

WORX®



LANDROID® (M)
UNMANNED
MOWING
VEHICLE

Lawn Mowing Robot

EN

1. Product Safety

1.1 General & Additional Safety Instruction

 **WARNING: 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.

- This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.
- Children should be supervised to ensure that they do not play with the appliance.
- The appliance is only to be used with the power supply unit provided with the appliance.

IMPORTANT

READ CAREFULLY BEFORE USE

KEEP FOR FUTURE REFERENCE

SAFE OPERATION PRACTICES

Training

- a) Read the instructions carefully. Make sure you understand the instructions and be familiar with the controls and the proper use of the appliance;
- b) Never allow people unfamiliar with these instructions or children to use the appliance. Local regulations can restrict the age of the operator;
- c) The operator or user is responsible for accidents or hazards occurring to other people or their property.

Preparation

- a) Ensure the correct installation of the boundary wire as instructed.
- b) Periodically inspect the area where the appliance is to be used and remove all stones, sticks, wires, bones, and other foreign objects.
- c) Periodically visually inspect to see that the blades, blade bolts and cutter assembly are not worn or damaged. Replace worn or damaged blades and bolts in sets to preserve balance.
- d) On multi-spindle appliances, take care as rotating one blade can cause other blades to rotate.
- e) **WARNING!** The lawnmower shall not be operated without the guard in place.

OPERATION

1. GENERAL

- a) Never operate the appliance with defective guards, or without safety devices, for example deflectors, in place;
- b) Do not put hands or feet near or under rotating parts. Keep clear of the discharge opening at all times;
- c) Never pick up or carry an appliance while the motor is running;
- d) Operate the disabling device from the appliance;
 - Before clearing a blockage;
 - Before checking, cleaning or working on the appliance;
- e) It is not permitted to modify the original design of robotic lawnmower. All modifications are made at your own risk.
- f) Start robotic lawnmower according to the instructions. When the power key is switched on, make sure you keep your hands and feet away from the rotating blades. Never put your hands and feet under the mower.
- g) Never lift up robotic lawnmower or carry it when the power key is switched on.
- h) Do not let persons who do not know how robotic lawnmower works and behaves use the mower.
- i) Do not put anything on top of robotic lawnmower or its charging station.
- j) Do not allow robotic lawnmower to be used with a defective blade disc or body. Neither should it be used with defective blades, screws, nuts or cables.
- k) Always switch off robotic lawnmower when you do not intend to use the mower. Robotic lawnmower can only start when the power key is switched on and the correct PIN code has been entered.
- l) Keep your hands and feet away from the rotating blades. Never place your hands or feet close to or under the body when robotic lawnmower is in operation.

2. ADDITIONALLY WHEN THE APPLIANCE IS OPERATING AUTOMATICALLY

- a) Do not leave the machine to operate unattended if you know that there are pets, children or people in the vicinity.

MAINTENANCE AND STORAGE

 **WARNING! When the mower is turned upside down, the power key must always be switched off.**

The power key should be switched off during all work on the mower's underframe, such as cleaning or replacing the blades.

- a) Keep all nuts, bolts and screws tight to be sure the appliance is in safe working condition;
- b) Inspect the robotic lawnmower each week and replace worn or damaged parts for safety;
- c) Check especially that the blades and blade disc are not damaged. Replace all blades and screws at the same time if necessary so that the rotating parts are balanced.
- d) Ensure that only replacement cutting means of the right type are used;
- e) Ensure that batteries are charged using the correct charger recommended by the manufacturer. Incorrect use may result in electric shock, overheating or leakage of corrosive liquid from the battery;
- f) In the event of leakage of electrolyte flush with water/neutralizing agent, seek medical help if it comes into contact with the eyes etc;
- g) Servicing of the appliance should be according to manufacturers instructions.

Transport

The original packaging should be used when transporting robotic lawnmower over long distances.

To safely move from or within the working area:

- a) Press the STOP button to stop the mower.
- b) You select the four digit PIN code when you start the mower for the first time.
- c) Always switch off robotic lawnmower if you intend to carry the mower.
- d) Carry the mower by the handle at the rear under the mower. Carry the mower with the blade disc away from the body.



Safety warnings for battery pack

- a) **Do not dismantle, open or shred cells or battery pack.**
- b) **Do not short-circuit a battery pack. Do not store battery packs haphazardly in a box or drawer where they may short-circuit each other or be short-circuited by conductive materials.** When battery pack is not in use, keep it away from other metal objects, like paper clips, coins, keys, nails, screws or other small metal objects, that can make a connection from one terminal to another. Shorting the battery terminals together may cause burns or a fire.
- c) **Do not expose battery pack to heat or fire. Avoid storage in direct sunlight.**
- d) **Do not subject battery pack to mechanical shock.**
- e) **In the event of battery leaking, do not allow the liquid to come into contact with the skin or eyes. If contact has been made, wash the affected area with copious amounts of water and seek medical advice.**
- f) **Seek medical advice immediately if a cell or battery pack has been swallowed.**
- g) **Keep battery pack clean and dry.**
- h) **Battery pack gives its best performance when it is operated at normal room temperature (20°C±5 °C).**
- i) **When disposing of battery packs, keep battery packs of different electrochemical systems separate from each other.**
- j) **Recharge only with the charger specified by POSITEC.** Do not use any charger other than that specifically provided for use with the equipment. A charger that is suitable for one type of battery pack may create a risk of fire when used with another battery pack.
- k) **Do not use any battery pack which is not designed for use with the equipment.**
- l) **Keep battery pack out of the reach of children.**
- m) **Retain the original product literature for future reference.**
- n) **Dispose of properly.**

1.2 Information on the Landroid® M



WARNING - Robotic lawnmower can be dangerous if incorrectly used.

Read through the Operator's manual carefully and understand the content before using your robotic lawnmower.



WARNING - Keep a safe distance from the machine when operating.



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



WARNING - Do not ride on the machine.



Do not burn



Batteries may enter water cycle if disposed improperly, which can be hazardous for ecosystem. Do not dispose of waste batteries as unsorted municipal waste.



Batteries should be recycled. Do not dispose of batteries, Return exhausted batteries to your local collection or recycling point.



Do not wash the machine with a high pressure washer



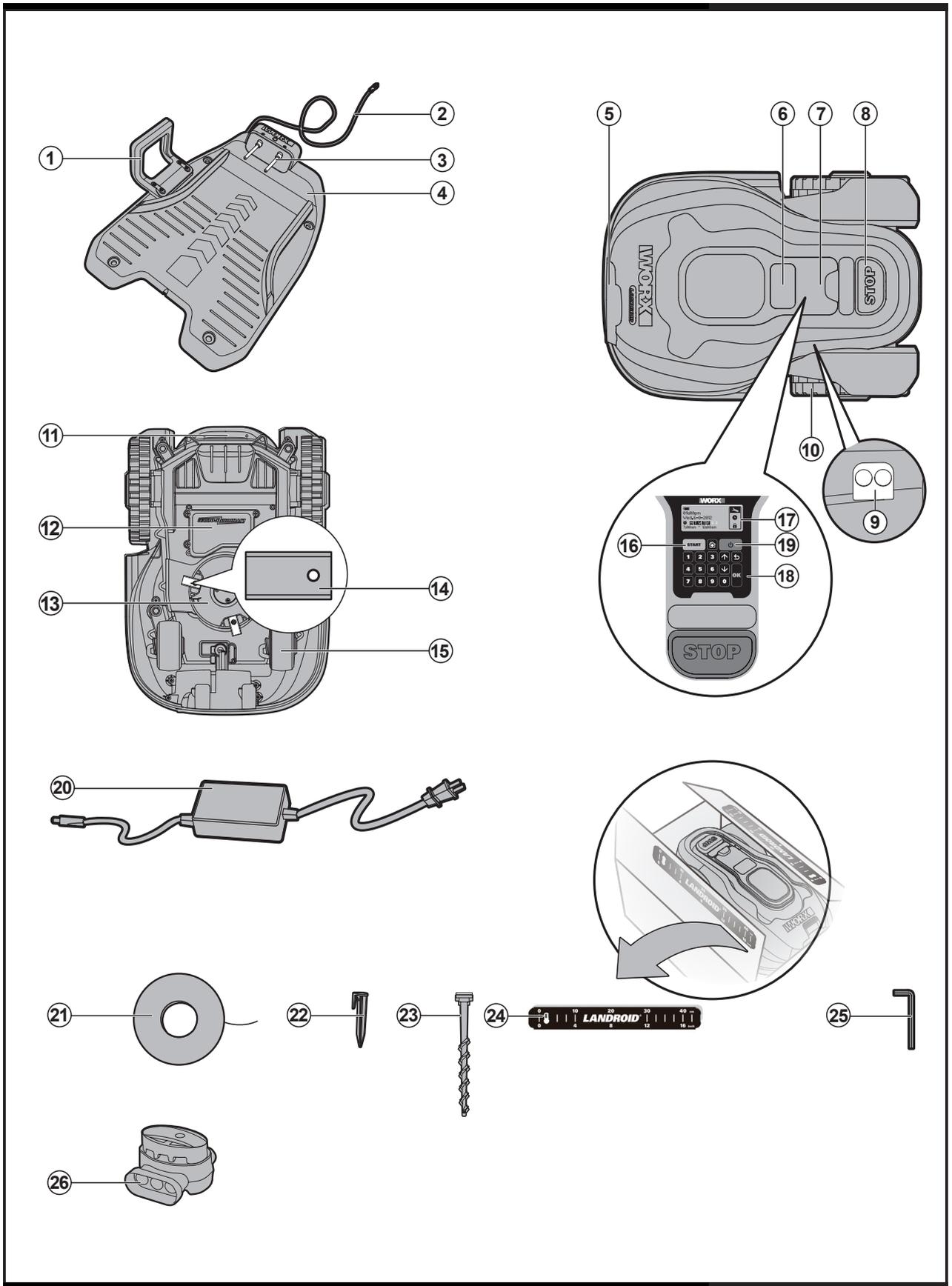
Class III appliance



Waste electrical products must not be disposed of with household waste. Please recycle where facilities exist. Check with your local authorities or retailer for recycling advice.

xINR18/65-y: Cylindrical lithium Ion battery cells with max diameter of 18mm and max height of 65mm; "x" represents a number cells serial connected, blank if 1; "-y" represents a number of cells paralleled connected, blank if 1.

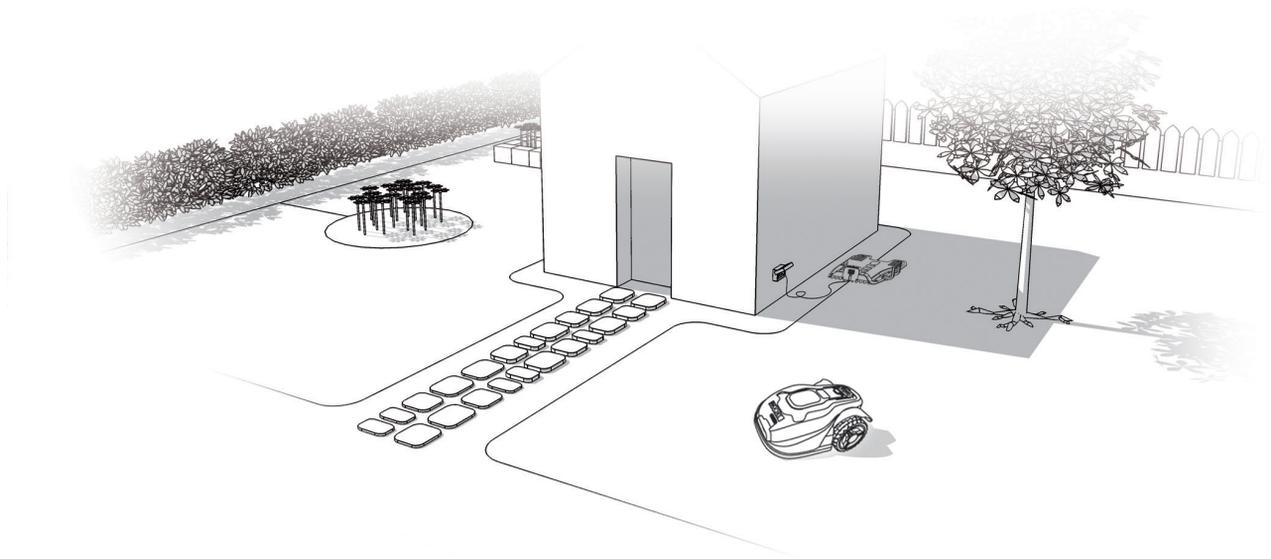
2. Component List



-
- 1. HANDLE BAR**
 - 2. LOW VOLTAGE CABLE**
 - 3. CONTACT PINS**
 - 4. CHARGING BASE**
 - 5. CHARGING STRIP**
 - 6. DISPLAY WINDOW**
 - 7. CONTROL PANEL COVER**
 - 8. STOP BUTTON**
 - 9. RAIN SENSOR**
 - 10. REAR DRIVING WHEEL**
 - 11. HANDLE**
 - 12. BATTERY PACK**
 - 13. BLADE TURNING DISC**
 - 14. CUTTING BLADE**
 - 15. FRONT WHEEL**
 - 16. START KEY**
 - 17. DISPLAY**
 - 18. KEYPAD**
 - 19. ON/OFF KEY**
 - 20. POWER ADAPTOR**
 - 21. BOUNDARY WIRE**
 - 22. WIRE PEGS**
 - 23. CHARGING BASE FIXING NAILS**
 - 24. BOUNDARY WIRE DISTANCE GAUGE**
 - 25. HEX KEY**
 - 26. CONNECTOR**
-

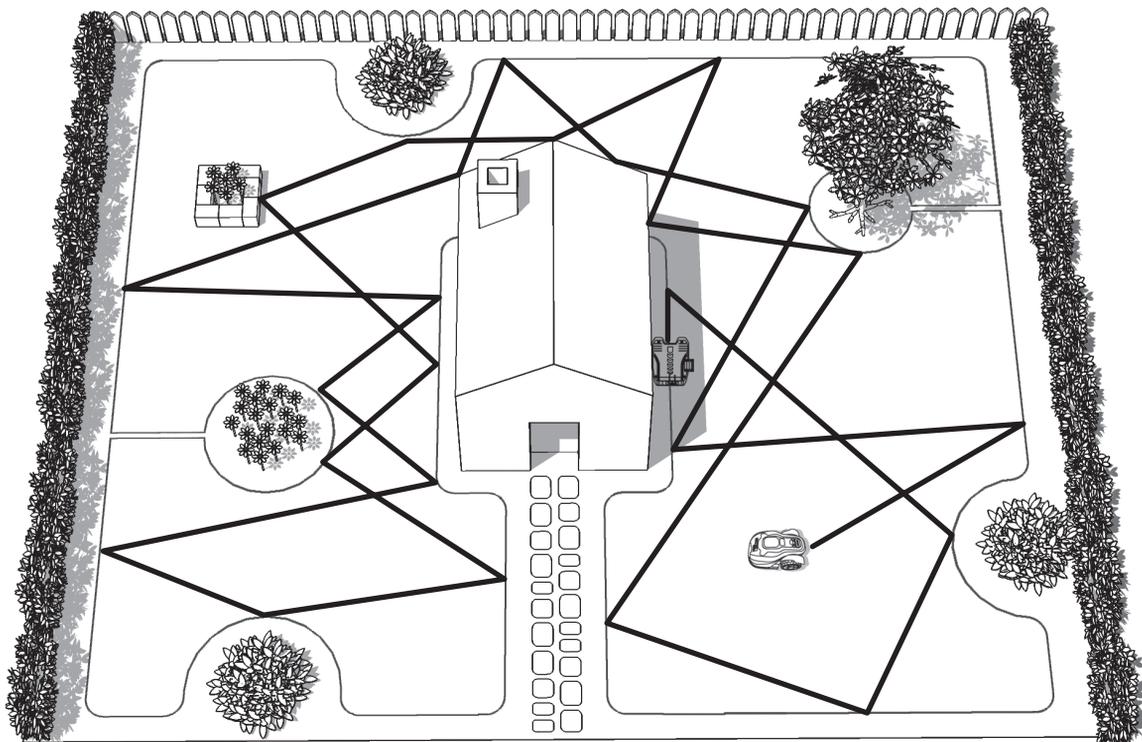
3. Understanding Your Landroid® M

We would like to congratulate you on your new purchase of the Landroid® M and entering into the care-free life of automatic mowing. In the following, we would like to help you better understand how your Landroid® M thinks.



3.1 How does my Landroid® M know what to mow?

The Landroid® M chooses its direction at random. It will make sure your entire lawn is evenly mowed without leaving behind any unattractive mowing paths (See Fig. A).



A

3.2 How does my Landroid®M know where to go?

Your Landroid®M is capable of doing things on its own. The Landroid®M knows when it needs to go to its Charging Base (4) to charge, can sense when it is raining, can stop itself if it senses a problem, and knows to stop, draw back, and then turn around when it bumps into something blocking its path or other object. The Landroid®M will also automatically stop its Blade Turning Disc (13) from rotating if it is lifted off the ground to prevent an accident.

A. Finding the charging base

When your Landroid®M needs to recharge, it will stop mowing and follow the Boundary Wire (21) in an anti-clockwise direction back to its Charging Base. Landroid®M is pre-programmed to mow the grass near the boundary wire once a week. If you want to mow the grass near the boundary wire at other times, open the panel cover, press the home button and close the panel cover. Landroid®M will stop mowing, locate the boundary wire and mow the grass near the boundary wire while it locates the charging station. We suggest you use this function when the battery power is more than 75%. You can check the battery power in the display.

B. Rain sensors

The Landroid®M is fitted with a Rain Sensor (9) that will detect rain drops and tell the Landroid®M to stop mowing and follow the Boundary Wire back to its Charging Base (See Fig. B)

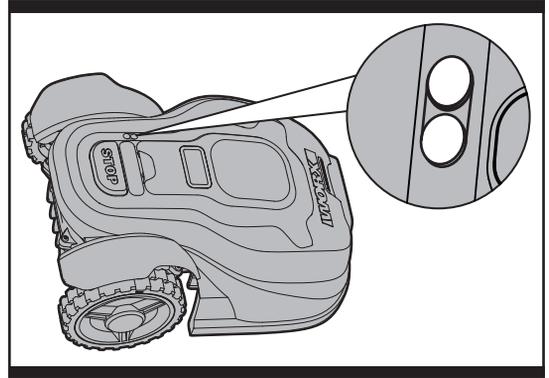
The Landroid®M is programmable to have a delay start function when it rains. The default delay time set in Landroid®M is 180mins. When the rain sensors are wet, the Landroid®M returns to its docking station. Only when the rain sensors become dry will the Landroid®M begin the delay start countdown or return to mowing immediately. See the Programming and Troubleshooting Guide for more details.

C. Sensing the boundary wire

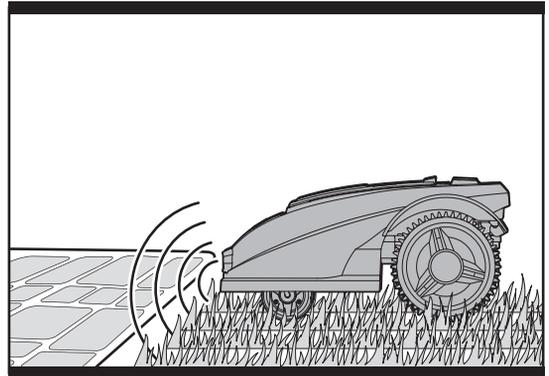
The Landroid®M always obeys the border set by the Boundary Wire and uses two sensors at its front to sense when it is getting close (See Fig. C).

D. Starting and stopping while mowing (See Fig. D,E)

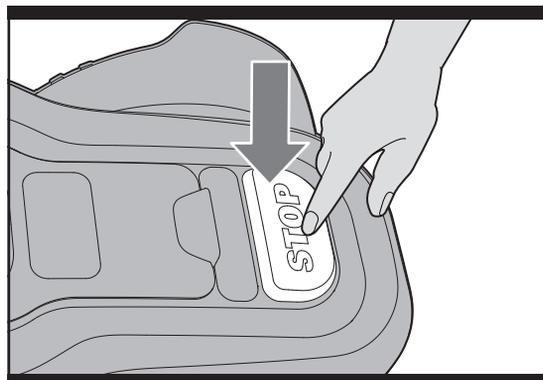
If you would like to command the Landroid®M to stop mowing, then simply press the STOP button (8) on top of the mower. To start mowing, open the Control Panel Cover, press the ON/OFF key and input the PIN code, then press start key and close the panel cover.



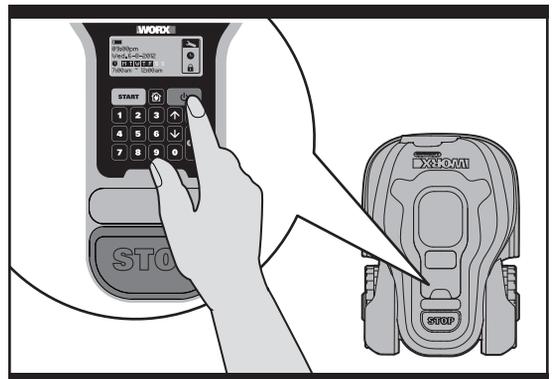
B



C



D



E

If the Landroid®M senses that something is wrong, it will display a fault message on the Display (17), and will turn itself off if it does not receive any input from the user within 20 min (for information on fault messages refer to the Programming and Troubleshooting Guide).

To resume:

Scene 1: STOP –Auto Shutdown after 20 mins

- Open the Control Panel Cover
- Press the ON/OFF Key (19) to ON
- Press 0 key to correct the problem
- Press START button again and Close the Control Panel Cover
- Now the Landroid®M will begin to mow!

Scene 2: STOP– Without Auto Shutdown

- Open the Control Panel Cover
- Press 0 key to correct the problem
- Press START button again and Close the Control Panel Cover
- Now the Landroid®M will begin to mow!

3.3 How big an area can my Landroid®M mow?

Your Landroid®M is capable of mowing areas of different sizes although this depends on various factors, such as:

- Species of grass in your lawn and its growth rate
- Sharpness of the Cutting Blades (14)
- Humidity
- Surrounding temperature
- Amount of obstacles in your Lawn

If the surrounding temperature is very hot where you live then your Landroid®M may charge at a slightly slower rate. The Landroid®M uses less energy in open areas that have fewer obstacles, such as flower beds, fountains, walkways, etc... You can find the default work time of Landroid®M for different lawn size in programming guide .

Mowing times are different for every lawn depending on the factors mentioned previously. Gradually adjust the time you allow your Landroid®M to mow each day until you find the most suitable setting.

You can also program Landroid®M working time to suit your schedule – refer to Programming Guide.

3.4 How efficiently will my Landroid®M mow the grass?

The Landroid®M's cutting height can be adjusted between 2cm - 6cm. Before starting your Landroid®M for the first time, you should cut the grass to the height no more than 9cm. Then make sure you open the Control Panel Cover (7) and set the cutting height to its maximum cutting height of 6cm (See Fig. F,G).

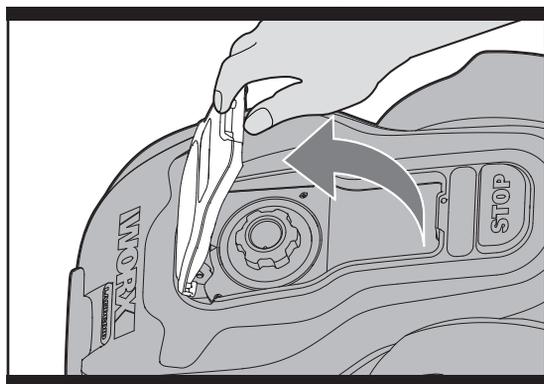
Your Landroid®M will cut its best in dry weather. It does not like wet grass, which can build up on the Blade Turning Disc (13) and within the motor, and can also cause loose traction and slippage while working.

Your Landroid®M is afraid of Lightening Storms. In case of a Lightening Storm, protect the Landroid®M by unplugging the Charging Base (4), disconnecting the Boundary Wire (21), and making sure the Landroid®M is not allowed to charge.

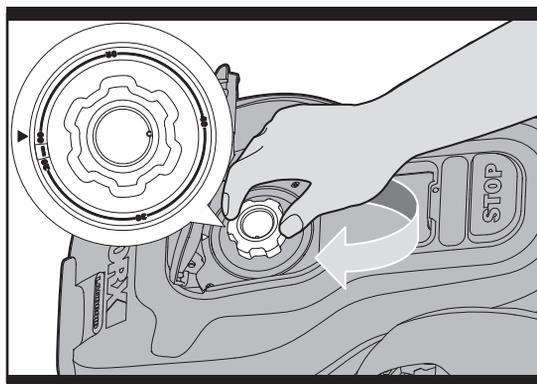
Your Landroid®M loves mowing grass and requires the Cutting Blades (14) to be kept in good condition to cut at its best.

The Landroid®M can do most things by itself, but will need your help sometimes to prevent damage to itself.

- Never let the Landroid®M travel over gravel.
- Remove or prevent access to obstacles that the Landroid®M could accidentally climb on and damage its Blade Turning Disc.
- Remove all debris and foreign objects from your lawn.



F



G

4. Remote Mobile Control (only for specific model, please check Technical data & Declaration of Conformity)

Your Landroid[®]M could be connected to smart phone. All the general settings could be set on your phone. It will also show the current working status, even errors. For the details settings, please refer to the Landroid[®]M Wifi Connection Guide.

5. Boundary Wire Basics

5.1 Pegging the Boundary Wire

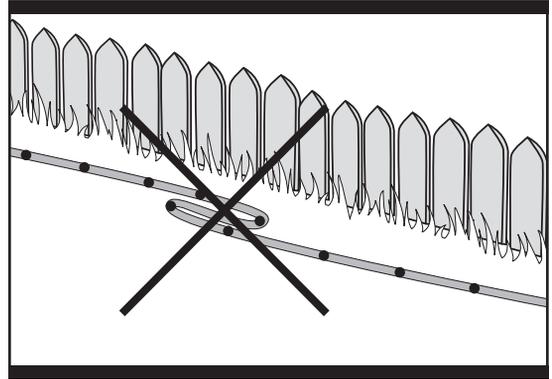
Use the Boundary Wire Distance Gauge (24) to set the correct distance from the border of your lawn (more than 35cm *).

* This is the recommended distance. Use the provided distance gauge to ensure proper installation.

If your neighbor also uses a Landroid[®]M, then you must keep a spacing of at least 0.5 metres between your Boundary Wire and your neighbors.

The boundary wire must outline the intended mowing area exactly. Your Landroid[®]M will become confused by extra bends or coils of Boundary Wire that are not part of its mowing area (See Fig. H).

If there is excess Boundary Wire after the mowing area has been outlined, then cut it off and store this additional wire in a separate location. However, it is important to leave the necessary length where it connects to the Charging Base so it can be connected and still remain buried.



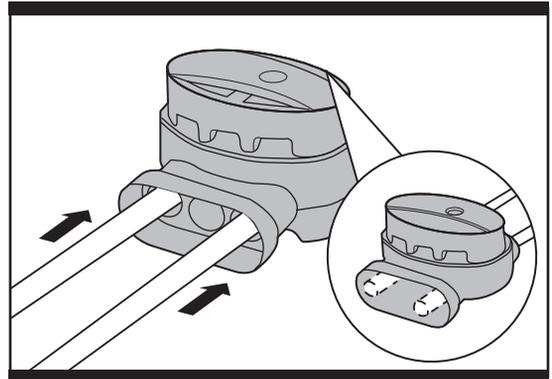
H

5.2 Burying the Boundary Wire

If you are planning to bury the Boundary Wire then it should be noted that when entering its Charging Base for the first time, your Landroid[®]M may find problems with the way you have laid the wire. It is recommended to first peg down the Boundary Wire to the lawn so it is easy to make adjustments if necessary. This will allow the Landroid[®]M to become adjusted to its new environment and ensures it will successfully work with the charging base before the Boundary Wire is buried.

When you have completed installing the boundary wire, it is recommended that you ask Landroid[®]M to follow the boundary wire by pressing the home button.

Whilst observing Landroid[®]M locating the charging station you can then make alterations to the boundary wire route to ensure trouble free tracking of the boundary wire by Landroid[®]M when locating the charging station.



I1

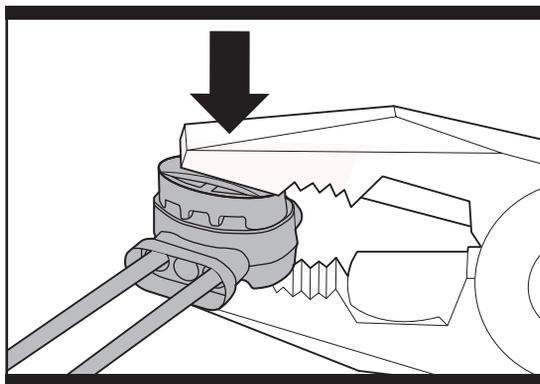
5.3 Joining the boundary wire

If you want to extend and splice the boundary wire, use a connector. The connector is waterproof and provides optimal connection.

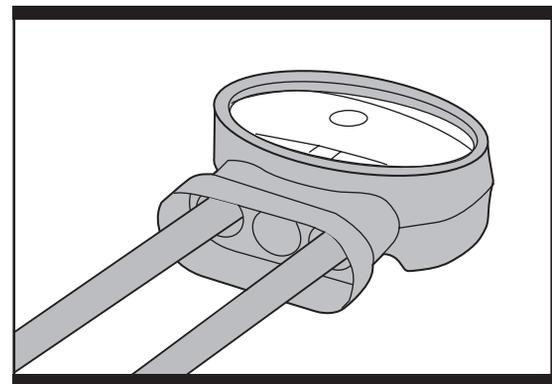
Insert both wire ends in any two of the three holes of the connector. Insert the wires fully until both wire ends are visible on the other side of the connector. (See Fig. I1)

Press the connector together by using a gripper. (See Fig. I2, I3)

WARNING: It is not recommended to simply splice the boundary wire with insulating tape or use a screw terminal block for connection. A broken circuit may occur after a period of time as soil moisture can oxidize the wire.



I2



I3

6. Software update

You can check your Landroid®M's software version when you turn on the machine by pressing the ON/OFF button. The software can be updated when new versions become available. The latest software can be downloaded from our website www.worxlandroid.com. See below for download and installation instructions:

Step 1: Locate the latest software version at: www.worxlandroid.com. Copy the "pck" file containing the latest software version to a USB memory stick.

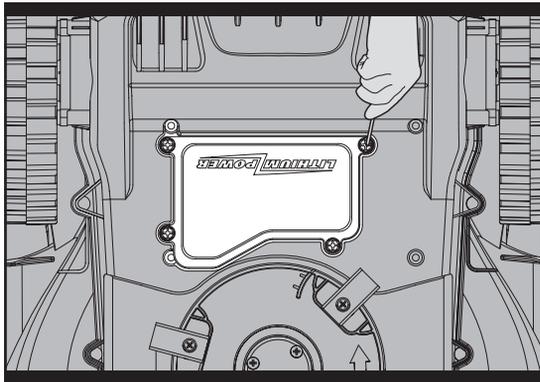
NOTE: Before transferring the "pck" file make sure the memory stick does not contain other files or data.

Step 2: Press the ON/OFF button (19) to turn off your Landroid®M. Open the cover at the bottom (See Fig. J1) and insert the USB memory stick (See Fig. J2). You can take out the battery pack (See Fig. J3) if you think it is difficult to align the USB memory stick with the USB port, but you need to fit the battery pack back after the USB memory stick is inserted.

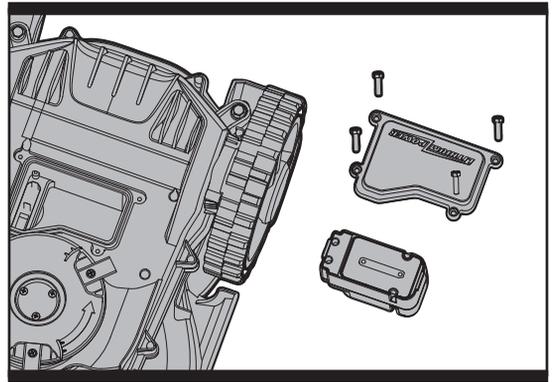
Step 3: Press the ON/OFF button (19) to turn on the Landroid®M. The new software version will be updated automatically, and will be displayed in the bottom right corner of the interface for 10 seconds. (See Fig. J4)

Step 4: Remove the memory stick and refit the battery cover.

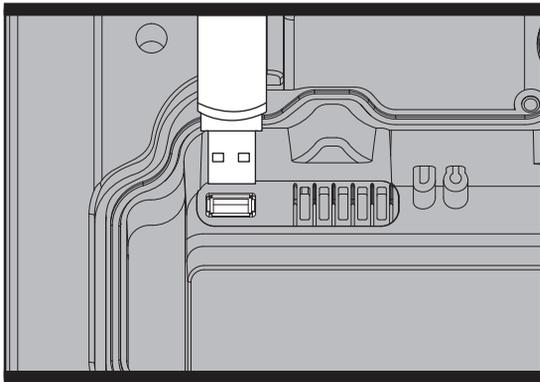
The manual in box is based on the default software in the mass production. Some new features/functions in the new version may not exist in the manual. If you found some settings not in the manual, please visit www.worxlandroid.com to download the latest manual.



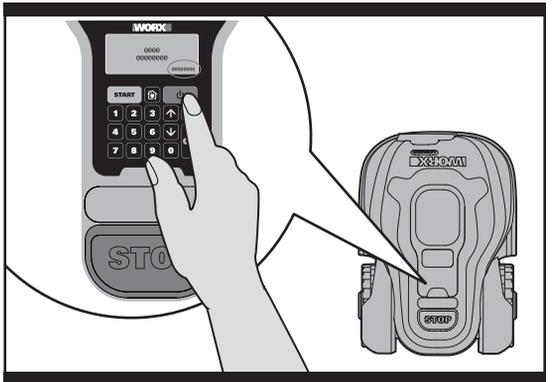
J1



J2



J3



J4

7. Maintenance

Your Landroid®M needs to be checked from time to time. The Landroid®M works hard and after time needs a good cleaning as well as having some parts replaced, as they can become worn.

In the following we want to let you know how to take care of your Landroid®M.

7.1 Keep it sharp

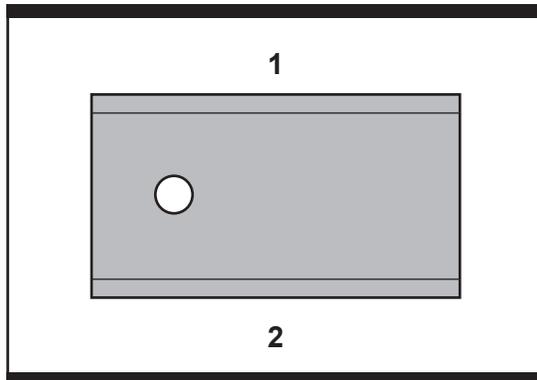


WARNING: Before cleaning, adjusting, or replacing the Blades, turn your Landroid®M OFF and put on protective gloves.



WARNING: When fitting new blades, make sure you replace ALL the blades. Always use new screws when fitting blades. This is important to ensure blade retention. Failure to use new screws could cause serious injury.

The Landroid®M does not cut grass like other mowers. Its Cutting Blades (14) are razor sharp on 2 edges and spin in both directions for maximum cutting capacity (See Fig. K). Each blade of your Landroid®M has 2 cutting edges. Depending on the frequency the Landroid®M mows your lawn, the cutting blades will need to be rotated periodically for a new cutting edge. If your Landroid®M is programmed to mow the lawn every day then the cutting blades will need to be rotated monthly for the best mowing results. Each cutting blade will last up to 2 months when it is programmed to mow every day. When the cutting blades are dull and worn out, they should be replaced with the spare blades provided with your Landroid®M. Spare blades are also available at your nearest WORX retailer.



K

A. Rotate and flip the blades

Your Landroid®M carries the Blades that are all screwed onto the Blade Turning Disc (13). The Blades allow the Landroid®M do its job and need care and attention. Every once in awhile, you should simultaneously rotate and flip all blades for a perfect cut. When rotating the Blades, make sure all the Blades are adjusted at the same time or else it could make the Blade Disc off balance. If your Landroid®M mows on a normal schedule (daily) then the Blades should last 2 months if they are rotated every month. Always check to see if the Blades are chipped or damaged and replace them if they are.

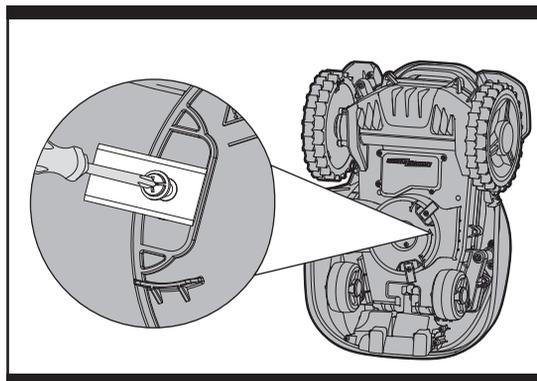
B. Replace the blades (See Fig. L)

After some time, usually every season, your Landroid®M's Blades will need to be replaced. Your Landroid®M does not like mowing while using Blades of different age and quality. So when replacing the Blades, make sure to replace all of them at the same time. You can replace them with one of the five spare Blade kits and extra Blade screws supplied with your Landroid®M.

Before attempting to replace your Landroid®M's Blades, turn the power off and put on protective gloves. Then follow these steps:

1. Gently flip the Landroid®M over.
2. Remove the battery cover and remove the battery.
3. Take the screws off the Blades with a screwdriver.
4. Firmly screw on the new Blades.
5. Refit the battery and the battery cover.

IMPORTANT: After screwing the Blade to the Blade Disc, make sure the Blade is able to spin freely.



L

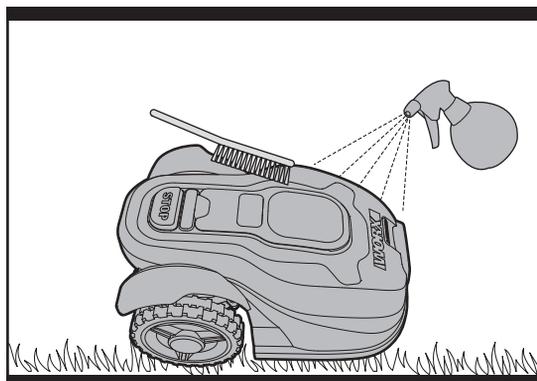
7.2 Keep it clean



WARNING: Before cleaning turn your Landroid®M OFF. Put on protective gloves before cleaning the Blade Turning Disc (13) and do not use running water. (See Fig. M)

A. Cleaning the body

Your Landroid®M will live a much happier and longer life if it is cleaned regularly. Although, as your Landroid®M is an electric machine, you will need to take care when cleaning, so DO NOT use a hose, high pressure washers or otherwise pour running water on your Landroid®M, it is best to use a spray bottle filled with water. When cleaning the machine body use a soft brush or clean cloth and avoid using solvents or polishes (See Fig. M). Lastly, make sure that you remove all build up of grass clippings and debris.



M

B. Cleaning the Underside

Again, it is important that you power the Landroid®M OFF using the ON/Off Button and **wear protective gloves before touching the Blade Turning Disc (13).**

First, flip your Landroid®M upside down to expose its underside. Here you will see the Blade Disc, the chassis, and the Front Wheel (15) and Driving Wheel(10). Clean everything thoroughly with a soft brush or moist rag. Rotate the Blade Disc to ensure it rotates freely. Check the blades spin freely around the fixing screws. Remove any obstructions.

IMPORTANT: Remove any lodged debris so that it does not cause a crack in the Blade Disc. Even the tiniest crack can decrease your Landroid®M's mowing output.

C. Clean the contact pins and the charging strips

Clean the Contact Pins (3) located on the Charging Base (4) and the Charging Strip (5) located on the Landroid®M using a cloth. Remove any build up of grass clippings and debris around the contact pins and charge strips periodically to ensure the Landroid®M successfully charges each time.

7.3 Battery life

The heart of the Landroid®M is its 28-volt lithium-ion battery. No maintenance is required. For proper storage of the battery, make sure it is fully charged in kept in a cool dry place between (20°C-60°C).

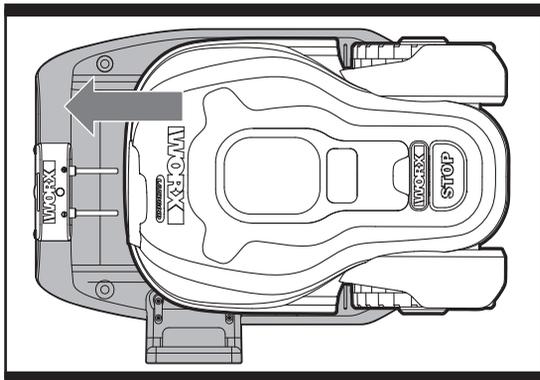
The life-span of the Landroid®M's battery depends on various factors, such as:

- The time span of the mowing season in your region.
- Amount of hours the Landroid®M mows per day.
- Battery maintenance during storage.

Landroid®M can be charged manually without the boundary wire.

To manually charge the battery without connecting the boundary wire to the charging base;

- 1. Connect the Charging Base to a suitable power supply.**
- 2. Manually dock the Landroid®M into the Charging Base while the Landroid®M is powered off. (See Fig. N1)**
- 3. The charging base red light will turn on.**
- 4. While "charging" is shown on the screen.(See Fig. N2) Landroid®M will begin to charge.**



N1



N2

7.4 Winter hibernation

Your Landroid®M will live longer and healthier if it is allowed to hibernate. So even though it is tough, we would recommend that you store your Landroid®M in your shed or garage during the winter.

Before you prepare your Landroid®M for winter hibernation, we recommend you:

- Thoroughly clean your Landroid®M
- Fully charge the battery
- Turn the power off

To maximize the battery life, it is recommended to fully charge the battery before storage during winter.

The Boundary Wire can be left in the ground although its ends should be protected, such as placed in a tin can with grease. If the Charging Base is left outside for winter, leave the Boundary Wire connected.

NOTE: When bringing the Landroid®M back to work after winter hibernation, make sure the Charging Strips (5) and Contact Pins (3) are clean, it is recommended to use a fine grade emery cloth to clean. Then make sure the date and time are correct and send the Landroid®M back to what it loves doing: mowing.

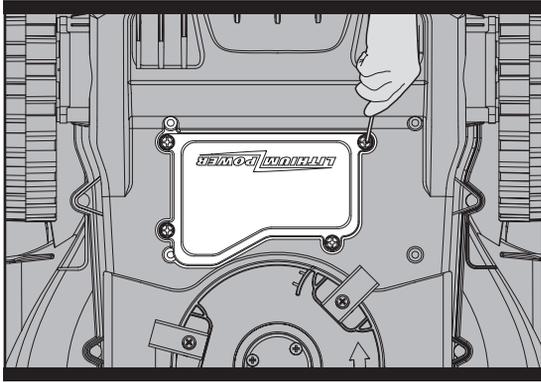
7.5 Replacing the battery



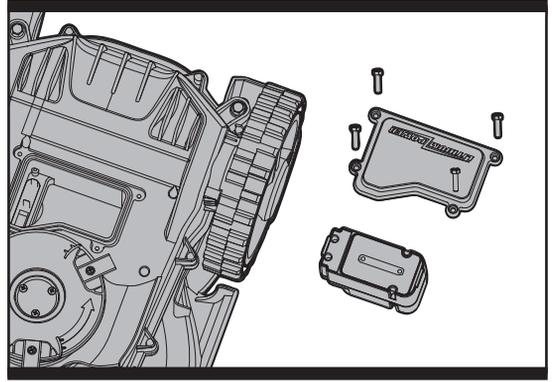
WARNING: Press the ON/OFF Key to OFF before attempting any adjustment, replacement or repair.

If you need to replace the Battery, follow these steps:

1. Gently turn your Landroid®M upside down.
2. Remove the four screws on the battery cover (See Fig. O).
3. Take out the old battery (See Fig. P).
4. Put in the new battery.
5. Firmly replace the screws.



O



P

Environmental Protection



Waste electrical products should not be disposed of with household waste. Please recycle where facilities exist. Check with your Local Authority or retailer for recycling advice.

Plug Replacement (UK & Ireland Only)

If you need to replace the fitted plug then follow the instructions below.

IMPORTANT

The wires in the mains lead are colored in accordance with the following code:

Blue - Neutral

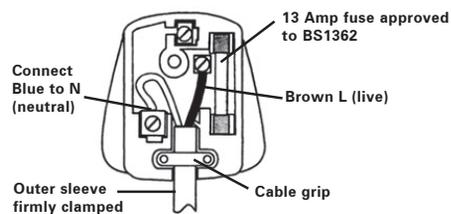
Brown - Live

As the colors of the wires in the mains lead of this appliance may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows. The wire which is coloured blue must be connected to the terminal which is marked with N. The wire which is coloured brown must be connected to the terminal which is marked with L.



WARNING: Never connect live or neutral wires to the earth terminal of the plug. Only fit an approved BS1363/A plug and the correct rated fuse.

NOTE: If a moulded plug is fitted and has to be removed take great care in disposing of the plug and severed cable, it must be destroyed to prevent engaging into a socket.



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it's your nature

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