



User manual

Lefant LT1 Mopping Robot

FCC ID:2AZ2R-LT1
FCC ID:2AZ2R-J2

Congratulations on the purchase of your Lefant ROBOTS!

We hope it brings you satisfaction. We trust your purchase will keep your home clean and provide you a high-quality life.

Should you encounter situations that have not been properly addressed in this User Manual, please contact our Customer Service Center, we will solve your specific problem. For more information, please visit the Lefant ROBOTICS official website: **www.lefant.com** or send email to **support@lefant.com**.

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

IMPORTANT SAFETY INSTRUCTIONS

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

1. The robot must be used in accordance with the directions in this User Manual. Our company cannot be held liable or responsible for any damages or injuries caused by improper use.
2. Do not allow to be used as a toy. Close attention is necessary when used by or near children.x.
Do not allow children to sit on the vacuum.
3. Clear the area to be cleaned. Remove power cords and small objects from the floor that could entangle the Robot. Tuck rug fringe under the rug base, and lift items such as curtains and table cloths off the floor.
4. If there is a drop off in the cleaning area due to a step or stairs, you should operate the Robot to ensure that it can detect the step 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.
5. Only use as described in this manual. Only use attachments recommended or sold by the manufacturer.
6. Please make sure your power supply voltage matches the base station.
7. Do not handle or plug appliance with wet hands.
8. Non-rechargeable batteries are prohibited.
9. Do not use without dust bin and/or filters in place.
10. Do not operate the robot in an area where there are lit candles or fragile objects on the floor to be cleaned.
11. 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. 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.
12. Keep hair, loose clothing, fingers, and all parts of body away from any openings and moving parts.
13. Do not operate the robot in a room where an infant or child is sleeping.
14. For INDOOR use ONLY. Do not use the robot in outdoor, commercial or industrial environments. Do not use Appliance on wet surfaces or surfaces with standing water.
15. Do not allow the robot to pick up large objects like stones, large pieces of paper or any item that may clog the robot.
16. Do not use the robot to pick up flammable or combustible materials such as gasoline, printer or copier toner, or use in areas where they may be present.
17. Do not use the robot to pick up anything that is burning or smoking, such as cigarettes, matches, hot ashes, or anything that could cause a fire.
18. 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.
19. Take care not to damage the power cord. Do not pull on or carry the robot or the base 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 the robot 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.
20. If the power cord is damaged, it must be replaced by the manufacturer or its service agent in order to avoid a hazard.

21. Do not use the base station if it is damaged.
22. Do not use the robot or the base 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.
23. Turn OFF the power switch before cleaning or maintaining the robot. Turn off all controls
24. The plug must be removed from the receptacle before cleaning or maintaining the base station.
25. Remove the robot from the base station, and turn OFF the power switch to the Appliance before removing the battery for disposal of the robot.
26. The battery must be removed and discarded according to local laws and regulations before disposal of the robot.
27. Please dispose of used batteries according to local laws and regulations.
28. Do not incinerate the robot even if it is severely damaged. The batteries can explode in a fire.
29. When not using the base station for a long period of time, please unplug it.
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 robot with your finger on the switch or energizing the robot 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, etc, 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 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/265°F may cause explosion.
35. Have servicing performed by a qualified repair person using only identical replacement parts.
36. Do not modify or attempt to repair the robot or the battery pack (as applicable) except as indicated in the instructions.
37. Do not operate the robot in a room that has lit candles on furniture that the vacuum may accidentally hit or bump into.
38. 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.
39. Use the robot only with specifically designated battery packs. Use of any other battery packs may create a risk of injury and fire.
40. The robot contains batteries that are only replaceable by skilled persons. To replace the robot's battery, please contact Customer Service.
41. If the robot is not going to be used for a long time, fully charge the robot, power it OFF, and unplug the base station.

SAVE THESE INSTRUCTIONS

To satisfy RF exposure requirements, a separation distance of 20 cm 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.

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

Correct Disposal of this Product

This marking indicates that this product should not be disposed of with other household waste throughout the EU. To prevent possible harm to the environment or human health from uncontrolled waste disposal, recycle it responsibly to promote the sustainable reuse of material resources. To recycle your used device, please use the return and collection systems or contact the retailer where the product was purchased. They can safely recycle this product.



Cleaner Precautions

Keep this product away from heat sources. It is recommended that the product is stored in a sealed container at 0-30°C in a dry and cool place. Keep this product out of the reach of children and pets. Do not allow this product to come into contact with eyes or skin. In case of accidental contact with the eyes, rinse slowly and gently with plenty of water for at least 15 minutes, for contact lens wearers remove contact lenses for the first 5 minutes and continue to rinse eyes. If skin contact occurs, wash off with warm, soapy water. If symptoms persist after these actions, seek medical attention. Do not inhale or consume this product. If this product is inhaled, move to fresh air. If this product is ingested, rinse your mouth or drink plenty of water. If discomfort persists after doing so, seek medical attention immediately. Do not add other liquids to this product to prevent it from interfering with the normal use of the machine. A small amount of suspended matter in the cleaner is normal and should be used with confidence.

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 user's authority to operate this equipment.

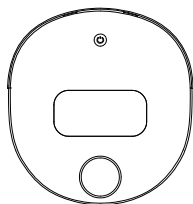
RF exposure warning

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. 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.

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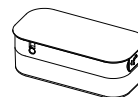
1. Product introduction / 1.1 Packing list



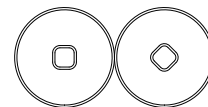
Robot



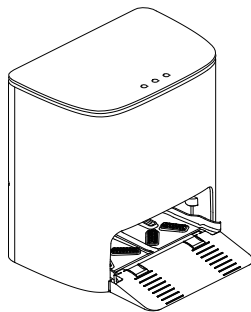
Power cable



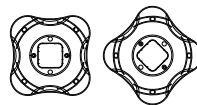
Water tank



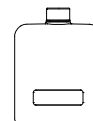
Mop



Self-cleaning station



Mop bracket



Cleaner

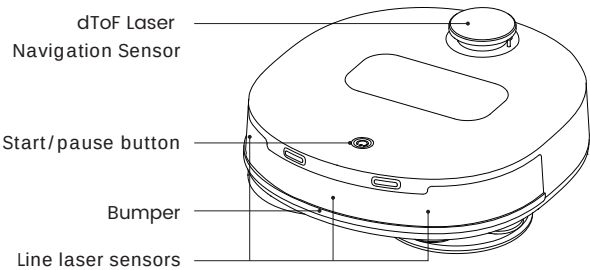


User manual

*The picture of the manual is for reference only. The appearance should be subject to the actual manual.

1. Product introduction / 1.2 Part Name

Front view

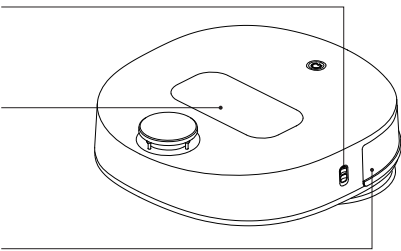


Side view

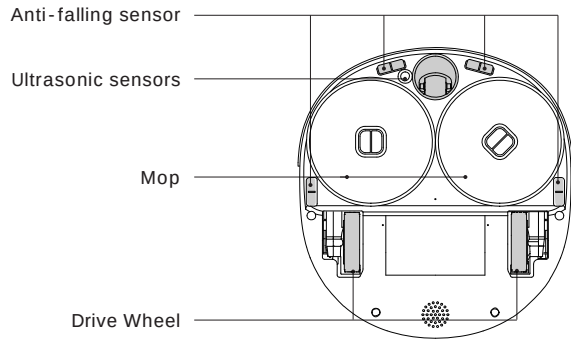
Power Switch
Green at the bottom of the switch is on,
Red at the bottom of the switch is off.

Water tank

Line laser sensors



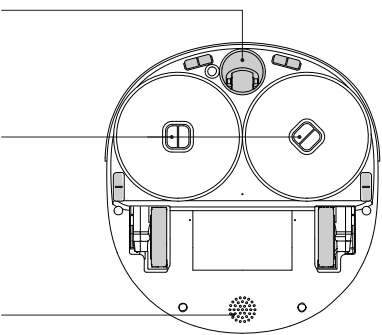
Bottom view



Universal Wheel

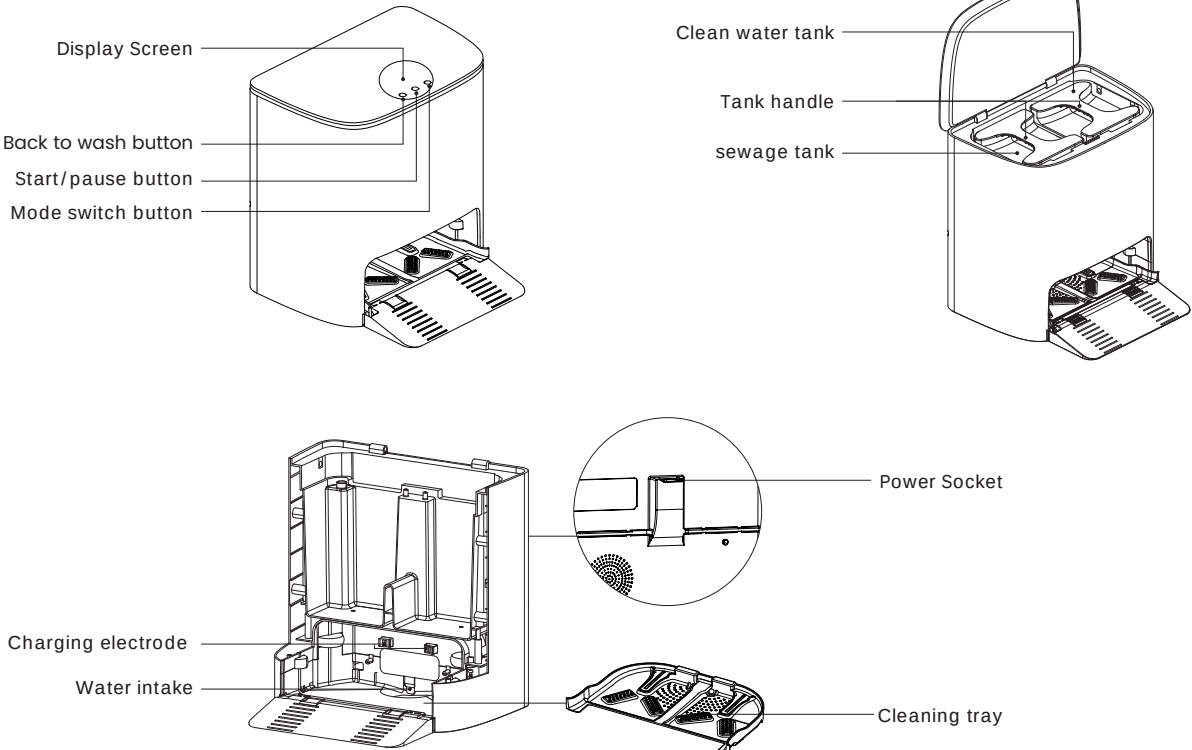
Mop bracket

Speaker



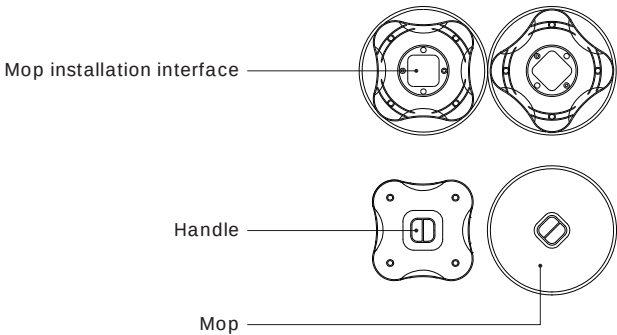
1. Product introduction / 1.2 Part Name

Self-cleaning station



1. Product introduction / 1.2 Part Name

Mopping Module



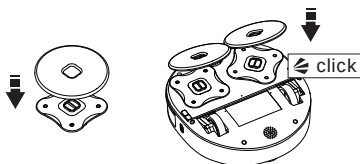
2. Preparation / 2.1 Assemble and charge

1 Remove the protective film



2 Install the mop

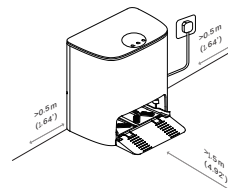
Aim the mop at the installation interface. Revolve the shaft until it's pressed in. A "click" sound indicates it's in place.



3 Position the station/Connect power supply

*Put the station in an open area.

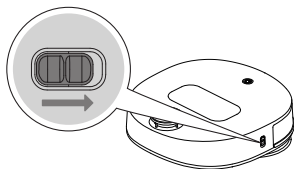
*Connect power supply and arrange the power cable.



4 Turn on the robot

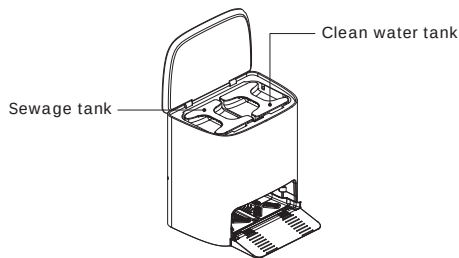
Green at the bottom of the button is on.
Red at the bottom of the button is off.

⚠ Reminder: Cannot charge when the robot is turned off.



5 Install the clean water tank/sewage tank

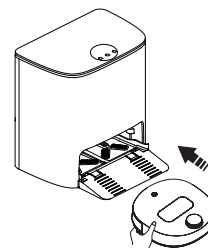
Open the station cover. Put the clean water tank on the right and the sewage tank on the left.



6 Put the robot on the station

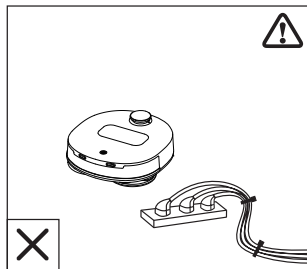
Put the robot on the station after connecting power supply. Pair the robot with the station in the network. If not paired, the robot cannot respond to the command of the station.

*Do not move the station during cleaning.

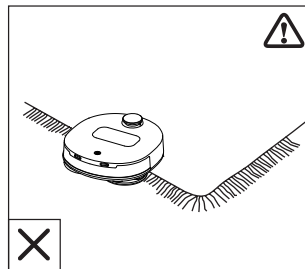


2. Preparation / 2.2 Using environment preparation

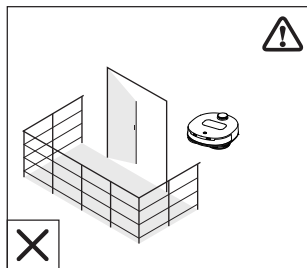
Sort out the space to be cleared



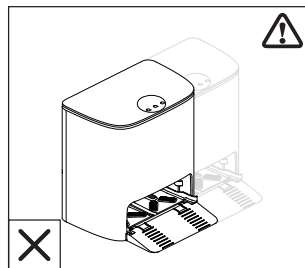
Tidy the items from the ground like cables and slippers to keep the robot working



If the rug at home has tassels, put the tassels under the rug in advance.

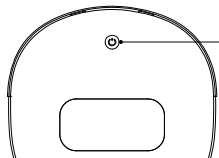


Do not put the robot in a raised place like the stairs. Keep the door of the lavatory and balcony closed.



When the robot starts to create a home map, do not move the station. Otherwise, the map needs to be recreated. It is recommended to recreate the home map when the location of large objects in the cleaning area changes.

3. Using the product / 3.1 How to use robot buttons



Start/pause button

- Single press: Start/Pause
- Double press: Automatic return and charge
- Press and hold for 3 seconds: Enter Wi-Fi pairing mode

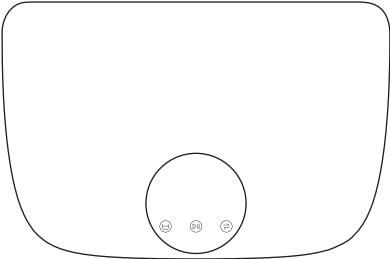
Robot status	Start/pause button light indicator status
Power ON	White light on (Red light on when low power)
Mopping	White light on
Charging/Mop washing	White light breathes
Low battery - automatic return and charge	Red light on
Cleaning complete - automatic return and charge	White light on (fully charged)
Error	Red light flashes
Entering Wi-Fi pairing mode	White light flashes
Wi-Fi pairing complete	White light on

Press  and hold for 20 seconds to enter energy-saving mode.

Take the robot off the station, and single press  to exit energy-saving mode.

Energy-saving mode: After setting the energy-saving mode, the robot will enter the energy-saving mode when it is fully charged on the station, most of the functional components will sleep, and the scheduled cleaning function will also fail. After entering the energy-saving mode, you need to manually start the robot to clean, and the robot will automatically exit the energy-saving mode after it is started.

3. Using the product / 3.2 How to use station buttons



Button Icon	Button Name	How to use the button
	Back to wash button	Single press: Robot returns to the station to wash the mop. Press and hold for 3 seconds: Wash the mop instantly.
	Start/pause button	Single press: start/pause.
	Mode switch button	Single press to switch to Strong mode/Daily mode/Soft mode/Quick clean mode. Single press  to confirm after choosing the mode. Press and hold for 3 seconds to exit the mode switch. Press and hold for 5 seconds to turn on/off the child lock.

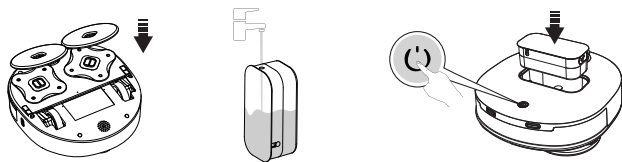
Reminder:

- 1. Single press the button, and the light of the triggered button will be on after flashing alone, and the lights of other buttons will be on. All lights go out 10 seconds after no operation.
- 2. If there is no operation, the screen will turn off after 10 minutes.

3. Using the product / 3.3 Start mopping

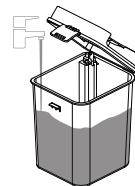
1 Install the mop/Fill the water tank

Install the mopping module on the robot. Place the robot flat on the ground. Take out the water tank, add an appropriate amount of water. Put it back on the robot, and press the Start/Pause button to turn it on.



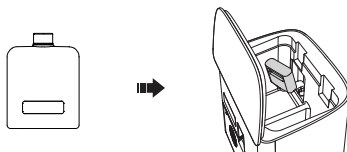
2 Fill the clean water tank

Add an appropriate amount of water to the clean water tank. Please fasten the latch before lifting the tank to avoid damage to the rotating shaft.



3 Fill the clean water tank with cleaner

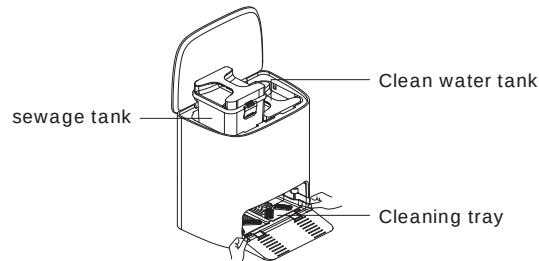
Please use Lefant special cleaner to avoid machine malfunction. The machine can automatically add cleaners. Cleaners can be purchased and used on demand. For more information, please visit the Lefant ROBOTICS official website: www.lefant.com or send email to support@lefant.com.



Insert the bottle mouth into the groove of the station. (bottle body doesn't tell front and back). The cleaner bottle is one-time packaged. Forcibly unscrewing the bottle cap will destroy the airtight and cause liquid leakage, which may cause equipment damage in severe cases.

4 Check the water tank and the cleaning tray

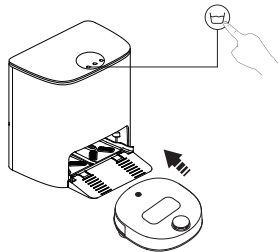
Install the clean water tank and the sewage tank into the station correctly, and put the cleaning tray into the groove on the bottom of the station. Make sure that the cleaning tray is placed flat.



3. Using the product / 3.3 Start mopping

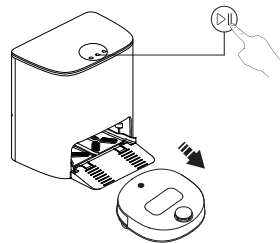
5 Recall the robot to the station

Short press  to recall the robot to the station.
(If you put the robot into the station by yourself, please pay attention to put the robot button in the direction of the station.)



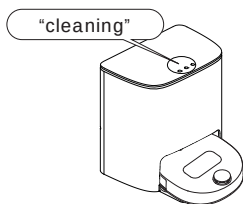
6 Start mopping

Select the cleaning task. Press  on the station. The robot starts to work.
(The robot starts to create a home map the first time it works. Do not move the robot or station to avoid the failure of the map creation.)



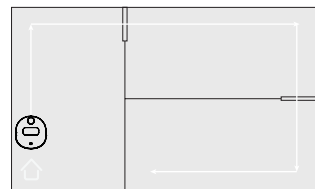
7 Mop cleaning

The robot will clean the mop before the mopping task. Please wait patiently for the mop washing to complete.



8 Plan the mopping

The robot will perform the mopping task according to the optimal cleaning plan made by the created home map.

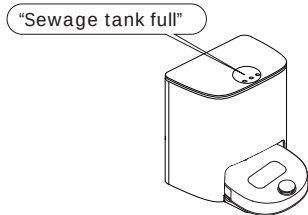


(Note: Please do not follow the robot, and do not stand in the aisle or doorway during the mopping task, otherwise it will cause the lack of map creation.)

3. Using the product / 3.3 Start mopping

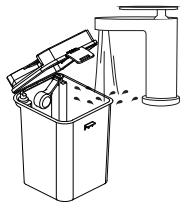
9 Check the clean water tank/ Sewage tank

If you run out of water or the tank is full during the mopping process, the base station screen will display "Insufficient clean water" / "Sewage tank full", please pay attention to the message on the station screen.



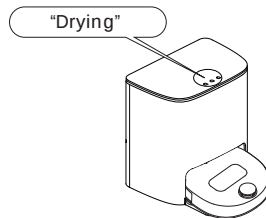
11 Clean the sewage tanks

After the mopping completed, please clean the sewage tank in time to prevent the dirty water from producing peculiar smell.



10 Mopping completed

After the robot completes mopping and returns to the station, it will automatically perform the mop washing and drying tasks.



Cautions

1. The machine will sleep after 10 minutes of no operation.
2. After a 10-minute pause, it will sleep, and the machine will shut down when the power is lower than 4%.

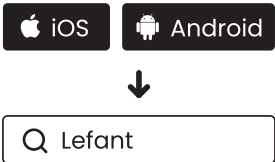
3. Using the product / 3.4 App download and configuration

Downloading and installation of the “Lefant” app

Method I : Scan the following QR code, and then download and install App as prompted.



Method II : Search "Lefant" in the App store, download and install the Lefant app.



Please connect to a 2.4GHz home Wi-Fi network



- Tips:**
- * Follow the guidance in the Lefant app to register, login, and pair the robot.
 - * Please make sure that the mobile phone is connected to your Wi-Fi network before pairing the robot vacuum cleaner.

3. Using the product / 3.5 Maintenance frequency

In order to maintain the peak performance of the product, it is recommended to perform accessories maintenance with reference to the following frequency:

Accessory	Maintenance frequency	Replacement frequency
Mop	/	Once every 1-2 months
dToF laser navigation sensor Universal Wheel Anti-fall sensors Anti-bumping strips Charging electrode on the robot Charging electrode on the station	Once a week	/
Cleaning trays	Once a week	/
Clean water tank	Once a month	/
Sewage tank	After each mopping	/
Body and bottom of the station	Once a month	/

Reminder: If you need to buy accessories, all major online stores are available for sale.

3. Using the product / 3.6 Maintenance

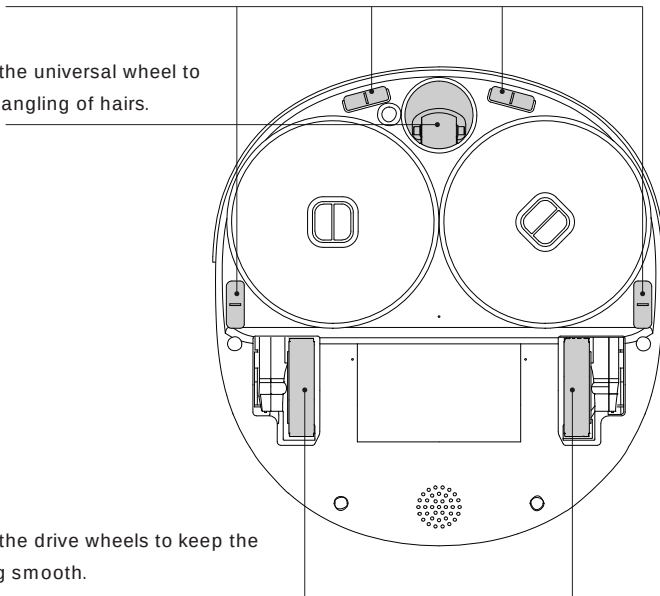
* Unplug the station when performing cleaning and maintenance on the robot and its accessories.

① Bottom of the robot

1. Clean the anti-drop sensor to ensure sensor sensitivity.

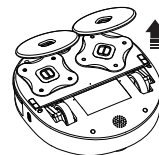
2. Clean the universal wheel to prevent tangling of hairs.

3. Clean the drive wheels to keep the sweeping smooth.

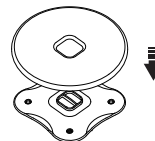


② The mop

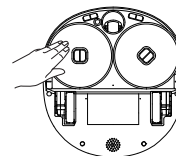
1. Tear off the old mop and remove it.



2. Past and install the new mop along the shape of the module.



3. Press the new mop firmly by hand.

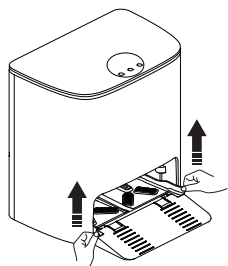


3. Using the product / 3.6 Maintenance

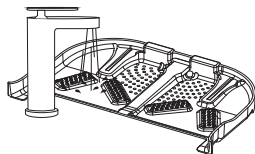
* Unplug the station when performing cleaning and maintenance on the robot and its accessories.

3 Cleaning tray for the station

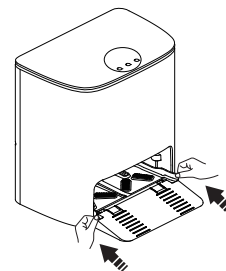
1. Hold the cleaning tray handle with both hands and lift it up to take it out.



2. Take out the cleaning tray and rinse directly with water.



3. Replace the cleaning tray.



4. Abnormal symptoms / 4.1 Troubleshooting

If the following problems occur during the use of the product, you can cross-reference them and solve them independently.

S/N	Fault	Possible causes	Solutions
1	Poor cleaning ability.	Mop bracket is tangled.	Clean up foreign objects.
		The mop is worn.	Replace the mop regularly.
		The sensors may be dirty.	Refer to the manual section [Maintenance] to clean the main unit and other parts.
2	Unable to connect to APP.	Incorrect home Wi-Fi username or password entered.	Please enter the correct Wi-Fi username and password.
		The robot is in a weak Wi-Fi signal or unstable network environment.	Make sure the robot is within a good Wi-Fi signal range.
		When the network is connected, the robot has not entered the network configuration state.	Press and hold  for 3 seconds to enter the network configuration state. For details, please refer to the [App download and configuration] chapter of the manual.
		2.4G network is not in use.	It is necessary to switch to 2.4G network. For details, please refer to the [App download and configuration] chapter of the manual.
3	The robot does not respond to station commands.	The robot and station are too far apart.	Please move the robot to the station.
4	Unable to charge.	The power supply is not connected and the plug is loose.	Check if the both ends of the power cord are connected and powered on normally.
		The charging electrodes of the robot and the station are not fully contacted.	Make sure that the charging electrodes of the robot and the station are fully connected, and regularly clean the charging electrodes of the robot and the station.
		Batteries deteriorate due to long time of non-use.	Regular use of this product is recommended. If you do not use it for a long time, please turn off the power switch after fully charging it, and keep charging it once a month. If the battery cannot be charged, please contact the after-sales service personnel.

* If the fault cannot be eliminated according to the operation in the table, contact our customer service representative.

4. Abnormal symptoms / 4.1 Troubleshooting

If the following problems occur during the use of the product, you can cross-reference them and solve them independently.

S/N	Fault	Possible causes	Solutions
5	Map lost.	There may be a risk of losing the map when moving the station.	Find the saved map in "Map Management" of the APP, and try to restore it by clicking "Use Map". If the above solution cannot solve the problem, it is recommended to rebuild the map.
6	Cannot find the signal of the station, and cannot return to the station.	Incorrect placement of the station.	Please follow the instructions in the chapter [Assemble and charge] for the correct placement of the base station.
		The station is powered off or moved.	Please check that the base station is connected to the power supply. Do not move the base station position artificially.
		The recharge route is blocked. For example, the door of the room with the station is closed or there are too many obstacles near the station.	Please put the station in an open area or clear obstacles around the station to keep the recharging route unobstructed.
		The robot does not start cleaning from the station.	It is recommended to let the robot start cleaning from the station.
7	Station abnormal alarm.	The sewage tank not installed correctly.	Gently press down on the sewage tank to ensure it is properly installed.
		The closing plug in the sewage tank is not properly installed.	Make sure that the two closing plugs of the sewage tank in the station are properly installed.
		The station cannot pump water normally.	Click ☹ once to observe whether the station can pump water normally. If the fault occurs during cleaning the mop, please press and hold ☹ to end the task, and then click ☹ twice to observe whether pump normally. If the water is pumped normally, please dry the overflow sensor of the cleaning groove; if the water cannot be pumped, please check whether there is any foreign object between the sewage tank and the station, and clean it if there is any.
		There is a foreign object in the suction port of the cleaning groove.	Make sure that there is no foreign object in the suction port of the cleaning groove.
		Trying the above methods still fails to clear the abnormal alarm.	Replug the station power switch. If you can't solve it, please contact the after-sales service personnel.

* If the fault cannot be eliminated according to the operation in the table, contact our customer service representative.

5. Technical parameters

Product model	LT1
Rated input of Robots	20V === 2A
Charging time	≤ 3.5 hours

Self-cleaning station models	LT1 Self-cleaning station
Rated input (state of charge)	100-240V~ 50/60Hz, Max 0.55A
Rated output (state of charge)	20V === 2A

Note: Since the product needs continuous improvement, the actual product shall prevail.
Our company reserves the right to update the product.

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.

Order 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

🌐 Website: www.lefant.com

✉ Email: support@lefant.com

📘 Facebook: [@LEFANTOFFICIAL](https://www.facebook.com/LEFANTOFFICIAL)

🐾 Community: [facebook.com/groups/Lefantofficalcommunity](https://www.facebook.com/groups/Lefantofficalcommunity)

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LT1-LH20221009-V01