

Shark AV2820S

Shark PowerDetect AV2820S Self-Empty Robot Vacuum Instruction Manual

Model: AV2820S

INTRODUCTION

This manual provides essential information for the setup, operation, and maintenance of your Shark PowerDetect Self-Empty Robot Vacuum, model AV2820S. This robot vacuum is designed to provide efficient cleaning across various floor types, featuring advanced detection technologies and a self-emptying base for convenience.

The PowerDetect robot vacuum utilizes three deep-cleaning technologies to optimize performance by sensing mess levels, floor types, and edges. DirtDetect identifies hidden debris and automatically increases suction and cleaning passes. NeverStuck technology helps the robot navigate obstacles and traverse thresholds and thick carpets. The bagless self-empty base includes HEPA Anti-Allergen Seal technology, trapping dust and allergens.

PACKAGE CONTENTS

Ensure all components are present before proceeding with setup:

- 1 x Shark PowerDetect Robot Vacuum
- 1 x Self-Empty Base
- 2 x Side Brushes



Image: The Shark PowerDetect robot vacuum and its accompanying self-empty base, illustrating the main components included in the package.

SETUP

1. Initial Placement and Charging

1. Place the Self-Empty Base against a wall in an open area, ensuring at least 3 feet of clearance on either side and 5 feet in front.
2. Plug the base into a power outlet.
3. Place the robot vacuum onto the charging base. Ensure the charging contacts on the robot align with those on the base. The robot will emit a chime when charging begins.
4. Allow the robot to fully charge before its first use. This may take several hours.

2. App Setup and Wi-Fi Connection

1. Download the SharkClean app from your mobile device's app store.

2. Follow the in-app instructions to create an account and connect your robot vacuum to your home Wi-Fi network.
3. The app will guide you through the initial mapping process, allowing the robot to learn your home's layout.

Complete Customization

Control your robot via the SharkClean® app or voice control with Amazon Alexa/Google Assistant.



Image: A smartphone screen showing the SharkClean app interface with a mapped home layout, demonstrating app control and customization features.

OPERATING INSTRUCTIONS

Cleaning Technologies

- **DirtDetect:** The robot senses areas with concentrated dirt and automatically increases suction power and cleaning passes to ensure thorough cleaning.
- **EdgeDetect:** Air blasts are used to dislodge debris from edges and corners, directing it into the robot's cleaning path for improved edge cleaning.
- **FloorDetect:** The robot identifies different floor types (e.g., carpet, hard floor) and adjusts brushroll engagement to optimize cleaning performance for each surface.



Image: A visual representation of the three deep-cleaning technologies: DirtDetect boosting power on debris, EdgeDetect using air blasts for corners, and FloorDetect optimizing brushroll for different surfaces.

Navigation and Obstacle Avoidance

- **NeverStuck Technology:** Features Active Lift & Lower, allowing the robot to lift itself over obstacles and thresholds, and navigate thick carpets without getting stuck.
- **3D Object Detection:** Advanced sensors detect objects both high and low to the ground, enabling the robot to navigate around or over them, ensuring comprehensive home coverage.
- **Precision Home Mapping:** 360° LiDAR vision accurately maps your home's layout, day or night, for efficient and systematic cleaning paths.

Active Lift & Lower

Robot lifts itself up and over thresholds and is able to get onto thick carpets with ease.



Image: The robot vacuum demonstrating its Active Lift & Lower feature, raising its body to easily move over a thick rug from a hard floor.

Obstacle Avoidance

The 3D sensor detects and avoids objects as the robot cleans for whole-home cleaning coverage.



Image: The robot vacuum using its 3D sensors to detect and navigate around various household objects on a hard floor, illustrating its obstacle avoidance capability.

Control and Customization

Manage your robot vacuum through the SharkClean app or via voice commands using Amazon Alexa or Google Assistant.

- **Schedule Cleaning:** Set specific times for the robot to clean automatically.
- **Set No-Go Zones:** Define areas the robot should avoid using the app's mapping features.
- **Select Spot Clean:** Direct the robot to clean specific, smaller areas as needed.

Self-Emptying System

After each cleaning mission, the robot automatically returns to its base to empty collected dirt and debris. The bagless base has a 30-day capacity, reducing the frequency of manual emptying. It features HEPA filtration with an Anti-Allergen Seal, trapping 99.97% of dust and allergens.

Self-Empty System

DUST-FREE & HANDS-FREE



HEPA Filtration
Anti-Allergen Complete
Seal base with True
HEPA Filtration.

**SELF-
EMPTY
BAGLESS
BASE**

30-DAY CAPACITY

HOLDS UP TO 30 DAYS
OF DIRT AND DEBRIS.



Image: A cutaway diagram illustrating the robot vacuum docking with its self-empty base, showing the airflow path as debris is transferred from the robot's dustbin into the base's larger collection bin.

MAINTENANCE

Regular maintenance ensures optimal performance and longevity of your robot vacuum.

Self-Empty Base and Filter

- **Emptying the Base:** The self-empty base holds up to 30 days of debris. Monitor the fill level and empty as needed. The base is bagless, allowing for easy disposal.
- **HEPA Filter:** The base contains a True HEPA filter. Check and clean the filter regularly according to the app's recommendations or if you notice reduced suction. Replace the filter every 6-12 months, or as needed.

True HEPA Self-Empty Base

HEPA filtration with Anti-Allergen
Complete Seal captures and traps over
99.97% of dust and allergens.*

*Based on ASTM F1977, down to .3 microns.
Allergens refers to non-living matter.



Image: The robot vacuum docked with its self-empty base, highlighting the HEPA filtration system within the base that captures dust and allergens.

Brushroll and Side Brushes

- **Self-Cleaning Brushroll:** The robot features a self-cleaning brushroll designed to minimize hair wrap. Periodically check the brushroll for any tangled hair or debris and remove it if necessary.
- **Side Brushes:** Inspect side brushes for wear or damage. Clean any accumulated hair or debris. Replace worn brushes to maintain effective edge cleaning.



Image: A comparison showing a standard brushroll tangled with hair versus a self-cleaning brushroll designed to prevent hair wrap, emphasizing its effectiveness for pet hair.

Sensors and Charging Contacts

- Wipe all sensors and charging contacts on both the robot and the base with a dry cloth to remove dust and debris. This ensures proper navigation and charging.

TROUBLESHOOTING

This section addresses common issues you might encounter with your Shark PowerDetect Robot Vacuum.

| Issue | Possible Cause | Solution |
|---------------------------------|---|---|
| Robot gets stuck frequently | Excessive obstacles, loose cables, high thresholds, or thick carpets exceeding robot's lift capability. | Clear the cleaning area of small objects and loose cables. Use the app to set No-Go Zones around problematic areas. Ensure thresholds are within the robot's specified height limit. |
| App connection issues or errors | Incorrect Wi-Fi credentials, robot not in pairing mode, app region settings incorrect, or temporary network glitch. | Verify Wi-Fi password and ensure you are connecting to a 2.4GHz network. Restart the robot and your router. Check the app's region settings. Re-attempt the pairing process. |
| Dustbin not emptying completely | Dustbin is overfilled or debris is compacted, blockage in the self-empty path, or dirty filters. | Empty the robot's dustbin manually if it's excessively full. Check the self-empty port on both the robot and the base for blockages. Clean or replace the HEPA filter in the base. Consider running the robot more frequently to prevent overfilling. |
| Robot is unusually noisy | Debris caught in brushroll or wheels, worn components, or normal operation noise during self-emptying. | Inspect and clean the brushroll and side brushes for tangled hair or debris. Check wheels for obstructions. Note that the self-emptying process can be loud, which is normal. If noise persists and is unusual, contact support. |

| Issue | Possible Cause | Solution |
|---------------------------------|---|--|
| Robot cleans when not scheduled | Accidental manual start, incorrect schedule setting in app, or software glitch. | Check the SharkClean app for any active schedules or unintended manual commands. Ensure the robot's firmware is up to date. If the issue persists, perform a factory reset (refer to app for instructions) and re-setup. |

SPECIFICATIONS

- **Brand:** Shark
- **Model Name:** Shark AV2820S
- **Special Features:** Anti-Fall, Auto-Docking, Bagless, Edge Cleaning, LiDAR Navigation
- **Color:** Black
- **Product Dimensions:** 20.08"L x 13.39"W x 11.81"H
- **Filter Type:** HEPA
- **Battery Life:** 110 minutes
- **Voltage:** 14.4 Volts (AC)
- **Capacity (Dustbin):** 0.24 Quarts
- **Power Source:** Corded Electric (for base)
- **Batteries Included:** Yes (1 Lithium Ion battery)
- **Control Method:** Voice, App
- **Compatible Devices:** Amazon Echo
- **Form Factor:** Robotic
- **Item Weight:** 1.83 pounds

WARRANTY AND SUPPORT

For warranty information, please refer to the warranty card included with your product or visit the official Shark website. For technical support, troubleshooting assistance, or to order replacement parts, please contact Shark customer service. Contact details can typically be found on the Shark website or within the SharkClean app.