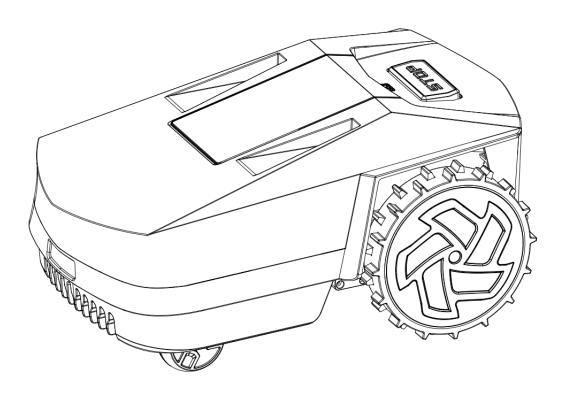


ROBOTIC LAWN MOWER USER MANUAL



THANK YOU FOR PURCHASING MR.GRASS ROBOTIC LAWN MOWER

Please read this manual carefully before using it and keep it for future reference.



INTRODUCTION

MR.GRASS is a robotic lawn mower that runs on battery power and cuts grass automatically, constantly alternating between mowing and charging. Its mowing path is planned, which brings a quick mowing effect. Collecting grass is not necessary.

The working area of the product is within the boundary wire. When the product approaches the boundary wire, the sensors in the product sense it. The front of the product always passes a specific distance from the boundary line before the product turns around.

You can select the operation settings via the buttons on the control panel or in the App.

These symbols can be found on the product. Please study them carefully.



WARNING: Read the user instructions before operating the product.



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



WARNING: Keep a safe distance from the product when operating. Keep your hands and feet away from the rotating blades.



WARNING: Do not ride on the product. Do not put your hands or feet close to or under the product.



A WARNINGS

Fail to observe the following warnings may result in damage to your lawn equipment or cause serious injury.

GENERAL WARNINGS

- The robot is designed for lawn mowing only, it must not be used for any other purpose.
- Read the instructions before operating or servicing. Children aged 8 and over and persons with reduced physical, sensory or mental abilities or lacking experience and knowledge must not use the robot unless they have been supervised or instructed in the safe use of the equipment and are aware of the dangers involved. Children must not carry out cleaning and maintenance without supervision.
- Except for simple routine maintenance described in this manual, the robot should be referred to qualified professional for servicing under any circumstances.
- Installers must follow manufacturer's instructions and comply with national or local installation standards. Under no circumstances will the manufacturer be responsible for any consequences resulting from non-compliance with applicable standards or local regulations.
- Incorrect installation or use of the robot may cause serious damage to property or personal injury.
- The battery can only be charged at the included charging station.
- It is better not to enter the lawn while the robot is mowing.
- Never connect the power supply to an outlet if the plug or cord is damaged.
- Use only original batteries recommended by the manufacturer.
- Never put your hands or feet close to or under the product when it is switched on.
- Lithium-ion batteries may explode or cause a fire if they are disassembled, short-circuited, exposed to water, fire or high temperatures.

WARNINGS ON USE

- The product should only be used with the equipment recommended by the manufacturer.
- Do not install the charging station (including any accessories) under or within 60 cm/24 inches of any combustible material.
- The product should only be operated, maintained and repaired by persons who are fully familiar with its special characteristics and safety regulations. Please read the operation manual carefully and make sure you understand the instructions before using the product.
- It is not permitted to modify the original design of the product. All modifications are at your own risk.
- Check foreign objects such as stones, branches, tools or toys on the lawn. If the blades hit foreign objects
 the blades may be damaged, switch off the product before clearing the obstruction. Inspect the product for
 damage before switching on the product again.
- If the product starts to vibrate abnormally, switch off the product and inspect the product for damage.
- Never touch moving hazardous parts, such as the blade disc, before it has come to a complete stop.
- Do not put any heavy objects on top of the product or its charging station.

SPECIAL CONDITIONS APPLICABLE TO ROBOT

- Temperature range for operation is 0-50°C/32-122°F, for storage is -20-50°C/-4-122°F, for charging is 5-45°C/41-113°F.
- The robot does not guarantee full compatibility between the product and other types of wireless systems such as remote controls, radio transmitters, hearing loops, underground electric animal fencing or similar.
- The metal objects can cause interference with the loop signal which then can lead to a stoppage.
- Do NOT use the robot in thunder storm or stormy weather.
- Do NOT use the product if the keyboard and STOP button does not work.
- The robot would not work if it is outside the boundary.



Table of Contents

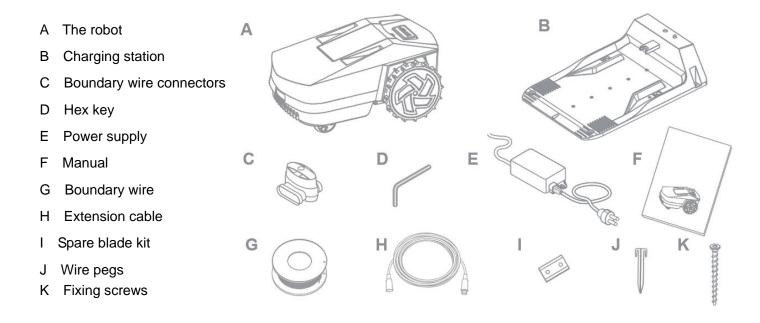
| SECTION 1. PRODUCT OVERVIEWS | 1 |
|--------------------------------------------|---------------------------------|
| 1.1 Packaging content | Chyba! Záložka není definována. |
| 1.2 Part of robot | Chyba! Záložka není definována. |
| 1.3 Technical specification | 1 |
| SECTION 2. INSTALLATION | 3 |
| 2.1 General requirements | 3 |
| 2.2 Installation procedures | 4 |
| SECTION 3. OPERATION | 9 |
| 3.1 Introductions of the control panel | 9 |
| 3.2 Introductions of the mowing mode | 10 |
| 3.3 Instructions for first use | 10 |
| 3.4 General settings | 11 |
| 3.5 To charge the battery | 13 |
| 3.6 Wifi setting | 13 |
| SECTION 4. MAINTENANCE | 16 |
| 4.1 Clean the product | 16 |
| 4.2 Replace the blades | 17 |
| 4.3 Battery | 18 |
| SECTION 5. TROUBLESHOOTING | 18 |
| 5.1 Operation messages | 18 |
| 5.2 Error messages | 19 |
| 5.3 Indicator lamp in the charging station | 20 |
| 5.4 Symptoms | 21 |
| SECTION 6. WARRANTY | 23 |
| SECTION 7 DECAI DATION OF CONFORMITY | 24 |



SECTION 1. PRODUCT OVERVIEWS

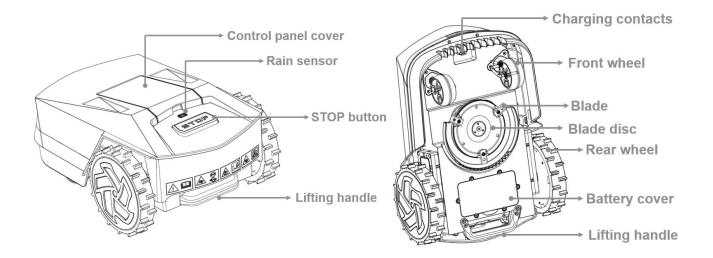
1.1 Packaging content

The following items are included in the packaging of robot, if there is any damage or loss, please contact your dealer.



Note: Different models may have different items in the packing.

1.2 Part of robot





1.3 Technical specification

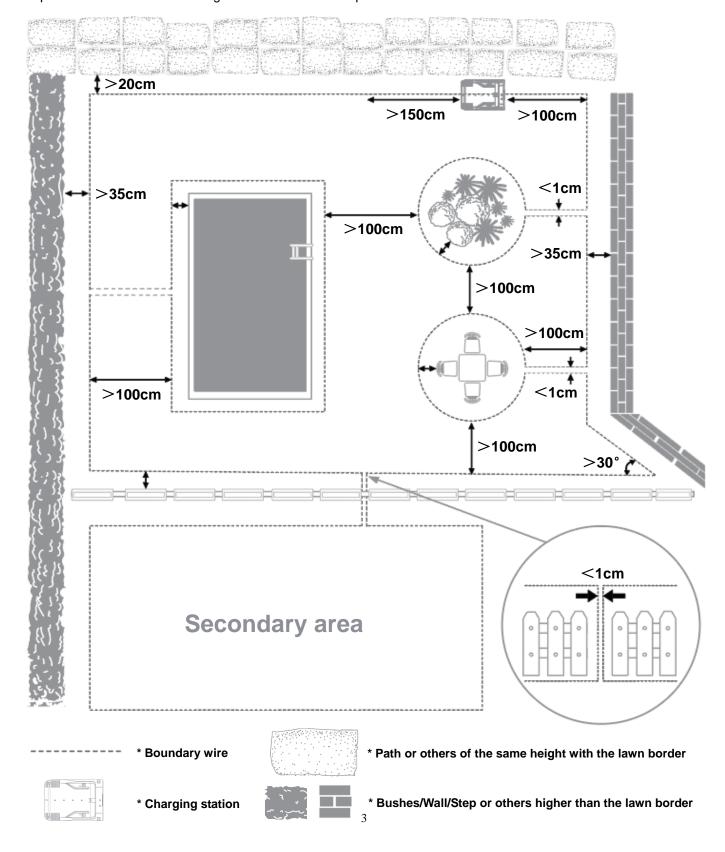
| Model | Al1600 | AI1000 | AI500 |
|---------------------------------|-------------|----------------------|-------------|
| Navigation system | | Al Pilot "3D S" Path | |
| Power System | | | |
| Suggested S-path area, m² | ≤800 | ≤800 | ≤500 |
| Maximum area, m² | ≤1600 | ≤1000 | ≤500 |
| Mowing time, h | 4 | 3 | 1 |
| Battery type | Li-ion | Li-ion | Li-ion |
| Battery capacity, Ah | 6 | 4 | 2 |
| Battery voltage,V | 20 | 20 | 20 |
| Charging current, A | 4 | 4 | 2 |
| Charging time, h | 1.5 | 1 | 1 |
| Cutting System | | | |
| Blade | 3 | 3 | 3 |
| Cutting blade speed, rpm | 2000-3000 | 2000-3000 | 2000-3000 |
| Cutting height min/max, mm | 30-60 | 30-60 | 30-60 |
| Cutting width, mm | 180 | 180 | 180 |
| Moving speed, m/s | 0.35 | 0.35 | 0.35 |
| Max slope | 45% | 45% | 45% |
| Features | | | |
| Sound level, dB(A) | 55 | 55 | 57 |
| APP / Wifi / Bluetooth | Yes | Yes | Yes |
| Optimum working temperature, °C | 0-50 | 0-50 | 0-50 |
| Waterproof level | IPX6 | IPX6 | IPX6 |
| Dimensions, mm | 566*402*259 | 566*402*259 | 566*402*259 |
| Net weight, KGS | 9.7 | 9.7 | 9.4 |
| Extension cable, m | 10 | 10 | Optional |
| Ultrasonic sensor | Yes | Yes | NA |



SECTION 2. Installation

2.1 General requirements

It is recommended to follow these installation instructions carefully to install your robot correctly, the general requirements are shown in the figure and detailed descriptions are as follows.





2.2 Installation procedures

2.2.1 Plan for charging station

The charging station is where robot goes to charge and where it rests in after mowing sessions. You should locate a proper position for it, follow these steps:

Step 1

Place the charging station within reach of 100-240VAC outlet and in the shade (if possible).

Step 2

① Random path

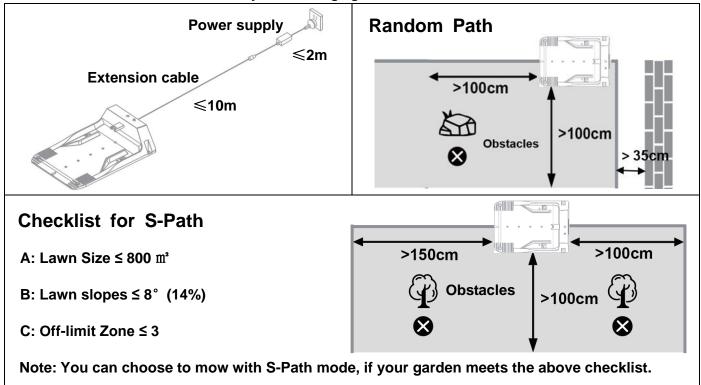
For the boundary wire leaving the charging station: at least 1.0m, and no slopes within 1m.

2 S-path

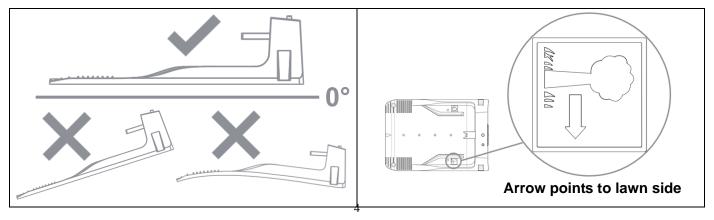
For the boundary wire leaving the charging station: at least 1.5m, and no slopes within 1m.

For the boundary wire end in the charging station: at least 1.0m.

Note: No obstacles within 1m vertically of the charging station



The charging station must be placed on flat, level ground to ensure effective docking and the arrow of marked Lawn side must point to the lawn when install charging station.

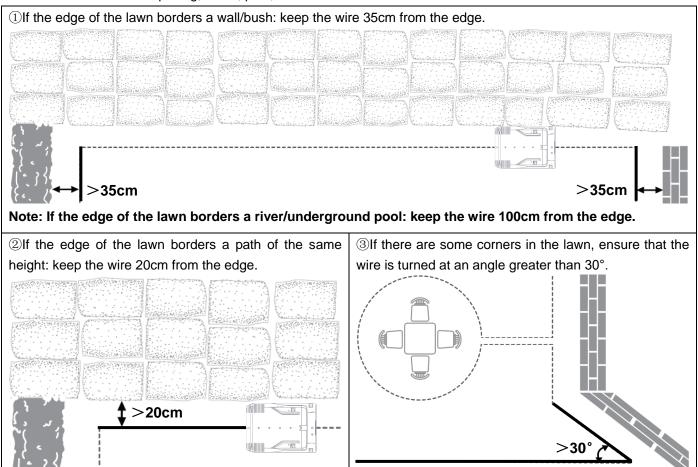




2.2.2 Plan for boundary wire

The boundary wire should be put as a loop around the work area. Sensors in the robot sense when the robot approaches the wire, then selects another direction.

The boundary wire must be placed at a certain distance from the edge of the lawn. This distance varies depending on what's on the other side of the edge. Different parts of your lawn may have different boundary situations: such as stone paving, fence, pool, etc.



2.2.3 To create islands

Islands can be used for:

A. Areas that affect the performances of the robot, such as slopes greater than 25° (45%).

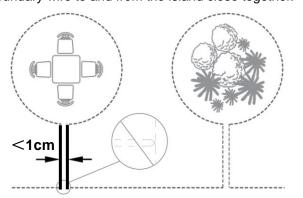
B. Pools, dining tables and other areas where robot is prohibited to enter in.

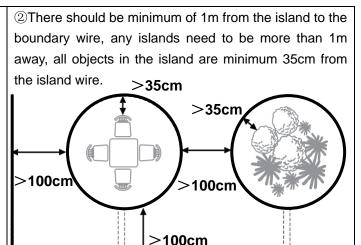
Some obstacles like trees are resistant to collisions, robot will collide with the trees and select a new direction.

Find these areas and fence them off with boundary wire.



①The boundary wire is a single loop that starts at the charging station, put the boundary wire to and around the obstacle to make an island, and put the 2 sections of boundary wire to and from the island close together.

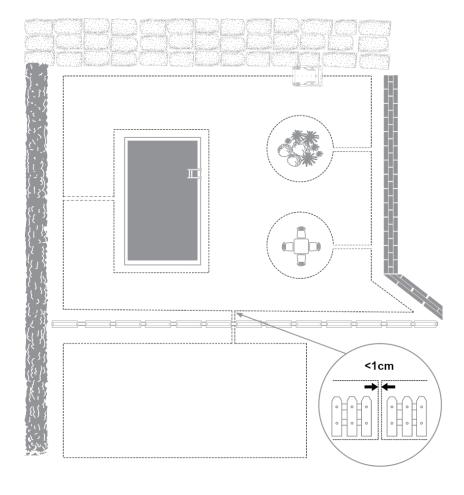




2.2.4 To create secondary areas

Create several secondary areas if the work area has 2 or more areas that are not connected with a wide passage. The work area with the charging station is the main area, others are the secondary areas. Even though there are several separate areas, there will still only be one boundary wire loop.

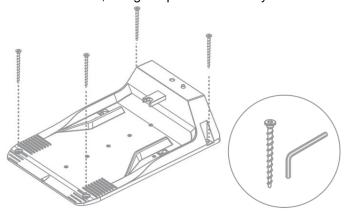
Note: Robot should be manually moved between the main area and the secondary areas.



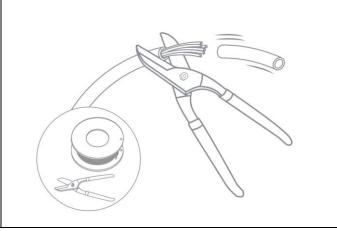


2.2.5 Get to install

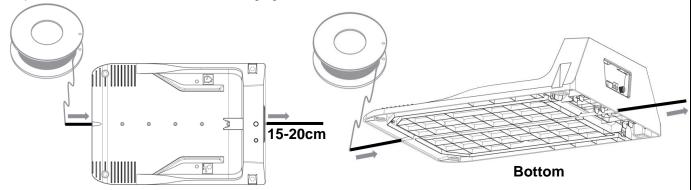
①Secure the charging station to the ground with the included screws, using the provided hex key.



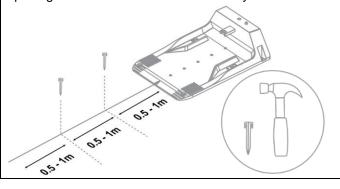
②Strip the start of the wire with a wire stripper.



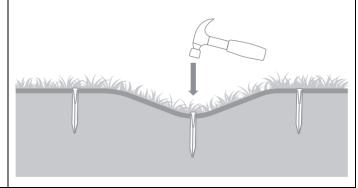
③Insert the stripped start into the hole at the bottom of charging station and pass it through the charging station, keep 15-20cm at the other side of the charging station.



①Lay the boundary wire as planned, space the pegs roughly 0.5-1m apart. For corners, turns and dips, spacing should be reduced as necessary.

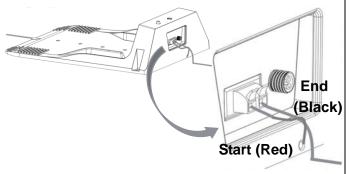


⑤Hammer the pegs all the way to the ground to no gap between the tight wire and the ground.





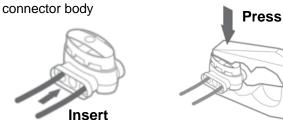
©Complete the boundary wire loop and place the start of the wire into the red clamp of the charging station and the end into the black clamp.



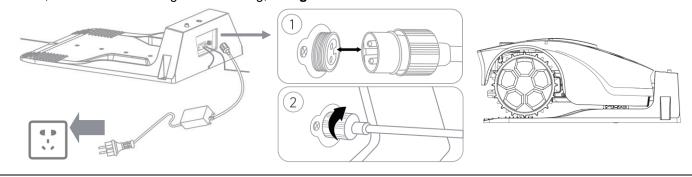
7Wire Connectors can be used for:

A. Need extra boundary wire to complete the installation.

B. Fix boundary wire or modify the original boundary wire installation. Insert the broken wires and press the connector until the blue clamp is fully seated into the



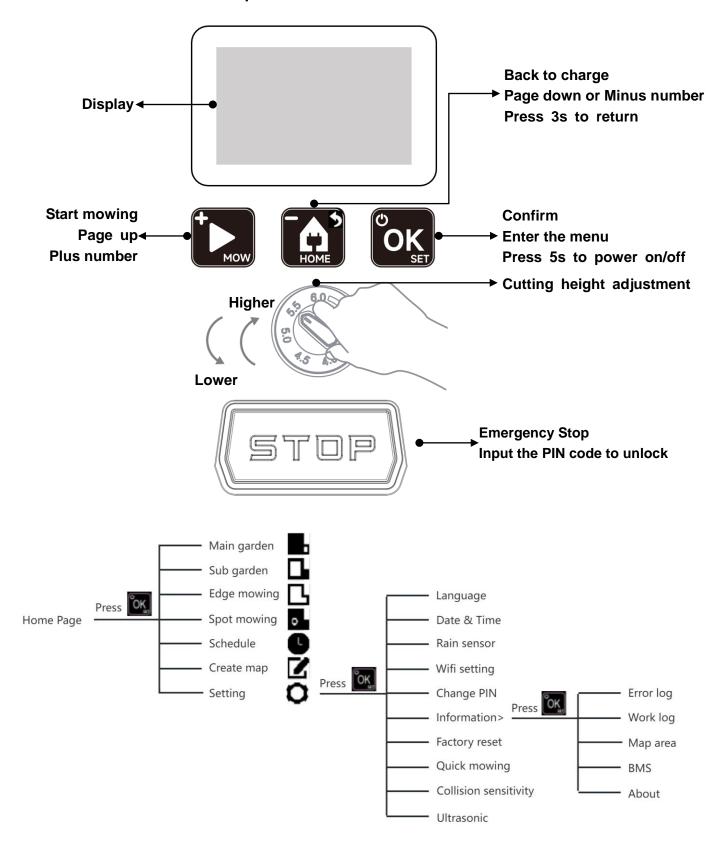
®Align the notch on charging station and power supply, tighten them, then connect to 100-240VAC outlet. The indicator on charging station shows green solid, then the connection is successful. Put your robot on the charging station, the indicator shows green breathing, **charge it at least 70% before use**.





SECTION 3. OPERATION

3.1 Introductions of the control panel





3.2 Introductions of the mowing mode

3.2.1 Main Garden

- 1.Create a map of your lawn (First use). Follow the boundary wire for a cycle and divide your lawn into a number of 4*6m zones.
- 2.Mow zone by zone at a 90° angle. The robot will go to an adjacent area after completing the last **4*6 m** area.
- 3. Mow at 135° and 45° angle after 90° angle is completed.
- 4. Mows once along the boundary and then automatically returns to the charging station.

3.2.2 Sub garden

Robot will mow in a random path for 2h, or other user-defined times for 1h, 2h, 3h by APP setting.

3.2.3 Edge mowing

Robot mows grass along boundary once and then automatically returns to the charging station.

3.2.4 Spot mowing

Robot will mow in a spiral movement from its location (except the charging station), it won't stop until spiraling for 3mins or forming a circle with a radius equal to 0.75m and then continues the original mode as you set.

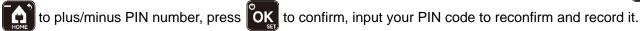
3.2.5 Turbo/Smart/Silent mode

Robot mows in a higher/normal/lower cutting motor speed, Turbo for tough lawn condition with higher or thicker grass, Smart for dynamic mowing and Silent for daily lawn care.

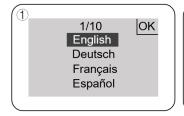
3.3 Instructions for first use

- 3.3.1 Power on the robot
- 1.Press OK for 5s until the screen lights up.
- 2.Select your language. Press to select up/down, press ok to confirm.
- 3.Set date & time. Press to plus/minus the number of "Year", press to confirm. Use the same method to complete for month/year/ hour/minute.
- 4.Set your PIN code for safety. The PIN code is a combination of 4 numbers between 0 and 9, press



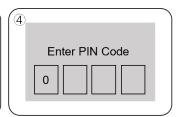


Note: If you have forgotten your PIN code, please contact your dealer.









3.3.2 Set your schedule

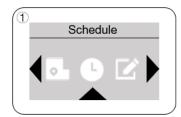
10

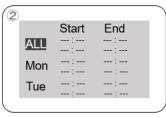


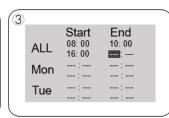


2.Following the same method as date & time, press to select the day and time to schedule.

3. You can set two periods a day at most.









- 3.3.3 Set the cutting height and start mowing
- 1. Adjust the cutting height to 6.0cm to create map successfully.
- 2.Press and ok, robot starts moving in random mode.
- 3.you can also press of and select for or robot starts creating map, then mow in S-path mode.
- 4. When robot first works in S-path mode, it will follow the boundary wire for a cycle to create a map of your lawn. With the map, robot will mow in regular path.

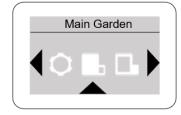
Note: If the grass is tall or thick, mow the edge before creating map.

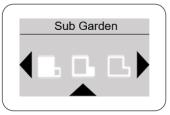
Please do not press STOP when robot saving map on the charging station.

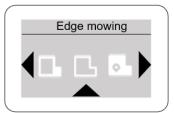
3.4 General settings

- 3.4.1 Select mowing mode
- 1.Press OK to the menu page, press to select right/left, press OK to the mowing power page, press OK to select up/down, press OK to start mowing.
- 2.Press and ok, robot will mow in random mode by default on first use.
- 3.In main garden with a charging station, with a map, press and ok, robot will mow in S-path mode; Without a map, robot will mow in random path.
- 4.In secondary area (without charging station), robot can only mow in random mode. If you select S-path, the robot will mow for a while and then report error message because it can't detect the signal from charging station.
- 5.After Main garden/Sub garden/Edge Mowing mode finished, robot returns to the charging station automatically.
- 6. After Spot Mowing mode finished, robot continues the original mode as you set.
- 7. Main Garden mode/Create map/Quick mowing mode are ineffective in the secondary area.





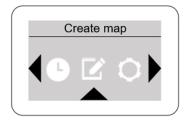


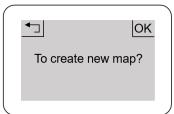


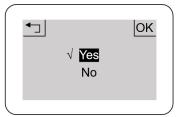


Note: Model of T1 robot does not have the last page.

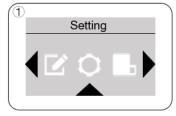
- 3.4.2 Recreate your map manually
- 1. When the boundary is replanned or robot is moved to a new lawn, original map would be invalid, robot must create another map to continue mowing in regular path.
- 2.Press OK to the menu page, press to select , press OK to create another map.
- 4. The blade disc will not rotate when robot is creating a map.



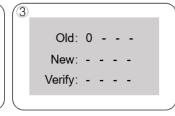


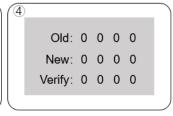


- 3.4.3 Change PIN code
- 1.Press ok to the menu page, press to select , press ok to the setting page, select and enter the "Change PIN" page.
- 2. Press to plus/minus the number of old and new PIN, press to confirm, verify the new PIN by repeating it.





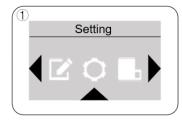


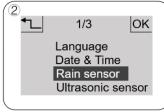


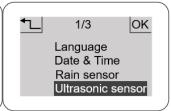
- 3.4.4 Switch off the Rain and Ultrasonic sensor
- 1.Press ok to the menu page, press to select on, press ok to the setting page, select and enter the "Rain sensor" / "Ultrasonic sensor" page.
- 2.Select "Off" / "On" to switch off / on the sensor.
- 3. Robot will keep working during rainy days if the "Rain sensor" is in "Off".

Note: The ultrasonic sensor will automatically switch to the "Off" state when the robot is cutting edge / returning / creating a map / reposition and will switch back when it is finished.



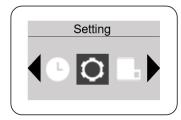


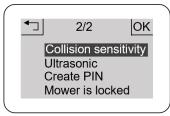


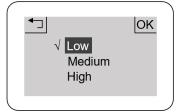




- 3.4.5 Set the collision sensitivity
- 1.Press ok to the menu page, press to select on, press ok to the setting page, select and enter the "Collision sensitivity" page.
- 2.Select "Low" / "Medium"/ "High" to set the collision fore, the default setting is "Medium".







3.5 To charge the battery

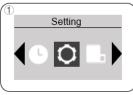
- 1.Press , robot will follow the boundary wire to the charging station and recharge to 100%.
- 2. When battery is low, robot will automatically return to the charging station to recharge and complete the remaining tasks when the battery is over 90% charged.
- 3.The LED status of the charging station is a breathing light when charging is in progress and becomes a solid light when charging is complete.

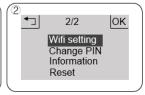
3.6 Wifi setting

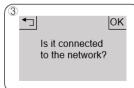
- 3.6.1 Wifi setting on robot and APP installation
- 1.Press ok to the menu page, press to select on, press ok to the setting page, select and enter the "Wifi setting" page.
- 2.Press OK and select "Yes", the robot will enter matching mode.
- 3.Confirm that you're connected to 2.4GHz Wi-Fi and your Bluetooth is on, open the "InverGo" APP to search device and go matching.

Note: Scan the code to download the "InverGo" APP in iOS App Store/ Google Play Store.





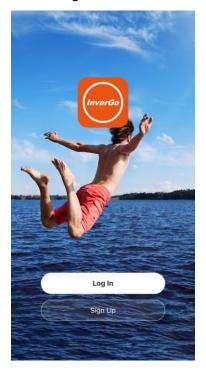




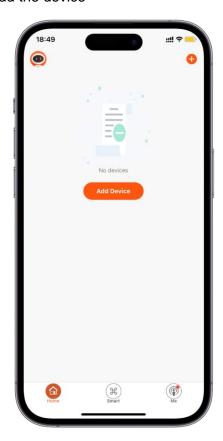




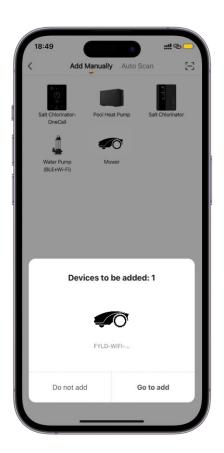
3.6.2 Account Registration



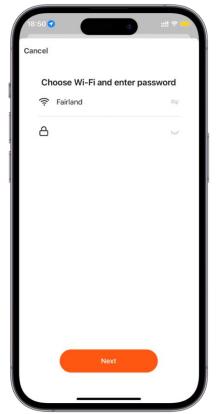
3.6.3 Add the device

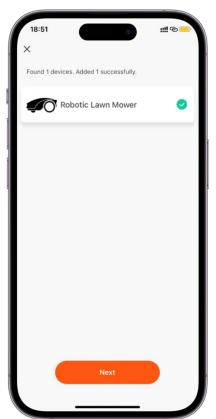


Mobile Number/Email I AgreeUser Agreement and Privacy Policy Get Verification Code Enter Verification Code A verification code has been sent to your email 1062662394@qq.com Resend (56s) Set Password Password Use 6-20 characters with a mix of letters and numbers







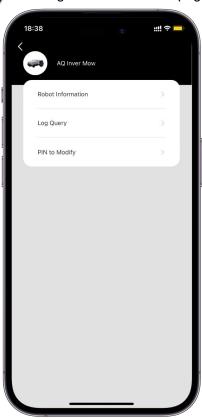


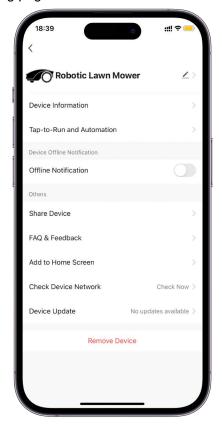
Note: Find the mower and click "Add" within 2minutes, or repeat 3.6.1 to find it again.

If mower add fails, please check if WIFI is 2.4GHz or use personal hotspot to reconnect.

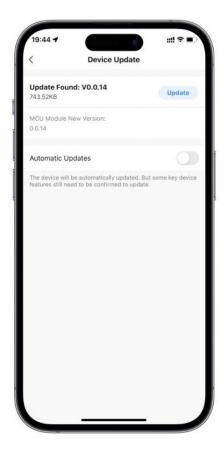
3.6.4 Robot OTA upgrade

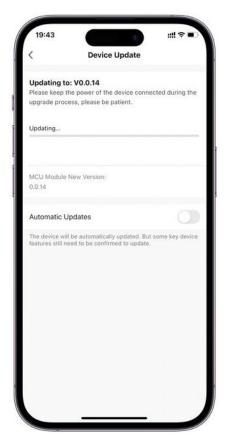
Click on the right corner of home page to enter setting page.









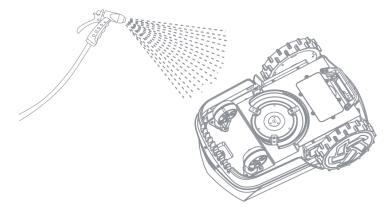


Note: Robot must be at the charging station when OTA upgrading.

SECTION 4. MAINTENANCE

4.1 Clean the product

- 1. The robot and charging station are waterproof to IPX6 and you can use the hose to clean all their surfaces.
- 2. Hose cleaning is recommended as a final step for better cleaning results.
- 4.1.1 Bottom
- 1. Switch off the robot and clean with a brush and hose.
- 2.Clean the blade disc and chassis with a dish brush and check that the blade disc and blades rotate freely.



4.1.2 Wheels

Remove mud and grass from the wheels with a brush and a water hose to ensure good wheel traction.

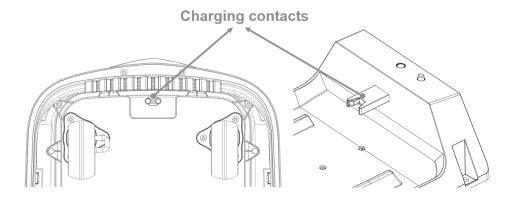


4.1.3 Body

- 1. Use a cloth and a water hose to clean the body of the product.
- 2. Please do not use solvents or polishers to avoid potential damage.

4.1.4 The charging contacts

- 1.Clean the contact paddles on the charging station and the charging contacts on the robot with a cloth and a water hose.
- 2.Periodically remove any build-up of grass clippings or debris around the contact paddles and the charging contacts to ensure the robot successfully charges each time.

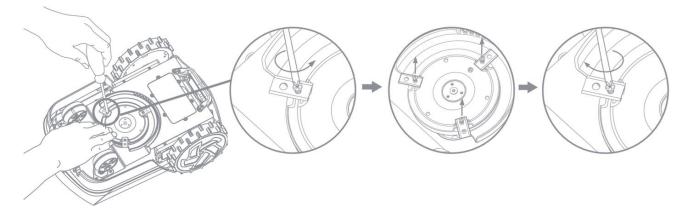


4.2 Replace the blades

- 1.Switch off the product.
- 2. Turn the robot upside down and put it on a soft and clean surface to prevent scratching the product.
- 3.Use a straight slot or cross-tip screwdriver to remove the screws.
- 4. Remove the worn blade and attach the new one.
- 5.Use a straight slot or cross-tip screwdriver to tight the screws.
- 6. Make sure that the blades can pivot freely.

Note: The blades have one hole for one use and come with two holes for double the life.

Each cutting blade will last up to at least 4 months when the robot is programmed to mow every day, always check to see if the blades are chipped or damaged and replace them if necessary.





4.3 Battery

- 1.It is recommended that always keep the battery in a cool dry place and replace it by your dealer for safety.
- 2. The life-span of battery depends on hours of usage and the length of use per day.
- 3.If the robot is not used for a long time, it is recommended to fully charge it at least every three months to protect the battery

SECTION 5. TROUBLESHOOTING

5.1 Operation messages

| Message | Cause | Robot action |
|------------------------|-------------------------------------------------|-------------------------------------------------|
| | The battery is less than 20% | Return to the charging station to recharge |
| Low battery | The battery is less than 70% when | |
| | scheduled task begins or start mowing | Continue charging until the battery is over 70% |
| | manually | |
| Mower is not in | Start Main garden mode but not in the | Return to the charging station to start Main |
| station | charging station | garden mode |
| Place inside the | Start Spot mowing mode in the charging | Return to the charging station after 3s |
| boundary and retry | station or boundary wire | Tretuin to the charging station after 35 |
| Spot mowing | Robot has finished Spot mowing mode | Standby after 3s |
| finished | Tobot has imished Spot mowing mode | Standby after 35 |
| Charge to work | Charging is paused manually | Standby after 3s |
| paused | Charging is paused manually | Standby after 33 |
| Irrigation time | Start mowing in irrigation time | Back to upper page after 3s |
| Duration at least | Duration less than 30mins between two | Dock to unner no go offer 20 |
| 30mins | tasks | Back to upper page after 3s |
| Invalid time | Task ends earlier than the start time | Back to upper page after 3s |
| Loading map | Robot is loading map | Back to upper page after 3s |
| Saving map | Robot is saving map | Back to upper page after 3s |
| Raining now, returning | Rain sensor is triggered | Return to the charging station after 3s |
| Rain sensor | B : | B 11 |
| activated | Rain sensor is still triggered after rain delay | Back to upper page after 3s |
| Update fail | Firmware updating is failed | Back to upper page after 3s |
| Please close the hatch | Start mowing | Back to upper page after 3s |



5.2 Error messages

| Message | Cause | Action |
|------------------------------------|-----------------------------------------------|----------------------------------------------------|
| | | If the LED on the charging station is not lit, it |
| | The power supply is damaged or not | shows that there is no power. Examine the |
| | connected | power outlet connection, reconnect or replace it |
| | | If the LED on the charging station is flashing |
| No lean aireal | The boundary wire is broken or not | green, it shows that there is a break on the |
| No loop signal | connected to the charging station or loose | boundary wire or loose contact between them, |
| | contact between them | find the break and repair it with boundary wire |
| | | connector, or reconnect them tightly |
| | Deletter for for the barrier size | Check that the working area does not exceed |
| | Robot too far from the boundary wire | the area capacity and reduce the working area |
| | Grass or other objects entangled in the left | Check the left rear wheel and remove grass or |
| Left motor blocked | rear wheel | other objects |
| Right motor | Grass or other objects entangled in the right | Check the right rear wheel and remove grass or |
| blocked | rear wheel | other objects |
| Cutting motor | Grass or other objects are entangled in the | Check the left rear wheel and remove grass or |
| blocked | blade disc | other objects |
| Left motor | Potential problem with the connection of the | Restart the robot. If the problem persists, please |
| disconnected | left motor to the main board | consult your approved service dealer |
| Right motor | Potential problem with the connection of the | Restart the robot. If the problem persists, please |
| disconnected | right motor to the main board | consult your approved service dealer |
| Cutting motor | Potential problem with the connection of the | Restart the robot. If the problem persists, please |
| disconnected | cutting motor to the main board | consult your approved service dealer |
| Left motor over | Grass or other objects entangled in the left | Check the left rear wheel and remove grass or |
| current | rear wheel | other objects |
| Right motor over | Grass or other objects entangled in the right | Check the right rear wheel and remove grass or |
| current | rear wheel | other objects |
| Cutting motor over | Grass or other objects are entangled in the | Check the cutting motor and remove grass or |
| current | blade disc | other objects |
| Battery discharge | | Robot will start mowing again when the |
| low temperature | Battery temperature is too low | temperature is between the set limits and the |
| - | Battery temperature is too high | schedule setting allows it to run |
| Battery discharge over temperature | | Please ensure that the charging station is |
| | | placed in a sun protected area |
| Battery discharge | | Restart the robot. If the problem persists, please |
| over current | The power supply unit is incorrect or faulty | consult your approved service dealer |
| Battery damage | Wrong type of battery | Use only original batteries recommended by the |
| | | manufacturer |
| Battery low voltage | The battery has not been used for a long time | Recharge the battery |
| Mower tilted | Tilt of the robot over 25° and less than 55° | Move the robot to a flat area |



| Mower lifted | One or two front wheels are lifted up | Move the robot to a flat area |
|-----------------------|------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| Mower rollover | Tilt of the robot over 55° | Move the robot to a flat area |
| Mower trapped | Trapped in the charging station over 3mins | Get robot out of trouble manually |
| | Duration of collision over 10 seconds or three times | Remove obstacles and restart the robot |
| Outside working area | Robot runs out of the working area when mowing | Move the robot to working area |
| Create map fail | There are some objects on the boundary or charging station | Remove obstacles |
| | Slipping during creating the map | Cut the thick and high grass on the boundary wire manually |
| | Working area beyond the area capacity | Reduce the working area |
| EMS sensor disconnect | | |
| IMU sensor failure | Detection methods on the DOD beard | Restart the robot. If the problem persists, please consult your approved service dealer |
| Left Loop sensor | Potential problem on the PCB board | |
| failure | | |
| Right Loop sensor | | |
| failure | | |

5.3 Indicator lamp in the charging station

| Light | Description | |
|-----------------|--------------------------------------------------------------------------|--|
| Green breathing | Robot is charging in the charging station | |
| Green solid | Robot is fully charged in the charging station/The loop signal is normal | |
| Green flashing | The loop signal is unusual | |
| Red flashing | New loop signal is created successfully | |



5.4 Symptoms

| Symptoms | Cause | Robot action |
|-------------------------------------|----------------------------------------------------|-------------------------------------------------|
| LED light on charging | | Check that the charging station is correctly |
| station does not light | No power supply | connected to the charger and that the charger |
| up | | is connected to a suitable power supply |
| Green light flashing | | Check that the boundary wire is correctly |
| on the charging | The boundary wire is broken or not | connected to the charging station and that |
| station | connected, or start end reversed | there are no breaks in the boundary wire |
| Robot turns on, but | | This is normal: when robot is creating map / |
| the blade disc does | Robot is creating map / returning to | returning to charging station , the blade disc |
| not rotate | charging station | does not rotate |
| | | Check the blades and replace if damaged, |
| Robot vibrates | Blade disc unbalanced, blades may be | remove debris and foreign objects from the |
| TODOL VIDIALOS | damaged | blades and blade disc |
| | | Sidde and Sidde dies |
| | Robot works too few hours a day | Increase the mowing time |
| | T | Change all the blades so that maximum |
| | The blades are dull and not sharp | cutting efficiency is achieved |
| Grass is being cut | The cutting height is set too low for the | Raise the cutting height and then gradually |
| unevenly | length of the grass | lower |
| | Grass or other objects entangled in the blade disc | Check the blade disc and remove any grass |
| | | or other objects that might prevent the disc |
| | | from rotating |
| Robot is in its working | | |
| area and the | | |
| boundary wire is | The boundary wire ends are clamped | Reverse both ends of the boundary wire and |
| connected, but the | incorrectly | reconnect to the charging station |
| display shows | , | |
| 'Mower is outside' | | |
| | Poor connection caused by debris on | Clean the contact paddles on the charging |
| Charging time well in | the charging station | station and the charging contacts on the robot |
| excess of rated | | Place the charging station in a sun protected |
| charging time | The battery temperature is too high | area or wait until the temperature down |
| | | |
| Robot mows for shorter periods than | The battery may be exhausted or old | Replace battery |
| | Grass or other foreign object blocks the | Remove and clean the blade disc |
| usual between | blade disc | Nemove and clean the blade disc |
| charges | Dull blades, more energy is needed | Penlace the blades |
| | when cutting the grass | Replace the blades |
| Robot does not | Charging station unaven | Use a level to ensure that the charging station |
| interface properly | Charging station uneven | is on level ground |
| with the charging | Poor connection caused by debris on | Clean the contact paddles on the charging |
| station | the charging station | station and the charging contacts on the robot |



| | Foreign obstacles, such as branches may | Remove foreign objects from the bottom of |
|-----------------------------------------------|---------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Rear wheels slipping or repeatedly slipping | be get stuck under robot | robot |
| | The lawn is too wet | Wait until lawn is dry |
| Robot runs outside the boundary wire | Electromagnetic interference from low-voltage cable in a coil or below the charging station | Remove the cable and restart the robot |
| Robot system crashes when charging or standby | Software or display fault | Restart the robot. If the problem persists, please consult your approved service dealer |
| Robot shuts off when | Robot fails to charge due to over temperature protection and is powered off | Place the charging station in a sun protected area or wait until the temperature down |
| docking in the charging station | Poor connection caused by debris on the charging station | Check the LED light on the charging station and the connection between the contact paddles located on the charging station and the charging contacts on the mower |



SECTION 6. WARRANTY

Mr.Grass s.r.o. warranty covers Al2000/Al1600/Al1000 models functionality for a period of 2 years from date of purchase, 3 years with mower registration. Warranty covers serious faults relating to materials or manufacturing faults. Within the warranty period, we will replace the product or repair it at no charge if the following items are met:

The robot and the charging station may only be used in compliance with the instructions in this Operator's Manual. This manufacturer's warranty does not affect warranty entitlements against the dealer/retailer.

End-users or non-authorized third parties must not attempt to repair the product.

Examples of faults which are not included in the warranty:

Damage caused by water seepage from using a high-pressure washer, or from being submerged under water, for example when heavy rain forms pools of water.

Damage caused by lightning.

Damage caused by improper battery storage or battery handling.

Damage caused by using a battery that is not a MR.GRASS / AQUARK original battery. Damage caused by not using AQUARK original spare parts and accessories, such as blades and installation material.

Damage to the loop wire.

Damage caused by non-authorized changing or tampering with the product or its power supply.

The blades and wheels are seen as disposable and are not covered by the warranty. If an error occurs with your AQUARK product, please contact MR.GRASS / AQUARK customer service for further instructions. Please have the receipt and the product's serial number at hand when contacting MR.GRASS customer service.



SECTION 7. DECLARATION OF CONFORMITY

AQUARK TECHNOLOGY LIMITED, RM D 10/F TOWER A BILLION CTR1 WANG KWONG RD KOWLOON BAY KL, declares that the robotic lawn mowers MR.GRASS/ISPEED comply with the requirements of the COUNCIL'S DIRECTIVE:

Product Name: MR.GRASS ROBOTIC LAWN MOWER

Product Model Numbers: Al1600, Al1000, Al500

The object of the declaration described is ensure that the models in conformity with the relevant Union harmonisation legislation:

Radio(RED)directive 2014/53/EU
Electromagnetic compatibility directive 2014/30/EU
LVD Directive 2014/35/EU
Directive 2006/42/EC on Machinery
RoHS directive 2011/65/EU and amending directive ((EU)2015/863)

Complies with the following harmonised standards:

EN IEC 62311: 2020 EN 301 489-1 V2.2.3 EN 301 489-17 V3.2.6 EN 55032:2015/A11:2020 EN 55035:2017/A11:2020

EN 300 328 V2.2.2

EN 60335-1:2012/AC:2014+A11:2014+A13:2017+A1:2019+A14:2019+A2:2019+A15:2021

EN 50636-2-107:2015/A1:2018+A2:2020+A3:2021

EN 62233:2008 EN IEC 63000:2018

 ϵ

(Authorized representative for AQUARK TECHNOLOGY and responsible for technical documentation.)

AQUARK TECHNOLOGY LIMITED RM D 10/F TOWER A BILLION CTR1 WANG KWONG RD KOWLOON BAY KL