



# DEEBOT **150 MAX** Family

**Instruction Manual**

## IMPORTANT SAFETY INSTRUCTIONS

### IMPORTANT SAFETY INSTRUCTIONS

### READ ALL INSTRUCTIONS BEFORE

### USING THIS APPLIANCE.

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

**WARNING:** Read all safety warnings and instructions.

Failure to follow the warnings and instructions may result in electric shock, fire, or serious injury.

1. Do not allow to be used as a toy. Close attention is necessary when used by or near children.
2. Clear the area to be cleaned. Remove power cords and small objects from the floor that could entangle the Appliance. Tuck rug fringe under the rug base, and lift items such as curtains and tablecloths off the floor.
3. If there is a drop off in the cleaning area due to a step or stairs, you should operate the Appliance to ensure that it can detect the step without falling over the edge. It may become necessary to place a physical barrier at the edge to keep the unit from falling. Make sure the physical barrier is not a trip hazard.
4. Only use as described in this manual. Only

use attachments recommended or sold by the manufacturer.

5. Do not handle plug or appliance with wet hands.
6. Non-rechargeable batteries are prohibited.
7. Do not use without dust bin and/or filters in place.
8. Do not operate the vacuum in an area where there are lit candles or fragile objects on the floor to be cleaned.
9. Do not use and store in extremely hot or cold environments (below  $-5^{\circ}\text{C}$  / $23^{\circ}\text{F}$  or above  $40^{\circ}\text{C}$  / $104^{\circ}\text{F}$ ). Please charge the robot in temperature above  $0^{\circ}\text{C}$  / $32^{\circ}\text{F}$  and below  $40^{\circ}\text{C}$  / $104^{\circ}\text{F}$ .
10. Keep hair, loose clothing, fingers, and all parts of body away from any openings and moving parts.
11. Do not operate the Appliance in a room where an infant or child is sleeping.
12. For INDOOR use ONLY. Do not use the Appliance in outdoor, commercial or industrial environments. Do not use Appliance on wet surfaces or surfaces with standing water.
13. Do not allow the Appliance to pick up large objects like stones, large pieces of paper, or any item that may clog the Appliance.
14. Do not use to pick up flammable or combustible

- materials such as gasoline, printer, or copier toner, or use in areas where they may be present.
15. Do not pick up anything that is burning or smoking, such as cigarettes, matches, hot ashes, or anything that could cause a fire.
  16. 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.
  17. Take care not to damage the power cord. Do not pull on or carry the Appliance or Docking Station by the power cord, use the power cord as a handle, close a door on the power cord, or pull power cord around sharp edges or corners. Do not run Appliance and Docking station 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.
  18. If the power cord is damaged, it must be replaced by the manufacturer or its service agent in order to avoid a hazard.
  19. Do not use with a damaged power cord or plug. Do not use the Appliance or Docking Station if it is not working properly, has been dropped, damaged, left outdoors, or come in contact with water. It must be repaired by the manufacturer or its service agent in order to avoid a hazard.
  20. Turn OFF the power switch before cleaning or maintaining the Appliance. Turn off all controls before unplugging. Always turn off this appliance before connecting or disconnecting motorized nozzle.
  21. Turn OFF the Power Switch before removing the Dust Bin.
  22. Remove the Appliance from the Docking Station, and turn OFF the power switch to the Appliance before removing the battery for disposal of the Appliance.
  23. The battery must be removed and discarded according to local laws and regulations before disposal of the Appliance.
  24. Please dispose of used batteries according to local laws and regulations.
  25. Do not incinerate the Appliance even if it is severely damaged. The batteries can explode in a fire.
  26. When not using the Docking Station, unplug from outlet when not in use and before servicing.
  27. The Appliance must be used in accordance with the directions in this Instruction Manual. Ecovacs Home Service Robotics cannot be held liable or responsible for any damages or injuries caused by improper use.

28. Prevent unintentional starting. Ensure the switch is in the off position before connecting to battery pack, picking up or carrying the appliance.
29. When battery pack is not in use, keep it away from other metal objects, like paper clips, coins, keys, nails, screws, or other small metal objects, that can make a connection from one terminal to another. Shorting the battery terminals together may cause burns or a fire.
30. 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.
31. Do not use a battery pack or appliance that is damaged or modified. Damaged or modified batteries may exhibit unpredictable behavior resulting in fire, explosion, or risk of injury.
32. Do not expose a battery pack or appliance to fire or excessive temperature. Exposure to fire or temperature above 130°C may cause explosion. The temperature of 130°C can be replaced by the temperature of 265°F.
33. 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.
34. Have servicing performed by a qualified repair person using only identical replacement parts. This will ensure that the safety of the product is maintained.
35. Do not modify or attempt to repair the appliance or the battery pack (as applicable) except as indicated in the instructions for use and care.
36. Place the cords from other appliances out of the area to be cleaned.
37. Do not operate the vacuum in a room that has lit candles on furniture that the vacuum may accidentally hit or bump into.
38. Do not allow children to sit on the vacuum.
39. Use only as described in this manual. Use only manufacturer's recommended attachments.
40. 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.
41. Use appliances only with specifically designated battery packs. Use of any other battery packs may create a risk of injury and fire.

42. The robot contains batteries that are only replaceable by skilled persons. To replace the robot's battery, please contact Customer Service.
43. If the robot will not be used for a long time, fully charge the robot and power OFF for storage and unplug the Docking Station.
44. To Reduce The Risk Of Electric Shock – Do not use on wet surfaces. Do not expose to rain. Store indoors.
45. To Reduce The Risk Of Injury From Moving Parts – Unplug Before Servicing.
46. Risk Of Injury. Brush May Start Unexpectedly. Unplug Before Cleaning or Servicing.
47. To reduce the risk of injury, user must read the Instruction Manual.
48. To Reduce The Risk Of Electric Shock – Do not use outdoors or on wet surfaces.
49. Please make sure your power supply voltage matches the power voltage marked on the Docking Station.
50. Do not use the Docking Station if it is damaged.
51. The plug must be removed from the receptacle before cleaning or maintaining the Docking Station.
52. Power Switch: "I"=ON, "O"=OFF.
53. Connect to a properly grounded outlet only. See Grounding Instructions.

|   |                     |
|---|---------------------|
| ≡ | Direct current      |
| ~ | Alternating current |

This Device Complies with DHHS Radiation Rules, 21CFR Chapter 1, Subchapter J.

## Federal Communications Commission (FCC) Interference Statement

**NOTE:** 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 generates, 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 or more 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.

**Caution:** Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device contains licence-exempt transmitter(s)/ receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

- (1) This device may not cause interference.
- (2) This device must accept any interference, including interference that may cause undesired operation of the device.

## RF exposure warning


This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment.

This equipment must be installed and operated in accordance with provided instructions and the antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be collocated or operating in conjunction with any other antenna or transmitter.

MPE caution (for mobile device under Part 15.247 & 15.407 device)

To satisfy FCC & IC RF exposure requirements, a separation distance of 20 cm or more should be maintained between the antenna of this device and persons during device operation.

To ensure compliance, operations at closer than this distance is not recommended.

To disable the Wi-Fi module on DEEBOT, follow these steps: power on the robot, then place it on the OMNI Station, ensuring that the Charging Contacts on DEEBOT and the Station are properly connected, and press and hold the  for 30 s until you hear beeps.

To enable the Wi-Fi module on DEEBOT, please restart the robot. Additionally, unplug and plug in the Station.

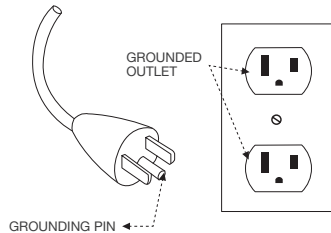
## SAVE THESE INSTRUCTIONS

## GROUNDING INSTRUCTIONS

This appliance must be grounded. If it should malfunction or breakdown, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This appliance is equipped with a cord having an equipment-grounding conductor and grounding plug. The plug must be inserted into an appropriate outlet that is properly installed and grounded in accordance with all local codes and ordinances.

**WARNING** – Improper connection of the equipment-grounding conductor can result in a risk of electric shock. Check with a qualified electrician or service person if you are in doubt as to whether the outlet is properly grounded. Do not modify the plug provided with the appliance – if it will not fit the outlet, have a proper outlet installed by a qualified electrician.

This appliance is for use on a nominal 120 V circuit and has a grounding attachment plug that looks like the plug illustrated as the following photo. Make sure that the appliance is connected to an outlet having the same configuration as the plug. No adaptor should be used with this appliance.



For INDOOR household use ONLY.

This device contains licence-exempt transmitter(s)/ receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

- (1) This device may not cause interference.
- (2) This device must accept any interference, including interference that may cause undesired operation of the device.

To satisfy FCC&IC RF exposure requirements, a separation distance of 20 cm or more should be maintained between the antenna of this device and persons during device operation.

To ensure compliance, operations at closer than this distance is not recommended.

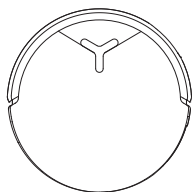
## Device Update

Typically, some devices are updated bi-monthly, but not always so specific.

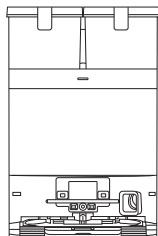
Some devices, especially those that went on sale more than three years ago, will only be updated if a critical vulnerability is found and fixed.

# Package Components

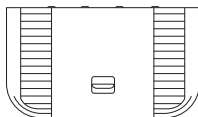
## 1 PACKAGE CONTENTS



Robot



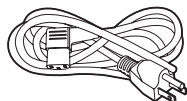
OMNI Station



Base



Side Brush



Power Cord



Instruction Manual

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

## 2 PRODUCT DIAGRAM

### 1. Robot Front View

Button on DEEBOT

Press: Start/Pause

Press and hold for 3s:

Return to charge

3D Structure Light Sensor

AI Camera

d-ToF Laser Module

Top Cover

Bumper

### 2. Bottom Back View

Anti-drop Sensors

Side Brush

Carpet Detection Sensor

Brush Release Button

Mounting Slots for

Mopping Pad Assembly

Universal Wheel

Roller Brush

Driving Wheels

### 3. Inside the Robot

RESET Button

Network Setup: Press the RESET Button and follow the voice prompt to set up the network.

Restore to default settings: Press and hold the RESET button for 5 seconds, and you will hear a prompt sound. After that, the startup music will play, and the robot will be restored to default settings.

Wi-Fi Status Indicator/  
RESET Button

Power Switch  
"|" = ON  
"O" = OFF

Charging Contacts

Water Filling Port

Edge Sensor

### 4. Mopping Pad Assembly

Mopping Pad Plates

Washable Mops

### 5. Dust Bin

Filter

Dust Disposal Port

Release Button

### 6. Station Front View

Dirty Water Tank

Clean Water Tank

Indicator

Dust  
Collection Cabin

Charging  
Contacts on Station

Mop Washing Tray

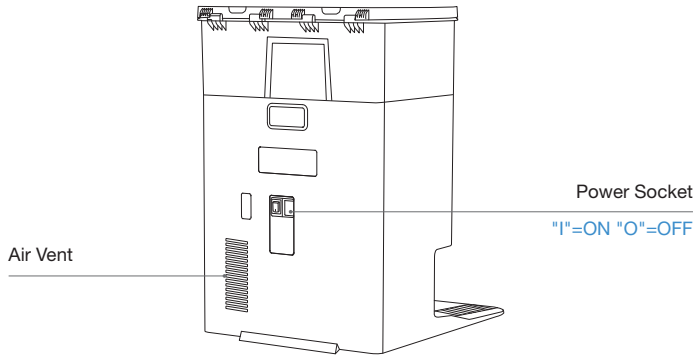
#### Note:

- If the Indicator flashes red, go to the ECOVACS HOME App for details about the malfunction.
- If the robot cannot charge, wipe the corresponding charging contacts on the OMNI station with a dry cloth.

### 7. Dust Bag

Dust Bag Handle

## 8. Station Back View



## 9. Indicator Light

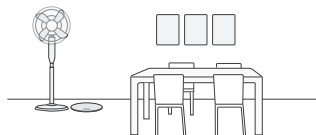
| Indicator | Light Effect    | State                         |
|-----------|-----------------|-------------------------------|
| Robot     | Breathing White | Charging                      |
|           | Solid White     | Fully Charged/Running         |
|           | Solid Red       | Low Battery                   |
|           | Flashing Red    | Alarm                         |
|           | Solid Yellow    | Voice Assistant Mute          |
| Station   | Solid White     | Standby/Running               |
|           | Flashing Red    | Malfunction                   |
|           | Goes Out        | Power Outage/ Deep Sleep Mode |

## 10. Sensors Overview

| Name<br>Functional Description | Functional Description  |
|--------------------------------|---|
| d-ToF Laser Module             | Laser Ranging is applied to measure the distance between the robot and surrounding objects based on the time difference of reflection, allowing the module to map against the objects around while the robot is moving. The detection range is 10 m.  |
| 3D Structure Light Sensor      | Infrared ranging and similar triangles are applied to measure the distance between the surrounding objects and the robot. When the sensor detects an object nearby, the robot will automatically take a turn to avoid bumping into the object. The detection range is 0.4 m.  |
| Anti-drop Sensors              | Infrared ranging is applied by the sensor at the bottom of the robot to measure the height between the bottom of the robot and the ground. When there is a height difference, for example, a height above 55 mm on white-colored ground or a height above 30 mm on black-colored ground, the robot will stop advancing, fulfilling the feature of Anti-drop.  |
| Carpet Detection Sensor        | The ultrasound probe can emit ultrasonic waves with a frequency of 300KHZ. The energy of the ultrasonic waves can be absorbed by carpets. If the reflected energy is below the threshold, the robot will recognize the presence of a carpet. According to ECOVACS lab tests, currently, over 50 types of carpets available on the market can be identified.   |
| Anti-collision Sensor          | When the transmitted signal is blocked by an object, the signal receiver will not be able to receive it. With this principle, the robot will avoid obstacles when encountering them.  |
| Edge Sensor                    | With Infrared Ranging, the robot can detect the distance between itself and objects on its right side. When there is a wall or an obstacle on the right side, the robot will do edge cleaning to avoid missed spots or collisions. (for model DDX 45)<br>With ToF distance measurement, the robot can detect the distance between itself and objects on its right side. When there is a wall or obstacle on the right side, the robot will perform edge cleaning to avoid missing spots or collisions. (for model DEX 54) |
| AI Camera                      | Use AI Camera to collect images of the surroundings for video recording, allowing distant video call via the microphone. FOV: Vertical Span of 77°, Horizontal Span of 97°  |
| Microphone                     | Human voices cause vibrations in the diaphragm of the microphone through air. As a result, the microphone utilizes the collection and algorithms of sound models to achieve sound recording and voice control of the robot to complete specific tasks. The effective wake-up distance is 5 m.   |

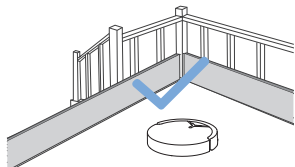
# NOTES BEFORE CLEANING

## 1 Before Cleaning



### Prepare the Area

Tidy up the area by arranging furniture like chairs and storing low-lying items to maximize cleaning space.



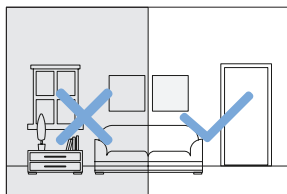
### Set up Protective Barriers

If working near stairs or edges, place a barrier to prevent falls.



### Keep Doors Open to Rooms to be Cleaned

During the first use, keep all doors open to help the robot explore and map the area.



### Provide Sufficient Lighting

Ensure areas are well-lit to optimize the robot's obstacle avoidance.



Tidy up the area by arranging furniture like chairs and storing low-lying items to maximize cleaning space.



For rugs with tassels, tuck them under the rug.



Avoid blocking narrow spaces like doorways to ensure the robot can detect all areas.



Keep the camera lens clean with a soft cloth, avoiding cleaning agents.

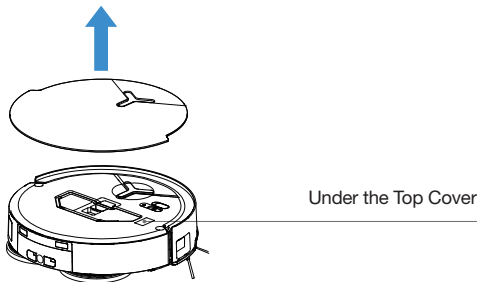
## 2 Quick Start

Before using, please remove all protective materials from the robot and OMNI station.

### 1. Download ECOVACS HOME App

Download ECOVACS HOME App to enjoy more features.

You may scan the QR Code on the robot to download the App.

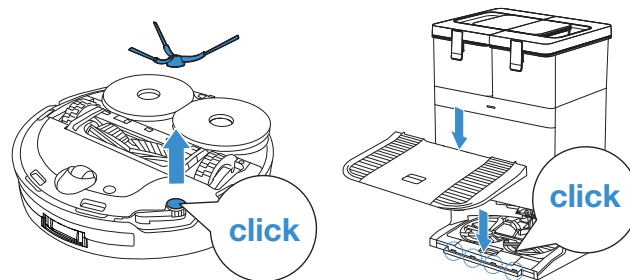


Or search for the ECOVACS HOME in your mobile app store to download the App.



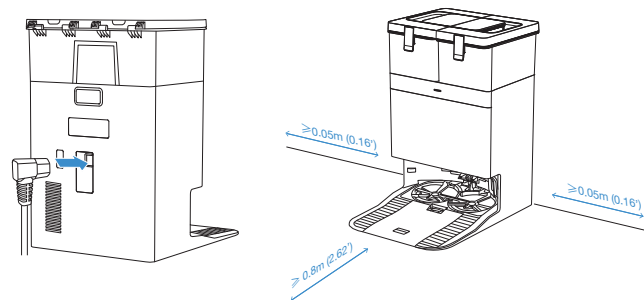
## 2. Install Robot and Station

The sound of Click indicates proper installation.



## 3. Place Station and Connect Power Cord

Place the station against a wall on a level, hard ground. Ensure there are no objects within 0.05 m on either side or 0.8 m in front of it.



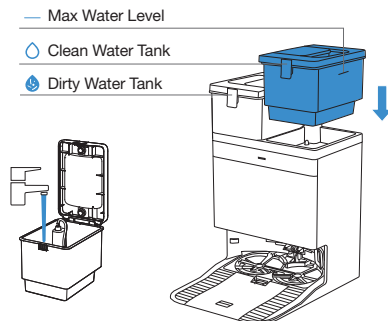
### Note:

- If there are reflective objects, such as mirrors, or reflective skirting lines near the station, cover them from the ground up to a height of 14 cm.
- Do not place the Station under direct sunlight.
- Place the Station in a location with a strong Wi-Fi signal.

**Note:** Follow the guide of the App to register, log in, and connect the product with the App.

### 3 Fill Clean Water Tank

Take out the clean water tank and fill it up to the max water level. After filling the tank, lock its cover and put it back to the station.

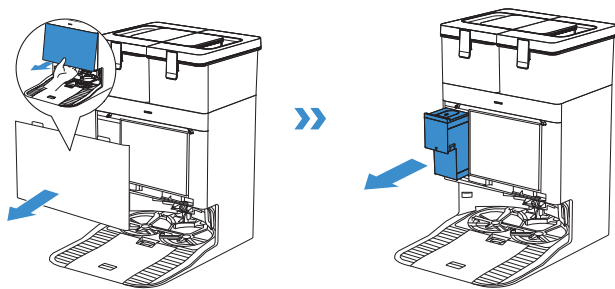


#### Note:

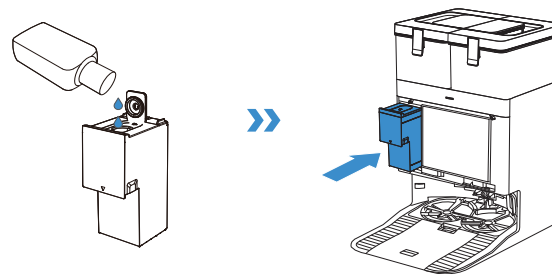
- Use a clean, dry cloth to wipe off any water on the surface of the tank before placing it in position.
- Make sure to lock the top covers of both water tanks securely before use.
- Any water marks in the water tanks are from function testing. Please use it with confidence.

### 4 Add Cleaning Solution (sold separately)

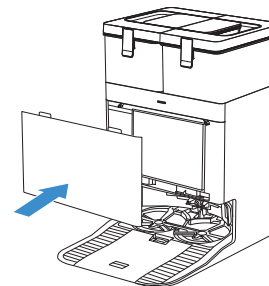
1. Take off the dust collection cabin cover, pull out the cleaning solution unit, and place it on a level, hard surface.



2. Unlid the cleaning solution unit and fill it with ECOVACS cleaning solution (sold separately). Put the lid on and the unit back to the station.



3. Place the fit joints at the upper edge of the dust cabin cover and press the lower part of it to install it properly.

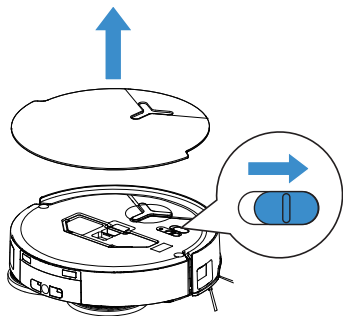


#### Note:

- Cleaning Solution is pumped automatically from the cleaning solution unit. Do not add Cleaning Solution to the water tanks.
- For better performance and longer lifespan of the product, please use ECOVACS DEEBOT Cleaning Solution (sold separately).
- Please make sure that no foreign objects fall into the cleaning solution unit.

## 5 Power on Robot

Turn on the power switch under the robot cover ("I" = ON, "O" = OFF), and place the robot in front of the Station that is connected to power supply.



## 6 Connect Robot to App

### Network Interface Information


| Name             | Description   |
|------------------|---|
| Bluetooth        | Enable Bluetooth to connect the robot to the network during the network setup process.  |
| Wi-Fi*           | Facilitate data transfer between the app and the robot, enabling control of the robot through the app.  |
| ECOVACS HOME App | ECOVACS products offer smart functions such as network setup, mapping, and cleaning mode selection (specific to each product). To utilize these features, users need to download and use the official ECOVACS Home App. |

\***Note:** The Deebot series robotic vacuums are designed for domestic cleaning scenarios. A home Wi-Fi network is required for operation, and anti-DDOS protection can be configured by users through route settings.

### Wi-Fi Network Requirements:


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

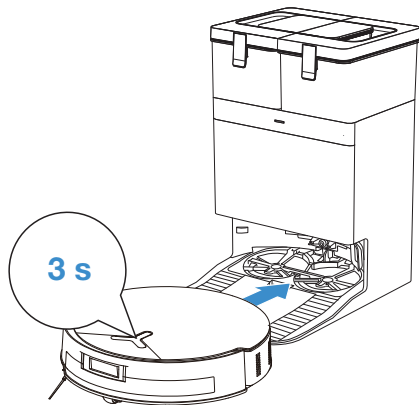
### Wi-Fi Indicator Light

|   |                      |                         |
|---|----------------------|-------------------------|
|  | Slow Flashing White  | Disconnected from Wi-Fi |
|   | Quick Flashing White | Connecting              |
|   | Solid White          | Connected to Wi-Fi      |

Please note that to access smart features such as remote startup, voice interaction, 2D/3D map display and control settings, and personalized cleaning (features may vary depending on the product), you'll need to download and use the ECOVACS HOME App, which receives constant updates. You must agree to our Privacy Policy and User Agreement before we can process some of your basic and necessary information and enable you to operate the product via the ECOVACS HOME App. Without your agreement, some of the aforementioned smart features cannot be accessed through the ECOVACS HOME App. Nevertheless, you can still use the product's basic functions for manual operation.

## 7 Charge Robot

Use the ECOVACS HOME App or voice control to recall the robot, or press and hold  the robot for 3 seconds, to allow the robot to dock for charging.



### Note:

- The robot cannot be charged when the power is turned off.
- When the robot is not working, it is recommended to keep it powered ON and charging.
- It is recommended that the robot start cleaning from the Station. Do not move the Station while cleaning.

## 8 Operate Robot

### 1. Start Mapping


When creating a map for the first time, please follow the robot to help resolve some minor issues.

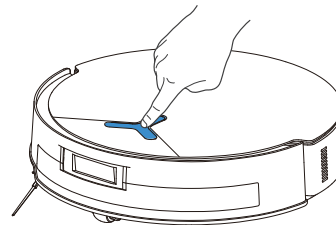
For instance, if the robot gets stuck in a narrow space under furniture, you may refer to the following solutions:

- ① Raise the furniture to create a passage for the robot if feasible.
- ② Cover the bottom of the furniture to prevent the robot from trying to enter.
- ③ Set up Virtual Boundary in the App to prevent the robot from entering.

### 2. Start Cleaning

- The robot's water tank is automatically refilled through the Station. Manual refilling is not needed.
- When mopping, the robot will recognize floor types and is able to lift mops automatically when encountering carpets. Please do not use the robot on shaggy rugs or carpets with fibres longer than 10 mm. It is recommended to fold up the shaggy rugs with fibres longer than 10 mm during the cleaning process, or set the shaggy carpeted area as a no-entry zone by setting virtual boundary in the ECOVACS HOME App.


Before cleaning for the first time, please make sure the robot is in the Station and fully charged. Tap  on the robot to start. You can also use the ECOVACS HOME App or Voice Control to start.




### Note:

- Do not frequently remove washable mopping pads.
- Do not use a rag or any other object to scratch the Mopping Pad Plates.
- When the ECOVACS HOME App prompts that the mops need to be replaced, please replace them in time. Explore more accessories on ECOVACS HOME App or at <https://www.ecovacs.com>.


### 3. Pause

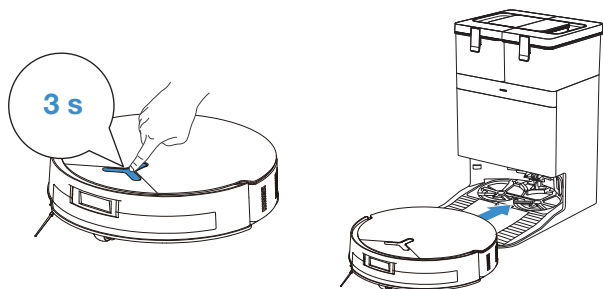
Tap  on the robot to pause it while it is working. You can also use the ECOVACS HOME App or Voice Control to pause the robot.

### 4. Wake up

After pausing for a while, all indicator lights on the robot will go out. To wake up the robot, press .

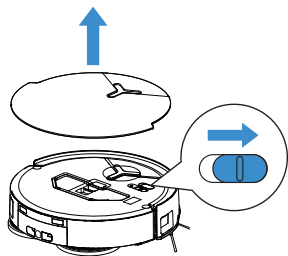
### 5. Return to Station

Use the ECOVACS HOME App or Voice Control to recall the robot, or press and hold the  button on the robot for 3 seconds, to allow the robot to dock for charging.



### 6. Deep Sleep Mode

The robot will enter deep sleep mode to protect the battery if it stays outside the Station for about 10 h. Please switch OFF and ON to wake up the robot.



# Regular Maintenance

## 1 Maintenance Frequency

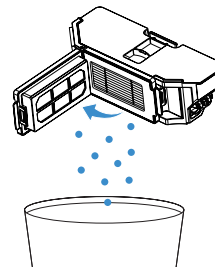
To ensure optimal performance, maintain and replace parts at the following frequencies:

| Part   | Maintenance Frequency | Replacement Frequency |
|--|-----------------------|-----------------------|
| Washable Mops  | /                     | Every 1-2 months      |
| Dust Bag   | /                     | When App prompts      |
| Side Brush   | Every 2 weeks         | Every 3-6 months      |
| Roller Brush   | Every week            | Every 6-12 months     |
| Filter   | Every week            | Every 3-6 months      |
| 3D structure light sensor<br>Universal Wheel<br>Anti-drop Sensors<br>Bumper<br>Charging Contacts on the robot<br>Charging Contacts on the Station<br>d-ToF Laser Module<br>AI Camera | Approx. every month   | /                     |
| Clean Water Tank   | Every 3 months        | /                     |
| Dirty Water Tank   | Every month           | /                     |
| Dust Collection Cabin  | Every month           | /                     |
| Body and Bottom of the Station   | Every month           | /                     |
| Cleaning Solution Unit   | Every month           | /                     |

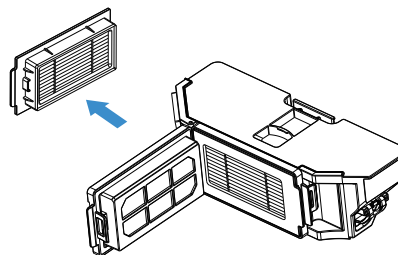
**Note:** Explore more accessories at ECOVACS HOME App or at <https://www.ecovacs.com>.

## 2 Dust Bin Maintenance

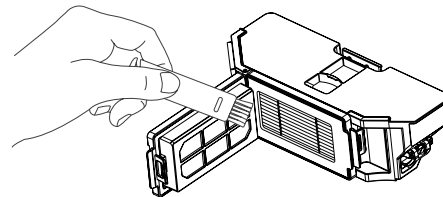
1. Open the cover and empty the bin.



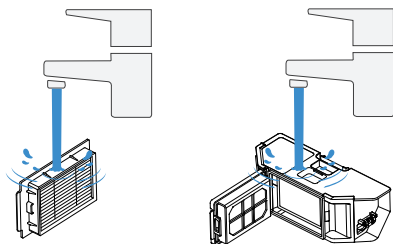
2. Take out the filter.



3. Clean the dust bin.



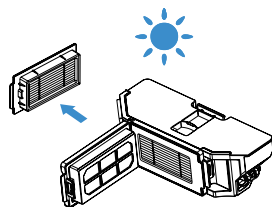
4. You may wash the dust bin and the filter with running water.  
Shake off the remaining water from the parts.



**Note:**

- Please rinse the filter with water.
- Do not use fingers or brushes to clean the filter.

5. Dry by airing.

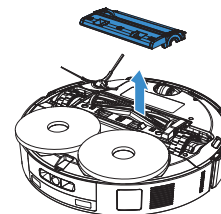


**Note:** Make sure to dry the filter completely before use.

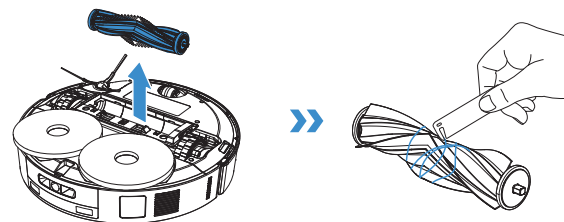
### 3 Roller and Side Brush Maintenance

#### Clean the Roller Brush

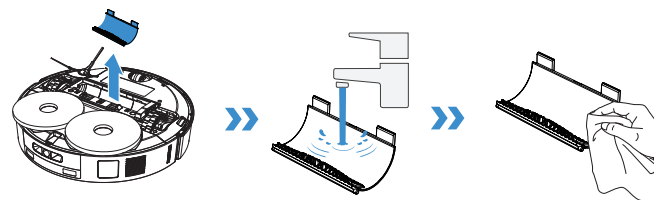
1. Remove the cover on the roller brush.



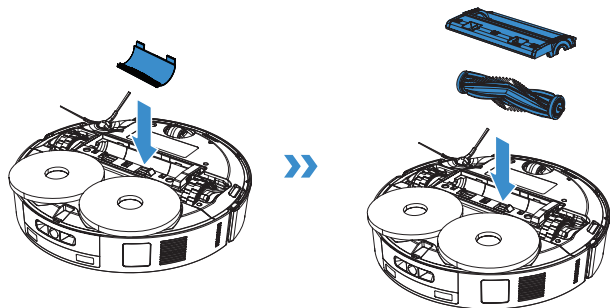
2. Remove and clean the roller brush.



3. Remove, clean and dry the brush comb.

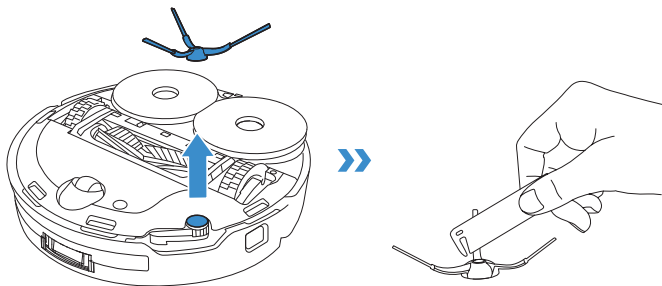


#### 4. Install the brush comb, the roller brush and the roller brush cover.



#### Clean the Side Brush

Remove and clean the side brush.

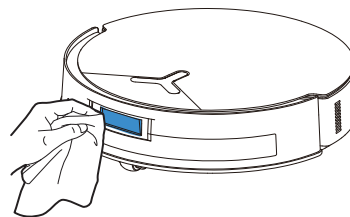


**Note:** Explore more accessories at ECOVACS HOME App or at <https://www.ecovacs.com>

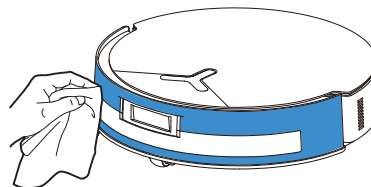
## 4 Maintain Other Components

**Note:** Do not use wet cloth when cleaning the following parts to prevent water damage.

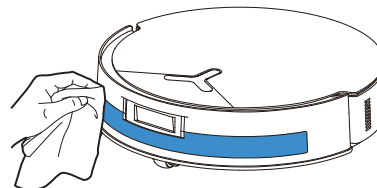
### 1. Clean the Sensor Lens



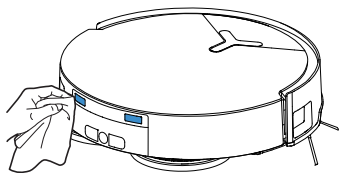
### 2. Clean the Bumper



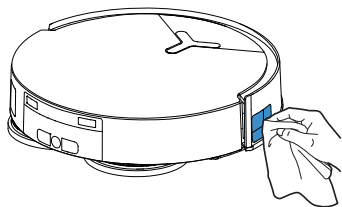
### 3. Clean the d-ToF Laser Module



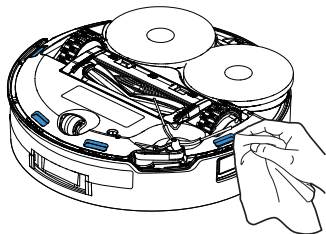
#### 4. Clean the Charging Contacts



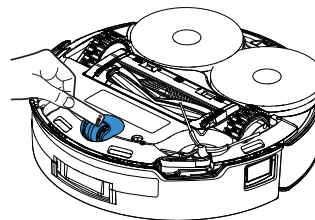
#### 5. Clean the Edge Sensor



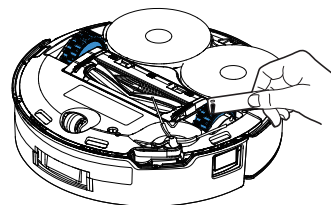
#### 6. Clean the Anti-drop Sensors



#### 7. Clean the Universal Wheel



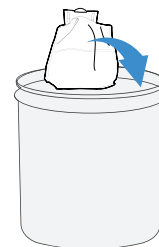
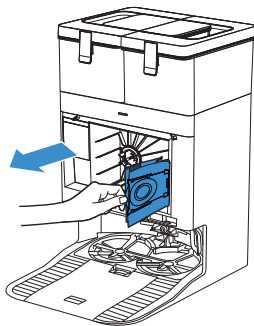
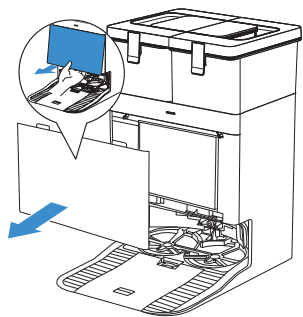
#### 8. Clean the Driving Wheels



**Note:** Explore more accessories at ECOVACS HOME App or at <https://www.ecovacs.com>

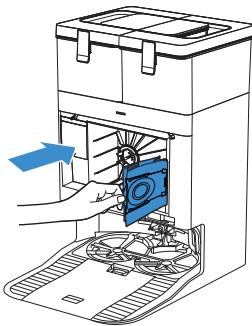
## 5 Dust Bag

1. Discard the used dust bag.

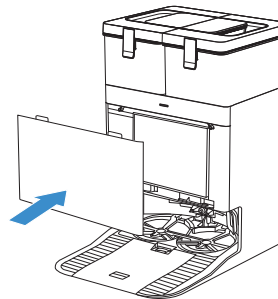


Hold the handle to lift out the dust bag, which can effectively prevent dust leakage.

2. Wipe the dust collection cabin with a dry cloth and insert a new dust bag.

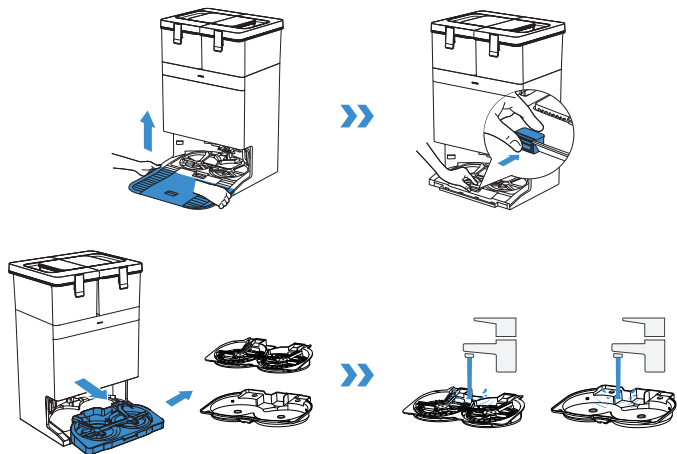


3. Place the fit joints at the upper edge of the dust cabin cover and press the lower part of it to install it properly.

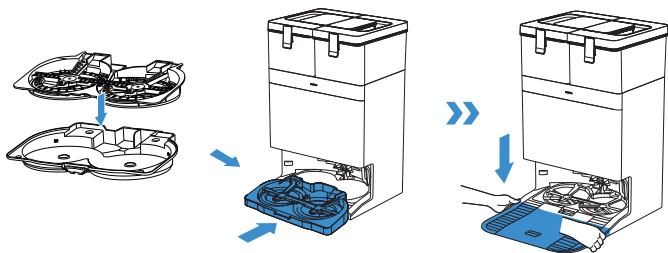


## 6 Mop Washing Tray

1. Remove the base and mop washing tray, and clean them.



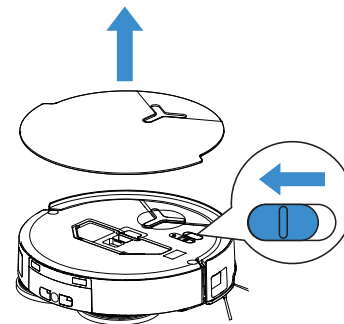
2. Install the cleaned base and mop washing tray.



**Note:** Please install the Mop Washing Tray properly for smooth operation.

## 7 Storage

Please fully charge and switch OFF the robot before storage. Please recharge it every 1.5 months to prevent the battery from over-discharging.




**!** Please note that the robot cannot charge when powered OFF.

- When the robot is not working, it is recommended to keep it powered ON and charging.
- If the battery is over-discharged or not used for a long time, the robot may not be able to be charged. Please contact ECOVACS for help. Do not disassemble the battery by yourself.

# TROUBLESHOOTING

For any issues encountered, refer to the corresponding solutions below. If the problem persists, please contact customer service for further assistance.

| No. | Malfunction   | Possible Cause   | Solution  |
|-----|---|--|---|
| 1   | The robot is not able to connect to the ECOVACS HOME App. | Incorrect Wi-Fi username or password entered.  | Enter the correct Wi-Fi username and password.  |
|     |   | The robot is not within range of your home Wi-Fi signal.   | Make sure the robot is within range of your home Wi-Fi signal. Try to stay as close to the router as possible.  |
|     |   | The robot is not in the configuration state.   | Press the RESET button and try to connect again. In case of failure, follow the App to reset the connection.  |
|     |   | There is no home Wi-Fi on the Wi-Fi list.  | 1. Check if the Wi-Fi name contains special characters. Please do not use special characters like !@#& ¥%^\.<br>2. Do not use a 5 Ghz network.  |
|     |   | Incorrect App installed.   | Please download and install the ECOVACS HOME App.   |
| 2   | The map is lost.  | The map might be lost if you move the robot while cleaning.  | Move the robot back to the Station to retrieve the map.<br>Find the saved map in Map Management on the ECOVACS HOME App and tap "Use This Map" to retrieve it.<br>If this issue persists, please restart mapping. |
| 3   | Unable to create the furniture map in the App.            | Moving the robot when cleaning might cause the map to be lost.   | During cleaning, do not move the robot.   |
|     |   | Auto cleaning is not finished.   | Make sure that the robot automatically returns to the station after cleaning.   |
| 4   | The Side Brush drops out of place during use.             | The side brush is not properly installed.  | Make sure the side brush clicks into place.   |
| 5   | No signal found. Unable to return to the station.         | The Station is incorrectly placed.   | Please place the station correctly according to the instructions in the <a href="#">[Quick Start]</a> section.  |
|     |   | The station is out of power or moved.  | Check whether the station is connected to the power supply.<br>Do not move the station.   |
|     |   | The robot does not start cleaning from the OMNI station.   | It is recommended that the robot starts cleaning from the OMNI station.   |
|     |   | The docking route is blocked. For example, the door is closed to the room where the station is placed. | Keep the route clear.   |

| No. | Malfunction  | Possible Cause   | Solution   |
|-----|--|--|--|
| 6   | The robot returns to the station before it has finished cleaning.  | The room is so large that the robot needs to return to recharge.   | Please enable auto resume. For more details, please follow the App instructions.   |
|     |  | In highly complex home layouts, cleaning efficiency may decrease, possibly resulting in incomplete cleaning.   | Simplify your home layout.   |
| 7   | The robot is unable to charge.   | The robot is not switched ON.  | Switch ON the robot.   |
|     |  | The robot's charging contacts are not fully in contact with the station's.   | Make sure that the robot's charging contacts have connected to the station's charging contacts and  flashes. Check whether the robot's and OMNI station's charging contacts are dirty. Please clean these parts according to the instructions in the <a href="#">[Regular Maintenance]</a> section. |
|     |  | The station is not connected to power supply.  | Make sure the OMNI station is connected to power supply.   |
|     |  | The base of the station is not installed properly.   | Refer to the <a href="#">[Quick Start]</a> section for correct installation.   |
| 8   | The robot is very loud during cleaning.  | The roller brush/side brush is tangled, or the dust bin/filter is blocked.   | It is recommended to clean the roller brush, side brush, dust bin, filter, etc. regularly.   |
|     |  | The robot is in Strong Mode.   | Switch to Standard Mode.   |
| 9   | The robot gets stuck while working and stops.  | The robot is tangled with objects on the floor (electrical wires, curtains, carpet fringing, etc.).  | The robot will try various ways to free itself. If its attempts fail, manually remove the obstacles and restart.   |
|     |  | The robot might be stuck under furniture with an entrance of similar height.   | Please raise the furniture, set a physical barrier, or set a virtual boundary via the ECOVACS HOME App.  |
|     |  | The robot is stuck in a narrow area.   | Tidy up your home, set a physical barrier, or set a virtual boundary via the ECOVACS HOME App.   |
| 10  | During cleaning, the robot may encounter issues like a disorderly route, biased movement, repeated cleaning over the same spots, and missing small areas. (If there is a large area that has not been cleaned temporarily, the robot will automatically clean the missed area. Sometimes the robot will re-enter a cleaned room, which may not be repeated cleaning, but the robot finds any missed area.) | Objects such as wires and slippers placed on the ground block the robot.   | Before cleaning, please tidy up scattered wires, slippers, and other objects on the ground as possibly can. If there is any area missed during cleaning, the robot will correct it automatically. Please refrain from interfering (such as moving the robot or blocking its route).  |
|     |  | The Driving Wheels may slip on the ground when the robot climbs steps, thresholds, and door bars, which can affect its judgement of the entire home environment. | It is recommended to close the door of the affected area and clean it separately. After cleaning, the robot will return to its starting location.  |
|     |  | On freshly waxed or polished floors, as well as smooth tiles, there may be less friction between the driving wheels and the floor.                               | Please wait for the wax to dry before cleaning.  |
|     |  | Due to variations in home layouts, some areas cannot be entered by the robot.  | Tidy up your home to ensure that the robot can enter the areas to be cleaned.  |

| No. | Malfunction   | Possible Cause  | Solution  |
|-----|---|---|---|
| 11  | Delay in remote control.  | The Wi-Fi signal is poor, causing the video loading to be slow.   | Use the robot in areas with good Wi-Fi signal.  |
| 12  | After returning to the OMNI station, the robot does not empty its dust bin. | The Auto-Empty function has not been turned on in the ECOVACS HOME App.                                 | Turn on the auto-empty function in the ECOVACS HOME App.  |
|     |   | Dust Bag is not installed in the station.   | Install the dust bag, and close the dust collection cabin.  |
|     |   | Manually moving the robot back to the station may not trigger the auto-empty function.                  | It is recommended to allow the robot return to the OMNI station on its own. Please do not manually move it.   |
|     |   | In Do Not Disturb mode, the robot will not empty the dust after returning back to the OMNI station.     | Turn off Do Not Disturb in the ECOVACS HOME App or manually start dust-emptying.  |
|     |   | If the above possible causes have been ruled out, components of the station may be abnormal.            | Please contact customer service for assistance.   |
| 13  | Auto-empty unsuccessful.  | The station detects a decrease in empty efficiency.   | Replace the dust bag according to the <a href="#">[Regular Maintenance]</a> section and close the dust collection cabin. If the dust bag is not full when prompted by the App, you can put it back again. |
|     |   | The outlet of the dust bin is blocked by foreign objects.   | Remove the dust bin and clear the foreign objects on the outlet.  |
| 14  | The inner side of the dust collection cabin is dirty.                       | Fine particles pass through the dust bag and accumulate on the inner side of the dust collection cabin. | Clean the inner side of the dust collection cabin.  |
|     |   | The dust bag is broken.   | Check and replace the dust bag.   |
| 15  | Dust leakage occurs while the robot is working.                             | The outlet of the dust bin is blocked by foreign objects.   | Remove the dust bin and clear the foreign objects on the outlet.  |
| 16  | Mopping pad plates will not rotate.   | The mopping pad plates are not correctly installed.   | Please install the mopping pad plates correctly. The sound of click indicates proper installation.  |
|     |   | The mopping pad plates are blocked by foreign objects.  | Clear the foreign objects.  |
| 17  | The robot does not respond to the station's instructions.                   | The robot is not in the station.  | Please make sure the robot is in the station.   |

| No. | Malfunction  | Possible Cause   | Solution  |
|-----|--|--|---|
| 18  | The driving wheel is stuck.  | The driving wheel is entangled or stuck due to foreign objects.                            | Rotate and press the driving wheel to check for any wrapping or obstruction by foreign objects. If any foreign objects are found, please clean them promptly. If this issue persists, please contact customer service for assistance. |
| 19  | The mop washing tray is full of water and can't be emptied. A voice prompt is broadcasted to alert you about this. | The dirty water tank is not properly installed.  | Tap down on the dirty water tank to ensure it is properly installed.  |
|     |  | The sealing plugs in the Dirty Water Tank are not installed properly.                      | Make sure that the two sealing plugs are properly installed.  |
|     |  | The station cannot drain water normally.   | Follow the App instructions to see if the station can drain properly. If draining attempts fail, please check for possible foreign objects between the dirty water tank and the Station.  |
|     |  | The suction port of the mop washing tray is blocked by foreign objects.                    | Ensure that there is no foreign object in the suction port of the mop washing tray.   |
|     |  | The mop washing tray is dirty.   | Cleaning the mop washing tray with running water.   |
|     |  | Check if the floating ball gets stuck when there is no water in the mop washing tray base. | Take out the mop washing tray to put the floating ball back in place.   |
|     |  | The voice alert persists after all the above solutions are tried.                          | Power off and on the station. If this issue persists, please contact customer service for assistance.   |

Please contact our customer service for assistance if the problem persists despite the recommended solutions.

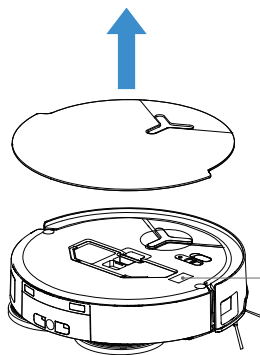
## TECHNICAL SPECIFICATIONS

|                               |   |                 |             |
|-------------------------------|---|-----------------|-------------|
| <b>Model</b>                  | <b>DEX 54/DDX 45</b>                                      |                 |             |
| Rated Input                   | 20V === 2A  | Charging Time   | About 3.5 h |
| <b>Station Model</b>          | <b>CH2453I</b>  |                 |             |
| Rated Input                   | 110~120 V ~ 50-60Hz                                       | Rated Output    | 20V === 2A  |
| Rated Input Current(Charging) | 1A  | Power(Emptying) | 4.5A        |
| Power(Hot Water Washing Mop)  | 12A   |                 |             |
| Robot Dimensions (L*W*H mm)   | 353*350*98mm  |                 |             |
| Station Dimensions (L*W*H mm) | 350*477*533mm (with base)<br>350*294*533mm (without base) |                 |             |

Output power of the wireless module is less than 100mW.

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

Explore more accessories at <https://www.ecovacs.com>.



Please use the mobile camera to scan the QR code and obtain the user guide.