



# OWNER'S MANUAL

# ROBOT CLEANER

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Read this owner's manual thoroughly before operating the appliance and keep it handy for reference at all times.

**ENGLISH**

R51WT



MFL71780928  
Rev.00\_072823

[www.lg.com](http://www.lg.com)

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# IMPORTANT SAFETY INSTRUCTIONS

## READ ALL INSTRUCTIONS BEFORE USE

The following safety guidelines are intended to prevent unforeseen risks or damage from unsafe or incorrect operation of the appliance.

The guidelines are separated into 'WARNING' and 'CAUTION' as described below.

### Safety Messages

**Your safety and the safety of others are very important.**

We have provided many important safety messages in this manual and on your appliance. Always read and follow all safety messages.



This is the safety alert symbol.

This symbol alerts you to potential hazards that can kill or injure you and others. All safety messages will follow the safety alert symbol and either the word WARNING or CAUTION.

These words mean:



#### **WARNING**

You may be killed or seriously injured if you do not follow instructions.



#### **CAUTION**

You may be injured or cause damage to the product if you do not follow instructions.

All safety messages will tell you what the potential hazard is, tell you how to reduce the chance of injury, and tell you what may happen if the instructions are not followed.

## WARNING STATEMENTS

### **WARNING**

- To reduce the risk of explosion, fire, death, electric shock, injury or scalding to persons when using this product, follow basic precautions, including the following:

### Technical Safety

- Read all safety warnings and instructions. Use only manufacturer's recommended attachments.
- Do not use an appliance with a damaged power cord or plug. The power cord or plug must be replaced. If the appliance is not working as it should, has been dropped, damaged, left outdoors, or dropped into water, return it to an LG Electronics service center.
- Do not pull or carry by the cord, use the cord as a handle, close a door on the cord, or pull the cord around sharp edges or corners. Do not run the appliance over the cord. Keep the cord away from heated surfaces.
- Do not unplug by pulling on the cord. To unplug, grasp the plug, not the cord.
- Place the cords from other appliances out of the area to be cleaned.
- This appliance is intended to be used in a household only. To avoid risk of electric shock, use indoors on a dry floor only.
- This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance.

## 4 IMPORTANT SAFETY INSTRUCTIONS

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- Do not use with any opening blocked; keep free of dust, lint, hair, and anything that may reduce air flow.
- Do not use without dust bag and filters in place.
- Prevent unintentional starting. Ensure the switch is in the off-position before picking up or carrying the appliance. Carrying the appliance with your finger on the switch or energizing appliance that have the switch on invites accidents.
- 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.
- Liquid ejected from the battery may cause irritation or burns.
- 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 °C (265 °F) 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.
- Do not operate the robot 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 allow the appliance to be used as a toy. Close attention is necessary when used by or near children.
- Do not operate the appliance in a room where an infant or child is sleeping.
- Have servicing performed by a qualified repair person using only identical replacement parts. This will ensure that the safety of the product is maintained.
- Before using this appliance, clear the floor of objects such as candles, power cords, fragile objects, clothing, loose papers, and pull cords for blinds or curtains.

### Installation

- Charge, store and operate this appliance in room temperature environments only.
- Place the charging station on a firm, level surface.
- Charge and store the appliance in a well-ventilated place.
- Do not store the product body, power cord or home station near heating devices or open flames.
- Do not operate or store the appliance at temperatures below 41 °F (5 °C) or above 100 °F (38 °C).
- This appliance is designed to be plugged into a standard outlet only. The appliance may not be used with any type of power converter.
- Do not plug the appliance into a damaged or loose outlet.
- Dispose of all packaging materials (such as plastic bags and styrofoam) away from children. The packaging materials can cause suffocation.
- Certain internal parts are intentionally not grounded and may present a risk of electric shock only during servicing, Service personnel - Do not contact the following parts while the appliance is energized: pump, valve, motor, control board.

### Battery

- Never use the battery, adapter, and the home station from other appliances with this appliance. Use only the battery and the home station provided by LG Electronics.

- Never use the battery, adapter, and the home station from this appliance with other appliances.
- Keep the remote controller batteries out of the reach of children. Swallowing the batteries can lead to chemical burns, perforation of soft tissue, and death. Seek medical attention immediately. Severe burns can occur within 2 hours of swallowing.
- Unplug the power cord and remove the battery if the appliance will not be used for an extended period of time.
- Do not use the battery if it is leaking or has changed shape. If battery fluid comes into contact with skin or eyes, thoroughly wash the affected area immediately with clean water and seek medical attention.
- Do not use modified or damaged batteries.
- Do not disassemble or short-circuit the battery. Do not crush or dismantle the battery.
- When disposing of the battery or the appliance, remove the battery from the appliance and safely dispose of it.
- Do not heat or place the battery near any heat source or direct sunlight. Do not subject the battery to mechanical shock.
- Have the battery replaced when it is no longer able to hold a charge. For replacement, contact an authorized LG Electronics service center for alternative battery options.
- When disposing of this appliance, follow regulations for disposal of rechargeable lithium-ion batteries.
- Follow all local ordinances and regulations when handling or disposing of the battery.
- For your safety, do not remove the battery from the appliance. If you need to replace the battery of the appliance, take it to an authorized LG Electronics service center or dealer for assistance.
- Do not modify or attempt to repair the appliance or the battery pack (as applicable) except as indicated in the instructions for use and care.

## Battery Specifications

<b>Model Name</b>	INR18650F9M-4S1P
<b>Type</b>	Lithium Battery
<b>Rated Capacity</b>	DC 14.4 V, 3200 mAh

## Operation

- Read all instructions before using the appliance, and save these instructions.
- Do not handle the power cord, plug, home station or product body with wet hands.
- Wipe any moisture or dirt off the cord or plug with a dry cloth.
- Never unplug the appliance by pulling on the power cord. Always grip the plug firmly and pull straight out from the outlet.
- Never attempt to operate this appliance if it is damaged, malfunctioning, partially disassembled, or has missing or broken parts, including a damaged cord or plug. Take it to an authorized LG Electronics service centre or dealer for assistance.
- Do not apply excessive force to the power cord to bend it, or place it under a heavy object as this will damage it.
- Do not plug the appliance into a damaged or loose outlet.
- Push the power plug firmly into the wall outlet so that it is not loose.
- Before using the appliance, remove any wire or string on the floor.
- Do not cover the power cord with a rug or carpeting.
- If the product makes a strange noise or emits an odour or smoke, discontinue use and contact an LG Electronics customer information centre.

## 6 IMPORTANT SAFETY INSTRUCTIONS

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- Only qualified technicians or service personnel from LG Electronics may disassemble, repair or modify the appliance.
- Never insert a sharp metal object such as a pin, nail or knife in a hole or gap in the product body or the home station.
- Do not clean up liquids with this appliance. Make sure that no water, beverage or detergent gets inside the product body or the home station.
- Do not use the appliance to clean up blades, thumb tacks, sawdust, sharp objects, or hot or cold ashes.
- Keep clothing and hair, fingers, or other parts of the body away from openings and moving parts.
- Do not use in an enclosed space where vapors are present from paint thinner, mothproofing substances, flammable dust or other explosive or toxic materials.
- Do not touch the charging terminals on the appliance or the home station, or insert an electrified object inside the appliance or the station.
- If the earth leakage breaker is tripped when the product is put on the home station, immediately remove the appliance from the home station. Contact an LG Electronics customer service centre.
- Do not use or store a heating device or flammable substance (ether, benzene, alcohol, chemicals, combustible sprays, insecticide, air freshener or cosmetics) in close proximity to the appliance.
- Do not attempt to clean up liquids (water, beverages), smelly substances (candy, chocolate, pet excrement), metal objects (blades, pins), flammable substances, surfactants, or glass shards with this appliance.
- In the event of a gas leak (natural gas, propane gas, etc.), do not operate this or any other appliance. Open a window or door to ventilate the area immediately.
- Never allow any water, beverage or detergent to get inside the battery.
- Make sure to unplug the power cord when cleaning or maintaining the home station.

## CAUTION STATEMENTS

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### CAUTION

- To reduce the risk of explosion, fire, death, electric shock, injury or scalding to persons when using this product, follow basic precautions, including the following:
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### Operation

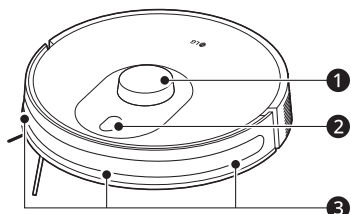
- Do not use on PVC or polyurethane mats for infants and children, as friction may cause the motor to overheat.

**SAVE THESE INSTRUCTIONS**

# BEFORE USING

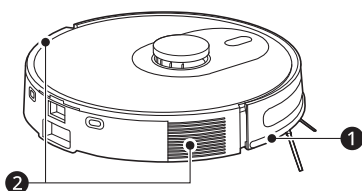
## Parts and Specifications

### Front View



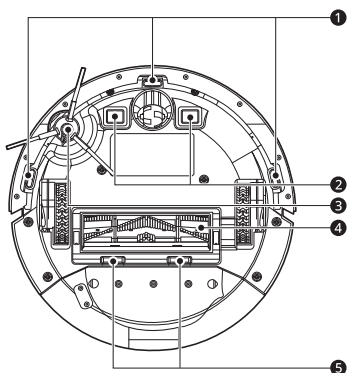
- ❶ LIDAR Sensor
- ❷ Control Panel
- ❸ Infrared sensor for charging

### Side View



- ❶ Bumper
- ❷ Ventilation Port

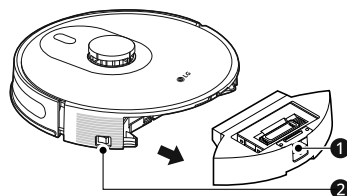
### Bottom View



- ❶ Cliff Detection Sensors
- ❷ Charging Terminals
- ❸ Side Brush

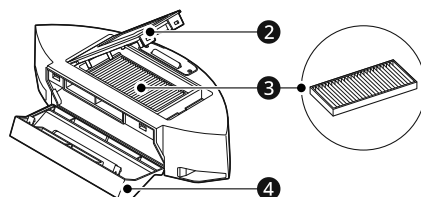
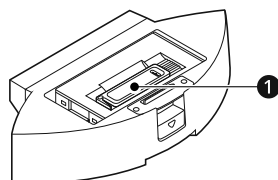
- ❹ Brush
- ❺ Brush Cover Release Buttons

### Rear View



- ❶ Dust Bin Release Button
- ❷ Main Power Switch

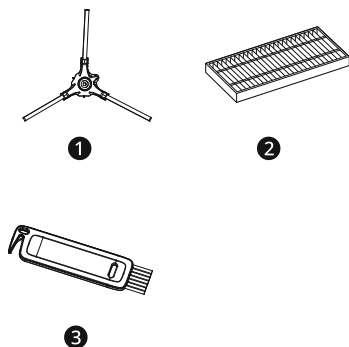
### Dust Bin



- ❶ Dust Bin
- ❷ Filter Cover
- ❸ Filter
- ❹ Dust Bin Cover

## Accessories

### Included Accessories



- ❶ Side Brush
- ❷ Filter
- ❸ Cleaning Brush

### Specifications

This product is a Class I laser device of which conformity assessment is conducted in accordance with the IEC 60825-1.

### Robot Cleaner

- **Model:** R51WT
- **Maximum Physical Dimensions:** 342 mm (Width) × 342 mm (Depth) × 94.5 mm (Height)
- **Power Consumption**
  - 30 W (Mid level)
- **Charging Time:** Approximately 5 hours
- **Cleaning Time (Based on general wooden floor)**
  - Up to 140 minutes (Low level)
  - Up to 110 minutes (Mid level)
  - Up to 80 minutes (High level)
  - Up to 60 minutes (General mode with Turbo function)

### Charging Station

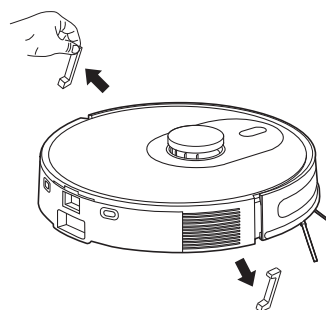
Model	VDS-RB4**
Input	120 V~ 60 Hz
Output	DC 24.5 V / 1.45 A
Power Consumption	9 A (Cleaning)
	0.5 A (Charging)

## Charging

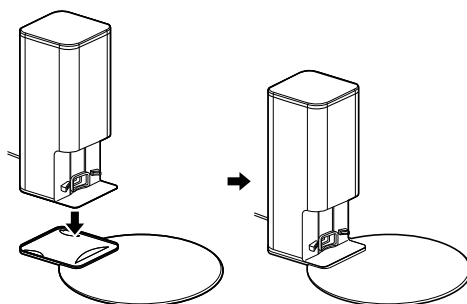
### Installing the Home Station

Always keep the home station plugged in when in use. If the home station is not plugged in, the robot cleaner will not return to the home station to charge automatically.

- 1 Before use, remove the foam strip beside the collision bumper.
  - If the foam strip is not removed, it may be difficult for the Robot Cleaner to find the charging station or product performance may be adversely effected.



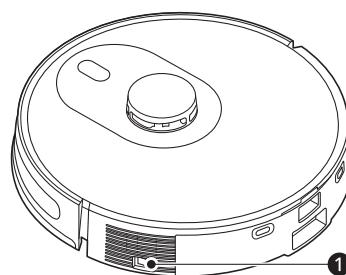
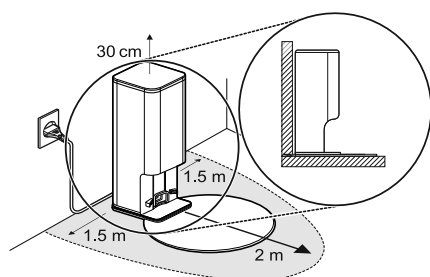
- 2 Remove the protective film attached to the charging station and the Robot Cleaner.
  - If the protective film is not removed, it may be difficult for the Robot Cleaner to find the charging station or product performance may be adversely effected.
- 3 Install the charging station on top of the Floor Damage Prevention Plate. Install the charging station by lowering it from top to bottom.



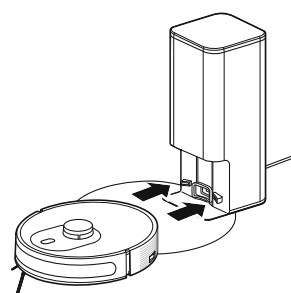


- 4** Place the home station on a flat and firm indoor floor and fix it to a suitable wall in your selected location.

- Remove all obstacles from around the home station.



- 2** Place the robot cleaner on the home station, align the centre of the robot cleaner with the centre of the home station and push the robot cleaner from behind.



- 5** Connect the adapter to a wall outlet.

#### NOTE

- If two robot cleaners are used together, there should be at least 1.5 m distance between home stations.
- If the home stations are too close together, the robot cleaner may not be able to return to its home station.
- Do not install the home station on a carpet.
- If the charging station is not plugged into a power outlet, the Robot Cleaner battery will not charge.
- Do not install the charging station in a narrow space. Doing so will make it difficult for the Robot Cleaner to find the charging station.
- Make sure that the charging station is plugged into a power outlet during use. If the power supply is not connected to the charging station, the Robot Cleaner cannot automatically return to the charging station to charge the battery.

- When charging begins, the status indicator on the Robot Cleaner will blink pink.
- The robot cleaner returns to the home station on its own to charge the battery when cleaning is finished or battery becomes low. If the robot cleaner returns to the home station due to low battery, it will resume cleaning after the battery is fully charged.

#### NOTE

- The battery is a consumable. The battery life and service life will decrease based on the years of usage and hours of use.
- If the robot cleaner cannot be charged normally, check if the charging terminals are contaminated by a foreign substance, and clean the home station with a dry towel.
- If charging is still not available after cleaning, check if the home station and the adapter are connected properly.
- Fully charge the battery every 6 months when not using the robot cleaner or keep it in storage for a long time.
- Storing the battery for a long period of time without charging may cause battery failure.

## Charging the Robot Cleaner

Always keep the power plug of the home station connected to an electrical outlet. The robot cleaner can find the home station to charge only when power is supplied to the home station.

- 1** Turning on the Power Supply. Turn the main power switch ON ❶ at the back of the robot cleaner to turn on the power supply.

### NOTE

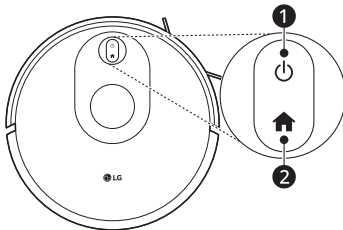
- When the main power switch is turned off, the battery % display in the ThinQ app does not change when charging. Turn on the main power switch on the back of the robot vacuum cleaner. Charging is possible even when the main power switch is turned off.
-

# OPERATION

## Control Panel

### Press Buttons

Press the button icons to start the robot cleaner.



#### 1 ⏻ Button

- Press and hold ⏻ button for 3 seconds to turn the robot cleaner on or off.
  - The button can't be pressed when in charge.
- Press the button to start or pause cleaning when the robot cleaner is on.
  - For the first use, please turn the main power switch **ON**.

#### 2 🏠 Button

- Press 🏠 button once to send the robot cleaner to its home station and charge.
- Press 🏠 button again to cancel.
- Press 🏠 button for 5 seconds after the robot cleaner announces that it is ready to clean to save energy.
  - The R5 robot cleaner's LED turns off and enters saving mode.

#### 3 ⏻ + 🏠 Button

- Press and hold ⏻ + 🏠 button for 3 seconds to connect the robot cleaner to the **LG ThinQ** app.

### Status Display

#### 1 Robot Status Display

- Battery level  $\geq 20\%$  : White
- Battery level  $< 20\%$  : Pink
- Charging : Breathing blinking in pink
- Fault status : Red

#### 2 Robot Wi-Fi Indicator

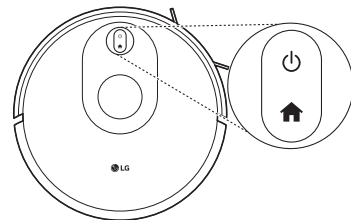
- Wait for connection : Blinking fast in white
- Being connected to Wi-Fi : Blinking fast in white

- Wi-Fi connected : White

## Cleaning

### Restarting the System

In standby mode, press and hold the home button for 15 seconds to reset the system. After resetting the system, the robot cleaner will lose the original settings including the map and do not clean areas.



# SMART FUNCTIONS

## Using LG ThinQ Application

### LG ThinQ Application Features

- **Suction Level Adjustment**

The user can use the mobile APP to switch between four suction modes: **Low**, **Mid**, **High** and **Turbo**. The default is the **Mid** mode.

- **Smart Turbo**

Automatically detects and cleans carpets using powerful suction.

Smart Turbo settings can be turned on and off in the **LG ThinQ** app. If the suction level is **Turbo**, detecting the carpet does not increase the suction power.

- **Simple Control**

- Operate the robot cleaner manually from the **Simple Control** screen.

- **Volume Setting**

- The volume of the product's voice guidance can be adjusted with the **LG ThinQ** app.

- **Language Setting**

- The user can switch the languages.

- **Locate**

- When the robot cleaner is powered on and you press the Locate button, the robot cleaner will make a sound to inform you of its current location.

- **Schedule Cleaning**

- Use Schedule Cleaning to set a regular cleaning time for the robot cleaner to begin cleaning.

- **Cleaning Diary**

- The Cleaning Diary records the date, cleaning mode, and start and completion times of each cleaning and shows the cleaning history.

- **My Zone**

With the **My Zone** feature and the **LG ThinQ** application, a designated area of the mapped home can be selected for specific cleaning attention.

- **Specified Area Cleaning:** Allows you to select part of the mapped area to clean or to clean selected areas in a certain order.

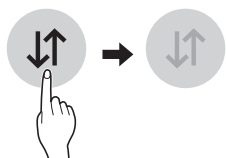
- **Do Not Clean Area:** Exclude certain areas from cleaning, such as bathrooms or pet zones, if desired. If **Do Not Clean Areas** are set too close together, the robot cleaner may be unable to clean between them.

### NOTE

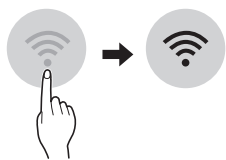
- If you change your wireless router, Internet service provider, or password, delete the connected appliance from the **LG ThinQ** application and connect it again.
- This information is current at the time of publication. The application is subject to change for product improvement purposes without notice to users.
- If you press the setting button at the top right of the screen to clean the selected area, you can edit the area and set the area to be cleaned.
- Set the cleaning prohibited area to prevent the robot vacuum from falling or being constrained to clean.
  - If it falls on the toilet or hallway
  - If you are constrained by a threshold or under a sofa
- When setting the cleaning prohibited area, consider the movement error and set the prohibited area large.
- If you set the no-clean area while the product is running, it stops cleaning and sets the prohibited area. At this time, you can continue cleaning after setting the prohibited area in a paused state during cleaning.
- If you want to save the drawing and prohibited area settings, press the power button of the robot vacuum cleaner outside the charging station for 3 seconds.
- Drawings may be deleted if the robot vacuum cleaner's main power switch is turned off. However, if the drawing is saved by pressing the power button for 3 seconds, it will not be deleted.
- If the drawing is distorted or there are missing spaces, initialize the drawing by turning the main power switch of the robot vacuum cleaner off and on before saving the drawing.
- The robot vacuum cleaner updates the drawing every time it cleans. If the robot vacuum cleaner is turned off while cleaning, the drawings up to that point are saved in the **LG ThinQ** app.
- After the drawing is completely saved, you can delete the drawing by pressing the charging button on the robot vacuum cleaner for more than 15 seconds. At this time, the product is initialized and reconnect to the **LG ThinQ** app.

## Before Using LG ThinQ Application

- 1 Use a smartphone to check the strength of the wireless router (Wi-Fi network) near the appliance.
  - If the distance between the appliance and the wireless router is too far, the signal becomes weak. It may take a long time to register or fail to install the application.
- 2 Turn off the **Mobile data** or **Cellular Data** on your smartphone.



- 3 Connect your smartphone to the wireless router.



### NOTE

- To verify the Wi-Fi connection, check that the Wi-Fi Indicator on the control panel is lit.
- The appliance supports 2.4 GHz Wi-Fi networks only. To check your network frequency, contact your Internet service provider or refer to your wireless router manual.
- **LG ThinQ** is not responsible for any network connection problems or any faults, malfunctions, or errors caused by network connection.
- The surrounding wireless environment can make the wireless network service run slowly.
- If the appliance is having trouble connecting to the Wi-Fi network, it may be too far from the router. Purchase a Wi-Fi repeater (range extender) to improve the Wi-Fi signal strength.
- The network connection may not work properly depending on the Internet service provider.
- The Wi-Fi may not connect or the connection may be interrupted because of the home network environment.
- If the appliance cannot be connected due to problems with the wireless signal transmission, unplug the appliance and wait about a minute before trying again.

- If the firewall on your wireless router is enabled, disable the firewall or add an exception to it.
- The wireless network name (SSID) should be a combination of English letters and numbers. (Do not use special characters.)
- Smartphone user interface (UI) may vary depending on the mobile operating system (OS) and the manufacturer.
- If the security protocol of the router is set to **WEP**, network setup may fail. Change the security protocol (**WPA2** is recommended), and register the product again.
- If the connection with the LG ThinQ is lost while using the product, press and hold the power button for 3 seconds to turn the product off and then on again.

## Installing the LG ThinQ Application

Search for the **LG ThinQ** application from the Google Play Store or Apple App Store on a smartphone. Follow instructions to download and install the application.

## RF Module Specifications

Type	Frequency Range	Output Power (Max)
Wi-Fi	2412 - 2462 MHz	< 30 dBm
Bluetooth	2402 - 2480 MHz	

## FCC Notice

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 the 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.

Any changes or modifications in construction of this device which are not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

**Supplier's Declaration of Conformity**

47 CFR §2.1077 Compliance Information

Trade Name	LG
Responsible Party	LG Electronics USA, Inc.
Address	111 Sylvan Avenue North Building Englewood Cliffs, NJ 07632
Email	lg.environmental@lge.com

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

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

**FCC RF Radiation Exposure Statement**

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

This equipment should be installed and operated with a minimum distance of 20 cm (7.8 inches) between the antenna and your body. Users must follow the specific operating instructions for satisfying RF exposure compliance.

**Open Source Software Notice Information**

To obtain the source code that is contained in this product, under GPL, LGPL, MPL, and other open

source licenses that have the obligation to disclose source code, and to access all referred license terms, copyright notices and other relevant documents, please visit <https://opensource.lge.com>.

LG Electronics will also provide open source code to you on CD-ROM for a charge covering the cost of performing such distribution (such as the cost of media, shipping, and handling) upon email request to [opensource@lge.com](mailto:opensource@lge.com).

This offer is valid to anyone in receipt of this information for a period of three years after our last shipment of this product.

# MAINTENANCE

## Regular Cleaning

### **⚠ WARNING**

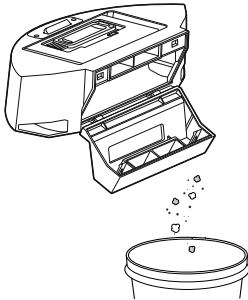
- Unplug the appliance before cleaning to avoid the risk of electric shock. Failure to follow this warning can cause serious injury, fire, electric shock, or death.

### **⚠ CAUTION**

- Do not wipe the robot cleaner with a volatile solvent or an organic solvent (thinner, solvent, acetone, etc.) Doing so will cause product damage.

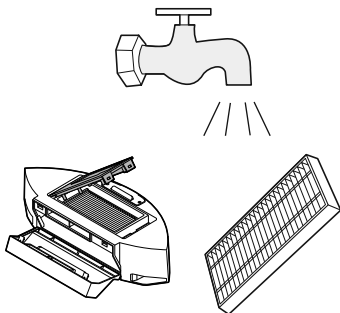
## Cleaning the Dust Bin

- 1 Remove the dust bin.



- 2 Open the dust bin cover.

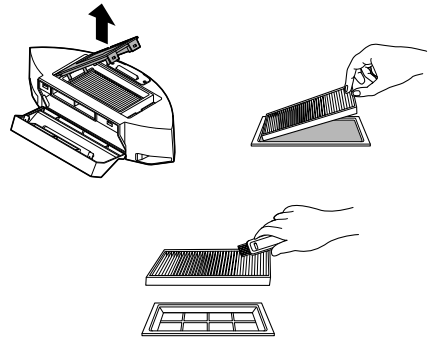
- 3 Tilt the dust canister to empty it.



- 4 Remove the filter and clean it with a cleaning brush.

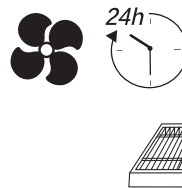
- 5 Wash the dust bin and filter under running water.

- Do not use hot water or detergent. Doing so may damage the parts.



- 6 After cleaning, dry the dust canister and filter completely before use.

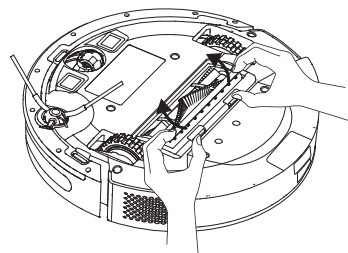
- Repeated rinsing will destroy the high-performance filter material and make it ineffective.



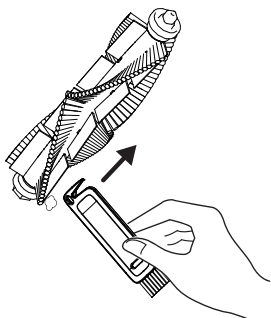
- 7 Reassemble the dried dust canister and filter and install them into the robot vacuum cleaner.

## Cleaning the Brush

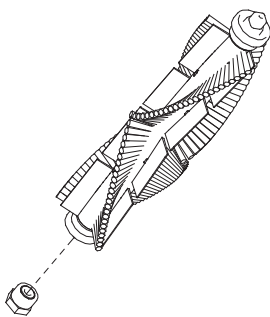
- 1 Take out the brush cover and brush.



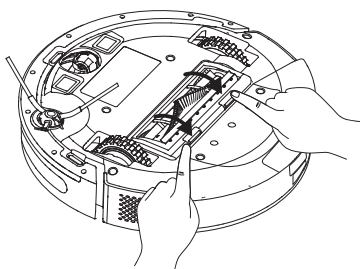
- 2 Clean the brush with a cleaning tool. The blade on the cleaning tool can cut off the hair entangled on the brush.



- 3 Remove the roller at one end of the brush and clean the hair entangled on the roller.

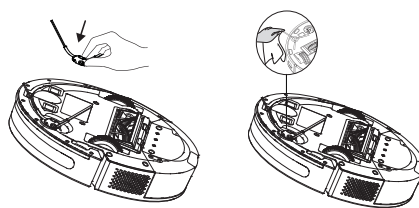


- 4 After cleaning, re-install the brush in place.



### Cleaning the Side Brush

- 1 Remove the side brush, clear it of hair or foreign matter, and if needed wipe with a damp cloth.
- 2 Re-install the side brush and press it tightly to ensure it is installed in place.

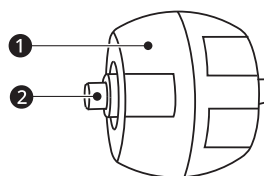


### NOTE

- Replace the side brush every 3-6 months to ensure cleaning results.

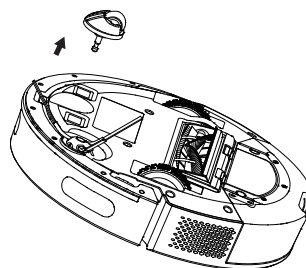
### Cleaning the Front Wheels

Hair or dust particles tend to affix to the universal wheel. The front wheel must be cleaned regularly or as needed.



- 1 Wheel
- 2 Shaft

- 1 Pull up front wheels to take them out.



- 2 Clean any hair or debris entangled around front wheels or in any front wheel chamber.
- 3 Reinstall front wheels and push them in till they click into place.

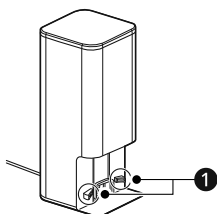
### NOTE

- Please do not rinse the front wheel with water.



## Cleaning the Charging Dock

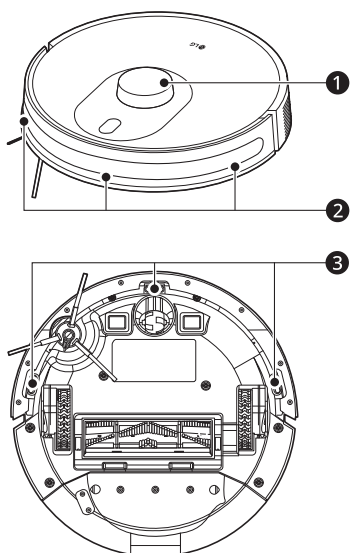
Clean the charging terminals regularly, and wipe dust off them with a soft dry cloth or brush.



- ① Charging Terminals

## Cleaning the Sensors

Clean the charging terminals clean sensors regularly, and wipe dust off them with a soft, dry cloth or brush.



- ① LIDAR Sensor
- ② Infrared Sensor for Charging
- ③ Cliff Detection Sensors

# TROUBLESHOOTING

## Before Calling for Service

### Operation

Problem	Possible Cause & Solution
Power cannot be turned on.	<b>Main power switch of the robot cleaner is turned off.</b> <ul style="list-style-type: none"> <li>Turn on the main power switch at the back of the robot cleaner.</li> </ul>
	<b>Battery is discharged completely.</b> <ul style="list-style-type: none"> <li>If needed, manually move the robot cleaner to the home station to charge.</li> </ul>
Power is turned off automatically.	<b>Robot cleaner was stopped for more than 10 minutes without being charged.</b> <ul style="list-style-type: none"> <li>If the robot cleaner has been on standby for more than 10 minutes without being charged, the power will be turned off automatically. Place the robot cleaner in the home station.</li> </ul>
	<b>Robot cleaner was trapped by an obstacle for more than 10 minutes.</b> <ul style="list-style-type: none"> <li>Remove obstacles from the area to be cleaned before starting cleaning.</li> </ul>
Charging cannot be carried out.	<b>There is an obstacle near the home station.</b> <ul style="list-style-type: none"> <li>Remove the obstacle near the home station.</li> </ul>
	<b>Main power switch of the robot cleaner is turned off.</b> <ul style="list-style-type: none"> <li>When the robot vacuum main power switch is turned off, the battery % display in the <b>LG ThinQ</b> app does not change when charging. Turn on the main power switch on the back of the robot vacuum cleaner. Charging is possible even when the main power switch is turned off.</li> </ul>
	<b>Battery charging indicator on the home station is turned off.</b> <ul style="list-style-type: none"> <li>Make sure the home station is plugged into an outlet. When the robot cleaner is normally connected to the home station, the indicator light turns off.</li> </ul>
	<b>Charging terminals are stained with foreign substances.</b> <ul style="list-style-type: none"> <li>Wipe the robot cleaner and the charging terminals of the home station with a soft cloth.</li> </ul>
	<b>Robot cleaner was charged in a cool place.</b> <ul style="list-style-type: none"> <li>The battery may not charge properly at temperatures below 41°F (5°C). Use the robot cleaner after charging the battery at proper temperatures.</li> </ul>
Suction power becomes weak.	<b>There is foreign material blocking the suction port.</b> <ul style="list-style-type: none"> <li>Remove any foreign material in the suction port.</li> </ul>
	<b>Dust bin is completely filled.</b> <ul style="list-style-type: none"> <li>Empty the dust bin.</li> </ul>
	<b>Filter is blocked.</b> <ul style="list-style-type: none"> <li>Clean the filter.</li> </ul>
The product is noisy when it's running.	<b>Dust bin is not attached to the robot cleaner correctly.</b> <ul style="list-style-type: none"> <li>Attach the dust bin correctly.</li> </ul>
	<b>Filter is not attached to the dust bin correctly.</b> <ul style="list-style-type: none"> <li>Attach the filter correctly.</li> </ul>
The product is noisier than usual.	<b>Brush is clogged with foreign substances.</b> <ul style="list-style-type: none"> <li>Remove foreign substances from the brush.</li> </ul>
	<b>Brush cover is not installed properly.</b> <ul style="list-style-type: none"> <li>Install the brush cover properly.</li> </ul>

Problem	Possible Cause & Solution
The product is noisier than usual.	<b>The robot cleaner is cleaning against the grain of the flooring.</b> <ul style="list-style-type: none"> <li>The robot cleaner may be noisier than usual if it is cleaning against the grain of the floor.</li> </ul>
The robot cleaner will not run.	<b>Main power switch of the robot cleaner is turned off.</b> <ul style="list-style-type: none"> <li>Turn on the main power switch at the back of the robot cleaner.</li> </ul>
	<b>Battery is discharged completely.</b> <ul style="list-style-type: none"> <li>If needed, manually move the robot cleaner to the home station to charge.</li> </ul>
The brush will not spin.	<b>Brush is not installed correctly.</b> <ul style="list-style-type: none"> <li>Separate and install the brush again.</li> </ul>
	<b>Brush is clogged with foreign substances.</b> <ul style="list-style-type: none"> <li>Remove foreign substances from the brush.</li> </ul>
The robot cleaner runs abnormally.	<b>Sensor is blocked with foreign substances.</b> <ul style="list-style-type: none"> <li>Wipe the sensor with a soft cloth.</li> </ul>
	<b>Wheel is blocked with foreign substances.</b> <ul style="list-style-type: none"> <li>Remove foreign substances from the wheels.</li> </ul>
	<b>The carpet got stuck in the robot.</b> <ul style="list-style-type: none"> <li>If you have a thin carpet that is easy to slip, remove the carpet or set up the <b>Do Not Clean Area</b> in <b>My Zone</b>.</li> </ul>
The floor becomes dirty after cleaning.	<b>There is liquid, coffee, animal waste or grease on the floor.</b> <ul style="list-style-type: none"> <li>If there is liquid, coffee, animal waste or grease on the floor, wipe it up with another mop first before using the robot cleaner. Stains can be picked up by the brush and carried to other parts of the floor.</li> </ul>
The robot fails to map.	<b>Remove any obstacles placed on the floor.</b> <ul style="list-style-type: none"> <li>When the robot is mapping, if there are many obstacles, the obstacles will limit its movement.</li> </ul>
	<b>Start at the charging base.</b> <ul style="list-style-type: none"> <li>If you do not start from the charging base, the actual location and the location on the map may be different.</li> </ul>
The robot is not good at removing foreign objects.	<b>If there is a step on the floor, the foreign object cannot be removed.</b> <ul style="list-style-type: none"> <li>If your rug is layered on a carpet, remove the rug or set the <b>Do Not Clean Area</b> in <b>My Zone</b>.</li> </ul>

## Wi-Fi

Problem	Possible Cause & Solution
Your home appliance and smartphone are not connected to the Wi-Fi network.	<b>Battery is fully discharged.</b> <ul style="list-style-type: none"> <li>Charge the battery, then connect your appliance to the <b>LG ThinQ</b> app.</li> </ul>
	<b>The password for the Wi-Fi that you are trying to connect to is incorrect.</b> <ul style="list-style-type: none"> <li>Find the Wi-Fi network connected to your smartphone and remove it, then connect your appliance to the <b>LG ThinQ</b> app.</li> </ul>
	<b>Mobile data for your smartphone is turned on.</b> <ul style="list-style-type: none"> <li>Turn off the <b>Mobile data</b> of your smartphone and connect the appliance using the Wi-Fi network.</li> </ul>

Problem	Possible Cause & Solution
Your home appliance and smartphone are not connected to the Wi-Fi network.	<b>The wireless network name (SSID) is set incorrectly.</b> <ul style="list-style-type: none"><li>The wireless network name (SSID) should be a combination of English letters and numbers. (Do not use special characters.)</li></ul>
	<b>The router frequency is not 2.4 GHz.</b> <ul style="list-style-type: none"><li>Only a 2.4 GHz router frequency is supported. Set the wireless router to 2.4 GHz and connect the appliance to the wireless router. To check the router frequency, check with your Internet service provider or the router manufacturer.</li></ul>
	<b>The appliance is too far from the router.</b> <ul style="list-style-type: none"><li>If the appliance is too far from the router, the signal may be weak and the connection may not be configured correctly. Move the location of the router so that it is closer to the appliance.</li></ul>

# LIMITED WARRANTY

## USA

### TERMS AND CONDITIONS

**ARBITRATION NOTICE: THIS LIMITED WARRANTY CONTAINS AN ARBITRATION PROVISION THAT REQUIRES YOU AND LG ELECTRONICS ("LG") TO RESOLVE DISPUTES BY BINDING ARBITRATION INSTEAD OF IN COURT, UNLESS YOU CHOOSE TO OPT OUT. IN ARBITRATION, CLASS ACTIONS AND JURY TRIALS ARE NOT PERMITTED. PLEASE SEE THE SECTION TITLED "PROCEDURE FOR RESOLVING DISPUTES" BELOW.**

Should your LG Robot Cleaner ("Product") fail due to a defect in materials or workmanship under normal and proper use, during the warranty period set forth below, LG will, at its option, repair or replace the Product. This limited warranty is valid only to the original retail purchaser of the Product ("You") and applies only when purchased lawfully and used within the United States including U.S. Territories.

WARRANTY PERIOD
Robot Cleaner & Charging Station
One (1) year from the date of original retail purchase.
Parts & Labor: LG will at its discretion provide repair or replacement of defective parts.

- Replacement Products and parts are warranted for the remaining portion of the original warranty period or ninety (90) days, whichever is greater.
- Replacement Products and parts may be new, reconditioned, refurbished, or otherwise factory remanufactured.
- Replaced Product or part(s) will be the property of LG.
- Proof of original retail purchase specifying the Product model and date of purchase is required to obtain warranty service under this limited warranty.

**EXCEPT TO THE EXTENT PROHIBITED BY APPLICABLE LAW, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ON THE PRODUCT IS LIMITED IN DURATION TO THE DURATION OF THE ABOVE LIMITED WARRANTY. UNDER NO CIRCUMSTANCES SHALL LG OR ITS U.S. DISTRIBUTORS/DEALERS BE LIABLE FOR ANY INDIRECT, INCIDENTAL, CONSEQUENTIAL, SPECIAL, OR PUNITIVE DAMAGES, INCLUDING, WITHOUT LIMITATION, LOST GOODWILL, LOST REVENUES OR PROFITS, WORK STOPPAGE, IMPAIRMENT OF OTHER GOODS, COST OF REMOVAL AND REINSTALLATION OF THE PRODUCT, LOSS OF USE, OR ANY OTHER DAMAGES WHETHER BASED IN CONTRACT, TORT, OR OTHERWISE. LG'S TOTAL LIABILITY, IF ANY, SHALL NOT EXCEED THE PURCHASE PRICE PAID BY YOU FOR THE PRODUCT.**

**SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES OR LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE EXCLUSIONS OR LIMITATIONS MAY NOT APPLY TO YOU. THIS LIMITED WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS AND YOU MAY ALSO HAVE OTHER RIGHTS THAT VARY FROM STATE TO STATE.**

### THIS LIMITED WARRANTY DOES NOT COVER:

- Service trips to deliver, pick up, or install, educate how to operate, correct wiring, or correct unauthorized repairs.
- Damage or failure of the Product to perform during power failures and interrupted or inadequate electrical service.
- Damage or failure of the Product caused by leaky or broken water pipes, frozen water pipes, restricted drain lines, inadequate or interrupted water supply or inadequate supply of air.
- Damage or failure of the Product resulting from operating the Product in a corrosive atmosphere or contrary to the Product owner's manual.

## 22 LIMITED WARRANTY

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- Damage or failure of the Product caused by accidents, pests and vermin, lightning, wind, fire, floods, acts of nature, or any other causes beyond the control of LG.
- Damage or failure of the Product caused by unauthorized modification or alteration, or if the Product is used for other than the intended purpose, or any water leakage where the Product was not properly installed.
- Damage or failure of the Product caused by incorrect electrical current, voltage, or plumbing codes.
- Damage or failure of the Product caused by transportation, storage, and/or handling, including scratches, dents, chips, and/or other damage to the finish of the Product, unless such damage is reported within one (1) week of delivery.
- Damage or failure of the Product resulting from misuse, abuse, improper installation, repair, or maintenance. Improper repair includes the use of parts not authorized by LG. Improper installation or maintenance includes installation or maintenance contrary to the Product owner's manual.
- Damage or failure of the Product caused by the use of parts, components, accessories, consumable cleaning products, or any other products or services that were not authorized by LG.
- Damage or missing items to any display or open box Product.
- Refurbished Product or any Product sold "As Is", "Where Is", "With all Faults", or similar disclaimer.
- Products with original serial numbers that have been removed, altered, or cannot be readily determined.
- Increases in utility costs and additional utility expenses.
- Any noises associated with normal operation.
- Products used for other than normal and proper household use (e.g., commercial or industrial use) or contrary to the Product owner's manual.
- Costs associated with removal and reinstallation of the Product for repairs, or the removal and reinstallation of the Product if it is installed in an inaccessible location or not installed in accordance with the Product Owner's manual.
- Accessories, removable components, or consumable parts (e.g. Shelves, door bins, drawers, water/air filters, racks, light bulbs, batteries, etc., as applicable), except for internal/functional parts covered under this limited warranty.
- Service trips to educate how to assemble, operate, or maintain the Product.

**The cost of repair or replacement under these excluded circumstances shall be borne by You.**

TO OBTAIN WARRANTY SERVICE AND ADDITIONAL INFORMATION

Call 1-800-243-0000 and select the appropriate option from the menu.

Or visit our website at <http://www.lg.com>

Or by mail: LG Electronics Customer Service P.O. Box 240007 Huntsville, AL 35813 ATTN: CIC

### PROCEDURE FOR RESOLVING DISPUTES:

ALL DISPUTES BETWEEN YOU AND LG ARISING OUT OF OR RELATING IN ANY WAY TO THIS LIMITED WARRANTY OR THE PRODUCT SHALL BE RESOLVED EXCLUSIVELY THROUGH BINDING ARBITRATION, AND NOT IN A COURT OF GENERAL JURISDICTION. BINDING ARBITRATION MEANS THAT YOU AND LG ARE EACH WAIVING THE RIGHT TO A JURY TRIAL AND TO BRING OR PARTICIPATE IN A CLASS ACTION.

**Definitions.** For the purposes of this section, references to "LG" mean LG Electronics U.S.A., Inc., its parents, subsidiaries and affiliates, and each of their officers, directors, employees, agents, beneficiaries, predecessors in interest, successors, assigns and suppliers; references to "dispute" or "claim" shall include any dispute, claim or controversy of any kind whatsoever (whether based in contract, tort, statute, regulation, ordinance, fraud, misrepresentation or any other legal or equitable theory) arising out of or relating in any way to the sale, condition or performance of the product or this Limited Warranty.

**Notice of Dispute.** In the event you intend to commence an arbitration proceeding, you must first notify LG in writing at least 30 days in advance of initiating the arbitration by sending a letter to LG at LG Electronics USA, Inc. Attn: Legal Department- Arbitration 111 Sylvan Avenue, Englewood Cliffs, NJ 07632. You and LG agree to engage in good faith discussions in an attempt to amicably resolve your claim. The notice must provide your name, address, and telephone number; identify the product that is the subject of

the claim; and describe the nature of the claim and the relief being sought. If you and LG are unable to resolve the dispute within 30 days, either party may proceed to file a claim for arbitration.

**Agreement to Binding Arbitration and Class Action Waiver.** Upon failure to resolve the dispute during the 30 day period after sending written notice to LG, you and LG agree to resolve any claims between us only by binding arbitration on an individual basis, unless you opt out as provided below. Any dispute between you and LG shall not be combined or consolidated with a dispute involving any other person's or entity's product or claim. More specifically, without limitation of the foregoing, any dispute between you and LG shall not under any circumstances proceed as part of a class or representative action. Instead of arbitration, either party may bring an individual action in small claims court, but that small claims court action may not be brought on a class or representative basis.

**Arbitration Rules and Procedures.** To begin arbitration of a claim, either you or LG must make a written demand for arbitration. The arbitration will be administered by the American Arbitration Association ("AAA") and will be conducted before a single arbitrator under the AAA's Consumer Arbitration Rules that are in effect at the time the arbitration is initiated (referred to as the "AAA Rules") and under the procedures set forth in this section. The AAA Rules are available online at [www.adr.org/consumer](http://www.adr.org/consumer). Send a copy of your written demand for arbitration, as well as a copy of this provision, to the AAA in the manner described in the AAA Rules. You must also send a copy of your written demand to LG at LG Electronics USA, Inc. Attn: Legal Department- Arbitration 111 Sylvan Avenue, Englewood Cliffs, NJ 07632. If there is a conflict between the AAA Rules and the rules set forth in this section, the rules set forth in this section will govern. This arbitration provision is governed by the Federal Arbitration Act. Judgment may be entered on the arbitrator's award in any court of competent jurisdiction. All issues are for the arbitrator to decide, except that issues relating to the scope and enforceability of the arbitration provision and to the arbitrability of the dispute are for the court to decide. The arbitrator is bound by the terms of this provision.

**Governing Law.** The law of the state of your residence shall govern this Limited Warranty and any disputes between us except to the extent that such law is preempted by or inconsistent with applicable federal law.

**Fees/Costs.** You do not need to pay any fee to begin an arbitration. Upon receipt of your written demand for arbitration, LG will promptly pay all arbitration filing fees to the AAA unless you seek more than \$25,000 in damages, in which case the payment of these fees will be governed by the AAA Rules. Except as otherwise provided for herein, LG will pay all AAA filing, administration and arbitrator fees for any arbitration initiated in accordance with the AAA Rules and this arbitration provision. If you prevail in the arbitration, LG will pay your attorneys' fees and expenses as long as they are reasonable, by considering factors including, but not limited to, the purchase amount and claim amount. Notwithstanding the foregoing, if applicable law allows for an award of reasonable attorneys' fees and expenses, an arbitrator can award them to the same extent that a court would. If the arbitrator finds either the substance of your claim or the relief sought in the demand is frivolous or brought for an improper purpose (as measured by the standards set forth in Federal Rule of Civil Procedure 11(b)), then the payment of all arbitration fees will be governed by the AAA Rules. In such a situation, you agree to reimburse LG for all monies previously disbursed by it that are otherwise your obligation to pay under the AAA Rules. Except as otherwise provided for, LG waives any rights it may have to seek attorneys' fees and expenses from you if LG prevails in the arbitration.

**Hearings and Location.** If your claim is for \$25,000 or less, you may choose to have the arbitration conducted solely on the basis of (1) documents submitted to the arbitrator, (2) through a telephonic hearing, or (3) by an in-person hearing as established by the AAA Rules. If your claim exceeds \$25,000, the right to a hearing will be determined by the AAA Rules. Any in-person arbitration hearings will be held at a location within the federal judicial district in which you reside unless we both agree to another location or we agree to a telephonic arbitration.

**Opt Out.** You may opt out of this dispute resolution procedure. If you opt out, neither you nor LG can require the other to participate in an arbitration proceeding. To opt out, you must send notice to LG no later than 30 calendar days from the date of the first consumer purchaser's purchase of the product by either: (i) sending an e-mail to [optout@lge.com](mailto:optout@lge.com), with the subject line: "Arbitration Opt Out" or (ii) calling 1-800-980-2973. You must include in the opt out e-mail or provide by telephone: (a) your name and address; (b) the date on which the product was purchased; (c) the product model name or model number; and (d) the serial number (the serial number can be found (i) on the product; or (ii) online by accessing <https://www.lg.com/us/support/repair-service/schedule-repair-continued> and clicking on "Find My Model & Serial Number").

You may only opt out of the dispute resolution procedure in the manner described above (that is, by e-mail or telephone); no other form of notice will be effective to opt out of this dispute resolution procedure. Opting out of this dispute resolution procedure will not affect the coverage of the Limited Warranty in any way, and you will continue to enjoy the full benefits of the Limited Warranty. If you keep this product and do not opt out, then you accept all terms and conditions of the arbitration provision described above.











**LG Customer Information Center**

For inquiries or comments,  
visit **www.lg.com** or call:  
**1-800-243-0000** U.S.A.

**Register your product Online!**

**www.lg.com**