

Lefant LS1

Lefant LS1 Robot Vacuum and Mop 2-in-1 User Manual

Model: LS1

1. INTRODUCTION

Welcome to the user manual for your new Lefant LS1 Robot Vacuum and Mop 2-in-1. This advanced cleaning device is designed to simplify your home maintenance by combining powerful vacuuming with efficient mopping capabilities. Equipped with cutting-edge Lidar navigation and FreeMove technology, the LS1 offers intelligent and precise cleaning for various floor types.

Key Features:

- **Lidar Navigation & SLAM:** Utilizes advanced laser navigation for real-time mapping and intelligent planning of cleaning routes, ensuring thorough coverage.
- **FreeMove Technology 3.0:** Features precise electronic sensors to accurately avoid obstacles and prevent the robot from getting stuck, contributing to a longer device lifespan.
- **2-in-1 Dust Box & Water Tank:** Designed with a combined 500ml dust box and 160ml water tank, allowing for simultaneous vacuuming and mopping without needing to switch containers.
- **Smart APP Control:** Connects to the "Lefant Life" app via 2.4 GHz Wi-Fi (5 GHz not supported) for remote control, cleaning schedules, suction power adjustment, water flow control, and specific zone cleaning.
- **Voice Control:** Compatible with popular voice assistants such as Amazon Alexa and Google Assistant for convenient hands-free operation.
- **Long-lasting Battery:** Powered by a 3600 mAh Lithium Iron Phosphate battery, providing up to 100 minutes of cleaning time or covering an area of up to 120 square meters on a full charge. The robot automatically returns to its charging base when the battery is low.

Lidar Navigation & FreeMove Technology

Avoid Obstacles and Clean Smarter



Image: The Lefant LS1 robot vacuum demonstrating its Lidar Navigation and FreeMove Technology to avoid obstacles and clean efficiently.

2. SETUP

Follow these steps to set up your Lefant LS1 Robot Vacuum and Mop for the first time.

What's Included:



Image: A visual representation of all components included in the Lefant LS1 package: the robot, charging base, power adapter, 2-in-1 dust box/water tank, reusable and disposable mop cloths, HEPA filters, and side brushes.

1. **Unpacking:** Carefully remove the robot and all accessories from the packaging. Retain the packaging for future storage or transport.
2. **Charging Base Placement:** Place the charging base against a wall in an open area. Ensure there are no obstacles within 1 meter (3 feet) to the sides and 1.5 meters (5 feet) in front of the charging base. Connect the power adapter to the charging base and plug it into a wall outlet.
3. **Initial Charge:** Place the robot onto the charging base. Ensure the charging contacts on the robot align with those on the base. The robot will begin charging. For optimal battery life, fully charge the robot before its first use, which typically takes 4-5 hours.
4. **Side Brush Installation:** Locate the two side brushes. Press each brush firmly onto the corresponding posts on the bottom of the robot until they click into place.
5. **App Download & Connection:** Download the "Lefant Life" app from your smartphone's app store (available for iOS and Android). Register an account and follow the in-app instructions to connect your LS1 robot to your home's 2.4 GHz Wi-Fi network. **Note: 5 GHz Wi-Fi networks are not supported.**

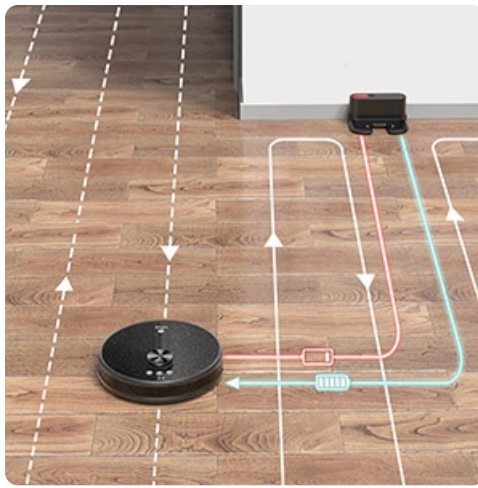


Image: The robot vacuum navigating back to its charging station, illustrating the automatic recharge function and ideal placement for the base.

3. OPERATING INSTRUCTIONS

Learn how to effectively operate your Lefant LS1 Robot Vacuum and Mop.

3.1 Starting a Cleaning Cycle

- **Manual Start:** Press the power button on the robot once to start an automatic cleaning cycle.
- **App Control:** Open the "Lefant Life" app and tap the "Start" button to initiate cleaning.

AI Precision Navigation

Realtime Mapping, Intelligent Planning of Cleaning Routes



Image: The Lefant LS1 robot vacuum actively mapping a room, with the real-time cleaning route and map displayed on the connected smartphone application, demonstrating AI Precision Navigation.

3.2 Cleaning Modes

The LS1 offers various cleaning modes to suit your needs, accessible via the Lefant Life app:

- **Auto Cleaning:** The robot intelligently navigates and cleans your entire home, creating a map for efficient coverage.
- **Spot Cleaning:** Direct the robot to clean a specific small area with concentrated suction.
- **Zone Cleaning:** Define custom zones on the app's map for the robot to clean, allowing you to target specific rooms or areas.

Efficient Cleaning, Clean Wherever You Want

Support Zone Cleaning and Spot Cleaning



Image: The Lefant LS1 robot vacuum demonstrating its ability to perform both zone cleaning (cleaning a defined area) and spot cleaning (cleaning a specific point) as controlled via the app, shown in a living room setting with a dog.

3.3 Vacuuming and Mopping

The LS1 is designed for both vacuuming and mopping simultaneously:

1. **Prepare for Mopping:** Fill the 160ml water tank with clean water. Attach a clean mop cloth to the mop cloth holder and then attach the holder to the robot.
2. **Combined Cleaning:** The robot will vacuum and mop at the same time. You do not need to switch between separate dustbins and water tanks.
3. **Adjust Water Flow:** Use the Lefant Life app to adjust the water flow level (low, medium, high) according to your floor type and cleaning needs.



Image: A split image showing the Lefant LS1 robot vacuum performing both dry vacuuming (left) and wet mopping (right) on a hard floor, highlighting its 2-in-1 functionality.



Image: An illustration depicting three different water flow levels for mopping, suitable for various floor surfaces from lightly soiled to heavily soiled.

3.4 Smart Control and Scheduling

- **App Control:** The Lefant Life app allows you to view the cleaning route in real-time, adjust suction power, control water flow, and set cleaning schedules.
- **Voice Control:** Connect your LS1 to Amazon Alexa or Google Assistant. Use simple voice commands to start, stop, or send the robot back to its charging base. For example, "Alexa, ask LS1 to start clean."
- **Scheduled Cleaning:** Set up recurring cleaning times through the app to ensure your home is cleaned automatically at your convenience.

Voice Control & Scheduled Cleaning

APP Intelligent Control, Remotely Start Cleaning

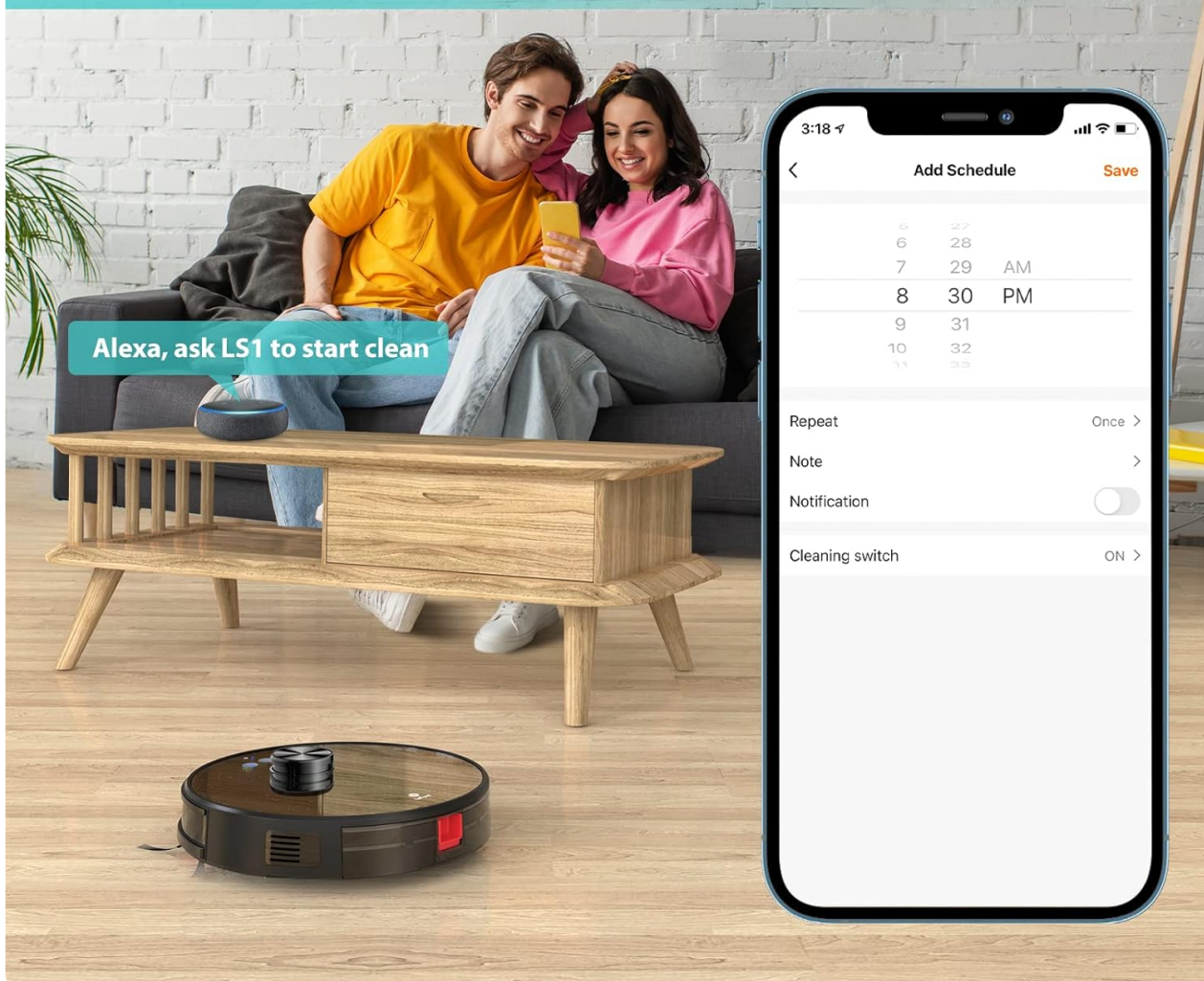


Image: Two individuals interacting with the Lefant LS1 robot vacuum, demonstrating voice control integration with Alexa and the ability to schedule cleaning via a smartphone app.

3.5 Automatic Recharging

When the battery level drops below 20% or after completing a cleaning cycle, the LS1 will automatically return to its charging base to recharge. Ensure the charging base remains accessible.

4. MAINTENANCE

Regular maintenance ensures your Lefant LS1 operates efficiently and extends its lifespan.

1. **Emptying the Dust Box:** After each cleaning cycle, remove the 2-in-1 dust box/water tank and empty the dust compartment.
2. **Cleaning the Water Tank:** After each mopping session, empty any remaining water from the tank and rinse it thoroughly to prevent mold or residue buildup.
3. **Cleaning Filters:** Remove the HEPA filters from the dust box. Tap them gently to remove dust or use a

cleaning brush. Do not wash HEPA filters with water. Replace HEPA filters every 3-6 months, depending on usage.

4. **Cleaning Side Brushes:** Periodically remove the side brushes and clear any tangled hair or debris. If brushes are worn or damaged, replace them with new ones.
5. **Cleaning Sensors:** Use a soft, dry cloth to wipe the Lidar sensor, anti-drop sensors (located on the bottom of the robot), and the charging contacts on both the robot and the charging base. This prevents performance issues due to dust accumulation.
6. **Mop Cloth Maintenance:** Wash reusable mop cloths after each use. Disposable mop cloths should be discarded and replaced as needed.



Image: A detailed view of the Lefant LS1's integrated 2-in-1 dust box and water tank, illustrating the components that require regular emptying and cleaning.

5. TROUBLESHOOTING

If you encounter issues with your Lefant LS1, refer to the following common problems and solutions.

- **Robot not charging:**

- Ensure the charging base is powered on and the power adapter is securely connected to both the base and a working wall outlet.
- Check that the charging contacts on both the robot and the base are clean and free of dust or debris. Wipe them with a dry cloth.
- Verify the robot is correctly positioned on the charging base, with contacts aligned.

- **Robot not connecting to Wi-Fi:**

- Confirm your home Wi-Fi network is 2.4 GHz. The LS1 does not support 5 GHz networks.
- Ensure the robot is within range of your Wi-Fi router.
- Restart your Wi-Fi router and the robot, then attempt the connection process again through the Lefant Life app.

- **Robot getting stuck frequently or avoiding obstacles poorly:**

- Clear obstacles, loose cables, and small items from the cleaning path.
- Clean the FreeMove sensors (located around the robot's bumper) and anti-drop sensors (on the bottom) to ensure they are not obstructed by dust or debris.
- Check for tangled hair or debris in the main brush, side brushes, and wheels.

- **Poor cleaning performance (vacuuming or mopping):**

- Empty the dust box and clean the HEPA filters.
- Ensure the side brushes are clean and not excessively worn. Replace if necessary.
- Increase suction power via the Lefant Life app.
- For mopping, ensure the water tank is filled and the mop cloth is clean and properly attached. Adjust water flow settings if needed.

- **Robot making unusual noises:**

- Turn off the robot and check for any foreign objects caught in the main brush, side brushes, or wheels.
- Ensure all removable components (dust box, brushes) are correctly installed.

6. SPECIFICATIONS

Feature	Specification
Model Number	LS1
Dimensions (L x W x H)	32 x 32 x 9.4 cm
Weight	4.23 kg
Battery Type	3600 mAh Lithium-ion (Lithium Iron Phosphate)
Max Cleaning Area	120 m ²

Max Cleaning Time	100 minutes
Dust Box Capacity	500 ml (2-in-1 with water tank)
Water Tank Capacity	160 ml (2-in-1 with dust box)
Navigation Technology	Lidar Navigation, SLAM
Obstacle Avoidance	FreeMove Technology 3.0
Filter Type	HEPA
Control Type	App Control, Voice Control (Alexa, Google Assistant), Button Control
Surface Recommendation	Hard Floor, Carpet



Image: The Lefant LS1 robot vacuum with an overlay indicating its cleaning capacity of 100 square meters and a battery life of 100 minutes per charge.

7. WARRANTY & SUPPORT

Warranty Information:

The Lefant LS1 Robot Vacuum and Mop comes with a standard manufacturer's warranty. Please refer to your purchase documentation or the official Lefant website for specific warranty terms, conditions, and duration applicable to your region.

Customer Support:

For technical assistance, troubleshooting guidance, or to inquire about warranty claims, please contact Lefant customer support. You can typically find support contact information within the Lefant Life app or by visiting the official Lefant website. Please have your product model (LS1) and purchase details ready when contacting support.