# DEEBOT M81

Instruction Manual



Note: This Instruction Manual applies to units purchased in North America only.



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Congratulations on the purchase of your ECOVACS ROBOTICS DEEBOT! We hope it brings you many years of satisfaction. We trust the purchase of your new robot will help keep your home clean and provide you with more quality time to do other things.

Before you go any further, please register your product on the ECOVACS ROBOTICS website at www.ecovacsrobotics.com/registration/. We also suggest you record your model number, serial number, date of purchase and attach your receipt to this page for safekeeping.

MODEL #		_	
SERIAL #		-	
DATE OF PURCHASE	/	/	

Should you have any problems programming the robot or getting your robot to function properly, please call us before contacting or returning it to the place of purchase. For more information, assistance or Warranty information, please visit the ECOVACS ROBOTICS website at www.ecovacsrobotics.com or call 1-844-ECOVACS (1-844-326-8227).

Thank you for choosing DEEBOT!



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# 1. Important Safety Instructions

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

# READ ALL INSTRUCTIONS BEFORE USING THIS APPLIANCE. SAVE THESE INSTRUCTIONS

- 1. This Appliance is not intended to be used by children under 8 or anyone lacking knowledge on proper use. Supervision may be necessary. Do not allow children to sit on or play with the Appliance.
- 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.
- Please make sure your power supply voltage matches the power voltage marked on the Charging Dock.
- For INDOOR household use ONLY. Do not use the Appliance in outdoor, commercial or industrial environments.
- 7. Use only the original rechargeable battery and Charging Dock provided with the Appliance from the manufacturer. Non-rechargeable batteries are prohibited. For battery information, please refer to Specifications section.
- 8. Do not use without dust bin and/or filters in place.
- 9. Do not operate the Appliance in an area where there are lit candles or fragile objects.
- 10. Do not use in extremely hot or cold environments (below -5°C/23°F or above 40°C/104°F).
- 11. Keep hair, loose clothing, fingers, and all parts of body away from any openings and moving parts.
- 12. Do not operate the Appliance in a room where an infant or child is sleeping.
- 13. Do not use Appliance on wet surfaces or surfaces with standing water.
- 14. Do not allow the Appliance to pick up large objects like stones, large pieces of paper or any item that may clog the Appliance.
- 15. Do not use Appliance to pick up flammable or combustible materials such as gasoline, printer or copier toner, or use in areas where they may be present.
- 16. Do not use Appliance to pick up anything that is burning or smoking, such as cigarettes, matches, hot ashes, or anything that could cause a fire.
- 17. Do not put objects into the suction intake. Do not use if the suction intake is blocked. Keep the intake clear of dust, lint, hair, or anything that may reduce air flow.
- 18. Take care not to damage the power cord. Do not pull on or carry the Appliance or Charging Dock 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 over the power cord. Keep power cord away from hot surfaces.
- 19. If the power cord is damaged, it must be replaced by the manufacturer or its service agent in order to avoid a hazard.
- 20. Do not use the Charging Dock if it is damaged.
- 21. Do not use with a damaged power cord or receptacle. Do not use the Appliance or Charging Dock 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.



# 1. Important Safety Instructions

- 22. Turn OFF the power switch before cleaning or maintaining the Appliance.
- 23. The plug must be removed from the receptacle before cleaning or maintaining the Charging Dock.
- 24. Remove the Appliance from the Charging Dock, and turn OFF the power switch to the Appliance before removing the battery for disposal of the Appliance.
- 25. The battery must be removed and discarded according to local laws and regulations before disposal of the Appliance.
- 26. Please dispose of used batteries according to local laws and regulations.
- 27. Do not incinerate the Appliance even if it is severely damaged. The batteries can explode in a fire.
- 28. When not using the Charging Dock for a long period of time, please unplug it.
- 29. The Appliance must be used in accordance with the directions in this Instruction Manual. ECOVACS ROBOTICS cannot be held liable or responsible for any damages or injuries caused by improper use.



# 2. Package Contents and Technical Specifications

# 2.1 Package Contents



Robot



**Charging Dock** 



Remote Control (with batteries)



Instruction Manual



(4) Side Brushes



**Battery Pack** 



(2) Advanced Wet/Dry Cleaning Cloths



Advanced Wet/Dry Reservoir



Sponge Filter and High Efficiency Filter



Measuring Cup



Reservoir Cleaning Solution

# 2.2 Specifications

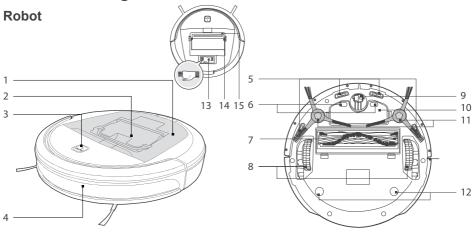
Model	DM81					
Working Voltage	12V DC	Rated Power	40W			
Charging Dock Model	CH1465A					
Rated Input Voltage	100-240V AC	Rated Output Voltage	20V DC			
Rated Output Current	1A	Rated Power	20W			
Remote Control Model	RC1507 Input Voltage 3V D					
Battery	Ni-MH 3000mAh					

<sup>\*</sup> Technical and design specifications may be changed in the course of continuous product improvement.



# 2. Package Contents and Technical Specifications

### 2.3 Product Diagram



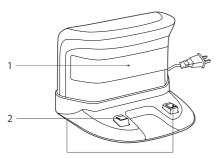
- 1. Top Cover
- 2. Dust Bin
- 3. AUTO Mode Button
- 4. Anti-Collision Sensors
- 5. Anti-Drop Sensors
- 6. Charging Contacts
- 7. Main Brush
- 8. Driving Wheels
- 9. Universal Wheel
- 10. Battery Pack
- 11. Side Brushes
- 12. Advanced Wet/Dry Reservoir Slots
- 13. Multi-Function Cleaning Tool
- 14. Upgrade Port (for Customer Service only)
- 15. Infrared Receiver for the Remote Control

#### **Control Panel**



1. AUTO Mode Button

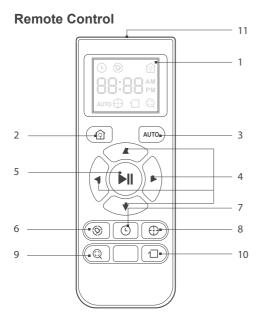
# **Charging Dock**



- 1. Infrared Signal Generators
- 2. Charging Dock Pins

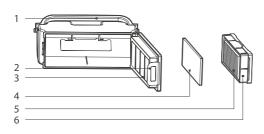


# 2. Package Contents and Technical Specifications



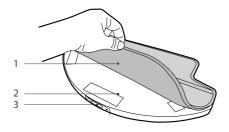
- 1. LCD Screen
- 2. Return to Charger Mode Button
- 3. AUTO Mode Button
- 4. Direction Control Buttons
- 5. START/PAUSE Button
- 6. Time Scheduling Button
- 7. Set Current Time Button
- 8. Spot Cleaning Mode Button
- 9. Intensive Cleaning Mode Button
- 10. Edge Cleaning Mode Button
- 11. Infrared Emitter

#### **Dust Bin**



- 1. Dust Bin Handle
- 2. Dust Bin Lock
- 3. Filter Net
- 4. Sponge Filter
- 5. High Efficiency Filter
- 6. Dust Bin Cover

### Advanced Wet/Dry Reservoir

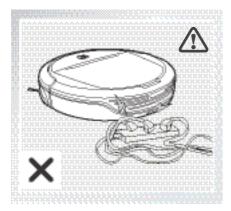


- 1. Advanced Wet/Dry Cleaning Cloth
- 2. Advanced Wet/Dry Reservoir
- 3. Water Inlet

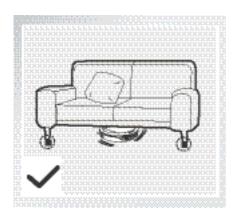


### 3.1 Notes Before Cleaning

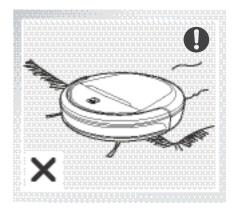
Before operating DEEBOT, take a few moments to survey the area to be cleaned and remove any obstacles.



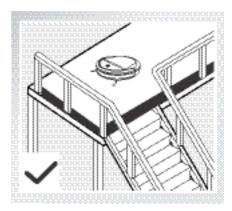
Remove power cords and small objects from the floor that could entangle the product.



Please be aware that the robot needs at least an 8 cm (3") clearance to clean under furniture without complications.



The product is not suitable for use on long-pile carpet. Before using the product near an area rug or on a short-pile area rug with tasseled edges, please fold area rug edges under themselves.



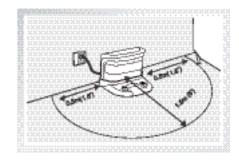
If there is a step or stairs in the cleaning area, please operate DEEBOT to ensure its Anti-Drop Sensors can detect the drop off. It may be necessary to place a physical barrier at the edge of the drop off to keep the unit from falling over the edge.



### 3.2 Quick Start

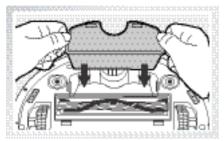
### 1 Charging Dock Placement

- Place the Charging Dock on a level floor surface against the wall with the base perpendicular to the ground. Keep the immediate area 1.5m (5') in front of the charger and 0.5m (1.6') on both sides of the charger clear of objects and reflective surfaces.
- Plug the Charging Dock in.

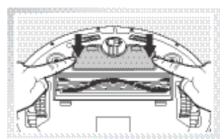


### 2 Install the Battery Pack

Place the Battery Pack into the battery slot on the bottom of DEEBOT. Press the Battery Pack into the slot until it clicks.

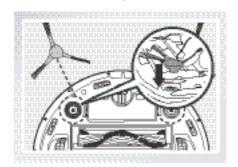






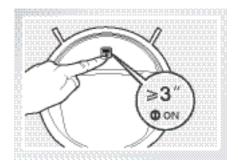
### 3 Install Side Brushes

 Attach Side Brushes to the bottom of DEEBOT by pressing a brush into each slot with the matching color until it clicks.



### 4 Power ON

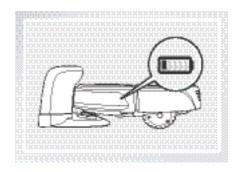
Press and hold the button on the robot. DEEBOT is powered ON when the place glows a continuous BLUE.





### 5 Charge DEEBOT

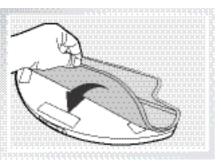
- Remove the Advanced Wet/Dry Reservoir before charging DEEBOT.
- Place DEEBOT on the Charging Dock making sure the Charging Contacts on DEEBOT and the Charging Dock Pins make a connection.
- Charge DEEBOT for at least 4 hours before the first use.



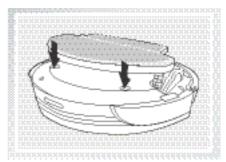
- \* button blinks when DEEBOT is charging and stops glowing when DEEBOT is fully charged.
- \* Remove the robot's battery if the robot will not be used for a long time. In case of battery leakage, please remove the battery and wipe the battery slot clean while wearing protective gloves.
- \* If the robot's battery is fully discharged or not used for a long time, its capacity may decrease and need to be reactivated.
- \* To reactivate the battery: Place the robot on the Charging Dock by hand, remove after charging for 3 minutes; repeat 3 times, then charge normally for 3-5 hours.
- \* DEEBOT uses a long life battery and does not require frequent replacement. To replace the battery, contact Customer Service or follow the below instructions:
  - a. Press and hold the button on the robot until it stops glowing to power OFF the robot. Remove the Battery Pack.
  - b. Insert new Battery Pack into battery slot and press until it clicks into place.

### 6 Attach a Cleaning Cloth, if Desired

- To use DEEBOT's Optional Advanced Mopping System, attach the provided Cleaning Cloth.
- \* When using the optional mopping feature, fold area rug edges under themselves so DEEBOT will avoid the rug.
- \* Please see section 3.5 Optional Advanced Wet/Dry Mopping System for complete instructions.



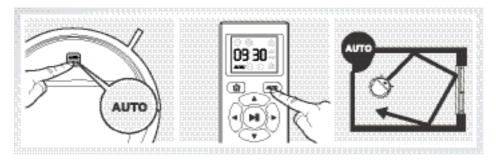






#### 7 Start

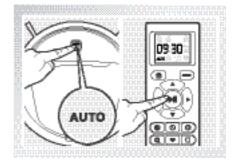
Press the button on DEEBOT or the AUTO Mode Button on the Remote Control. DEEBOT starts to work immediately in AUTO Cleaning Mode.



\* To choose another Cleaning Mode, please refer to section 3.3 Cleaning Mode Selection for details.

### 8 Pause

Pause DEEBOT by pressing the [min or DEEBOT or the START/PAUSE Button on the Remote Control.

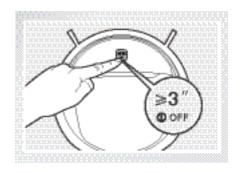


- \* DEEBOT can be directed to move forward, backward, left and right by using the Direction Control Buttons on the Remote Control when it is paused. DEEBOT does not clean when Paused.
- \* The AUTO Mode Button on the robot's Control Panel stops glowing when the robot is paused for more than (5 minutes) minute. Press AUTO Mode Button on the robot to wake up the robot, or press any button on the Remote Control to start DEEBOT immediately.



### 9 Power OFF

- Pause DEEBOT. Press and hold the button on the robot. DEEBOT is powered OFF when the button stops glowing.
- \* When DEEBOT is not cleaning, it is suggested to keep it powered ON and charging instead of powered OFF.

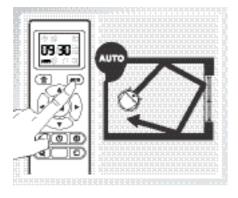


### 3.3 Cleaning Mode Selection

DEEBOT has several cleaning modes to choose from to effectively clean different floors. Cleaning modes are selected using the Remote Control.

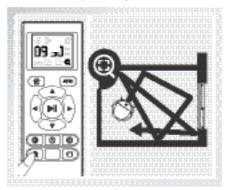
### 1 AUTO Cleaning Mode

This is the most commonly used mode. In AUTO Cleaning Mode, DEEBOT cleans in a straight line and changes direction when it meets an obstacle.



### 2 Intensive Cleaning Mode

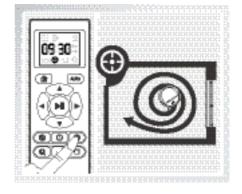
■ This mode is good for aggressive cleaning or for extremely dirty or dusty floors. In this mode, DEEBOT follows the same cleaning pattern as Automatic Cleaning Mode, but with stronger suction power and higher Main Brush rotating speed and performs a more thorough cleaning.





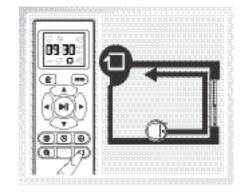
# 3 Spot Cleaning Mode (2-5 minutes)

This mode is applicable for an area of highly concentrated dirt or dust. In Spot Cleaning Mode, DEEBOT focuses on a specific area to clean. DEEBOT cleans the area in a spiral pattern and stops when it completes Spot Cleaning.



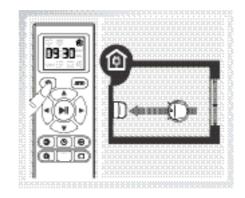
### 4 Edge Cleaning Mode

 This mode is good for cleaning the edges and corners of a room. In Edge Cleaning Mode, DEEBOT cleans along a border (e.g. wall).



### 5 Return to Charger Mode

- When battery power gets low, DEEBOT automatically switches to Return to Charger Mode and returns to the Charging Dock to recharge itself.
- \* DEEBOT can also be sent back to the Charging Dock at any time by pressing the Return to Charger Button on the Remote Control.



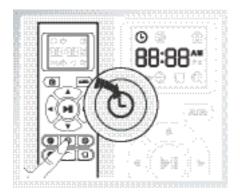


# 3.4 Programming the Robot

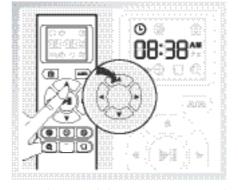
DEEBOT has a Time Scheduling function. DEEBOT can be programmed to automatically clean once per day, at a specific time, even if nobody is at home. The current time of day and the cleaning times are scheduled using the Remote Control.

- \* All scheduled cleanings are performed in AUTO Cleaning Mode.
- \* The Remote Control uses a 12-hour clock with "AM" and "PM" indicators.

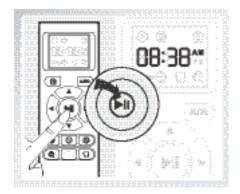
### 1 Set the Current Time of Day



Press button on the Remote Control and the "hour" (first two digits) flashes on the Remote Control LCD Screen.



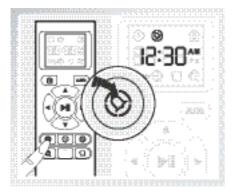
Press the up and down Direction Control Buttons ♦ to adjust "hour" and "minute" number. Press the left and right Direction Control Buttons ► to switch between "hour" and "minute."



Press **I** button on the Remote Control to confirm and save the current time of day.

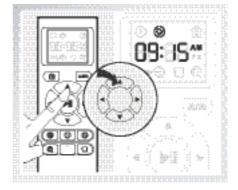


### 2 Schedule the Cleaning Time

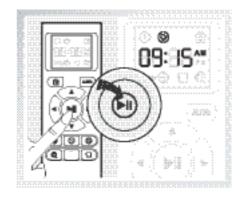


Press (S) button on the Remote Control and the "hour" (first two digits) flashes on the Remote Control Screen.

Press ▶II button on the Remote Control to confirm and save the scheduled cleaning time. DEEBOT emits two beeps. DEEBOT automatically cleans at the scheduled cleaning time every day.

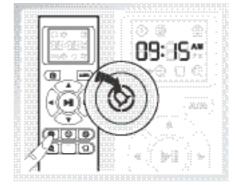


Press the up and down Direction Control Buttons ♦ to adjust "hour" and "minute" number. Press the left and right Direction Control Buttons ♦ to switch between "hour" and "minute."



# 3 Cancel Scheduled Cleaning Time

To cancel the scheduled cleaning time, press and hold ③ button for 3 seconds until ⑤ disappears from the Remote Control LED Screen and the robot emits three beeps. The scheduled cleaning time is cancelled.





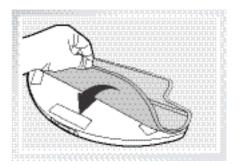
# 3.5 Optional Advanced Wet/Dry Mopping System

DEEBOT has an Optional Advanced Mopping System using an Advanced Wet/Dry Cleaning Cloth attached to a proprietary Advanced Wet/Dry Reservoir. The washable/reusable Cleaning Cloth automatically damp mops and then dries the floor to a spotless clean.

- \* Do not use the mopping system on carpet.
- \* When using the mopping system, fold area rug edges under themselves so DDEEBOT will avoid the rug.
- \* When using the mopping system, do not stop the robot and allow it to stand still. This prevents the Advanced Wet/Dry Cleaning Cloth from leaving water on the floor.
- \* Remove the Advanced Wet/Dry Reservoir before charging DEEBOT.

# 1 Attach Advanced Wet/Dry Cleaning Cloth

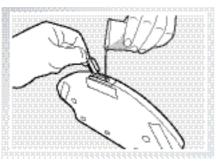
 Attach the Advanced Wet/Dry Cleaning Cloth to the Advanced Wet/Dry Reservoir.



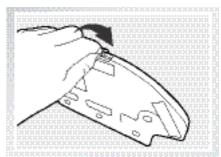
### 2 Add Water to the Advanced Wet/Dry Reservoir

\* Before adding water to the Advanced Wet/Dry Reservoir, remove the Advanced Wet/Dry Reservoir from the bottom of the robot.

Fill the provided Measuring Cup with water. Open the lid of the Water Inlet on the Advanced Wet/Dry Reservoir and slowly pour water from the Measuring Cup into the Reservoir. Close the Water Inlet lid.

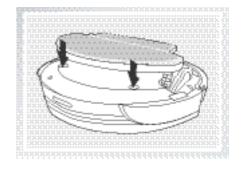






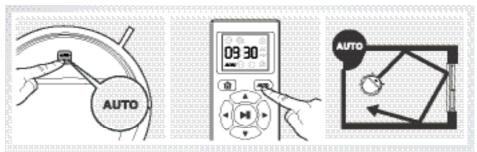


Attach the Advanced Wet/Dry Reservoir to the bottom of the robot. Insert the tabs on the Advanced Wet/Dry Reservoir into the Advanced Wet/Dry Reservoir Slots on the bottom of the robot until you hear a click.



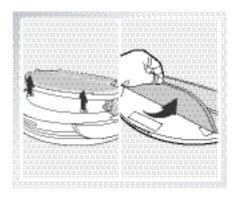
### 3 Start

Select the desired Cleaning Mode. DEEBOT sweeps, lifts, vacuums, mops and dries in the selected mode.



### 4 Remove

 After DEEBOT finishes cleaning, remove the Advanced Wet/Dry Reservoir from DEEBOT, empty any remaining water from the Reservoir, and remove the Advanced Wet/Dry Cleaning Cloth.

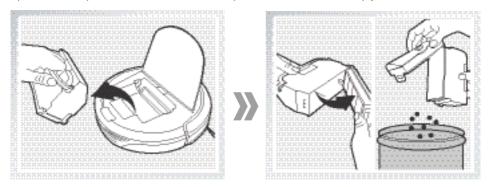




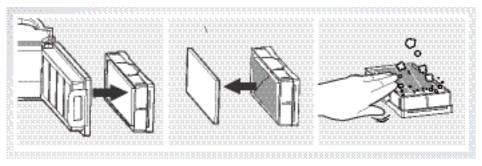
Before performing cleaning and maintenance, power OFF DEEBOT and unplug the Charging Dock.

### 4.1 Dust Bin and Filters

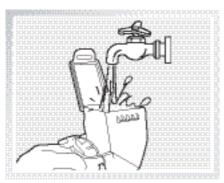
Open DEEBOT's Top Cover and remove the Dust Bin. Open the Dust Bin Cover and empty the Dust Bin.



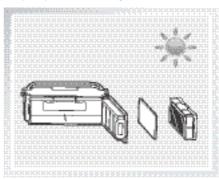
Remove the Sponge Filter and High Efficiency Filter. Pat the High Efficiency Filter clean. Do not rinse the High Efficiency Filter under water.



Rinse the Sponge Filter, Dust Bin and Filter Net under running water.



Dry the Sponge Filter, Dust Bin and Filter Net completely before reinstalling.





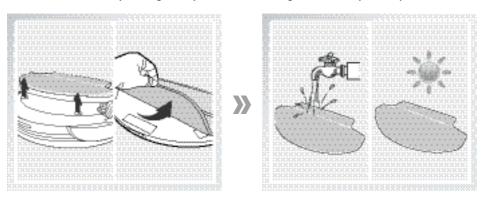
# 4.2 Advanced Wet/Dry Cleaning Cloth, Advanced Wet/Dry Reservoir

### Cleaning the Advanced Wet/Dry Cleaning Cloth

If the mopping system was used, remove the Advanced Wet/Dry Reservoir from the bottom of DEEBOT and remove the Cleaning Cloth.

Empty any remaining water from the Reservoir.

Wash the Advanced Wet/Dry Cleaning Cloth by hand or in the washing machine, and lay flat to dry.



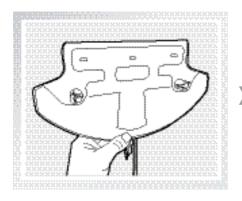
### Cleaning the Advanced Wet/Dry Reservoir

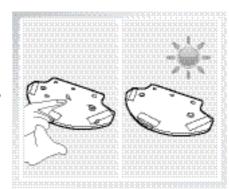
If the mopping system was used, remove the Advanced Wet/Dry Reservoir from the bottom of DEEBOT.

Empty any remaining water from the Reservoir and set out to dry.

Wipe the outside of the Advanced Wet/Dry Reservoir with a dry cloth.

If the Advanced Wet/Dry Reservoir does not run out of water after DEEBOT cleans for 60 minutes, the water outlets on the Reservoir are clogged. Clean the Reservoir with the ECOVACS Reservoir Cleaning Solution according to the instructions on the bottle of the solution.







### 4.3 Main Brush and Side Brushes

\* A Multi-Function Cleaning Tool is provided for easy maintenance. Handle with care, this cleaning tool has sharp edges.

#### Cleaning the Main Brush

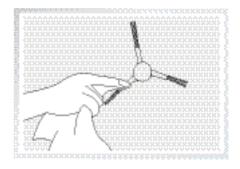
Turn the robot over. Push both buttons on the Main Brush Cover and remove it. Remove the Main Brush.

Use the Multi-Function Cleaning Tool to cut off and remove any hair tangled around the Main Brush.



### **Cleaning the Side Brushes**

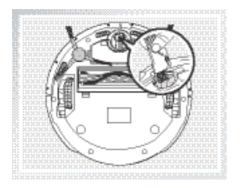
Remove the Side Brushes. Wipe the Side Brushes and their slots with a dry cloth.



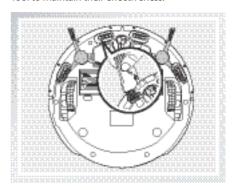


# **4.4 Other Components**

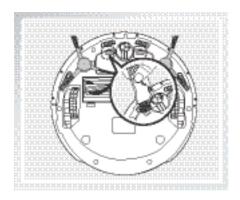
Use the Multi-Function Cleaning Tool to cut off and remove any hair tangled around the Universal Wheel.

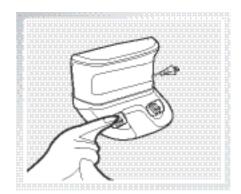


Wipe the Anti-Drop Sensors with the brush or the felt side of the Multi-Function Cleaning Tool to maintain their effectiveness.



Wipe the Charging Contacts and Charging Dock Pins with the brush of the Multi-Function Cleaning Tool or a dry clean cloth to maintain their effectiveness.







# 5. Troubleshooting

Please use this chart to troubleshoot common problems using DEEBOT.

No.	Malfunction	Possible Causes	Solutions					
		DEEBOT is not powered ON.	Press and hold AUTO Mode Button on DEEBOT to power ON.					
		DEEBOT has not made a connection with the Charging Dock.	Be sure that DEEBOT's Charging Contacts have made a connection with the Charging Dock Pins. You may move the robot manually to make the connection if necessary.					
1	DEEBOT will not charge.	Charging Dock is unplugged while DEEBOT is powered ON, which causes battery consumption.	Plug in the Charging Dock and ensure DEEBOT is powered ON. Keep DEEBOT on the Charging Dock to make sure it has a full battery to work at any time.					
		The battery is completely discharged.	Re-activate the battery. Place DEEBOT on the Charging Dock by hand, remove after charging for 3 minutes, repeat 3 times; then charge normally.					
		DEEBOT is tangled with something on the floor (electrical cords, drooping curtains, carpet fringe etc.).	DEEBOT will try various ways to get itself out of trouble. If it is unsuccessful, manually remove the obstacles and restart.					
2	DEEBOT gets into trouble while working and stops.	Side Brush is stuck or the rotation speed of the Side Brush decreases.	Remove the debris tangled around the Side Brush. If the Side Brush still rotates slowly, contact Customer Service.					
		Main Brush is stuck or the rotation speed of the Main Brush decreases.	Remove the debris tangled around the Main Brush with the provided Multi-Function Cleaning Tool. If the Main Brush still rotates slowly, contact Customer Service.					
3	DEEBOT returns to the Charging Dock before it finishes clea	When battery power gets low, DEEBOT automatically switches to Return to Charger Mode and returns to the Charging Dock to recharge itself.	This is normal. No solution necessary.					
	ning.	Working time varies according to floor surface, room complexity and the selected Cleaning Mode.	This is normal. No solution necessary.					



# 5. Troubleshooting

No.	Malfunction	Possible Causes	Solutions					
		Time Scheduling function is cancelled.	Set Time Scheduling function as described in section 3.4.					
4	DEEBOT will not clean automatically at scheduled time.	DEEBOT is powered OFF.	Power ON DEEBOT.					
		The robot's battery is low.	Keep DEEBOT powered ON and on the Charging Dock to make sure it has a full battery to work at any time.					
		The robot's components are tangled with debris.	Power OFF DEEBOT, clean the Dust Bin, and invert the robot. Clean Side Brushes and the Main Brush as described in section 4.					
		The batteries in the Remote Control need to be replaced.	Replace with new batteries making sure they are installed correctly.					
		DEEBOT is powered OFF or DEEBOT's battery is low.	Make sure DEEBOT is powered ON and fully charged.					
5	Remote Control failure (effective control range of Remote Control is 5m (16').	The infrared signal cannot be transmitted because the Infrared Emitter on the Remote Control or DEEBOT's Infrared Receiver on DEEBOT is dirty.	Use a dry cloth or the Multi-Function Cleaning Tool to wipe the Infrared Emitter on Remote Control and the Infrared Receiver on DEEBOT.					
		There is other equipment interfering with the infrared signal to DEEBOT.	Avoid using the Remote Control near other equipment using infrared signals.					





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