



reddot winner 2021

# Segway Navimow 2023

Choose Life Without Boundaries



# The Future of the Robotic Mower Industry



In 1999, Segway was established in Bedford, NH, US, and has become a global enterprise in intelligent short-distance transportation and service robots. Segway products currently benefit more than 7.7 million users worldwide.

Navimow robotic mower is Segway's entry into the gardening and outdoor tools industry. Unlike most commercially available mowers, it does not require boundary wires. In addition, centimeter-level precise positioning and systematic mowing pattern increase efficiency and help ensure perfectly manicured lawns.

This revolutionary mower furthers our mission to expand the boundaries of daily life through technology.



**BladeHalt Sensor**

When the sensor area is touched, the blades stop spinning automatically.

**Intuitive Control Panel**

An easy-to-use interface that shows mowing progress and mower status.

**VisionFence Sensor**

Smart objects detection and avoidance.

**Bumper**

Reverses and continues in another direction after encountering obstacles.

**Recommended Mowing Area up to 3000 m<sup>2</sup>**

Battery capacity of up to 10400 mAh.

**RTK Positioning Module**

Global Navigation Satellite System Real-time Kinematic Module.

**Off-road Rubber Tires**

Can handle rough terrain and slopes of up to 45%.

**Built-in Hub Motor**

Generates up to 5 N·m of output torque for strong traversing capabilities.

## No More Perimeter Wires

With Exact Fusion Locating System (EFLS), Navimow can improve positioning accuracy to eliminate the need for physical perimeter wires. You can easily set a virtual boundary, and make adjustments via the Navimow app. The mower will work efficiently in a planned route within the mapped out area.



## Systematic Mowing Pattern

Precise positioning allows the mower to move in a planned path, cutting grass systematically. This significantly improves cutting efficiency and leaves fewer tracks on the lawn.



## How Does the Exact Fusion Locating System (EFLS) Work?

The GNSS base station antenna and the mower can receive the signals from the satellites. Meanwhile, the charging station transmits the signals between the mower and the base station. This simultaneous data analysis minimizes transmission-related errors.

Even so, GPS signals can still get lost because of blockage. The Navimow's system is designed to fuse all the information with devices like the gyroscope, accelerometer, magnetic compass, barometer, and odometer. As a result, the mower can get centimeter-level position accuracy even if the GPS signal is lost temporarily.

Simply put, EFLS fuses satellite-based positioning with data from multiple sensors, guaranteeing highly accurate positioning. The mower cuts systematically within the virtual boundary mapped out by EFLS, delivering a revolutionary mowing experience.

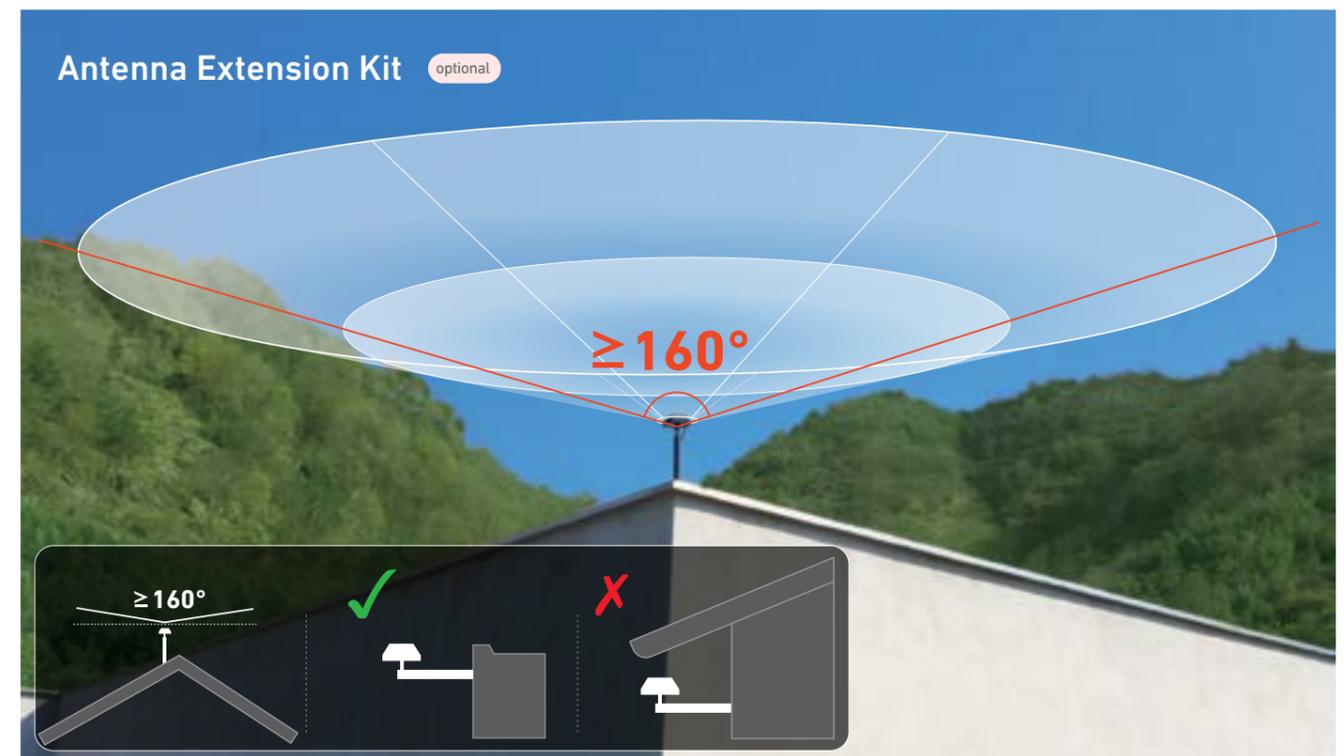


## Install the Charging Station and the Antenna

To ensure strong signal from GNSS, the antenna needs to be installed in an open space with an unobstructed view of at least 110° of the sky.



To get better signal, you can purchase the antenna extension kit and install it according to the provided instructions, ensuring an unobstructed sky view of at least 160°.



## VisionFence Sensor

With AI inside, VisionFence Sensor enables your Navimow to detect various objects and mow even more intelligently.



## Adaptable to More Complex Yards

When the satellite signal is weak in areas with challenging layouts, the VisionFence Sensor can identify the lawn's edge and allow Navimow to keep mowing the lawn.



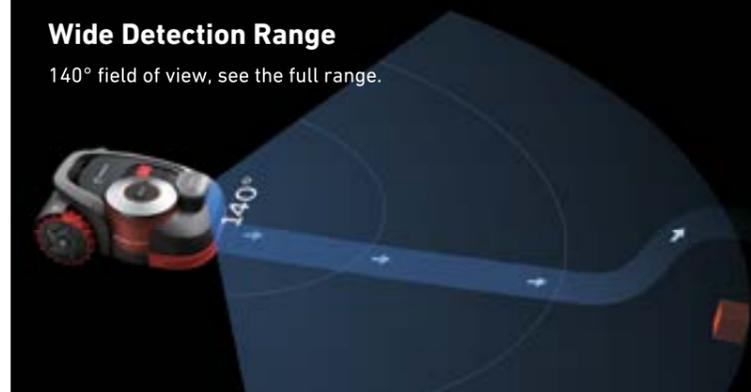
## Enhanced obstacle avoidance

Thanks to the advanced visual recognition algorithm, the sensor can recognize obstacles more effectively. With the VisionFence Sensor, Navimow can recognize and actively avoid objects within 1.5 m ahead and larger than 0.1 m in diameter. Consequently, some obstacles, such as trees and flowerpots, can be avoided without being set as off-limit islands.



## Wide Detection Range

140° field of view, see the full range.



## Weather Proof

IPX7 waterproof level, build to endure.



## Easy Update

Get software updates via Wi-Fi connection.



## Capture Every Move

Accurately capture moving objects and react in time.



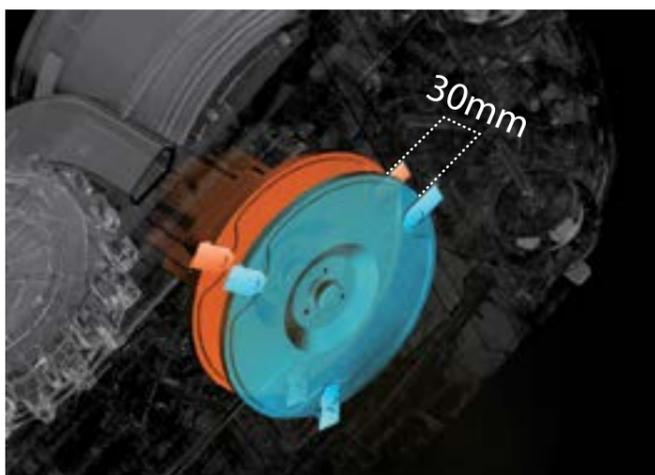


### 54 dB(A) Ultra-low Noise

Navimow is so far the quietest mower on the market, operating at a noise level just a bit higher than an electric toothbrush. Compared to traditional push and riding mowers, you'll hardly hear it working.

### IPX6 Waterproof Level

IPX6 waterproof level ensures powerful protection against heavy sprays of water. You can easily wash it clean with a garden hose.



### Electric Cutting Height Adjustment

Navimow is equipped with an electric motor for the blade disk. 7 blade disk height positions available from 30 mm to 60 mm, you can easily adjust it through Navimow app.

### Equipped for Complex Terrains

Two hub motors are installed into the wheels to ensure stronger climbing capability. The uniquely designed rubber tires also promise strong grip. Because of this, Navimow can easily handle slopes of up to 45% and handle complex lawns.



### Perfect Lawn Maintenance

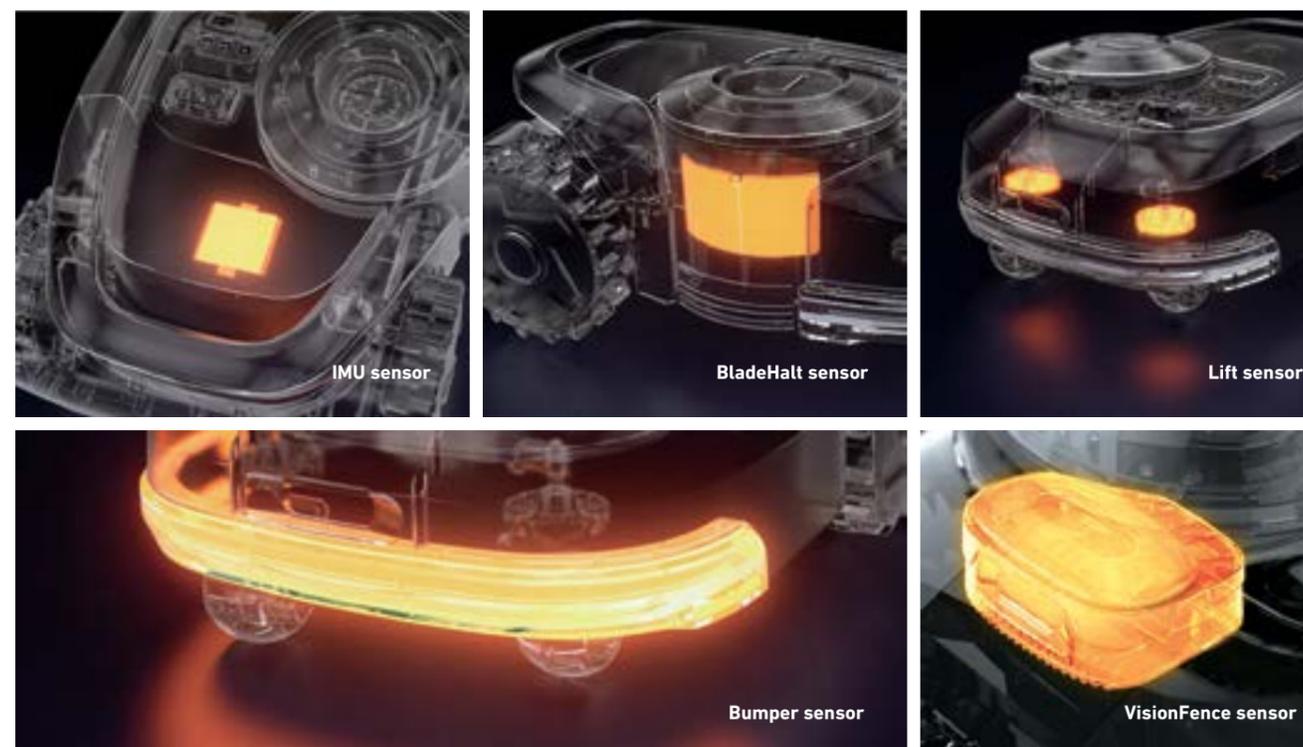
The automatic mowing path optimization system allows Navimow to select the optimal mowing path and automatically change the mowing direction after completing a round of mowing. Avoids the traces left by repeated mowing paths and keeps your lawn in a healthier growth environment.



### Safer than Ever

Navimow has multiple built-in safety sensors, including an IMU and Lift sensor for front and rear lifting, and VisionFence and Bumper sensors for obstacle avoidance. The BladeHalt\* sensor provides an extra layer of safety, stopping the blades if an object has contact with the sensing area.

\*This Lab function needs to be turned on in the app, because some water-rich plants will also trigger bioelectric induction, which may cause false detection. Optimization is in progress.



**CHOOSE LIFE**   
**WITHOUT BOUNDARIES**



## Navimow App: Perfect Lawn Care With Just a Tap

To download the Navimow app, scan the QR code below or search "Navimow" in the App Store or Play Store.



## Smart App Control

In the Navimow app, you can find everything you need, from interactive guidance and personalized settings to status updates and service extension.



Set and Adjust Mowing Area



Check Real-time Mower Status



Adjust Mowing Schedule



Set an Anti-theft Alarm



OTA Updates

## Why Choose a Navimow Robotic Mower

Easy to use, efficient operation and smart technology which all adds up to a perfectly cut lawn.

<h3>Virtual Boundary</h3> <p>Avoid the hassle of laying boundary wire in your lawn. Just map out a virtual boundary in the app.</p>	<h3>Boundary Wire</h3> <p>Spend hours of time and effort with your wire, hammer, ruler, and spikes.</p>
<h3>Systematic Mowing Pattern</h3> <p>Systematic routes and efficient work, flawless cutting.</p>	<h3>Random Mowing Pattern</h3> <p>Random routes and time-consuming, repetitive cutting.</p>
<h3>IoT Connectivity</h3> <p>Remotely operate and monitor the mower with ease from anywhere at any time. To ensure you always have the latest features, you can download over-the-air (OTA) updates with just a tap in the app.</p>	<h3>No IoT Connectivity</h3> <p>The mower cannot be controlled or monitored remotely. Updating can only be done with a USB flash disk.</p>

## With No Perimeter Wires, Setup Is a Breeze

Download the Navimow app and follow the instructions to set up the virtual boundary. Navimow is built to adapt quickly, so even when the garden lawn layout changes, you can quickly and easily redefine the virtual boundary to reflect those changes.

1

### Activation

Connect your Navimow to a network and activate it.



2

### Mapping

Follow the guidance in the app to create a map.



3

### Mowing

You can manually start the mower, start it in the app, or set up a schedule.



4



### Features

	H800A-VF	H1500A-VF	H3000A-VF
Dimensions	603 × 468 × 264 mm	603 × 468 × 264 mm	603 × 468 × 264 mm
Net Weight	16.9 kg	17.2 kg	17.5 kg
Recommended Mowing Area	800 m <sup>2</sup>	1500 m <sup>2</sup>	3000 m <sup>2</sup>
Cutting Height	30–60 mm	30–60 mm	30–60 mm
Cutting Width	21 cm	21 cm	21 cm
Battery	5.2 Ah	7.8 Ah	10.4 Ah
Run Time	180 min	240 min	240 min
Charging Time	180 min	240 min	300 min
Mowing Efficiency	100 m <sup>2</sup> /h	100 m <sup>2</sup> /h	150 m <sup>2</sup> /h
Max. Slope	45%	45%	45%
Noise	54dB (A)	54dB (A)	54dB (A)
Waterproof Level	IPX6	IPX6	IPX6
Virtual Boundary	●	●	●
Systematic Mowing Pattern	●	●	●
Automatic Charging	●	●	●
Mulching	●	●	●
Off-road Driving	●	●	●
BladeHalt Sensor	●	●	●
VisionFence Sensor	●	●	●
Wi-Fi	●	●	●
4G	●	●	●
App Control	●	●	●
In-app Height Adjustment	●	●	●
Streamlined Interface	●	●	●
Anti-theft Protection	●	●	●
Easy Cleaning	●	●	●
Rain Sensor	●	●	●
OTA Updates	●	●	●
PIN Code	●	●	●

All data are nominal values

## Accessories

### Blade Assembly

Easy blade replacement for the whole year.



Dimensions  
110 × 190 × 12.5 mm



Packaging Material  
Blister Card



Model  
HA002E



### Antenna Extension Kit

Improves GPS signal for antenna installation on the wall or roof.



Dimensions  
165 × 82 × 255 mm



Packaging Material  
Color Box



Model  
HA001



### Temporary Fence

Protects areas where you don't want the mower to go.



Dimensions  
345 × 345 × 50 mm



Packaging Material  
Color Box



Model  
HA003



### Extension Cable

Extra extension cable for antenna installation on the wall or roof.



Dimensions  
120 × 200 × 45 mm



Packaging Material  
Color Box



Model  
HA103



## Benefits of Navimow



### Virtual Boundary

Easy setup with no perimeter wires required.

### Systematic Mowing Pattern

Improves the mowing efficiency significantly.

### Off-road Driving

Off-road tires, built-in hub motor, 45% slope-climbing capability.



### Electric Cutting Deck

30-60 mm adjustable cutting height with 7 available positions.



### Smart App

Easy access and control from anywhere, at any time.



### Anti-theft

Sends auto alert if the mower is outside the boundary.



### Easy Operation

User-friendly and intuitive control panel.



### Internet of Things (IoT)

Remote control, monitoring and over-the-air updates.



### Labor Saving

Say goodbye to complicated operation and maintenance.



### Time Saving

Free up your schedule and spend quality time in your yard.



### Maximum Safety

Multiple built-in safety sensors.



### IPX6 Waterproof Level

Cleanable with a garden hose.



### Ultra-low Noise

Noise level minimized to a barely audible 54 dB(A).



### No Pollution

No fuel burning or CO2 pollution thanks to lithium-ion batteries.



### Healthy Cutting

Cuts a little bit each time and cuts more frequently.



CHOOSE  LIFE  
WITHOUT   
 BOUNDARIES

CHOOSE  LIFE  
WITHOUT   
 BOUNDARIES



**SEGWAY**

<https://navimow.segway.com>



Products depicted in this document are subject to specification, performance characteristic and availability changes without prior notice. Images used for illustration purposes only. All trademarks herein are fully acknowledged to belong to their corresponding owners. No reproduction of this document, or part thereof, by electronic or photographic means permitted without prior consent of Roy Gripske & Sons Pty. Ltd. Latest update August 2023

Copyright © 2023 Roy Gripske & Sons Pty. Ltd. All rights reserved. 1205227795718470