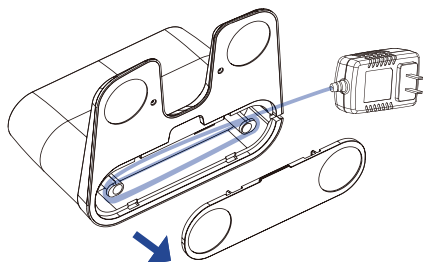


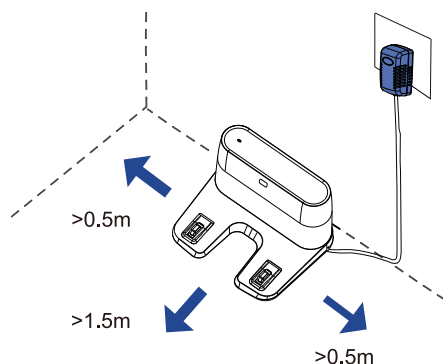
## Installation Instructions

### 6 Handle residual cable.



Collect residual cable into the cable tray at the bottom of charging dock to prevent it from being pulled and power outage caused thereby.

### 7 Place the charging dock against a wall, and connect the power supply.

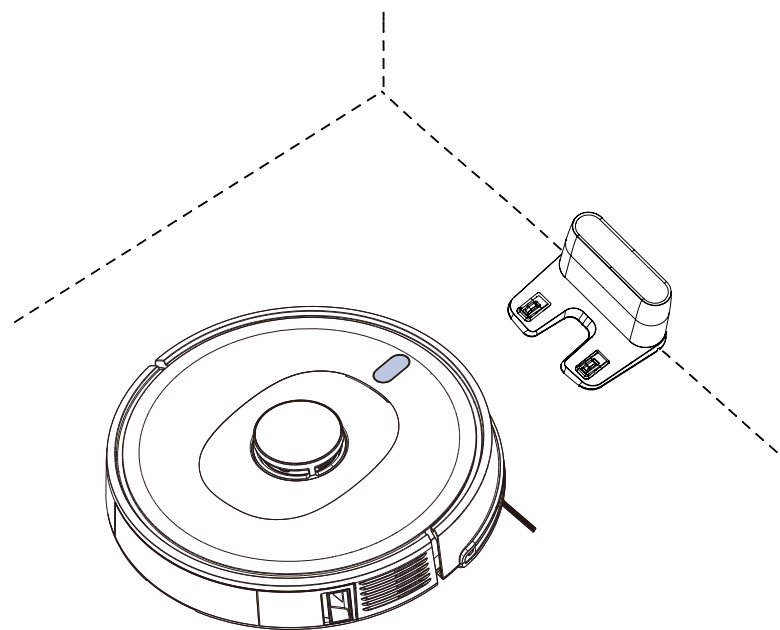


#### Notes:

- \* Do not expose the charging dock to direct sunlight.
- \* Please ensure a space of at least 0.5m on both the left and right sides of the charging dock, and a space of at least 1.5m in front of it.

### 8 Power on and charging

At initial use, long press "  " button for 3 seconds to power on, and manually place the main machine onto the charging dock by aligning the pole piece with the charging electrode. In daily use, you can start intelligent recharging by directly pressing "  " button.



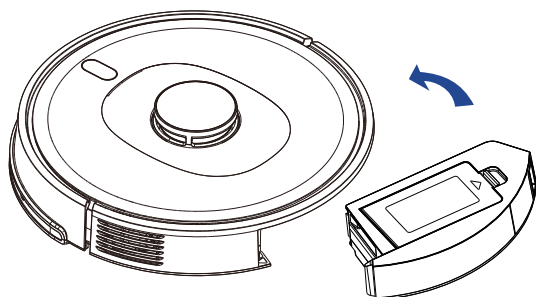
#### Tips:

- \* When main machine fails to power on due to low battery level, place it on charging dock for charging.
- \* The main machine will start up automatically after connected to the charging dock, and cannot be shut down during charging.

## Installation Instructions

### 9 To assemble accessories based on different cleaning modes.

Sweeping mode (Please assemble the dust case or two-in-one water tank) Push in place the dust box into the machine horizontally until you hear a click.

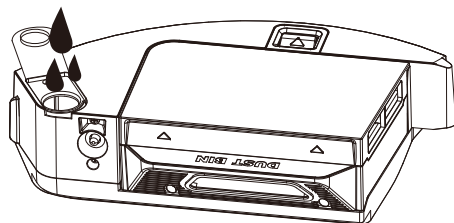


#### Tips:

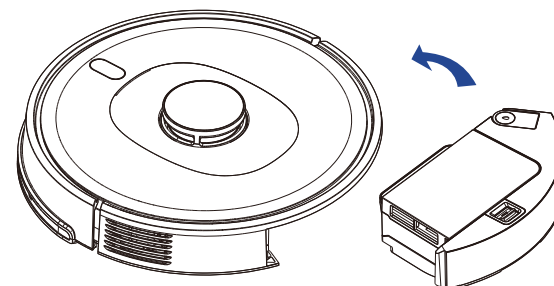
- \* to sweep, either the dust box or the two-in-one water tank is fine.
- \* Clean the dust box or the two-in-one water tank regularly to avoid stains that bring about ineffective cleaning.

Mopping mode (Please assemble the two-in-one water tank, the mop support, and the mop).

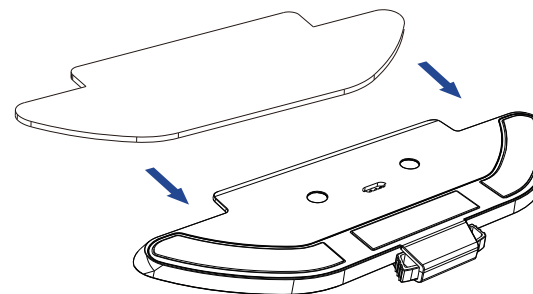
1. Open the rubber cover of the two-in-one water tank; fill the water, tank with water; then close the rubber cover.



2. Push in place the two-in-one water tank into the machine horizontally until you hear a click.



3. Attach the wet cloth that has been dried into the duster bracket, and stick the duster to the Velcro.



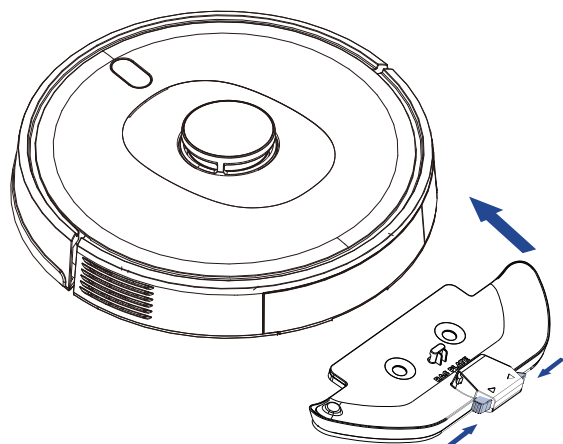
#### Tips:

Do not use any detergent, disinfectant or solid cleaning agent on nor fill hot water into the product, which may corrode or damage the integrated tank.

## Installation Instructions

### 9 To assemble accessories based on different cleaning modes.

4. Manually press the clips on both sides of the duster bracket, and push the duster bracket to the bottom of the robot in the indicated direction.



#### Tips:

- \* During mopping, set virtual wall or restricted zone in carpet area.
- \* Before starting sweeping/mopping function, be sure to remove any water accumulated on the floor.
- \* After completion of mopping, immediately remove the integrated tank and mop holder, empty the tank, clean the mop and dry it in air.
- \* Do not use mopping function when nobody is at home.

### 10 Use Your Robot with the Shellbot App

To enjoy all available features, it is recommended to control your robot via the Shellbot App.

#### Before you start, make sure that:

- Your smartphone or tablet is connected to a Wi-Fi network.
- Your smartphone or tablet is running iOS 10.0 (or above) or Android 5.0 (or above).
- The 2.4GHz band wireless signal is enabled on your wireless router.
- The Wi-Fi status light on robot is slowly flashing blue.
- Robot is attached to the Charging Base to ensure it has enough power during setup.



1. Download the shellbot App from the App Store (iOS devices) or Google Play (Android devices).
2. Open the app and create a user account.
3. Tap the " + " icon in the top right corner to add your robot to your Shellbot account.
4. Follow the instructions in the app to set up the Wi-Fi connection
  - After connecting successfully, you can control robot via the app.
  - With the app, you can select a cleaning mode, set the time, schedule a cleaning, view the system status and access additional features.

## Installation Instructions

### Wi-Fi Status Light

|                                                                                   |                      |                                   |
|-----------------------------------------------------------------------------------|----------------------|-----------------------------------|
|  | Slowly flashing blue | Waiting for connection            |
|                                                                                   | Solid blue           | Connected to your wireless router |

### Restore Factory Settings

Press and hold "  " "  " on RoboVac for 3 seconds to restore factory settings if necessary.

- You will hear a voice prompt when the settings have been reset and the Wi-Fi status light will slowly flash blue. Now you can follow the Wi-Fi instructions in the Shellbot Home app to set up the Wi-Fi connection.

### Schedule Cleaning

With the Shellbot Home app, you can schedule RoboVac to start cleaning at a particular time.

#### Tips:

You can set the time and customize the cleaning schedules from Sunday to Saturday on the Shellbot Home app. This function is available in the app only.

# Operation Instructions

## Power-On/Off

The robot will start up automatically after connection to the charging dock and it cannot shut down.

Long press " ⏻ " Button for 3 seconds; the power indicator light comes on, and the robot enters the power-on state.

When the robot is stationary, long press the " ⏻ " Button for 3 seconds to shut it down.

## Quick mapping

At initial use, no map is stored in App, so you have to place main machine onto charging dock, and choose Quick Mapping in the App. The main machine will create a map but not start sweeping. After returning to charging dock automatically, the main machine will finish mapping and store map automatically.

### Tips:

During mapping, do not move the robot and keep it away from Child and pet

## Sweeping or mopping

In power-on status, short press the button " ⏻ ", and main unit will active sweeping/mopping mode depending on the accessory mounted.

## Pause

When main machine is in operation, press any button to cease operation; press button " ⏻ " to continue sweeping; press button " ⏻ " to return it to charging dock for charging and finish current sweepin task.

## Equipment recharge

In power-on state, short press " ⏻ " button to enter recharge mode. When the robot cleaning is finished, it will enter recharge mode automatically.

The white button light on the robot blinks.

Main unit will start recharging automatically in case of low battery level during the course of sweeping, and return to the breakout point to proceed with sweeping automatically after battery is full.

## Breakpoint Resume

When proceeding at breakout point is activated, main machine will search for charging dock for charging in case of low battery level during the course of cleaning, and return to the breakout point to proceed with previous cleaning task. Proceeding at breakout point will be canceled if previous cleaning task is ended manually during charging.

## Sleep

Unless during charging, the main machine will go to sleep automatically when it is left idle for 5 minutes, and power off automatically when it has slept for 6 hours. In sleep status, press any button will wake main machine up.

### Tips:

Main machine will not go to sleep when charging on the charging dock.

## Refilling tank or cleaning mop half-way

To refill tank or clean mop during the course of sweeping/mopping press any button to cease it and remove and refill the tank or remove and clean the mop, and re-mount it after completion and short press button " ⏻ " to proceed with previous task.

# Operation Instructions

## Model/level selection

In App, you can choose various cleaning modes and water flow rates.

## Non-Disturbance Mode

When non-disturbance mode is activated, proceeding at breakout point, scheduled cleaning and active voice reporting are unavailable in main unit. Non-disturbance mode is activated by default during the period from 22:00 to 7:00. Non-disturbance mode can be deactivated in App.

## Global cleaning

When no map is stored, if global cleaning is chosen, the main machine will start cleaning each zone by a square area of 6mx6m. When any map is stored, if global cleaning is chosen, the main machine will start cleaning each room along the planned route. Upon completion of cleaning, the main machine will return to charging dock.

## Memory map

When memory map is activated in App, the main machine will save and update the map after finishing cleaning task and recharging. After a map is completed successfully, you can split or merge zones or name any room in the App.

## Edge Cleaning

When choosing edge cleaning in the App, the main machine will automatically recognize range of the area to clean, and start cleaning along edge, and return to charging dock automatically after finishing cleaning.

## Specified-area cleaning

When an area to be cleaned is defined in App, the main machine will clean the defined area.

**Tips:** During cleaning, the main machine may go beyond a defined area, so be sure to remove any obstacle on the floor within defined area since definition of any area will not ensure safe separation.

## Fixed-point cleaning

When choosing fixed-point cleaning and choose a target point in App, the main machine will route cleaning task and start cleaning within a rectangular area of 2m x 2m based on the target position defined in the map in App.

## Scheduled cleaning

User can schedule a cleaning task in App, and main machine will start the cleaning task as scheduled and return to charging dock upon end of the task.

**Tips:** Any scheduled cleaning task will not be executed during the time when non-disturbance mode is activated.

## Constituency cleaning

The user may select one or more rooms in the selected section, and then the machine will go to the section and start cleaning.

## Virtual Wall/ Restricted Area

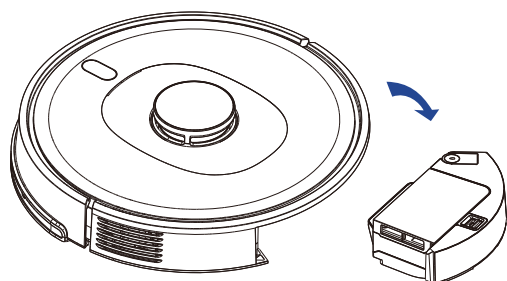
User can define virtual wall/ restricted area in App which main machine will avoid cleaning.

**Tips:** Before using this function, you have to store a map in the App. Moving the main machine or change of indoor environment may cause the original map lost and any virtual wall/ restricted area unavailable.

## Product Maintenance

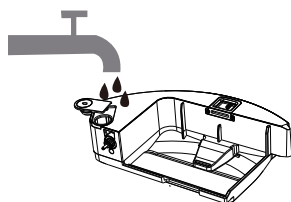
### Two-in-one water tank

- 1 Take out the two-in-one water tank from the robot, as shown in the figure.

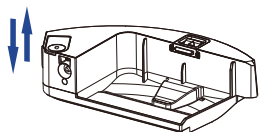
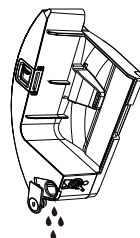


- 3 Clean the water tank.

(1) Pull out the plug and pour water into the tank.

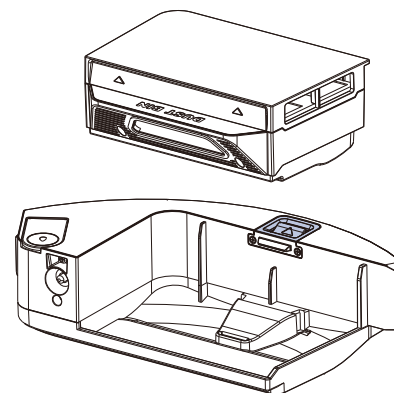


(2) Shake the tank gently after pushing the plug into the hole.

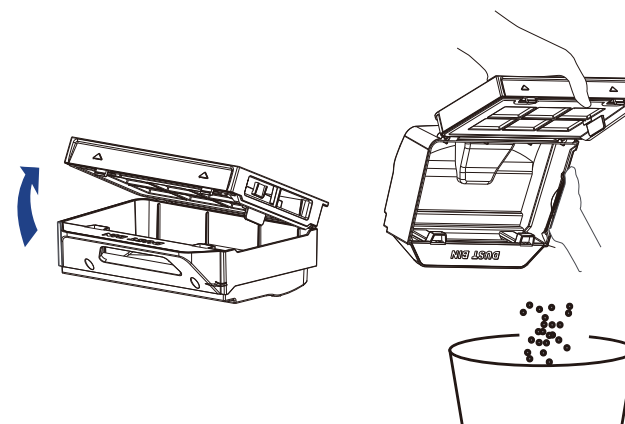


(3) Follow the picture to quickly pour the remaining water out of the tank.

- 2 Detach dust collector and tank.



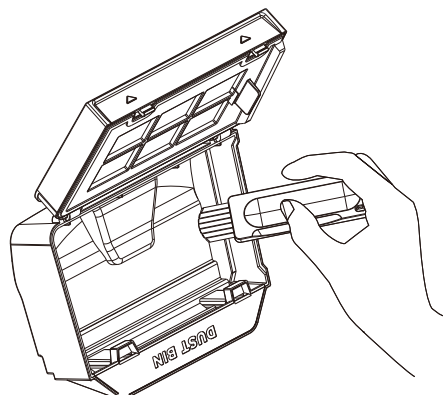
- 4 First uncover the dust collector, remove filter component and dump trash out of the dust collector.



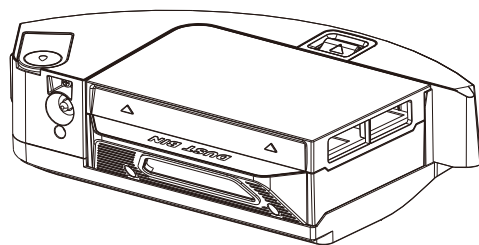
## Product Maintenance

### Two-in-one water tank

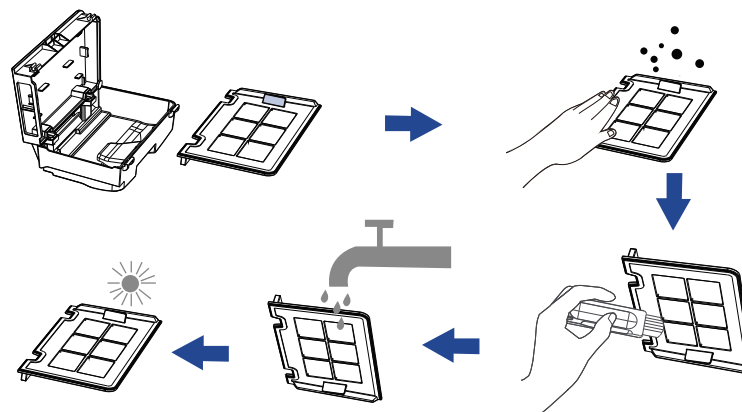
- 5** Clean the dust collector with cleaning brush.



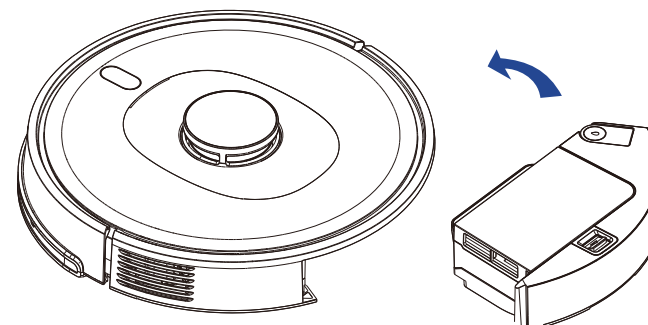
- 7** Re-cover the dust collector and couple it to the tank.



- 6** Pull up and tap the filter net. It can be washed in clean water. Please remember to put it back after it dries.



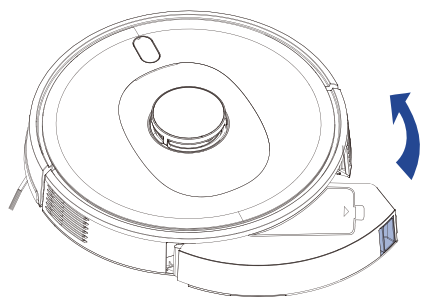
- 8** Put the integrated water tank back into the main machine and fasten the handle.



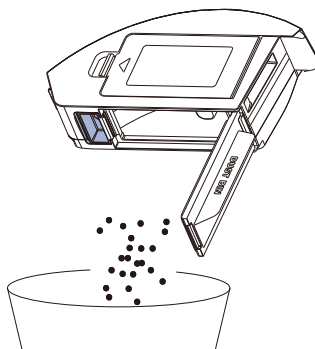
## Product Maintenance

### Dust tank

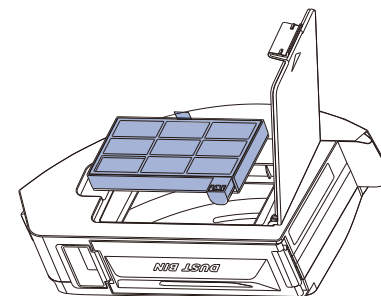
**1** Take out the dust tank.



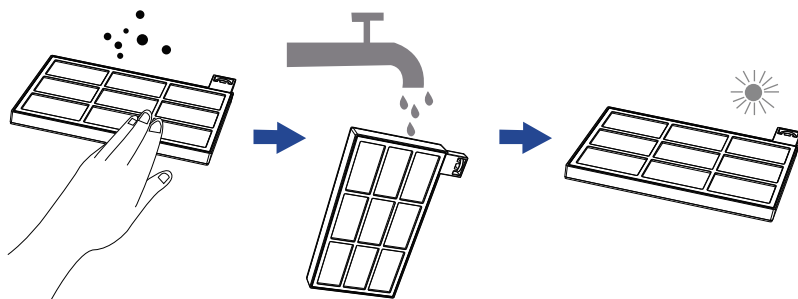
**2** Open the cover of the dust tank and dump the garbage.



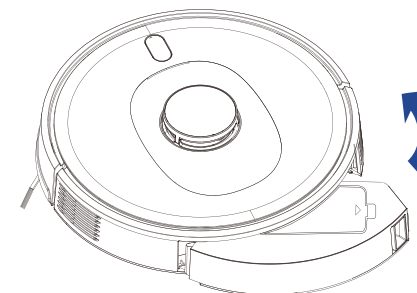
**3** Open the upper filter cap and take out the filter net.



**4** Wash repeatedly the filter net and tap the dust off it until it is clean. Then, dry the net completely and put it back for use.



**5** Put the dust tank back into the mainframe and fasten it.



#### Tips:

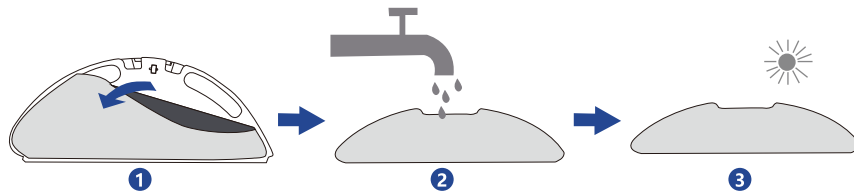
- \* Only use the filter component when it is completely dry.
- \* It is critically prohibited to touch the filter net with fingernails, brushes, or any sharp stuff. Otherwise, the filter net is damaged.

# Product Maintenance

## Duster component

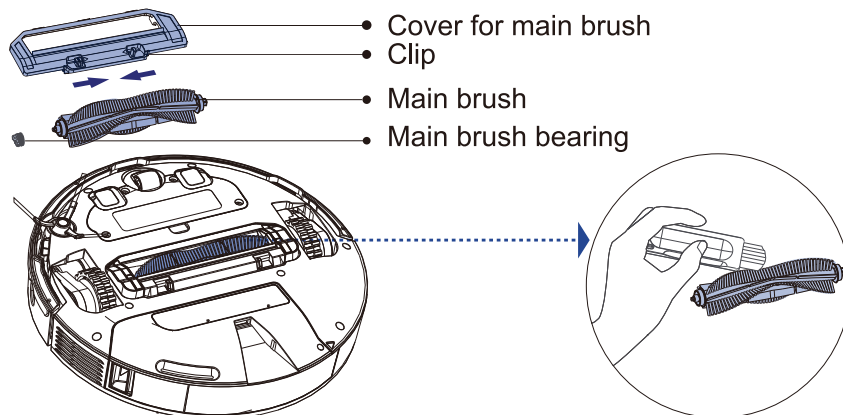
Clean the washable mop cloth

1. Take the mop cloth off the mop supporter.
2. Wash the mop cloth. (Caution: NEITHER strongly acidic NOR strongly alkaline detergent is allowed to use.)
3. Dry the mop cloth.



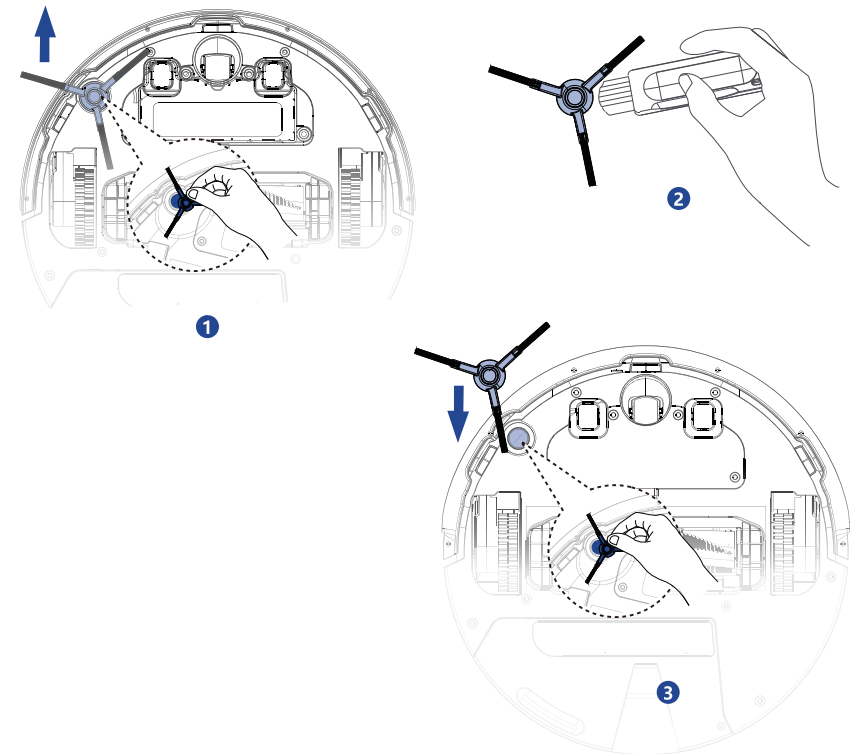
## Main Brush

1. Turn over the robot, lift the clip, remove the cover for middle motor.
2. Take out the rolling brush upwards and clean the main brush bearing.
3. Use tools to clean the rolling brush.
4. Replace the main brush and install the cover properly with the faster clip.



## Side brush

1. Reverse the machine and pull the side brush upwards.
2. Take off and clean it with the cleaning brush.
3. Put the side brush back.



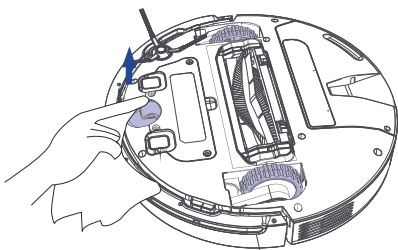
## Product Maintenance

### Main wheels

Clean the main wheels with a soft dry cloth or the cleaning brush.

### Swivel wheel

Wipe swivel wheel with a soft dry cloth, or pull up and take them out to for a complete clean.

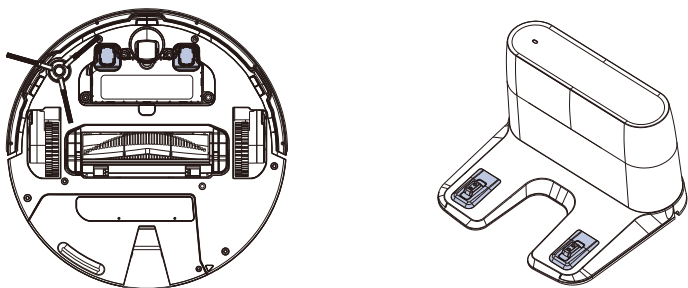


### Charging Dock

Wipe the charging dock with a soft dry cloth.

### Electrodes

Wipe the charger connector pins and battery pieces with a soft, clean cloth.

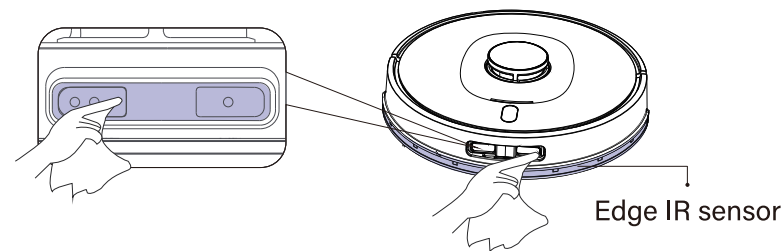


**Caution:** Inside electrodes, there are sensitive electronic components. So, when cleaning, please use a dry cloth. Do not use a wet cloth, or else electrodes may be damaged.

### Optical sensor

The main machine contains three precision optical sensors: 3D ToF sensor, visual recognition sensor, and edge IR sensor. Be sure to clean these sensors with soft and dust-free cloth to remove any dirt or dust on them, which, if accumulating heavily, may impair the intelligent obstacle avoidance performance of the main machine.

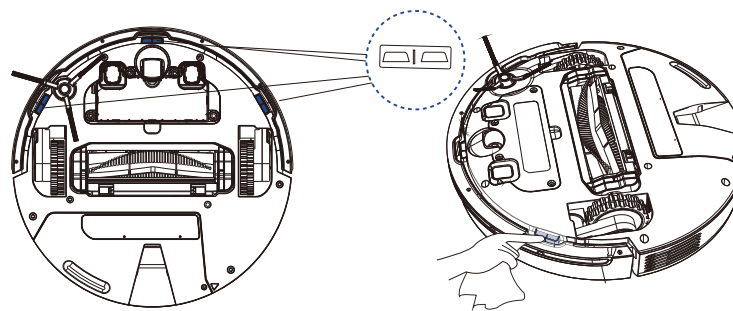
3D ToF sensor and visual recognition sensor



**⚠ Tips:** Do not use any detergent or chemical spray to clean main machine.

### Boundary sensor

Clean the boundary sensor regularly with a soft cloth.



## Common Problems

| Problem                                          | Solution                                                                                                                                                                                                                                                                                                                                     |
|--------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Unable to power on                               | <ol style="list-style-type: none"> <li>1. The battery is low, please charge it before using.</li> <li>2. The ambient temperature is too low(below 0°C) or too high(above 40°C).</li> </ol>                                                                                                                                                   |
| Robot fails to start sweeping                    | Low battery level. Charge it to full battery level.                                                                                                                                                                                                                                                                                          |
| Robot cannot return for charging                 | <ol style="list-style-type: none"> <li>1. Too many barriers around charging dock. Place charging dock in an unblocked area.</li> <li>2. Robot is too far from charging dock. Place robot near charging dock and try again.</li> </ol>                                                                                                        |
| Abnormal robot actions                           | Please shut down and restart the robot.                                                                                                                                                                                                                                                                                                      |
| Abnormal sound during cleaning                   | Please check and clean the foreign matters on the main brush, side brush, left/right wheel after the machine is turned OFF.                                                                                                                                                                                                                  |
| Cleaning performance deteriorates or dust drops. | <ol style="list-style-type: none"> <li>1. Dust collector is full. Please empty the collector.</li> <li>2. Filter screen is blocked. Please clean the screen.</li> <li>3. Robot is blocked by any foreign object. Please clean the main brush.</li> </ol>                                                                                     |
| Robot is offline                                 | <ol style="list-style-type: none"> <li>1. Weak Wi-Fi signals. Make sure robot is in proper coverage of Wi-Fi signals.</li> <li>2. Wi-Fi connection fails. Reset Wi-Fi connection and download the latest App and try again.</li> </ol>                                                                                                       |
| Robot fails to proceed at breakout point         | <ol style="list-style-type: none"> <li>1. Make sure non-disturbance mode is not activated, which will disable proceeding at breakout point.</li> <li>2. Proceeding at breakout point is unavailable when manually start recharging by performing operations in the App or short pressing recharging button, or robot is charging.</li> </ol> |
| Unable to charge                                 | Make sure there is sufficient spaces around charging dock, and there is no dust or blockage on the surface of electrode of charging dock.                                                                                                                                                                                                    |
| Fail to do scheduled cleaning                    | <ol style="list-style-type: none"> <li>1. Make sure the equipment has been connected to the network, as disconnection from network will fail sync and scheduled cleaning task.</li> <li>2. Make sure non-disturbance mode is not activated, which will deactivate scheduled cleaning.</li> </ol>                                             |
| Robot is always offline                          | Please ensure that the robot network configuration is successful and that the robot is always with in the coverage of Wi-Fi signal.                                                                                                                                                                                                          |
| Robot fails to connect to APP                    | Ensure that the robot and the charging dock are in the area with good Wi-Fi signal; reset Wi-Fi according to the steps described in the Instruction Manual; then pair again.                                                                                                                                                                 |

# Troubleshooting

| Common Problems                                             | Solution                                                                                                                                                                                                                                  |
|-------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Make sure the laser ranging sensor is not blocked.          | <ul style="list-style-type: none"> <li>• Laser ranging sensor is blocked or jammed by foreign object.</li> <li>• Remove the blockage or foreign object.</li> <li>• If removal is impossible, relocate robot and then start it.</li> </ul> |
| Clean boundary sensor and relocate robot.                   | <ul style="list-style-type: none"> <li>• Robot is off ground.</li> <li>• Relocate and restart robot.</li> <li>• Boundary sensor is dirty.</li> <li>• Clean the sensor.</li> </ul>                                                         |
| Check collision sensor and remove any foreign object on it. | <ul style="list-style-type: none"> <li>• Collision sensor is jammed.</li> <li>• Remove foreign object by tapping the sensor.</li> <li>• If there is no foreign object, relocate and restart robot.</li> </ul>                             |
| Place robot on a horizontal ground and start it.            | <ul style="list-style-type: none"> <li>• It is detected that robot stays inclined.</li> <li>• Place robot on a horizontal ground and start it, or perform leveling in App and then restart robot.</li> </ul>                              |
| Make sure that the dust collector is mounted in place.      | <ul style="list-style-type: none"> <li>• Dust collector is not mounted in place.</li> <li>• Please remount it and make sure that it is mounted in place.</li> </ul>                                                                       |
| Remove any obstacle around robot and try again.             | <ul style="list-style-type: none"> <li>• Robot may be jammed or trapped.</li> <li>• Remove any barrier around it.</li> </ul>                                                                                                              |

| Common Problems                                          | Solution                                                                                                                                                          |
|----------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Please clean edge IR sensor.                             | <ul style="list-style-type: none"> <li>• Edge IR sensor may get dirty.</li> <li>• Please clean edge IR sensor.</li> </ul>                                         |
| Make sure that visual recognition sensor is not blocked. | <ul style="list-style-type: none"> <li>• Visual recognition sensor is blocked.</li> <li>• Please remove any obstacle before visual recognition sensor.</li> </ul> |
| Make sure that the integrated tank is mounted properly.  | <ul style="list-style-type: none"> <li>• Re-mount the integrated tank and make sure that it is fixed securely to the snap joint.</li> </ul>                       |
| Make sure that the mop is mounted in place.              | <ul style="list-style-type: none"> <li>• Re-mount mop and mop holder, and make sure that they are fixed securely to the snap joint.</li> </ul>                    |
| Place robot back to charging dock.                       | <ul style="list-style-type: none"> <li>• Robot fails to start due to low battery level.</li> <li>• Please manually place robot back to charging dock.</li> </ul>  |
| Low battery level. Please charge robot.                  | <ul style="list-style-type: none"> <li>• The robot fails to locate charging dock.</li> <li>• Please manually place robot back to charging dock.</li> </ul>        |

## Wi-Fi Connection

Before Wi-Fi setup, make sure robot and your Wi-Fi network meet the following requirements.

### Wi-Fi Setup Requirements

- Robot:
  - Robot is fully charged.
  - Wi-Fi status light slowly flashes blue.
- Wi-Fi Network:
  - Use the correct password for your network
  - Do not use a VPN (Virtual Private Network) or Proxy Server.
  - Your Wi-Fi router supports 802.11b/g/n and IPv4 protocol.
  - You are using a 2.4GHz router or a dual-band router that is configured to support a 2.4GHz frequency band. Robot does not support 5GHz frequency band.
  - If robot cannot connect to the Wi-Fi network and you are using a 2.4/5GHz mixed network, switch to a 2.4GHz network for Wi-Fi setup. You can switch back once your setup is complete.
  - When connecting to a hidden network, make sure you enter the correct network name, SSID (case sensitive), and connecting to a 2.4GHz wireless network.
  - When using a network extender/repeater, make sure the network name (SSID) and password are the same as your primary network.

- The firewall and port settings of your Wi-Fi router allow robot to connect with the shellbot servers.
- Network Security Requirement:
  - WPA and WPA2 using TKIP PSK, AES/CCMP encryption.

### The malfunction of Wifi

1. Incorrect is the router's username and password.
2. Configure the router's network to ensure the router's correct username and password.
3. The host is beyond the network signal coverage of the router.
4. Make sure that the host is within the network signal coverage of the router.
5. The host is not in the to-be-configured status.
6. Only in the to-be-configured status can the network of the host be configured. First, connect the host with electricity. Then, press and hold the poweron button and the recharge button. When the user hears the beep, the host is poised for configuration
7. The 2.4G network is not in use.
8. The host does not support the 5G network at the moment. Please connect the 2.4G network for configuration.