to "set date and time", then press the OK Key .

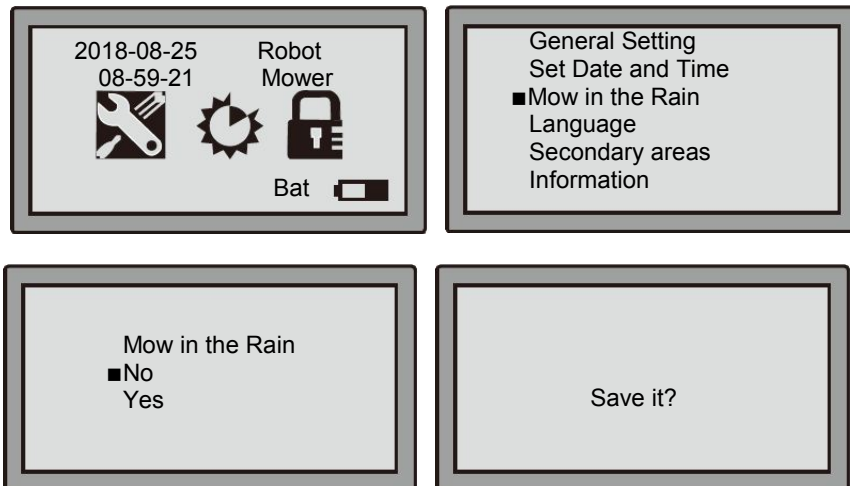
Step 3: Use  or  to move the cursor to the setting you would like to change, then change the numbers through the keyboard. After the changes are done, press .



Step 4: The screen displays "Save it?". Hit the  key if you want to keep the changes. If you don't want to save the changes, press  to get to the previous menu.


Note: If you enter an incorrect date or time, the display will show "invalid data " for three seconds and be redirected to the setting.




Note: Only with the date and time set correctly will the robot will work properly.

5.4.2 Mow in the rain





Step 1: Move the cursor to the general setting , then press the  OK key.

Step 2: Move the cursor to "Mow in the rain", then press the  OK key.

Step 3: Use  or  to choose Yes or No, press .

The Yes or No means to set the mower to work in the rain or not.

Step 4: On the pop-up message "Save it?", press the OK Key  if you want to keep the changes. If you don't want to save the changes, press  to get back to the upper menu.

The default setting is "No".

Rain sensor

Mowing in the rain is not recommended.

The Robotic Mower has got a rain sensor and may prevent the robot from mowing in the rain. In the default factory setting, the Robotic Mower returns back to the charging station if rain is detected, where it will continue to charge. After charging it will stay in the charging station for a further 2 hours before resuming mowing.

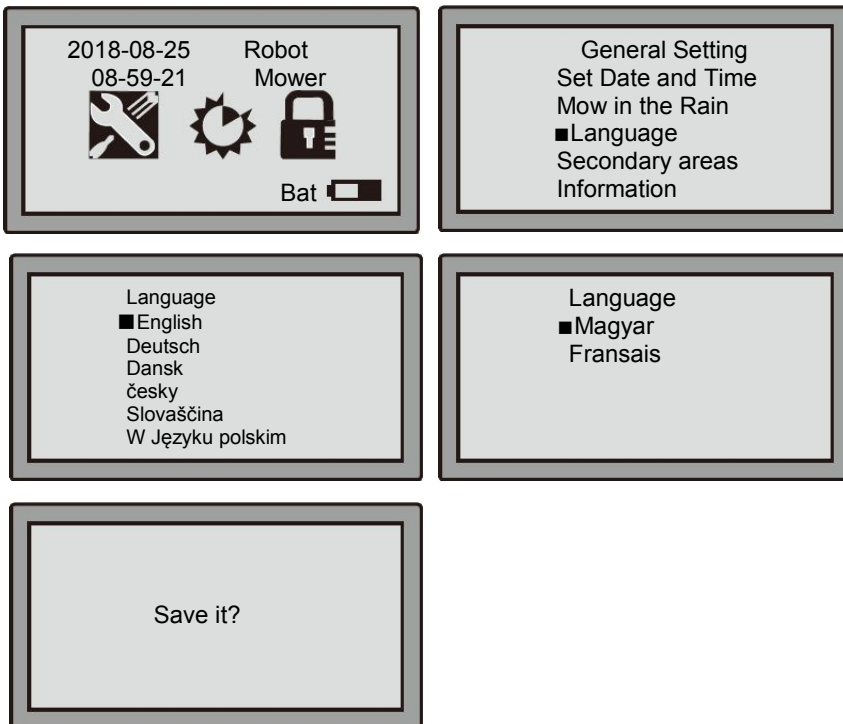
Note: Do not short cut the two metal sensors with metal or other conductor. This will make the robot work abnormally.



If you want the mower to work in the rain, you can change the default setting with reference to 5.4.2.

The Robotic Mower can cut wet grass - but wet grass will accumulate on the blade disc and wheels, and require more frequent cleaning.

Do not use the Robotic Mower during lightning to avoid damage to the electronic circuits. We strongly recommend unplugging the charging station and to disconnect the boundary wire from the base station too.



5.4.3 Language



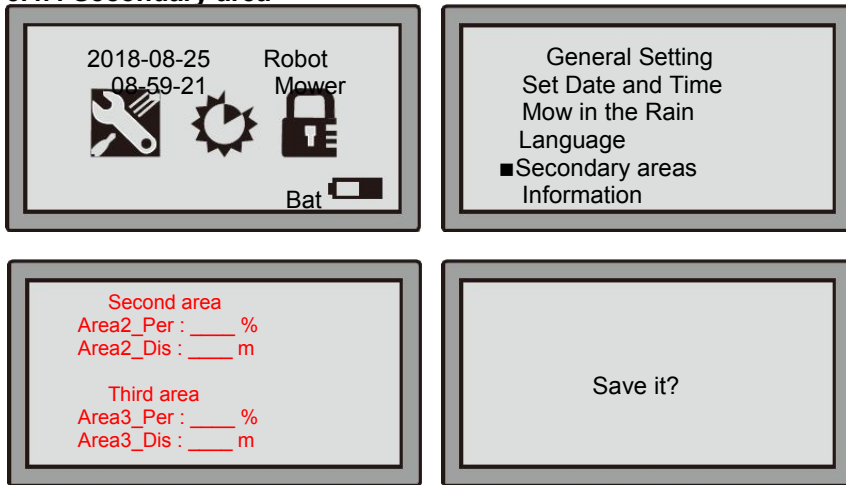
Step 1: Move the cursor to the general settings , then press the OK key .

Step 2: Move the cursor to *Language*, then press .

Step 3: Use  or  to move the cursor to the desired language, press .

Step 4: On the pop-up message "Save it?", press the OK key  if you want to confirm the changes. If you don't want to save the changes, press  to return to the previous menu.



5.4.4 Secondary area



Step 1: Move the cursor to “General setting”  , then press  ;

Step 2: Move the cursor to “Secondary areas”, then press .

Step 3: Use the , , , [...], ,  buttons to move the cursor and set the values.

Step 4: On the prompt "Save it?", hit the OK key  to save the changes or  to discard and return to the previous menu.

Note:

Area2_Per: (2nd Area_Percentage)

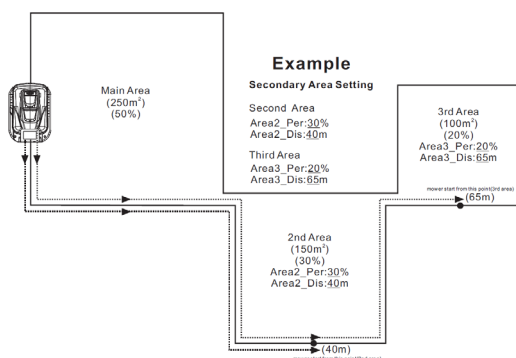
It sets the proportion of the secondary area in relation with the entire surface.

Area2_Dis: (2nd Area_Distance)

It sets out the distance (in meters) that the robot needs to reach the secondary area, following the boundary wire. It is recommended to measure the distance to half way within the second area, so that you can be sure that the Robotic Mower will be in the second area when it starts mowing.

For example:

The total working area is 500 m², the main area is 250 m², the secondary area is 150 m², the third area is 100 m², the settings are as below:



For the above example:

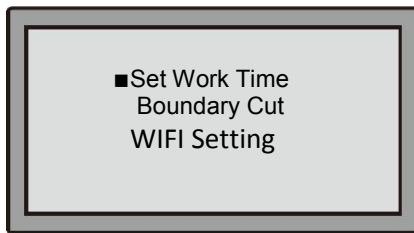
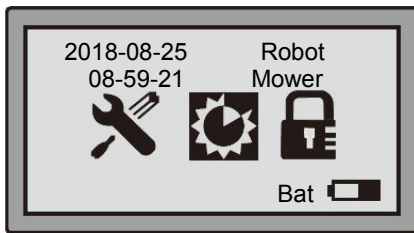
For the main area: the robotic mower will start to cut the grass just after it has left the charging station.

For the 2nd area: the robotic mower will travel 40 meters along the boundary wire from the charging station, then start to cut the grass.

For the 3rd area: the robotic mower will travel 65 meters along the boundary wire from the charging station, then start to cut the grass.

The mower will allocate working time to each area proportional to the area percentage.




5.4.5 Set cutting weekday and time









Day	Start	Hours
Mon	02:00	22.0h
Tue	02:00	22.0h
Wed	02:00	22.0h
Thu	02:00	22.0h
Fri	02:00	22.0h
Sat	02:00	22.0h


Day	Start	Hours
Mon	02:00	22.0h
Tue	02:00	22.0h
Wed	02:00	22.0h
Thu	02:00	22.0h
Fri	02:00	22.0h
Sat	02:00	22.0h

Step 1: Move the cursor to the Function setting , then press .

Step 1: Use  or  to move the cursor to Set Work Time, then press .

Step 2: Use  or  to move the cursor to a weekday, then press .

Step 3: Use  or  to move the cursor to the time, change the numbers with the number keys. After having set your changes to one weekday, press  to confirm it and then set the other weekdays.

Step 4: After the setting is finished, press .

Step 5: On the pop-up message "Save it?", hit the OK key  if you want to keep the changes. Press  to discard your changes.

Set work time operation example:

Day	Start	Hours
Mon	08:00	3.0h

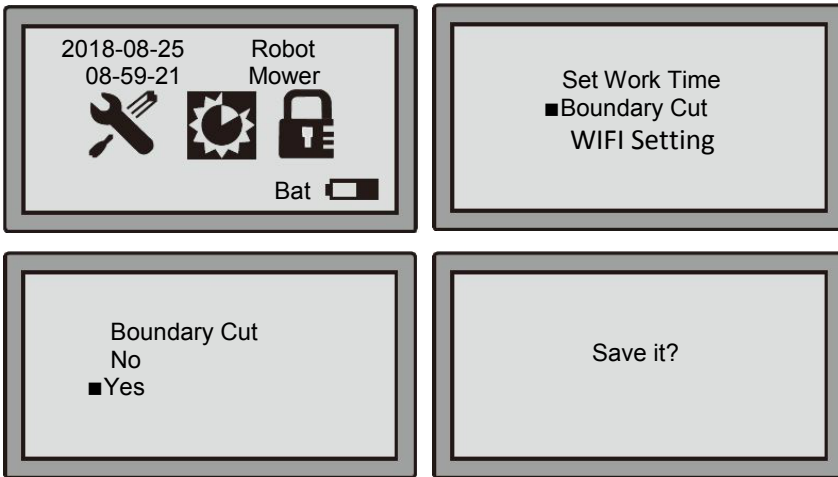
Here the Robotic Mower will work on Monday from 8:00 AM to 11:00 AM (Starting at 8:00 AM and working for 3.0 Hours)



Recommended work time per day:

For 300 m² working area, 4 hours per day (from Monday to Friday);




For 500 m² working area, 6 hours per day (from Monday to Friday).



5.4.6 Boundary cut



Step 1: Move the cursor to the Function setting , then press the OK Key  ;

Step 2: Move the cursor to "Boundary cut", then press the OK Key  ;

Step 3: Use  or  to move the cursor to "No" or "Yes". Then press  ;

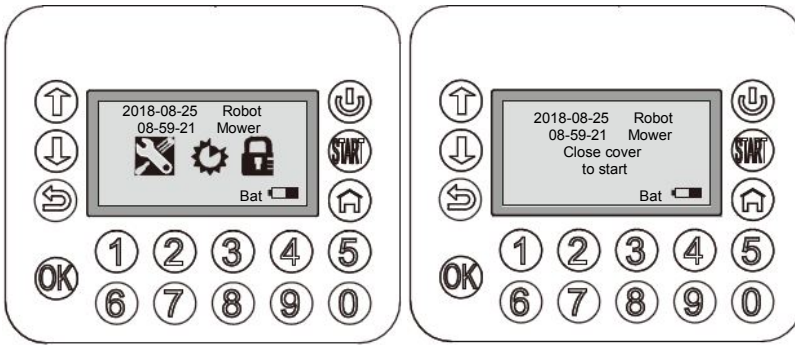
Step 4: On the pop-up message "Save it?", press the OK Key  if you want to keep the changes. If you don't want to save the changes, press  to go back to the previous menu.

Note:

The factory setting is "No", meaning the Robotic Mower does not cut the grass on its way along the boundary wire. You can change the setting to "Yes", to let the Robotic Mower cut the grass when it's going back to the station.

5.5 Cutting

Push the "Start" key and close the LCD cover to let the Robotic Mower start to work.



During cutting time, the battery capacity level is monitored and displayed. When the battery capacity has discharged to 30%, the Robotic Mower will automatically go back to the charging station.

5.6 Charging

After successfully docking in to the charging station, the battery symbol displays the charging progress.



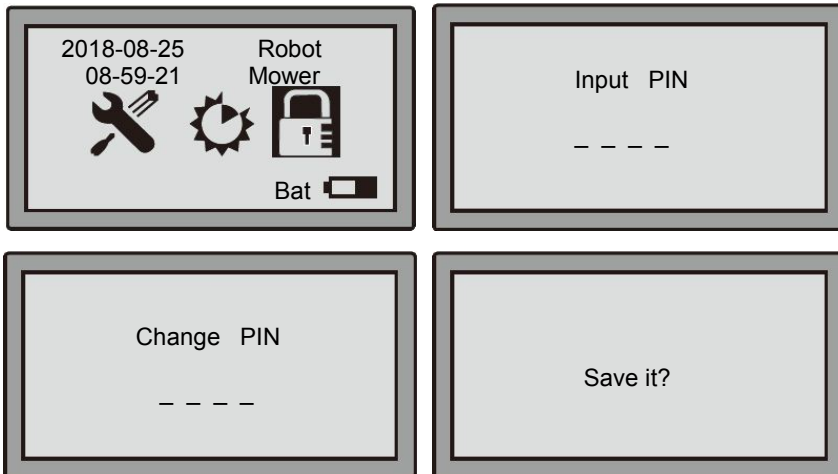
Note: In the normal working mode, if you press the red "STOP" button on top of the Robotic Mower and then press the "HOME" button on the keyboard, your Robotic Mower will return to the charging station.

5.7 Change PIN code

Note: Change the PIN code when the main power switch is set “ON”

Every time you open the LCD cover, you need to input the PIN code to unlock the Robotic Mower.

The factory-set PIN code is “1-2-3-4”; you can change this PIN code as below:



Step 1: Move the cursor to the icon of *Change PIN* , then hit the OK key .

Step 2: Input the old PIN code through the keyboard, the factory setting is “1-2-3-4”.

Step 3: Input the new PIN code.

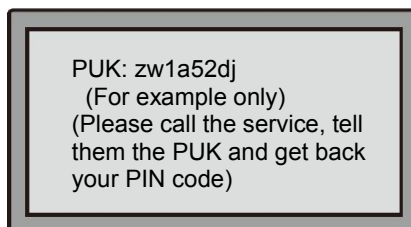
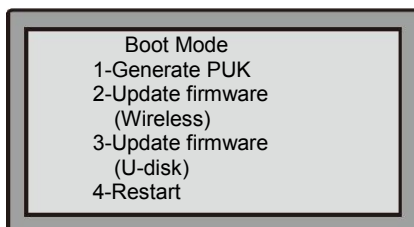
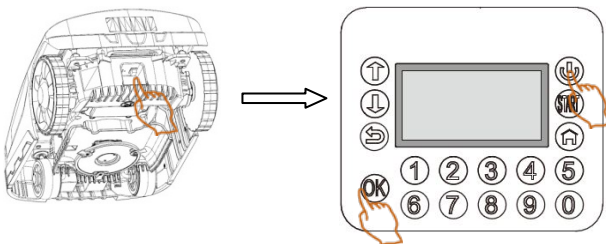
Step 4: On the pop-up "Save it?", hit  to save it, or press  to discard the changes and return to the previous menu.



IMPORTANT!

Please write down your new PIN here: _____

Every time you change the PIN, please write it down to remember it. Without the correct PIN, your Robotic Mower is anti-theft protected and all functions are blocked.

NOTE: What to do if you forget your PIN



Step 1:
Press the main power switch to “ON”.
Press  and  at the same time for 4 seconds to enter the *Boot Mode*.

Step 2:
Press key **1**, the screen will display a *PUK* number; this is your *personal unlocking code*. Contact our service center to get your new PIN.

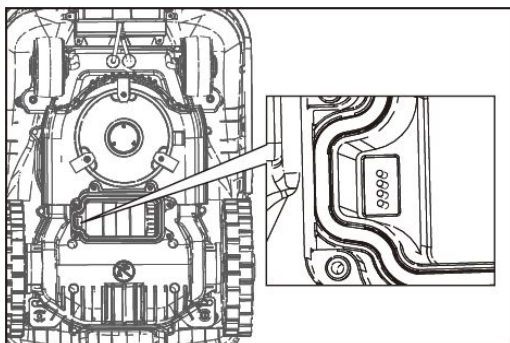
Keep your purchase receipt and the robot’s serial number ready. These are mandatory to obtain your PIN.

5.8 Firmware update

Periodically, the robotic mower firmware or operating system parameters will be updated. Check and update as follows:

1. To update the Firmware of the robotic mower with the mobile app, please refer to the 'Mobile Application Installation & Guide'.
2. See your local authorized service centre, who are able to perform an update whilst completing maintenance and service work. During the winter service completed by an authorized service centre the software will be updated.
3. USB memory stick update from Mowbot service

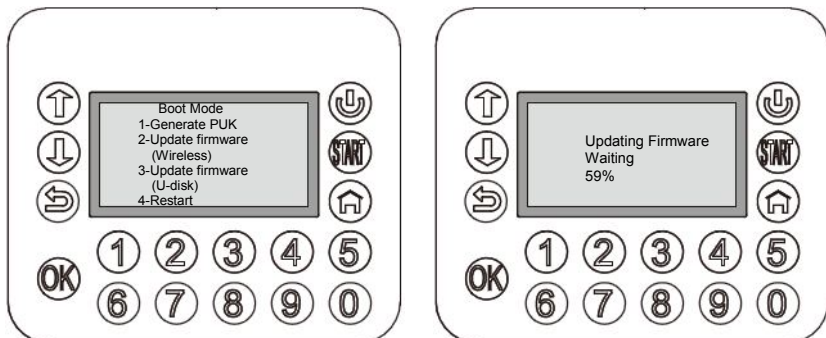
The robotic mower has a USB port located in the battery compartment for manual firmware updates. To access the USB socket, remove the battery and insert a USB memory stick containing the firmware update.



Insert the battery again, turn the main power switch to "ON".

Press  and  at the same time for 4 seconds to enter the *Boot Mode*.

Press **3** to start updating. After the update has finished, the Robotic Mower will restart and the screen will enter the "Input PIN" page. This means the firmware has updated successfully.

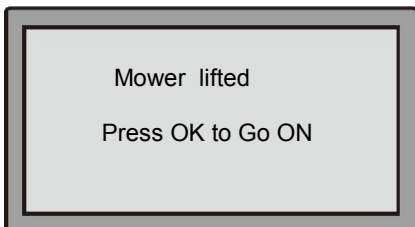
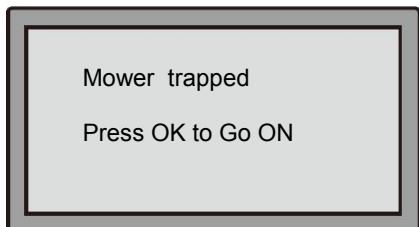
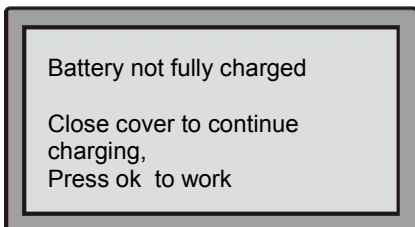
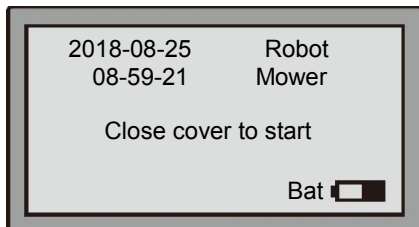


Note:

1. Please make sure the battery level has enough charge for updating (>50% left).
2. DO NOT press the main power switch during updating.

5.9 Alert or note information

The screen will display alerts or information when the Robotic Mower detects any fault.



Mower rolling over
Press OK to Go ON

Mower tilted
Press OK to Go ON

Motor over current
Press OK to Go ON

Motor Fault
Check the motor and
Restart the mower

Battery low voltage
Press OK to Go ON

Battery error
Please check the battery
Restart the mower

Warning!
Battery temp. abnormal
Stop the mower


Warning!
PCB over temperature
Stop the mower!

Hall error
Please check the mower
Restart the mower


Boundary signal error
Check the boundary wire
Restart the mower

Main board error
Please contact the service

Close cover to start


After pushing **START** or  on the keyboard, the Robotic Mower reminds you to close the LCD cover. Please see section *trouble shooting 7.2 No. 1*.

Mower trapped

If the obstruction sensors are activated ten times within a minute, the Robotic Mower will stop and display the message: "Mower trapped". Please remove the mower from the obstruction and open the LCD cover and hit  to restart the Robotic Mower. If this error message shows up repeatedly, please check that the boundary wire is correctly installed. Especially check narrow corners, corridors, fences, rocks, surrounding etc. Please change the boundary wire layout if necessary.

Please see section *trouble shooting 7.2 No. 2*.

Mower lifted:


If the lift sensors are activated continuously for ten seconds, the Robotic Mower will stop and display the information “*Mower lifted*”. Please open the LCD cover and hit  to restart the robotic mower.

If this error message shows frequently, please check if there are obstacles taller than 100 mm in the working area and move these obstacles out of the working area or change the boundary wire layout to exclude these objects.

Please note: This fault may be caused by the grass being too high in the working area; please cut the grass to less than 60 mm.

Please see section *trouble shooting 7.2 No. 3*.


Mower rolling over or Mower tilted

If the Robotic Mower is turned over (upside down), or has been tilted over 35%(20 °) for a period of time, the Robotic Mower will stop and display information: “*Mower rolling over*” or “*Mower tilted*”. Please turn the Robotic Mower back to its normal position, open the LCD cover and hit  to restart.

If the rolling over is caused by a steep slope in the working area, please change the boundary wire layout to avoid the slope.

Please see section *trouble shooting 7.2 No. 4*.

Motor over-current

The motors are protected against current overloading. Please open the LCD cover and hit  to restart the Robotic Mower.

If this error message appears frequently, please check the grass height in the working area and cut it to less than 60 mm. Please also inspect the blade disk and the wheels for thick mud, leaves and, if needed, clean the parts thoroughly.

Please see section *trouble shooting 7.2 No. 5*.

Motor Fault

If the system detects a potential motor issue, the Robotic Mower will stop and display the message: “*Motor fault*”.

Please check the rear wheels and the cutting disk, clear and clean any obstructions and restart the mower.

Wear safety gloves. If the fault continues, please contact the service centre.

Please see section *trouble shooting 7.2 No. 5*.

Battery low voltage

Please carry the Robotic Mower to the station for charging and put it in the charging position.

Please see section *trouble shooting 7.2 No. 6*.

Battery error

In this case the battery has reached its end of life

Please see section *trouble shooting 7.2 No. 7*.

Battery temperature abnormal

The battery temperature range for discharging is 0 to 75°C, for charging is 0 to 45°C. Out of this range, the Robotic Mower returns to the charging station and waits to cool down or warm up. The screen then displays *battery temperature abnormal*.

High ambient temperatures over 35°C, strong sunlight or very cold conditions will cause this message.

During summertime, it is recommended to change the work time to the early morning hours. During wintertime, store the Robotic Mower in a warm area – this may be in the house or heated garage. The local service centre may offer a winter storage or maintenance service.

Please see section *trouble shooting 7.2 No. 8*.

PCB over temperature

If the PCB (main board) in the Robotic Mower is over 90°C, the Robotic Mower will stop cutting, go back to the station and wait for it to cool down.

High ambient temperatures over 35°C or strong sunlight may cause this.

You are recommended to change the work time to the early morning hours to avoid the warmer times of the day.

Please see section *trouble shooting 7.2 No. 9*.

Hall error

There are four magnets in the upper cover of the Robotic Mower. If the screen displays: Hall error, please check if there are metal parts between the magnets and the deck. Take off the metal parts if needed.

Please see section *trouble shooting 7.2 No. 10*.

Boundary signal error

If the boundary signal is not operating correctly - for example, the Robotic Mower is outside the working area, the boundary wire is incorrectly connected or is damaged, or if there is no power supply, the Robotic Mower will turn in circles searching for the boundary signal and will finally stop; the screen will display the information *boundary signal error*.

Please make sure the Robotic Mower is in the working area and check if the LED indicator on the charging station is constantly green. Please check the LED as follows:

- LED off ▶ no power supply.
- LED flashing green ▶ boundary wire is cut or
- ▶ wire incorrectly connected or
- ▶ wire loose from the charging station's connectors

Please see section *trouble shooting 7.2 No. 11*.

Main board error

The mower is controlled by a main PCB board, with a programmed MCU, a gyroscope and other components. If certain components error or fail, the screen will display the information *Main board error*.

Please try to restart the mower. If the problems persist, please contact the service centre.

Please note: It is important to check and follow the instructions outlined in this manual completely. Incorrect maintenance or installations are not covered by the warranty.

Chapter 6 - Maintenance

Check and clean the Robotic Mower regularly and replace worn parts if necessary. Use a dry brush or a damp cloth, but never use a pressure washer or running water to clean the mower. Follow these maintenance instructions to maximize the lifetime of the mower. Take your robotic mower to an authorized dealer for a comprehensive winter service incorporating cleaning, testing and adjustment of all functions, replacement of worn parts and software upgrades.

6.1 Battery life

The Robotic Mower has a maintenance-free lithium-ion battery. This battery is easy to take out of the Robotic Mower (we recommend you to take it out fully charged), and should be kept in a dry place (indoor during winter). It is recommended to charge the battery every three months to keep it in the best condition.

Long periods of non-usage as well as extreme temperatures (direct sunlight on the mower or cold winter conditions) will significantly limit the battery lifetime. Therefore, please protect your Robotic Mower from extreme temperatures, take it in for the winter and give it a full charge.

6.2 Winter storage

During the winter we recommend that you keep your Robotic Mower and charging station in a shed or garage to avoid the frost. The following preparation should be carried out before winter storage:

1. Clean your Robotic Mower thoroughly.
2. Charge the battery completely
3. Ensure the main power switch is OFF
4. Disconnect the charger power supply from the power socket.
5. Disconnect the charger / power supply from the charging station.
6. Disconnect the boundary wire connections from the charging station. The boundary wire can be left outside overwinter, but ensure the connections are protected by water-free grease or tape to prevent corrosion.

It is advisable to repack the product in the original carton after cleaning and charging, with all 4 wheels flat in the box and storing in a dry, frost free environment.

6.3 Cleaning and maintenance

It's important to keep the Robotic Mower clean.

The Robotic Mower will deal with slopes better if the wheels are clean, cutting blades will also cut more efficiently if clean and sharp - but note: When cleaning the blades, please switch off the main power switch and use protective gloves. Never use a high-pressure cleaner or running water for cleaning.

6.3.1 Cleaning the Robotic Mower body

Take care when cleaning not to damage the mower. Use a soft brush and / or a damp cloth with household detergents. Wipe off any residues after cleaning.

6.3.2 Cleaning the underside

Ensure the main power switch is in the *OFF* position and wear protective gloves. Turn the Robotic Mower onto its side to expose its underside, clean the blade disc and frame, using a soft brush or damp cloth. Rotate the blade disc to make sure that it moves freely and check that the blades can turn easily on their bearings.

6.3.3 Clean the contact pins and the charging strips

Use a metal cleaner or very fine-grade emery paper to clean the contact pins and the charging strips on your Robotic Mower / charging station. Remove any debris, leaves or grass clippings around the contact pins and charging strips to ensure efficient charging.

6.4.3 Cutter blade sharpening



WARNING!

Ensure the Robotic Mower is completely shut off and wear protective gloves before cleaning, adjusting or replacing the blades.



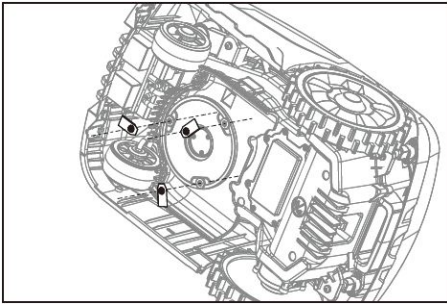
WARNING!

To ensure maximum cutting efficiency and safety, always use Mowbot replacement blades and blade mounting parts when replacing.

There are three blades on your Robotic Mower which are mounted onto the blade disc. These blades may last up to 3 months (if no obstacles have been hit). Please remember to replace all three blades at the same time for best balance and cutting performance.

6.4.4 Replace the blades

Use a screwdriver to remove each of the mounting screws and blades. Then replace each blade and firmly re-screw. Please make sure your newly assembled blades can spin freely.



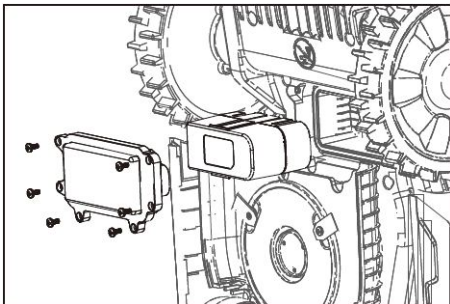
6.4.5 Replacing the battery

Step 1 - Adjust the cutting blade holder to the lowest working height.

Step 2 - Disassemble 6 fixing screws from the bottom.

Step 3 - Pull out the battery.

Step 4 - Install the new battery, replace the battery pack cover and secure with the 6 screws. The old battery should be recycled correctly.



ONLY USE ORIGINAL MOWBOT REPLACEMENT BATTERIES.

Chapter 7 -Troubleshooting

7.1 Troubleshooting: Charging station

LED	Description	Solution
Light off	No power	Check power supply
Constant Green light on	Ready for mowing (Battery fully charged, Boundary wire OK)	Correct connection
Flashing Green	Boundary cut or connected incorrectly	Check the two wire ends are connected to the correct terminals securely. Then check if the boundary wire has a break.
Red	Battery on charging	Await full charge or set "Start" – "OK".

7.2 Troubleshooting: Robotic mower

No	Problem	Message on the LCD	Possible reason	Action
1	None	Close cover to start	If the LCD cover is not closed, the Robotic Mower will not start to work.	Close the lid.
2	Robotic Mower stopped in the working area	Mower trapped	The Robotic Mower is trapped and stopped, this occurs when the collision sensor has been triggered repeatedly.	<ol style="list-style-type: none"> 1. Check if the Robotic Mower is trapped by an obstacle or jammed between trees, bushes, etc. Remove the obstacle or reconfigure the boundary. 2. Check if the grass in the lawn is too tall to block the Robotic Mower from moving. If so, please cut the grass to less than 60 mm 3. Restart the Robotic Mower or take it back to the charging station.
3	Robotic Mower stopped in the working area	Mower lifted	The Robotic Mower has been lifted continuously for ten seconds	Check if there are obstacles higher than 100 mm in the working area and, if needed, move those out of the working area or change the boundary wire layout to exclude them.
4	Robotic Mower tumbled and stopped	Mower rolling- over / Mower tilt	The Robotic Mower has rolled over or is on a slope over 35% for a long time.	<ol style="list-style-type: none"> 1. If the roll-over is caused by too steep a slope in the working area, please correct the boundary wire layout to avoid those. 2. Take the Robotic Mower to a flat area and restart it.
5	The Robotic Mower stopped in tall grass or deep moss	Motor over-current/ Motor fault	The Robotic Mower stopped because there is a current overload in the motor, or the motor may be blocked by something, or there is a motor fault.	<ol style="list-style-type: none"> 1. Check if the grass is too high and blocks the mowers movement. If this is the case, please cut the grass to less than 60 mm using a conventional mower. 2. Increase the cutting height. 3. Check if the blade disk is jammed. Switch off the mower, wear protective gloves, then clean as necessary. 4. Check if the wheels are jammed. 5. Restart the Robotic Mower or take it back to the charging station.

6	The Mower has stopped and the screen is off.	Battery low voltage	Battery voltage is too low and not on the charging station, the Mower will stop and the display will be blank.	Carry the Robotic Mower to the station for charging.
7	The Robotic Mower cannot start or the battery cannot be charged.	Battery error	The battery may require attention or replacement.	Check or replace the battery.
8	During the set working time, the Robotic Mower goes back to the station, or the battery cannot be charged on the charging station.	Battery temperature abnormal	<ol style="list-style-type: none"> 1. If the battery temp. is higher than 75°C, the Robotic Mower will go back to or stay on the charging station. 2. If the battery temp. is higher than 45°C or lower than 0°C, it will stop charging and wait on the base. 	<ol style="list-style-type: none"> 1. In the summer, please set the working time to the early morning; try to avoid the Robotic Mower working during hot daytime temperatures. 2. After having cooled down to the rated range (charge: 0-45°C; discharge: 0-90°C), the Robotic Mower will automatically return to the set program.
9	The Mower goes back to the station and stays there during its designated working time.	PCB over temperature	If the PCB is overheated, the program will send the Robotic Mower back to the station to wait for the mower to cool down.	<ol style="list-style-type: none"> 1. In summer season, please set the working time to the early morning; try to avoid the Robotic Mower working during hot daytime temperatures. 2. After the PCB has cooled down, the Robotic Mower automatically returns to the designated schedule.
10	The Mower cannot pass its program self check, cannot be started	Hall error	There are metal parts between the magnets and the deck.	Take off the metal parts if needed. Take the mower to a service dealer.
11	The Mower turns in circles and then stops	Boundary signal error	<p>The Robotic Mower is outside the working area.</p> <p>The boundary wire has a fault.</p> <p>There is no power supply.</p>	<ol style="list-style-type: none"> 1. Make sure the Robotic Mower is in the working area. 2. Check if the LED indicator on the charging station is constantly green. 3. If the Robotic Mower runs outside of the boundary frequently, please check if there is a high-voltage cable nearby or underneath. Change the position of the boundary wire. 4. If the Robotic Mower runs outside of the boundary on a slope, avoid that area by changing the position of the boundary wire. 5. Restart the Robotic Mower or take it to the charging station.

12	Screen is off	None	<p>Hit the Power key on the key board for 3 sec. to turn the LCD screen on.</p> <p>If the battery voltage is too low, the LCD screen cannot be turned on.</p> <p>Electric circuit or electronic parts problems may also cause this problem, if this occurs, please contact the service centre.</p>	<ol style="list-style-type: none"> 1. Make sure the main power switch is "ON". 2. When you first use the Robotic Mower the battery may not be fully charged. Put the Robotic Mower into its charging station. 3. For normal working, press the power key on control panel, then input the PIN and start the Robotic Mower. 4. If the screen is still off, please carry the Robotic Mower to the charge station. Make sure the main switch is "ON" for the battery to be charged. 5. If the problem persists contact the service centre.
13	The Mower cannot enter the charging station	None	If the charging station is not installed correctly, the Robotic Mower cannot enter it.	<ol style="list-style-type: none"> 1. Make sure the LED indicator on the charging station is constantly green. 2. Check if the boundary wire is under and in front of the charging station and are aligned. 3. Check if the charging station is positioned correctly. 4. Ensure charging station installation is level.
14	The Mower turns around in circles along the boundary wire.	None	High power cable close to the Boundary wire or underneath it affects the boundary signal.	Check if there is a high-power cable close to the boundary wire or underneath it; change the position of the boundary wire to avoid this.
15	The Robotic Mower stopped while running back to the station.	None	Objects on the boundary wire blocked the mower's movement.	Remove any obstacle on the boundary.
16	The Mower behaves abnormally around islands (flower beds, pool, etc.)	None	Boundary wire incorrectly placed around the islands	Relocate the boundary wire

17	The Robotic Mower is very noisy.	None	<ol style="list-style-type: none"> 1. Damaged cutting blades. 2. Cutting blade is partially blocked by tapes, ropes, plastic fragments, etc. 3. The Robotic Mower started with obstacles being too close (less than 1 m away - fallen branches, forgotten objects, etc.). 4. Damaged cutting motor or driving motor. 5. Other damages on the parts of the mower. 	<ol style="list-style-type: none"> 1. Replace all of the 3 blades together. <p>The Robotic Mower's cutting efficiency depends on sharp blades, so please keep them in good condition.</p> <ol style="list-style-type: none"> 2. Stop the Robotic Mower safely, use protective gloves to avoid the risk of cuts to hands, remove the debris/blockage from blades. 3. Get the motor repaired or replaced by the service centre.
18	The Robotic Mower stays on the station or the mower keeps going back to the station	None	Wrong working time setting.	<p>Check the Working Time setting.</p> <p>For example, if you set:</p> <p>DAY Start Hours Mon 8:00 3 hrs</p> <p>This means on Monday the mower will be working from 8:00 AM to 11:00 AM. Outside of that time window, the Robotic Mower will stay on the station or be travelling to the charging station.</p>

8. WARRANTY

This product is warranted in accordance with legal regulations for a 24 month period effective from the date of purchase by the first user.

The warranty covers faults resulting from manufacturing or material defects. The warranty provision is provided on the condition of the following being adhered to in all cases:

1. The product, charger and charging station must be used in compliance with this instruction manual.
2. Non-authorized third parties or end-users must not attempt to repair the product.

This warranty covers all material or manufacturing failures, it does not include: defects from normal wear and tear, parts such as, bearings, brushes, cables, wheels, cutter blades, lubricant oils and grease or accessories. Damage or defects resulting from abuse, accidents or alterations, natural fading of painted or plated surfaces, sheet peeling and other natural deterioration.

Examples of faults which are not included in the warranty:

- Damage due to water ingress caused by using a pressure washer, watering hose or submerging in water.
- Damage caused by water seepage from underneath the robotic lawnmower. This damage is normally caused by cleaning or irrigation systems or holes / hollows in the working area when pools of water are formed when it rains.
- Damage caused by exposure of the product to smoke and soot, chemical agents, bird droppings or other animal waste, seawater, sea breeze, salt or other environmental phenomena.
- Damage caused by lightning.
- Damage caused by the incorrect storage/handling of the battery.
- Damage to the border wire.
- Damage caused by a poorly installed border wire.
- Damage caused by the non-authorized repairs/changes/tampering with the product or its associated power supply.
- Any damage that occurs from the use of non-genuine Mowbot parts will not be covered.

We reserve the right to reject any claim where the purchase cannot be verified or when it is evident that the product was not maintained properly, serviced annually or installed as per this manual.

Expenses incidental to the warranty claim that are not covered;

- Compensation for loss of time, commercial loss or rental costs of substitute product.
- Damage caused to property, animals and people.
- Costs incurred for transportation to and from the dealership.

Any damage resulting from operating methods other than those indicated in the owner's manual will not be covered.

Your purchase receipt must be kept as proof for the date of purchase. Your un-dismantled mower must be returned to your dealer in an acceptably clean state, accompanied by your proof of purchase.

Register your purchase:


Please register your robotic mower on mowbot.co.uk, for warranty and security identification purposes for PIN code recalling.

9. ENVIRONMENT

Should your machine need replacement after extended use, do not put it in the domestic waste but dispose of it in an environmentally safe way.



10. EC-DECLARATION OF CONFORMITY

EC Declaration of Conformity	
We herewith declare,	Mowbot Robotic Mowers Henton & Chattell Ltd, London Road, Nottingham NG2 3HW United Kingdom
That the following machine complies with the appropriate basic safety and health requirements of the EC Directive based on its design and type, as brought into circulation by us.	
In case of alteration of the machine, not agreed upon by us, this declaration will lose its validity	
Product	Robotic Mower
Machine Type:	MOWBOT800 (DYM220601) MOWBOT1200 (DYM220602)
Rated voltage/power	24VDC/50W
Measured sound power level:	62.7dB(A)
Guaranted sound power level:	66dB(A)
Applicable EC Directives:	EC Radio Equipment Directive:2014/53/EU EC Machinery Directive:2006/42/EC EC Directive of Electromagnetic Compatibility:2014/30/EU
Applicable Harmonized Standards:	EN 60335-1 EN 50636-2-107 EN 62311 EN 55014-1 EN 55014-2 EN 61000-3-2 EN 61000-3-3 Draft EN 301 489-1 Final draft EN 301 489-3 Draft EN 301 489-17 EN 300 328 EN 303 447 EN 62479
Authorized Signature/Date/ Place:	 Peter J. Chaloner Mowbot Robotic Mowers Henton & Chattell Ltd, London Road, Nottingham NG2 3HW United Kingdom 2018-11-16
Title of Signatory:	Managing Director