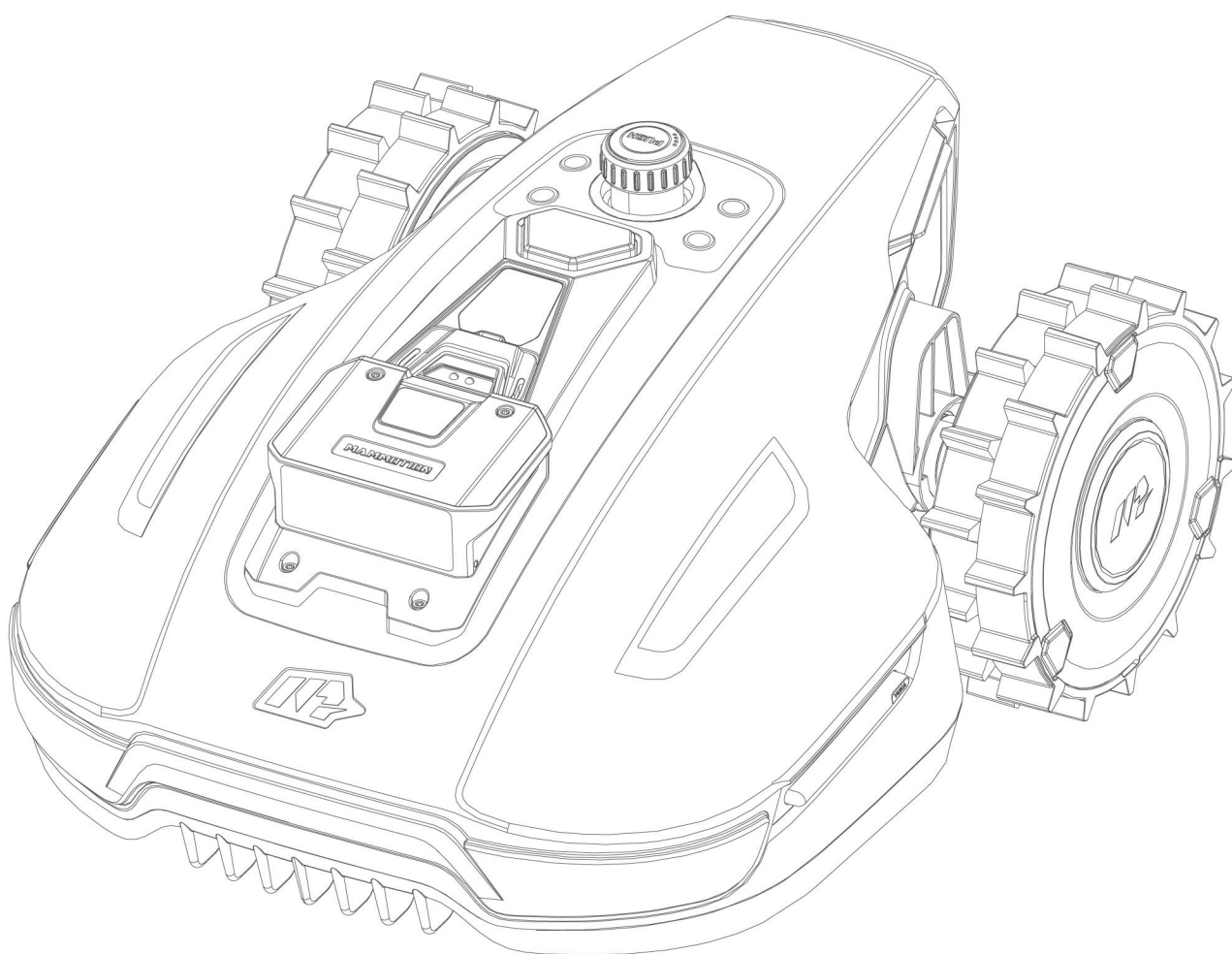




USER MANUAL

Robotic Lawn Mower

YUKA mini Vision



Original Instructions **Version 1.0**

06/2025

Thank you for choosing Mammotion as your garden care lawn mower. This user manual will help you learn and operate Mammotion robot, a perimeter-free lawn mower, to cut grass and maintain your lawn.

This manual is copyrighted by Mammotion company. Without the written permission of the company, any unit or individual shall not copy, modify, reproduce, transcribe or transmit in any way or for any reason. This manual is subject to change without notice at any time.

Unless explicitly agreed otherwise, this manual serves solely as a usage guide, and all statements and information contained herein do not constitute any form of warranty.

Revision Log

Date	Version	Description
06/2025	V1.0	Initial version

CONTENTS

1 Safety Instructions	- 1 -
1.1 General Safety Instructions	- 1 -
1.2 Safety Instructions for Installation	- 2 -
1.3 Safety Instructions for Operation	- 2 -
1.4 Safety Instructions for Maintenance	- 3 -
1.5 Battery Safety	- 4 -
1.6 Residual Risks	- 4 -
1.7 Intended Use	- 4 -
1.8 Disposal	- 4 -
2 Introduction	- 5 -
2.1 How Vision Module Works	- 5 -
2.2 In the Box	- 6 -
2.3 Symbols on the Product	- 8 -
2.4 Product Overview	- 10 -
3 Installation	- 14 -
3.1 Preparation	- 14 -
3.2 Choosing a Location for Charging Station	- 14 -
3.3 Install	- 16 -
4 Operation	- 19 -
4.1 Preparation	- 19 -
4.2 Add Your Product	- 20 -
4.3 Activate SIM Card	- 21 -
4.4 Update Firmware	- 21 -
4.5 Create a Map	- 22 -
4.6 Mow	- 27 -
4.7 Task Schedule	- 31 -
4.8 View Status	- 33 -

4.9 Settings	- 34 -
4.10 Service Page	- 37 -
4.11 Me Page	- 37 -
5 Maintenance	- 45 -
5.1 Cleaning	- 45 -
5.2 Maintenance for Cutting Blades and Motor	- 47 -
5.3 Battery Maintenance	- 49 -
5.4 Winter Storage	- 49 -
6 Product Specifications	- 51 -
6.1 Technical Specifications	- 51 -
6.2 Fault Codes	- 55 -
7 Warranty	- 57 -
8 Compliance	- 59 -
9 Simplified EU Declaration of Conformity	- 61 -

1 Safety Instructions

1.1 General Safety Instructions

- Carefully read and understand the user manual before using the robot.
- Only individuals who are legally considered adults in their state of residence are recommended to use the robot.
- Only use the equipment recommended by Mammotion with the robot. Any other usage is incorrect.
- Never allow children, persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge or people unfamiliar with these instructions to use the robot, local restrictions may restrict the age of the operator.
- Do not allow children to be in vicinity or play with the robot when it is operating.
- Do not use the robot in areas where people are unaware of its presence.
- When manually operating the robot with the Mammotion app, do not run. Always walk, watch your steps on slopes, and maintain balance at all times.
- Avoid touching moving hazardous parts, such as the blade disc, until it has completely stopped.
- Avoid using the robot when there are people, especially children or animals, in the task area.
- If operating the robot in public areas, place warning signs around the task area with the following text:
"Warning! Automatic lawn mower! Keep away from the robot! Supervise children!"
- Wear sturdy footwear and long trousers when operating the robot.
- To prevent damage to the robot and accidents involving vehicles and individuals, do not set task areas or channels across public pathways.
- Seek medical aid in case of injury or accidents.
- Set the robot to **OFF** and remove the security key before clearing blockages, performing maintenance, or examining the robot. If the robot vibrates abnormally, inspect it for damage before restarting. Do

not use the robot if any parts are defective.

- Do not connect or touch a damaged cable until it is disconnected from the power outlet. If the cable becomes damaged during operation, disconnect the plug from the power outlet. A worn or damaged cable increases the risk of electrical shock and should be replaced by service personnel.
- Do not place cables in areas where the robot will cut.
- Only use the charging station included in the package to charge the robot. Incorrect use may result in electric shock, overheating, or corrosive liquid leakage from the battery. In case of electrolyte leakage, flush with water/neutralizing agent and seek medical aid if the corrosive liquid comes into contact with your eyes.
- Only use original batteries recommended by Mammotion. The safety of the robot cannot be guaranteed with non-original batteries. Do not use non-rechargeable batteries.
- Keep extension cords away from moving hazardous parts to avoid damage to the cords which can lead to contact with live parts.
- The illustrations used in this document are for reference only. Please refer to the actual products.

1.2 Safety Instructions for Installation

- Avoid installing the charging station in areas where people may trip over it.
- Do not install the charging station in areas where there is a risk of standing water.
- Do not install the charging station, including any accessories, within 60 cm/24 in of any combustible material. Malfunctioning or overheating of the charging station and power supply can pose a fire hazard.
- For users in the USA/Canada: If installing the power supply outdoors, there is a risk of electric shock. Only install it in a covered Class A GFCI receptacle (RCD) with a weatherproof enclosure, ensuring that the attachment plug cap is inserted or removed.

1.3 Safety Instructions for Operation

- Keep your hands and feet away from the rotating blades. Do not place your hands or feet near or

below the product when it is turned on.

- Do not lift or move the product when it is turned on.
- Ensure that there are no objects such as stones, branches, tools, or toys on the lawn. Otherwise, the blades may be damaged when they come into contact with the object.
- Do not put objects on top of the robot and charging station.
- Do not use the product if the **STOP** button is not functioning.
- Avoid collisions between the product and people or animals. If a person or animal comes in the path of the product, stop it immediately.
- Always power off the robot when it is not in operation.
- Do not use the product simultaneously with a pop-up sprinkler. Utilize the Schedule function to ensure that the product and pop-up sprinkler do not operate at the same time.
- Avoid setting a channel where pop-up sprinklers are installed.
- Do not operate the product in the presence of standing water in the task area, such as during heavy rain or water pooling.

1.4 Safety Instructions for Maintenance

- Power off the robot when performing maintenance.
- Disconnect the plug from the charging station before cleaning or performing maintenance on the charging station.
- Do not use a high-pressure washer or solvents to clean the robot.
- After washing, ensure that the robot is placed on the ground in its normal orientation, not upside down.
- Do not reverse the robot to wash the chassis. If you do reverse it for cleaning purposes, make sure to restore it to its proper orientation afterward. This precaution is necessary to prevent water from leaking into the motor and potentially affecting normal operation.

1.5 Battery Safety

Lithium-ion batteries can explode or cause a fire if disassembled, short-circuited, exposed to water, fire, or high temperatures. Handle them with care, do not dismantle or open the battery, and avoid any form of electrical/mechanical abuse. Store them away from direct sunlight.

- Only use the battery charger and power supply provided by the Manufacturer. The use of an inappropriate charger and power supply can cause electric shocks and/or overheating.
- DO NOT ATTEMPT TO REPAIR OR MODIFY BATTERIES! Repair attempts may result in severe personal injury, due to explosion or electrical shock. If a leak develops, released electrolytes are corrosive and toxic.
- This appliance contains batteries that are only replaceable by skilled persons.

1.6 Residual Risks

To avoid injuries, wear protective gloves when replacing the blades.

1.7 Intended Use

Mammotion robots are designed for residential lawn care and are not intended for commercial use.

1.8 Disposal

Dispose of this product in compliance with local electronic waste (WEEE) regulations. Do not dispose of it with regular household waste. Instead, bring it to an authorized recycling center or collection point to ensure safe handling and environmentally responsible disposal of electronic components.

2 Introduction

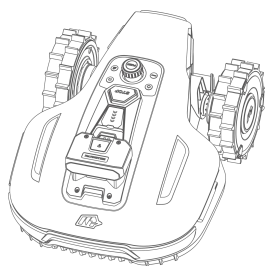
2.1 How Vision Module Works

- **Visual Localization and Mapping**
 - ◆ **Environment Scanning:** The built-in cameras capture real-time images of the lawn, extracting key features (edges, textures, objects) to create a digital map.
 - ◆ **SLAM Technology:** Using Visual Simultaneous Localization and Mapping (V-SLAM), the robot continuously updates its position by matching detected features with the stored map.
 - ◆ **Perimeter Recognition:** The AI identifies grass areas, borders (e.g., sidewalks, flower beds), and no-go zones without requiring physical perimeter wires.
- **Obstacle Detection and Avoidance**
 - ◆ **Real-Time Object Recognition:** Deep learning models classify obstacles (static: rocks, toys; dynamic: pets, humans).
 - ◆ **Dynamic Path Planning:** Adjusts mowing routes instantly when obstacles are detected to ensure smooth avoidance.

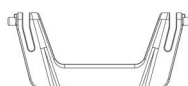
2.2 In the Box

Ensure the parts can be found in the package according to your order. If any parts are missing or damaged, contact your local dealer or our after-sales support. Mammotion recommends you keep the package box and foam inserts for future use.

2.2.1 YUKA mini Vision Installation Kit



YUKA mini Vision x1



Security Key x1 (for spare use)

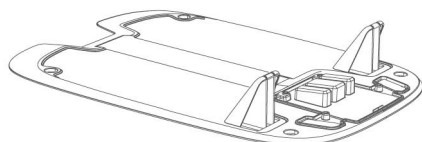


Blade x6 (for spare use)

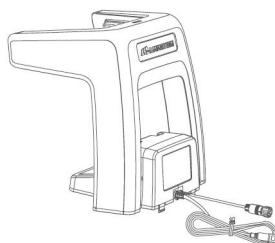


Screw x6 (for spare use)

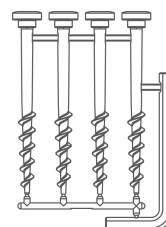
2.2.2 Charging Station Installation Kit



Charging Base Plate x1



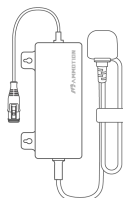
Charging Tower x1



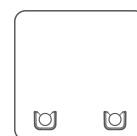
Stake Kit x1



Screw x4

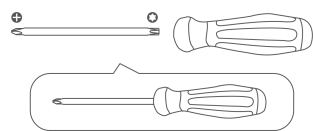


Charging Station Power Supply x1



QR Code Marker

2.2.3 Tool Kit



Screwdriver (Phillips bit+T20 bit) x1



Brush x1



Cable Peg x4

2.3 Symbols on the Product

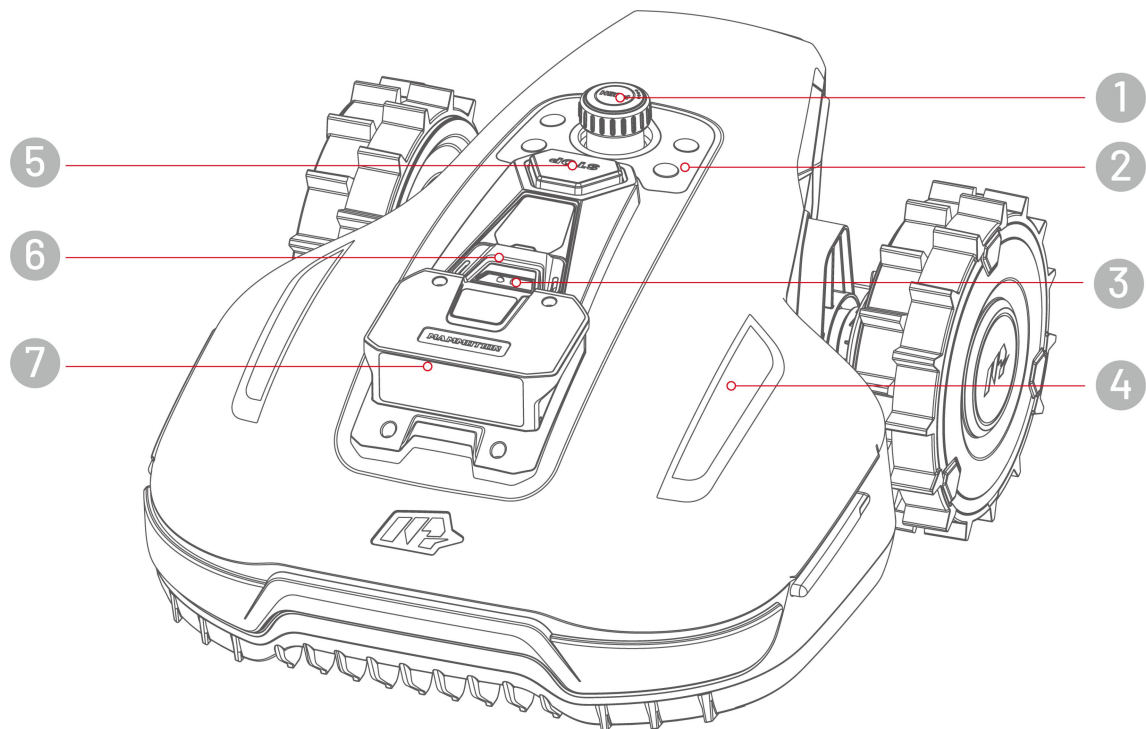
These symbols can be found on the product. Study them carefully.

Symbol	Description
	Warning.
	Read user instructions before operating the product.
 TS-A081-2703002	Use a detachable supply unit TS-A081-2703002.
	This product complies with the applicable EU Directives.
Made in China	This product is manufactured in China.
	It is not permitted to dispose of this product as normal household waste. Ensure that the product is recycled in accordance with local legal requirements.
	This item can be recycled.
	Keep the pack of this product dry.
	The pack of this product should not be covered.
	Prohibit flipping.
	This product is fragile.
	The pack of this product/the product should not be tread.
	Class III appliance.

Symbol	Description
	Keep hands or feet away from movable blades.
	Do not ride on the product.
	Keep a safe distance from your product when operating.
	WARNING – Do not touch rotating blade.
	WARNING – Read the user instructions before operating the product.
	WARNING – Keep a safe distance from the machine when operating.
	WARNING – Remove the disabling device before working on or lifting the machine.
	WARNING – Do not ride on the machine. Never put your hands or feet close to or under the product.

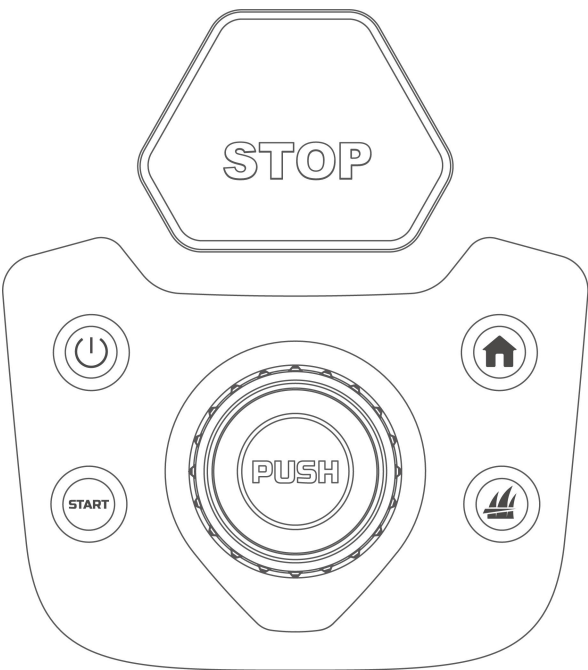
2.4 Product Overview

2.4.1 YUKA mini Vision

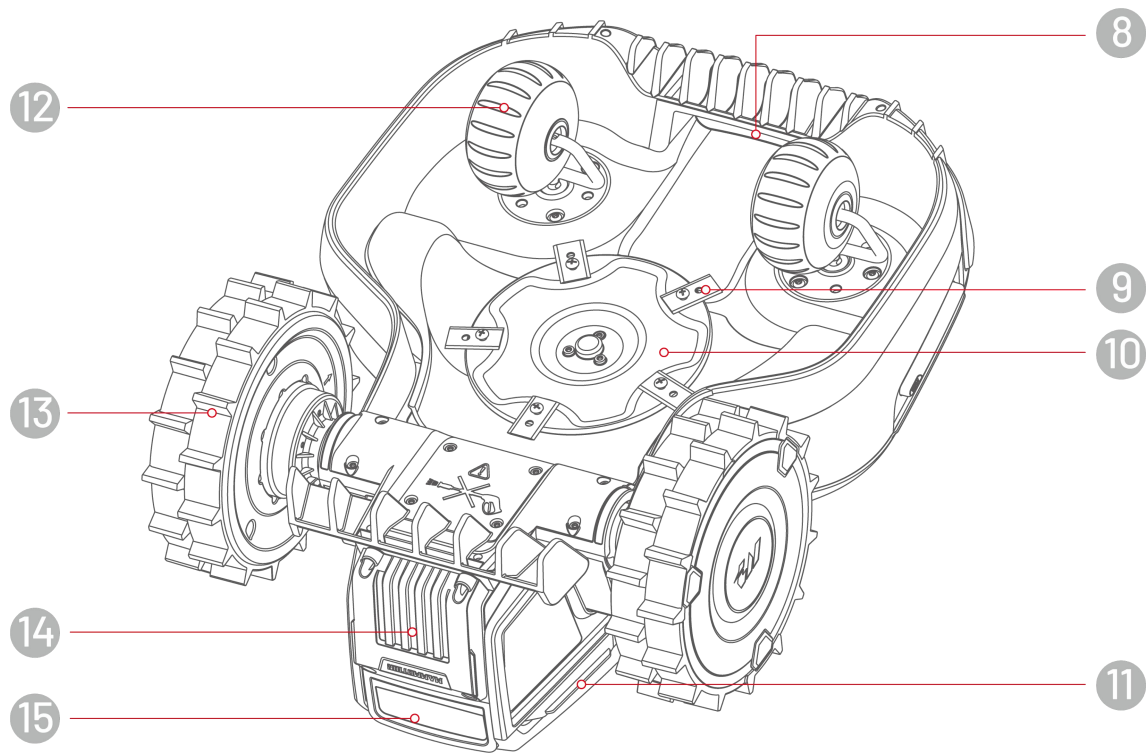


- | | |
|---|--------------------------|
| 1. Cutting Height Adjustment Button — press and turn to adjust cutting height | 3. Rain Sensor |
| 2. Control Center | 5. Emergency Stop Button |
| 4. Side LED | 7. Vision Module |
| 6. Security Key — do not lift the robot from this point | |

Control Center

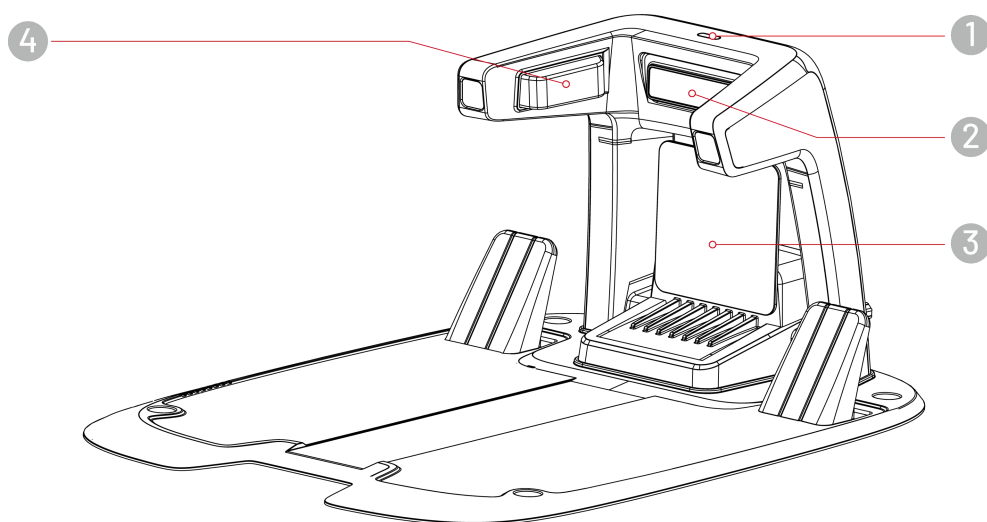


Button	Description	Description
	Home Button	● Press  , then press  to return to the charging station. ● Press  , then press  to start or continue a task.
	Grass Button	
	Start Button	
	Power Button	Long press the button  to turn on/off the robot.
	Emergency Stop Button	If any unexpected problems arise, press the button to stop the robot immediately.



- | | |
|------------------------------|------------------------------|
| 8. Handle | 9. Cutting Blade |
| 10. Cutting Disc | 11. Charging Contact |
| 12. Omni Wheel | 13. Rear Wheel |
| 14. Removable Battery | 15. Infrared Receiver |

2.4.2 Charging Station



- | | |
|--|--------------------------------|
| 1. Charging Station LED Indicator | 2. Infrared Transmitter |
| 3. QR Code Marker | 4. Charging Contact |

2.4.3 LED Indicator Codes

YUKA mini Vision

Indicator	Color	Description
Side LED	Solid green	The robot is functioning properly.
	Breathing green	● OTA upgrade in progress. ● The robot is being charged.
	Blinking blue	● Emergency Stop Button activated. ● Low battery. ● The robot got stuck. ● Security key not properly installed. ● The robot has been lifted/tilted/flipped over.
	Solid red	● The robot system malfunction. ● The robot system upgrade failed.
	Off	● The robot is turned off. ● The robot is sleeping. ● The side LED is turned off in the app. ● The robot is in manual control mode but is currently inactive.

Charging Station

Color	Description
Blinking green	The robot is docked at the charging station.
Solid green	The robot is not at the charging station.
Solid red	The charging station malfunction.
Off	No power supply.

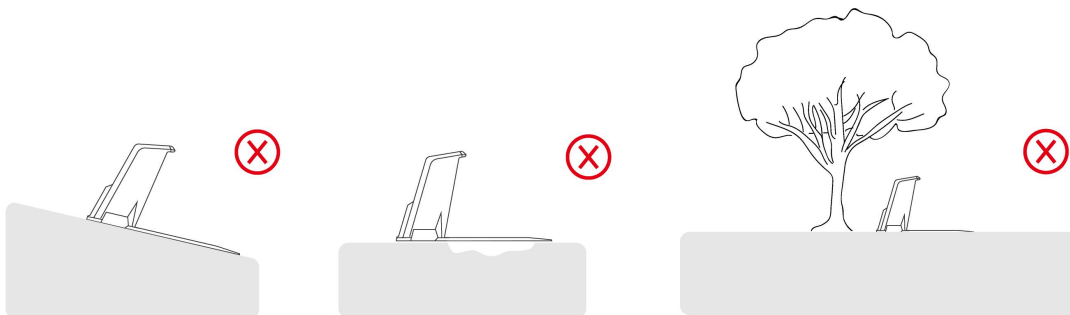
3 Installation

3.1 Preparation

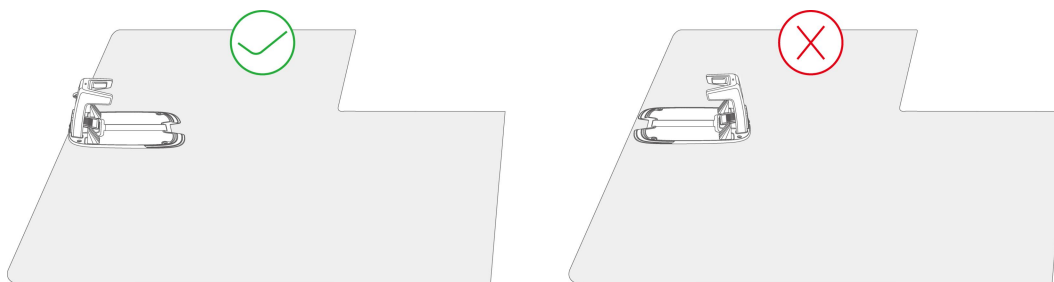
- Read and understand the safety instructions prior to installation.
- Use original parts and installation materials.

3.2 Choosing a Location for Charging Station

- Place the charging station on a flat ground.
- The charging area (1x1 m/3x3 ft. in front of the charging station) should be free from significant bumps. The slope must be less than 5°.
- DO NOT install the charging station at the corner of an L-shaped building or on a narrow path between two structures.
- No obstacles or other items should be between the charging station and the docking point.
- The base plate of the charging station must not be bent or tilted.



- Position the charging station to face the lawn.



- If the charging station is placed outside the lawn, create a channel to connect it to the lawn.



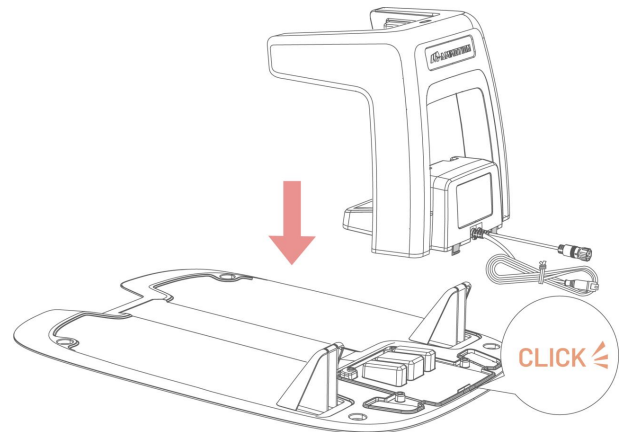
NOTE

If the charging station is installed on a concrete surface, please secure it with expansion bolts.

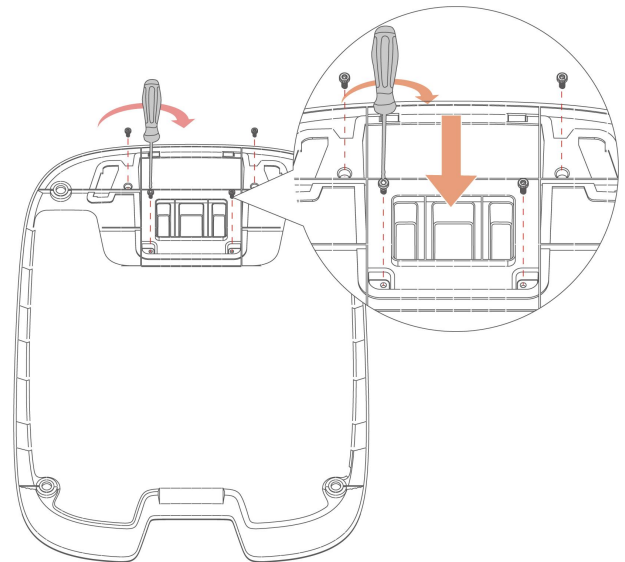
3.3 Install

3.3.1 Install the Charging Station

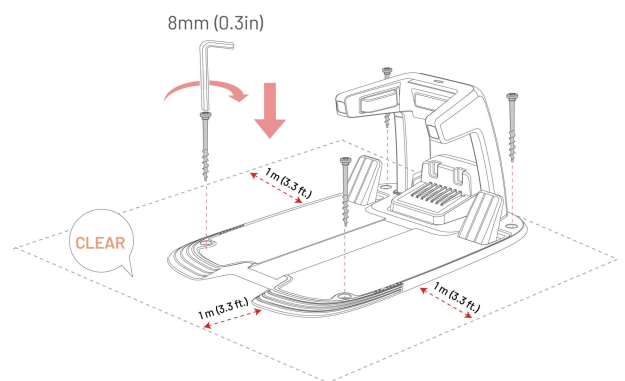
1. Insert the charging tower into the charging base plate until you hear a CLICK sound.



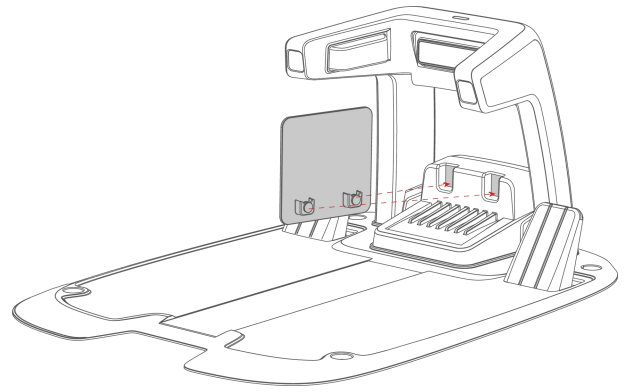
2. Install and tighten the four screws from the bottom of the charging base plate using the screwdriver with the T20 bit.



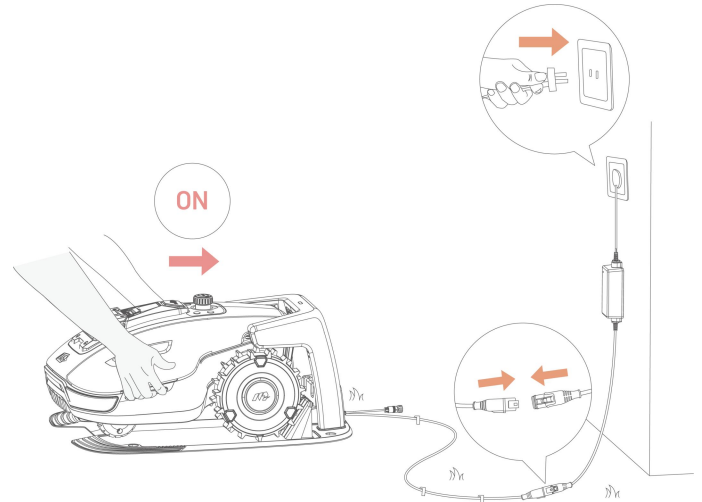
3. Select an open spot to install the charging station.
4. Use the four stakes to properly fasten the charging station in the position as shown.



5. Install the QR code marker.



6. Connect the charging station cable (the longer one) with the charging station power supply.
7. Plug the charging station power supply into the wall socket.
8. Place the robot on the charging station to begin charging.



NOTE

Charge the robot for initial use to activate it.

3.3.2 Install AirTag (optional)



NOTE

The AirTag is not included in the package.

