



Robotic Mower

Original Instructions



Read the operator's manual carefully and make sure that you understand the instructions before you use the product.

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Part 1 Safety and Regulations



IMPORTANT: READ CAREFULLY BEFORE USE
KEEP FOR FUTURE REFERENCE

1.1 General safety instructions

- Never allow children, persons with reduced physical, sensory, or mental capabilities, individuals lacking experience and knowledge, or people unfamiliar with these instructions to use the machine. Local regulations may restrict the age of the operator.
- Children shall not play with the appliance.
- Cleaning and user maintenance shall not be made by children without supervision.
- The product must only be used with the equipment recommended. All other types of use are incorrect.
- Do not use the product when persons, especially children, or animals are in the work area.
- Do not use the product in areas where persons are not aware of the product.
- To prevent damage to the product and accidents to vehicles and persons, do not install work areas and path across public pathways.
- Warning signs must be put around the work area of the product if it operates in public areas. The signs must have the text that follows: Warning! Automatic lawn mower! Keep away from the machine! Supervise children!
- Do not run when you operate the product manually with the app. Always walk, be sure on footing on slopes and make sure to have a balance at all times.
- Always wear sturdy footwear and long trousers when you operate the product.
- Do not touch any moving hazardous parts, such as the blade disc, before it has come to a complete stop.
- Shut down before you clear a blockage, do maintenance or examine the product, and if the product starts to vibrate abnormally. Examine the product for damage before you start the product again. Do not use defective products.
- If an injury or accident occur, get medical aid.
- Keep extension cables away from moving hazardous parts to avoid damage to the cables which can lead to contact with live parts.
- Do not connect a damaged cable or plug, or touch a damaged cable, before it is disconnected from the power outlet. Disconnect the plug from the power outlet if the cable becomes damaged while in operation. A worn or damaged cable increases the risk of electrical shock. A damaged cable must be replaced by service personnel.
- The supply cord cannot be replaced. If the cord is damaged the appliance should be scrapped.
- The battery charger must only be plugged into an earthed socket-outlet.

- Only charge the product in the charging station we provided. Incorrect use may result in electric shock, overheating or leaking of corrosive liquid from the battery. In the event of leakage of electrolyte, flush with water / neutralizing agent. Get medical aid if corrosive liquid comes in your eyes.
- Use only original batteries recommended by UBHOME. Product safety cannot be guaranteed with non-original batteries.
- If there is a risk of thunderstorm, it is recommended that the power supply to the charging station and the reference station are disconnected to decrease the risk of damage to electrical components. Connect the power supply again if there is no longer a risk of thunderstorm.
- Follow the maintenance instructions and if necessary use UBHOME original spare parts.
- The operator is responsible for accidents or dangers that occurs to other persons or properties.
- The product must only be operated, maintained and repaired by persons that are fully conversant with its special characteristics and safety regulations.
- It is not permitted to change the initial design of the product.
- Obey national regulations about electrical safety.
- 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.
- UBHOME does not guarantee full compatibility between the product and other types of wireless systems such as remote controls, radio transmitters or equivalent.
- The built-in alarm is loud. Be careful, especially if the product is handled indoors.
- Operation temperature is -10-50 °C / 14-122 °F. Temperature range for charging is 5-45 °C / 45-113 °F. Too high or too low temperatures might cause damage to the product.
- For the best mowing results, it is recommended mowing in dry weather. Mowing in the rain can make the grass stick on the product and the mower may slip. DO NOT mow in bad weather, such as heavy rain, thunderstorm or snow.

1.2 Safety instructions for operation

- Read the part 3 installation carefully, correctly installed equipment improves mowing accuracy.
- Mow only during daylight hours or in good artificial light.
- Avoid operating the machine on wet grass.
- Use extreme caution when reversing the machine toward you.
- Do not install the charging station in an area where there is a risk that persons trip on it or a risk of standing water.
- Keep your hands and feet away from the rotating blades. Do not put your hands or feet near or below the product when the power is on.
- Stop or shut the product down when persons, especially children or animals are in the work area. UBHOME recommends setting the product to operate when the work area has no activity.

- Make sure that there are no objects such as stones, branches, tools or toys on the lawn. The blades can be damaged if it hits an object.
- Do not lift the product or move it when its power is on.
- Lift the product by the handle to keep the blade disc away from your body.
- Do not lift the product when it is parked in the charging station. It can cause damage to the charging station or the product.
- Do not let the product collide with persons or animals. If a person or animal comes in the way of the product, stop the product immediately.
- Do not put objects on top of the product, the charging station or the reference station.
- Do not use the product if the STOP button does not work.
- Always shut the product down when it is not in operation.
- Do not use the product at the same time as a pop-up sprinkler. Use the schedule function so the product and pop-up sprinkler does not operate at the same time.
- Do not set any path where pop-up sprinklers are installed.
- Do not let the product operate when there is standing water in the work area. For example when heavy rain forms standing water. You can set a no-go zone for the standing water.

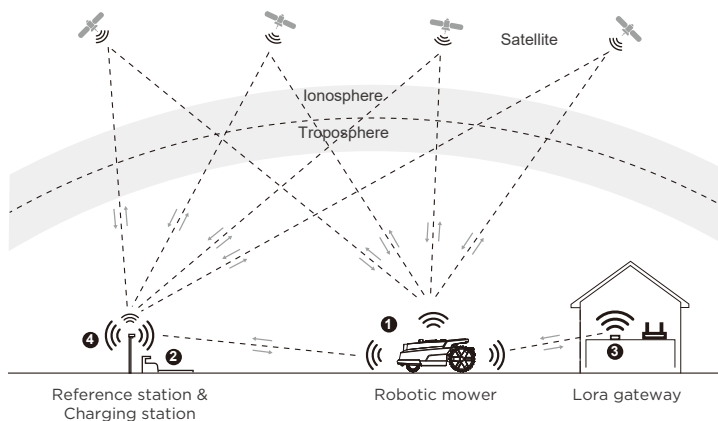
1.3 Safety instructions for maintenance

- Keep all nuts , bolts , and screws tight to be sure the machine is in safe working condition.
- Shut the product down when you do maintenance on the product.
- Do not use solvents to clean the product.
- Disconnect the plug to the charging station before you clean or do maintenance of the charging station.
- Regularly check the warning devices to ensure they are effective. These devices include the buzzer and the screen on the robotic mower, the indicator light on the charging station, the reference station and the Lora gateway.

Part 2 Introduction

2.1 System description

The system includes a robotic mower, a charging station, a Lora gateway and a reference station. The robotic mower and the reference station use the technology with satellite signals to position the robotic mower correctly, that means a virtual boundary can be made. The reference station is stationary and sends correct data to the robotic mower to get an accurate position of the robotic mower. The virtual work area for the product is made with the APP.



2.2 Product description

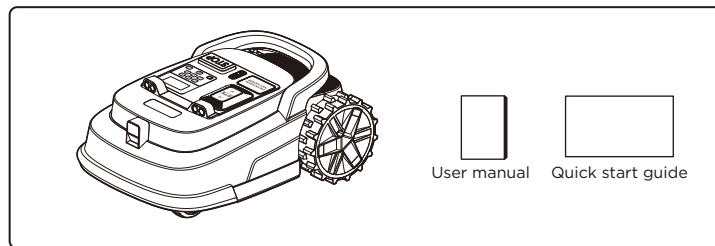
The robotic mower is powered by a lithium battery and can automatically cut grass in a defined work area. The work area can be remotely defined through the APP according to your demand. When mowing, the robotic mower's driving path is automatically planned by the algorithm according to the shape of the work area to achieve the highest mowing efficiency. If the entire lawn cannot be completed at one time, the robotic mower will automatically return to the charging station to charge. When the power is sufficient, the mowing resumes from the position where it stopped.

2.3 APP

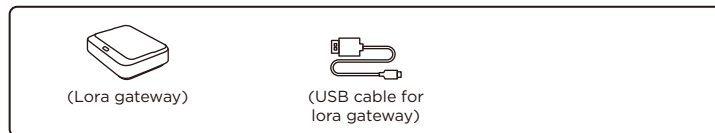
The app is an important part of the system. You can follow the interactive guidance shown via the app to complete the system installation and set up the work area. You can also use the app to adjust the settings of the robotic mower, manage the work area, review the work status of the robotic mower, control the robotic mower remotely, etc. You can also get the latest and most comprehensive official Help and Support content through the APP.

2.4 Packing list

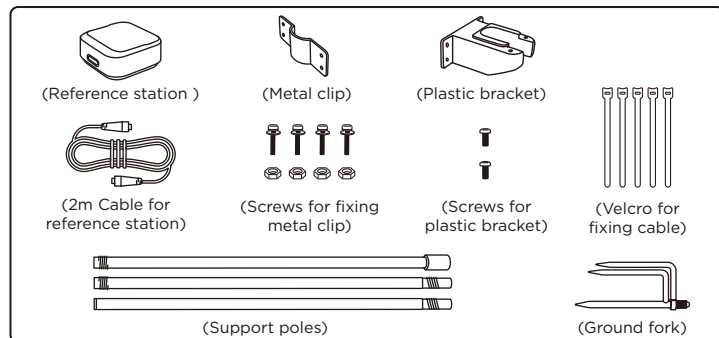
Robotic Mower



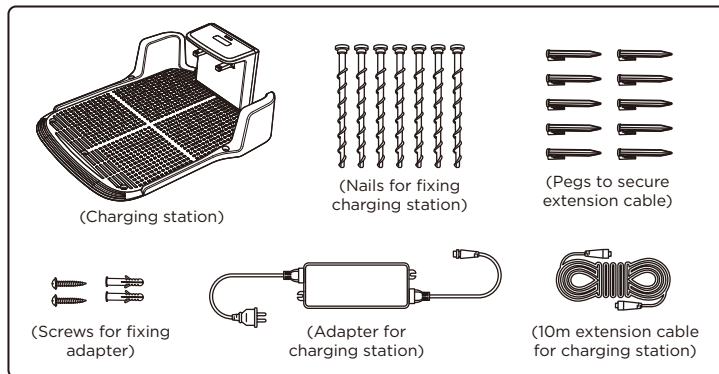
Lora Gateway Installation Kit



Reference Station Installation Kit



Charging Station Installation Kit

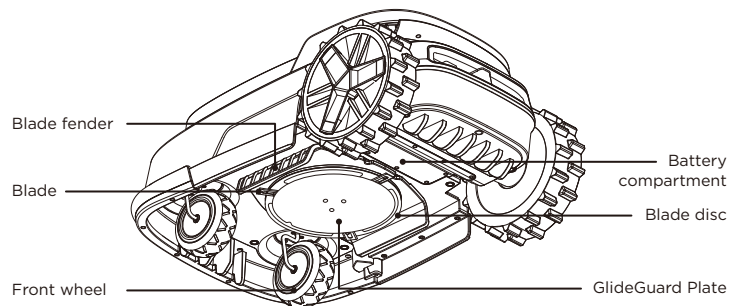
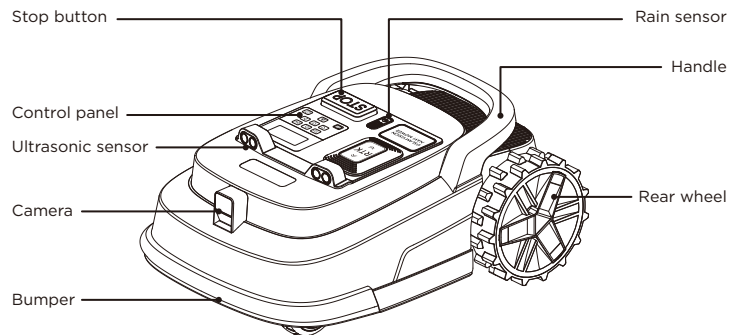


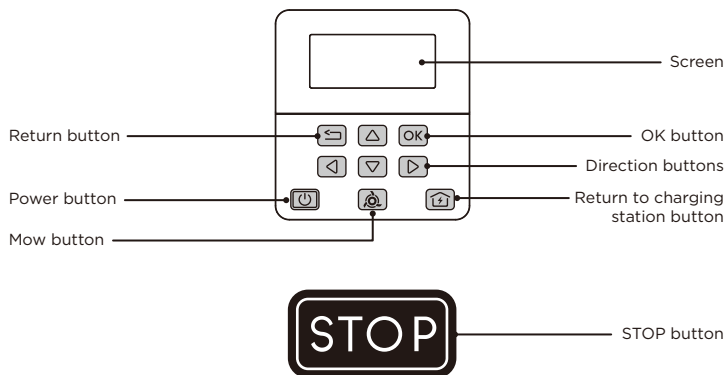
Others



2.5 Product overview

2.5.1 Robotic Mower overview

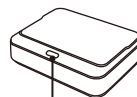




• Basic operations for control panel

Power on	Press 【⏻】 for 3s
Power off	Press 【⏻】 for 3s
Restart	Press 【⏻】 for 8s until the screen turns off
Start / Pause mowing	Press 【🌀】
Stop mower operation	Press 【STOP】
Return to charging station / Cancel return	Press 【🏠】
Enter the PIN code	Press direction buttons, then press 【OK】
Set up network	Press 【🏠】 for 3s
Return to previous step	Press 【↩️】
Confirm action	Press 【OK】
Lock buttons	Press 【OK】 for 3s (Enter PIN to unlock), 【⏻】 & 【STOP】 buttons will not be locked.
Restore factory settings	Press 【⏪】 & 【⏩】 for 5s

2.5.2 Lora gateway overview

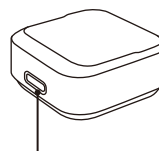


Indicator light

• Indicator light

Blue	Solid	Network is connected; Ready for use or working
	Flashing	Setting up WiFi
Red	Solid	No network
	Flashing	Error

2.5.3 Reference station overview



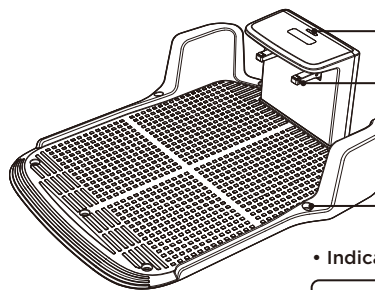
Indicator light

• Indicator light

Blue	Solid	Paired but not positioning
	Flashing	Pairing mode
Green	Solid	Good satellite signal, ready for use or working
	Flashing	Positioning; Location selecting
Red	Solid	Pairing failed; Positioning failed
	Flashing	Error

Note: the power supply of the reference station will not exceed 100W.

2.5.4 Charging station overview



Indicator light

Charging strip

Mounting holes for nails

• Indicator light

Solid green	Power on
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2.6 Symbols



Learn these symbols carefully.



WARNING: Read the user manual before operating the product.



WARNING: Disable the product before working on or lifting the product.



WARNING: Keep a safe distance from the product when operating. Keep your hands and feet away from the rotating blades.



WARNING: Do not ride on the product. Do not put your hands or feet close to or under the product.



WARNING: Do not touch rotating blade.

MADE IN CHINA

This product is manufactured in China.



The chassis must also be resealed in a professional manner. For these reasons the chassis shall only be opened by authorized service technicians. A broken seal can result in the entire or parts of the guarantee no longer being valid.



This product complies with the applicable EU Directives.



This product complies with the applicable UK Directives.



Class III appliance.



It is not permitted to dispose this product as normal household waste. Ensure that the product is recycled in accordance with local legal requirements.



WARNING: Lithium-ion batteries can explode or cause fire if disassembled, short-circuited or handled roughly. Do not expose the battery to water, fire or high temperature.



Read the user instructions.



Do not discard the battery into fire and do not expose the battery to a heat source.



Do not immerse the battery into water.

Part 3 Installation & Use

3.1 App installation

Please scan the QR code to download the APP, follow the steps to register and login the account.

Check the device detailed installation steps, settings and operations information on the APP. You can also find more information, such as device status, etc.



NOTE:

During use, please enable Bluetooth, GPS location, 2.4GHz WiFi, and other access permissions to ensure smooth operation of the APP.

3.2 Preparation for installation



- Read and understand the safety chapter before installing the product.
- Use original spare parts and installation materials.
- The illustrations/screens used in the document are for reference only. Please refer to the actual products.
- Holes with water in the lawn may cause damage to the product.
- Remove debris, piles of leaves, toys, wires, stones and other obstacles in the lawn.
- Fill in holes in the lawn to make it level.
- Make sure children and pets are not on the lawn.
- Before the first time mowing, please cut your lawn to a height of no more than 6 cm.

Please scan QR code above for step-by-step videos and start to set up Robotic Mower.

If you have problems during installation, Please feel free to contact the Customer Support at aftersales@ubtrobot.com.

Part 4 Specifications

Robotic Mower

Product name	Robotic Mower
Model	M10
Length × Width × Height	602mm x 416mm x 255mm
Net weight (battery included)	appr. 12.6kg
Material	Mower frame: PP; Cover: ASA
Battery capacity	5.2Ah
Average mowing time per full charge	1.5h
Average charging time	2.5h
Average mowing capacity per day	1000 m ²
Cutting width	23cm(9.06 in)
Cutting height	30–60 mm for EU/AU/UK, 40–60 mm for US
Driving speed	0.2–0.6 m/s
Measured sound power level LWA	<60dB
Working temperature	-10–50 °C (14–122 °F)
Charging temperature	5–45 °C (41–113 °F)
Storage temperature	-20–60 °C (-4–140 °F)
IP rating	Robotic mower IPX6; Charging station & Reference station IPX5
Max. Incline Inside working area	55%
Max. Incline at boundary	10%
Connectivity	Wi-Fi/BT/Lora
charger rating	Input: 100–240V ~ 50/60Hz 2.5A
	Output: 30.0V === 2.5A; 75.0W

Reference station

Product name	Reference Station
Model	RS-M10
Rated Input: 12–30.0V === 1A	

Lora gateway

Product name	Lora gateway
Model	LG-M10
Rated Input: 5V === 1A	

Part 5 Maintenance



- Before cleaning, make sure the mower is powered off. When the mower is upside down, it must be powered off.
- Please wear the protective gloves.



For better operation and lifetime of the product, make sure to clean the product regularly and replace worn parts. When the product is new, examine the blade discs and blades every week. If the wear is slow, you can increase the interval for the next time you examine the blade discs and blades. Examine the blade discs and the blades more regularly if there is much wear.

It is important that the blade disc rotates easily and that the edges of the blades are not damaged. The conditions that follow can increase or decrease the lifetime of the blades:

- Operation time and dimension of the work area.
- Length and thickness of the grass.
- Soil, sand and use of fertilizers.
- Objects such as cones, tools, stones and roots in the work area.

5.1 Cleaning

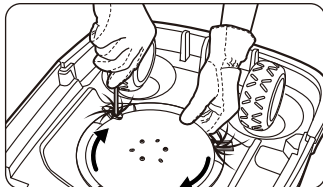
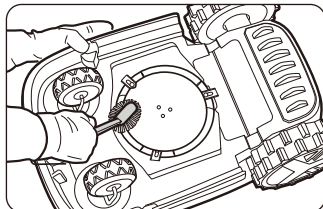


Do not touch any moving hazardous parts, such as the blade disc, before it has come to a complete stop.

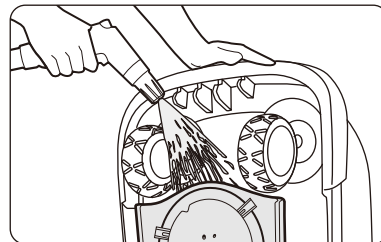
Use a soft brush or a water hose to clean the exterior of the mower thoroughly.

DO NOT clean with alcohol, gasoline, acetone, or other corrosive/volatile solvents. These substances may damage the appearance and internal structure of your mower.

Remove the blade screws to clean the tangled grass so the blades can spin freely.

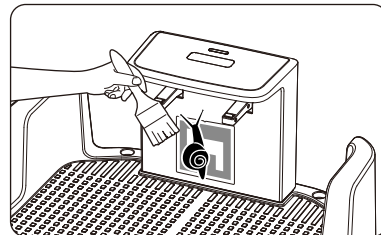


After mowing, use a hose to flush away any accumulated grass on the back of the fender so that blade disc can be raised and lowered without obstruction.



For proper charging, periodically inspect and clean the charging station from debris and mud, make sure there is no object blocking the QR code of the charging station.

Make sure all connecting parts of the charging station, the low-voltage cable, and the power supply are not blocked.



• Chassis and blade disc

If the chassis and blade disc are dirty, please use a brush or a water hose to clean foreign objects or grass clippings, do not knock the mower with your feet or other objects. At the same time, make sure that the blade disc rotates freely and the blades can pivot freely.

• Blade fender

Check the blade fender regularly. If mud, grass clippings or other objects gather on the blade fender, remove them with a dry brush or scraper.

• Wheels

Grass on the wheels can affect how the mower performs when climbing slopes. Remove mud or other objects stuck in to ensure strong grip.

• Front wheels (universal wheels)

Inspect and clean universal wheels regularly. If the wheels are stuck, clean off the debris and lubricate the wheels.

• Rain sensor

Check the rain sensor regularly and make sure the rain sensor is not covered by mud, grass clippings or other objects. You can either wash it or clean it with a soft brush. After cleaning, dry the sensor area.

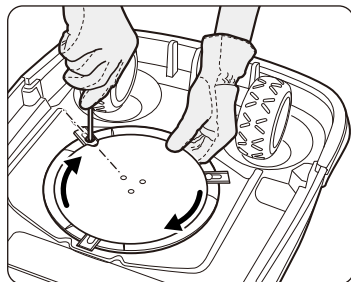
5.2 Replacement of the blades



- If regularly use the mower, it is recommended to replace the blades and screws every 1-2 months to ensure safety and better mowing results. Replace three blades and their screws at the same time for a safe cutting system.
- Only original blades and screws can be used.
- Wear the protective gloves when inspect or replace the blades.

Steps to replace the blades:

1. Turn off the mower.
2. To avoid scratching, place the mower on a soft and clean surface in an upside-down position.
3. Rotate the skid plate until its holes align with the screws for blade.
4. Remove the 3 screws with a screwdriver.
5. Remove the blades that should be replaced.
6. Replace with new blades and fix them with 3 new screws.
7. Make sure that the blades can pivot freely.



5.3 Transportation

To protect the mower, use the original package for long-distance transportation. Before lifting, moving, or transporting the product, turn it off. Handle with care and avoid violent force, such as throwing and heavy pressure. Never pick up or carry the mower while the motor is running. Carry the mower by the handle, with the blade disc facing away from your body.



To avoid damage to the mower or the charging station, DO NOT lift the product when it's parked in the charging station.



5.4 Battery



Charge the battery enough or at least 50% to avoid over-discharge before you put the product into storage.

If the operating time is obviously shorter than usual between charges, this means that the battery is at the end of its life cycle. Replace the battery to extend the operating time.

Note: The battery life is related to the length of the season and how many hours a day the product operates. A long season or many hours of operation a day means that the battery must be replaced more regularly. Please contact the customer support to replace the battery.

5.5 Power supply

Disconnect the power supply:

- Before clearing the blockage
- Before checking, cleaning or working on the machine
- After striking a foreign object to inspect the machine for damage.

Regularly examine the cord, plug, enclosure and other parts. If any damage or signs of aging are found, stop using immediately.



- DO NOT operate a damaged power supply. If the supply cord is damaged, it must be replaced by the manufacturer or its service agent in order to avoid a hazard. If the extension cable is defective, please replace it with the approved 10-meter cable.
- DO NOT connect a damaged cord to the power supply or touch a damaged cord or extension cable before it is disconnected from the power socket. Damaged cords can lead to contact with live parts.
- DO NOT use the power supply with any other product or battery, otherwise there will be risks of personal injury, fire or electrical shock. Product safety cannot be guaranteed with other than original batteries.
- DO NOT charge when the battery is leaking. Keep the extension cable away from moving hazardous parts to avoid damage to the cords which can lead to contact with live parts.

Recommendation

Connect the mower or its peripherals only to a supply circuit protected by a residual current device with a tripping current of not more than 30 mA.

5.6 Storage

Before storage, power off the mower and charge its battery at least 50% to avoid over-discharge, which will cause permanent damage.

Store in a cool and dry place indoors. Exposure to sunlight and temperature extremes (both hot and cold) will accelerate the aging process of the components and may permanently damage the battery.

Keep the mower, charging station and power supply away from heat sources (such as stoves, radiators, etc.) or chemicals. Protect the power supply from moisture and keep it in a well-ventilated place.

Do not stack items on top of the mower to prevent damage to the screen buttons, etc.



When there is a risk of a thunderstorm, unplug the power supply from the power outlet. Disconnect all cables and wires connecting to the charging station, the reference station. Reconnect when there is no longer a risk of thunder.

• The robotic mower

Clean the mower thoroughly before storage. Check the components subject to wear such as the blades. Repair or replace them if they are in poor condition. Store the mower in a dry and frost-free place, while standing on all wheels, preferably in the original package.

• The charging station and the reference station

Unplug the power supply from the power outlet and disconnect it from the charging station. Make sure the reference is powered off.

5.7 Disposal

DO NOT treat this product as domestic waste. For recycling information, contact your domestic waste service, your municipality, or point of sale.



DO NOT dispose of this product in a landfill, by incineration, or by mixing with household trash. Danger or serious injury can occur because of the electrical components.

Part 6 Warranty

UBHOME provides a straightforward warranty that is processed in the most hassle- free way possible. This policy should be regarded as a standard service policy covering products that have been authorized for sale dealer.

Kindly contact us at aftersales@ubtrobot.com with your order receipt or other proof of purchase for confirmation.

Item	Warranty Content	Warranty Period
Main unit	Main unit (including the built-in lithium battery)	2 year
Accessories	Reference Station, Charging Station and Lora Gateway	2 year
Consumables	Blades\Pegs\Nails	/

Note: Consumables delivered with the product have no warranty.

Warranty protections are in addition to rights provided under local consumer laws and may vary among countries/regions.

30 days Day Money-Back Guarantee for Any Reason:

Undamaged products may be returned for a full refund for any reason within 30 days of the date the item was delivered to the designated shipping address.

- Returns must include all accessories.
- Items must include the original package.
- For non-quality related warranty claims, buyer is responsible for shipping costs.
- For non-quality related warranty claims, UBHOME refunds the cost of the product itself.
- Returns may be rejected if product does not meet above requirements.

It is not possible to process a request for a refund for non-quality issues for items that have expired this 30-day window. For purchases not made directly through online stores, please contact retailers for refunds. For quality-related issues, please see below.

Warranty Claims for Quality-Related Issues:

All quality-related defects on items sold directly by online stores or UBHOME's authorized resellers are covered by an extensive warranty, starting from the date of purchase.

UBHOME's limited warranty is restricted to the country of purchase. The limited warranty is void on items taken outside the country they were originally bought in or shipped to directly from an authorized online purchase.

Warranties on all replacements follow the same warranty time frame of the original defective item, or 3 months after being replaced, whichever is longer.

Warranties on products are void after having been fully refunded.

Process:

- Buyer must provide sufficient proof of purchase.
- UBHOME must document what happens when buyers troubleshoot the product.
- The defective item's serial number and/or visible proof depicting the defect are required.
- It may be necessary to return the item for quality inspection.

Valid proof of purchase:

- Order number from online purchases made through online stores or UBHOME's authorized resellers.
- Sales invoice.
- Dated sales receipt from an authorized UBHOME reseller that shows a description of the product along with its price.

Please note more than one type of proof of purchase may be required to process a warranty claim (such as receipt of money transfer and confirmation of address item was originally shipped to).

Shipping costs must be covered by buyer in the following situations:

- Returning products for any reason other than a proven defect.
- Warranty claims on items taken outside the original country of purchase.
- Buyer's accidental returns.
- Returning personal items.
- Returning items claimed to have defects but found by UBHOME quality control to be in working condition.
- Returning defective items in international shipping.
- Costs associated with unauthorized returns (any returns made outside of the approved warranty process).

Not Covered Under Warranty:

- Products without sufficient proof of purchase
- Lost or stolen products
- Items that have expired their warranty period
- Non quality-related issues (after 30 days of purchase)
- Free products

- Repairs through the 3rd parties
- Damage from outside sources
- Damage from misuse of products (including, but not limited to: falls, extreme temperatures, water, operating devices improperly)
- Purchases from unauthorized resellers UBHOME is not liable for:
- Loss of data incurred from use of UBHOME products
- Returning personal items sent to UBHOME

When returning items with a prepaid shipping label provided by UBHOME, UBHOME takes responsibility for any damage or loss incurred in transit. When returning items for non-quality issues, buyer assumes responsibility for any damage or loss incurred in transit. UBHOME does not provide refunds for items damaged in transit for non- quality related warranty claims.

Warranty Card

User Information

Product Model: _____ Product No.: _____

Date of Purchase: _____ User Name: _____

Warranty Record

Warranty Date	Faults and Troubleshooting	Completion Date	User's Signature

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment .

This transmitter must not be co - located or operating in conjunction with any other antenna or transmitter.

This equipment should be installed and operated with minimum distance 20cm between the radiator& your body.



UBTECH ROBOTICS CORP LTD

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