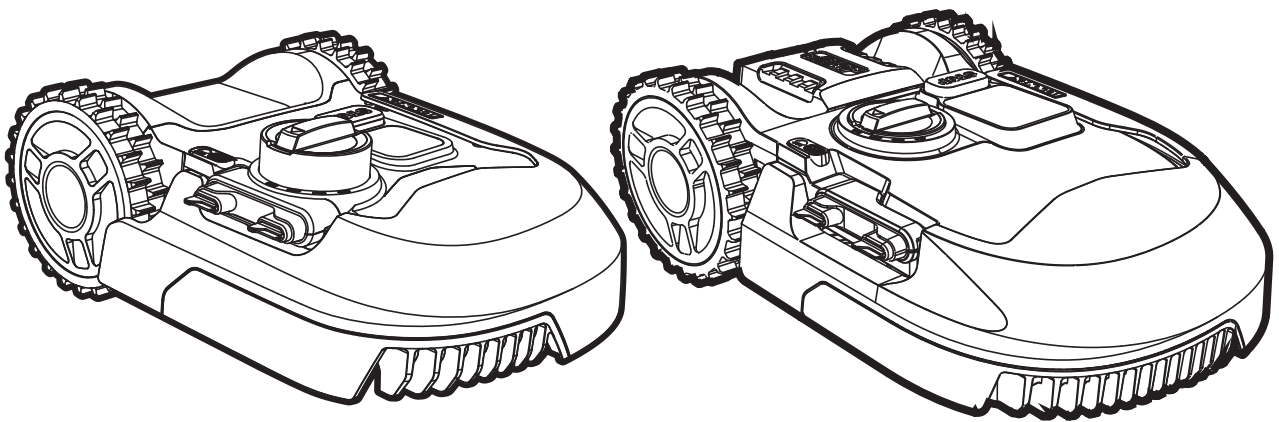


WORX



LANDROID[®]
UNMANNED
MOWING
VEHICLE

Owner's Manual

EN

P02

WR142E WR143E WR145E WR146E
WR153E WR154E WR155E WR156E

ORIGINAL INSTRUCTIONS

TABLE OF CONTENTS

1. Product Safety	3
1.1 General & Additional Safety Instruction	
1.2 Information on the Landroid®	
2. Component list	7
3. Technical data and noise data	9
3.1 Technical data	
3.2 Noise data	
4. Control panel	11
5. Understanding Your Landroid®	12
5.1 How does my Landroid® know what to mow?	
5.2 How does my Landroid® know where to go?	
A. Finding the charging base	
B. Rain sensors	
C. Sensing the boundary wire	
D. Starting and stopping while mowing	
5.3 Cut to Edge	
5.4 How efficiently will my Landroid® mow the grass?	
6. App	15
7. Boundary Wire Basics	16
7.1 Pegging the Boundary Wire	
7.2 Burying the Boundary Wire	
7.3 Joining the Boundary Wire	
8. Software update	17
9. Maintenance	18
9.1 Keep it Sharp	
A. Replace the Blades	
9.2 Keep it Clean	
A. Cleaning the Body	
B. Cleaning the Underside	
C. Cleaning the contact pins and the charging strips	
9.3 Battery Life	
9.4 Winter Hibernation	
9.5 Replacing the Battery	
10. Function messages	21
11. Error messages	21
12. Security	23
13. Troubleshooting	23

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.

 **WARNING:** To reduce the risk of injury to persons and damage to the machine, do not remove battery pack before switching off the machine.

**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.
- m) To avoid using the machine and its peripherals in bad weather conditions especially when there is a risk of lightning.
- n) Do not touch moving hazardous parts before these have come to a complete stop.
- o) For machines used in public areas, that warning signs shall be placed around the working area of the machine. They shall show the substance of the following text:

WARNING! Automatic lawnmower! Keep away from the machine! Supervise children!

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.

Recommendation

To connect the machine and/or its peripherals only to a supply circuit protected by a residual current device (RCD) with a tripping current of not more than 30 mA.

Residual risks

To avoid injuries, wear protective gloves when replacing the blades.

Transport

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

To safely move form or within the working area:

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

RF exposure requirements

To satisfy RF exposure requirements, a separation distance of 200mm or more should be maintained between this device and persons during device operation.

To ensure compliance, operations at closer than this distance is not recommended. The antenna used for this transmitter must not be co-located in conjunction with any other antenna or transmitter.

 **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) **Wipe the battery pack terminals with a clean dry cloth if they become dirty.**
- i) **Battery pack needs to be charged before use. Always refer to this instruction and use the correct charging procedure.**
- j) **Do not maintain battery pack on charge when not in use.**

- k) After extended periods of storage, it may be necessary to charge and discharge the battery pack several times to obtain maximum performance.**
- l) Battery pack gives its best performance when it is operated at normal room temperature (20 °C ± 5 °C).**
- m) When disposing of battery packs, keep battery packs of different electrochemical systems separate from each other.**
- n) Recharge only with the charger specified by WORX. 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.*
- o) Do not use any battery pack which is not designed for use with the equipment.**
- p) Keep battery pack out of the reach of children.**
- q) Retain the original product literature for future reference.**
- r) Remove the battery from the equipment when not in use.**
- s) Dispose of properly.**

1.2 Information on the Landroid®



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.

6



Li-Ion

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

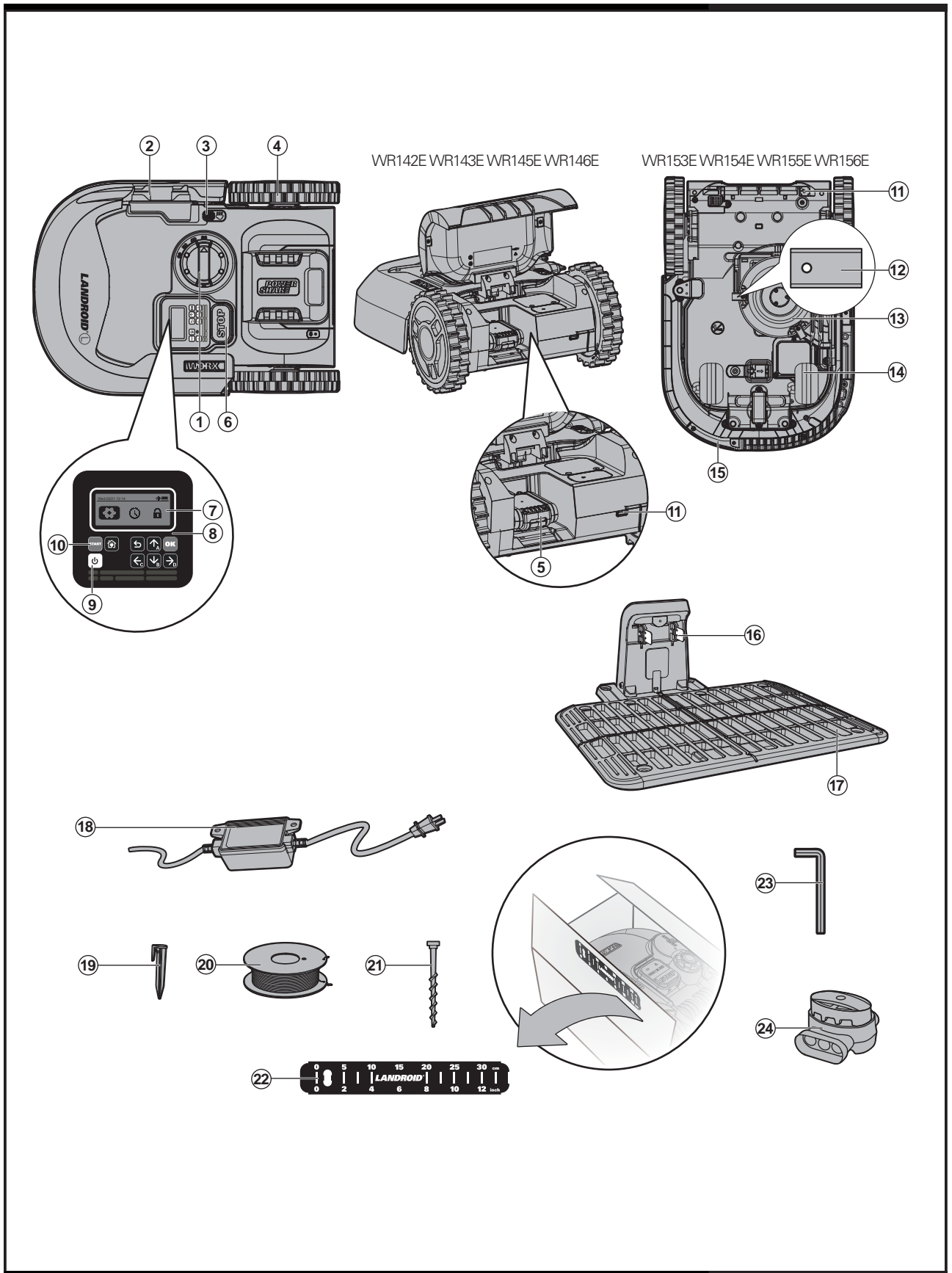


Class III appliance



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.

2. Component List



-
- 1. CUTTING HEIGHT ADJUSTMENT KNOB**

 - 2. CHARGING STRIP**

 - 3. RAIN SENSOR**

 - 4. REAR DRIVING WHEEL**

 - 5. BATTERY PACK**

 - 6. STOP BUTTON**

 - 7. DISPLAY**

 - 8. KEYPAD**

 - 9. ON/OFF KEY**

 - 10. START KEY**

 - 11. USB PORT**

 - 12. CUTTING BLADE**

 - 13. BLADE TURNING DISC**

 - 14. FRONT WHEEL**

 - 15. HANDLE**

 - 16. CONTACT PINS**

 - 17. CHARGING BASE**

 - 18. POWER ADAPTER**

 - 19. WIRE PEGS**

 - 20. BOUNDARY WIRE**

 - 21. CHARGING BASE FIXING NAILS**

 - 22. BOUNDARY WIRE DISTANCE GAUGE**

 - 23. HEX KEY**


 - 24. CONNECTOR**
-

Not all the accessories illustrated or described are included in standard delivery.

3. Technical data and noise data

3.1 Technical data

Type WR142E WR143E WR145E WR146E WR153E WR154E WR155E WR156E (100-199 - designation of machinery, representative of Robotic Lawnmower)

	WR142E WR145E	WR143E WR146E	WR153E WR154E	WR155E WR156E
Rated voltage	20V  Max.*			
No load speed	2800/min		2200/min	
Cutting area	700m ²	1000m ²	1500m ²	2000m ²
Cutting diameter	18cm		22cm	
Cutting height	30-60mm			
Cutting height positions	4			
Battery type	Lithium-ion			
Battery model	WA3553			WA3556
Charging time approx.	3hrs	1.5hrs	1.2hrs	1.5hrs
Charger model	WA3755.1/WA3750.1	WA3751/WA3762		
Charger rating	Input: 100-240V~50/60Hz, 38W, Output: 20V, 1.5A	Input: 100-240V~50/60Hz, 90W, Output: 20V, 3.0A		
Machinery weight	9.4kg	9.4kg	10.5kg	10.5kg
Protection degree	III			
App	Y			
Frequency band of embedded WLAN module	2.412GHz-2.484GHz			
Max. radio-frequency power of embedded WLAN module	802.11b:+16±2dBm(@11Mbps) 802.11g:+14±2dBm(@54Mbps) 802.11n:+13±2dBm(@HT20,MCS7)			

*Voltage measured at no load. Initial battery voltage reaches maximum of 20 volts. Nominal voltage is 18 volts.

ACCESSORIES

	WR142E WR145E	WR143E WR146E	WR153E WR154E	WR155E WR156E
Screw	9	9	9	9
Charging base	1	1	1	1
Charging base fixing nails	8	8	8	8
Boundary wire	150m	180m	200m	250m
Wire pegs	210	250	270	340
Hex key	1	1	1	1
Boundary wire distance gauge	2	2	2	2
Blade	9	9	9	9
Battery pack (WA3553)	1	1	1	/
Battery pack (WA3556)	/	/	/	1
Charger (WA3755.1/WA3750.1)	1	/	/	/
Charger (WA3751/WA3762)	/	1	1	1
Connector	2	2	2	2

We recommend that you purchase genuine accessories listed in the above list from the same store that sold you the tool. Refer to the accessory packaging for further details. Store personnel can assist you and offer advice.

Your Landroid® can be used with other WORX functional accessories. Visit www.worx.com to learn more about these available accessory options.

3.2 Noise data

	WR142E WR143E WR145E WR146E	WR153E WR154E WR155E WR156E
A weighted sound pressure	$L_{PA} = 45.5 \text{ dB(A)}$	$L_{PA} = 44.3 \text{ dB(A)}$
	$K_{PA} = 0.6 \text{ dB(A)}$	$K_{PA} = 1.1 \text{ dB(A)}$
A weighted sound power	$L_{WA} = 65.5 \text{ dB(A)}$	$L_{WA} = 64.3 \text{ dB(A)}$
	$K_{WA} = 0.6 \text{ dB(A)}$	$K_{WA} = 1.1 \text{ dB(A)}$

Wear ear protection when sound pressure is over 80 dB (A).

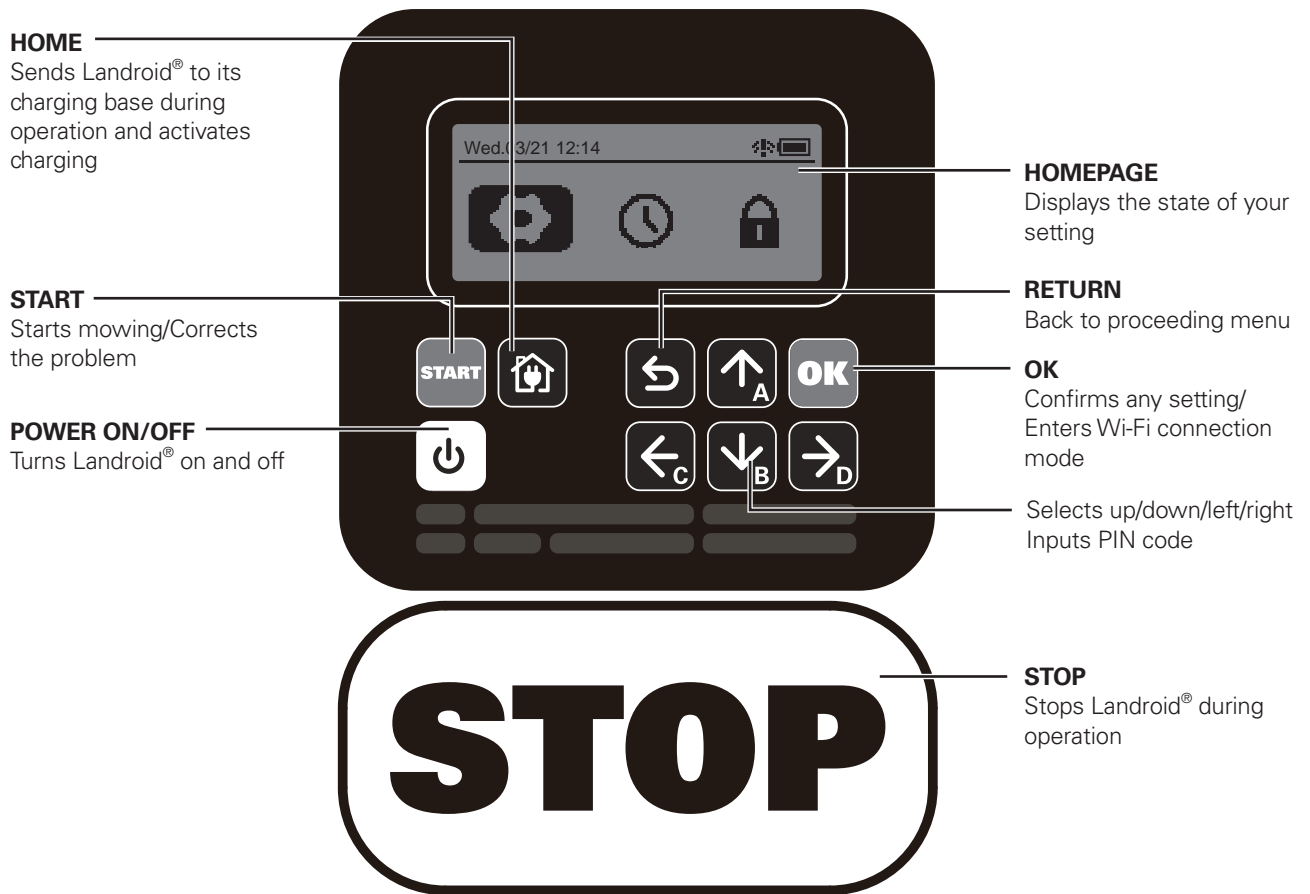


A degree of noise from the machine is not avoidable. Route noisy work is to be licensed and limits for certain periods. Keep rest periods and they may need to restrict the working hours to a minimum. For their personal protection and protection of people working nearby, an appropriate hearing protection shall be worn.






Intended Use

The garden product is intended for domestic lawn mowing. It is designed to mow often, maintaining a healthier and better looking lawn than ever before. Depending on the size of your lawn, your Landroid® may be programmed to operate at any time or frequency. It is impossible for digging, sweeping or snow cleaning.

4. Control panel

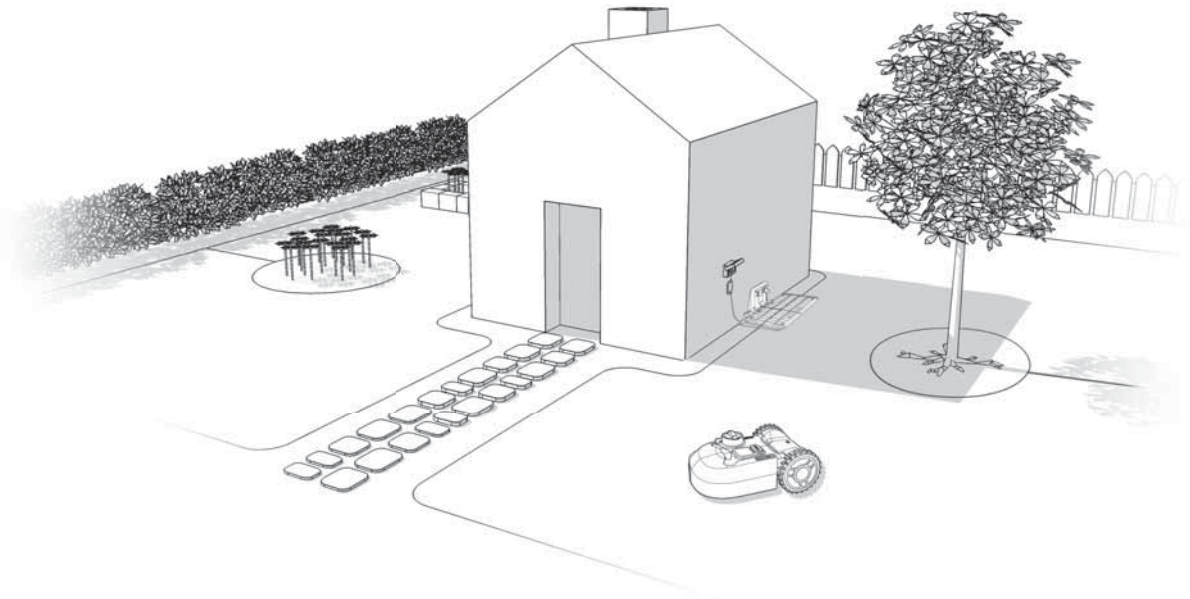


Start

- 1) After the boundary wire installation, you can start using the Landroid® (Please refer to Installation Guide for boundary wire installation).
 - 2) Press  until Landroid® turns on, then input the default PIN AAAAA.
 - 3) Press , then press  to start mowing.
 - 4) Press  then  to make Landroid® go to the charging base.
- Landroid® will work continuously until reaching low battery power level and then it will return to the charging base. Once charging is complete, Landroid® will automatically resume mowing or stay in the charging base according to the mowing schedule.

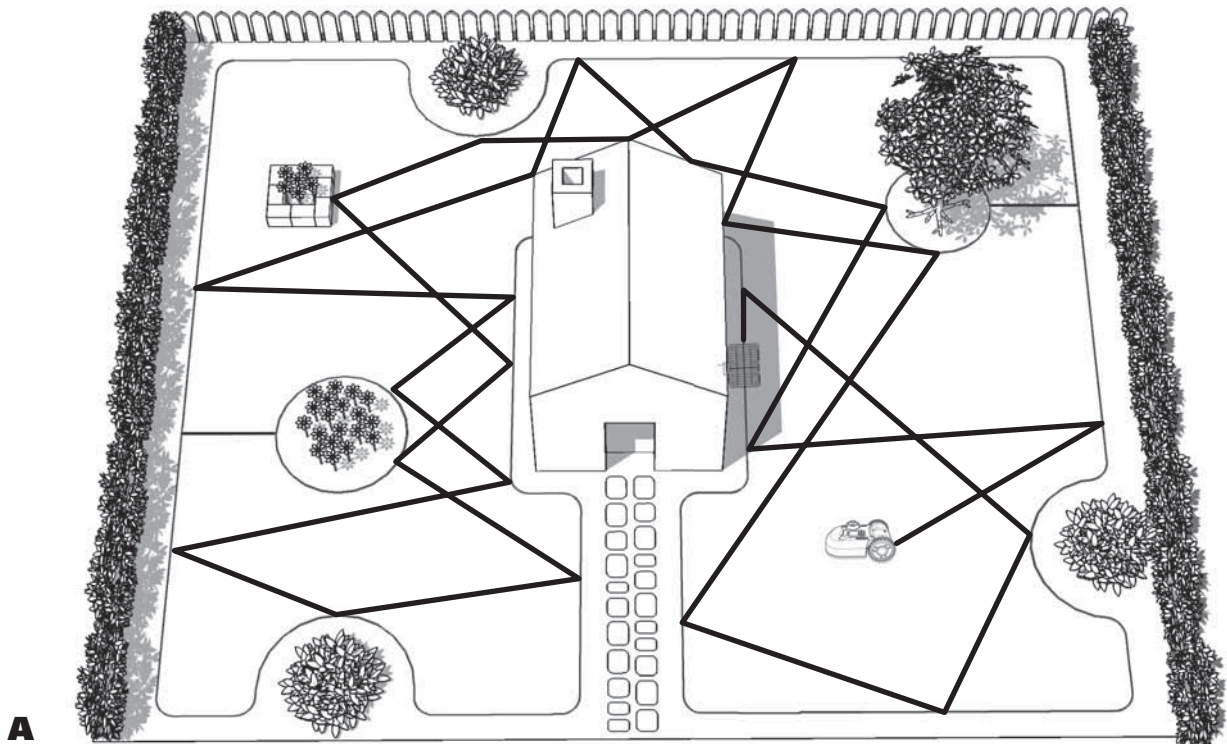
5. Understanding Your Landroid®

Congratulations on your new purchase of Landroid® and welcome to the care-free life of automatic mowing. In the following, we want to help you to better understand how your Landroid® thinks.



5.1 How does my Landroid® know what to mow?

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



5.2 How does my Landroid® know where to go?

Your Landroid® is made to work on its own. Landroid® knows when it needs to go to its charging base to charge, can sense when it is raining, can stop itself if it senses a problem, and knows to stop, drawback, and turn around when it bumps into something blocking its path. Landroid® will also automatically stop its blade turning disc from rotating if it is lifted off the ground to prevent an accident.

A. Finding the Charging Base

When your Landroid® needs to recharge, it will stop mowing and follow the boundary wire in an anti-clockwise direction back to its Charging Base. Landroid® is pre-programmed to mow the grass near the boundary wire once a week. By default, Landroid® will mow near the boundary wire every Monday of its system time.

If you don't want to enable boundary cut, deactivate it via your smartphone or by the control panel in "Work Time - Customize work time - Monday".

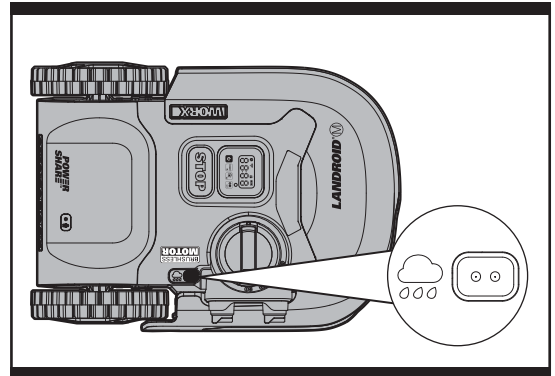
B. Rain sensors

Landroid® is equipped with a rain sensor which detects rain and tells Landroid® to stop mowing and follow the boundary wire back to its charging base (See Fig. B).

Landroid® will resume mowing after passing the Delay Time. The default Delay time is 180mins. The delay time setting can be changed via Landroid® APP or by the control panel in "General settings - Rain start delay".

When the rain sensors are wet, Landroid® returns to its charging base. When the rain sensors are dry, Landroid® will begin the delay time countdown or return to mowing (depending on the saved settings). If you want to exit from the rain delay, dry the sensor area, and perform a power cycle by operating the ON/OFF key. After the power cycle has been performed you can operate again.

NOTE: If the delay time is set to 0, Landroid® will continue mowing.



B

C. Sensing the boundary wire



Landroid® always obeys the border set by the boundary wire and uses sensors at its front to detect it. (See Fig. C)

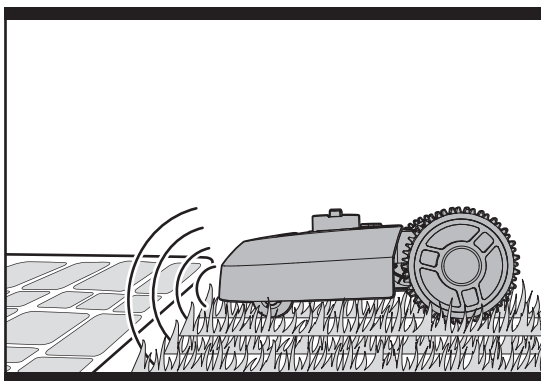
D. Starting and stopping while mowing (See Fig. D, E1, E2)

If you would like Landroid® to stop mowing, simply press the STOP button on top of the mower. To start mowing, press the ON/OFF key and input the PIN code. Press **START** , then press **OK** .

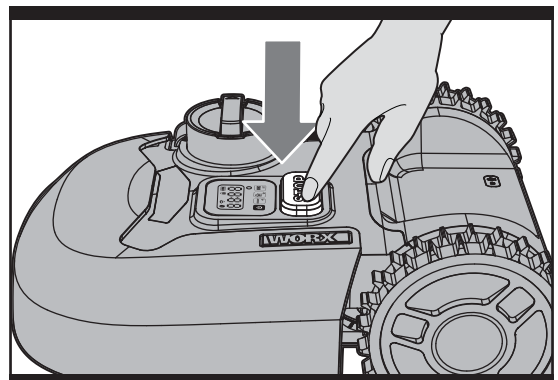
If Landroid® senses something is wrong, it will display a fault message on the display. For information on these messages, refer to the Error Messages. Landroid® will turn off if it does not receive any input from the user within 20 mins.

To resume:

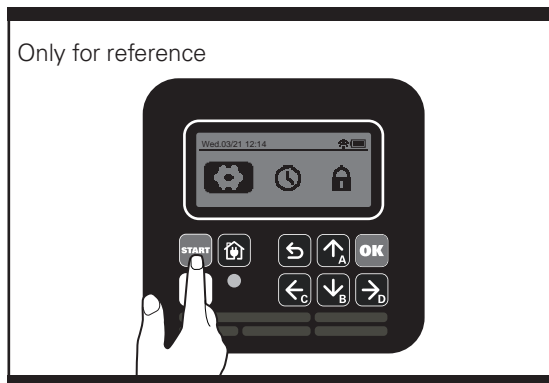
- Press the ON/OFF Key to OFF
- Correct the problem (refer to Error Messages)
- Press the ON/OFF Key to ON
- Press **START** , then press **OK** 
- Now the Landroid® will begin to mow!



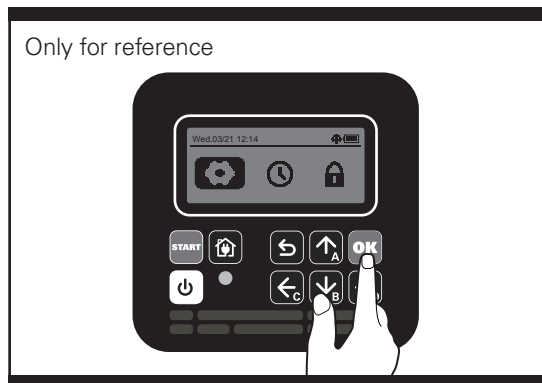
C



D



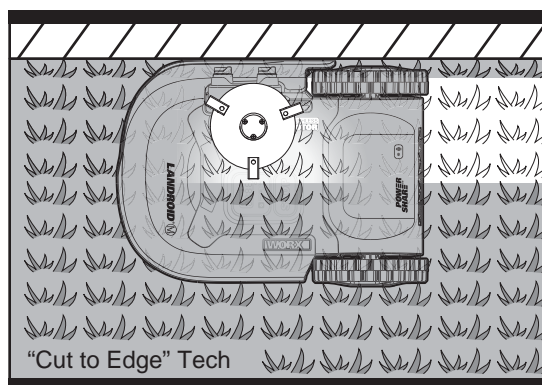
E1



E2

5.3 Cut to edge

Off-centered blade turning disc design provides a clean cut with narrowest distance to the boundary or wall. It helps minimize the amount and frequency of manual trimming along the boundary. Additionally, Landroid® is designed with a protective cover underneath that prevents objects from touching the turning blades and/or injury. (See Fig. F)



F

5.4 How efficiently will my Landroid® mow the grass?

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

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

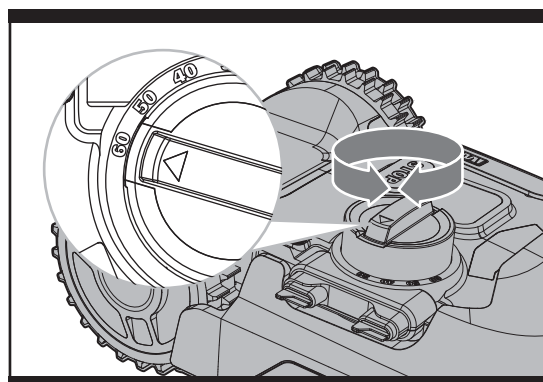
- Species of grass in your lawn and its growth rate
- Sharpness of the cutting blades
- Humidity
- Surrounding temperature
- Amount of obstacles in your Lawn

Unlike most other mowers, Landroid® uses a side charging system, which is able to cut the surrounding grass as much as possible. The holes on the bottom of the charging base allow the grass to grow through the base to help disguise it and create an elegant appearance.

Landroid®'s cutting height can be adjusted between 30mm-60mm. Before starting your Landroid® for the first time, you should cut the grass to the height no more than 90mm with your manual lawnmower. Then, set the cutting height of your Landroid® to its maximum setting 60mm for its first time mowing. (See Fig. G)

Your Landroid® will cut best in dry weather. Wet grass can build up on the blade turning disc and within the motor, and can also cause loose traction and slippage while working.

Your Landroid® is afraid of lightening storms. In case of a lightning storm, protect Landroid® by unplugging the charging base, disconnecting the boundary wire, and making sure Landroid® is not allowed to charge.



G

Your Landroid® loves mowing grass and requires the cutting blades to be kept in good condition to cut at its best. Landroid® can do most things by itself, but will sometimes need your help to prevent damage to itself.

- Never let Landroid® travel over gravel.
- Remove or prevent access to obstacles that Landroid® could accidentally climb on and damage its blade turning disc.
- Remove all debris and foreign objects from your lawn.

6. App

Your Landroid® is able to connect with smartphone. Using Landroid® App for your smartphone, you can change your Landroid®'s general settings, and view the machine's status and error messages.

Checklist before connecting your App to Landroid®

Step 1: Check your smart phone

1. Make sure the Wi-Fi that your smart phone connected is 2.4GHz instead of 5GHz.

Example:



2. Make sure the APP installed on your smart phone is the latest version.

Step 2: Check your Landroid®

1. Make sure your Landroid® is under the same router environment as your smart phone.
2. Make sure the firmware on your Landroid® is the latest version.
3. Make sure the distance between your Landroid® and smart phone is as close as possible during connection (less than 3 meters).
4. Make sure the distance between your Landroid® and router is as close as possible during connection (less than 3 meters).

Step 3: Check your router

1. Make sure your router is 2.4GHz or 2.4GHz mixed 5GHz, and please enable 2.4GHz band.
2. Make sure your router 802.11 mode of wireless setting is b/g/n mixed. (See Fig. 1)
3. Make sure your router channel/ band width of wireless setting is Auto or 20M or 20M mixed 40M. (See Fig. 4)
4. Make sure your router Enable the SSID Broadcast function when you connect the machine with the APP. And you can close it after you connect successfully. (See Fig. 1)

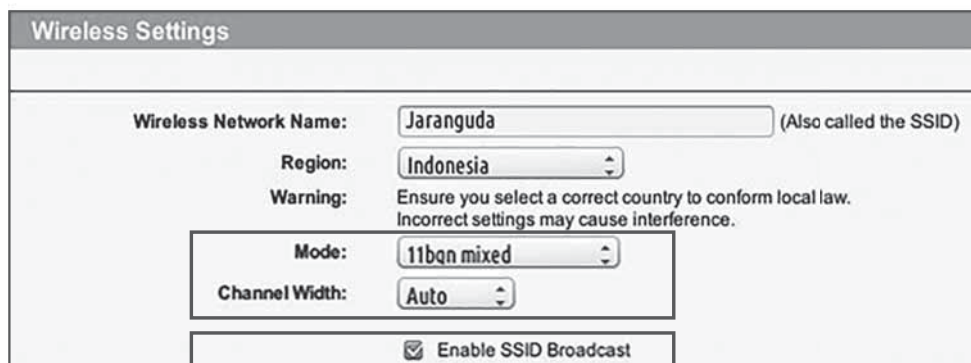


Fig. 1

5. Make sure DHCP function is enabled. (See Fig. 2)

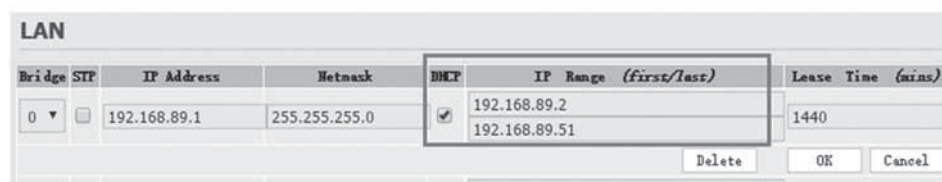


Fig. 2

- If you have a "Fritz!box" Router, please make sure activate "Allow communication between devices in same network" in the settings.
- Make sure Port 8883 TCP is open. If it's blocked (See Fig. 3), please modify the setting.

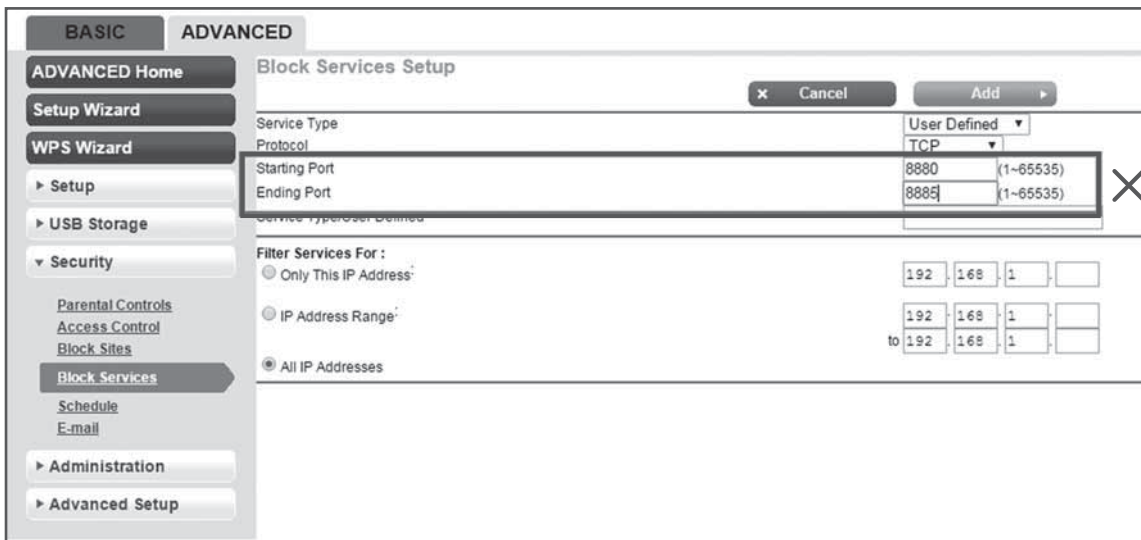


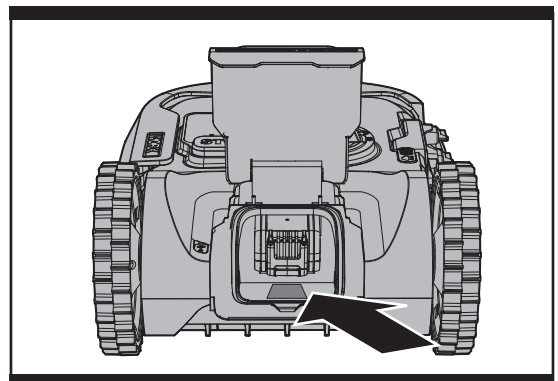
Fig. 3

To connect smartphone to your Landroid®:

Step 1: To download the Landroid® App, scan the QR code below or download it from Playstore (Google-Android), AppleStore (Apple-iOS) or our website www.worx.com.

Step 2: Enter the Landroid® APP, and then follow the instructions to connect to your Wi-Fi.

*The Serial No. can be found at the rear of Landroid® as shown.



H

NOTE:

- If your Wi-Fi information changes, Landroid® needs to be re-set according to Step 2.
- When Landroid® is located in an area with low or no Wi-Fi signal, instructions sent from the mobile App may not be executed immediately. Landroid® will receive instructions when it returns to an area with good Wi-Fi signal.
- For strong Wi-Fi signal to ensure stable connection, it is recommended to install Wi-Fi extenders to cover areas with weak or no Wi-Fi signal.

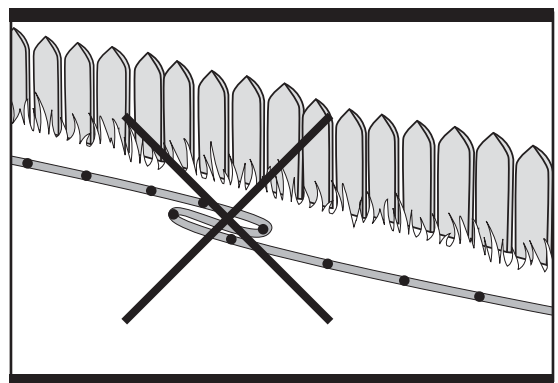
7. Boundary Wire Basics

7.1 Pegging the Boundary Wire

Use the boundary wire distance gauge to set the correct distance between the wire and the border of your lawn (more than 26cm). This is the recommended distance. The provided distance gauge ensures proper installation.

If your neighbor also uses a Landroid®, keep a spacing of at least 1 metre between your boundary wire and your neighbor's.

The boundary wire must outline the intended mowing



I

area exactly. Your Landroid® will become confused by extra bends or coils of boundary wire that are not part of its mowing area (See Fig. I). If there is excess boundary wire after the mowing area has been outlined, cut it off and store this additional wire in a separate location. It is important to leave the necessary length where it connects to the charging base so it can be connected and still remain buried.

7.2 Burying the Boundary Wire

If you are planning to bury the boundary wire, it is recommended to first peg it down. This allows you to easily change the layout if necessary before burying the wire. When the boundary wire installation is complete, have Landroid® follow and check the path by pressing **⏪** and **OK**. This allows your Landroid® to adjust to its new environment.

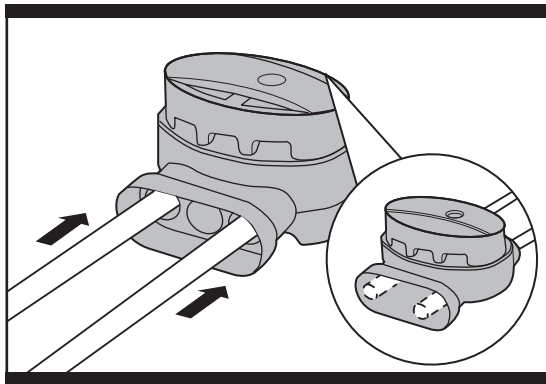
While observing Landroid® you can easily make alterations to the boundary wire to ensure Landroid®'s trouble-free tracking when locating the charging station. Confirm that Landroid® docks in the charging station successfully, and bury the wire if desired.

7.3 Joining the boundary wire

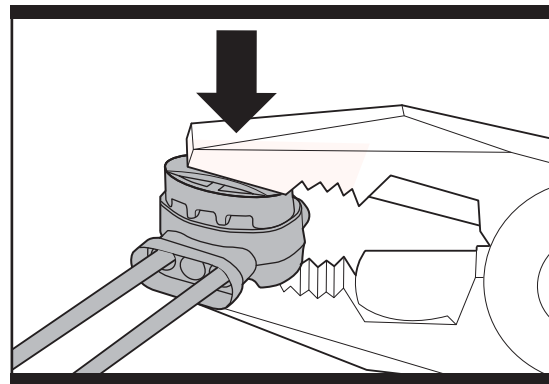
If you want to extend and splice the boundary wire, use a connector. The connector is waterproof and provides optimal connection.

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. J1) Press the connector together by using a pair of pliers. (See Fig. J2, J3)

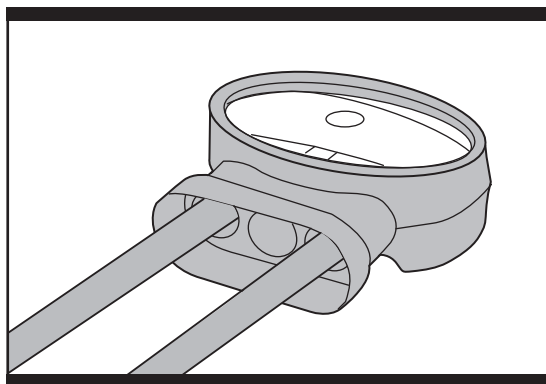
⚠ WARNING! It is not recommended to simply splice the boundary wire with insulating tape or use a screw terminal block for connection. A broken circuit may occur after a period of time as soil moisture can oxidize the wire.



J1



J2



J3


8. Software update

The software can be updated when new versions become available. The latest software can be downloaded from our website www.worx.com. There are two methods to update software.


Method 1: Update via USB. See below for download and installation instructions:

(1) Locate the latest software version at: www.worx.com. Save the file to an empty FAT32 formatted USB (flash drive). Delete any other files on the drive and check the format. If the drive is not formatted in FAT32, please reformat the drive.

NOTE: the software update is downloaded as a zipped file. You will need to unzip or extract it before proceeding.

(2) Place Landroid® on a secure and level surface. Press  to turn off your Landroid®.

(3) Insert the USB drive (flash drive) in the port. (See Fig. K1, K2)

(4) Press  to turn on your Landroid®.

(5) Without lifting the Landroid®, remove the USB drive (flash drive) according to the screen tips.

(6) The update will begin automatically and may take several minutes.

Landroid® will restart automatically after the update is completed.

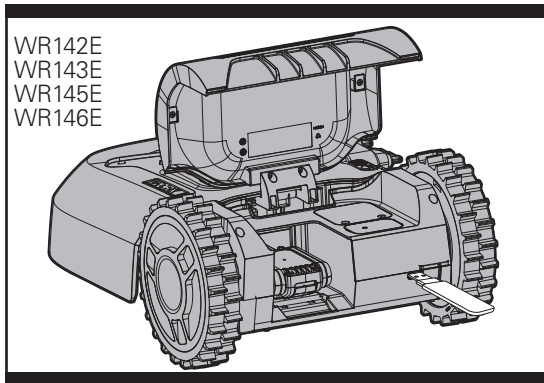
NOTE: If the Landroid® is not inside the boundary wire, the message "Outside working area! Press "START" to reset" will be displayed. Please refer to the manual for more information.

(7) Be sure to tightly and completely close the rubber protective USB port cover.

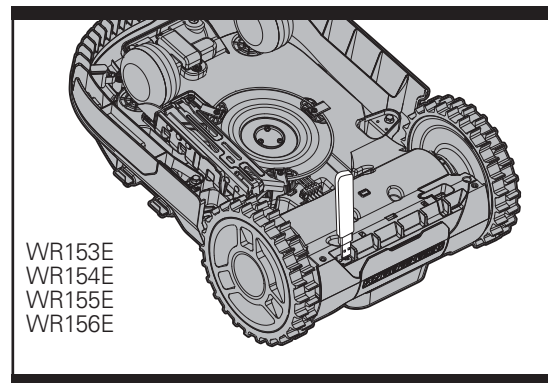
Method 2: Update via your smartphone.

If your Landroid® is connected to your smartphone via the Landroid® App, you can check the software version. The App will also notify you when new software version is available.

The manual included with your Landroid® is based on the default software at the time of 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.worx.com to download the latest manual.



K1



K2


9. Maintenance


Your Landroid® works hard and needs to be cleaned and checked from time to time. Some parts will require replacement as they become worn. Never use your Landroid® with defective on/off switch.

Switch off the machine before carrying out any service or maintenance.

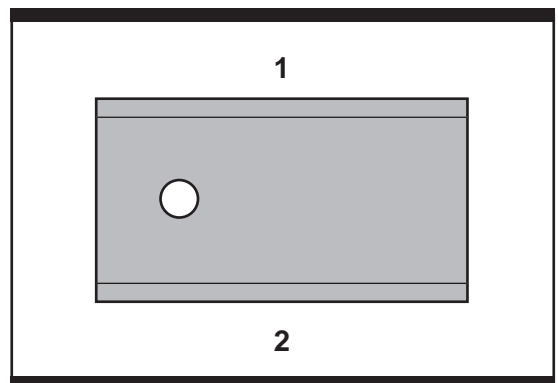
Here's how to take care of your Landroid®.

9.1 Keep it sharp

 **WARNING: Before cleaning, adjusting, or replacing the blades, turn your Landroid® 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 and balance the blade turning disc. Failure to use new screws could cause serious injury.**

The Landroid® does not cut grass like other mowers. Its cutting blades are razor sharp on 2 edges and rotate in both directions for maximum cutting capacity (See Fig. L). Each blade of your Landroid® has 2 cutting edges. The blade turning disc will make forward and reverse rotation at random to use both cutting



L

edges and minimize the frequency of replacing the blades. Each cutting blade will last up to 2 months when it is programmed to mow every day. Always check to see if the blades are chipped or damaged and replace them if they are. When the cutting blades are dull and worn out, they should be replaced with the spare blades provided with your Landroid®. Spare blades are also available at your nearest WORX retailer.

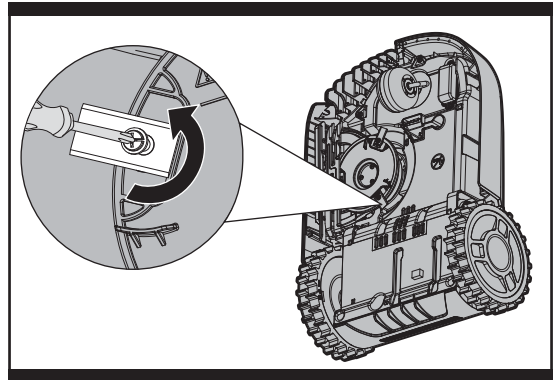
A. Replace the Blades

After some time, usually every season, your Landroid®'s blades will need to be replaced. When replacing the blades, make sure to replace all of them at the same time. You can replace them with one of the spare blade kits and extra blade screws supplied with your Landroid®.

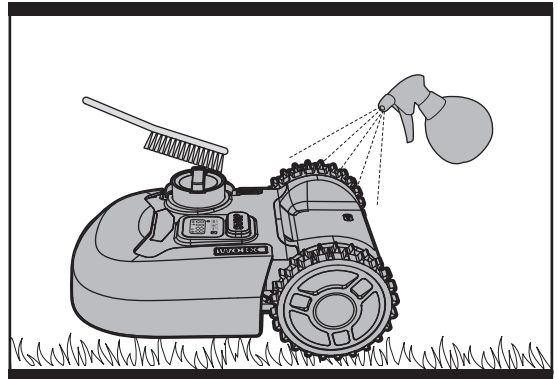
Before attempting to replace your Landroid®'s blades, turn the power off and put on protective gloves and follow these steps:

1. Open the battery cover and remove the battery.
2. Take the screws off the blades with a screwdriver. (See Fig. M)
3. Firmly screw on the new blades.
4. 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.



M



N

9.2 Keep it clean

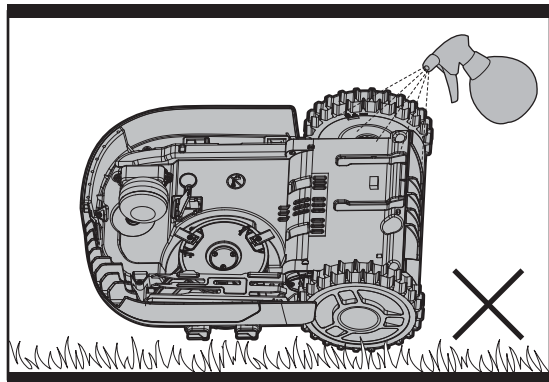
WARNING: Before cleaning, turn your Landroid® OFF. Put on protective gloves before cleaning the blade turning disc and do not rinse or flush with water.

A. Cleaning the Body

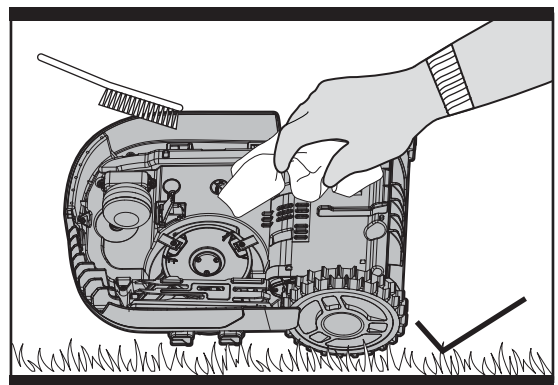
Your Landroid® will live a much happier and longer life if it is cleaned regularly. Since your Landroid® is an electric machine, you will need to take care when cleaning. **DO NOT use a hose, high pressure washers and do not pour running water on your Landroid®.** It is best to use a spray bottle filled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

B. Cleaning the Underside

Again, it is important that you power the Landroid® OFF and **wear protective gloves before touching the blade turning disc.**



O1



O2

First, flip your Landroid® upside down to expose its underside. Here you will see the blade disc, the chassis, and the front wheel and driving wheels. Clean everything thoroughly with a soft brush or moist rag.

WARNING: NEVER clean the underside of Landroid® with running water. Component damage can occur. (See Fig. O1, O2)

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®'s mowing output.

C. Clean the contact pins and the charging strips

Clean the contact pins located on the charging base and the charging strips located on Landroid® using a cloth. Remove any built up grass clippings or debris around the contact pins and charge strips periodically to ensure Landroid® successfully charges each time.

9.3 Battery life

The heart of the Landroid® is its 20V Li-Ion Battery. For proper storage of the battery, make sure it is fully charged and kept in a cool dry place.

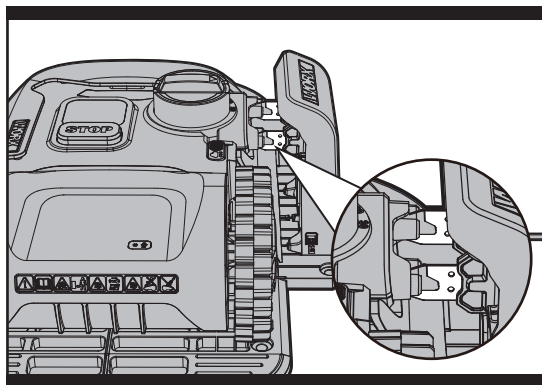
NOTE: The recommended Landroid® operation temperature is between 0-55°C.

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

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

Landroid® can be charged manually without the boundary wire.

- 1. Connect the charging base to a suitable power supply. The green light on the charging base will turn on.**
- 2. Manually dock Landroid® into the charging base while Landroid® is powered off. (See Fig. P)**
- 3. The green light on the charging base will turn to red. Landroid® will begin to charge.**



P

9.4 Winter hibernation

Your Landroid® will live longer and healthier if it is allowed to hibernate. So even though it is troublesome, we recommend storing your Landroid® in your shed or garage during the winter.

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

- Thoroughly clean your Landroid®
- Fully charge the battery and remove it from Landroid®
- Turn the power off

To maximize the battery life, fully charge the battery and remove it from Landroid® before storage during winter.

WARNING: Protect the underside of Landroid® from water. NEVER store Landroid® upside down outdoors.

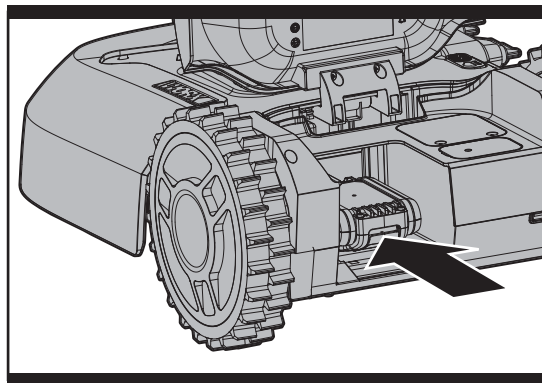
The boundary wire can be left in the ground but its ends should be protected, such as placed in a tin can with grease. If the charging base is left outside for the winter, leave the boundary wire connected.

NOTE: When bringing Landroid® back to work after winter hibernation, make sure the charging strips and contact pins are clean. We recommend using a fine grade emery cloth to clean the contacts. Using the app, make sure the date and time are correct and send Landroid® back to what it loves doing: mowing.

9.5 Replacing the battery

WARNING: Power off before attempting any adjustment, replacement or repair.

Open the battery pack protection cover. Press down the battery pack release button to remove the battery pack from Landroid®. (See Fig. Q) Insert a new and fully charged battery pack into the battery port. A simple push and slight pressure will be sufficient until a click is heard. Check to see if the battery is fully secured.








Q

10. Function Messages







Cutting grass	cutting grass according to the program setting
Raining	The rain sensor detects water. Landroid® will return to the charging base and stay there for the time you have programmed it to do so. When dry, Landroid® will automatically begin the delay and countdown and then return to mow. If you want Landroid® to mow before this, simply turn it off then on again, but only when the rain sensor is dry or you can set the delay time to 0 min.
Going home	needs to recharge—during the journey to the base, the cutting blade is stopped in order to save energy
Charging	charge is in progress—charge percentage are displayed
No working time scheduled	stand-by, need to be programmed as desired.
Not working today	stand-by, will start according to program set.
Work done today	
Searching working area	According to the setting of "Customize work zone," Landroid® is searching a certain area to mow.
Charging 100%	Landroid® has completed its charging.
Emergency charging	Landroid® is charging in power-off state.

11. Error Messages

Message	Cause	Action
Outside working area! Press "START" to reset	Machine can't find boundary wire signal or the direction of boundary is wrong.	<ol style="list-style-type: none"> 1. If Landroid® is actually outside its territory: turn power off, take Landroid® inside its territory. Turn power on. Press . 2. If the Landroid® is inside its territory, check if the LED on the charging base is green. If not, verify that the charging base is properly connected to the charger and that the charger is connected to a suitable power supply. If they are properly connected, the boundary wires are clamped incorrectly and must be reversed. 3. Reverse the boundary wire ends.
Please enter right PIN code	PIN code is wrong.	Input the correct PIN or re-set your PIN.
Blade motor fault! Press "START" to reset	Blade disc is blocked.	<ol style="list-style-type: none"> 1. Turn power off; 2. Turn Landroid® upside down and check if there's anything preventing the blade disc to rotate. 3. Remove any obstruction. 4. Turn Landroid® upright and take it to an area with short grass or adjust the cutting height; 5. Turn power on. Press .
Wheels motor fault! Press "START" to reset	Wheel motor is blocked.	<ol style="list-style-type: none"> 1. Turn power off; take Landroid® in an area free from obstacles; 2. Turn power on. Press . 3. If the error message is still displayed; turn power off; turn Landroid® upside-down and check if there's anything preventing the wheels from rotating. 4. Remove any obstruction, turn Landroid® upright, turn power on.

Mower trapped! Press "START" to reset	Landroid® is trapped.	<ol style="list-style-type: none"> 1. Turn power off; 2. Take Landroid® to an area in your lawn free of obstacles; 3. Turn power on. Press . 4. If the error message is still displayed; turn power off; turn Landroid® upside-down. Check if there is anything preventing the wheels from rotating. 5. Remove any obstruction, turn the Landroid® upright, turn power on.
Mower lifted! Press "START" to reset	Landroid® is lifted up.	<ol style="list-style-type: none"> 1. Turn power off. 2. Take Landroid® to a lawn area clear of obstacles, turn power on. Press . 3. If the error message is still displayed: turn power off, turn Landroid® upside-down and check there's nothing lifted up. 4. Remove any possible object, turn Landroid® upright, turn power on.
Upside down! Press "START" to reset	Landroid® is upside down.	Turn Landroid® upright.
Battery voltage too low.	Low battery.	In this case you must turn Landroid® off and place it in the charging base, then "Charging" will be shown on screen, which means it starts charging.
Wire missing! Press "START" to reset	Machine can't find boundary wire signal.	If the LED light flashes green, confirm that the boundary wire is well connected to the clamps on the charging base. If the problem persists, check that the boundary wire hasn't been cut.
Battery charge overtemp! Please wait cooling down.	Temperature is too high (more than 55°C) when charging.	Place the charging base in a shady area or wait until the temperature has cooled down.
Mower locked!	"Lock" function is activated.	Put Landroid® in the original network and unlock it by setting "Enable lock" to "disabled" in mobile App.

NOTES

- Before turning power on, always check Landroid® is inside its territory. If not, the message "Outside working area! Press "START" to reset" will be displayed. This message is displayed also when Landroid® is sitting over the boundary wire when turned on.
- If for any reason—i.e. a party, children playing...—you want to park your Landroid® in the charging base: press  then . Landroid® will go to its base and stay there. Please note Landroid® will now wait until the next scheduled mowing session. If you want to re-start it, and press  then  to start your Landroid®.
- If an error repeatedly occurs in the same area of your lawn, you might have a problem with the boundary wire so please refer to the previous installation instructions and check your set up with its help.
- If your lawn is divided in two separated areas, connected by a corridor less than 1m, one of which is not provided with the charging base: when Landroid® runs out of charge, take it manually to the charging base, turn power on, press  then  and the charge process will start.
- If Landroid® runs abnormally once in a while, please try to restart it. If the problem cannot be solved, please contact WORX service agent for help.
- Do not wash your Landroid® with a high pressure washer. This could cause damage to the battery or the machine.



12. Security

If Landroid® is connected to your smartphone, you can lock it on your smartphone. This prevents unauthorised people from being able to use it.

13. Troubleshooting

If your Landroid® does not work correctly, follow the troubleshooting guide below. If the issue persists, contact your Dealer.

Symptom	Cause	Action
The LED light on the charging base does not turn on.	There is no power.	Check the charging base is connected properly to the power adapter and the power adapter is connected to a suitable power supply.

Red light turns on the charging base.	The boundary wire isn't connected or boundary wire is broken.	Check that the boundary wire has been connected correctly to the charging base. Check there are no breaks in the boundary wire, especially in the wire ends.
Landroid® turns on, but the blade disc does not move.	Landroid® is searching for the charging base (except that you press the HOME button to make it go to the charging base, or the "Border cut" function is operating).	This is normal, Landroid® needs to recharge, the blade disc does not rotate while it is searching for the charging base automatically.
Landroid® vibrates.	Blades may be damaged. Check condition of the blade disc.	Check the blades, and replace them if damaged. Remove debris and foreign objects from the blades and blade disc.
Grass is being cut unevenly	Landroid® does not work enough hours per day.	Add more hours to the mowing time.
	Mowing area is too big.	Try decreasing the size of the mowing area or adding more hours to the mowing time.
	Blades are dull.	Change all the blades and screws in order to balance the blade disc.
	The cutting height is set too low for the length of the grass.	Raise the cutting height and then gradually lower.
	Grass or other object has wrapped around the blade disc.	Check the blade disc and remove the grass or other object.
Your Landroid® is inside its territory and the boundary wire is connected. But the display says "Outside working area! Press "START" to reset!"	There is a build-up of grass in the blade disc or motor frame box.	Make sure the blade disc rotates easily. If need be, you may take off the blade disc and then remove the debris. See How to Clean.
	The boundary wire ends are clamped incorrectly.	Reverse the boundary wire ends.
The charging time is far more than the rated charging time.	Poor connection caused by debris on the charging strip.	Clean the contact pins located on the charging base and the charging strip on Landroid® using a cloth.
	The charging protection program has activated due to high or low temperature.	Place the charging base in a right place or wait until the temperature has cooled down or warmed up.
The mower does not charge	There is no power.	Check the LED on charging base is turned on.
	Landroid® does not connect correctly with contact pins while manually charging.	Try again. Make sure both the charging pins on the mower touch the centre of the contact pins on the charging base.
	The battery voltage is over 18.85V.	This is normal.
Landroid® is starting to have shorter run-times between charges.	Something is clogged in the blade disc.	"Take off the blade disc and clean it. The grass is too high and too thick."
	Landroid® is shaking heavily.	Check the blade disc and blades, remove debris and foreign objects from the blades and blade disc.
	The battery may be exhausted or old.	Replace battery.
Landroid® is not operating at the correct time.	The clock is not set to the correct time.	Set the clock to the correct time.
	Programmed cutting times for Landroid® are not correct.	Change the time settings for the mower to start and stop.
	Landroid® is manually docked in the charging base.	Press  and then  .

Landroid® cannot correctly dock with the charging base.	Environmental influences.	Reposition the charging base. Avoid of a wall, metal or other objects.
	Poor connection caused by debris on the charging strip.	Clean the contact pins located on the charging base and the charging strip on Landroid® using a cloth.
	The boundary wire on both sides of the charging base is not long enough.	Make sure the boundary wire on both sides of the charging base is straight for at least 0.8m.
The green light on the charging base turns on before charging is complete.	The charging base is overheating, the LED will display "Battery charge overtemp! Please wait cooling down". The temperature of the charging base is below 0°C.	Place the charging base in a shady area or wait until the temperature has cooled down or warmed up.
Landroid® runs outside the boundary wire. Landroid® does not mow an area within a boundary wire zone. Landroid® reverses or rotates erratically near the boundary wire.	The lawn is wet, uneven or there are obstacles.	Wait until the lawn is dry. Make the lawn even and remove obstacles.
	The boundary wire of another Landroid® or another branded robotic mower is positioned too closely.	Ensure your Landroid® boundary wire has at least 1m of spacing between the neighboring boundary wire.
	The boundary wire has been installed with tight corners.	Check the boundary wire to ensure the corners are smooth.
	In wet conditions, the boundary wire electric signal may leak were wire has been joined or repaired.	Check boundary wire joints. Insulate to provide a fully waterproof connection.
	The cutting area is larger than the allowable cutting area for Landroid®.	Contact service agent.
Landroid® wheels skid or damage lawn.	Foreign obstacles, such as twigs and branches may be lodged under Landroid®.	Remove foreign objects from underside of Landroid®.
	The lawn is too wet.	Wait until lawn has dried.
	The boundary wire has been installed with tight corners.	Check the boundary wire to ensure the corners are smooth.
Landroid® exits the boundary wire due to high speed when going down a hill.	The boundary wire is placed on a slope steeper than 17% (10°).	Reposition the boundary wire away from slopes that are steeper than 17% (10°). Please refer Installation Guide for details.
Landroid® crashes when charging or on standby.	Software or display fault.	Restart Landroid®.
Landroid® shuts off when docking in the charging base.	Landroid® fails to charge due to over temperature protection and is powered off.	Place the charging base in a right place or wait until the temperature has cooled down.
	Poor connection.	Check the LED light on the charging base. Check there are no breaks in the boundary wire. Check the connection between the contact pins located on the charging base and the charging strip.

Landroid® stops in the working area.	There is an obstacle in the working area.	Exclude the obstacle from Landroid®'s working area.
	The cutting area is larger than the allowable cutting area for Landroid®.	Reduce the cutting area. The extended boundary wire should not exceed 400m or it may cause signal problem.
	The cutting height is set too low for the length of the grass. The grass is too dense.	Raise the cutting height and then gradually lower.
Landroid® flips over.	There is an inclined obstacle on the lawn.	Exclude the obstacle from Landroid®'s working area.

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.

Declaration of Conformity

We,
Positec Germany GmbH
Grüner Weg 10, 50825 Cologne, Germany

Declare that the product,
Description **Robotic Lawnmower**
Type **WR142E WR143E WR145E WR146E WR153E WR154E WR155E WR156E (100-199 - designation of machinery, representative of Robotic Lawnmower) (Year, article number and month of serial number are placed on the back page. The complete serial number is clearly stated on the enclosure of lawnmower) with battery charger WA3755.1/WA3750.1/WA3751/WA3762 and charging base WA4002.1/WA0511**
Function **Cutting grass**

Complies with the following Directives,
2006/42/EC, 2014/30/EU, 2014/35/EU, 2011/65/EU, 2000/14/EC amended by 2005/88/EC, 2014/53/EU

WR142E WR143E WR145E WR146E:

2000/14/EC amended by 2005/88/EC
- Conformity Assessment Procedure as per **Annex V**
- Measured Sound Power Level **65.5 dB (A)**
- Declared Guaranteed Sound Power Level **67 dB (A)**

WR153E WR154E WR155E WR156E:

2000/14/EC amended by 2005/88/EC
- Conformity Assessment Procedure as per **Annex V**
- Measured Sound Power Level **64.3 dB (A)**
- Declared Guaranteed Sound Power Level **66 dB (A)**

The notified body involved

Name: Intertek Testing & Certification Ltd. (notified body 0359)
Address: Cleeve Road, Leatherhead, Surrey, KT22 7SB United Kingdom
Certification No. : 181000469SHA-V1 (WR142E WR143E WR145E WR146E)
181000473SHA-V1 (WR153E WR154E WR155E WR156E)

Standards conform to,

EN 60335-1:2012+A11+A13:2017, EN 50636-2-107:2015+A1:2018, EN 60335-2-29:2004+A2:2010, EN 62233:2008, EN ISO 3744:2005, EN 55014-1:2017, EN 55014-2:2015, EN 61000-3-2:2014, EN 61000-3-3:2013, EN 300 328 V2.1.1, EN 301 489-1 V2.1.1, EN 301 489-17 V3.1.1, EN 62311:2008, EN 61558-1:2005+A1:2009, EN 61558-2-16:2009+A1:2013, EN 55011:2016, EN 303 447 V1.1.1, EN 55032:2015, EN 55035:2017

The person authorized to compile the technical file,

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2019/02/26
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