



OPERATION MANUAL

GFORCE

**GARDEN
PRODUCTS
ROBOTIC
MOWER**

GR-XP800



WARNING!
Read this manual carefully before using
your robotic mower
and keep it in a safe place for future
reference.



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1. INTENDED USE

This Robotic Mower is designed for cutting grass on lawns. It is designed for domestic use and is not designed for commercial, trade or industrial use.

This Robotic Mower **MUST NOT** be used by children and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge unless they have been given supervision or instruction concerning the use of the Robotic Mower by a person responsible for their safety.

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

2. DESCRIPTION OF PARTS

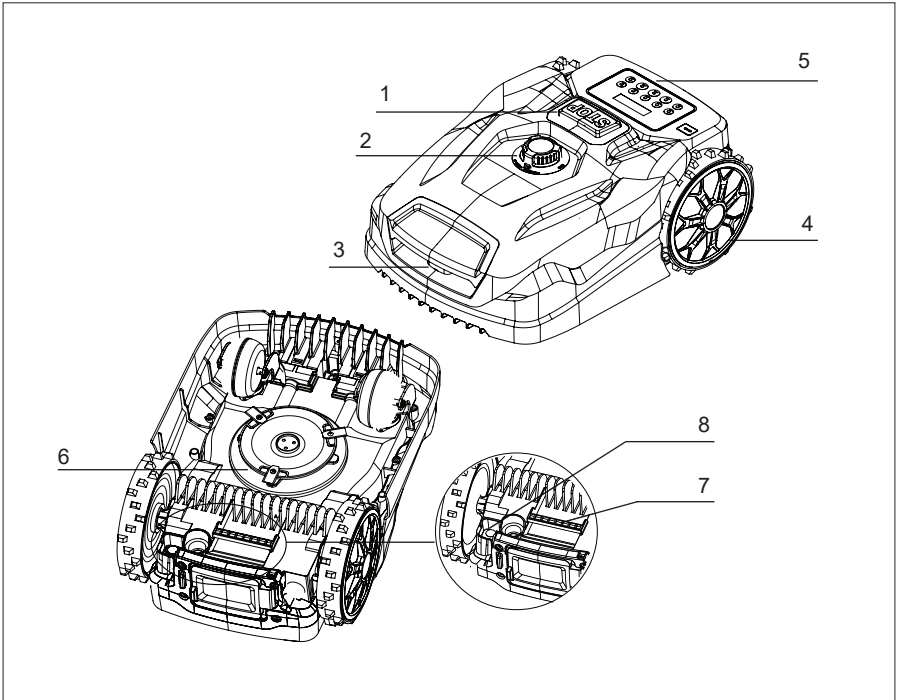


Fig. A

1. STOP button
2. Cutting height adjustment dial
3. Charging inlet
4. Rear wheel
5. Control panel
6. Blade disc
7. Carrying handle
8. Power switch button

3. PACKAGE CONTENT LIST

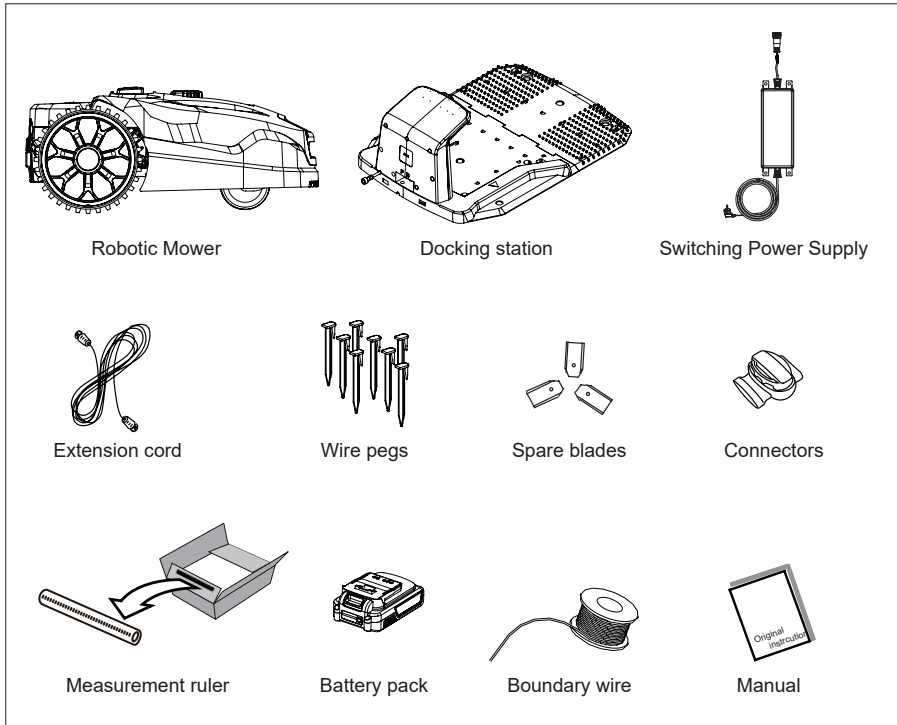


Fig. B

- Remove all packing materials
- Ensure all parts on the content list are present
- Check the appliance and all accessories for transportation damages

















WARNING! Packaging materials are not toys! Children must not play with plastic bags! Danger of suffocation!












If any parts are missing or damaged, please contact your dealer.

4. WARNING SYMBOLS

Warning symbols on the Robotic Mower	
	Denotes risk of personal injury or damage to the tool
	Read the instruction manual before use
	Attention!
	Read the instruction manual before use
	WARNING - Beware of thrown objects,
	keep bystanders away
	Keep hands and feet away from the blades
	Do not ride on the Robotic Mower
	WARNING - Disconnect battery before maintenance
	Do not expose to rain
	Sound power level label
	Class III equipment
	Australian Regulatory Compliance Mark
	Dispose of appliances according to the regulations and requirements of your local council

WARNING SYMBOLS

Warning symbols on the charger	
	Double insulation
	For indoor use only
	Pole orientation
Ta: 45 °C	Rated maximum ambient temperature 45°C
	SMPS (Switch mode power supply unit) incorporating a short-circuit-proof safety isolating switching power supply
	SMPS (Switch mode power supply unit)
Warning symbols on the battery	
	Do not subject the battery to strong sunlight over long periods and do not leave it on a heater (max. 45 °C)
	Do not dispose of batteries in water
	Do not litter to fire
 Li-Ion	Dispose of rechargeable batteries according to the regulations and requirements of your local council

5. SAFETY WARNINGS

1. 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 Robotic Mower.
2. Children should be supervised to ensure that they do not play with this Robotic Mower.
3. The operator or user is responsible for accidents or hazards occurring to other people or their property.
4. Ensure the correct installation of the perimeter boundary system as instructed.
5. Periodically inspect the area where the Robotic Mower is to be used and remove all stones, sticks, wires and other debris which could cause damage to the Robotic Mower or be unsafe.
6. Never leave the Robotic Mower unattended while other people, children and pets are in the area.
7. Do not put hands or feet near or under rotating parts.
8. Never pick up or carry the Robotic Mower while the motor is running.
9. Take the battery out before clearing any blockages, checking, cleaning or maintaining the Robotic Mower.
10. Do not put anything on top of the Robotic Mower or its docking station.
11. Do not use the Robotic Mower with defective housing and blades.
12. Avoid operating the Robotic Mower in wet grass.
13. Keep all nuts, bolts and screws tight to ensure that the Robotic Mower is in a safe working condition.
14. Replace worn or damaged parts for safety.
15. Do not place the docking station under tall trees to prevent damage by lightning.

6. PREPARING YOUR LAWN FOR THE ROBOTIC MOWER

We recommend creating a drawing of your lawn, including all obstacles and how these should be protected. This makes it easier to find a good position for the docking station and correctly place the boundary wire around your garden perimeter to protect bushes, flower beds, etc. You will also need some tools, like a hammer and wire cutters, plier, or scissors.

Please read the whole chapter before preparing your lawn for the Robotic Mower.

Pre- cut your lawn

Cut your lawn to a height less than 60 mm.

Cutting limitations

The Robotic Mower is equipped with collision sensors. These sensors detect all rigid and solid obstacles that are higher than 100 mm, such as walls, fences, and garden furniture.

When the sensors detect an obstacle, the Robotic Mower stops, backs up, and then continues mowing in a different direction.

It is recommended to use the boundary wire as a long-term solution to protect the obstacles.

Lay the boundary wire so that the Robotic Mower is not more than 20 m away from the boundary wire at any point in the mowing area.

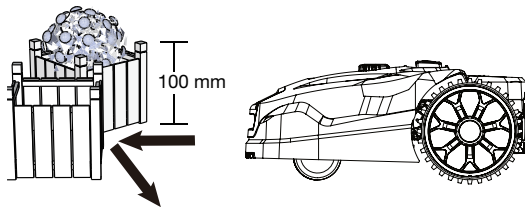


Fig. 1

Trees

The Robotic Mower treats trees as common obstacles, but if the roots of the tree are exposed and lower than 100mm, this area should be excluded using boundary wire to protect the root, the mower's cutting blades and rear wheels from damage.

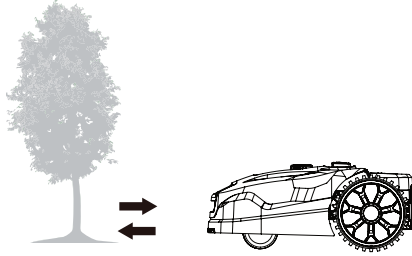


Fig. 2

Stones

We recommend clearing the lawn of small stones that are less than 100 mm high and stones with a round or sloped edge. The Robotic Mower may try to climb over those stones instead of recognising them as obstacles. A Robotic Mower getting stuck on such a stone will require the user to restart the mowing and the stones may damage the blades.

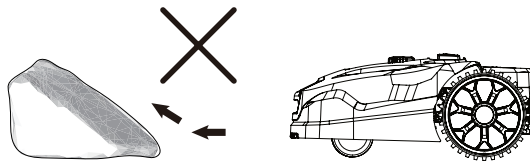


Fig. 3

Slopes

The Robotic Mower can navigate slopes up to a maximum of 40% incline. The boundary wire should not be laid across on a slope with a gradient that is more than 10%.

Leave a strip of at least 2 m between the boundary wire and a slope with a gradient that is more than 10%. Otherwise, when the Robotic Mower is moving downhill, it may run at a faster downhill speed and run over the boundary wire, especially on wet and slippery ground.

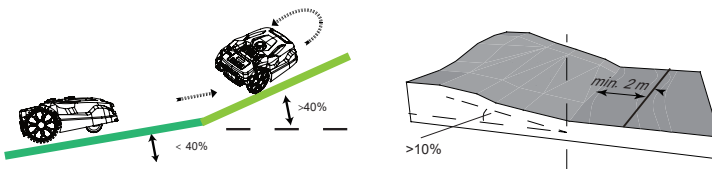


Fig. 4

Paths, driveways, and roads

If there is an elevated driveway on your lawn, it is advised to keep it outside the boundary wire. Please allow a safety distance of 30 cm between the elevated driveway and the boundary wire.

If the driveway and the lawn are at the same level, you can use the boundary wire to create a corridor so that the Robotic Mower can cross the driveway and reach the other side.

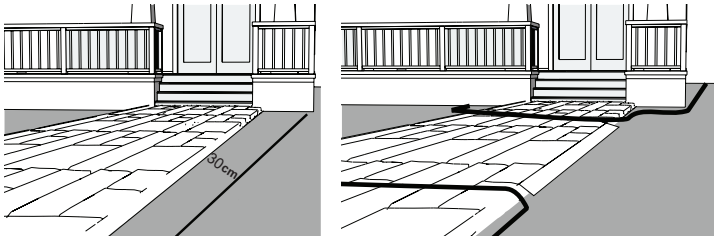


Fig. 5

Uneven lawn surfaces

Uneven lawn areas may cause the blades to touch the ground. We recommend levelling the lawn before using your Robotic Mower or excluding uneven areas with the boundary wire.

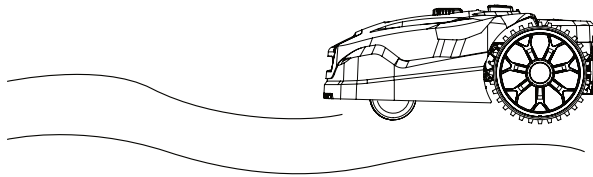


Fig. 6

Flowerbeds

There are two ways to exclude flowerbeds from the cutting area.

- 1) Keep the distance between the parallel boundary wires wider than 5 cm. The Robotic Mower will recognise the boundary wires as an ordinary obstacle. During cutting, it will "bounce" off as usual. When returning to the docking station, It will follow the boundary wire around the flower bed and back to the docking station.

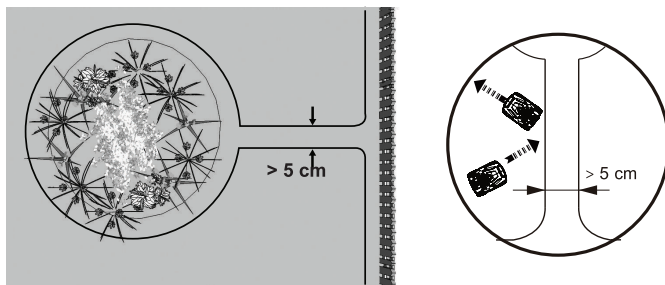


Fig. 7

- 2) Keep the distance between the parallel boundary wires less than 5 cm. The Robotic Mower will not recognise the boundary wires as an obstacle and it will travel across them.

Place an obstacle e.g. a large rock or pole at position A. Position A must be on a flat and level area (at least 1 m x 1 m) without any slopes. When the Robotic Mower returns to the docking station, it will exit the circle at this point and it will not circle around the flower bed.

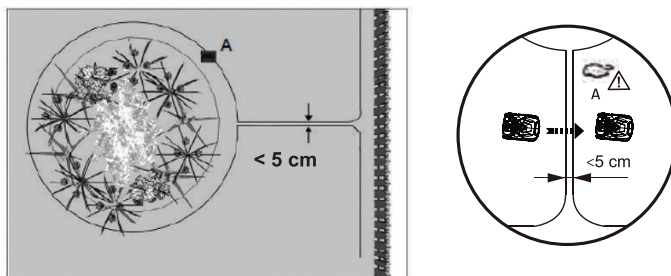


Fig. 8

Narrow corridor

If you need to create a narrow corridor to connect two patches of lawn within the boundary, the corridor should be at least 2 m wide and max. 8 m long.

If a corridor is too narrow or too long, the Robotic Mower might not be able to navigate it and travel from one end to the other.

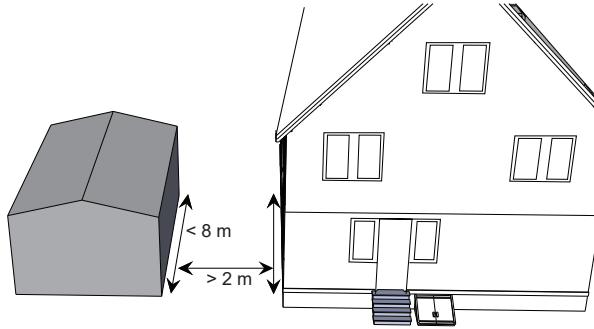


Fig. 9

Placing the docking station

Take the docking station parts out of the box and assemble the docking station as follows:

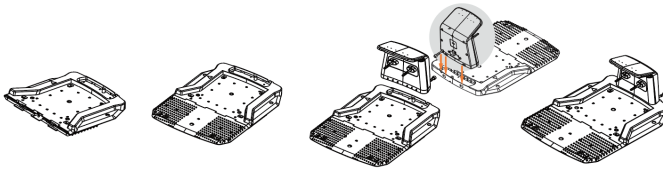


Fig. 10

The docking station must be placed on a level ground. Do not place the docking station too close to a slope, such as at the top of a hill or the bottom of a furrow. It must not be placed on a slope with a gradient more than 5°.

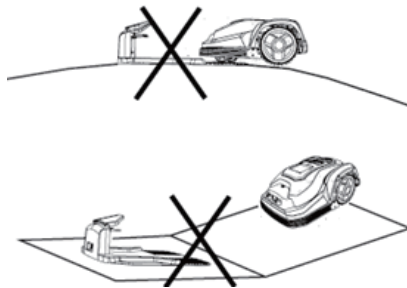




Fig. 11

Find a shaded area away from the pool or stairs, with access to a power outlet. Ensure that there is a minimum of 1.5 m straight boundary line in front of the docking station and the boundary line is 0.3 m from the side.

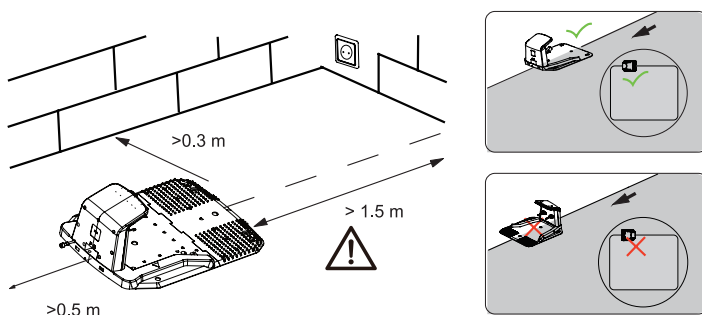


Fig. 12

If your lawn has a soft or uneven surface, we recommend supporting the area around the docking station with a grass protection mesh. Otherwise, the rear wheels can damage the lawn. Finish all boundary layout work before connecting the docking station to the mains.

Pegging your boundary wire

We strongly recommend mowing the lawn to 60 mm or less before laying out the boundary wire. Burying the boundary wire is entirely optional. The closer to the ground you lay out the boundary wire, the lower the chance of tripping over it or damaging it when mowing the lawn.

Use the ruler provided to ensure that there is a minimum of 30 cm between the boundary wire and the obstacles or sides.

The recommended distance between two pegs is about 80 cm in a straight line, and less in tight curves. The pegs' hook and wire slit should always face the outside of the boundary.

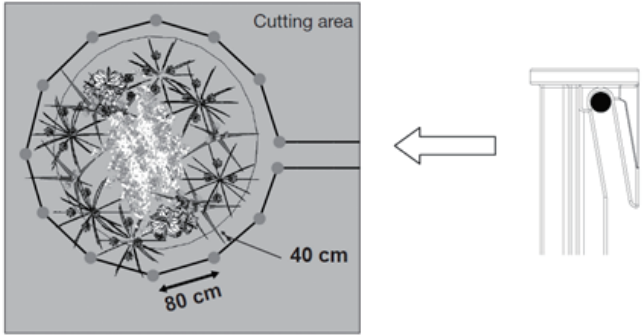


Fig. 13

Avoid right angles when running the boundary wire around a corner.

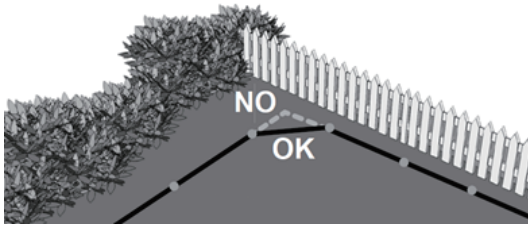


Fig. 14

Starting from the docking station, lay out the boundary wire after all the pegs are in position.

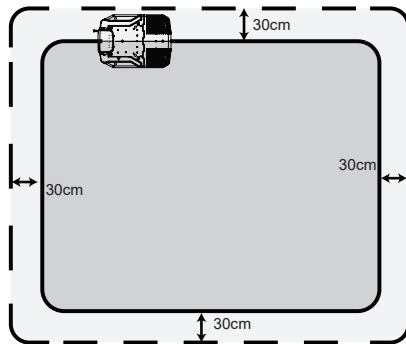


Fig. 15

Connecting the boundary wire to the docking station

Strip the boundary wire 10-15 mm from the end. Run the boundary wire under the front of the docking station and connect the end of the wire to the left (black) connector, marked as "F" (front). After you have placed the boundary wire around the garden, connect the other end of the boundary wire to the right (red) connector, marked as "B" (back).

You can join two boundary wires with the connectors provided.

Connect the switching power supply with the extension cord to the docking station. Then connect the plug of the switching power supply to the mains.

Once the docking station is connected to the power, it will run a self-test and the blue LED on the docking station will be ON if everything is fine and the docking station is ready for operation.

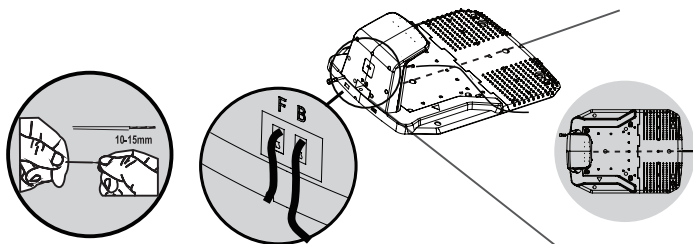


Fig. 16

Testing the Robotic Mower

Insert the battery pack into the Robotic Mower and make sure that it is secure.

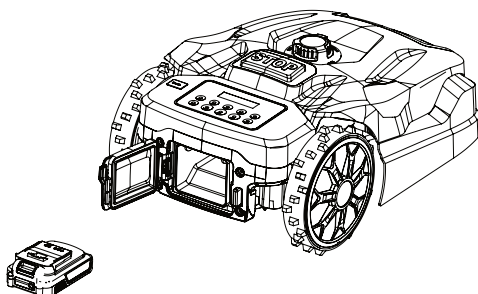





Fig. 17

PREPARING YOUR LAWN FOR THE ROBOTIC MOWER

Once the blue LED and the S1 or S2 on the docking station are ON, you can test the functions of the Robotic Mower.

Place the Robotic Mower in the working area, a few metres from the docking station. Turn on the Robotic Mower by pressing the power switch button on the underside of the Robotic Mower. Press  to select the default PIN code "0000".

Press the  and  buttons. After a few seconds, the Robotic Mower should automatically return to the docking station by following the boundary wire in an anti-clockwise direction. If the Robotic Mower fails to dock correctly, the docking station's position may not be a suitable one, move the docking station to a more suitable position.

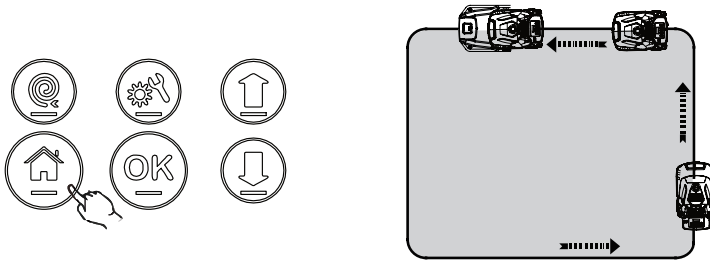


Fig. 18

Once the Robotic Mower has docked, the S1 and S2 signals will flash alternately, showing that the docking station is charging the Robotic Mower.

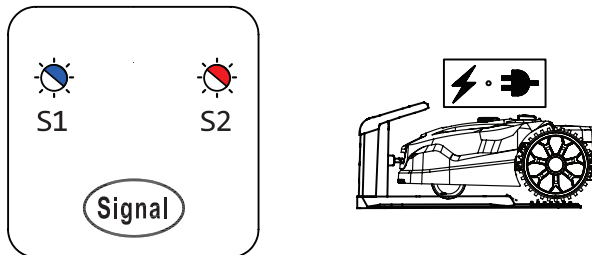


Fig. 19

Successfully docking and charging indicate that you have found a suitable position for the docking station. You can now fix the docking station onto the ground with the pegs provided.

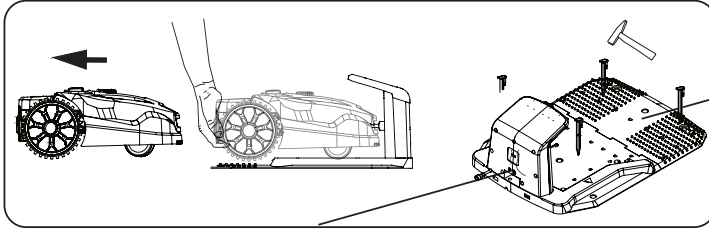


Fig. 20

Selecting the signals S1 and S2

The default signal is S1. There is no need to change the default signal from S1 to S2, if your neighbour does not use a YARD FORCE Robotic Mower.

If your neighbour is using the same type of Robotic Mower, you will need to keep a distance of 0.5 m between your neighbour's boundary wire and your boundary wire. Ensure that your docking station is at least 10 m away from your neighbour's boundary wires and that both Robotic Mowers are using different signals.

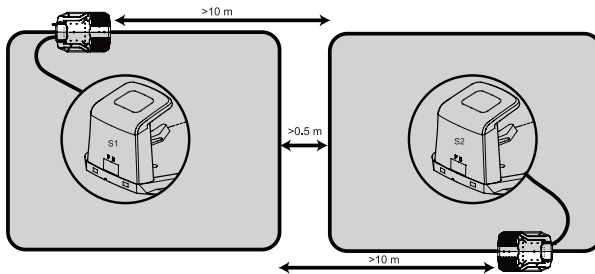


Fig. 21

You can select the S1 or S2 signal for your Robotic Mower by:

- Press the "signal" button on the docking station, the indicator will switch between S1 and S2.
- Press the S1 or S2 button on the control panel of the Robotic Mower accordingly, so that both the docking station and the Robotic Mower are with the same signal.

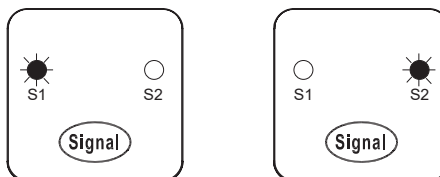


Fig. 22

7. MENU SETTING

Press the power switch button to turn on the Robotic Mower.

Control panel:

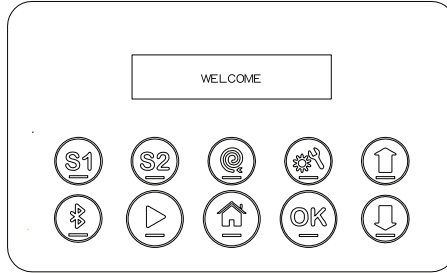



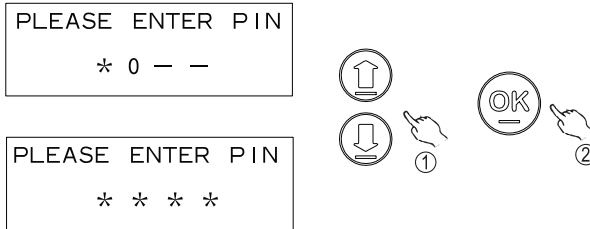
Fig. 23

Function of the buttons:

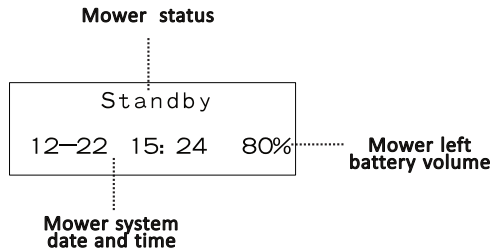
	Select the S1 boundary wire signal
	Select the S2 boundary wire signal
	Press the SPIRAL MOVING button, the Robotic Mower will mow in a spiral mowing path.
	MENU button Use the and to select the mode, press to confirm.
	Press the BLUETOOTH button to activate or deactivate the Bluetooth function for "APP" connection.
	Press the START button, the Robotic Mower will start cutting, when the programmed work time is passed, the Robotic Mower will return to the docking station.
	Press the HOME button, the Robotic Mower will return to the docking station.
	Press to confirm the setting.
	Move the setting up.
	Move the setting down.

Unlocking the control panel interface


After turning on your Robotic Mower by pressing the power switch button, enter the default PIN code 0000 by pressing .



The display panel will show the mower's status:



Before starting, follow the steps below to adjust the settings of your Robotic Mower:

Press the button  to enter the "menu setting".

There are six settings in the menu:




- Work time setting
- Daily mowing time setting
- Start mowing time setting
- System language setting
- System date setting
- System time setting

Work time setting




There are two modes:

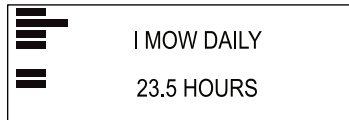
- Daily Mowing mode
- APP mode






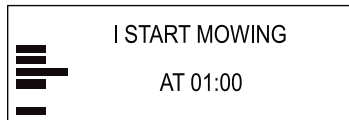
Use the  and  to select the mode, press  to confirm.

Daily Mowing mode

- "Daily Mowing" mode - the Robotic Mower will work for the defined duration at the specified starting time.
- When the work time setting is in "Daily Mowing" mode, the daily mowing duration time is available for setting. Use  and  to increase and decrease the duration time. Once the duration time is done, press .






- Then the daily mowing start time is available for setting. Use  and  to change the start time, once the start time is done, press .

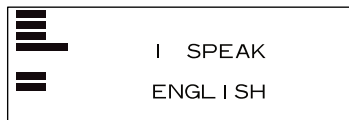


"App" mode

- Users can set the individual start time and end time for each day.
- Refer to our APP manual.

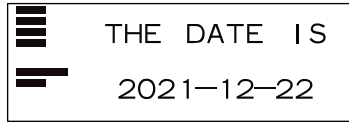
System language setting

- You can choose the language of your Robotic Mower.
- Use the  and  to select the language, press  to confirm.



System date setting

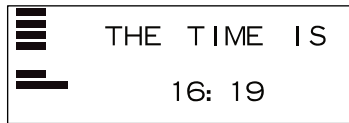
- You can change the date on your Robotic Mower.



- Use the and to select the year, month and day, and press to confirm.

System time setting

- You can change the time on your Robotic Mower.



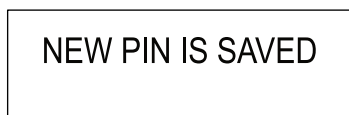
- Use the and to select the hour and minute, and press to confirm.

PIN code reset

You can reset your PIN code, either from the APP or the Robotic Mower's control panel.

If reset from the control panel, press and hold the button, you hear a beep from the Robotic Mower. Then press to enter the PIN code setting page.

Use the Use and to select the PIN code number and press to confirm.



8. OPERATION

Adjusting cutting height

The cutting height can be adjusted by rotating the cutting height adjustment dial. The cutting height can be adjusted from 20 mm to 60 mm.

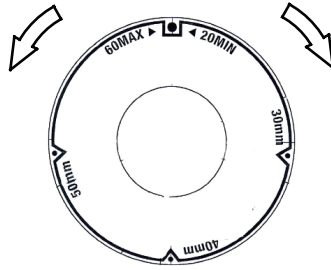


Fig. 24

Start mowing

After finishing the time setting, you can start your Robotic Mower.

1. Press **OK** to enter the PIN code input page, use **↑** and **↓** to select the PIN code, press **OK** to confirm.
2. Press the **▶** and **OK**, the Robotic Mower will start to work.

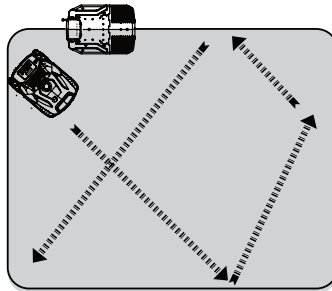




Fig. 25

Use the **▶** and **OK** to select the PIN code number and press **OK** to confirm.

Return to the docking station

1. Press **OK** to enter the PIN code input page, use **▶** and **OK** to select the PIN code, press **OK** to confirm.

2. Press the  and , the Robotic Mower will return to the docking station.

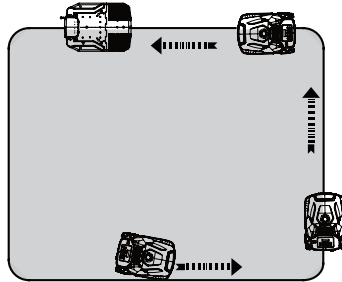


Fig. 26

Emergency stop

Pressing the STOP button will stop the Robotic Mower immediately.

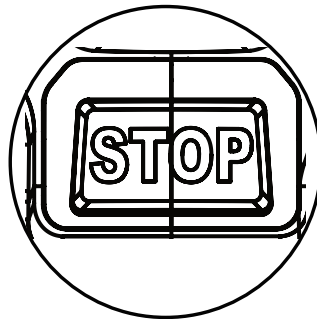





Fig. 27

Docking station's LED signal indicators

	<p>S1 or S2 indicator is ON. The boundary wire is in good condition.</p>
	<p>S1 or S2 indicator is flashing. The boundary wire is broken.</p>
	<p>Both S1 and S2 indicators are flashing alternately. The Robotic Mower is charging at the docking station.</p>

9. CLEANING, MAINTENANCE AND STORAGE



WARNING! Disconnect the docking station from the mains and remove the battery pack from the Robotic Mower before cleaning, maintenance and storage.

Cleaning

- Clean the housing and blade disc with a soft brush or damp cloth.
- You can use a garden hose to clean the dust, but do not let water into the battery compartment.
- Rotate the blade disc to make sure that it can move freely.
- Remove any debris, leaves or grass clippings around the contact pins on the docking station, clean the contact pins with wire wool, metal cleaner, or very fine grade sanding paper.

Maintenance

- Check and clean your Robotic Mower regularly and replace worn parts if necessary.
- Reversing or replacing the blades
 - i. Wear protective gloves when replacing the cutting blades
 - ii. The blades are double-edged. When one side of the blade is blunt, loosen the fixing screw and turn the blade upside down, and put the blade back to the blade disk.
 - iii. Always replace all three blades together for the best performance.

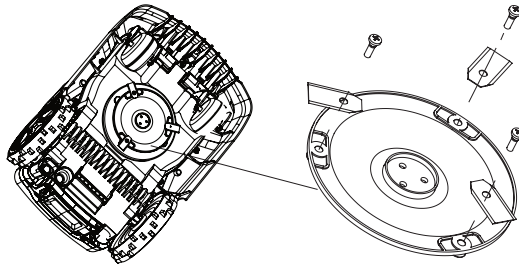


Fig. 28

Storage

If the Robotic Mower is not to be used for a long time, such as winter:

- Remove the battery pack from the Robotic Mower before storage.
- Unplug the docking station from the mains.
- Disconnect the boundary wires from the docking station.
- Store the Robotic Mower and docking station in a dry and secure place, out of reach of children.

10.TROUBLESHOOTING

Problem	Possible cause	Possible solution
The Robotic Mower cannot dock with the docking station	The boundary wire in front or underneath the docking station is not in a straight line	Lay the boundary wire in front or underneath the docking station in a straight line
	The docking station is not in a suitable position	Put the docking station in a suitable position
The Robotic Mower runs in circles while mowing or following boundary wire back to the docking station	A power cable is running or close to the boundary wire	Reposition the boundary line if necessary
	One of the front wheels is stuck	Clear the debris in the front wheels
	Your neighbour is using a similar Robotic Mower and signals are interfered	Set your docking station and Robotic Mower to an alternative signal S1 or S2
	The driving motor is damaged	Repair by an authorised service centre
The Robotic Mower is noisy	The blade is loose	Tighten the screw of the blades if necessary
	The blade is damaged	Replace the blades with a new one.
	The grass is too high	Increase the cutting height or mow the lawn with an ordinary mower first
	The motor for the cutting blades is damaged	Repair by an authorised service centre
The Robotic Mower remains at or returns to docking station after pressing the START button	The Robotic Mower has completed the programmed working time for that day	Reprogram the working time if necessary
	The battery is low in capacity	Charge the Robotic Mower

TROUBLESHOOTING

No light on the docking station	Incorrect boundary wire connection	Check the boundary wire connection to the docking station
	The docking station is not connected to the mains	Check the connection and plug the docking station to the mains
	No power to the mains	Check the mains and switch on the mains
S1 or S2 on the docking station is flashing	The boundary wire is broken	Repair the boundary wire with the connectors provided
The Robotic Mower is not charging	The Robotic Mower is not correctly docked in the docking station	Make sure that the Robotic Mower is fully docked at the docking station
	The charging pins of the docking station is corroded	Clean the charging pins
	The battery pack is not inserted properly	Re-insert the battery pack
The Robotic Mower has no power	The battery pack is low in charge	Charge the Robotic Mower at the docking station
The Robotic Mower cannot start	The time schedule is not activated	Check and reset the time schedule if necessary
	There is grass build up under the deck	Clean the under deck
	Grass is too tall	Mow the lawn to under 60 mm with an ordinary mower, or increase the cutting height
	Temperature is too cold or too hot	The working temperature is between 5 and 45 °C
	The boundary wire is broken	Check and repair the boundary wire if necessary
	The power switch button is not pressed	Press the power switch button

The Robotic Mower runs outside the boundary wire	The boundary wire is on a slope	Reposition the boundary wire
Some parts of the lawn are not cut	The Robotic Mower needs more cutting time	Increase the scheduled cutting time
	The grass is too tall	Mow the lawn to under 60 mm with an ordinary mower
The Robotic Mower gets stuck in the lawn	There are obstacles on the lawn	Remove the obstacles from the lawn
	The boundary wire is not correctly laid	Reposition the boundary wire to exclude the obstacles
	The boundary wire in front of the docking station is not long enough	There should be at least 1.5 m of straight boundary wire in front of the docking station
Excessive vibration	The blade is loose	Tighten the blade if necessary
	The blade is damaged	Replace the damaged blade with a new one
	The grass is too tall	Increase the cutting height
	The cutting motor is damaged	Repair by an authorised service centre

11. DISPOSAL



Dispose of appliances according to the regulations and requirements of your local council. If appliances are disposed of in landfills or dumps, hazardous substances may leak into the groundwater and get into the food chain, damaging your health and well-being.



Li-Ion

Do not dispose of the battery with your household refuse. Dispose of the battery pack according to your local council's regulations and requirements.

12. TECHNICAL DATA

Model	XPower 800
Max cutting area	800 m ²
Battery pack	20 Vdc / 2500 mAh
Switch power supply	Input: 100-240 V~, 50/60 Hz, 36 W Output: 32Vdc, 1.5 A
Power supply model*	FY3201500S2
Mowing time on one charge	80 min
Rated voltage	20 Vdc
Rated power	42 W
No load speed	3500 min ⁻¹
Cutting width	18 cm
Cutting height	Approx 20-60 mm
Charging time	90 min
Blade model	846210
Weight	8.4 kg
Frequency Band	0-148.5 kHz
Radiated Power	58.93 dB μ A/m
Bluetooth Frequency Band/Power	2402-2480MHZ/0.3dbm
Max sound pressure level	L _{pA} =53 dB, K=3 dB
Max sound power level	L _{wA} =64 dB, K=3 dB
Robotic Mower	IPX5
Switching power supply	IP67, Plug IP44
Spare Blades	6 Pcs
Boundary pegs	200 Pcs
Boundary wire	150 m
Connectors	3 Pcs

13. WARRANTY

This product is covered by a 3 year parts and labour warranty for engine (1 year for battery and charger) against manufacturing defects. Our goods come with guarantees that cannot be excluded under the Australian Consumer Law.

You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

This warranty will not apply:

- (i) where this product has been subjected to misuse, abuse, accident or want of care;
- (ii) where this product has been used for a purpose for which it was not designed or is not suited;
- (iii) where the service of this product has been undertaken by a non-authorized person or company or if non-approved parts have been used;
- (iv) where this product has been used for industrial or commercial purposes .
Should service become necessary during the warranty period, the purchaser should contact your dealer.

In order to obtain warranty service, the purchaser must present the store receipt showing the name of the retailer and the date of purchase.

The period of the warranty begins from the original date of purchase, notwithstanding any subsequent repair or parts replacement.

Purchaser shall be responsible for all transport charges to and from the Authorised Service Centre.

Damage in transit is not covered by this warranty. The purchaser should remove from the product any liquids (if applicable) before sending the product for service or repair.

The product should be packed securely to prevent damage.

WARRANTY EXCLUSIONS

Wear parts or service related parts required when performing normal and regular maintenance of this product are not covered by warranty unless it is found to be defective by an Authorised Service Centre.