POWERbot

User manual

VR2AR72**** Series

- Before operating this unit, please read the instructions carefully.
- For indoor use only.

SAMSUNG

Contents

Safety information

SAFETY INFORMATION

⚠ **WARNING** · Before operating the appliance, please read this manual thoroughly and retain it for your reference.

⚠ **WARNING** · Because these following operating instructions cover various models, the characteristics of your vacuum cleaner may differ slightly from those described in this manual.

CAUTION/WARNING SYMBOLS USED

⚠ WARNING	Indicates that a danger of death or serious injury exists.
⚠ CAUTION	Indicates that a risk of personal injury or material damage exists.

OTHER SYMBOLS USED

📄 NOTE	Indicates that the following text contains additional important information.

State of California Proposition 65 Warning (US only)

⚠ **WARNING** This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

♻ **For battery recycling go to call2recycle.org or call 1-800-822-8837**

IMPORTANT SAFETY INSTRUCTIONS

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

READ ALL INSTRUCTIONS BEFORE USING YOUR POWERbot.

Unplug the battery charger / docking station from outlet when not in use and before conducting maintenance.

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

Safety information

GENERAL

- Use only as described in this manual.
- Do not operate POWERbot or the battery charger / docking station if it has been damaged in any way.
- If the vacuum cleaner is not working as it should, has been dropped, damaged, left outdoors, or dropped in water, return it to a customer care center.
- Do not handle the battery charger / docking station or POWERbot with wet hands.
- Use only on dry, indoor surfaces.
- 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. Do not let children clean or perform user maintenance on the POWERbot without adult supervision.
- 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.
- 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.
- If the supply cord is damaged, it must be replaced by the manufacturer or its service agent or a similarly qualified person in order to avoid a hazard.

Battery charger / Docking station

- Do not modify the polarized plug to fit a non-polarized outlet or extension cord.
- Do not use outdoors or on wet surfaces.
- Unplug the battery charger / docking station from the outlet when not in use and before servicing.
- Use only the battery charger / docking station supplied by the manufacturer to recharge.
- Do not use with a damaged cord or plug or a loose power outlet.
- Do not pull or carry by the cord, use the cord as a handle, close the door on the cord, or pull the cord around sharp edges or corners. Keep the cord away from heated surfaces.
- Do not use extension cords or outlets with inadequate current carrying capacity.
- Do not unplug by pulling on the cord. To unplug, grasp the plug, not the cord.
- Do not mutilate or incinerate batteries as they will explode at high temperatures.

- Do not attempt to open the battery charger / docking station. Repairs should only be carried out by a qualified customer care center.
- Do not expose the battery charger / docking station to high temperatures or allow moisture or humidity of any kind to come into contact with the battery charger / docking station.
- Do not charge the non-rechargeable batteries with the battery charger / docking station.

POWERbot

- Do not pick up hard or sharp objects such as glass, nails, screws, coins, and etc.
- Do not use without a filter in place. When servicing the unit, never put fingers or other objects into the fan chamber in case the unit accidentally turns on.
- Do not put any objects into openings. Do not use with any openings blocked; keep openings free of dust, lint, hair, and anything that may reduce air flow.
- Do not pick up toxic materials (chlorine bleach, ammonia, drain cleaner, etc.).
- Do not pick up anything that is burning or smoke, such as cigarettes, matches, or hot ashes.
- Do not use to pick up flammable or combustible liquids such as gasoline, nor use on areas where they may be present.
- Locations with candles or desk lamps on the floor.
- Locations with unattended fires (fire or embers).
- Locations with distilled alcohol, thinner, ashtrays with burning cigarettes, etc.
- Do not use POWERbot in an enclosed space filled with vapours given off by oil based paint, paint thinner, moth proofing substances, flammable dust, or other explosive or toxic vapours.
- Leaks from battery cells can occur under extreme usage or temperature conditions. If the liquid gets on skin, wash quickly with water. If the liquid gets into the eyes, flush them immediately with clean water for a minimum of 10 minutes. Seek medical attention.

SAVE THESE INSTRUCTIONS

POLARIZED PLUG INSTRUCTIONS

- To reduce the risk of electric shock, this appliance has a polarized plug (one blade is wider than the other). This plug will fit in a polarized outlet only one way. If the plug does not fit fully in the outlet, reverse the plug. If it still does not fit, contact a qualified electrician to install a proper outlet. Do not modify the plug in any way.

Safety information

REGULATORY NOTICE

1. FCC Notice

⚠ **CAUTION** **FCC CAUTION:**

- Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
- This device complies with Part 15 of FCC Rules. Operation is Subject to following two conditions:
  1. This device may not cause harmful interference, and
  2. This device must accept any interference received including interference that cause undesired operation.
- For products available in the US and Canadian markets, only channels 1~11 are available. You cannot select other channels.

FCC STATEMENT:

- This equipment has been tested and found to comply within 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:
  – Reorienting or relocating the receiving antenna
  – Increasing the separation between the equipment and receiver
  – Connecting the equipment to an outlet that is on a different circuit from the radio or TV.
  – Consulting the dealer or an experienced radio/TV technician for help.

FCC RADIATION EXPOSURE STATEMENT:

- This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated so there are at least 8 inches (20 cm) between the radiator and your body. This device and its antenna(s) must not be co-located or operated in conjunction with any other antenna or transmitter.

2. IC Notice

- The term "IC" before the radio certification number only signifies that Industry Canada technical specifications were met. Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.
- This Class B digital apparatus complies with Canadian ICES-003.
- Cet appareil numérique de la classe B est conforme á la norme NMB-003 du Canada.
- For products available in the US and Canadian markets, only channels 1~11 are available. You cannot select other channels.

IC RADIATION EXPOSURE STATEMENT:

- This equipment complies with IC RSS-102 radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated so there are at least 8 inches (20 cm) between the radiator and your body. This device and its antenna(s) must not be co-located or operated in conjunction with any other antenna or transmitter.

Open Source License Notice

- This device uses open source software. Open Source Licenses are available on the product menu.
- Tap "Settings > Network > Software Update > Legal Information" on the device for more details.

Unintentional emitter per FCC Part 15

Product type/model : Robot vacuum cleaner/ VR2AR72****

Responsible Party – U.S. Contact Information

Samsung Electronics America, Inc.
QA Lab America
19 Chapin Rd. Building D Pine Brook NJ 07058
Tel: 1-973-808-6375 Fax: 1-973-808-63

Safety information

Power related

▸ Please prevent any risk of electric shock or fire.
  - Do not damage the power cord.
  - Do not pull the power cord too hard or touch the power plug with wet hands.
  - Do not use a power source other than 100-240 V~ and also do not use a multi outlet to supply power to number of devices at the same time. (Do not leave the cord carelessly on the floor.)
  - Do not use a damaged power plug, power cord or loose power outlet.
▸ Clean dust or any foreign matters on the pin and contact part of the power plug.
  - There is a risk of electric shock or malfunction.

⚠ WARNING **Before use**

▸ Do not use POWERbot near a heater or combustible materials.
  - Do not use POWERbot near fire or flame such as a movable heater, a candlelight, a desk lamp, a fireplace etc. or in a place where combustible materials such as gasoline, alcohol, thinner etc. exist.
▸ Make sure there are no dangerous objects around the POWERbot's cleaning area to prevent collision and unplug any electric heaters or fans.
▸ The POWERbot is intended for household use therefore do not use it in an attic, basement, storage, industrial building, out of indoor space, places with moisture (such as bathroom, laundry), on the table or shelves.
  - The POWERbot can be damaged or malfunction.
▸ Be sure POWERbot does not pass through or touch any kind of liquids.
  - The POWERbot can be severely damaged and it may contaminate other areas if the wheels pass through liquid.

▸ Attach the boundary markers on a place where the POWERbot may fall such as a stair or banister to prevent product damage and injury.
  - Please keep the cliff sensor clean all the time for safety.
▸ Do not spill any liquids on the docking station.
  - There is a risk of fire or electric shock.
▸ Do not use the docking station for anything other than its intended purpose.
  - There is a risk of fire or severe damage to the docking station.
▸ Always keep the cliff sensor clean for your safety.

⚠ WARNING **In use**

▸ If any abnormal sounds, smells or smoke come from POWERbot, immediately shut off the emergency switch at the bottom of POWERbot and contact a service center.

⚠ WARNING **Cleaning and maintenance**

▸ When power cord is damaged, contact a service center to get it replaced by a certified repairman.
  - There is a risk of fire or electric shock.
▸ Please check with a Samsung Electronics service center when exchanging batteries.
  - Using batteries from other products can cause malfunction.

⚠ CAUTION **Before use**

▸ Insert the dustbin before using POWERbot.
▸ Be careful with the followings for proper automatic recharging.
  - Always turn on the power of the docking station.
  - Install the docking station where POWERbot can easily find.
  - Do not leave any object in front of the docking station.

- When installing the docking station, do not leave the cord carelessly on the floor since POWERbot may get tangled by it.
- Do not use POWERbot on black colored floors.
  - The POWERbot may not be able to operate normally.
- Do not place any objects within 1.6 ft (0.5 m) of either side of the docking station or within 3.3 ft (1 m) of the front of the docking station.
- Make sure the docking station's charging contact is not damaged or have any foreign matters on it.
- Do not install the docking station in an area with a dark floor.
  - If the floor around the docking station is dark, recharging is hindered.
- Move any obstacles that may disturb POWERbot's movement (such as children's indoor swing or slides) before cleaning.
- Do not use the POWERbot in a place which is narrower than its turning radius (1.6 ft/0.5 m or less).
- To clean all areas of your house, open all rooms and attach the boundary markers on the places where the POWERbot may get damaged such as a front door, veranda, bathroom, and stairs for safety.
- For the very low areas where the POWERbot may get stuck, attach the boundary markers to prevent the POWERbot from getting in.
- If a brush or brush cover is not assembled correctly, scratches may occur on the floor, or product malfunction may occur.
- Before operating the POWERbot, remove the objects which could break such as a frame, mirror, and porcelain items so that the POWERbot works without interruption.

⚠ CAUTION | In use

- Using the POWERbot on thick carpet may damage both the POWERbot and the carpet.
  - The POWERbot cannot pass over carpet that is thicker than 0.4 in (1 cm).
- Do not use POWERbot on tables or other high surfaces.
  - There is a risk of damage if it falls.
- The POWERbot may bump into chair, desk legs therefore move them away for faster and efficient cleaning.
- When POWERbot is operating, do not lift it up or carry it to another area.
- Do not hold by driving wheels of POWERbot when carrying it to another area.
- Do not put any objects on top of POWERbot and camera since it may cause malfunction.
- Remove any large papers or plastic bags immediately when using POWERbot since they may block the intake.
- Do not aim the red pointer directly at people or animals.
- Do not lie down around the POWERBOT that is running.
  - Your hair may be caught in the brush, resulting in physical injury.
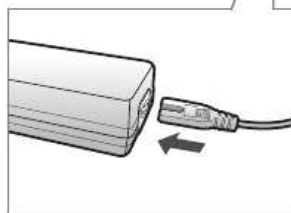
⚠ CAUTION | Cleaning and maintenance

- Prevent any damage to POWERbot by complying with the following
  - Do not clean POWERbot by spraying water directly onto it or use benzene, thinner, acetone or alcohol to clean it.
- Do not disassemble or repair POWERbot. This should only be done by a certified repairman.
- Always keep the obstacle sensor, cliff sensor and camera clean.
  - If foreign matter accumulates, sensors may malfunction.

Installation

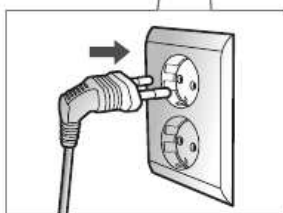The docking station must be plugged in and turned on at all times.

Install the docking station in a place without obstacles and danger of falling.

About 1 m

About 0.5 m

About 0.5 m

DC-IN
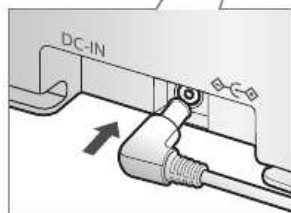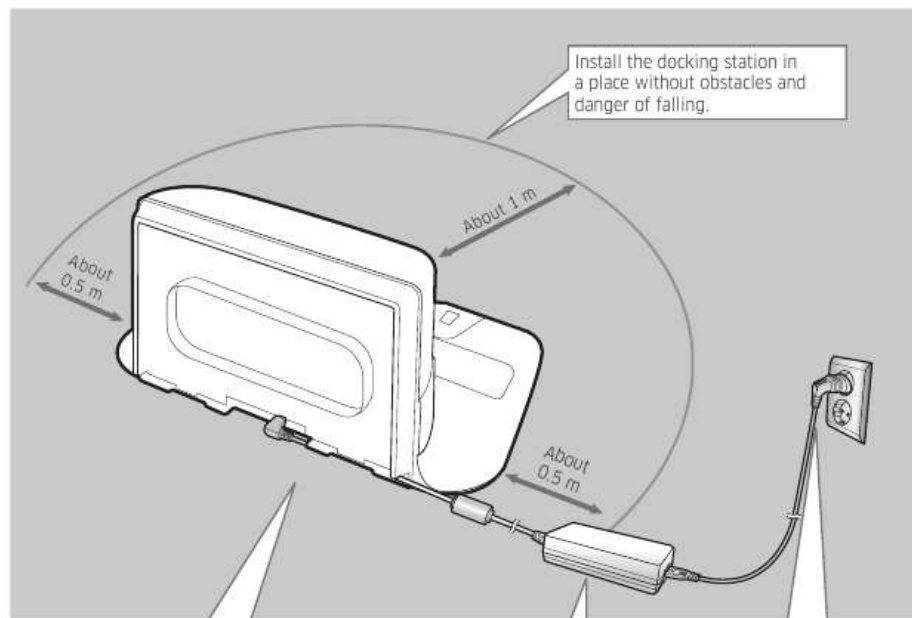
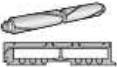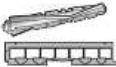**1** Connect the battery charger jack to the docking station

2 Connect the power cord to the battery charger

When using the battery charger, the side with the sticker attached must face down.

3 Connect the power plug to the outlet

Accessories

Remote controller	Batteries (AAA type)	User manual	Spare filter	Docking station
Power cord	Battery charger	Boundary markers	Soft Action Brush / Brush cover	Combo Brush / Brush cover

✽ Accessories may differ depending on the models.
✽ Refer to page 17 for the installation of boundary markers.
✽ Battery Spec : Lithium-ion, 21.6V, 3600mAh, 12cell
✽ For VR2A726*** models, combo brush and soft action brush are provided.

Installation note

🗒 Note

▶ Install the docking station in a place where the floor and wall are level.
▶ It is best to install the docking station along the grain of wooden floors.
▶ If the emergency switch is off, the POWERbot will not charge even if it is docked on the docking station.
▶ Always turn on the power of the docking station.
  – If power is not supplied to the docking station, the POWERbot cannot find it and cannot automatically recharge.
  – If the POWERbot is left detached from the docking station, the battery will drain naturally.
▶ If the POWERbot is in sleep mode, power will not come on even if the emergency switch is turned off and then on. Press and hold the [Start/Stop] button on the POWERbot to turn the sleep mode off.

Charging

Charge the POWERbot fully before using for the first time. (Refer to the page 35 for the charging time.)

> ⚠️ **WARNING**
> • Rated input voltage of this product is 100-240 V~.
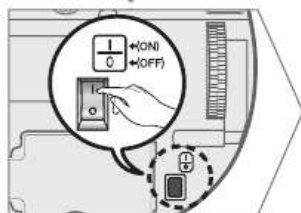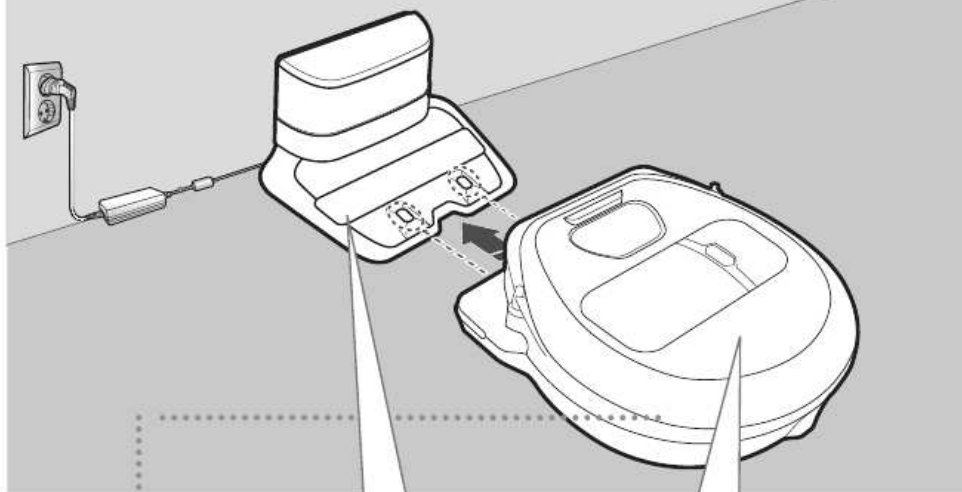
1 Turn on the emergency switch on the bottom

You must turn on the emergency switch to turn on the POWERbot.

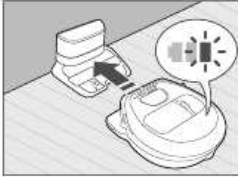## 2 Manually charge the POWERbot by placing it on the docking station

Make sure the charging pins on the POWERbot and the docking station are aligned.

3 Check the charging status

"⊞⊞ ⊞⊞" will turn on according to charging progress and "FULL" will turn on when charging is complete.
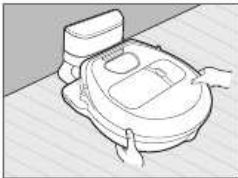
Automatic charging

When the battery indicator blinks during cleaning, the **POWERbot** will return to the docking station to charge itself automatically.

Recharging

You can command the **POWERbot** to recharge at the docking station while it is in cleaning.

Low battery (Lo)

Manually charge the **POWERbot** by placing it on the docking station.

Steps to take if recharging not occuring:

Check the installation status of the docking station when:

▸ the docking station is located in a place where the POWERbot cannot easily access it.
▸ the distance between the docking station and POWERbot is over 16.4 ft (5 m).
 – It may take a long time for POWERbot to return to the docking station for recharging

Manually charge the POWERbot when:

▸ the docking station is located in a corner
▸ the battery is fully exhausted
▸ the POWERbot is immobilized by an obstacle (furniture etc.)
▸ the POWERbot can't climb a threshold near the docking station (The maximum height of a threshold the POWERbot can climb is about 0.6 in (1.5 cm)).
▸ when the battery indicator blinks and "Lo" is displayed
▸ when the POWERbot is set to the Spot clean or Manual clean mode

Using POWERbot

You must turn on the emergency switch on the bottom of the unit before using **POWERbot**.

Turning the power on/off

Press the ⊳‖ button for more than 3 seconds

> ⚠ **WARNING** • When POWERbot is not used for about 30 minutes, it automatically returns to the docking station to recharge.

Starting Auto clean mode

The POWERbot moves and automatically cleans the set areas only once.

⊳‖

✳ Stop cleaning: Press and release the ⊳‖ button

Using Spot clean mode

The POWERbot cleans a localized area intensely.

Recharging/Energy-saving mode

▸ Recharging
You can command POWERbot to recharge at the docking station automatically while it is cleaning by pressing this button.
▸ Energy-saving mode
Refer to page 17.

Selecting cleaning modes

Cleaning mode	How to select	Displayed icon
Auto clean		
Spot clean		
Repeat clean	* Press the [(Repeat)] on the remote controller first and then press the [Start/Stop ⟨⟩].	
Manual clean	* Manual clean mode can be selected by the direction control buttons of the remote controller.	

* If POWERbot fails to return to the docking station, it will turn to energy-saving mode and display panel will be turned off.

* To exit the energy-saving mode, press the [Start/Stop ⟨⟩] or [Power ⟨⟩] button of main body or remote controller.

* If cleaning in Auto clean mode is completed within 15 minutes, POWERbot cleans 1 more time.
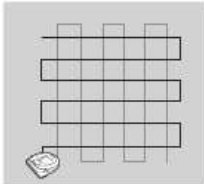
* POWERbot increases suction power in Spot clean and Point cleaning mode.

Using POWERbot

Cleaning method for each modes
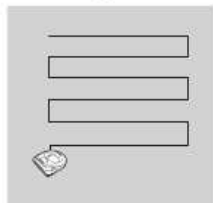
Auto clean

Automatically cleans the set areas only once.

About 1.5 m

About 1.5 m
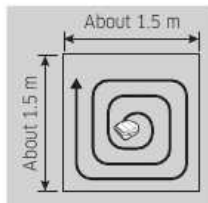
Spot clean

Cleans a localized area intensely. It can be used to clean bread or cookie crumbs.

Manual clean

You can move POWERbot with the remote controller to clean the desired spot.
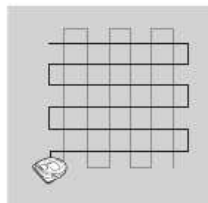
Repeat clean

Cleans repeatedly until the battery is depleted.

📄 Note

▶ If you select Auto clean or Repeat clean, the POWERbot cleans the area near the docking station first.

Using special cleaning functions

Cleaning function	Operation	Displayed icon
Intelligent power control	✲ When the POWERbot detects a carpet in normal mode, it will automatically operate with stronger suction power.	
Edge Clean Master	✲ When the POWERbot detects an edge or corner in Auto clean or Spot clean, the auto shutter tool operates and approaches the edge or corner section to clean. ▶ Straight edge (One time cleaning) ▶ Corner (Two times cleaning)	

About the boundary markers

To prevent the POWERbot from entering the following areas, place the boundary markers on the floor in an ⊏ shape at intervals of about 5.9 in (15 cm).

About 5.9 in (15 cm)

About 1.9 in (5 cm)

Boundary markers
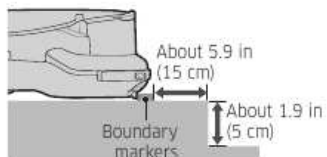
Where a raised spot exceeds 1.9 in (5 cm)

About 5.9 in (15 cm)

Boundary markers

Where there is a slide, swing, fireplace, or any flammable substance or moisture.

Above 0.6 in (1.5 cm)

boundary markers
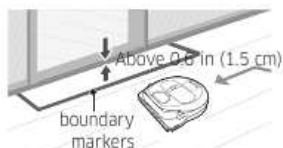
Where a threshold is higher than 0.6 in (1.5 cm)

Boundary markers
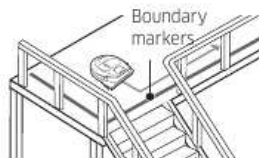
Where there is risk of falling such as near stairs, porches, or guardrails.

Using Energy-saving mode

You can select the Energy-saving mode to save energy during battery charging. Energy-saving mode turns off all functions except battery charging. Use it to reduce power consumption while you are away from home for an extended period of time.

How to select or cancel		Displayed icon	
	Press for 5 sec.	5A_E	❋About 3 seconds later, the previous indicator will appear.

📄 Note

▶ If you select the Auto/Max/Manual clean mode or press the Point cleaning button, the Energy-saving mode will be cancelled.

▶ When Energy-saving mode is on, setting the schedule will cancel Energy-saving mode.
 – If you select the Energy-saving mode after setting the schedule, the schedule will not be cancelled.

▶ If the docking station is off, Energy-saving mode will be cancelled.

▶ If the battery is completely flat, place the POWERbot on the docking station, and then press the [Start/Stop ⏯] button on the main body.

Using the remote controller

Labels on remote: 1, 3, 1, 2, 5, 6, 2, 4, 4, Refer to page 21

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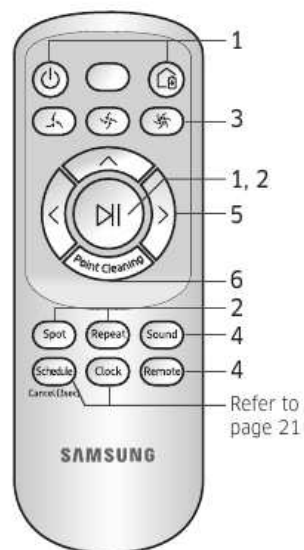
1 Operation & Recharging

Power	⏻	Turn POWERbot's power on/off
Recharging		Select to recharge POWERbot at the docking station automatically
Start/Stop	▷II	Select to start or stop cleaning process

2 Cleaning modes

Auto clean	▷II	Select to clean all set areas only once and then automatically return to the docking station.
Spot clean	Spot	Select to clean a localized area intensely
Repeat clean	Repeat	Select to clean repeatedly until the battery becomes very low with indicator blinking

3 Suction power

Turbo mode		Select to clean with the strongest suction power
Normal mode		Select to clean with moderate suction power
Quiet mode		Select to clean with lower operation noise

4 Additional function

Sound	Sound	Select to set the voice guide ▸ Voice Guide (English) → Sound Effects → Mute ▸ Press and hold the sound button to change and set a language.
Remote control	Remote	Select to turn Wi-Fi function on or off

✱ Turning the emergency switch off and then on will not cancel or change the settings.

5 Manual clean mode & Direction control

Move forward		Select to move forward
Turn left		Select to turn left
Turn right		Select to turn right

✲ Moving backward is not available.

6 Point cleaning

You can use the remote controller to point and clean the desired spot while the POWERbot is in cleaning process.

Point the red light on the floor within 0.5 m around POWERbot's location.

Press and hold the Point cleaning button to move the red light to the desired spot. The POWERbot will follow the light while cleaning.

▶ If you point the red light directly at the body of the POWERbot, abnormal operation may occur. Therefore, point the red light within 0.5 m around the POWERbot.
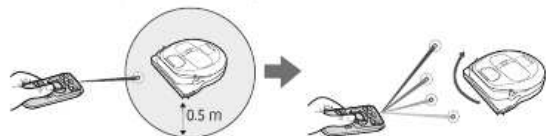
Operating distance of the remote controller
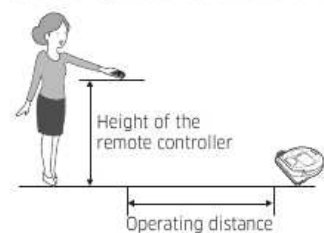
Height of the remote controller	1.6 ft (0.5 m)	3.3 ft (1 m)	4.9 ft (1.5 m)
Operating distance	About 4.9 ft (1.5 m)	About 6.6 ft (2 m)	About 9.8 ft (3 m)

Inserting batteries

Open the battery cover by lifting it up while pressing the locking tab and insert the batteries as shown in the illustration. Then, close the cover until it clicks into place.
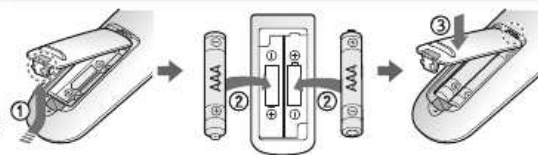
Name of each part
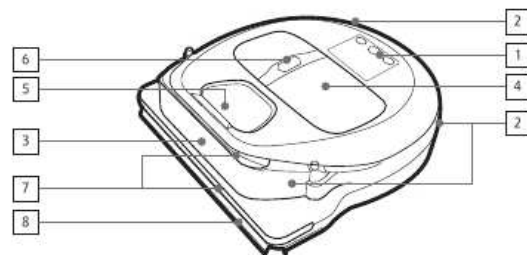
Top

1. Display panel
2. Remote control signal receiver
3. Obstacle sensor
4. Dustbin
5. Camera
6. Dustbin button
7. Bumper sensor
8. Auto shutter tool
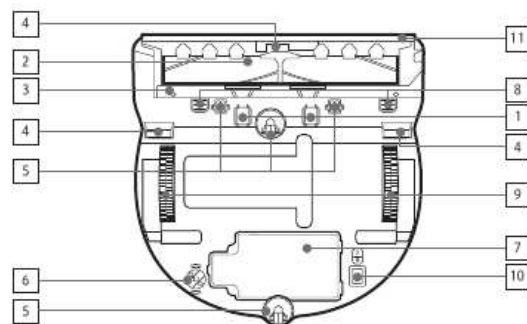
Bottom

1. Charge pins
2. Brush
3. Brush cover
4. Cliff sensor
5. Roller
6. * Optical sensor
7. Battery cover
8. Brush cover button
9. Driving wheel
10. Emergency switch
11. Auto shutter tool

* Optical sensor: Measures moving distance by the light pattern which is reflected from floors and comes into the optical receiver.
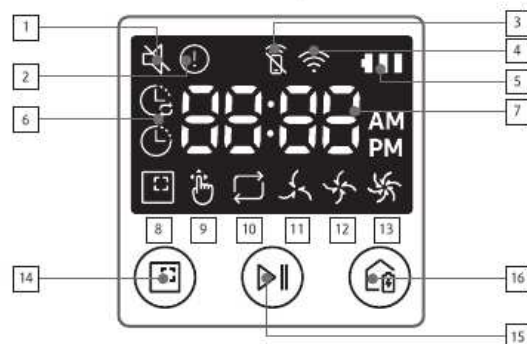
Display panel

1. Mute
2. Information Indicator
3. Remote control Off/On indicator
4. Wi-Fi
5. Battery indicator
6. One-time/Daily schedule
7. Number display
8. Spot clean mode
9. Manual clean mode
10. Repeat clean mode
11. Quiet mode
12. Normal mode
13. Turbo mode
14. Spot cleaning button
15. Start/Stop button
16. Recharging button

Setting time/schedule

Setting the time

You must set the current time before using the One-time/daily schedule.

Start setting   **Select "Hour"**   **Select "Minute"**

Skip to previous, next setting

Setting complete   **Select "AM/PM"**
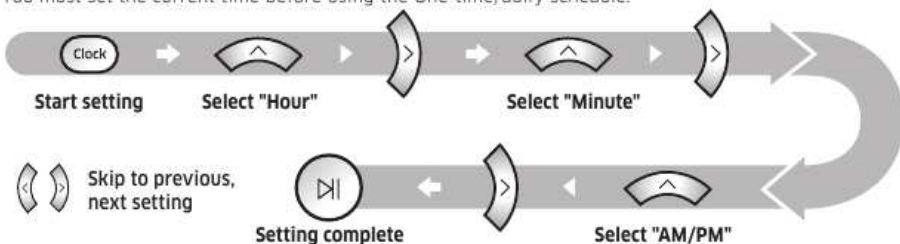
Setting the schedule

Setting/cancelling the schedule can only be done while POWERbot is docked on the docking station.

Start setting   **Select "One-time" or "Daily" schedule**   **Select "Hour"**

Setting complete   **Select "AM/PM"**   **Select "Minute"**

Skip to previous, next setting
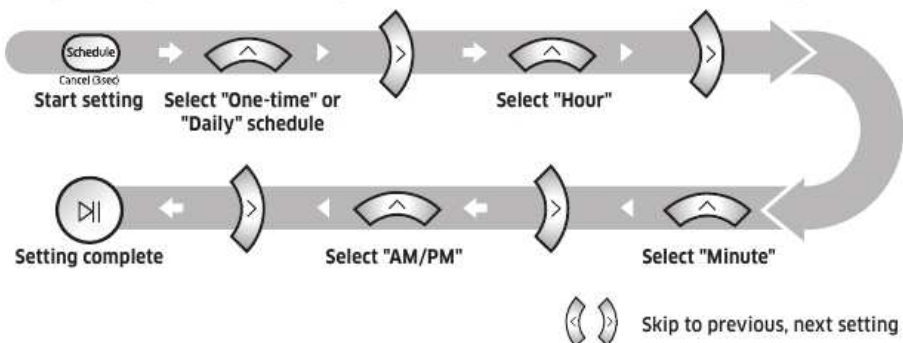
Cancelling during setup   ▸ Setting will be canceled automatically when there's no input for 7 seconds.

Cancelling One-time/Daily schedule

When both One-time/ Daily schedule is set	Schedule Cancel (3sec)	→	or Schedule Cancel (3sec)	→	or Schedule Cancel (3sec)
	Press for 3 sec.		Select the schedule		Cancel complete
When either one of One-time or Daily schedule is set			Schedule Cancel (3sec) Press for 3 sec.		

▸ You can set the multi-time schedule and the anti-disturbance time with the SmartThings App.

▸ When the anti-disturbance time is set at the SmartThings App, you cannot set the schedule at the body of the POWERbot within the set anti-disturbance time.

   – If you want to set the schedule within the set anti-disturbance time, cancel the set anti-disturbance time at the SmartThings App first.

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Cleaning and maintaining

You must turn off the emergency switch before cleaning POWERbot.

Cleaning the dustbin
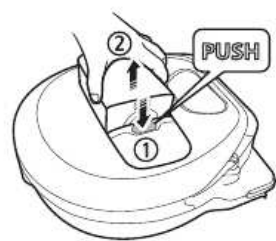
1 Press the button to remove the dustbin
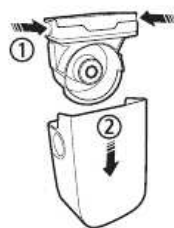
2 Remove the dustbin cover

3 Remove dust in the dustbin and cyclone unit

4 Detach the cyclone unit from the dustbin cover, and then wash the dustbin and the filter
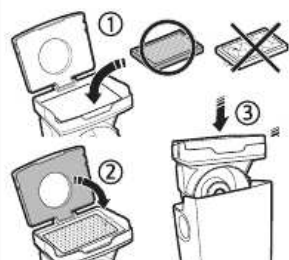
5 Reassemble the dustbin

6 Reinsert the dustbin into the main body until it clicks

'Click'

Cleaning the sensors and the camera

Lightly wipe with soft cloth. Do not use water or cleaning solutions.

Camera

Front sensor window

Cliff sensors

Optical sensor

Rear sensor window
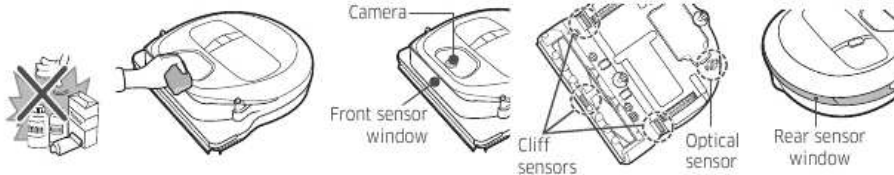
Cleaning the brush and Auto shutter tool

Brush design may differ depending on the model. Do not clean the brush with water.

Soft Action Brush

Combo Brush
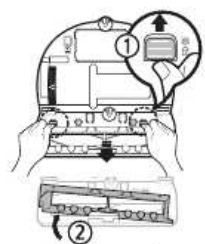
1 Remove the brush cover

2 Remove the brush

3 Clean the brush

Remove remaining dirt on the soft action brush with a wet tissue or a dry cloth.

4 Clean the auto shutter tool

5 Reassemble the brush

6 Reassemble the brush cover

For VR20R726*** models, check that the brush cover is correct for the assembled brush.
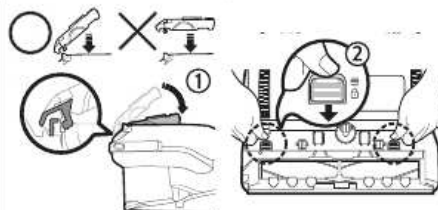
Cleaning the Driving wheel

1 Put a soft cloth on the floor and place POWERbot upside-down on the cloth.

2 Use a blunt rod or tweezers to remove foreign matter.

SmartThings App

The SmartThings App is only compatible with models that have a Wi-Fi function.

Setting up the wireless router

‣ Please refer to the user manual of your wireless router if you have access problems.

‣ Samsung POWERbot supports only Wi-Fi 2.4 Ghz.

‣ Samsung POWERbot supports IEEE 802.11b/g/n and Soft-AP.
  - IEEE 802.11n is recommened.

‣ Samsung POWERbot supports only DHCP (Dynamic Host Configuration Protocol). Please make sure that the DHCP server option is activated on your wireless router.

‣ POWERbot supports the WEP-OPEN, WPA-PSK/TKIP, and WPA2-PSK/AES for the authentication and encryption protocols.
  - WPA2-PSK/AES is recommended.
  - Confirm that your router has a unique SSID and password.

‣ The quality of your wireless network connection may be influenced by the surrounding wireless environment.

‣ If your Internet service provider has permanently registered the MAC address (a unique identification number) of your PC or modem, your POWERbot may not be able to connect to the Internet. Ask your Internet service provider about the procedure to connect an apparatus other than a PC to the Internet.

‣ If your internet service provider requires your ID or password to connect to the internet, your POWERbot may not be able to connect. If this is the case, you must enter your ID or password when connecting to the Internet.

‣ The POWERbot may not be able to connect to the Internet because of firewall issues. Contact your Internet service provider to resolve these issues.

‣ Some wireless routers may transmit an abnormal Domain Name Server (DNS) address even if the Internet is not connected. If this occurs, contact the manufacturer of your wireless router and your Internet service provider.

‣ If you still cannot connect to the Internet even after trying the procedure provided by your Internet service provider, please contact an authorized Samsung service center.

‣ If your router is not a Wi-Fi certified product, The POWERbot may not be able to connect to the Internet.

Downloading the SmartThings App

▸ Download and install the SmartThings app from the markets (Google Play Store, Apple App Store, or Samsung Galaxy Apps). To find the app, use the keyword "SmartThings".

Note

▸ SmartThings is incompatible with tablets and some mobile devices.
  - [Android] 6.0 or later (at least 2GB of RAM) is recommended.

▸ iPad and some mobile devices may not be supported.
  - [iOS 10.0] or later / iPhone 6 or later is supported.

▸ Visit Play Store or App Store to see if your mobile device is compatible with SmartThings.

▸ The supported features are subject to change without any prior notice.

Setting up a Samsung account

▸ You must sign in to a Samsung account before using the SmartThings app.

▸ To set up a Samsung account, you can follow the directions provided by the SmartThings app.

▸ Or, if you have a Samsung smartphone, you can add your Samsung account in the setting app of your smartphone. Then, it will automatically sign in to your Samsung account.

SmartThings App
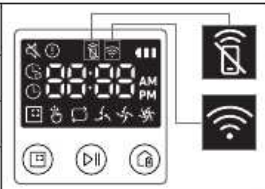
Adding a device to the SmartThings APP

1. Connect your smartphone to your wireless router.
   - If the smartphone is not connected, turn on the Wi-Fi in the Settings App and select a wireless router you want to connect to.
   - Disable the "Mobile data" use option of a smartphone to use Wi-Fi only and connect a device.
2. Launch the SmartThings app on your smartphone.
3. If a pop-up saying that a new device has been found appears, tap ADD NOW.
   - If the pop-up doesn't appear, tap the + button and select the device which you want to connect from the list of AVAILABLE DEVICES.
   - If your device doesn't appear in the list, add the device manually by selecting the device type and selecting the specific device model.
4. [Android] The connection to your device will be progressed automatically.
   - [iOS] Open the setting app, and select [robot vacuum] Samsung in the Wi-Fi list.
5. Provide the authentication when you are directed to do so.
6. [Android] The connetion to your wireless router will be progressed automatically.
   - [iOS] Open the setting app, and select the wireless router in the Wi-Fi list.
7. The remaining setup will be automatically done. Then, a new Device Card will be added.

📄 Note

▶ If you cannot complete the product registration, please take the following steps.
   - Try the registration procedure again as you have directed by the pop-up messages.
   - Confirm that the UPnP option of your wireless router is active, and then try the registration procedure again.
   - Confirm that your wireless router is operating in wireless mode, and then try the registration procedure again.
   - If you have two or more POWERbots, turn off the other POWERbots, and then try to register your POWERbot again.
   - If there is any other wireless router that has the same SSID as your wireless router, the registration might be failed.
▶ Remote control and Wi-Fi indicator

📵	On	Remote control is blocked. (The remote controller can still be allowed.)
📵	Off	Remote control is allowed.
📶	On	The POWERbot is connected to the wireless router.
📶	Off	The POWERbot is trying to connect the wireless router.

▶ When the remote control is blocked, you cannot control the POWERbot on your smartphone.

▶ The POWERbot and your smartphone are not connected to the same wireless router, a response delay may occur depending on your network environment.

Software Update

▶ When the POWERbot is charging on the docking station, the POWERbot connects to the server and then checks if a software is available. If a new software is found, POWERbot will automatically download and update it.

▶ If "UP" is displayed on the display panel while the POWERbot is charging, it means that an update is in progress. Please wait for completing the update before using the POWERbot.

Using the SmartThings APP

▶ When you tap the device card on the SmartThings app, the plug-in for your device will be launched.

1. Power (on / off)
2. Direction controls with Manual clean mode (Forward, Left turn, Right turn)
3. Auto clean mode (start /stop)
4. Spot clean mode
5. Current status
6. Battery status
7. Suction power
8. Repeat Clean (on / off)
9. Schedule (Once / Daily / Multi-time)
   – Although you can set the schedule within the anti-disturbance time which is set at the SmartThings App, the schedule function will not work.
10. Cleaning history
11. Anti-disturbance setting
   – Setting is available only at SmartThings App.
12. Settings > Voice Guide

Notes and cautions

Charging

📄 Note

▸ If the battery overheats during charging, it may take longer to charge.

▸ When automatic charging is not working, do the following:

- Turn the emergency switch (on the bottom of POWERbot) off and on again.

- Unplug the docking station's power plug and then plug it back on.

- Unplug the docking station, and then check whether there is any foreign matter on the charge pins and clean POWERbot and the charge pins of the docking station with a dry cloth or rag.

- Check for any obstacles such as reflective objects, chairs, etc. near the docking station.

▸ If POWERbot is left detached from the docking station, the battery will drain naturally.

- Try to keep POWERbot being charged on the docking station. (However, turn off the emergency switch and leave the docking station unplugged when planning to leave the house for long periods of time by going on a business trip or vacation, etc.)

Using

📄 Note

▸ The POWERbot may get caught on thresholds, etc. during cleaning.

- To restart operation, shut off the emergency switch, move the POWERbot to an area where it can move easily, and then turn on the power again.

▸ The POWERbot cannot completely clean areas it cannot enter, such as corners, between the wall and sofa, etc.

- Please use another cleaning tool to clean them regularly.

▸ The POWERbot cannot vacuum clumps of dirt, so some may remain on the floor after cleaning.

- Please use another cleaning tool to clean them regularly.

▸ If POWERbot is turned off, you cannot turn it on by pressing the Power button on the remote controller. Press and hold the [Start/Stop] button on POWERbot.

▸ You cannot select and have the POWERbot execute Spot clean mode while it is charging.

▸ If you press Manual clean / Point cleaning button while charging, the POWERbot will be detached from the docking station and then turn into the standby mode.

Cleaning and maintenance

📄 Note

▸ If you washed the dustbin and filter with water

- Dustbin: Completely wipe out the water.

- Filter: Completely dry it in the shade before using.

▸ When cleaning the auto shutter tool, do not pull the auto shutter tool out too hard.

⚠ Caution

▸ Watch your fingers when attaching or detaching the filter, since they may get stuck in the dustbin's intake.

▸ To avoid blockages by foreign matter, do not let the POWERbot vacuum up toothpicks, cotton swabs etc.

▸ If it is difficult to remove foreign matter from the brush, contact an authorized Samsung service center.

- Since the brush removes dirt from the floor during cleaning, foreign matter such as thread, long hair, etc. may get caught in it. For the best cleaning results, check and clean it regularly.

- If a brush or brush cover is not assembled correctly after the maintenance work, scratches may occur on the floor, or product malfunction may occur. Therefore, assemble them correctly by checking the maintenance method.

About the battery

📄 Note

- Purchase batteries at authorized Samsung centers and check for the symbol (**SAMSUNG**) which is stuck on the battery and the model name before purchasing.

- This battery is exclusively for the Samsung Electronics POWERbot. Do not use it for any other product.

- Do not disassemble or modify the battery.

- Do not throw the battery out in fire or heat it.

- Do not connect any metallic object to the charging contacts (+, -).

- Store the battery indoors (at 0 ℃~40 ℃).

- If the battery malfunctions, do not disassemble it yourself. Contact your nearest Samsung service center.

- Battery charging time and usage time may decrease the more the battery is used. If the battery's lifespan has been exceeded and it no longer docking stations properly, have it replaced at a Samsung service center.

- The battery warranty period is 6 months from the date of purchase.

About the IrDA sensor

⚠ Caution

- Infrared signal transmission may not be smooth in locations exposed to halogen lamps or in outdoor locations.

- The POWERbot uses 3 types of infrared devices. Each of the devices has a different priority level. A device may not work if it's signal is superseded by a device with a higher priority.
  - Infrared signal Priority: Remote control > Docking station

- Different infrared signals may interfere with one another and cause the devices to malfunction if they are used together in a small space or in close proximity.

- If more than one POWERbot is used simultaneously, they may malfunction due to interference between infrared signals.

Information codes

| 1 | The information code below appears with a voice guide | 2 | Turn off the emergency switch and check the below instructions and take appropriate action | 3 | Information code will disappear when you turn on the emergency switch |

Information codes	Checklist
⚠ ◂▮▮	**The POWERbot is caught, stuck or trapped while moving around.** ▸ Turn off the emergency switch and move the POWERbot to another area.
C 01	**Foreign matter caught in the brush.** ▸ Turn off the emergency switch and remove the foreign matter from the brush.
C 02	**Foreign matter caught in the left Driving wheel.** ▸ Turn off the emergency switch and remove the foreign matter from the Driving wheel.
C 03	**Foreign matter caught in the right Driving wheel.** ▸ Turn off the emergency switch and remove the foreign matter from the Driving wheel.
C 05	**Bumper sensor needs to be checked.** ▸ Turn off the emergency switch and turn it back on. ▸ When information code does not disappear, check if there's any small foreign matter between the bumper and the main body. If there is, pull the bumper slightly and remove the foreign matter.
C 06	**Foreign matter accumulated on the obstacle sensor.** ▸ Turn off the emergency switch and clean the front and rear sensor with a soft cloth.
C 07	**Foreign matter accumulated on the cliff sensor.** ▸ Turn off the emergency switch and clean the cliff sensor with a soft cloth.
C 11	**Main PCB needs to be checked.** ▸ Turn off and restart the product. If the same problem occurs repeatedly, a service check is required.

Troubleshooting

Symptom	Checklist
The POWERbot is not working at all.	▶ Check if the emergency switch is on. ▶ Check if all the icons are displayed on the display panel. ▶ Check if the POWERbot's battery is depleted. – When "Lo" is displayed, place the POWERbot on the docking station to charge it. ▶ Replace the batteries (AAA type) if the remote controller is not working.
The POWERbot has stopped during cleaning.	▶ When "Lo" is displayed on the display panel, place the POWERbot on the docking station to charge it. ▶ When POWERbot is immobilized by an obstacle such as a cord, threshold etc, pick it up and move it away from the obstacle. – If any fabric or string is caught in a drive wheel, turn off the emergency switch and remove the fabric or string before using it again.
Suction power is weak.	▶ When there's too much dust in the dustbin, suction power may get weakened. Turn off the emergency switch and empty the dustbin. ▶ If the brush is blocked by foreign matter, turn off the emergency switch and remove foreign matter from the brush. ▶ When noise suddenly increase, turn off the emergency switch and empty the dustbin.
The POWERbot cannot find the docking station.	▶ Check if there's a power failure or whether the power plug is unplugged. ▶ Remove any obstacles around the docking station that may prevent POWERbot from returning to the docking station. ▶ When there's foreign matter on the charging pins, charging can be affected. Clean the foreign matter off the pins.
The POWERbot suddenly cleans diagonally.	▶ Check if the docking station is installed along the grain of wooden floors or tiles. ▶ The POWERbot may clean in a diagonal direction if it is moving to another area using the shortest route. It may also move at a diagonal if it made contact with an obstacles at that angle, if it was charged at the docking station at an angle, or if the grain of the wooden/tile floor skewed is in that direction.
POWERbot does not detect the boundary marker and crosses the boundary.	▶ Make sure the boundary markers are attached as (⊏) shape at 15 cm before the locations where the POWERbot shouldn't cross.

Troubleshooting

Symptom	Checklist
Point cleaning is not working.	▶If you point the red light directly at POWERbot, it may not move in desired direction. - Point the red light on the floor within 1.6 ft (0.5 m) of the POWERbot. ✻Do not use point cleaning in direct sunlight, under bright light, or on dark floors.
POWERbot does not clean some places.	▶Check whether the docking station is installed in a narrow passage or near a room door and move it to another place. - If the docking station is installed in a narrow passage or near a room door, the POWERbot cannot pass through the passage or door.
Schedule function cannot be set at the desired time.	▶Check whether the anti-disturbance time is set at the SmartThings App and cancel the anti-disturbance setting.
I have installed the SmartThings app, but the POWERbot fails to be connected.	▶You can use the product after connecting the wireless router and the POWERbot through Easy-Setup according to the procedure.
I fail to log into the Samsung account.	▶Check your ID and password on the screen of the Samsung account.
A message appears saying there is a failure during Easy-Setup.	▶You may have failed temporarily due to the distance from the wireless router or other obstacles. Please try again after a while.
The SmartThings app does not work even though your smartphone is normally connected to the POWERbot.	▶Turn off the SmartThings app and then run it again, or disconnect the smartphone from the wireless router and then connect it again. Or turn off the power supply of the POWERbot, turn it on, wait for a minute or longer, and then run the SmartThings app again.
The functions of the SmartThings App do not work.	▶Check if the remote control blocking function of the POWERbot is set. (When the remote control is locked, the Wi-Fi indicator is turned off.)
The SmartThings Robot Vacuum App fails to start.	▶Check if the POWERbot is connected to the wireless router.
The POWERbot is not connected to Wi-Fi.	▶Check the setting status of the wireless router.
The Intelligent Power Control function works on a normal floor. (It should only work on carpets.)	▶Check whether the floor is not even and then the POWERbot works with its body a bit lifted up. ▶Check whether there are any foreign matters on the cliff sensor which is at the bottom of the POWERbot. ▶Check whether the floor color is dark.
The Intelligent Power Control function does not work.	▶When the POWERbot cleans a carpet with short fibre and bright color, it may recognize the carpet as a floor and then the Intelligent power control function may not work.

Symptom	Checklist

The Edge Clean Master function does not work.	▶ When POWERbot cannot recognize the wall, the Edge clean master may not work.
	  – When an obstacle made of reflective material is in front of the wall
	  – When the wall itself is made of reflective material
	  – When the wall is a dark color

The Edge Clean Master function works though there is no wall or corner.	▶ Check whether small obstacles are arranged in a narrow space. ▶ When the POWERbot recognizes the front obstacle as a wall, Edge clean master function may work.
The Edge clean master function works though the POWERbot has not approached a wall or corner.	▶ When the degree of the angle of a corner which the POWERbot detects is large, the Edge clean master function may work without approaching the wall or corner.
SmartThings App cannot be installed.	▶ SmartThings App operates on Android OS 6.0 or later, iOS 10 or later. ▶ The supporting OS version for SmartThings App may change later. ▶ For rooted smart devices, standard installation and use will not be guaranteed.
A message of product registration failure appears.	▶ Try the product registration procedure again by referring to the pop-up messages. ▶ Please refer to the "Setting up the wireless router" in the user manual. ▶ Please refer to the steps for completing the product registration in the user manual section "Adding a device to the SmartThings APP". ▶ When the product registration fails repeatedly, reset the POWERbot and Smartphone, run the SmartThings App again and try the product registration. ▶ The same Samsung account should be used for the login of App and product registration. ▶ All users should use the Samsung account issued by the same country.
During product registration, recharging button is pressed and held as instructed but the next step does not appear.	▶ Press the recharging button until you hear it beep. ▶ If the next step does not appear within several seconds, press the recharging button one more time.
During product registration, the wireless router I want to connect cannot be searched.	▶ Cancel the product registration, run the SmartThings App again, and try the product registration again.

Symptom	Checklist
During product registration, the AP password 1111122222 is not input correctly.	▶ Press and hold the "[robot vacuum] Samsung" on the network list and delete the network to initialize the password.
During product registration, the password of the connecting wireless router is not input correctly.	▶ Cancel the product registration, run the SmartThings App again, and try the product registration again. ▶ Press and hold the wireless router you want to connect on the network list, and delete the network to initialize the password.
A connection cut between the SmartThings App and the POWERbot occurs though the product registration is completed.	▶ Refresh the screen and wait. ▶ Run the SmartThings App again. ▶ Check whether there is an internet connection problem. Especially, a firewall may interrupt standard operation.
A connection cut between the SmartThings App and the POWERbot suddenly occurs during normal operation of the app.	▶ If the POWERbot is distant from a wireless router, connection cut may occur. ▶ Reset the POWERbot and the smartphone, and check the connection again. ▶ If the connection cut occurs repeatedly, try the product registration again. ▶ When the SSID/password of a wireless router is changed, try the product registration again.
Controlling with SmartThings App does not work since the remote control function is disabled.	▶ Remote control function is disabled status. Make the remote control function enabled status with a remote controller.

Open Source Announcement

The software included in this product contains open source software. You may obtain the complete corresponding source code for a period of three years after the last shipment of this product by sending an email to mailto:oss.request@ samsung.com.

It is also possible to obtain the complete corresponding source code in a physical medium such as a CD-ROM; a minimal charge will be required.

The following URL http://opensource.samsung.com/opensource/VR7000_A20_TZ/ seq/0 leads to the download page of the source code made available and open source license information as related to this product. This offer is valid to anyone in receipt of this information.

Specifications

Classification	Item		Detail information
			VR20R72**** series
Mechanical specifications (POWERbot)	Size (D x H x L)		340 mm x 97 mm x 348 mm
	Weight		4.3 kg
	Cleaning Method		Ceiling shape recognition (Visionary mapping plus TM)
	Button type of POWERbot		Touch type
Power specifications	Power voltage		100-240 V~, 50 Hz/60 Hz
	Power consumption		130 W
	Battery specifications		21.6 V/ 77.8 Wh
Cleaning	Charging type		Automatic charging/Manual charging
	Cleaning mode		Auto, Spot, Manual, Repeat
	Additional function		Anti-disturbance time setting
	Schedule		One-time, Daily, Multi-time
	Charging time		Approximately 160 minutes
	Cleaning time (On the basis of hard floor)	Max mode	Approximately 60 minutes
		Normal mode	Approximately 75 minutes
		Quiet mode	Approximately 90 minutes
Wi-Fi	Frequency range		2412 - 2472 MHz
	Transmitter power(Max)		20 dBm

✳ You can set the multi-time schedule and the anti-disturbance time with the SmartThings App.
✳ Charging and cleaning times may differ according to conditions of use.

SAMSUNG

If you have any questions or comments relating to Samsung products,
please contact the SAMSUNG customer care center.

Country	Customer Care Center	Web Site
CANADA	1-800-SAMSUNG (726-7864) 1-844-SAM-PAYS (726-7297)	www.samsung.com/ca/support (English) www.samsung.com/ca_fr/support (French)
U.S.A	1-800-SAMSUNG (726-7864) 1-844-SAM-PAYS (726-7297)	www.samsung.com/us/support