Manuals+ — User Manuals Simplified.

MOVA E20 Auto Empty Robot Vacuum and Mop User Manual

Contents
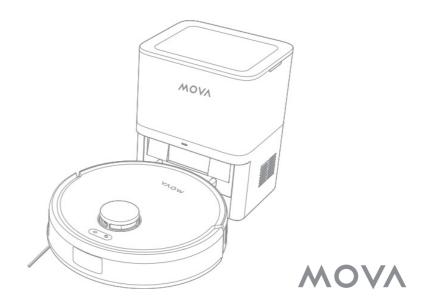
MOVA **E20 Plus**

Auto-Empty Robot Vacuum and Mop
User Manual

The illustrations in this manual are for reference only. Please refer to the actual product.

Safety Information

To avoid electric shock, fire or injury caused by improper use of the appliance, please read the user manual carefully before using the appliance and keep it for future reference.

Usage Restrictions

- This product should not be used by children younger than 8 years old nor persons with physical, sensory, intellectual deficiencies, or limited experience or knowledge without the supervision of a parent or guardian to ensure safe operation and to avoid any risks. Cleaning and maintenance shall not be performed by children without supervision.
- This appliance contains batteries that are only replaceable by skilled persons.
- Clear the area to be cleaned. Children shall not play with the appliance.
  Ensure children and pets are kept at a safe distance from the robot while it is operating.
- Do not install, charge or use the appliance in the bathrooms or around the pools.
- This product is for floor cleaning in a home environment only. Do not use it outdoors, on non-floor surfaces, or in a commercial or industrial setting.
- If the power cord is damaged, it must be replaced by a special cord or assembly available from the manufacturer or its service agent.
- Do not use the robot in an area suspended above ground level without a protective barrier.
- Do not place the robot upside down. Do not use the LDS cover, robot cover, or bumper as a handle for the robot.
- Use the robot in environments with an ambient temperature above 0°C and below 40°C. Make sure there is no liquid or sticky substance on the floor.
- To prevent damage or harm from dragging, clear any loose objects from the floor, and remove cables or power cords on the cleaning path before operating the appliance.
- Remove fragile or small items from the floor to prevent the robot from bumping into and damaging them.
- Keep hair, fingers, and other body parts away from the suction opening of the robot.

- Do not operate the appliance in a room where an infant or child is sleeping.
- Do not place children, pets, or any item on top of the robot regardless of whether it is stationary or moving.
- Do not use the robot to clean any burning objects. Do not use the robot to pick up flammable or combustible liquids, corrosive gases, or undiluted acids or solvents.
- Do not vacuum hard or sharp objects. Do not use the appliance to pick up objects such as stones, large pieces of paper or any item that may clog the appliance.
- Plug must be removed from the socket-outlet before cleaning or maintaining the appliance.
- Do not wipe the robot or the base station with a wet cloth or rinse them with any liquid. After cleaning washable parts, fully dry the parts before reinstalling and using them.
- Please use this product in accordance with the instructions in the User Manual. Users are responsible for any loss or damage that arise from improper use of this product.

Batteries and Charging

- Do not use any third-party battery or base station with auto-empty. Use only with RCED0102 supply unit.
- Do not attempt to disassemble, repair, or modify the battery or the base station with auto-empty on your own.
- Do not place the base station with auto-empty near a heat source.
- Do not use a wet cloth or wet hands to wipe or clean the charging contacts of the base station with auto-empty.
- Do not improperly dispose of old batteries. Unneeded batteries should be discarded at an appropriate recycling facility.
- If the power cord becomes damaged or broken, stop using it immediately and contact after-sales service.
- Make sure the robot is turned off when being transported and kept in its original packaging if possible.
- If the robot will not be used for an extended period, fully charge it, then turn it off and store it in a cool, dry place. Recharge the robot at least once every 3 months to avoid over-discharging the battery.

Laser Safety Information

- The invisible laser sensor in this product meets the IEC 60825-1:2014, EN 60825-1:2014+A11:2021, EN 50689:2021 Standard for Class 1 laser products. Please avoid direct eye contact with it during use.

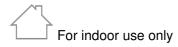CLASS 1 LASER PRODUCT
CONSUMER LASER PRODUCT
EN 50689:2021

Max output: <0.39mW
Wavelength: 840-860nm
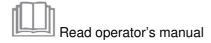Pulse duration: 0.125ms

Hereby, Dreame Trading (Tianjin) Co., Ltd. declares that the radio equipment type RLE22GDis in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address: **www.mova-tech.com**
For detailed e-manual, please go to **https://www.mova-tech.com/pages/user-manuals-and-faqs**
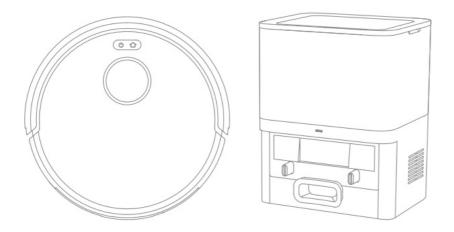
CAUTION:

In order to avoid a hazard due to inadvertent resetting of the thermal cut-out, this appliance must not be supplied through an external switching device, such as a timer, or connected to a circuit that is regularly switched on and off by the utility.

For indoor use only

Read operator's manual

Product Overview

Package Contents

Robot   Base Station with Auto-Empty

Other Accessories
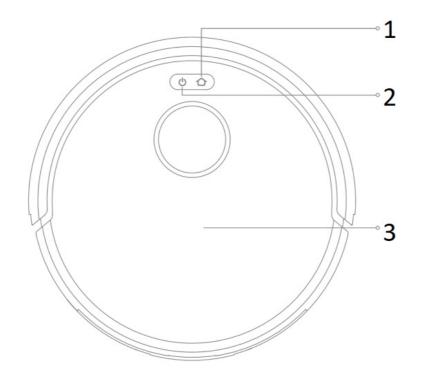
Side Brush   Mop Assembly   User Manual

Robot

1. ⬡ **Dock** / **Spot Cleaning Button**

   • Press to send the robot back to the base station

   • Press and hold for 3 seconds to start spot cleaning

   • Press and hold for 7 seconds to enable/disable the Child Lock

2. ⏻ **Power** / **Clean Button**

   • Press and hold for 3 seconds to turn on or press and hold for 5 seconds to turn off

   • Press to start cleaning after the robot is turned on

3. **Cover**

Status Indicator

- Solid White: Cleaning or cleanup completed
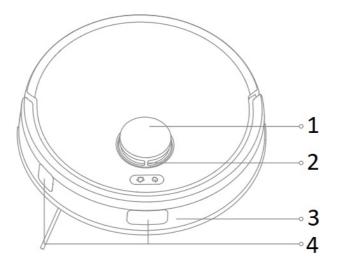- Breathing Orange: Returning to charge
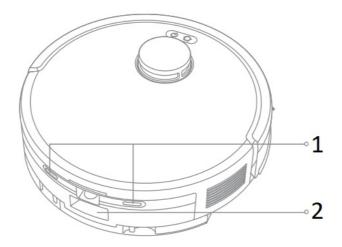- Blinking Orange: Error
- Solid Orange: Low battery

Note:

- Press any button on the robot to pause while the robot is cleaning or returning to charge.
- Press and hold the ⏻ and ⬡ button for 3 seconds to reset Wi-Fi.
- Press and hold the ⏻ and ⬡ button for 10 seconds to restore to factory settings.
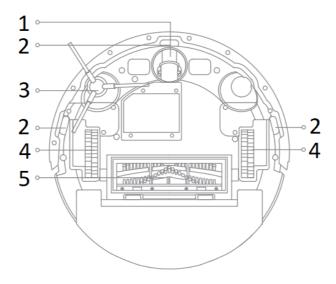- Child Lock can be enabled/disabled through the app.

Robot and Sensors

1. LDS Cover

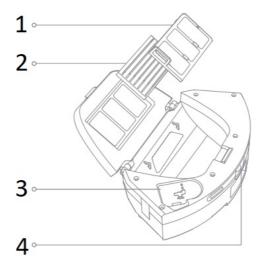2. Laser Distance Sensor (LDS)

3. Bumper

4. Return-to-Dock Sensors

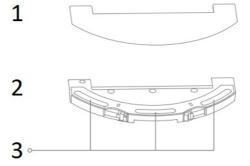1. Charging Contacts

2. Auto-Empty Vent

1. Omnidirectional Wheel

2. Cliff Sensor

3. Side Brush

4. Main Wheel

5. Main Brush

2-in-1 Water Tank with Dust Box
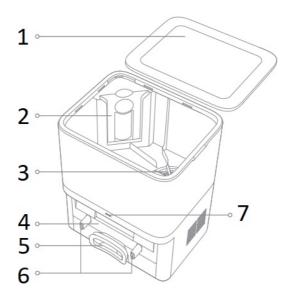
1. Primary Filter

2. HEPA Filter

3. Water Inlet

4. Water Tank Release Clip

Mop Assembly

1. Mop Pad

2. Mop Pad Holder

3. Mop Pad Attachment Area

Base Station with Auto-Empty

1. Cover
2. Dust Bag Slot
3. Filter
4. Signaling Area
5. Auto-Empty Vent
6. Charging Contacts
7. Status Indicator
    • Solid White: Base station is connected to power
    • Breathing White: Robot is charging
    • Blinking Red: Base Station has an error

1. Mounting Screw
2. Air Duct Cover

Preparing Your Home

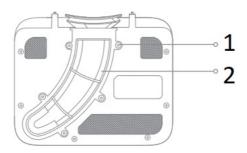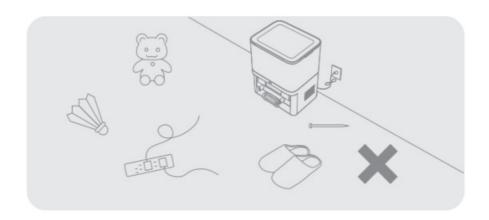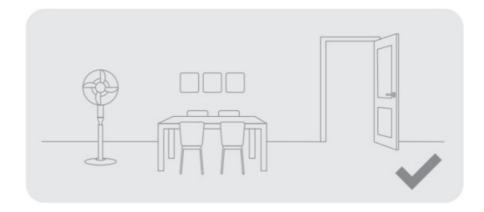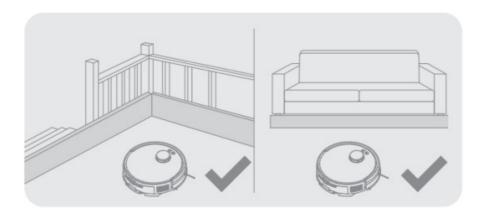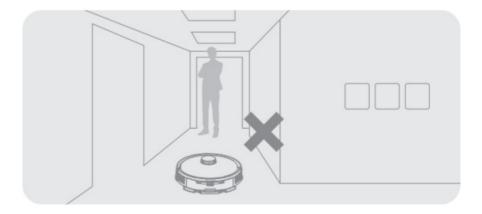Before cleaning, please move away unstable, fragile, valuable or dangerous items, and clean up cables, cloths, toys, hard objects and sharp objects on the ground to avoid being entangled, scratched or knocked over by the robot and causing losses.

Open the door of the room to be cleaned, and put the furniture in its proper place to leave more space.

Before cleaning, place a physical barrier at the edge of the stairs and sofa to ensure safe and smooth operation of the robot.
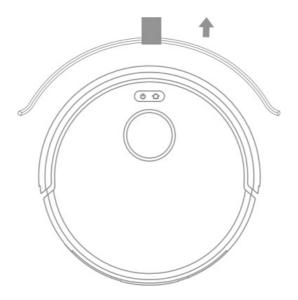
To prevent the robot from not recognizing areas that need to be cleaned, do not stand in front of the robot, threshold, hallway, or narrow places.

Note:
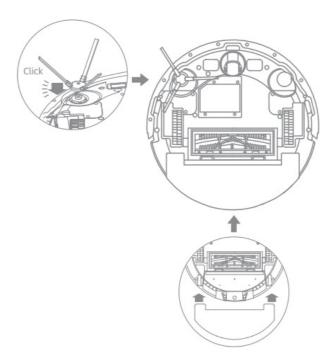
- When operating the robot for the first time, follow it around while cleaning to remove any potential obstacles in time.
- Do not vacuum hard objects like stones, steel balls and toy parts, or sharp objects like construction waste, broken glass and nails, otherwise the ground may be scratched.

Before Use

1. Remove the protections

2. Install the side brush and the mop assembly
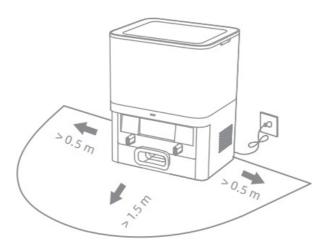
Note: Install the side brush until it clicks into place.

3. Place the base station and connect to an electrical outlet

Place the base station on level ground against the wall and plug the power cord into the socket.

🛜 Place the base station in a location that is as open as possible with a good Wi-Fi signal.
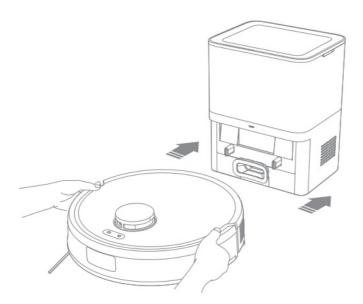
Note:

- Do not place the base station on the carpets.
- Make sure that no objects might block the signaling area.
- Remove any objects that are closer than 1.5 m from the front and 0.5 m from either side of the base station.

4. Charge the robot

When placing the robot, align the charging contacts of the robot with the charging contacts of the base station, and the robot will automatically turn on and start charging.
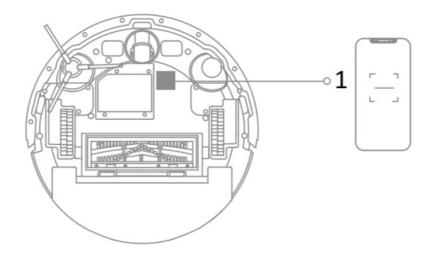
Note: It is recommended to fully charge your robot before first time use.

Connecting with the MOVAhome App

1. Download the App

Scan the QR code on the robot to download and install the app.

1. QR Code
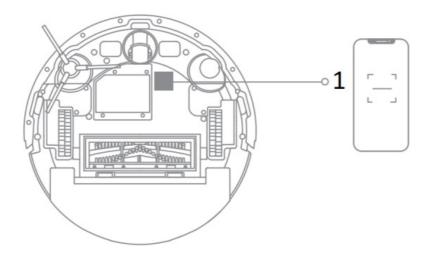
Note:

- Only 2.4 GHz Wi-Fi is supported.
- Due to upgrades in the app software, the actual operations may differ from the directions in this manual. Please follow the instructions based on the current app version.

2. Add Device

Open the app, tap "Scan QR code to connect", and scan the same QR code on the robot again to add the device. Please follow the prompts to finish the Wi-Fi connection.

Note: If you want to reset Wi-Fi, press and hold the ⏻ and ⌂ button for 3 seconds or repeat step 2 and then follow the prompts to finish the Wi-Fi connection.

1. QR Code

How to Use

Turn On/Off

Press and hold the ⏻ button for 3 seconds to turn on the robot. The power indicator should be illuminated. Place the robot onto the base station, the robot should turn on automatically and begin charging. To turn off the robot,

move the robot away from the base station and press and hold the ⏻ button for 5 seconds.

Fast Mapping

After configuring the network for the first time, follow the instructions in the app to quickly create a map. The robot will start mapping without cleaning. When the robot returns to the base station, the mapping process has been completed and the map will be saved automatically.

Start Cleaning

Press the ⏻ button to start cleaning after the robot is turned on. The robot will accurately map out a route, methodically clean along the edges and walls, then finish by cleaning each room in an S-shaped pattern to ensure a thorough job.

Note:

- It is recommended that the robot set out from the base station before cleaning. Do not move the base station while the robot is cleaning. This ensures that the robot returns to base station smoothly.
- After the robot completes the cleaning task and automatically returns to the base station, the base station will start auto-empty. More settings can be operated on the app.

Pause

When the robot is running, press any button to pause it.

Note: If the robot is paused and placed onto the base station, the current cleaning task will end.

Auto Resume Cleaning

If the battery is too low, the robot will automatically return to the base station to charge. After charging to the appropriate battery level, it will resume unfinished cleaning tasks.

Note: To use this function, please enable it in the app.

Do Not Disturb (DND) Mode

When the robot is set to Do Not Disturb (DND) mode, the robot will be prevented from resuming cleaning and the power indicator will turn off. DND mode is disabled by default at the factory. You can use the app to enable DND mode or modify the DND period. The DND period is 22:00-8:00 by default.

Note:

- The scheduled cleaning tasks will be performed as usual during the DND period.
- The robot will resume cleanup where it left off after the DND period expires.

Spot Cleaning

When the robot is on standby, press and hold the ⌂ button for 3 seconds to enable the spot cleaning mode. In this mode, the robot cleans a square-shaped area of 1.5×1.5 meters around it and returns to charge once the spot cleaning is completed.

Robot Restarting

If the robot stops responding or cannot be turned off, press and hold the ⏻ button for 15 seconds to forcefully turn it off. Then, press and hold the ⏻ button for 3 seconds to turn the robot on.
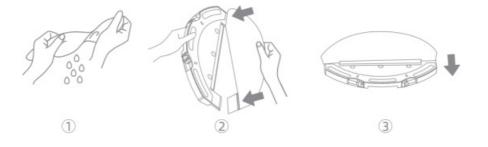
Use Mopping Function

It is recommended that all floors are vacuumed at least three times before the first mopping session to achieve a better cleaning effect.
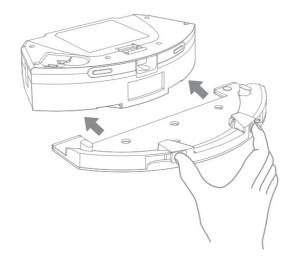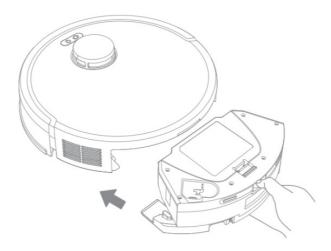
1. Fill the water tank with clean water.

Note:

- Do not use detergent or disinfectant.
- Do not fill the water tank with hot water as this may cause the water tank to warp.

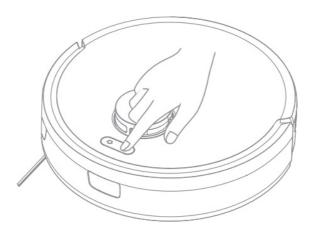2. Dampen the mop pad and wring out excess water. Install the mop pad as shown in the diagram.

3. Install mop assembly.

4. Slide the 2-in-1 water tank with dust box and mop assembly into the robot until it clicks into place.

5. Press the ⏻ button or use the app to start cleaning.
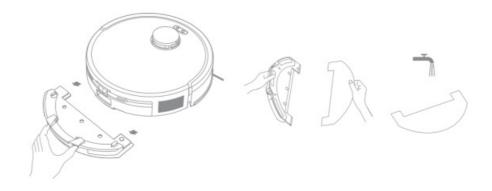

Note:

- Do not use detergent or disinfectant.
- Do not fill the water tank with hot water as this may cause the water tank to warp.

6. When the robot finishes a cleaning task and returns to the base station, remove the mop assembly and wash the mop pad in time. To remove the 2-in-1 water tank with dust box, press and hold the release clip, and then take it out.

Note: When the robot is charging or not in use, it is recommended to remove the 2-in-1 water tank with dust box and mop pad. Pour out all the remaining water in the water tank, and clean the mop pad to prevent mildew or odors.

Routine Maintenance

Parts

To keep the robot in good condition, it is recommended to refer to the accessory usage in the app or the following table for routine maintenance.
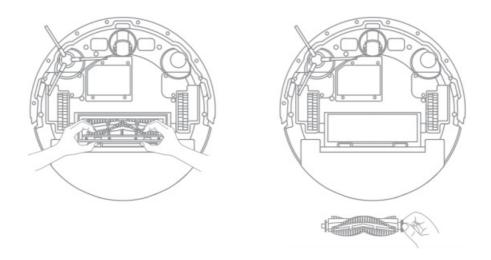
Part	Maintenance Frequency	Replacement Period
Mop pad	After each use	Every 3 to 6 months
Filter	Once every week	
Main brush	Once every month	Every 6 to 12 months
Side brush		Every 3 to 6 months
Robot's charging contacts		/
Robot's auto-empty vent		
Laser Distance Sensor (LDS)		
Return-to-Dock Sensors		
Bumper		
Omnidirectional wheel		
Cliff sensors		
Bottom of the robot		
Base station's signaling area		
Base station's charging contacts		
Base station's auto-empty vent		
Water tank	Clean it as needed	
Dust box		
Dust bag	/	Every 2 to 4 months

Note: The replacement frequency will depend on your usage of the robot. If an exception occurs due to special

circumstances, the parts should be replaced.

Main Brush

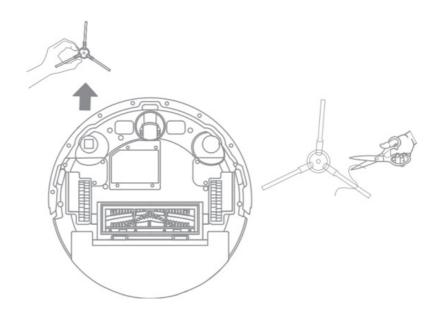1. Press the brush guard clips upwards to remove the brush guard and lift the brush out of the robot.

2. Use a proper tool to remove any hair tangled in the brush.
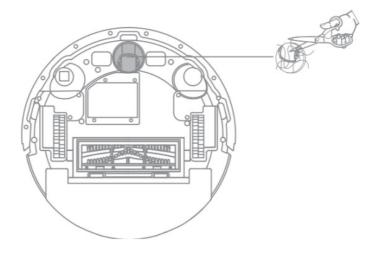
Note: Do not pull out the hair tangled in the main brush excessively. Otherwise, the brush may be damaged.

Side Brush

Pull out the side brush and use a proper tool to remove any hair tangled in the brush.
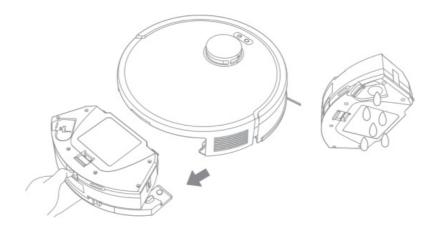
Omnidirectional Wheel

Note:

- Use a tool such as a small screwdriver to separate the axle and tire of the omnidirectional wheel. Do not use excessive force.
- Rinse the omnidirectional wheel under the running water and put it back after drying it completely.

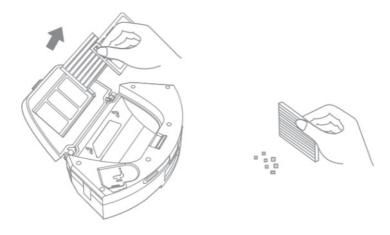**2-in-1 Water Tank with Dust Box**

1. Press the release clip to remove the 2-in-1 water tank with dust box, and then empty the water tank.

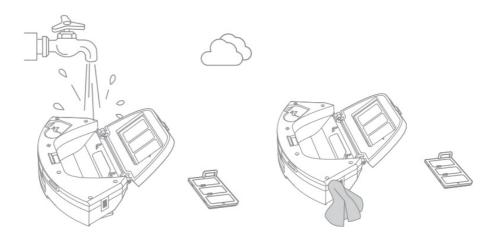2. Open the dust box cover and empty the dust box.

3. Remove the filters and tap the HEPA filter gently.

Note: Do not attempt to clean the filters with a brush, a finger or sharp objects to prevent damage.

4. Rinse the dust box and primary filter with water and air dry them completely before reinstalling.

Note:

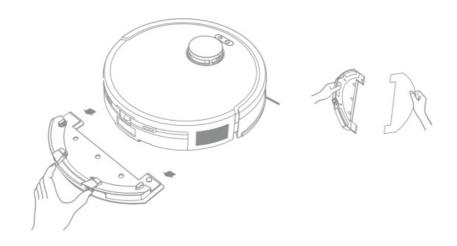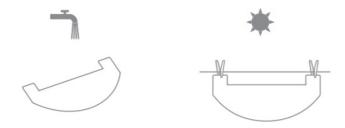- Do not rinse the parts outside the dust box. If there are any water stains, please wipe them dry before reinstalling.
- Rinse the dust box and primary filter with clean water only. Do not use any detergent.
- Use the dust box and primary filter only when they are completely dry.

Mop Pad

1. Press the release clips on the mop pad holder to remove the mop assembly. Pull the mop pad off the mop pad holder.
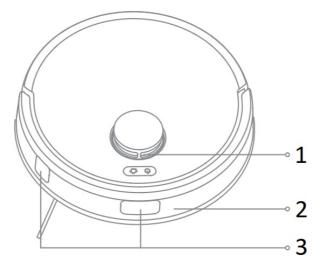
2. Clean the mop pad with water only and leave it to air dry before reinstalling.
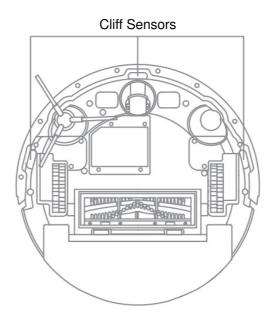
Robot Sensors

Wipe robot sensors by using a soft and dry cloth, as shown in the below figure:
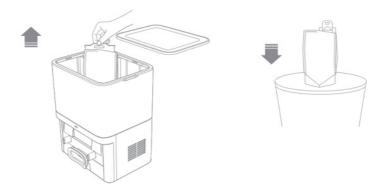
1. Laser Distance Sensor (LDS)
2. Bumper
3. Return-to-Dock Sensors

Cliff Sensors
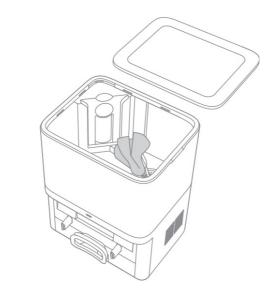
Note: A wet cloth can damage sensitive elements within the robot and the base station. Please use a dry cloth for cleaning.

Dust Bag
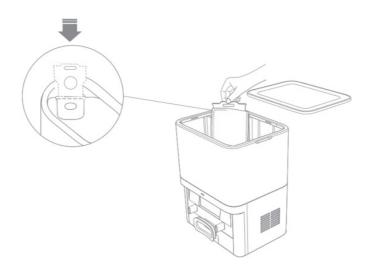
1. Remove and discard the dust bag.

2. Remove the dust and debris from the filter with a dry cloth.

3. Install a new dust bag.
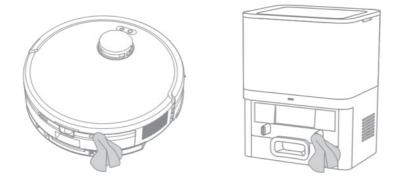
4. Put back the cover of the dust tank.
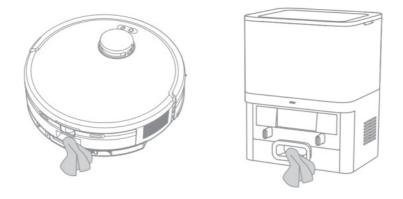
Charging Contacts and Signaling Area

Clean the charging contacts and the signaling area with a soft and dry cloth.

Auto-empty Vents
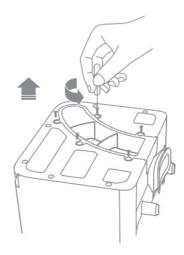
Clean the auto-empty vents of the robot and the base station with a soft and dry cloth.
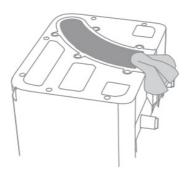
Air Duct

If the air duct is blocked, please clean it according to the following steps.
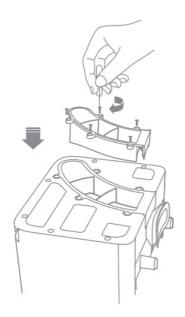
1. Unscrew the mounting screws on the air duct cover and remove the cover.

2. Check whether the air duct is blocked by foreign objects. If any, clean them.

3. Reinstall the air duct cover.

Battery

The robot contains a high-performance lithium-ion battery pack. Make sure that the battery remains well-charged for daily use to maintain optimal battery performance. If the robot is not used for an extended period of time, turn it off and put it away. To prevent damages from over-discharging, charge the robot at least once every three months.

Troubleshooting

Problem	Solution

The robot will not turn on.	The battery is low. Recharge the robot on the base station and try again.
	The temperature of the battery is too low or too high. It is recommended to operate the appliance at a temperature between 32°F (0°C) and 104°F (40°C).
The robot will not charge.	The base station is not connected to power, please make sure the power cord is correctly plugged in.
	The contact between the charging contacts on the base station and the robot is poor, please clean the charging contacts.
The robot fails to connect to WiFi.	The Wi-Fi network password is incorrect. Make sure the password used to connect to your Wi-Fi network is correct.
	The robot does not support a 5 GHz Wi-Fi connection. Make sure the robot is connected to a 2.4 GHz Wi-Fi connection.
	The Wi-Fi signal is weak. Make sure the robot is in an area with good Wi-Fi coverage.
	The robot may not be ready to be configured. Please exit and re-enter the app, and then try again as instructed.
The robot cannot find and return to the base station.	The base station is disconnected from power or moved when the robot is not on it. Please connect the base station to the power supply or place the robot onto the base station to charge.
	There are too many obstructions around the base station. Place the base station in a more open area.
	Moving the robot may cause it to re-position itself, and it will recreate a map if re-positioning fails. If the robot is too far from the base station, it might not be able to automatically return on its own, in which case you will need to manually place the robot onto the base station.
	Wipe the signaling area on the base station to remove dust or debris.
The robot gets stuck in front of the base station and cannot return to it.	Clear any obstruction within 0.5 m on the left and right sides or within 1.5 m in front of the base station to prevent the robot from being blocked.
	The route for returning to charge is blocked, e.g. the door is closed.
	It is recommended to move the base station to a different place and try again.
The robot will not turn off.	The robot cannot be turned off when it is charging. It is recommended to move the robot from the base station, and then press and hold the ⏻ button for 5 seconds to turn it off.
	If the robot cannot be turned off by performing step 1, press and hold the ⏻ button for 15 seconds to forcibly turn off the robot. If the problem persists, please contact after-sales service.

The charging speed is slow.	It takes about 5 hours to fully charge the robot when its battery is low. If you operate the robot at temperatures outside of the specified range, the charging speed will automatically slow down to extend the battery life. The charging contacts on both the robot and the base station may be dirty, please wipe them with a dry cloth.
The noise increases while the robot is operating.	Check whether the dust box's filter is clogged. If so, clean it or replace it. A hard object may be caught in the main brush or the dust box. Check and remove any hard object. The main brush or the side brush may become tangled. Check and remove any foreign objects. Switch the suction mode to Standard or Quiet.
The robot moves without following the set route.	Objects such as power cords and slippers should be organized before using the robot. Working on wet slippery surfaces may cause the main wheel to slip. It is recommended to dry any wet areas before using the robot.
The robot misses the rooms to be cleaned.	Make sure that the doors of the rooms to be cleaned are open. The robot cannot climb over high thresholds or steps. The place in front of the room to be cleaned may be wet and slippery, causing the robot to slip and work abnormally. Please try drying the floor before using the robot.
The robot will not resume cleaning after charging.	Make sure that the robot is not set to the Do Not Disturb (DND) mode, which will prevent it from resuming cleaning. The robot will not resume cleaning after you manually place the robot on the base station or send the robot to charge via the app or the ⏻ button.
The base station cannot automatically empty the dust box.	Check whether the dust bag in the dust tank is full. If the dust bag is not full, check whether there is any obstruction at the auto-empty vents of the robot, the base station, or the dust box. If any, clean the blocked part in time.
No water comes out of the water tank, or only a little bit comes out.	Check whether there is water inside the water tank. Clean the mop pad if it becomes dirty. Make sure the mop pad is installed correctly according to the user manual.
Robot returns to the base station without performing auto-empty tasks.	DND mode prevents the robot from performing auto-empty tasks.

For more support, contact us via **www.mova-tech.com**

Specifications

Robot

Model	RLE22GD
Charging Time	Approx. 5 hours
Rated Voltage	14.4 V
Rated Power	50 W
Operation Frequency	2400-2483.5 MHz
Maximum Output Power	< 20 dBm

Under normal use of condition, this equipment should be kept a separation distance of at least 20 cm between the antenna and the body of the user.

Base Station with Auto-Empty

Model	RCED0102
Rated Input	200-240 V 50-60 Hz
Rated Output	19 V 0.7 A
Rated Power (during dust emptying)	680 W

Battery Disposal and Removal

The built-in lithium-ion battery contains substances that are hazardous to the environment. Before disposing of the battery, make sure the battery is removed by qualified technicians and discarded at an appropriate recycling facility.
– the battery must be removed from the appliance before it is scrapped;
– the appliance must be disconnected from the supply mains when removing the battery;
– the battery is to be disposed of safely.

CAUTION:

Before removing the battery, disconnect the power and run out the battery as much as possible.
Unneeded batteries should be discarded at an appropriate recycling facility.
Do not expose to high temperature environment to avoid risks of explosion.
Under abusive conditions, liquid may be ejected from the battery. If contact occurs, flush with water and seek medical help.

Removal Guide:

1. Turn over the robot, use a proper tool to remove the screws on the back of the robot, and then remove the cover.
2. Unplug the terminals between the battery and PCB board to remove the battery.

WEEE Information

All products bearing this symbol are waste electrical and electronic equipment (WEEE as in directive 2012/19/EU) which should not be mixed with unsorted household waste. Instead, you should protect human health and the environment by handing over your waste equipment to a designated collection point for the recycling of waste electrical and electronic equipment, appointed by the government or local authorities.

Correct disposal and recycling will help prevent potential negative consequences to the environment and human health. Please contact the installer or local authorities for more information about the location as well as terms and conditions of such collection points.

Documents / Resources

	MOVA E20 Auto Empty Robot Vacuum and Mop [pdf] User Manual d8021bcb55277b532eb2d92f997f3fbe-121651-n403lhgnqzs-101025541-47-2024-Sa, E20 Auto Empty Robot Vacuum and Mop, E20, Auto Empty Robot Vacuum and Mop, Robot Vacuum and Mop, Vacuum and Mop, and Mop, Mop

References

- ^ **MOVA: Innovative Smart Living Solutions for a Better Life – MOVA-GLOBAL**
- **User Manual**