

YARDCARE V100-CA-0418

YARDCARE V100 Robotic Lawn Mower User Manual

HD Visual Navigation, Smart Obstacle Avoidance & Precision Collision Sensors

1. INTRODUCTION

Thank you for choosing the YARDCARE V100 Robotic Lawn Mower. This manual provides essential information for the safe and efficient operation, setup, and maintenance of your new robotic lawn mower. Please read this manual thoroughly before first use and keep it for future reference.

The YARDCARE V100 is designed to simplify your lawn care routine with its advanced features, including HD visual navigation, smart obstacle avoidance, and adjustable cutting height. It is ideal for small lawns up to 1,600 sq ft.

2. PRODUCT OVERVIEW

The YARDCARE V100 Robotic Lawn Mower integrates cutting-edge technology to provide an effortless mowing experience. Key features include:

- **Visual Navigation Technology:** Equipped with a high-definition camera that precisely detects and distinguishes lawn grass, enabling efficient mowing navigation.
- **Smart Obstacle Avoidance:** Intelligently detects obstacles and navigates around them. High-precision collision sensors ensure the mower adjusts its path promptly upon slight contact.
- **Adjustable Cutting Height:** A convenient manual adjustment knob allows setting the cutting height from 0.8 to 2.4 inches.
- **Quiet Operation:** Designed to run quietly, minimizing disturbance to your family and neighbors.
- **Suitable for Small Lawns:** Efficiently covers areas up to 1,600 square feet, leaving finely cut grass clippings to naturally fertilize your lawn.



Figure 2.1: YARDCARE V100 Robotic Lawn Mower with its included 18V 4Ah battery and charger.

2.1. Product Components

What's in the package?

- 1 Robot Mower x1
- 2 Battery charger x1
- 3 4 Ah Battery x1
- 4 M4 screws of cutting blade x3
- 5 Spare blades x3
- 6 Instruction x1



Figure 2.2: Detailed view of the YARDCARE V100 Robotic Lawn Mower's top and bottom components, including the Control Panel, Scale Knob Cover, Visual Sensor + AI, Rain Sensor, STOP Button, Caster, Blade, Blade Disc, Driving Wheel, and Protection Disc.

3. WHAT'S IN THE PACKAGE

Upon opening the package, please verify that all components are present and undamaged:

- 1. Robot Mower x1
- 2. Battery charger x1
- 3. 4 Ah Battery x1

- 4. M4 screws of cutting blade x3
- 5. Spare blades x3
- 6. Instruction manual x1

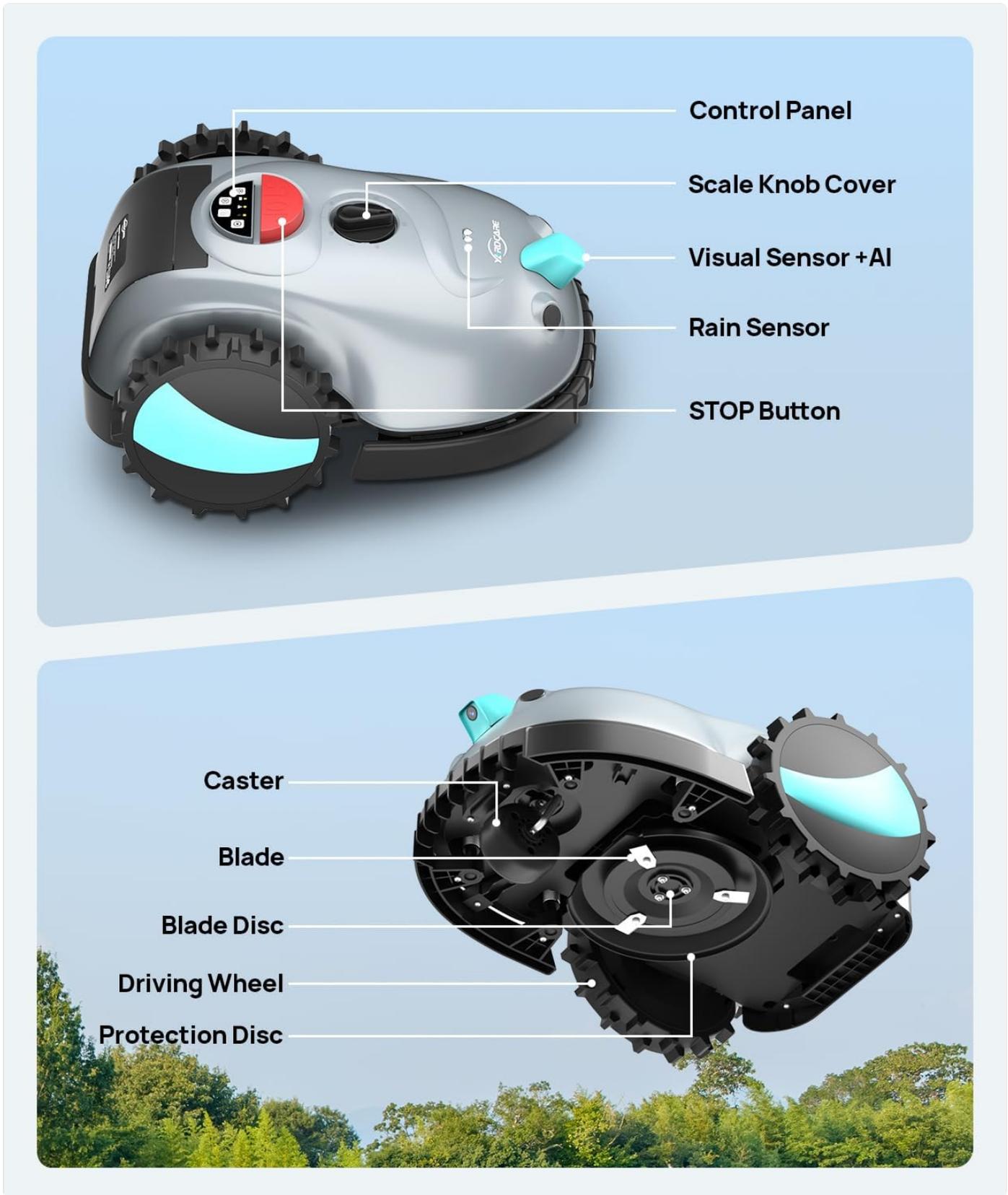


Figure 3.1: All items included in the YARDCARE V100 Robotic Lawn Mower package, clearly labeled for easy identification.

4. SETUP

4.1. Charging the Battery

Before first use, fully charge the 18V 4Ah battery. Connect the battery charger to a power outlet and insert the battery. The indicator light on the charger will show the charging status.

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Video 4.1: This video demonstrates the unboxing and initial setup of the YARDCARE V100 Robotic Lawn Mower, including how to handle the battery and charger.

4.2. Preparing Your Lawn

The V100 is designed for lawns with clear boundaries. For areas without natural boundaries (e.g., fences, gravel paths), it is recommended to establish clear physical borders. If the grass height exceeds 2.5 inches (6.35 cm), manually trim it before operating the mower to ensure optimal performance and prevent the mower from identifying tall grass as an obstacle.

Suitable for Obvious Boundaries

Magnetic Boundary for Undefined Lawns (Not included)



Figure 4.2: Illustration of suitable lawn boundaries for the YARDCARE V100, highlighting that clear borders are essential for effective operation. It also shows examples of unclear lawn borders and excessively tall grass, which are not suitable.

Suitable for Small Lawns with Clear Borders



Figure 4.3: The YARDCARE V100 is best suited for small lawns with clear, defined borders such as pathways or garden edges.

5. OPERATION

5.1. Starting the Mower

Ensure the battery is fully charged and properly inserted. Press the START button on the control panel to begin mowing. The mower will start its operation automatically.

5.2. Navigation and Mowing Pattern

The V100 uses HD visual navigation to identify and distinguish lawn grass from non-grass areas like sidewalks and flower beds. It operates by cutting the grass along a random path. If any areas are missed, you can manually place the mower in those spots for operation.

Visual Precision Recognition

Intelligently identify obstacles such as flowers and plants and automatically avoid them

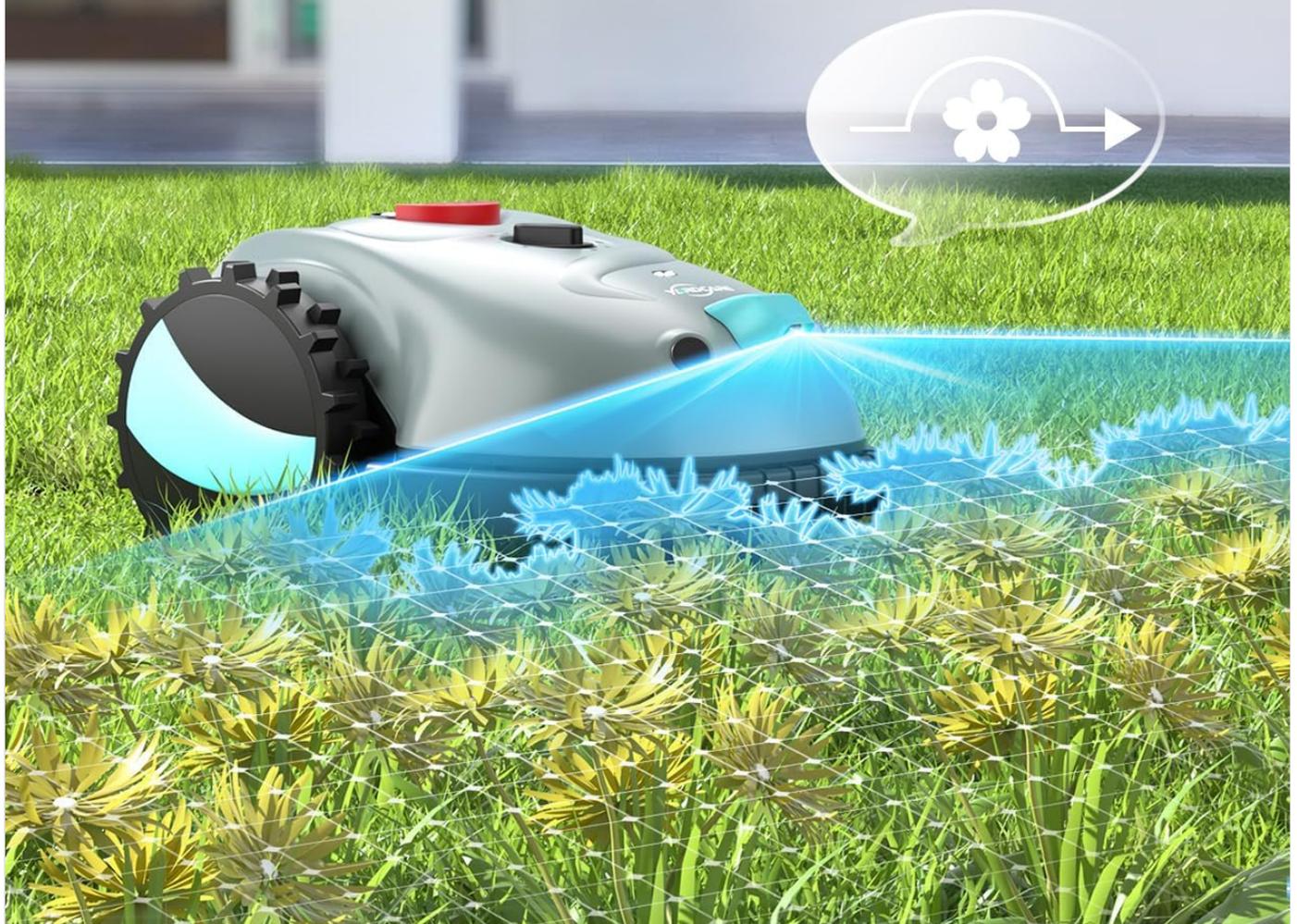


Figure 5.1: The mower's visual precision recognition intelligently identifies and automatically avoids obstacles like flowers and plants.



Figure 5.2: The mower's AI vision allows for easy navigation and identification of non-lawn areas, such as pool edges, to prevent accidental entry.

5.3. Obstacle Avoidance

The V100 is equipped with both vision-based and mechanical collision sensors. It intelligently detects and navigates around common garden obstacles such as decor, pet toys, and small items. If it makes slight contact with an object, it will promptly adjust its path to continue mowing without interruption.

Dual Obstacle Avoidance



Figure 5.3: The mower's dual obstacle avoidance system uses both vision to detect objects like hedgehogs and mechanical collision sensors for immediate path adjustment upon contact with larger obstacles like rocks.



Figure 5.4: Visual obstacle avoidance allows the YARDCARE V100 to effectively bypass over 150 types of obstacles, ensuring continuous mowing.

5.4. Adjusting Cutting Height

The cutting height can be adjusted using the manual knob on the top of the mower. The range is from 0.8 inches (20mm) to 2.4 inches (60mm). Rotate the knob to your desired height setting.

5 Adjustable Cutting Heights

Note: If the grass height exceeds 2.6 inches, please mow manually first to prevent the machine from identifying it as an obstacle



Figure 5.5: The YARDCARE V100 offers 5 adjustable cutting heights, ranging from 0.8 to 2.4 inches, allowing customization for your lawn's needs.

5.5. Spot Spiral Mowing

Activate the spot spiral mowing function to focus on areas with denser grass, ensuring a cleaner and more uniform lawn. The mower will steadily and gradually increase its mowing radius from the starting point.

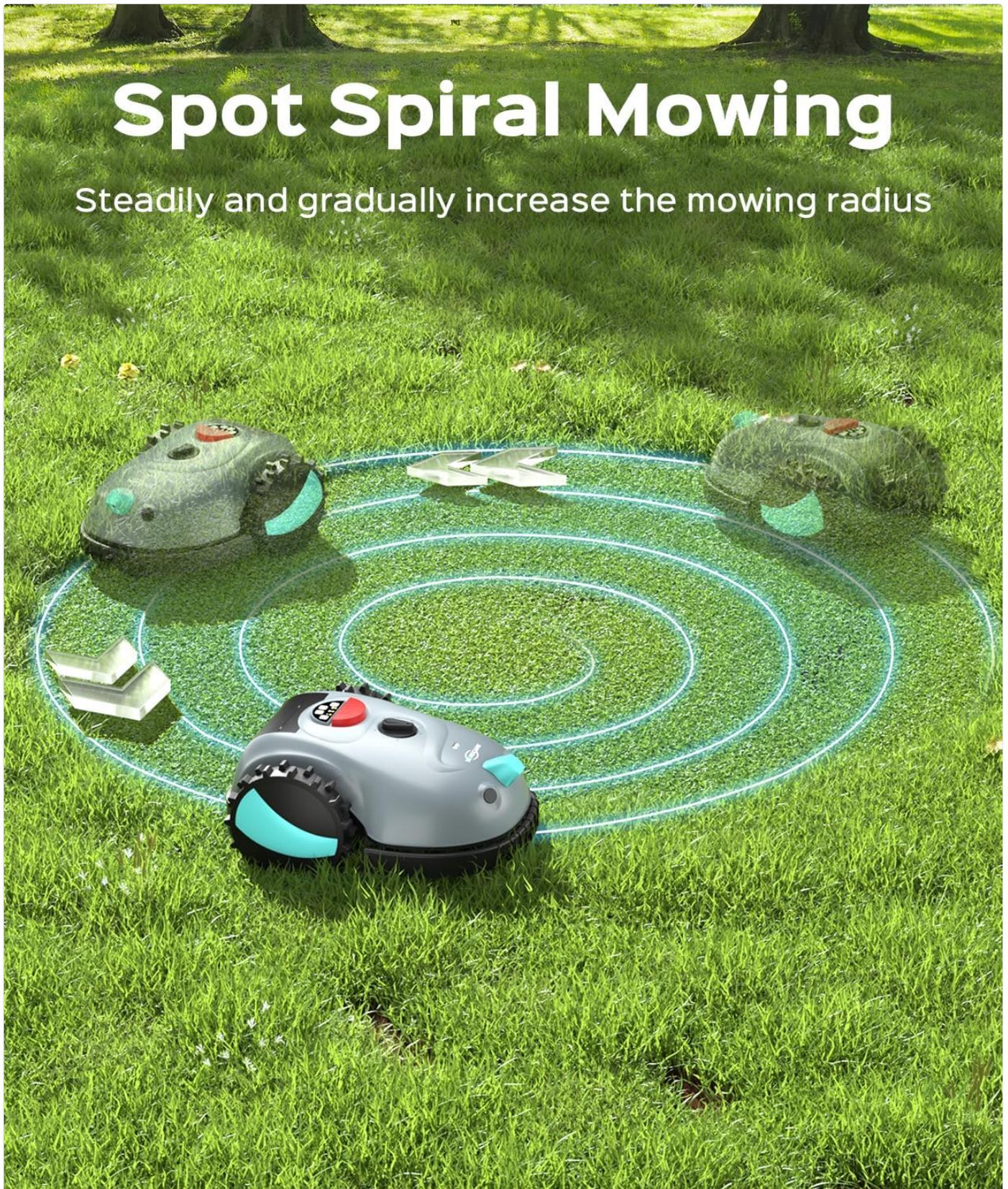


Figure 5.6: The mower's spot spiral mowing feature allows it to concentrate on specific areas, expanding its path in a spiral to ensure thorough coverage of denser patches.

5.6. Creating No-Mow Zones (Optional Accessory)

For areas you wish to exclude from mowing, such as flower beds or delicate garden features, you can lay magnetic wires (not included, purchased separately) across your yard. These wires create a temporary virtual fence, keeping certain areas off-limits for mowing.



Figure 5.7: Magnetic wires can be used to define "no-mow zones," preventing the robotic mower from entering specific areas. Note: Magnetic wires are sold separately.

6. MAINTENANCE

6.1. Cleaning

Regularly clean the mower to ensure optimal performance. The YARDCARE V100 is IPX4 waterproof, allowing for easy cleaning with water. Ensure the mower is turned off and the battery is removed before cleaning.



Figure 6.1: The YARDCARE V100 is IPX4 waterproof, allowing for safe and easy cleaning with a hose.

6.2. Blade Replacement

For best cutting results, inspect and replace the blades periodically. Spare blades and M4 screws are included in the package. Refer to the detailed instructions in the included instruction manual for blade replacement procedures.

7. TROUBLESHOOTING

This section addresses common issues you might encounter with your YARDCARE V100 Robotic Lawn Mower.

Problem	Possible Cause	Solution
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Problem	Possible Cause	Solution
Mower not starting	Battery not charged or improperly inserted.	Ensure battery is fully charged and securely inserted.
Mower gets stuck frequently	Tall grass (over 2.5 inches) or unclear boundaries.	Manually trim tall grass. Ensure clear boundaries are established.
Mower misses spots	Random mowing pattern on complex lawns.	Manually place the mower in missed areas. Consider using magnetic wires for complex layouts.
Mower stops unexpectedly	Lift & Tilt sensor activated, Rain sensor activated, or Bump sensor triggered repeatedly.	Check for obstacles. Ensure the mower is on a relatively flat surface. If raining, the mower will stop as designed.

8. SPECIFICATIONS

Feature	Detail
Brand	YARDCARE
Model Number	V100-CA-0418
Power Source	Battery Powered (18V 4Ah included)
Color	Gray
Item Weight	14.22 Pounds (6.45 kg)
Cutting Width	6.3 Inches (16 cm)
Adjustable Cutting Height	0.8 - 2.4 Inches (20 - 60 mm)
Operation Mode	Automatic
Recommended Lawn Area	Up to 1,600 sq ft (148.6 sq meters)
Waterproof Rating	IPX4
Product Dimensions	23.07"D x 17.95"W x 12.43"H (58.6 x 45.6 x 31.6 cm)

9. WARRANTY & SUPPORT

For warranty information and customer support, please refer to the official YARDCARE website or contact their customer service directly. Keep your purchase receipt as proof of purchase for any warranty claims.

Visit the [YARDCARE Store](#) for more products and information.