**E**COVACS

DEEBOT 1150 PRO

**Instruction Manual/Manuel d'instructions** 

## **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.
- Do not use and store in extremely hot or cold environments (below -5°C /23°F or above 40°C/104°F). Please charge the robot in temperature above 0°C/32°F and below 40°C/104°F.
- 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. Double-tap the  $\bigcirc$  button.

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

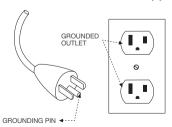
## SAVE THESE INSTRUCTIONS

## **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.

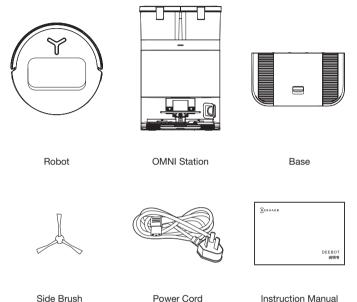
## **Device Update**

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.

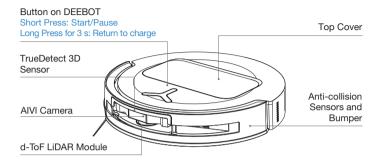
## **Product composition**

## 1 Packaging Contents

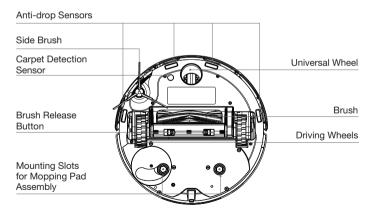


## 2 Part Name

## 1.Front of the Robot



#### 2. Back of the Robot

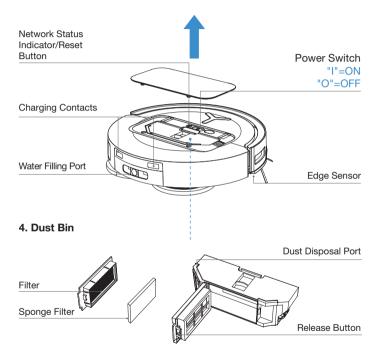


## 3. Inside the Robot (under the cover)

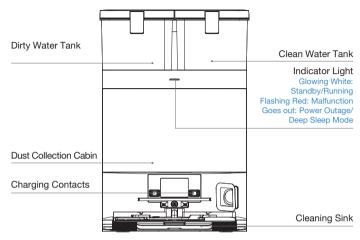
#### **RESET Button**

Restore to default settings: Press and hold RESET button for 5 s.

After you hear the voice prompt, the startup music will be played and the robot will be restored to default settings.



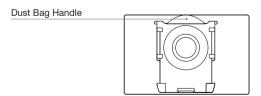
## 5. OMNI Station (Front)



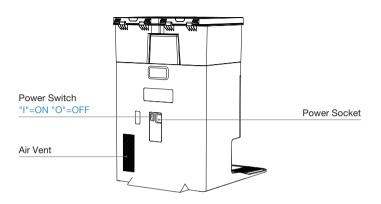
#### Note:

- · Flashing Red: Please check the reason in ECOVACS HOME App.
- · If DEEBOT fails to charge, please wipe Charging Contacts with a clean and dry cloth.

## 6. Dust Bag



## 7. Station (Back)



## 8. Sensor Introduction

Name	Functional Description
d-ToF LiDAR Module	Using the principle of laser ranging, the laser is emitted and reflected by surrounding objects. d-ToF The time difference of incoming light is used to calculate the distance between the host and surrounding objects through an algorithm. LiDAR Module When the host walks in a certain environment, it locates the positions of surrounding objects and draws Output the spatial environment map of the host. The measurement range is 10m.
TrueDetect 3D Sensor	Using the infrared ranging principle, the sensor emits infrared rays and receives the obstacles in front. TrueDetect 3D The reflected light is used to calculate the distance between the obstacle and the host using similar triangles. Power interface Structured light sensor When the sensor detects an obstacle near the host, it automatically turns to avoid the obstacle. Walking. The measuring range is 0.4m.
Anti-drop Sensor	Using the infrared ranging principle, the infrared sensor at the bottom of the host monitors the host The height between the bottom and the ground is high. When there is a downward step in front of the host (for example: white ground Surface height greater than 55mm, black ground height greater than 30mm) Sensor reading When the preset value is exceeded, the host will no longer move forward, thus realizing the host anti-fall function.
Carpet Detection Sensor	The ultrasonic probe emits 300KHZ ultrasonic waves. When there is a carpet, the ultrasonic Carpet Sensor The energy of the wave is absorbed by the carpet, and the energy reflected back is less than the threshold, and the host recognizes Identify more than 50 types of carpets on the market in the Ecovacs Lab.
Anti-collision Sensor	The anti-collision sensor uses the principle of optical coupling switch. When a robot collides with an object, it will avoid the obstacle.
Edge Sensor	When there are walls or obstacles Detect the distance between the side of the DEEBOT and the object when the right side,through the infrared ranging principle The host performs edge motion to avoid missed scans and collisions.
AIVI Camera	Use AI cameras to collect images of the surrounding environment and realize video recording function. AI Camera Through interaction with MIC, remote video call function is realized. FOV: vertical 77° Horizontal 97°.
Microphone	The human voice vibrates the diaphragm through the air, and the sound model is collected and calculated. microphone Method to achieve sound recording and voice control host to complete the specified work. The awakening distance is within 5m.

## **Product use**

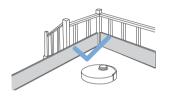
## 1 Precautions



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



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



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



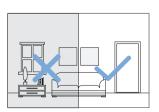
Before using the product on a rug with tasseled edges, please fold the rug edges under.



During the first use, make sure each room door is open to help DEEBOT fully explore your house.



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



Make sure areas to be cleaned are well illuminated so AIVI Camera works properly. Remove power cords and small objects from the floor to ensure cleaning efficiency.



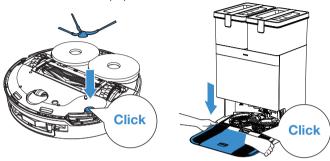
Clean the AIVI Camera and TrueMapping Distance Sensor with a clean cloth, and avoid using any detergent or cleaning spray.

## 2 Preparation

Before using DEEBOT, please remove all protective materials.

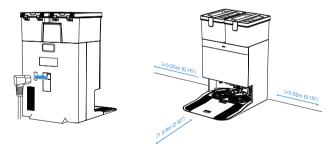
#### 1.Installation

The sound of Click indicates proper installation.



#### 2. Assemble and Place the Station

Keep the area around the Station clear of objects, especially objects with reflective surfaces.

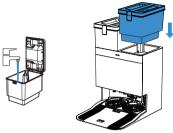


#### Note:

- If there are reflective objects such as mirrors and reflective skirting lines near the Station, the bottom 14
  cm of that should be covered.
- Do not place the Station under direct sunlight.
- It is recommended to place the Station on the hard floor to experience complete functions of the robot.
- Place Station in a location with a strong Wi-Fi signal.

## 3 Add Water In The Tank

Take out the clean water tank, open the top cover of the water tank and add water to the highest water level of the clean water tank. After adding water, close the top cover of the water tank and put the clean water tank back to the base station.



#### Note

- If there is residual water stain on the outside of the water tank, please wipe it clean with a soft dry cloth before putting it back for use.
- Please add the cleaning liquid to the cleaning liquid box. If it is added to the water tank, the cleaning liquid concentration may be too high, affecting normal use.
- Before use, please make sure to lock the top cover of the clean water tank and the sewage tank to avoid affecting the normal use of the product.
- The water stains in the water tank are left over from the factory test, please feel free to use it.

## 4 Add Cleaning Solution

1. Remove the dust bin cover, insert your fingers into the handle at the bottom of the cleaning liquid box, pull out the entire cleaning liquid box, and place it on a hard, level surface.

