

# Robotic vacuum cleaner

Instructions for use

(Note: Please read this manual carefully before use to avoid danger or damage to the product due to improper operatio )

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# **Wi-Fi Setup Instructions**

## WIFI settings

Scan QR code of Figure 1 , then download and install "LIBOS HOME" APP or Search for LIBOS HOME on the App Store or Android App platforms. Then, download and install it.



Figure1

Open the "LIBOS HOME" App and log in. There are two ways to log in: by verification code or by password.

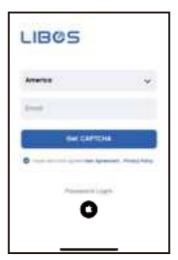
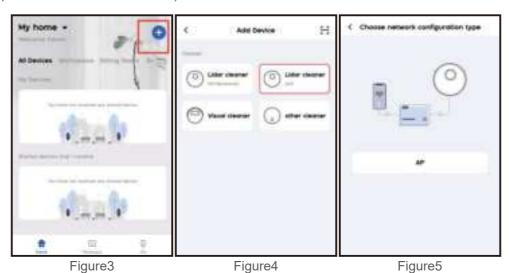


Figure2

After logging in, click the "+" sign in the upper right corner to add the device. On the device selection page, choose the "Lidar cleaner(AP)", and follow the page prompts to connect.

(If the robot with Bluetooth function can choose "Lidar cleaner(AP + Bluetooth)", then select Bluetooth according to the page prompts for fast match connection.)

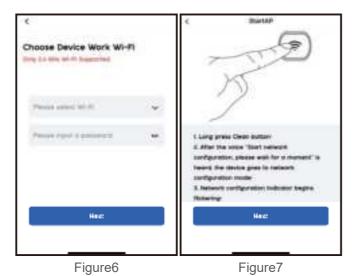


The final interface is subject to the actual product, thank you.

# **Wi-Fi Setup Instructions**

Figure 6: Select the working Wi-Fi of the robot (only support 2.4Ghz Wi-Fi, Wi-Fi name does not support Chinese and full-angle symbol). Input wi-fi password and click "Next".

Turn on the robot power switch, according to the App page prompts to connect the robot.



There are differences between iOS and Android in the following network connection steps. iOS:

Figure 8:Connect the robot according to the prompt on the App page.

Figure 9:Connect the phone to the hotspot of the robot in the wireless LAN "Robot## Libos-xxx" or "Robot##xxx-xxx" and then return to the App.

If the phone is connected to the robot hotspot, it will show Figure 10.

If the phone is not connected to the robot hotspot, it will show Figure 11 to reconnect; if the connection is confirmed, click "Confirm that the AP of the robot is connected, continue to the next step".



Figure8 Figure9 Figure10

# **Wi-Fi Setup Instructions**

Figure 12: Jump to home page after successful connection.

After the robot is successfully connected, click it to enter the robot control page (Figure 16).



Figure11

Figure12

Figure13

#### Android:

Figure 14 pending connection. Wait for the hotspot "Robot##Libos-xxx" or "Robot## xxx-xxx" to pop up for the robot. Choose it and wait for the connection.

Figure 15: Jump to home page after successful connection.

After the robot is successfully connected, click it to enter the robot control page (Figure 16).



Figure14 Figure15 Figure16

Before using this product, please read the following safety instructions and follow all general safety precautions

Please read this manual carefully Please keep this manual

Any operation inconsistent with this manual may cause damage to the product

# IMPORTANT SAFETY INSTRUCTIONS precautions related to the host and accessories

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

READ ALL INSTRUCTIONS BEFORE USING (THIS APPLIANCE)

WARNING – To reduce the risk of fire, electric shock, or injury:

- 1.Do not leave appliance when plugged in. Unplug from outlet when not in use and before servicing.
- 2.Do not use outdoors or on wet surfaces
- 3.Do not allow to be used as a toy. Close attention is necessary when used by or near children.
- 4. Use only as described in this manual. Use only manufacturer's recommended attachments.
- 5.Do not use with damaged cord or plug. If appliance is not working as it should, has been dropped, damaged, left outdoors, or dropped into water, return it to a service center.
- 6.Do not pull or carry by cord, use cord as a handle, close a door on cord, or pull cord around sharp edges or corners. Do not run appliance over cord. Keep cord away from heated surfaces.
- 7. Do not unplug by pulling on cord. To unplug, grasp the plug, not the cord.
- 8.Do not handle plug or appliance with wet hands.
- 9.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.
- 10. Keep hair, loose clothing, fingers, and all parts of body away from openings and moving parts.
- 11. Turn off all controls before unplugging.
- 12. Use extra care when cleaning on stairs.
- 13.Do not use to pick up flammable or combustible liquids, such as gasoline, or use in areas where they may be present.
- 14. To reduce the risk of electric shock, this appliance has a polarized plug (one blade is wider than the other). This plug will fit in a polarized outlet only one way. If the plug does not fit fully in the outlet, reverse the plug. If it still does not fit, contact a qualified electrician to install the proper outlet. Do not change the plug in any way.

SAVE THESE INSTRUCTIONS

#### ♠ warn

- 01. Do not disassemble, repair or modify the machine by yourself, otherwise the product will be damaged and danger will occur.
- 02. Do not use this product in an environment that may cause fire or explosion.
- 03. This product can only use the original power cord, otherwise it may cause damage to the product and cause a fire.
- 04. It is forbidden to stand or sit on this product, otherwise it may cause product damage or fall.
- 05. When dust is attached to the metal part of the power plug, be sure to wipe it off with a dry cloth.
- 06. The base station uses (USA 120V) (EU 220~230V) ACvoltage, please insert the plug into the socket correctly to avoid children touching it.
- 07. It is forbidden to wash and soak the host and electronic components, otherwise it will cause short circuit damage.
- 08. Do not damage the processing power cord, do not press heavy objects on the power cord, heat the power cord or pull and bend the power cord.
- 09. When the product is running and cleaning, please pay attention to the safety of young children and elders to avoid the danger of tripping. Please do not touch the wheels and side brushes with your hands to avoid being entangled and causing injury. (Please pay special attention to young children)
- 10. This product is an indoor household product, please do not use it outdoors.
- 11. It is forbidden to touch the battery contacts with metal and conductive substances, otherwise it will cause a short circuit.

### ! Notice

- 01. Do not touch with wet hands, otherwise it may cause electric shock.
- 02. Do not place this product in a place where it is easy to fall, such as a high platform in a room with tables and chairs.
- 03. This product is a precision electronic device, so avoid prolonged exposure to sunlight.
- 04. Do not use this product in a humid environment, such as a bathroom.
- 05. Do not put this product near cigarette butts, lighters and other open flames.
- 06. Please clean the product after charging.
- 07. When not using this product for a long time, please turn off the power switch on the side of the machine.
- 08. Please carefully check whether the power adapter is connected to the socket before use, otherwise the machine will be damaged.
- 09. Laser standard: IEC-60825; class: class I; wavelength: 775-800nm, laser radiation function: 5mw.
- 10. The display method of the product model approval code is reflected on the nameplate.
- 11. Before using this product, please remove all vulnerable items on the ground, such as glasses, lamps, and items that may entangle the side brushes and suction channels, such as wires and curtains.

- 12. When the trash box is full, please empty the trash before using the machine.
- 13. Do not use the machine to clean construction waste.
- 14. The operating temperature range of this product is 5 degrees Celsius to 40 degrees Celsius, please do not use it in a high or low temperature environment.

  (Battery storage temperature: -20~50 ℃)
- 15. Before discarding this product, please remove the battery from the machine. When removing the battery, please ensure that the product is not connected to the power supply. Please recycle the waste battery in a safe and environmentally friendly manner.
- 16. This equipment is only for use by normal people over 8 years old. Users are not allowed to use and maintain the equipment if they do not fully understand the safe use of equipment, or lack physical, sensory, and mental capabilities.

#### Safety Precautions for Rechargeable Batteries

## ♠ Danger

- 01. Be sure to use a dedicated battery adapter, otherwise it will cause leakage, heating or rupture.
- 02. Do not short-circuit or disassemble the battery, otherwise it will cause leakage, heating or rupture.
- 03. Do not transport or store together with metal objects such as necklaces and hairpins, otherwise it will cause a short circuit and cause leakage, heat or rupture.
- 04. Do not throw the battery into fire or heat the battery, otherwise it will cause leakage, heating or rupture.

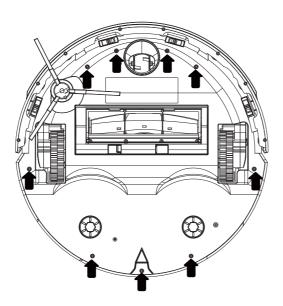
## (!) Notice

- 01. If abnormal overheating is found during charging, please stop using it immediately, otherwise it will cause leakage, heating or rupture.
- 02. In order to prolong the service life of the battery, please pull out the battery when not in use for a long time, and place it in a cool and dry environment, otherwise it will cause leakage, heating or rupture.
- 03. Do not immerse in water or come into contact with liquid, otherwise the leaking liquid will heat up or burst.
- 04. Be sure to stop using it when abnormality occurs (such as discoloration or deformation), otherwise it will cause leakage, heating or rupture.
- 05. Be sure to use tape or the like to insulate the electrode part when recycling or disposing of the product.
- 06. If the battery leaks, please wipe it clean with a dry cloth, recycle it in time, or discard it.
- 07. Put the recycled batteries in battery recycling bins or harmful trash cans set up in communities, hotels, schools, shopping malls, supermarkets, etc., and collect them by professional recycling agencies. Discarded product battery, product battery must be removed and discarded in accordance with local laws and regulations

#### ♠ warn

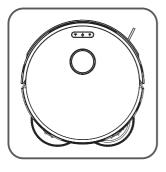
- 01. If the battery leakage touches the skin or clothes, it must be washed immediately with clean water. If it is ignored, it will cause skin inflammation and other problems.
- 02. Do not use the rechargeable battery of this product on other devices. This battery is only suitable for intelligent sweeping robots.
- 03. When the battery case is found to be deformed and swelled and the electrolyte flows out, it is forbidden to charge or continue to use to avoid danger.
- 04. Do not hit or throw the battery strongly, otherwise it will cause leakage, heating or rupture.
- 05. It is forbidden to disassemble the battery pack, otherwise it will cause the battery pack to rupture and the electrolyte to flow out, causing fire and explosion hazards.

#### How to remove the battery

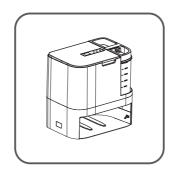


- 01. Use a screwdriver to take out the 9 screws on the bottom case.
- 02. Take out the bottom case.
- 03. Unplug the wire and take out the battery.

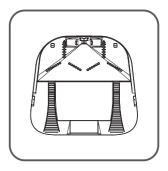
# 3.1Part name



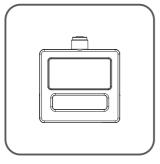
the host



clean base station



washable tray



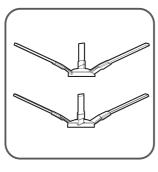
Bleach



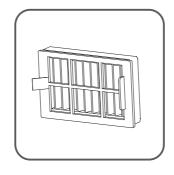
Base Station Cleaning Tool



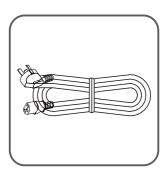
Mop holder/mop



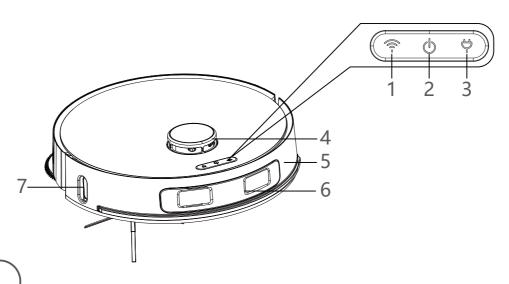
side brush



filter assembly



power cable



the host

1.WIFI connection button

2.Power button

3.Recharge button

**4.**Lidar component

5.Bumper

6.Line laser sensor

7.TOF sensor

the host

1.Charging pole piece5.Factory reset button

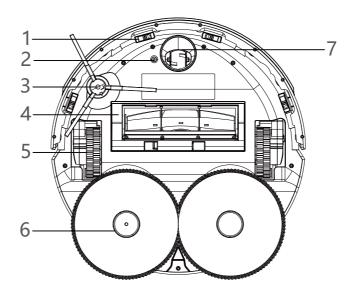
2.Water injection hole

6.Dust collection box

3.Magnetic panel

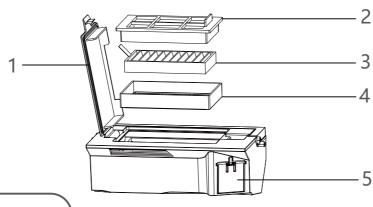
4. Vacuum suction port

7.Scrubber cleaning tool



# the host

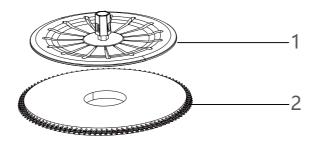
- 1. Ground detection component
- 4. Roller brush component
- 7. Universal wheel assembly
- 2. Carpet detection component
- 5. Side wheel assembly
- 3. Side brush
- 6. Mop assembly



# **Dust box assembly**

- 1. Dust box flip cover
- 2. Hypa bracket
- 3. High efficiency filter
- 4. Hypa silica gel

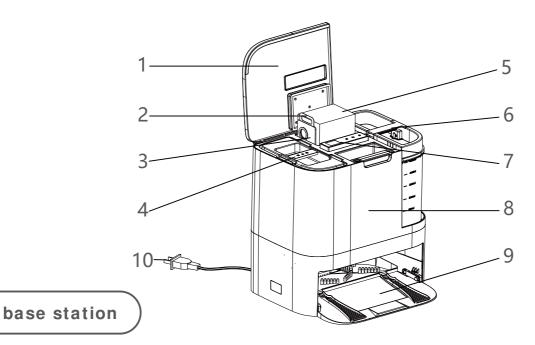
5. Dust outlet



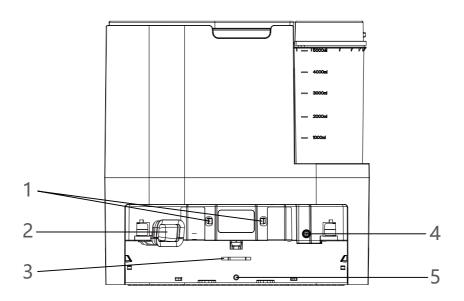
# Mop component

1.Mop holder

2.Mop



- 1. Lid
- 5. Dust bag
- 9. Washable tray
- 2. Dust bag handle
- 6. Fresh water tank
- 10. Power cord
- 3. Dust bag guide plate
- 7. Touch button + display
- 4. Sewage tank
- 8. Body



#### base station

- 1. Charging electrode
- 4. Water nozzle

- 2. Dust collection port
- 5. Sewage suction port
- 3. Hot air drying port

### 3.2 Product parameters

## **Structural class**

Sweeper Diameter Sweeper Thickness Net weight of sweeper base station size Net weight of the base station 348mm 104mm 4.11kg 460\*400\*452mm

10.5kg

# **Electronics**

Sweeper voltage Sweeper battery capacity Sweeper button type Base station button type Hardware version 14.4V 5200mAh Physical button + LED button touch LED button S710-MB-CSI-VERF

### Accessories

Sweeper water tank capacity
Sweeper dust box capacity
Sweeper cloth (polyester cotton)
Base station clean water tank capacity
Base station sewage tank capacity
Base station dust bag capacity
Quantity of bleach
Bleach type

145ml 230ml 150\*38\*7mm 5000ml 3450ml

2500ml 1 PCS neutral

10131004

# **Operating parameters**

Sweeper charging type
cleaning time
charging time
Base station rated input
Base station rated output
Software version

Manual / Auto Approx.120min 300-360min USA 120V~50/60Hz EU 220V~230V~50/60Hz 19V === 1A

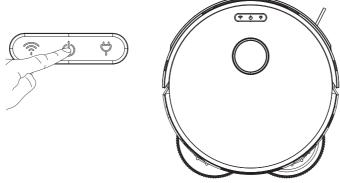
Robotic vacuum cleaner					
	Frequency Range(MHz)	Max E.I.R.P (dBm)			
WIFI module(AW-NM372SM)	2412-2472	20.5			
BT-(AW-NM372SM)	2402-2480	13			
WIFI module (ESP-WROOM-02D)	2412-2472	20.5			

Charging base station					
	Frequency Range(MHz)	Max E.I.R.P (dBm)			
WIFI module(XR829)	2412-2472	17			
WIFI module (ESP-WROOM-02D)	2412-2472	20.5			

### 3.3 Product Features

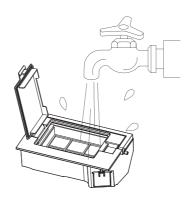
#### Intelligent cleaning adjustment

This product can adjust the cleaning mode through the APP according to different cleaning modes, which greatly improves the cleaning efficiency and can save 30% of the power.



#### humanized design

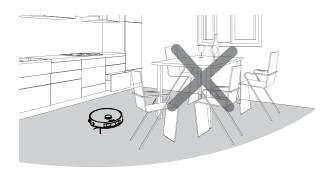
The operation is simple and easy to use. After long pressing the power button to turn on the machine, you only need to press the "control" button lightly to control the machine! Follow the prompts and let the machine start working for you!

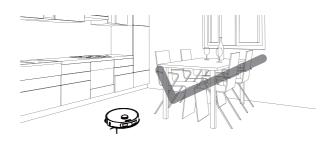


#### The litter box can be washed with water

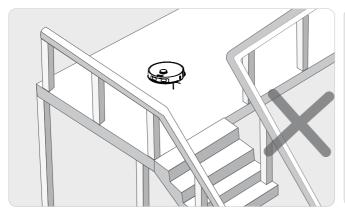
Both the dustbin and the primary filter can be washed directly with water, which does not require much labor on your part, and washing the dustbin with water can avoid flying dust!

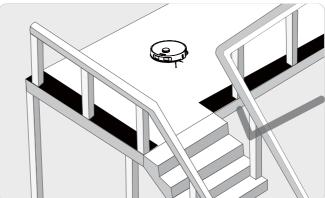
#### 4.1 Precautions



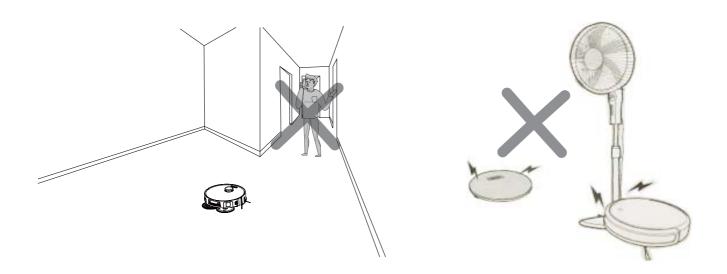


When the host is working, please help and remove unfriendly obstacles in the work. Arrange the tables, chairs and other furniture and home appliances in the home neatly, and the host will clean it smoothly and return you a clean and new home.



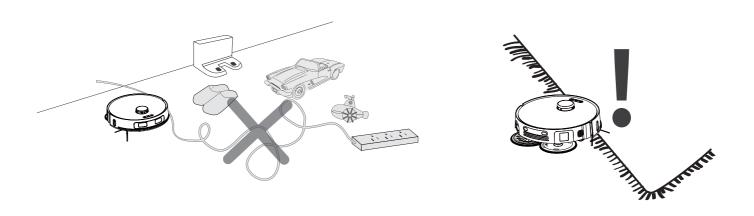


If the main engine performs tasks at the entrance of the stairs, the edge of the steps, or the entrance of the narrow area between the furniture, please place a protective fence to ensure its safety and smooth operation.



Please do not stand in narrow places such as thresholds and aisles, so as to prevent the host from missing scans.

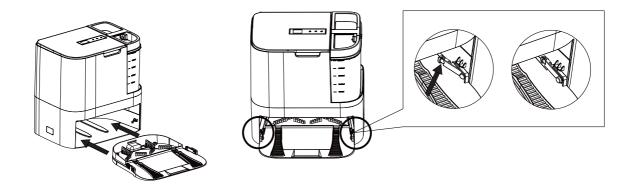
When the host is performing work, please ensure that no objects with the lowest edge less than 1.8 cm are placed in the cleaning area to prevent the host from climbing and getting stuck.



Power cords, toys and other sundries scattered on the ground may trip or entangle the host, please remove the sundries carefully. The robot has a carpet recognition function. When the machine is equipped with a mop, when it encounters a carpet, it can automatically lift the mop for vacuuming.

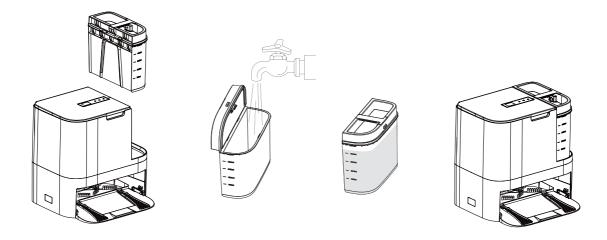
# 4.2 Operation Guide

#### Assemble the base station



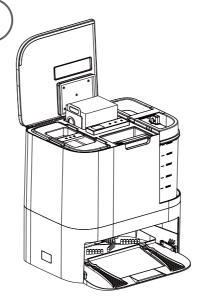
Align the washable tray with the installation position of the base station, push it into the base station, and press the buckles on both sides to fix the washable tray.

#### Add water to the



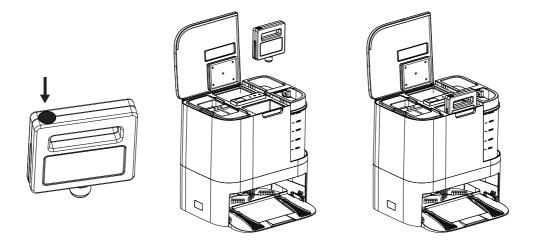
and add an appropriate amount of clean water (4500ml is recommended). Cover the clean water tank cover and align it with the base station to complete the installation.

## place dust place dust

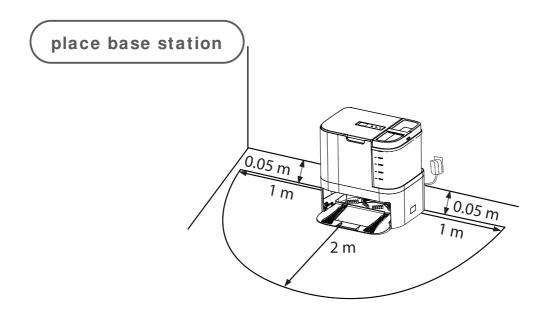


Open the top cover, insert the dust bag guide plate into the dust bag stop of the base station, and the dust bag handle should be fully inserted into the dust bag guide plate. Close the top cover.

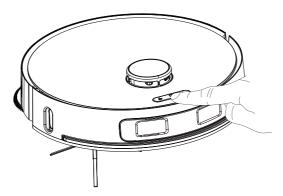
# place cleaning solution



Peel off the cleaning fluid sealing sticker, open the top cover of the base station and insert the cleaning fluid vertically. Then close the top cover



Place the base station flat against the wall, do not place objects within 1M to the left and right and 2M in front, and do not have objects with strong reflective surfaces such as mirrors. Then connect the power.



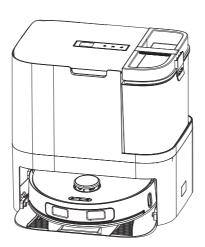
Long press the power button of the machine to turn on the machine, all the lights are on, and enter the waiting command mode. If there is no operation on the machine within 10 minutes, the machine will enter sleep mode.

#### Power on and charge



Press and hold the power button of the sweeper to turn on the machine. In any mode, press the "Recharge" button on the main unit or the "Recall" button on the base station to automatically recharge the sweeper. You can also click the recharge button on the APP to make the machine recharge automatically.

### automatic charging

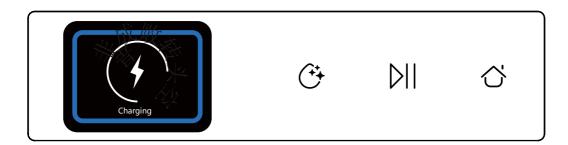


This product complies with European ERP energy loss standards.

When the cleaning is completed or the battery is too low, the machine will automatically start looking for a charging base to charge.

Please keep the charging base powered on, otherwise the machine will not be able to find the base for charging.

#### Base station touch buttons and display





Click the base station self-cleaning button. (If the sweeper is in the base station, it will exit the base station about 50cm to enter the waiting command mode.) The base station will add water to the cleaning tank for self-cleaning, and will automatically drain the sewage after cleaning. After the start of self-cleaning, every time you click the self-cleaning button, the base station will switch between "add water to the cleaning tank" and "drain the sewage" once.

(If the sweeper does not operate in 10 minutes while waiting for command mode, the machine will enter sleep mode.)



Click II on the sweeper to start cleaning, and click on the sweeper again during the cleaning process to pause cleaning



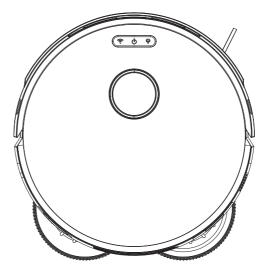
Tap  $\circlearrowleft$  the sweeper to return to the base station for charging in any mode. Click again in the process of returning to the base station, the machine will suspend recharging and enter the waiting command mode.

Press and hold at the same time  $| \cdot | |$  to turn off the child lock. All buttons on the sweeper and base station are locked. APP control is not affected. Press and hold again at the same time to turn off the child lock. When the child lock is turned on, all buttons on the sweeper and base station are locked. APP control is not affected. Long press again

#### **Charging Precautions**

- 01. When using the machine for the first time, please let the machine run out of power.
- 02. Please charge the machine for 12 hours for the first time. When the machine is charging, the recharge button will flash. When the charging is completed, the control button light will be on.
- 03. If you do not use the machine for a long time, please press and hold the power button to turn off the sweeper.
- 04. After the power is used up, please recharge the machine as soon as possible.
- 05. This product can only use the charging base station equipped with the factory.
- 06. The battery will be repaired and replaced by the after-sales department.

**Key Function** 





Long press  $\circlearrowleft$  to switch between power on and off, short press after power on to switch between start cleaning and pause cleaning.



Long press ? to activate host hotspot for network configuration.



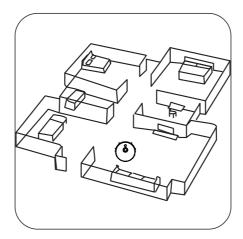
After powering  $\heartsuit$  on, short press the main unit to start recharging.

### Sleep

Sleep mode means that the machine is in a stopped state, and the control button lights are off. In standby mode, if there is no operation on the machine for 10 minutes, the machine will automatically enter sleep mode. Note: If the machine will not be used for a long time, please turn off the machine.

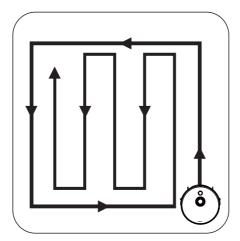
cleaning mode

explore mode



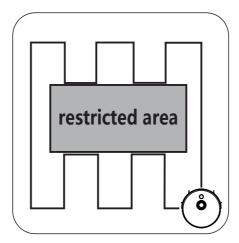
For the first time, you can activate the APP to quickly build a Figure function, the machine will independently explore the indoor environment, and the fastest 8 minutes to build a 100 square meter Figure.

#### planning cleaning



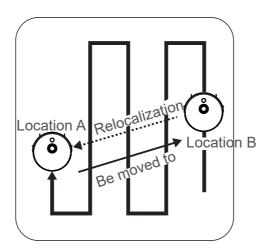
The machine will perform intelligent multi-zoning according to the room environment. First extend an area and then carry out the bow-shaped planning and cleaning. Line laser and infrared sensor fusion obstacle avoidance can accurately avoid common indoor objects; ToF along the wall can be as close to the wall as possible to avoid missing the wall

#### Draw a restricted area



It is only applicable to APP operation, and the restricted area is divided on the APP, and the sweeper will automatically avoid the area.

# laser repositioning



During the cleaning process, move the sweeper after a pause, and then restart it, the sweeper will seek repositioning, if the positioning is successful, the sweeper will continue to clean, if it fails, empty the Figure and clean again

#### other modes

Connect APP to open more modes

Single mopping mode: The machine only mops the floor (the side brush and the roller brush are turned on, and the fan is not turned on).

Single sweeping mode: raise the mop, turn on the side brush, roller brush and fan.

Sweeping and mopping integrated mode: Turn on the fan, side brush, and roller brush, and the mop fits the ground, applying pressure or rotating.

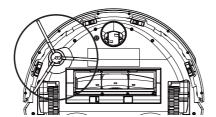
Carpet avoidance mode: when it is turned on: when cleaning (three modes), the carpet is not cleaned. When it is turned off: In the sweeping and single mopping modes, lift the mop to clean the floor and turn off the water tank at the same time; in the sweeping mode, directly put on the carpet; after laying down the carpet, restore the previous cleaning settings.

Carpet booster mode: [Switch] Increase the fan gear to Max when cleaning the carpet.

(Single mopping mode and sweeping and mopping integrated mode, the machine needs to be equipped with a mop to start. When it encounters a carpet, it will automatically lift the mop, stop the rotation of the mop, turn off the water tank, and avoid wetting the carpet. When entering, pausing, and exiting, there will be a voice broadcast.) Users can adjust according to the actual situation.

### **Product Maintenance**

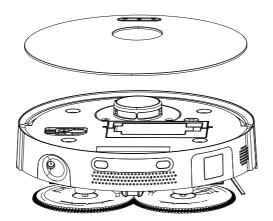
# 5.1 Side brush cleaning and replacement





Check the condition of the side brush from time to time to see if it is damaged or entangled with foreign objects. Clean the side brush with a cleaning tool or a rag. When the side brush is damaged and cannot be used, please replace it in time. L and R correspond to each other.

# 5.2 Dust box and filter cleaning



open magnetic panel