



[Manuals.plus](#) /

› [Yard Force](#) /

› Yard Force SA650ECO Robotic Lawnmower User Manual

Yard Force SA650ECO

Yard Force SA650ECO Robotic Lawnmower User Manual

Model: SA650ECO

INTRODUCTION

Thank you for choosing the Yard Force SA650ECO Robotic Lawnmower. This manual provides essential information for the safe and efficient operation, maintenance, and troubleshooting of your new robotic lawnmower. Please read it thoroughly before first use and keep it for future reference.



Image: The Yard Force SA650ECO Robotic Lawnmower, black and orange, designed for autonomous lawn care.

PRODUCT FEATURES

- **Optimal Lawn Coverage:** Designed for lawns up to 650 square meters, ensuring efficient and thorough mowing.
- **Adjustable Cutting Height:** Easily customize your lawn's height from 20mm to 60mm to suit different grass conditions and preferences.
- **Precise Edge Cutting:** Features a dedicated edge cutting function for a neat and tidy lawn border, with an 180mm cutting width.
- **Safety Sensors:** Equipped with a lift sensor that immediately stops the blades if the mower is lifted or tilted, enhancing user safety.
- **Mulching System:** The practical mulching system finely chops grass clippings and distributes them back onto the lawn, acting as a natural fertilizer for a healthier, greener lawn.
- **User-Friendly Control Panel:** The intuitive ECO control panel allows for easy programming and operation with minimal buttons.
- **Efficient Brushless Motor:** A robust, maintenance-free, and quiet brushless motor provides superior cutting performance and extended durability.
- **Powerful Lithium-Ion Battery:** Powered by a 28V 2.0Ah Lithium-Ion battery, compatible with other Yard Force 20V garden tools for versatile use.

PACKAGE CONTENTS

Before beginning installation, please ensure all items listed below are present and undamaged:

- 1x Yard Force SA650ECO Robotic Lawnmower
- 1x Charging Station
- 120 meters of Boundary Wire
- 150 pcs. Fixing Pegs for boundary wire
- 9 meters Power Cable for charging station
- 6 pcs. Replacement Blades
- 3 pcs. Replacement Screws for blades
- 3 pcs. Cable Connectors
- Spacer Ruler
- User Manual (this document)

SETUP GUIDE

1. Charging Station Placement

Select a flat, level area for the charging station, preferably in a shaded spot near an outdoor power outlet. Ensure there is at least 1 meter of clear space on both sides and 2 meters in front of the station for the mower to dock properly.

2. Connecting the Charging Station

Connect the power cable to the charging station and then to a suitable outdoor power outlet. Ensure the connection is secure and waterproof. Pay close attention to the correct pin alignment to avoid damage.

Your browser does not support the video tag.

Video: Demonstrates the correct way to connect the power cable to the Yard Force charging station, highlighting the importance of proper pin alignment to prevent damage.

3. Laying the Boundary Wire

The boundary wire defines the mowing area. Lay the wire around the perimeter of your lawn, ensuring it is at least 40cm (16 inches) from obstacles like walls, fences, or flowerbeds. Use the provided fixing pegs to secure the wire to the ground every 80cm (31 inches). The wire can also be buried slightly below the surface if desired.



Image: The robotic lawnmower operating near a boundary, illustrating the importance of proper wire placement for effective edge cutting.

4. Initial Charging

Place the robotic lawnmower in its charging station. Ensure the charging contacts align. The mower will begin charging automatically. Allow it to fully charge before its first operation.



Image: A woman carefully placing the robotic lawnmower into its charging station, ensuring proper alignment for charging.

OPERATING INSTRUCTIONS

1. Control Panel Overview

The ECO control panel is located under the orange flap on top of the mower. It features buttons for setting mowing duration (4H, 6H, 8H), signal selection (S1/S2), lock/unlock, and home/start functions. A rotary dial allows for easy adjustment of the cutting height from 20mm to 60mm.



Image: A woman opening the top flap of the robotic lawnmower to access the control panel and adjust settings.

2. Starting the Mower

Press the 'Start' button on the control panel. The mower will begin its mowing cycle. It operates on a random pattern to ensure full coverage of the defined area. For optimal results, ensure your lawn is not higher than 60mm before the first cut.

3. Edge Cutting Function

The mower automatically performs an edge cutting cycle, driving along the boundary wire to ensure clean edges. This function helps maintain a consistently neat lawn appearance.

4. Returning to Charging Station

When the battery is low or the mowing cycle is complete, the mower will automatically return to its charging station by following the boundary wire. You can also manually send it back by pressing the 'Home' button.

Your browser does not support the video tag.

Video: An overview of the Yard Force SA Series Robotic Lawnmower, demonstrating its operation and features for lawns up to 650-900 sqm.

MAINTENANCE

1. Blade Replacement

For optimal cutting performance, inspect the blades regularly and replace them when dull or damaged. Typically, blades should be replaced approximately every 10 weeks, depending on usage and grass conditions. Always use genuine Yard Force replacement blades.

2. Cleaning

Regularly clean the mower's chassis, wheels, and cutting deck to prevent grass buildup. Use a soft brush or cloth. Avoid using high-pressure water jets directly on the mower.

3. Battery Care

The 28V Lithium-Ion battery is designed for long life. For seasonal storage, ensure the battery is fully charged and store the mower in a dry, frost-free environment.

TROUBLESHOOTING

Problem	Possible Cause	Solution
Mower not starting	Low battery; Safety flap open; PIN code not entered.	Charge battery; Close flap securely; Enter correct PIN.
Mower not returning to station	Boundary wire issue; Station not powered; Obstruction.	Check wire continuity and connections; Verify power to station; Clear path to station.
Uneven cutting	Dull blades; Incorrect cutting height; Uneven lawn surface.	Replace blades; Adjust cutting height; Level lawn if necessary.
Mower stuck frequently	Obstacles in mowing area; Steep slopes; Soft ground.	Remove obstacles; Ensure area is within slope limits; Avoid very soft or muddy areas.

For more detailed troubleshooting, please refer to the full user manual or contact Yard Force customer support.

SPECIFICATIONS

- Model:** SA650ECO
- Brand:** Yard Force
- Recommended Lawn Area:** Up to 650 m²
- Cutting Width:** 18 cm
- Cutting Height:** 20mm - 60mm (Adjustable)
- Motor Type:** Brushless
- Battery Type:** 28V Lithium-Ion, 2.0Ah
- Product Dimensions (L x W x H):** 57 x 40 x 28.2 cm
- Weight:** 16.6 kg

Operating Mode: Automatic
Power Source (Charging Station): Corded

WARRANTY AND SUPPORT

Yard Force products are manufactured to high-quality standards. For warranty information, technical support, or spare parts, please visit the official Yard Force website or contact your local dealer. Keep your purchase receipt as proof of purchase.

For further assistance, please refer to the [Yard Force Store on Amazon](#).