

Mammotion LUBA mini AWD 1500H

LUBA mini AWD 1500H Robot Lawn Mower

Instruction Manual

Brand: Mammotion | Model: LUBA mini AWD 1500H

1. INTRODUCTION

This manual provides essential information for the safe and efficient operation, maintenance, and troubleshooting of your Mammotion LUBA mini AWD 1500H Robot Lawn Mower. Please read this manual thoroughly before using the product and retain it for future reference.

Safety Information

Always follow basic safety precautions to reduce the risk of fire, electric shock, and personal injury. Ensure the product is used only as described in this manual. Keep children and pets away from the mowing area during operation. Disconnect power before performing any maintenance or cleaning.

2. PRODUCT OVERVIEW & COMPONENTS

The LUBA mini AWD 1500H is an advanced robotic lawn mower designed for efficient and autonomous lawn care. It features all-wheel-drive, UltraSense AI Vision, RTK navigation, and smart app control.

Package Contents

- LUBA mini AWD 1500H Robot Lawn Mower
- Charging Station
- RTK Reference Station
- Power Adapter
- Spare Blades
- User Manual (this document)
- Other accessories (e.g., RTK mounting kit, charging station stakes)

Product Diagram



Figure 2.1: Front view of the LUBA mini AWD 1500H Robot Lawn Mower, highlighting its design and omni-directional wheels.

Beyond Positioning

UltraSense AI Vision Delivers More



Figure 2.2: The LUBA mini AWD 1500H operating in a lawn, demonstrating its advanced positioning system.

3. SETUP GUIDE

Proper setup is crucial for optimal performance of your LUBA mini. Follow these steps carefully.

3.1 Charging Station Placement

Select a flat, level area with access to a power outlet. Ensure the charging station has clear space around it for the mower

to dock easily. Avoid direct sunlight or areas prone to standing water.

3D Lawn Printing, Your Lawn's "Tattoo"



Figure 3.1: The LUBA mini AWD 1500H automatically returning to its charging station when battery is low.

3.2 RTK Reference Station Installation

The RTK (Real-Time Kinematic) reference station is vital for precise navigation. Install it in an elevated location with an unobstructed view of the sky, away from large metal objects or buildings that could interfere with satellite signals. Connect it to power as per the instructions in the RTK station's separate guide.

3.3 Initial Charging

Before first use, fully charge the LUBA mini. Place the mower on the charging station. The indicator lights on the mower will show charging status. A full charge typically takes several hours.

3.4 App Download and Connection

Download the Mammotion app from your device's app store. Follow the in-app instructions to connect your LUBA mini to your Wi-Fi network and pair it with your smartphone. This app is essential for mapping, scheduling, and controlling your mower.

3.5 Lawn Mapping

Use the Mammotion app to map your lawn. Drive the mower manually along the perimeter of your mowing areas and around any obstacles or no-go zones (e.g., flower beds, pools). The UltraSense AI Vision and RTK system will create a precise map. You can define up to 20 mowing zones.

Zero-distance Edge Cutting

Cutting near walls can be done to less than 2.0 in.

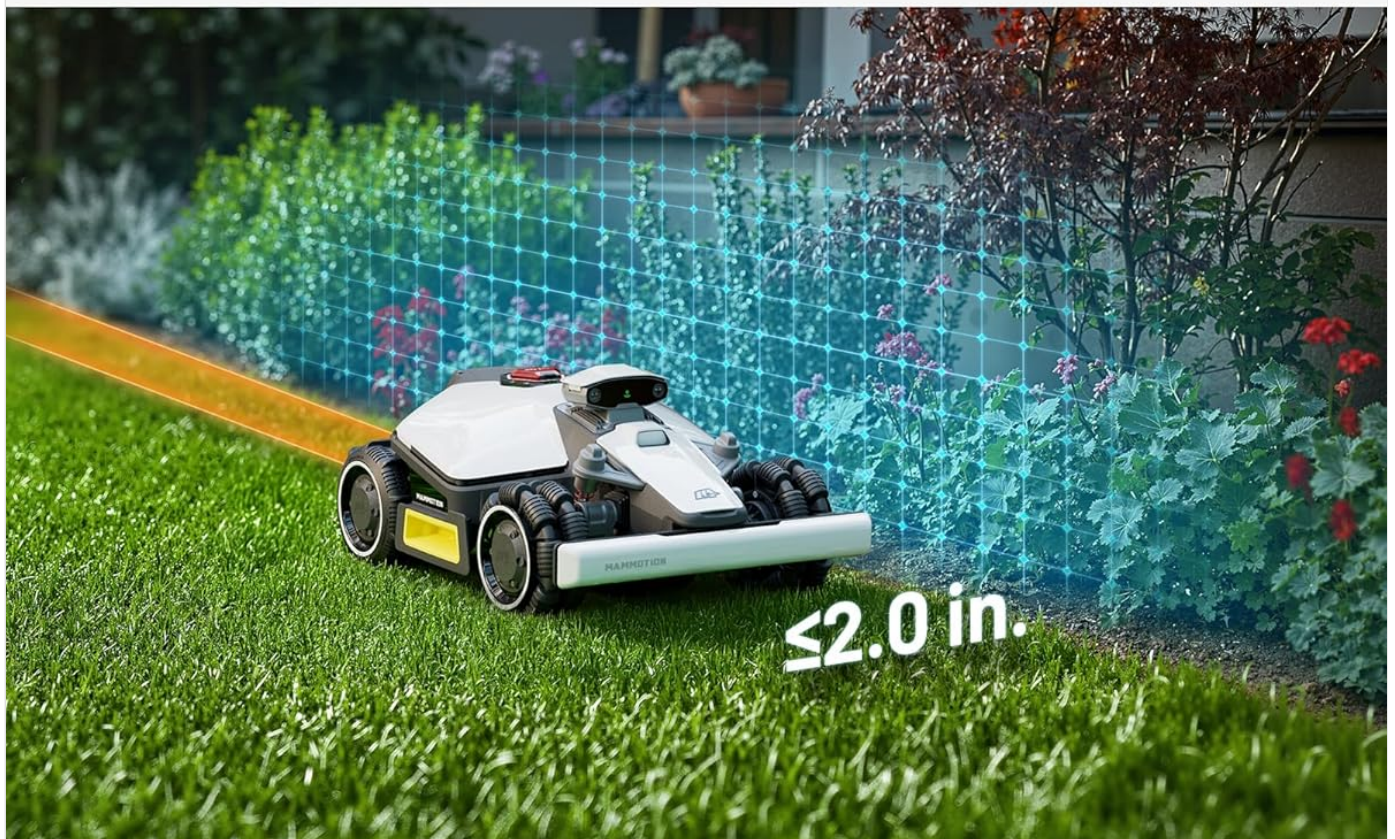
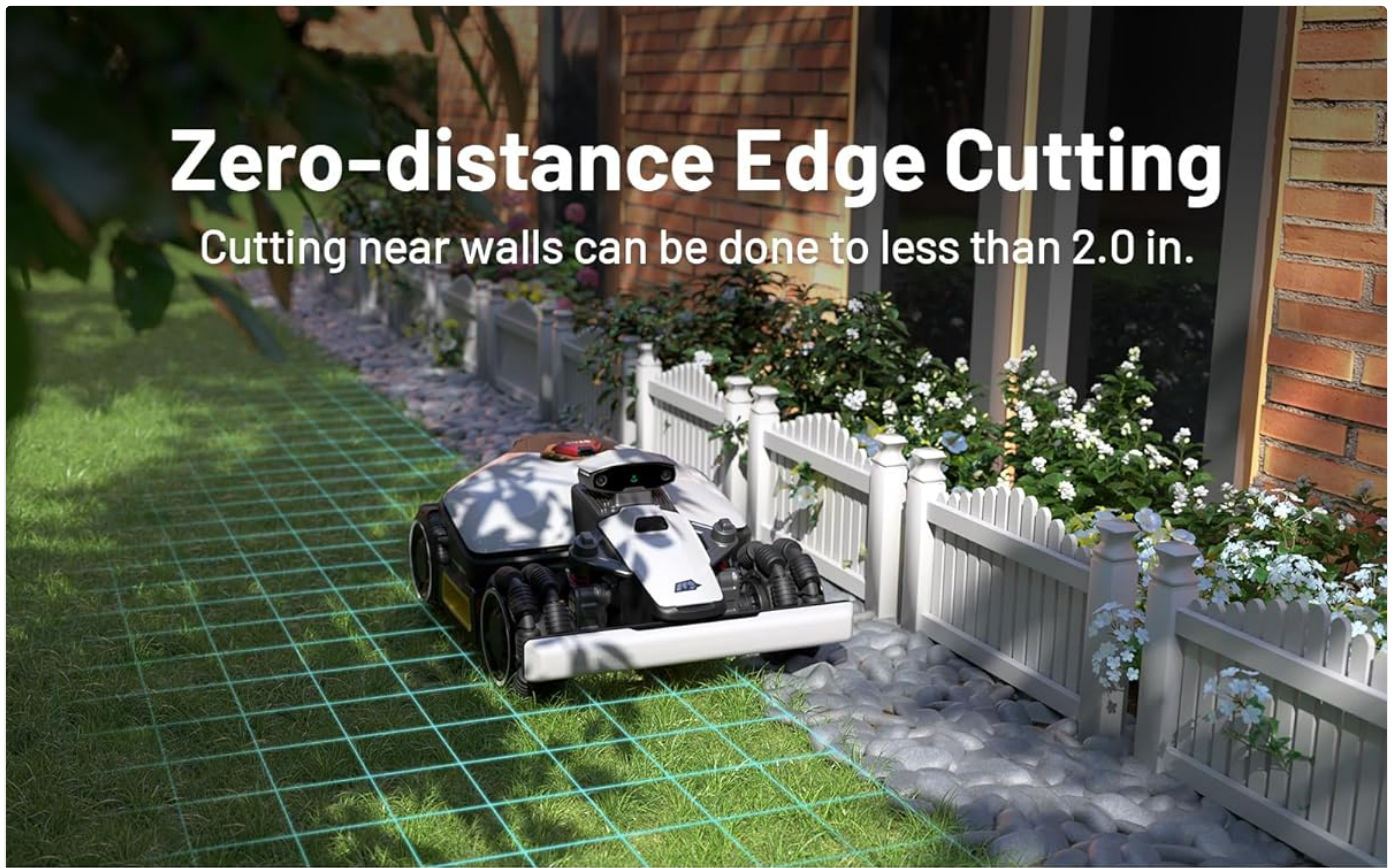


Figure 3.2: The LUBA mini AWD 1500H performing auto-mapping around a pool, defining the mowing area.

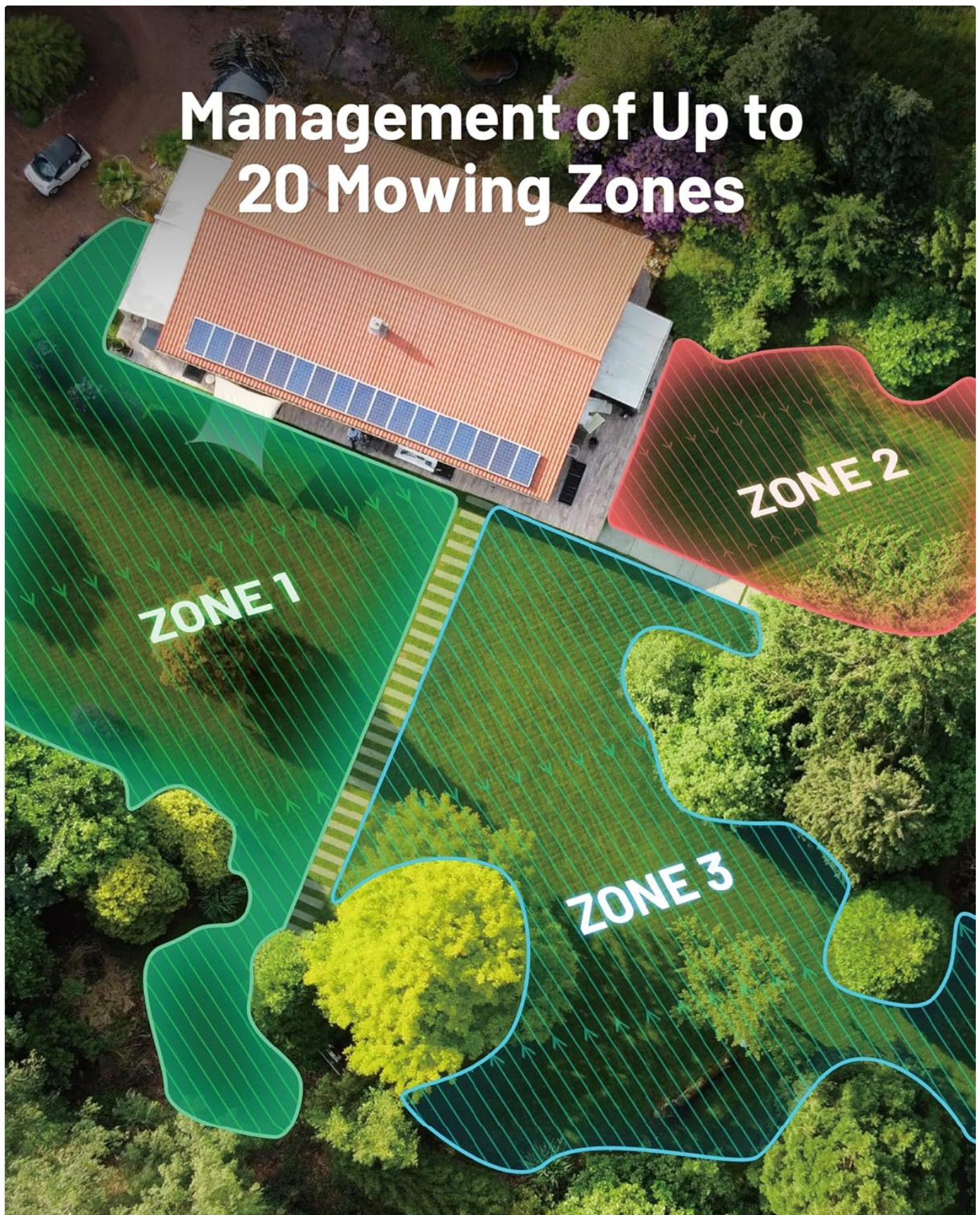


Figure 3.3: Example of multi-zone management, allowing the mower to operate in up to 20 distinct areas.

4. OPERATING INSTRUCTIONS

Once set up, your LUBA mini is ready for automated lawn care.

4.1 Starting and Stopping Mowing

- **Start:** Use the Mammotion app to select a mowing zone and initiate a mowing task.

- **Pause:** Press the STOP button on the mower or use the app to pause operation.
- **Stop:** Press and hold the STOP button, or use the app to end the mowing task and send the mower back to its charging station.

4.2 Mowing Modes and Patterns

The app allows you to customize mowing patterns and schedules.

- **Planned Mowing:** Choose from patterns like Parallel, Checkboard, or Diamond Grid for desired lawn aesthetics.
- **Edge Cutting:** The mower can perform zero-distance edge cutting, minimizing the need for manual trimming.
- **Cutting Height:** Adjust the cutting height between 2.2 inches and 4.0 inches via the app.

Unmatched Off-Road Capacity

35% ↑

Better climbing ability
Compared with competitors



80% Slope



**Adaptive
Suspension System**



Bumper



**Zero-turn
Technology**

Figure 4.1: The LUBA mini AWD 1500H performing precise edge cutting.

4.3 Obstacle Avoidance and Safety

The UltraSense AI Vision system helps the mower identify and avoid obstacles. It can recognize over 200 objects and adjust its path accordingly. The mower also features a rain sensor to prevent operation during wet conditions.

88W Cutting Motors Mow up to 0.06 Acre/charge



6

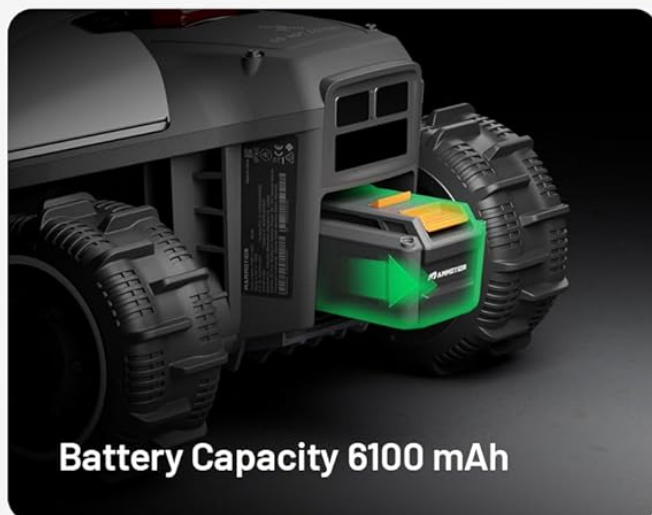
More blades

165mins

Mowing time per charge

6.1Ah

Larger battery capacity



Battery Capacity 6100 mAh



Cutting Width 7.9 inch

Figure 4.2: The LUBA mini AWD 1500H demonstrating its off-road capability on a steep slope.

4.4 Anti-Theft Features

The LUBA mini includes GPS tracking and geofence alarms. If the mower leaves its designated mowing zones, you will receive an app notification. Ownership authentication prevents unauthorized use.

5. MAINTENANCE

Regular maintenance ensures the longevity and optimal performance of your LUBA mini.

5.1 Cleaning

- **Mower Body:** Wipe the exterior with a damp cloth. Avoid using high-pressure water jets.
- **Cutting Deck:** Regularly clean grass clippings from the cutting deck and blades. Use a brush or scraper.
- **Sensors:** Ensure all sensors (e.g., vision camera, bumper sensors) are clean and free of debris.

5.2 Blade Replacement

Dull or damaged blades can affect cutting quality. Replace blades as needed, typically every few months depending on usage and grass type. Always wear protective gloves when handling blades. Refer to the app or a separate guide for detailed blade replacement instructions.

5.3 Battery Care

The LUBA mini uses a Lithium-Ion battery. For best battery life, store the mower in a cool, dry place during off-season and ensure it is charged periodically if stored for extended periods.

6. TROUBLESHOOTING

This section addresses common issues you might encounter with your LUBA mini.

Problem	Possible Cause	Solution
Mower not starting/charging	Not properly docked; power issue; battery depleted.	Ensure mower is correctly docked. Check power connection to charging station. Allow time for initial charge.
Poor mowing performance/uneven cut	Dull blades; cutting deck clogged; incorrect cutting height.	Replace blades. Clean cutting deck. Adjust cutting height in app.
Mower getting stuck or avoiding areas	Obstacles; mapping error; RTK signal loss.	Clear obstacles. Re-map the area if necessary. Ensure RTK station has clear sky view.
App connectivity issues	Wi-Fi signal weak; app outdated; mower not paired.	Check Wi-Fi signal strength. Update app and mower firmware. Re-pair mower if needed.

For more detailed troubleshooting, refer to the Mammotion app's help section or contact customer support.

7. SPECIFICATIONS

Technical specifications for the LUBA mini AWD 1500H.

Feature	Detail
Brand	Mammotion
Model Number	LUBA mini AWD 1500H
Power Source	Battery Powered (Lithium Ion)
Material	Plastic

Feature	Detail
Color	White
Cutting Width	7.9 Inches
Cutting Height Range	2.2" - 4.0" (5.59 cm - 10.16 cm)
Operation Mode	Automatic
Product Dimensions (D x W x H)	23"D x 11.1"W x 16.9"H
Slope Capability	Up to 80% (38.6°)
Mowing Area Capacity	Up to 0.37 Acre (recommended)

8. WARRANTY AND SUPPORT

Mammotion offers comprehensive support for your LUBA mini AWD 1500H.

Warranty Information

The product comes with a 3-year warranty. Please retain your proof of purchase for warranty claims. The warranty covers manufacturing defects and malfunctions under normal use conditions. It does not cover damage from misuse, accidents, or unauthorized modifications.

Customer Support

For technical assistance, troubleshooting not covered in this manual, or warranty inquiries, please contact Mammotion customer support:

- **Email:** Refer to your product packaging or the Mammotion official website for the most current email address.
- **Live Chat:** Available through the Mammotion app or official website.
- **Phone:** Refer to the Mammotion official website for regional phone numbers.

Mammotion offers 24/7 after-sales service to assist you.



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Related Documents

	<p>MAMMOTION Luba RTK Robot Lawn Mower: FAQs and Installation Guide</p> <p>A comprehensive guide to MAMMOTION Luba RTK robot lawn mowers, covering essential information such as cutting height, working conditions, no-go zones, maximum working area for the AWD 5000 model, and optimal installation locations for the RTK Reference Station. Includes a checklist for purchasing.</p>
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