MOVA E20 Pro

Robot Vacuum and Mop User Manual
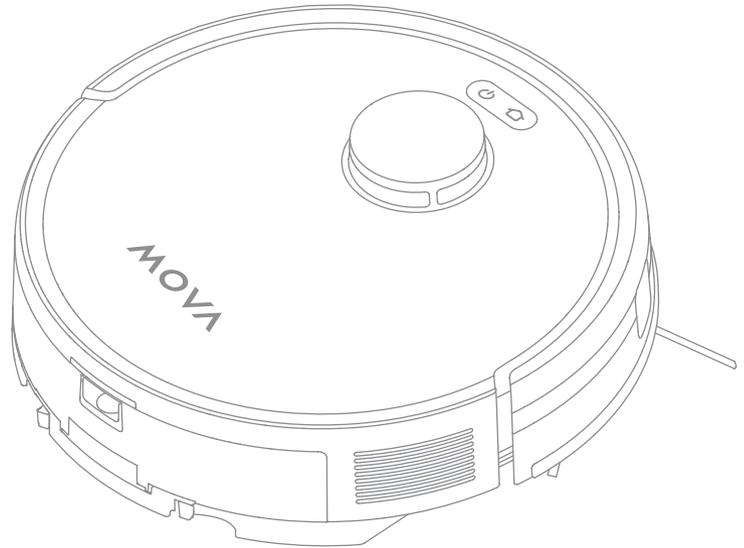
MOVA

Contents

Safety Information

IMPORTANT SAFETY INSTRUCTIONS

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

READ ALL INSTRUCTIONS BEFORE USING (THIS APPLIANCE), Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.

SAVE THESE INSTRUCTIONS

Household use only.

WARNING– To reduce the risk of fire, electric shock, or injury:

· Do not use outdoors or on wet surfaces.

· Do not allow to be used as a toy. Close attention is necessary when used by or near children, pets or plants.

· Use only as described in this manual. Use only manufacturer's recommended attachments.

· Do not use with damaged cord or plug. If appliance is not working as it should, has been dropped, damaged, left outdoors, or dropped into water, return it to a service center.

· Do not pull or carry by cord, use cord as a handle, close a door on cord, or pull cord around sharp edges or corners. Do not run appliance over cord. Keep cord away from heated surfaces.

· Do not unplug by pulling on cord. To unplug, grasp the plug, not the cord.

· Do not handle the charging dock, including charger plug, and charger terminals with wet hands.

· 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.

Safety Information

· Keep hair, loose clothing, fingers, and all parts of body away from openings and moving parts.
· Do not use to pick up flammable or combustible liquids, such as gasoline, or use in areas where they may be present.
· Do not pick up anything that is burning or smoking, such as cigarettes, matches, or hot ashes.
· Do not use without dust bin and filter in place.
· Prevent unintentional starting. Ensure the switch is in the off-position before connecting to battery pack, picking up or carrying the appliance. Carrying the appliance with your finger on the switch or energizing the appliance that has the switch on invites accidents.
· Do not use and store in extremely hot or cold environments (below 0℃/ 32 ℉ or above 40℃/104 ℉). Please charge the robot in temperature above 0℃/ 32 ℉ and below 40℃/104 ℉.
· 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.
· Use appliances only with specifically designated battery packs. Use of any other battery packs may create a risk of injury and fire.
· 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.
· 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.
· 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.
· Do not expose a battery pack or appliance to fire or excessive temperature. Exposure to fire or temperature above 130℃/266 ℉ may cause explosion.
· 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.

Safety Information

· Have servicing performed by a qualified repair person using only identical replacement parts. This will ensure that the safety of the product is maintained.

· Do not modify or attempt to repair the appliance or the battery pack except as indicated in the instructions for use and care.

· Place the cords from other appliances out of the area to be cleaned.

· Do not operate the vacuum in a room where an infant or child is sleeping.

· Do not operate the vacuum in an area where there are lit candles or fragile objects on the floor to be cleaned.

· Do not operate the vacuum in a room that has lit candles on furniture that the vacuum may accidentally hit or bump into.

· Do not allow children to sit on the vacuum.

· Do not use the vacuum on a wet surface.

· Use only with **RCEA0103** supply unit.

· Risk Of Injury. Brush May Start Unexpectedly. Switch off the appliance and Remove the brush Before Cleaning or Servicing.

· Unplug before cleaning or servicing.

Precautions : Place on a flat floor against a wall. Do not attempt to disassemble on your own. Do not operate in high temperature or moist environments. Please refer to the user manual for latest information.

Caution:
This device complies with Part 15 of the FCC Rules / 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 harmful interference. (2) this device must accept any interference received, including interference that may cause undesired operation.

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

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

1. L'appareil ne doit pas produire de brouillage;

2. L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Safety Information

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.

MPE Reminding
To satisfy FCC / IC RF exposure requirements, a separation distance of 8" (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.

L'antenne installée doit être située
de facon à ce que la population ne puissey être exposée à une distance de moin
de 20 cm. Installer l'antenne de facon à ce que le personnel ne puisse approcher à 20 cm ou moins de la position centrale de l'ant
La FCC des éltats-unis stipule que cet appareil doit être en tout temps éloigné d'au
moins 20 cm des personnes pendant son functionnement.

To disable Wi-Fi module on robot, power the robot ON. Place the robot on the charging dock. Ensure the Charging Contacts on robot and the charging dock Pins make a connection.
Press and hold the Dock Button on the robot for 20 seconds until the Wi-Fi module is turned off.
When the Wi-Fi module is turned off, press any button on the robot to turn the Wi-Fi module on.

⎓	Direct current
~	Alternating current

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

Safety Information

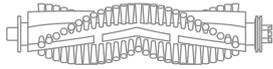For indoor use only

Read operator's manual

BZ015-190060-AU

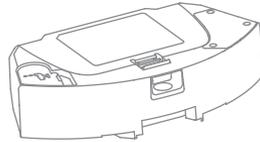Use with adapter BZ015-190060-AU supply unit.

Product Overview
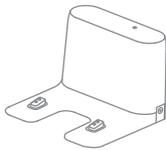
Accessories

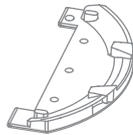**Pre-Installed Accessories**

Main Brush

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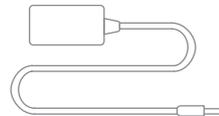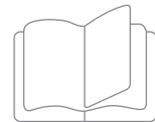
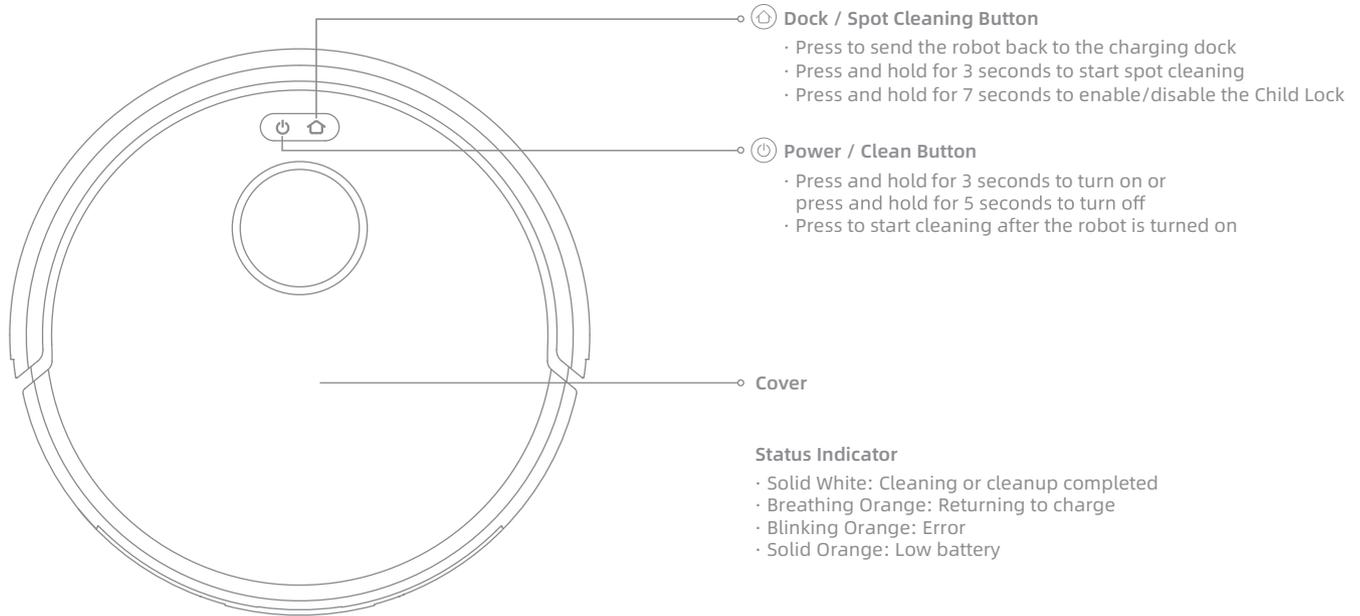**Other Accessories**

Charging Dock

Mop Assembly

Side Brush

Charger

User Manual

Product Overview

Robot

Dock / Spot Cleaning Button

· Press to send the robot back to the charging dock
· Press and hold for 3 seconds to start spot cleaning
· Press and hold for 7 seconds to enable/disable the Child Lock

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
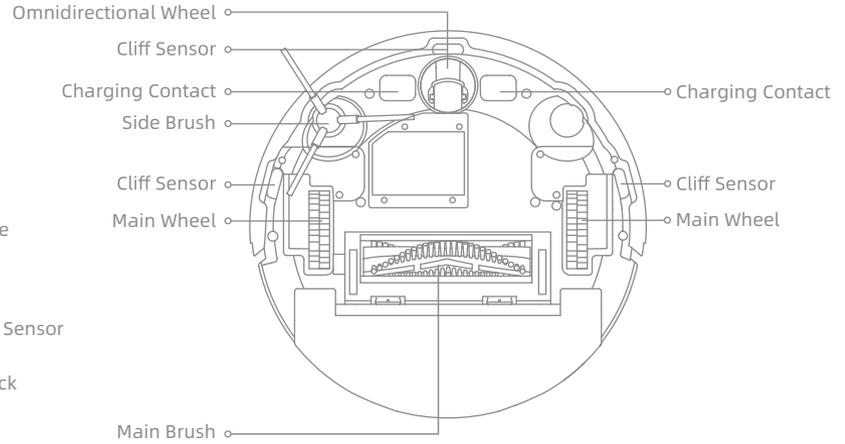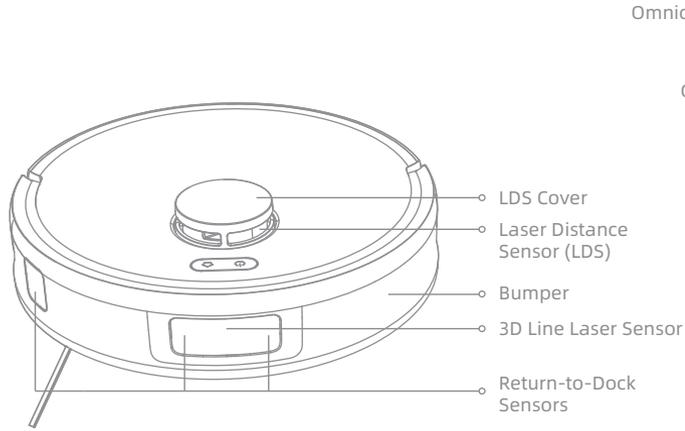
Cover

Status Indicator

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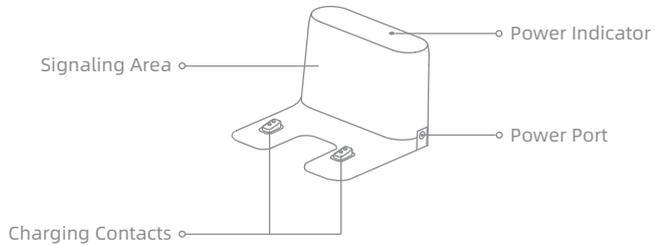· Blinking Orange: Error
· Solid Orange: Low battery

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.

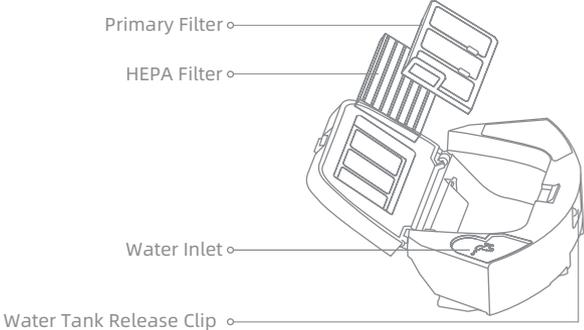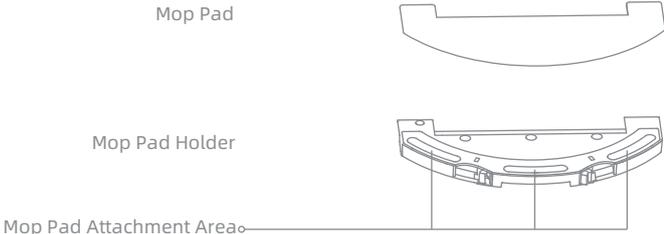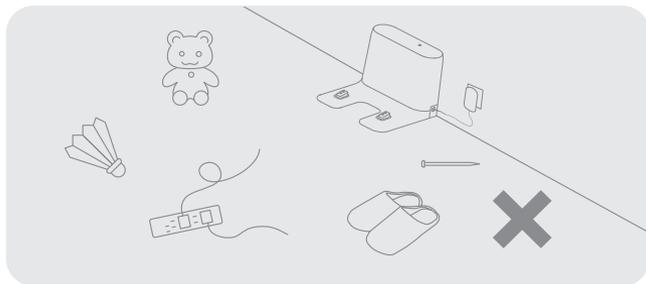# Product Overview

Robot and Sensors

LDS Cover

Laser Distance Sensor (LDS)

Bumper

3D Line Laser Sensor

Return-to-Dock Sensors

Omnidirectional Wheel

Cliff Sensor

Charging Contact

Side Brush

Cliff Sensor

Main Wheel

Charging Contact

Cliff Sensor

Main Wheel

Main Brush

Charging Dock

Power Indicator

Signaling Area

Power Port

Charging Contacts

Product Overview

2-in-1 Water Tank with Dust Box

Primary Filter

HEPA Filter

Water Inlet

Water Tank Release Clip

Mop Assembly

Mop Pad

Mop Pad Holder

Mop Pad Attachment Area
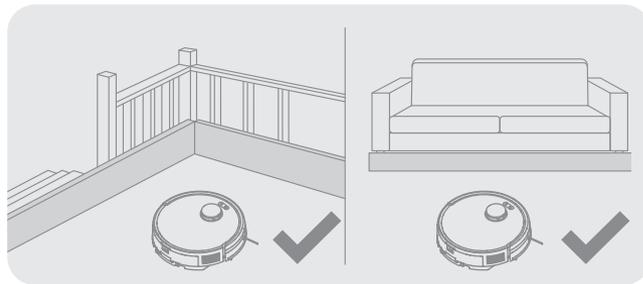
Preparing Your Home

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.
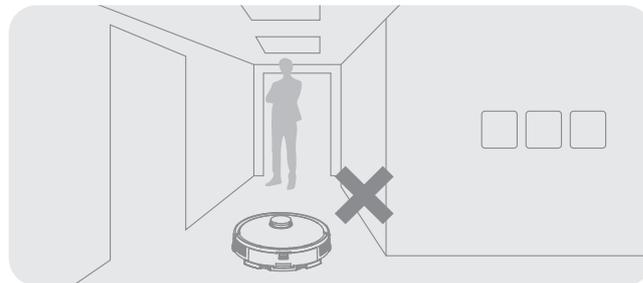

Before cleaning, place a physical barrier at the edge of the stairs and sofa to ensure safe and smooth operation of the robot.
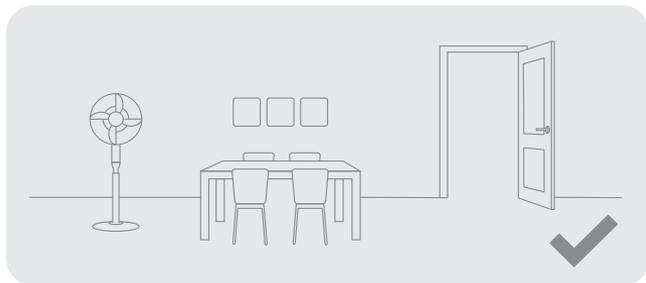
Open the door of the room to be cleaned, and put the furniture in its proper place to leave more space.

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.
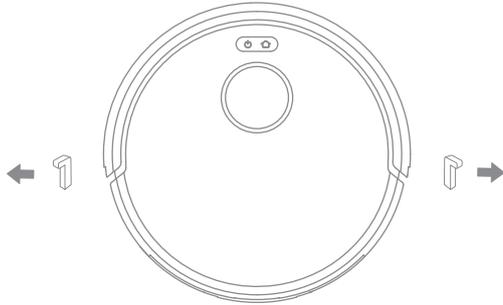
Note:

· 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.
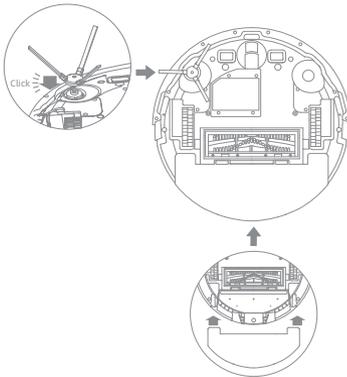
Before Use

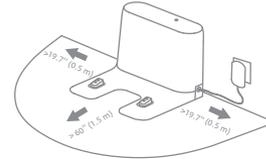## 1. Remove the protections

2. Install the side brush and the mop assembly

Click

Note: Install the side brush until it clicks into place.

3. Place the charging dock on level ground against the wall and connect it to a power outlet

Place the charging dock in a location that is as open as possible with a good Wi-Fi signal.


>19.7'' (0.5 m)

> 60'' (1.5 m)

>19.7'' (0.5 m)

Note:

· Do not place the charging dock on the carpets.
· Remove any objects that are closer than 60'' (1.5 m) from the front and 19.7'' (0.5 m) from either side of the charging dock.
· Do not place the charging dock in an area with direct sunlight or where other objects might block the signal, as this may hinder the robot from returning to the charging dock.

4. Charge the robot

When placing the robot, align the charging contacts at the bottom of the robot with the charging contacts of the charging dock, and the robot will automatically turn on and start charging.
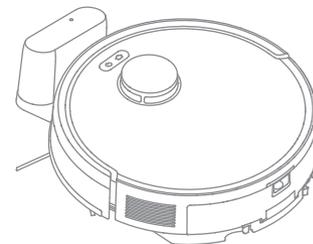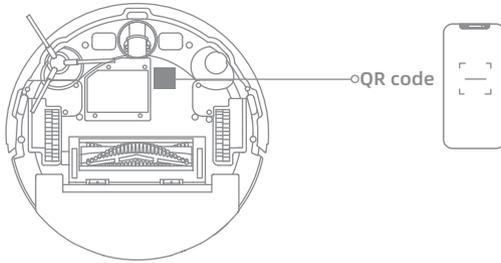

Note: It is recommended to fully charge your robot before first time use.

Connecting with the App

1. Download the App

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

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.

QR code
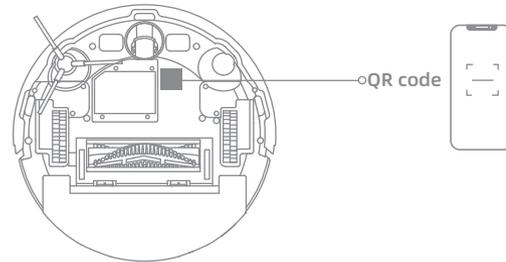
How to Use

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 charging dock, the robot should turn on automatically and begin charging. To turn off the robot, move the robot away from the dock 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 charging dock, 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. Then, the robot will methodically clean each room in an S-shaped pattern, then finish by cleaning along the edges and walls to ensure a thorough job.

Note: It is recommended that the robot set out from the charging dock before cleaning. Do not move the charging dock while the robot is cleaning. This ensures that the robot returns to charging dock smoothly.

Pause

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

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

Auto Resume Cleaning

If the battery is too low, the robot will automatically return to the charging dock 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.
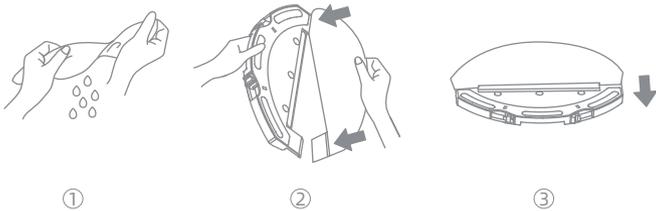
How to Use

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.
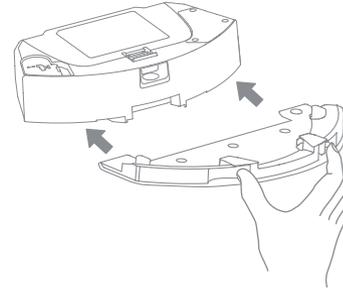
1. Fill the water tank with clean water.
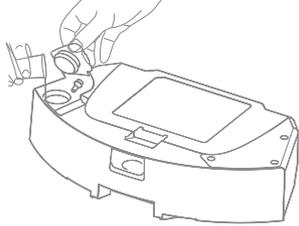
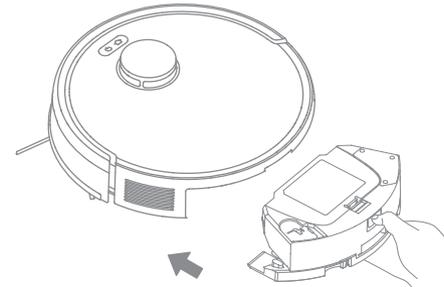**Note:** Do not use detergent or disinfectant.

2. Dampen the mop pad and wring out excess water. Install the mop pad as shown in the diagram.
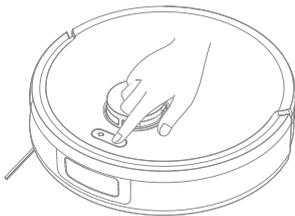
① ② ③

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.

How to Use

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

Note:
· It is recommended to remove the mop assembly before cleaning carpets.
· Use the app to adjust the water flow as required.

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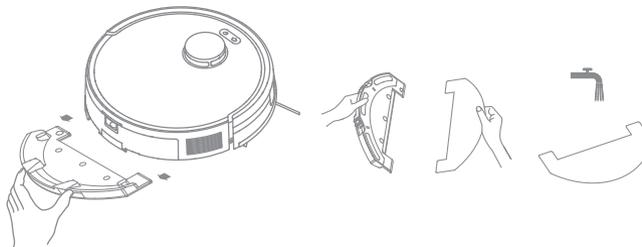
Note: When the robot is charging or not in use, it is recommended to remove the 2-in-1 water tank with dust box and mop pad. Pour out all the remaining water in the water tank, and clean the mop pad to prevent mildew or odors.

Routine Maintenance

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		Every 6 to 12 months
Side brush		Every 3 to 6 months
Charging contacts	Once every month	
Omnidirectional wheel		
Cliff sensors		
Laser Distance Sensor (LDS)		
3D Line Laser Sensor		/
Return-to-Dock Sensors		
Bumper		
Charging dock's signaling area		
Water tank	Clean it as needed	
Dust box		

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.

Routine Maintenance

Clean the Main Brush

1. Press the brush guard clips upwards to remove the brush guard and lift the brush out of the robot.
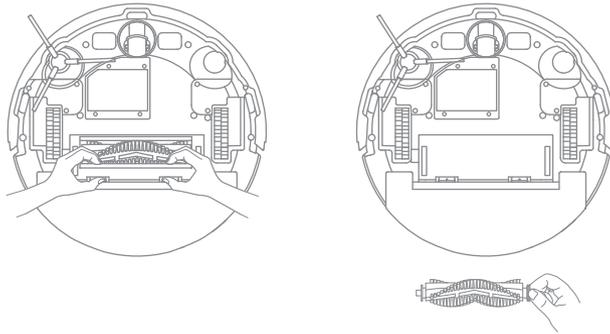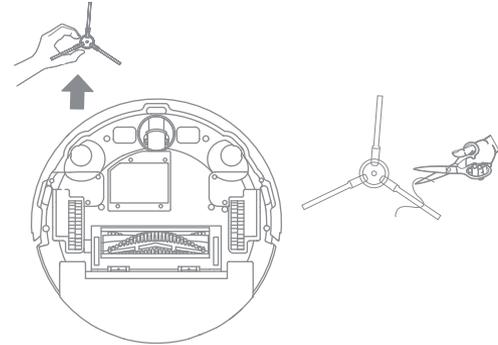
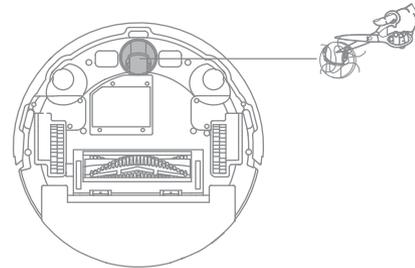2. Use a proper tool to remove any hair tangled in the brush.

Note: Do not pull out the hair tangled in the main brush excessively. Otherwise, the brush may be damaged.

Clean the Side Brush

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

## Clean the Omnidirectional Wheel

Note:
· Use a tool such as a small screwdriver to separate the axle and tire of the omnidirectional wheel.
· Rinse the omnidirectional wheel under the running water and put it back after drying it completely.
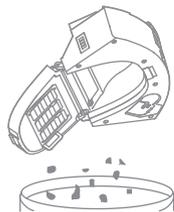
Routine Maintenance
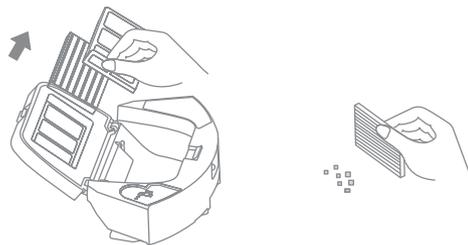
Clean the 2-in-1 Water Tank with Dust Box

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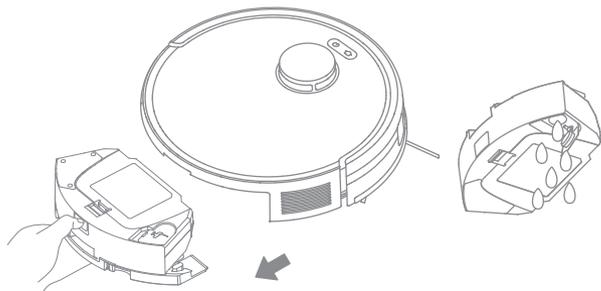
2. Open the dust box cover and empty the dust box.

3. Remove the filters and tap the HEPA filter gently.
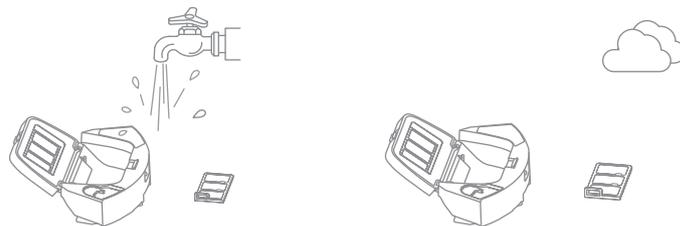
Note: Do not attempt to clean the filters with a brush, a finger or sharp objects to prevent damage.

4. Rinse the dust box and primary filter with water and air dry them completely before reinstalling.
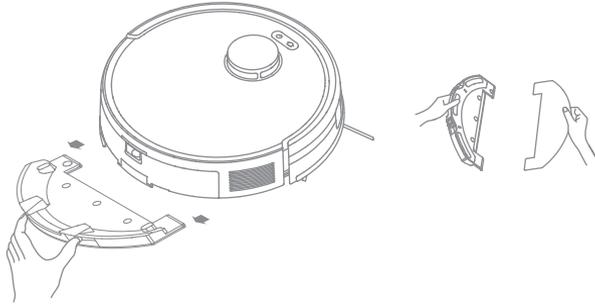
Note:
· Rinse the dust box and primary filter with clean water only. Do not use any detergent.
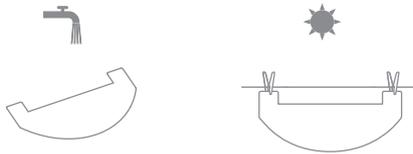· Use the dust box and primary filter only when they are completely dry.

Routine Maintenance

Clean the 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.

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.

Clean Robot Sensors and Charging Contacts

Wipe sensors and charging contacts of the robot by using a soft and dry cloth, as shown in the below figure:

Note: A wet cloth can damage sensitive elements within the robot and the charging dock. Please use a dry cloth for cleaning.

LDS Cover

Laser Distance Sensor (LDS)

Bumper

3D Line Laser Sensor

Return-to-Dock Sensors

Cliff Sensor

Charging Contact

Charging Contact

Cliff Sensor

Cliff Sensor

Charging Contacts
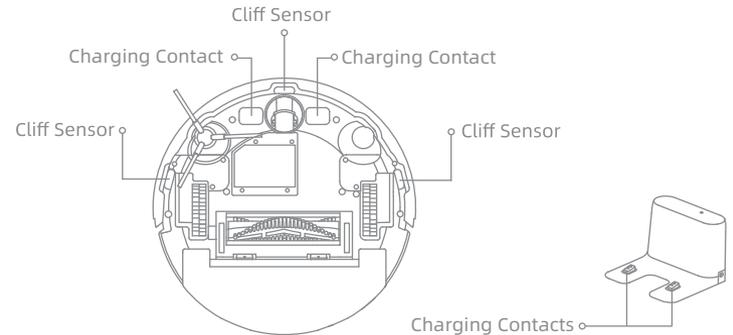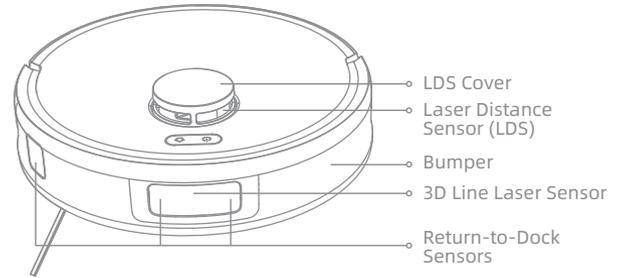
Troubleshooting

Problem	Solution
Robot does not turn on.	The battery level is low. Recharge the robot on the charging dock, then 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).
Robot does not recharge.	The charging dock is not receiving power. Please confirm that both ends of the charger are plugged in correctly. Poor contact. Clean charging contacts of the charging dock and robot.
Robot does not return to charging dock.	There are too many obstructions around the charging dock. Place the charging dock in a more open area. Please clean the dock's signaling area.
Robot is malfunctioning.	Turn off the robot and then reactivate it.
Robot is making a strange noise.	A foreign object may be caught in the main brush, side brush, or one of the main wheels. Stop the robot and remove any debris.
Robot no longer cleans efficiently or leaves dust behind.	The dust box is full. Please clean it. The filter is blocked. Please clean it. A foreign object is caught in the main brush. Please clean it.

Troubleshooting

Problem	Solution
Robot cannot connect to Wi-Fi.	There is something wrong with the Wi-Fi connection. Reset the Wi-Fi and download the latest version of the app, then try reconnecting. Location permission is not open. Please ensure the location permission on the app is enabled. Wi-Fi signal is weak. Make sure the robot is in an area with good Wi-Fi coverage. 5GHz Wi-Fi is not supported. Please ensure your robot connects to 2.4GHz Wi-Fi. The username or password of Wi-Fi is incorrect. Please enter the correct username and password.
Robot does not perform scheduled cleaning.	The robot has low battery. Scheduled cleaning will not start unless the robot has at least 15% battery left.
Does leaving the robot on the charging dock consume power if it is already fully charged?	Leaving the robot on the charging dock after it's fully charged consumes very little electricity and helps maintain optimal battery performance.
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 if it becomes dirty. Make sure the mop pad is installed correctly according to the User Manual.
Robot doesn't resume cleaning after charging.	Make sure the robot is not set to Do Not Disturb mode (DND), which will prevent it from resuming cleaning. The robot does not resume cleaning when it is manually recharged or placed onto the charging dock.
Robot doesn't return to charging dock after being moved.	Manually place the robot onto the charging dock.

For additional services, please contact us via support.us@dreame.tech
Tel: +1 (866) 977-5177

Specifications

Robot

| Model	RLE22SA
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 8'' (20 cm) between the antenna and the body of the user.

Charging Dock

Model	RCEA0103
Rated Input	19 V ⎓ 0.6 A
Rated Output	19 V ⎓ 0.6 A

Charger

Model	BZ015-190060-AU
Rated Input	100-240 V∼ 50/60 Hz 0.35 A
Rated Output	19 V ⎓ 0.6 A

| LASER 1 |
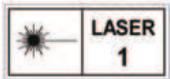
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