Lefant

Robot Vacuum Cleaner M2

Instruction Manual

Congratulations on the purchase of your Lefant ROBOTICS!

We hope it brings you many years of satisfaction. We trust the purchase of your new robot will help keep your home clean and provide you more quality time to do other things.
Wisdom Inspired Freedom

Should you encounter situations that have not been properly addressed in this Instruction Manual, please contactour Customer Service Center where a technician can address your specific problem or question.

For more information, please visit the Lefant ROBOTICS official website:
www.lefant.com or send email to **support.us@lefant.com**

The Company reserves the right to make technological and/or design changes to this product for continuous improvement.

Important Safety Instructions
IMPORTANT SAFETY INSTRUCTIONS READ ALL INSTRUCTIONS BEFORE USING THIS APPLIANCE.

For Household use only

When using an electrical appliance, basic precautions should always be followed, including the following:

WARNING: Read all safety warnings and instructions. Failure to follow the warnings and instructions may result in electric shock, fire or serious injury.

1. Do not allow to be used as a toy. Close attention is necessary when used by or near children.
2. Clear the area to be cleaned. Remove power cords and small objects from the floor that could entangle the Appliance. Tuck rug fringe under the rug base, and lift items such as curtains and table cloths off the floor.
3. If there is a drop off in the cleaning area due to a step or stairs, you should operate the Appliance to ensure that it can detect the step without falling over the edge. It may become necessary to place a physical barrier at the edge to keep the unit from falling. Make sure the physical barrier is not a trip hazard.
4. Only use as described in this manual. Only use attachments recommended or sold by the manufacturer.
5. Please make sure your power supply voltage matches the power voltage marked on the Docking Station.
6. Do not handle plug or appliance with wet hands.
7. Non-rechargeable batteries are prohibited.
8. Do not use without dust bin and/or filters in place.
9. Do not operate the vacuum in an area where there are lit candles or fragile objects on the floor to be cleaned.
10. Do not use and store in extremely hot or cold environments (below -5°C /23°F or above 40°C/104°F). Please charge the robot in temperature above 0°C/32°F and below 40°C/104°F.

11. Keep hair, loose clothing, fingers, and all parts of body away from any openings and moving parts.
12. Do not operate the Appliance in a room where an infant or child is sleeping.
13. For INDOOR use ONLY Do not use the Appliance in outdoor, commercial or industrial environments. Do not use Appliance on wet surfaces or surfaces with standing water.
14. Do not allow the Appliance to pick up large objects like stones, large pieces of paper or any item that may clog the Appliance.
15. Do not use Appliance to pick up flammable or combustible materials such as gasoline, printer or copier toner, or use in areas where they may be present.
16. Do not use Appliance to pick up anything that is burning or smoking, such as cigarettes, matches, hot ashes, or anything that could cause a fire.
17. Do not put any object into openings. Do not use with any opening blocked; keep free of dust, lint, hair, and anything that may reduce air flow.
18. Take care not to damage the power cord. Do not pull on or carry the Appliance or Docking Station by the power cord, use the power cord as a handle, close a door on the power cord, or pull power cord around sharp edges or corners. Do not run Appliance over the power cord. Keep power cord away from hot surfaces. Do not unplug by pulling on cord, To unplug, grasp the plug, not the cord.
19. If the power cord is damaged, it must be replaced by the manufacturer or its service agent in order to avoid a hazard.
20. Do not use the Docking Station if it is damaged.
21. Do not use the Appliance or Docking Station if it is not working properly, has been dropped, damaged, left outdoors, or come in contact with water. It must be repaired by the manufacturer or its service agent in order to avoid a hazard.
22. Turn OFF the power switch before cleaning or maintaining the Appliance. Turn off all controls before unplugging.

23. The plug must be removed from the receptacle before cleaning or maintaining the Docking Station.
24. Remove the Appliance from the Docking Station, and turn OFF the power switch to the Appliance before removing the battery for disposal of the Appliance.
25. The battery must be removed and discarded according to local laws and regulations before disposal of the Appliance.
26. Please dispose of used batteries according to local laws and regulations.
27. Do not incinerate the Appliance even if it is severely damaged. The batteries can explode in a fire.
28. When not using the Docking Station for a long period of time, please unplug it.
29. The Appliance must be used in accordance with the directions in this Instruction Manual. Our company cannot be held liable or responsible for any damages or injuries caused by improper use.
30. Prevent unintentional starting. Ensure the switch is in the off position before connecting to battery pack, picking up or carrying the appliance. Carrying the appliance with your finger on the switch or energizing appliance that have the switch on invites accidents.
31. 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.
32. Under abusive conditions, liquid may be ejected from the battery; avoid contact. If contact accidentally occurs, flush with water. If liquid contacts eyes, additionally seek medical help. Liquid ejected from the battery may cause irritation or burns.
33. Do not use a battery pack or appliance that is damaged or modified. Damaged or modified batteries may exhibit unpredictable behavior resulting in fire,explosion or risk of injury.
34. Do not expose a battery pack or appliance to fire or excessive temperature. Exposure to fire or temperature above 130°C may cause explosion. The temperature of 130°C can be replaced by the temperature of 265°F.

35. Follow all charging instructions and do not charge the battery pack or appliance outside of the temperature range specified in the instructions. Charging improperly or at temperatures outside of the specified range may damage the battery and increase the risk of fire.
36. Have servicing performed by a qualified repair person using only identical replacement parts. This will ensure that the safety of the product is maintained.
37. Do not modify or attempt to repair the appliance or the battery pack (as applicable) except as indicated in the instructions for use and care.
38. Place the cords from other appliances out of the area to be cleaned.
39. Do not operate the vacuum in a room that has lit candles on furniture that the vacuum may accidentally hit or bump into.
40. Do not allow children to sit on the vacuum.
41. Recharge only with the charger specified by the manufacturer. A charger that is suitable for one type of battery pack may create a risk of fire when used with another battery pack.
42. Use appliances only with specifically designated battery packs. Use of any other battery packs may create a risk of injury and fire.
43. The robot contains batteries that are only replaceable by skilled persons, To replace the robot's battery, please contact Customer Service.
44. If the robot will not be used for a long time, fully charge the robot and power OFF for storage and unplug the Docking Station.

SAVE THESE INSTRUCTIONS

	Short-circuit-proof safety isolating transformer
	Switch mode power supply
	For indoor use only
	Direct current
	Alternating current
	detachable supply unit

Federal Communications Commission (FCC) Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules.
These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generate, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:
• Reorient or relocate the receiving antenna.
• Increase the separation between the equipment and receiver.
• Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
• Consult the dealer or an experienced radio/TV technician for help.

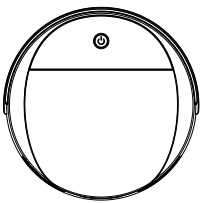
This device complies with Part 15 of the FCC Rules.

Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.
FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user5s authority to operate this equipment.
RF exposure warning
This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment must be installed and operated in accordance with provided instructions and the antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be collocated or operating in conjunction with any other antenna or transmitter.

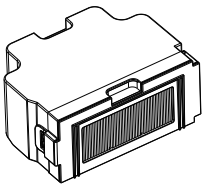
Contents

1.Package Contents 8
2.Operating and Programming. 11
3.Maintenance 17
4.Indicator Light and Alarm Sounds 20
5.Troubleshooting 22
6.Product Specifications 25

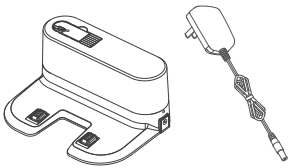
1. Package Contents /1.1 Package Contents



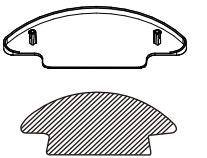
Robot



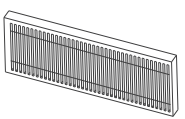
Dust Bin



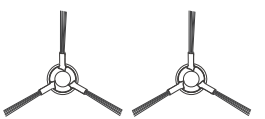
Docking Station
Power Adapter



Mopping Cloth
& Mopping Cloth Bracket



High Efficiency Filter



Side Brushes



Instruction Manual

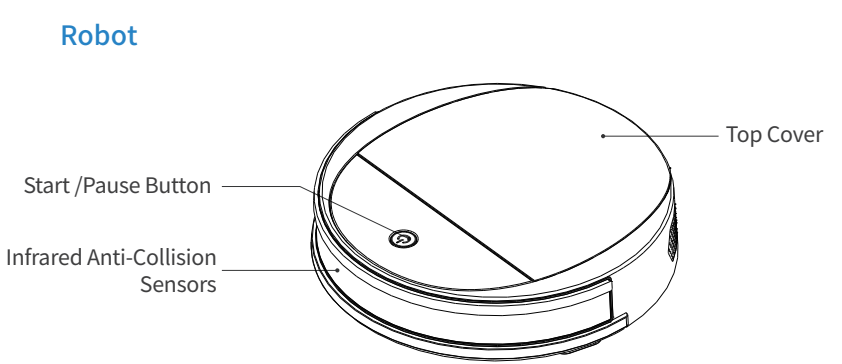


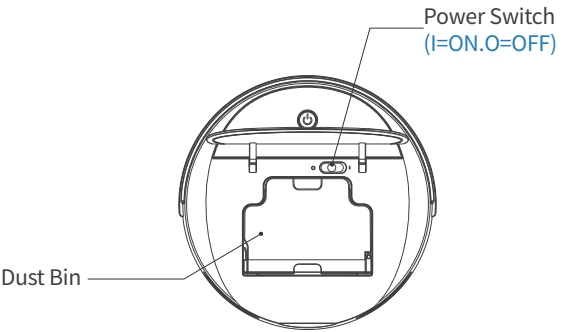
Disposable Mopping Cloth

Note: Figures and illustrations are for reference only and may differ from actual product appearance. Product design and specifications are subject to changes without notice.

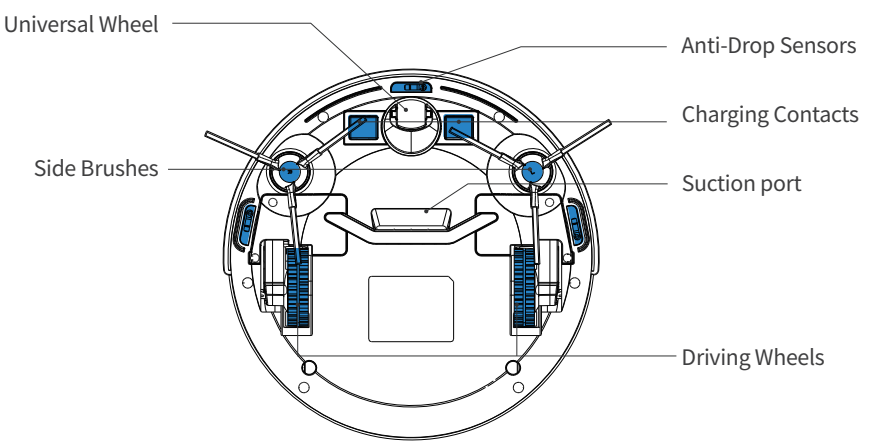
1. Package Contents /1.2 Product Diagram

Robot

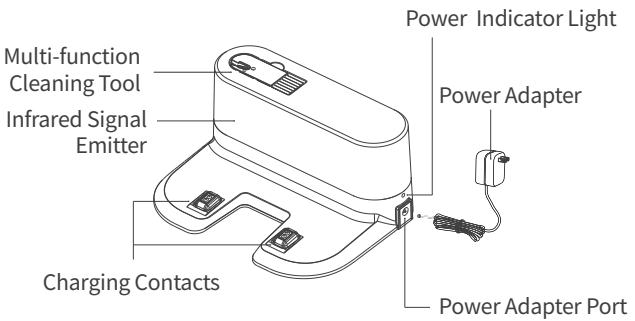




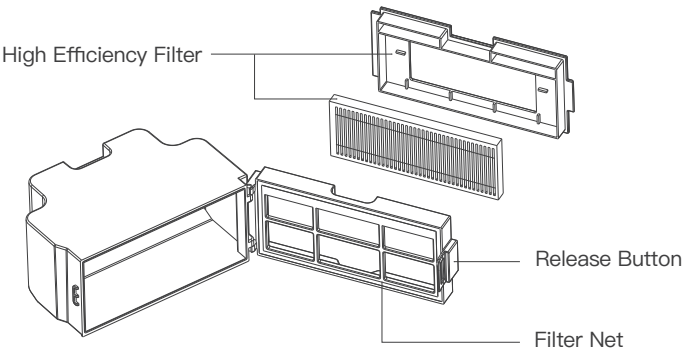
Bottom



Docking Station

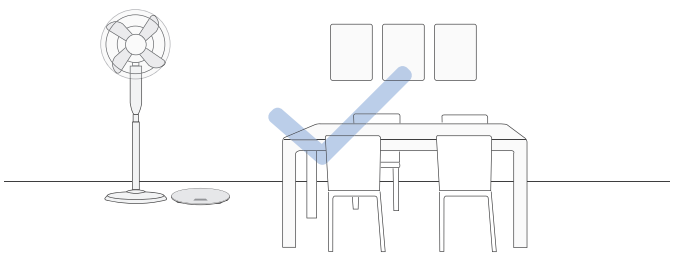


Dust Bin

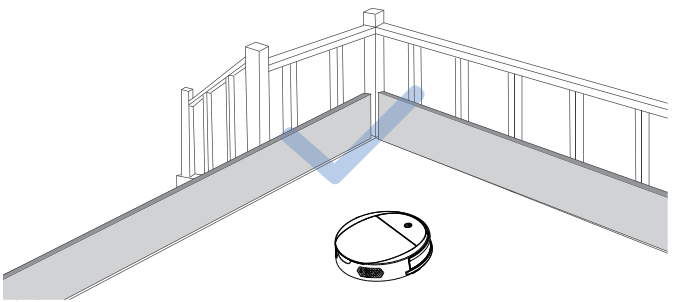


2. Operating and Programming /2.1 Notes Before Cleaning

1. Tidy up the area to be cleaned by putting furniture, such as chairs, in their proper place.



2. It may be necessary to place a physical barrier at the edge of a drop to stop the unit from falling over the edge.





Put away objects including wires, cloths and slippers, etc. on the floor to improve the cleaning efficiency.



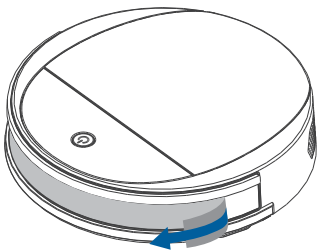
Before using the product on a rug with tasseled edges, please fold the rug edges under.

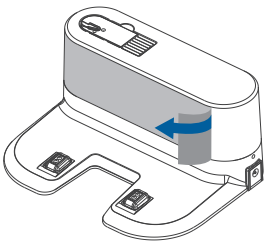


Please do not stand in narrow spaces, such as hallways, and make sure not to block Robot.

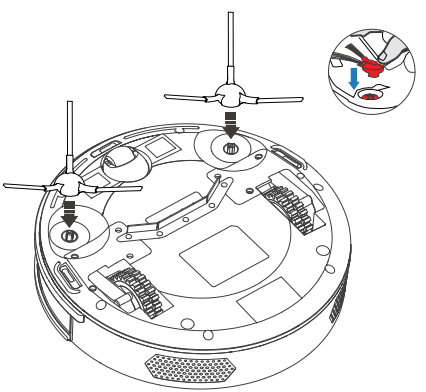
2. Operating and Programming /2.2 Quick Start

1 Remove Protective Materials



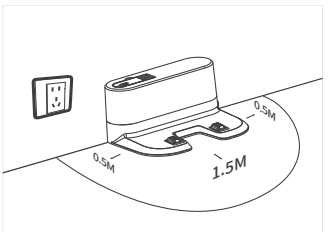


2 Install Side Brushes

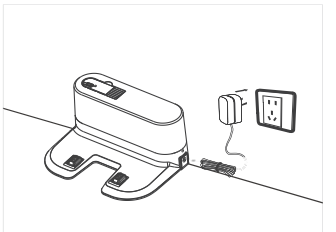


2. Operating and Programming / 2.3 Charging Robot

1 Docking Station Placement

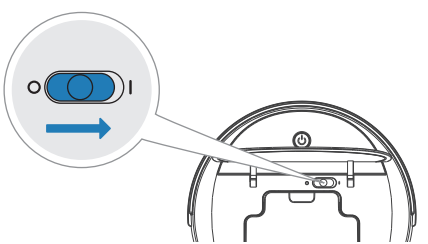


Place the charging Dock



Connect the power supply

2 Power ON



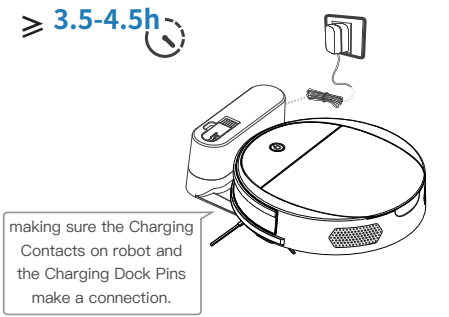
Note: I = ON, O = OFF

Robot cannot be charged when being powered OFF.

3 Charge Robot

flashes when Robot is charging.

goes out when Robot is fully charged



*It is suggested to avoid picking up or moving Robot during the cleaning for Robot to return to charge successfully.

2. Operating and Programming /2.4 App Download

To enjoy all available features , it is recommended to control your Robot via the Lefant Life App.

Before you start, make sure that:

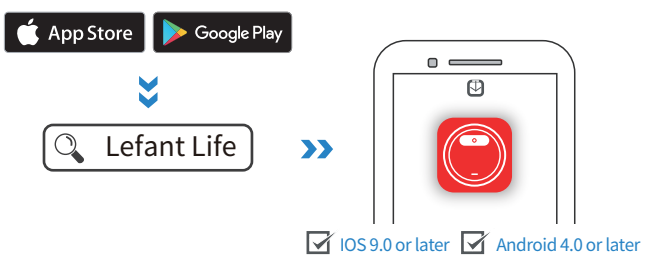
- Your mobile phone is connected to a Wi-Fi network.
- The 2.4GHz band wireless signal is enabled on your router.

Download and Install App

Method 1: Scan the QR code, download and install the App according to the prompts.

under the cover

Method 2: Search for "Lefant Life", download and install.



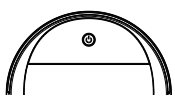
Add device & Pair the network through the app

Open the “Lefant Life” APP and log in (new users need to register first). Select <Add device> on home page. Then pair the network following the detailed instructions in the app.

Reset the device

If you experience with network pairing failure, please reset the device.

1. Turn on the power switch on your robot.
2. Press the ⏻ button on your robot for 3 seconds to enter EZ network pairing mode (robot gives 1 beep); press it for another 3 seconds to enter AP network pairing mode (robot gives 2 beeps).



Indicator light
- Wait for connection: EZ mode: blue light flashing rapidly
  AP mode: blue light flashing slowly
- Connecting / Wi-Fi connected: solid blue

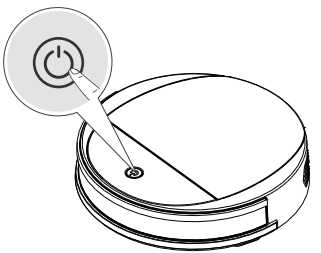
Notes:
- This device only supports 2.4GHz Wi-Fi network. (not compatible with 5GHz Wi-Fi)
- If you experience with network pairing failure, please restart the robot and start over again. Or try the other network pairing method instead (touch ⇋ on the upper right corner).

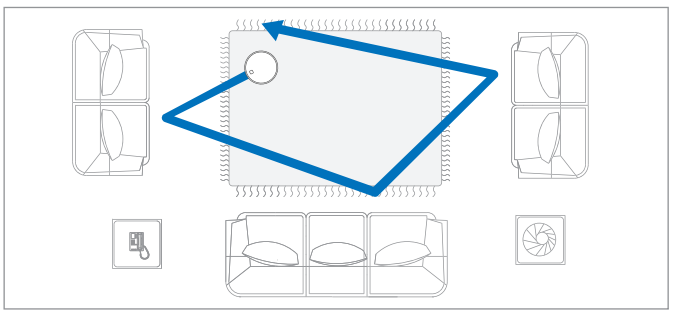
2. Operating and Programming /2.5 Start Cleaning

During the first cleaning, please supervise Robot and assist it should there be a problem.

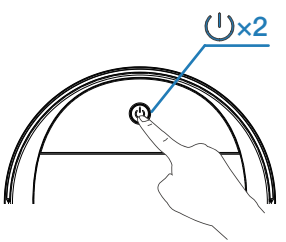
1 Auto Cleaning Mode

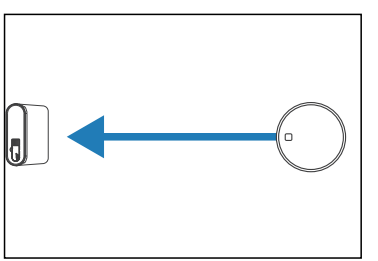
Robot will clean in Random Cleaning Pattern designed for carpet cleaning by default.





2 Return to Charging Dock

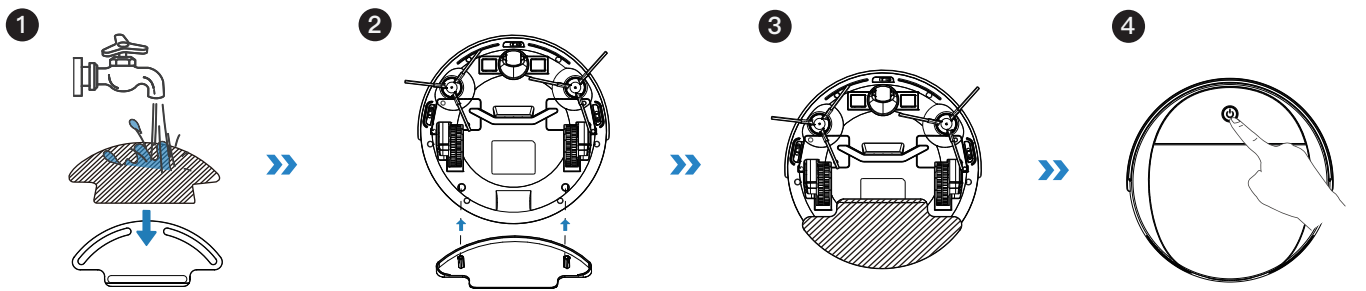




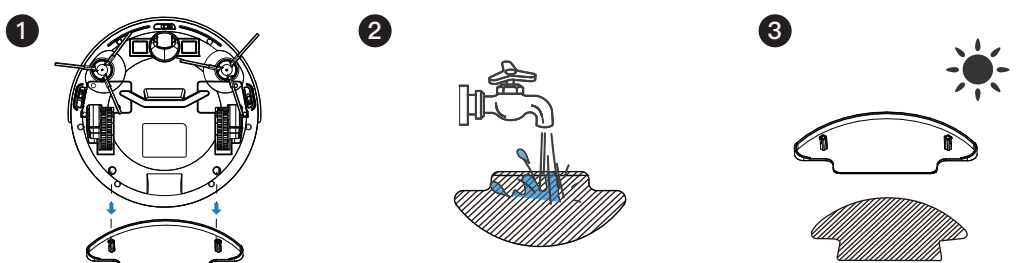
2.Operating and Programming /2.6 Mopping Function

Notes: • Do not use mopping function on carpets.
• Cleaning the mop cloth every 60 minutes to ensure the cleaning effect.
• Please remove the mopping cloth bracket before charging the robot.

Use the mopping function



Maintenance



3.Maintenance /3.1 Regular Maintenance

To keep Robot running at peak performance, perform maintenance tasks and replace parts:

Robot Part	Maintenance Frequency	Replacement Frequency
Side Brush	Once every 2 weeks	Every 3-6 months
High Efficiency Filter	Once per week	Every 3-6 months
Universal Wheel Anti-Drop Sensors Infrared Anti-Collision Sensors Charging Contacts Docking Station Pins Dust Bin	Once per week	/

Before performing cleaning and maintenance tasks on Robot turn the robot OFF and unplug the Docking Station.
A multi-function Cleaning Tool is provided for easy maintenance. Handle with care, this cleaning tool has sharp edges.

Note: We manufacture various replacement parts and fittings. Please contact Customer Service for more information on replacement parts.

3.Maintenance /3.2 Dust Bin

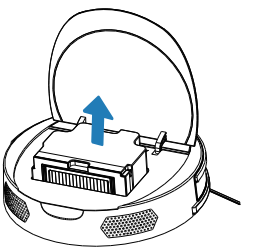
⚠ Warning:

Do not use water to clean

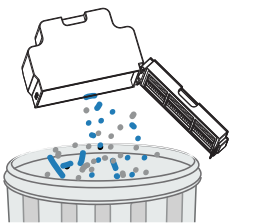
Dust Bin and filter materials!



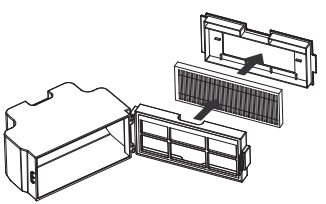
❶



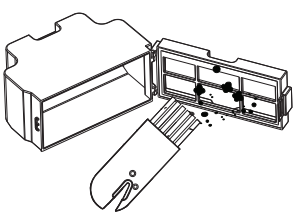
❷



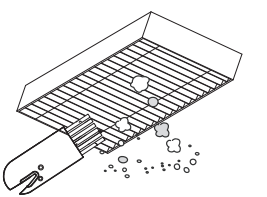
❸



❹

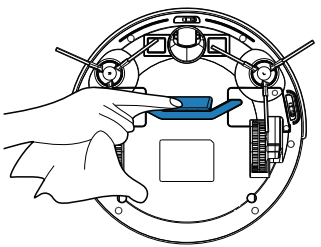


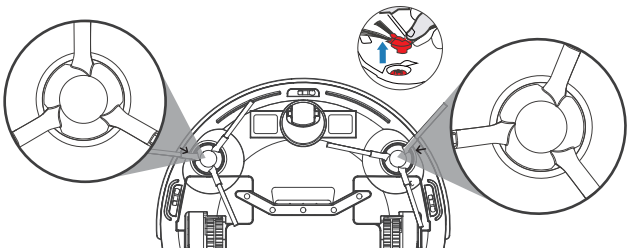
❺

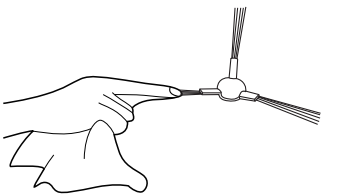


3.Maintenance /3.3 Direct Suction Option and Side Brushes

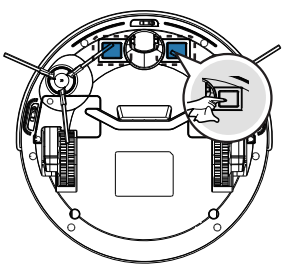
❶ Direct Suction Option ❷ Side Brushes

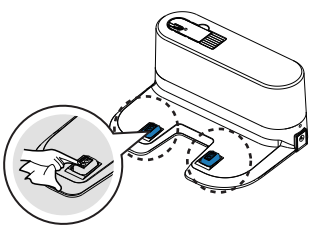


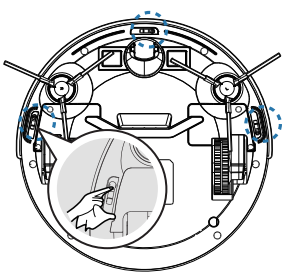


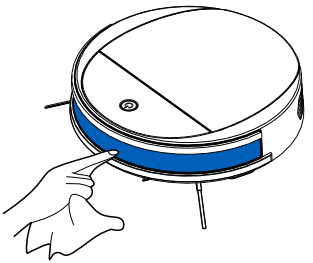


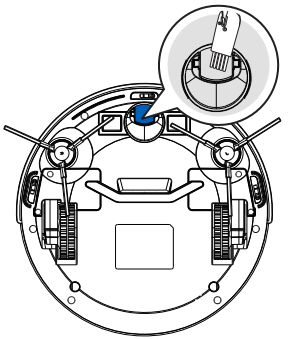
3.Maintenance /3.4 Other Components

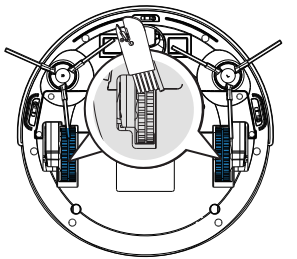












4.Indicator Light and Alarm Sounds /4.1 Indicator Light

Status	Start/Pause Button
The Robot is charging	Flashes BLUE/ PINK
The Robot has a problem	Flashes RED or glows a continuous RED
The Robot has low battery	Glows a continuous RED
The Robot is cleaning	Glows a continuous BLUE
In the state “pending for network configuration”	Flashes BLUE
Network configuration in progress/Reconnection after the signal is lost	Network configuration ends in 3 minutes. BLUE light off
Network configuration completed	Glows a continuous BLUE

4.Indicator Light and Alarm Sounds /4.2 Alarm Sounds

If Robot detects a problem, it emits alarm beeps and the Start/Pause Button flashes RED or glows RED.

Glowing a solid RED			
No.	Cause of issue	Beeps	APP Error prompts and solutions
1	Driving Wheel malfunction	1 Beep sounds 3 times	Check Driving Wheel for tangled hair or debris and clean as described in section 3 Maintenance
2	Side Brush malfunction	2 Beep sounds 3 times	Check Side Brushes for tangled hair or debris and clean as described in section 3 Maintenance
3	Vacuum fan not working normally	3 Beep sounds 3 times	Vacuum fan does not work normally. Remove the dirt in the dust bin and clean the vacuum inlet
4	No Dustbin	5 Beep sounds 3 times	Please install the Dustbin.
Flashing RED			
No.	Cause of issue	Beeps	APP Error prompts and solutions
1	Floor sensor alarms	2 Beep sounds 3 times	The is Robot longer in contact with the Floor. Put it back onto the floor
2	The robot is suspended or Stuck	3 Beep sounds 3 times	Place the robot on an even surface, or remove the obstacles, and restart the robot
3	Low Battery	4 Beep sounds 3 times	Manually place the robot on the Charging Dock to charge
4	Charging adapter not working normally	5 Beep sounds 3 times	The charging voltage is abnormal. Clean the Charging Contacts of the Docking Station and Robot, and make sure that you are using the original adapter
5	Charging error	6 Beep sounds 3 times	There is an error in charging. Check if the power switch is turned on

Tips: If the problem cannot be solved by means of the above mentioned measures, please try to turn on the power switch beneath the face plate once again and restart the device.

5.Troubleshooting /5.1 Troubleshooting

No.	Malfunction	Possible Cause	Solutions
1	Robot is not able to connect to the home Wi-Fi network	Incorrect home Wi-Fi username or password entered	Enter the correct home Wi-Fi username and password
		Robot is not within range of your home Wi-Fi signal	Make sure Robot is within range of your home Wi-Fi signal
		Network setup started before Robot was ready	The network can only be configured when the device is in the state “Pending for configuration”. See the instructions given by the app
		Robot does not support 5 GHz Wi-Fi	Make sure the robot has been connected with 2.4 GHz Wi-Fi network
2	Robot is not charging	Robot is not switched ON	Switch ON Robot
		Robot has not connected to the Docking Station	Be sure that the robot's Charging Contacts have connected to the Docking Station Pins. Check if the Charging Contacts of the Docking Station or Robot are contaminated. Clean the parts according to measures described in the section “Maintenance”
		The Docking Station is not connected to the power supply	Make sure the Docking Station is connected to the power supply
		The battery is fully discharged after the device is not in use for a long time	It is recommended to use the device on a regular basis. If it is not in use for a long period of time and cannot be charged, please contact our Customer Service personnel
3	Robot cannot return to the Docking Station	The Docking Station is not correctly placed	Refer to Section 2.3 correctly place the Docking Station
		The Docking Station is not correctly connected	Make sure the Docking Station is correctly connected
		The Docking Station is manually moved during the cleaning	It is suggested not to move the Docking Station during the cleaning
		Robot did not start cleaning from the Docking Station	Make sure Robot starts cleaning from the Docking Station

No.	Malfunction	Possible Cause	Solutions
4	Robot misses cleaning spots to be cleaned, or repeats cleaning the area cleaned	The cleaning cycle is interfered by small objects or barriers on the floor	Remove power cords and small objects from the floor to ensure cleaning efficiency. Robot will automatically clean the area missed, please avoid moving Robot manually or block the path during the cleaning cycle
		Robot is working on slippery polished floors	Make sure the floor wax is dried before Robot starts cleaning
		Robot is unable to reach certain areas blocked by furniture or barriers	Tidy up the area to be cleaned by putting furniture and small objects in their proper place
5	Robot gets stuck while working and stops	Robot gets stuck while working and stops	Robot will try various ways to free itself. If it is unsuccessful, manually remove the obstacles and restart
		Robot might be stuck under furniture with an entrance of similar height	It is recommended to raise the furniture a little bit or block it with appropriate. means
6	Robot is making too much noise when cleaning	Robot is tangled or blocked with debris	Clean Robot as described in section Maintenance and restart. If the trouble persists, please contact Customer Care

5.Troubleshooting /5.2 Wi-Fi Connection

Before Wi-Fi setup, make sure Robot, mobile phone, and Wi-Fi network meet the following requirements.

Robot and Mobile Phone Requirements

•Robot is fully charged and the power switch of Robot is turned on.
•Robot is ready for network setup.
•Turn off mobile phone's cellular data (you can turn it back on after setup).

Wi-Fi Network Requirement

•You are using a 2.4G Hz or 2.4/5 GHz mixed network.
•Your router supports 802.11b/g/n and IPv4 protocol.
•Do not use a VPN (Virtual Private Network) or Proxy Server.
•Do not use a hidden network.
•WRA and WPA2 using TKIR PSK, AES/CCMP encryption.
•WEP EAP (Enterprise Authentication Protocol) is not supported.
•Use Wi-Fi channels 1-11 in North America and channels 1-13 outside North America (refer to local regulatoryagency).
•If you are using a network extender/repeater; the network name (SSID) and password are the same as your primary network.

6.Product Specifications

Model	M213S		
Rated Input	19 V ⎓ 0.6A 11.4W		
Docking Station Model	L1		
Rated Output Voltage	19 V ⎓	Rated Output Current	0.6A
Power Adapter Model	AD-0121900060US		
Power Adapter Input	100-240V~ 50-60Hz 0.5A		
Power Adapter Output	DC 19V, 0.6A, CLASS II		
Off/Standby Mode Power	Less than 0.5W		
Networked Standby Power	Less than 2.00W		

*Note: Technical and design specifications may be changed for continuous product improvement.

Warranty

This warranty covers the repair or replacement of the malfunction device at our company' s discretion for a period of 1-year. In addition this certificate is void if altered. The serial number must be provided as well as all accessories to be eligible for warranty coverage. Please kindly fill in below form accurately and completely.

Account Number: _____

Serial Number: _____

Date of Purchase: _____

Important:
When returning this device, carefully pack the product to avoid damage in shipping. Damage in shipping is not covered by the Warranty and shall be the sole responsibility of Buyer. Damage or loss not covered by this Warranty or occurring outside the Warranty Period will require a fee to cover the cost of handling and shipping. All such fees and costs shall be the sole responsibility of Buyer.

Exclusion
Unless agreed in writing, the warranty will not apply if the defects relate to:
• Consumable parts such as filters, or brushes etc, that are subject to normal wear and tear, and require regular maintenance and/or replacement to ensure the proper functioning of your unit.
• Defects caused by rough or inappropriate handling or use or damage caused by accident, misuse, neglect, fire, water, lighting or other acts of nature, external sources such as weather, electrical outages or power surges.
• Improper operation or maintenance, use not in accordance with the product instructions or connection to improper voltage supply.
• Accident, abuse, misapplication, or any unauthorized repair, modification, or disassembly of the product.
• Any failure to adequately package the Product for transportation.
• Use of parts not in accordance with the product instructions.
• Use of parts and accessories other than those produced or recommended by our company.
• Use in a commercial environment as the Product is designed for residential use only.
• Consequential and incidental damages.
• Any product(s) purchased from unauthorized dealers/resellers.
• Products used outside the country of purchase.
• Lost and/or stolen products.

Official website

Shenzhen Iohas Technology Co.，LTD

http://www.lefant.com / support.us@lefant.com
Building 2, Fashion Brand Industrial Park, E'Bu Town, Shenzhen–Shanwei Special Cooperation Zone,
Shenzhen, Guangdong, China.

M213S-LH20210922-V01