TRON SE

USER MANUAL

YOUR FIRST MULCHING ROBOTIC LAWN MOWER

AIRSEEKERS

AIRSEEKERS LEGAL DISCLAIMER

TRON INTELLIGENT LAWN MOWER USER MANUAL

Thank you for purchasing the AIRSEEKERS TRON lawn mowing robot (hereinafter referred to as “the robot”). Ensure safe and correct usage. Please read this original user manual carefully before use and keep it for future reference.

Please read this user manual carefully to ensure that you understand its content and familiarize yourself with the correct usage of this product. Follow the instructions in the manual and pay special attention to the warning sections, although risks cannot be completely eliminated.

While the robot is equipped with multiple built-in safety sensors., but there are still safety risks. This manual has described or informed you of all other relevant risks.

By starting to use this product, you are considered to have read, understood, and accepted all the terms and content of this manual. Users are responsible for their own operational actions and any consequences arising from them.

AIRSEEKERS will not be responsible for any loss caused by the user’ s failure to follow the user manual. Any use that has not been approved by the user manual may damage the robot or cause serious harm to the user or others.

If the product is used in public spaces, warning signs must be placed within the operational area to inform people of the safety risks.

Do not modify the robot yourself, as modifications may affect its operation, potentially leading to injury to people or animals, as well as damage to the product and other property losses. Unauthorized modifications will also invalidate limited warranty services.

Please use only AIRSEEKERS-authorized parts, accessories, and consumables.

This product is not intended for use by individuals with sensory, motor, intellectual, or mental disabilities, or children, unless supervised and instructed by a person responsible for their safety.

As required by law, AIRSEEKERS is responsible for the preparation of this document and all related product materials. Updates, revisions, or terminations will not be notified separately. Please visit the AIRSEEKERS official website for the latest product information.

Scan the QR code for more languages and support

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1. SAFETY INSTRUCTIONS

1.1 Warnings

- Please read and follow the instructions and warnings in the user manual thoroughly before using this product.
- The operator is obligated to ensure the safety of others and protect their property in the event of an accident or hazard.
- Do not use the robot if any part is damaged, worn out, or malfunctioning.
- Do not modify the robot on your own.
- Do not operate the robot in heavy fog, typhoons, rain, thunderstorms, snow, or low-light conditions.
- Regularly check the robot's working area for any changes or newly added lawn structures. Update the working map or set no-go zones if necessary.
- Regularly clean the camera, ultrasound sensors, charging contacts, and cutting disc. Inspect and maintain the wheels, blades, and fan blades. Replace any damaged parts with AIRSEEKERS authorized parts, accessories, and consumables.
- Do not allow individuals with sensory, motor, intellectual, or mental disabilities, or children, to use this product.
- Do not allow anyone who is unfamiliar with the contents of the product manual to use this product.
- Follow local regulations regarding the minimum age requirement for operators.
- Keep a safe distance from the robot while it is in operation.
- Do not allow children to stay in or play within the robot’ s working area.
- Do not touch any moving parts of the robot while it is powered on.
- Always use AIRSEEKERS-authorized chargers, batteries, and power cables. Never connect a damaged power cord to a power source, and avoid touching damaged cords until the power is disconnected. Keep power cords away from the operating robot.
- Do not immerse the robot in water for cleaning.
- The product must be operated, maintained, and repaired by AIRSEEKERS-authorized after-sales service or by personnel familiar with the product's characteristics and safety regulations.
- Operate the robot within a temperature range of 0°C to 45°C (32°F to 113°F) and store it between -20°C to 60°C (-4°F to 140°F) to prevent damage.

1.2 When to Power Off

- When the robot exhibits any abnormalities.
- When cleaning the robot's exterior and cutting disc.
- When performing maintenance or replacing parts.
- After the robot has accidentally been submerged in water.

1.3 Product Disposal Instructions

- When disposing of the battery, please follow local laws and regulations regarding battery recycling and disposal. Fully discharge the battery before placing it in the battery recycling bin. Batteries contain hazardous chemicals and should not be disposed of in regular trash bins.
- If the product or battery prevents the battery from being fully discharged, do not place the battery directly in the recycling bin. Please contact a local battery recycling company for proper disposal.
- Battery leakage can cause injury. Avoid contact with eyes or skin. If contact with skin occurs, immediately wash with soap and water. If contact with eyes occurs, rinse immediately with water and do not rub. If discomfort persists, seek medical attention immediately.
- The chemicals contained in the built-in battery of this product can pollute the environment. Before disposing of the robot, make sure to remove the built-in battery and dispose of it separately.

2. PRODUCT OVERVIEW

2.1 About Airseekers Tron

Airseekers Tron Product Overview

Airseekers Tron is an innovative all-terrain autonomous lawn mowing robot that combines the design inspiration from ATVs (all-terrain vehicles) with advanced lawn care technology. It is specifically designed for users who seek a refined garden and efficient landscaping. The Tron excels not only in mowing but also features the FlowCut mulching system, which finely cuts grass clippings and converts them into a natural organic layerThis helps retain soil moisture, regulate temperature, and provides natural nutrients to the lawn, truly achieving “mowing and mulching integration.”

All-Terrain Mowing Capability

The Tron features an ATV-inspired design with a powerful drive system and large omnidirectional wheels. It can easily handle various challenging terrains. Whether on steep slopes, grass fields, or dirt paths, it moves smoothly and ensures every mowing task is completed with precision and efficiency.

FlowCut Mulching System

The innovative FlowCut mulching chamber technology utilizes powerful aerodynamics to repeatedly cut the grass clippings within the chamber, turning them into fine mulch. This not only reduces the accumulation of clippings on the lawn, but also creates a natural organic cover for the soil, helping maintain moisture, temperature, and promoting better grass growth.

Intelligent Path Planning and Obstacle Avoidance System

The Tron features AI-powered obstacle avoidance technology and an advanced vision system, combined with RTK/NetRTK precision positioning, the Tron can intelligently plan paths in complex environments. It can precisely avoid obstacles such as trees, walls, or narrow pathways, ensuring smooth completion of mowing tasks.

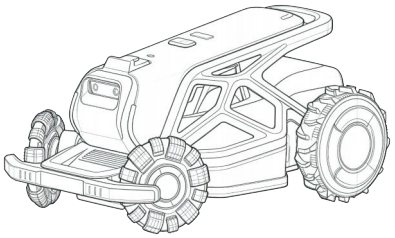
Dual-Layer Blade Design and Efficient Power System

The Tron uses a dual-layer blade design, ensuring the grass clippings are cut finer to improve their penetration into the soil. Its efficient brushless motor provides stable power, enabling the robot to handle complex conditions such as thick or wet grass with ease, and extends the equipment's lifespan.

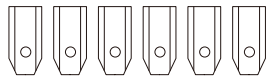
Through these innovative designs and technologies, the Airseekers Tron provides users with an efficient, intelligent, and convenient lawn care experience, effortlessly conquering various lawn environments, keeping the lawn healthy, and enhancing its aesthetics.

2.2 Product Contents

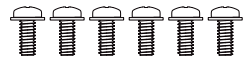
The following diagrams are for illustration purposes only, and the actual shapes are primarily solid. Note:
This manual applies to multiple models in the series. Accessories marked with an asterisk (*) are model-specific or optional, and may not be included in all packages. Please refer to the actual contents of your purchased model.



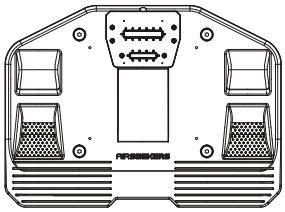
TRON SE * 1



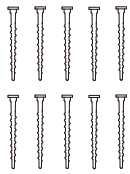
Spare Blades*6



Blade Spare Screws*6

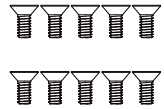


Charging Base Plate*1

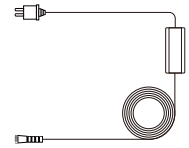


Ground Stakes*10

Charging Tower*1

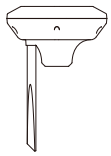


Base Plate Screws*10



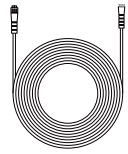
Charging Station Adapter *1

*RTK Upright Support Tube*2



*RTK Base Station Antenna Rod *1

*RTK Antenna Ground Stake*1



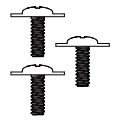
*RTK Adapter Standard Cable*1

*RTK Adapter *1

User Manual*1

Quick Guide*1

Mudguard*1



Mudguard Screws*3

Hex Key Screwdriver (2-in-1)*1

* Available on select models only.

2.3 Product Symbols

Please read the following symbols and instructions carefully, as they appear on the product.

WARNING

"Read the user instructions before operating the product."

WARNING

"Always turn off the product before operating or moving it."

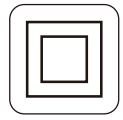
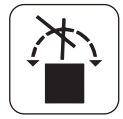
WARNING

"Danger of projections of objects against the body. Keep an adequate safe distance from the machine while it is running."

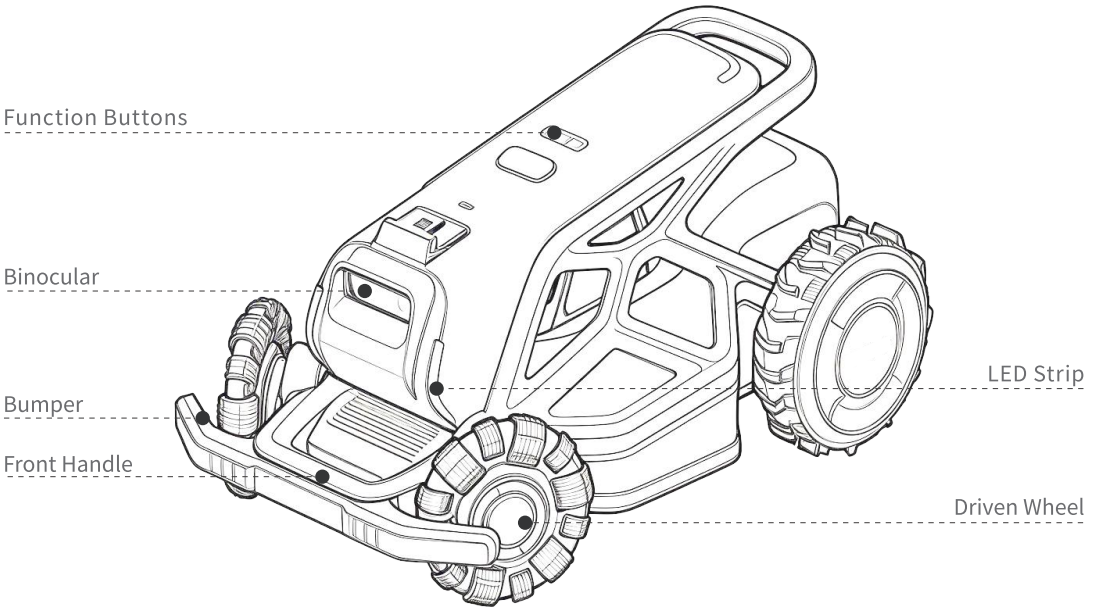
WARNING

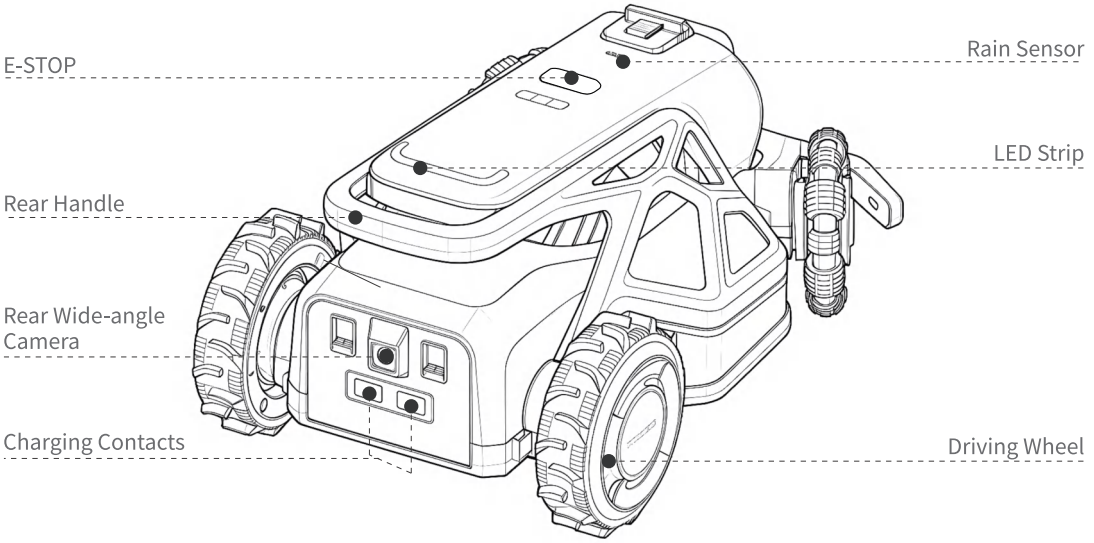
"Do not ride on the product. Never put your hands or feet close to or under the product."

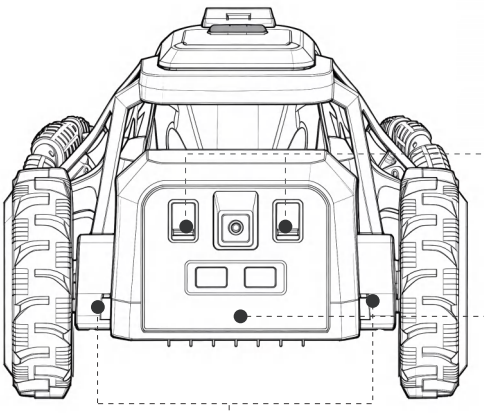
SYMBOL	SYMBOLIC DESCRIPTION	SYMBOL	SYMBOLIC DESCRIPTION
CE	This product complies with the applicable EU Directives.		This product complies with RCM regulations.
B00011002094	The charging station is an independent power supply unit.	B00011002098	The RTK is an independent power supply unit.
FC	This product complies with the U.S. wireless regulations. FCC ID :2BPTW-TRONE1	RoHS	This product complies with EU chemical testing regulations.

IC	This product has been certified for radio equipment and electromagnetic compatibility in Canada. IC: 33826-TRONE1		This product is a DC power adapter.
	This product is a multi-pin power adapter with a ground wire.		This product uses double insulation to prevent the risk of electric shock.
	Class III equipment.	**Made in China**	This product is manufactured in China.
	This product requires two people to lift and handle the packaging.		This product must be placed vertically and should not be tilted or inverted.
	The pack of this product, and the product should not be tread.		Prohibit flipping.
	This product is fragile.		The packaging of this product should not be covered.
	Keep the packaging of this product dry.		This item can be recycled.
	It is not permitted to dispose this product as normal household waste. Ensure that the product is recycled in accordance with local legal requirements.		

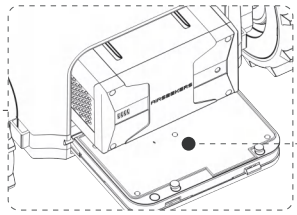
2.4 Product Overview





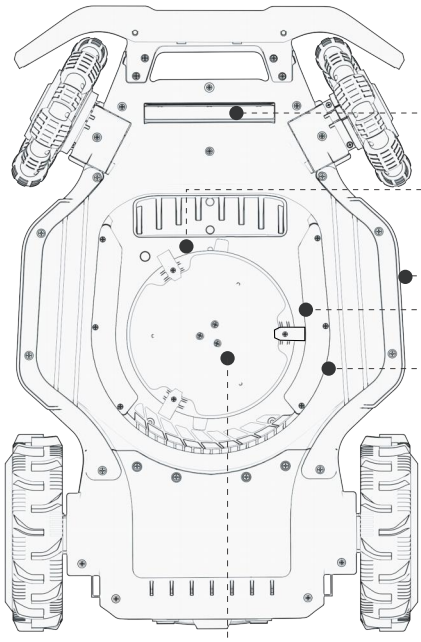


Battery Chamber Latch

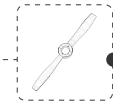


Lithium Battery

Comb Roller Mounting Interface



Mudguard

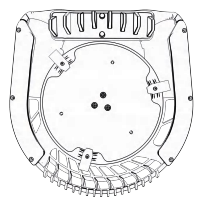


Fan Blade

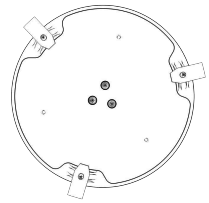
Protective Fence
(No private demolition)

Blade

Masher Chamber



Standard Mowing Disk

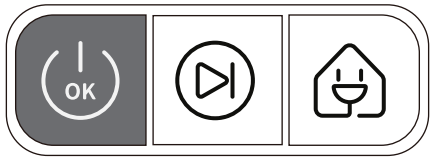


Large Mowing Disk
(Non-standard parts)

2.5 Button Functions

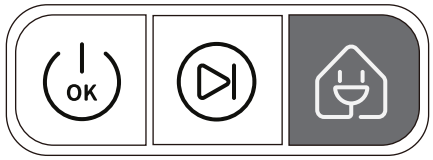
Power Button

1. Press and hold the power button for 3 seconds to turn on the mower when it is off, and press and hold for 3 seconds to turn it off when it is on.
2. When the mower is in Stop state, pressing the power button once can exit the Stop state.
3. The “Power button” also Serves as the “Confirm button.”



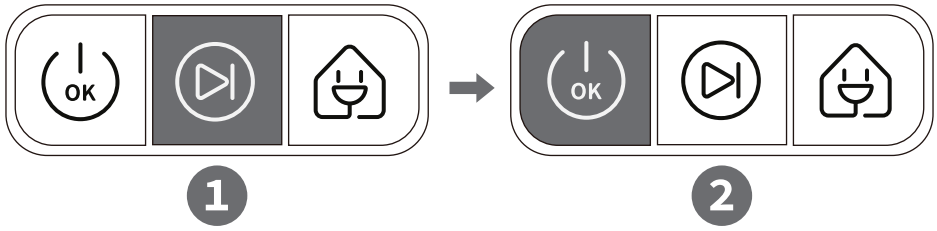
Return to Charge Button

Pressing the “Return to charge button” will pause the mowing task and send the mower back to the charging station to recharge.



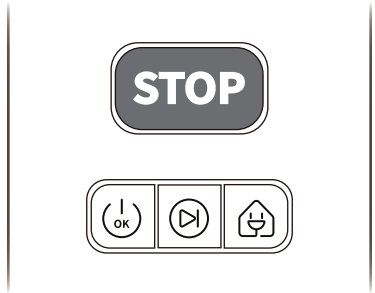
Work Button

1. To start or resume the mowing task, press the “Work button” first, then press the “OK button” within 1 second to begin. After the self-check is completed, the mower will automatically move to the task area and start mowing.
2. After lifting or an emergency stop, or in other situations where the mower is paused, press the “Work button” first, then press the “OK button” within 1 second to continue once the Stop state is cleared.



E-STOP (Stop)

Pressing this button will stop all tasks, and the mower will be immobilized.



3. INSTALLATION

3.1 Preparatory Steps

1. Be sure to read and fully understand the safety manual before installation.
2. Use only original parts and specified installation materials to ensure safety and performance.

3.2 Positioning System Setup

Read Before Installation: Choose Your Positioning Method

All models in this series support NetRTK positioning, which requires no physical base station.

If you plan to use NetRTK, you do not need to perform any hardware installation for the base station.

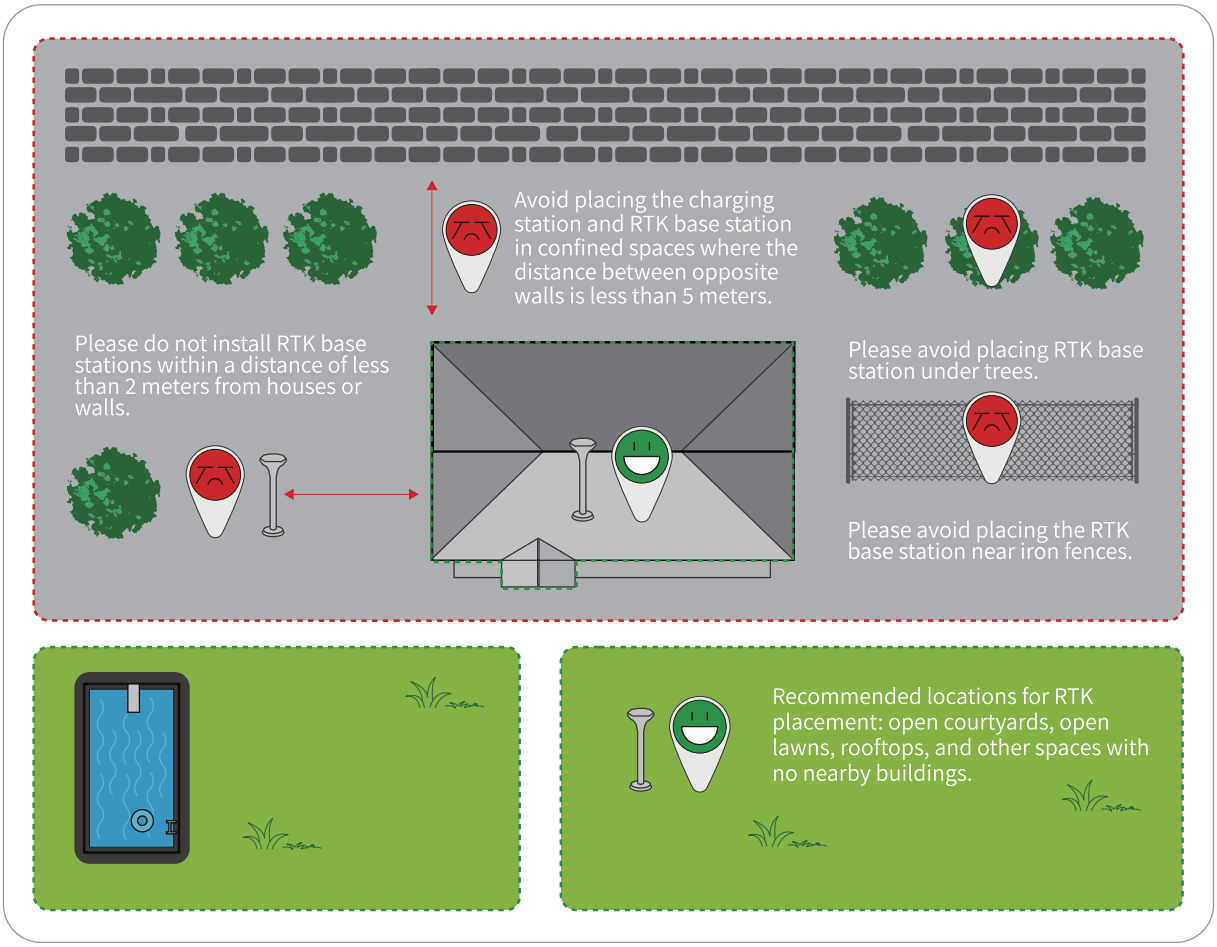
The subsequent operational sections contain usage instructions for NetRTK. Now proceed with the remaining installation steps. Please skip directly to chapter 3.3 Charging Stations Installation.

If you plan to use RTK Base Station, please continue reading below to complete the hardware assembly.

Read Before Installation: Choose Your Positioning Method

1. To optimize RTK performance, ensure the base station is installed in an open area, avoiding signal obstructions from narrow passages, eaves, or trees.
2. Place it as close to the center of the mowing area as possible to maximize signal coverage.
3. Avoid installing it in areas prone to water accumulation or unstable terrain.

Below are some examples clearly showing the correct and incorrect placements:



Determining the Installation Location

Preparation

Required Accessories and Tools:

- RTK Base Station Antenna Rod
- RTK Antenna Ground Stake
- RTK Upright Support Tube
- RTK Adapter Standard Cable
- RTK Adapter
- Tools

Installing the RTK Base Station

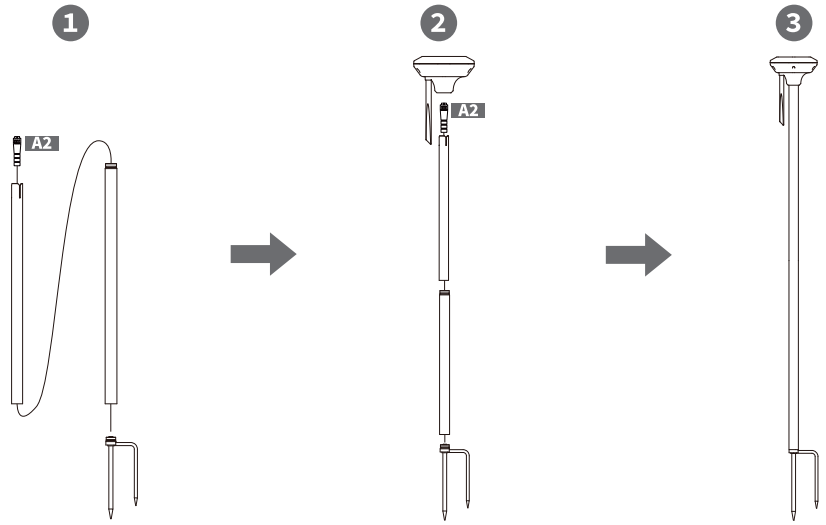
Step 1: Standard Cable

1. Use the standard cable to connect the RTK base station antenna through the center of the vertical support pipe.
2. There are three vertical support pipes in total, and you can choose how many to use depending on the installation requirements.

Step 2: Selecting the Support Installation Method

Upright Support Tube Installation

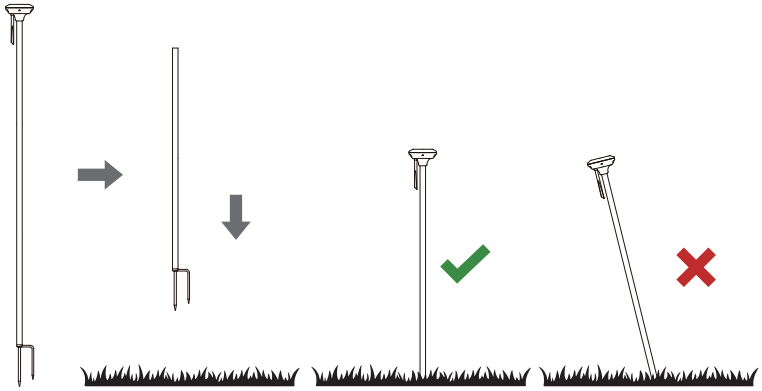
1. The two RTK upright support tubes can be connected together.
2. Connect the two RTK upright support tubes to the RTK antenna.
3. Attach the RTK upright support tube to the RTK Antenna Ground Stake.



Step 3: Installing the RTK Base Station

If using ground stake installation:

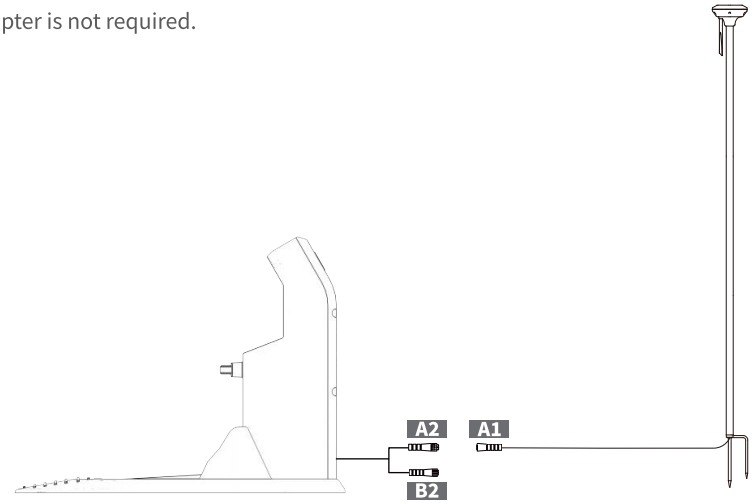
1. Use a hammer or ground stake driver to install the RTK ground stake into the ground.
2. Ensure the ground stake is vertical and firmly secured.
3. Mount the RTK upright support tube onto the ground stake and adjust it to a vertical position.



Step 4: Power Connection

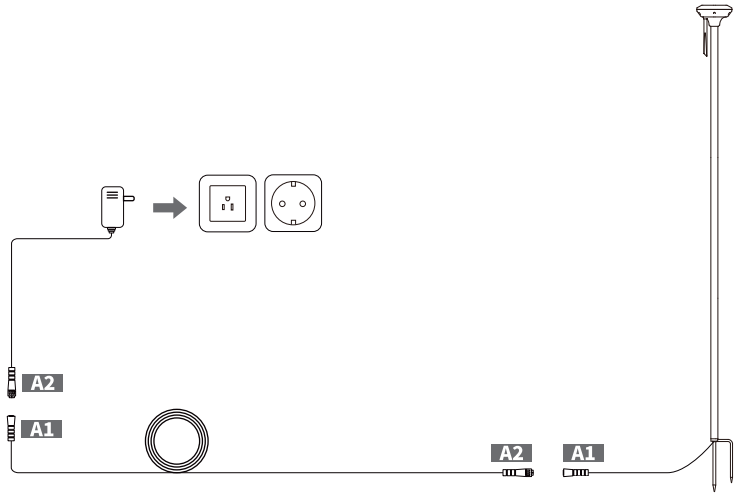
If using the charging station connection:

1. Connect the standard cable directly to the charging station.
2. The RTK adapter is not required.



If using a power supply connection:

1. Connect the standard cable to the RTK adapter.
2. Use the RTK adapter to connect to the power supply and ensure a stable power connection.

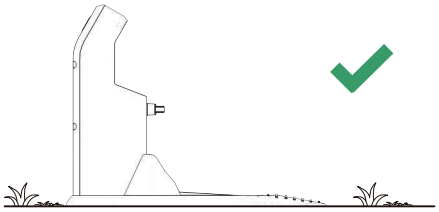


3.3 Charging Station Installation

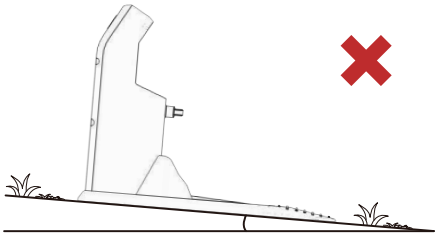
Selecting the Charging Station Installation Location

1. Place the charging station on a flat surface.
2. Do not install the charging station at the corner of an L-shaped building or in a narrow passage between two buildings.
3. The charging area (2×2m in front of the charging station) should be free of obstacles or other objects.
4. The base of the charging station must not be bent or tilted.

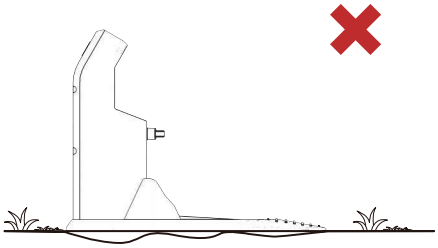
Below are some examples clearly showing the correct and incorrect placements:



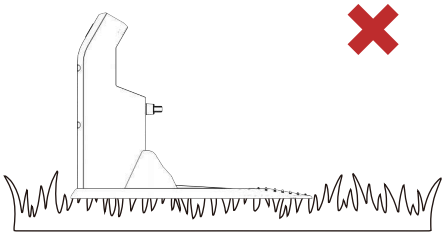
Flat and solid ground,
can be placed on short grass.



On the slope.



The ground is not flat, and it is easy to shift and bend when heavy objects are pressed on it.

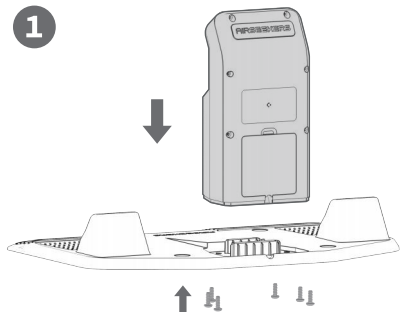


Dense grass that bends easily when heavy objects are placed on it.

Preparation

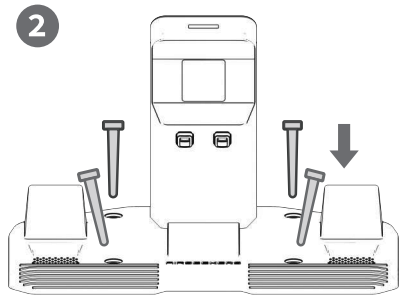
Required Accessories and Tools:

- Charging Tower
- Charging Base Plate
- Base Plate Screws
- Charging Station Adapter
- Ground Stakes
- Tools



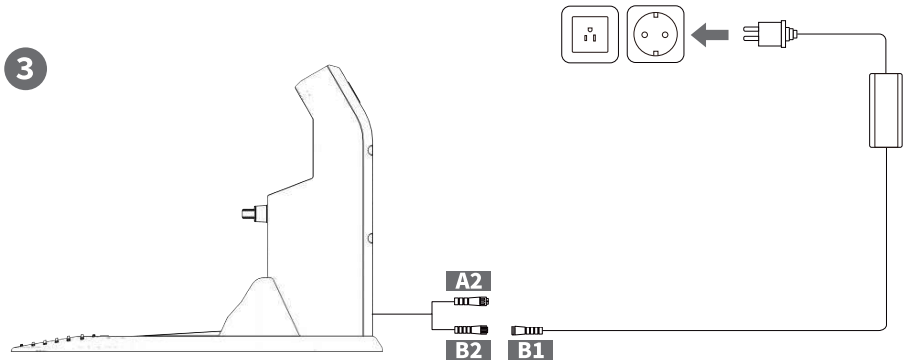
Step 1: Assembling the Charging Station

1. Align the bottom of the Charging Tower vertically with the mounting holes on the base plate.
2. Secure the Charging Tower to the base plate using four Charging Base Plate screws, ensuring stability.
3. Ensure all screws are fully tightened and the charging station is stable without any wobbling.



Step 2: Charging Station Placement and Connection

1. Choose an open area to install the charging station.
2. Use six ground stakes to securely fix the charging station in the designated position.
3. Connect the wires as shown in the diagram.
4. Plug the power adapter into the wall socket.

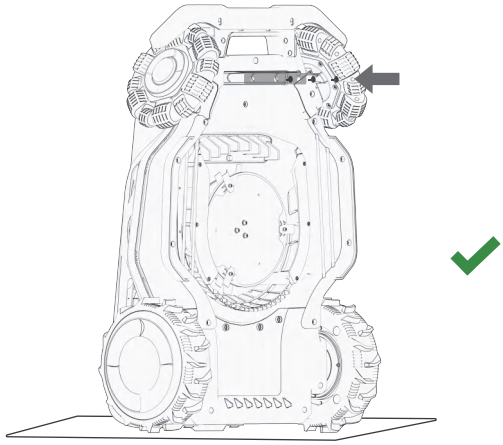


PRECAUTIONS

- **In the event of a malfunction, the charger or power supply may become hot. Do not place the charging station near flammable or explosive materials.**
- **Do not install the charging station or charger in areas with frequent foot traffic to avoid tripping hazards.**
- **Do not install the charging station in areas prone to water accumulation.**
- **If the charging station is far from a power source, for safety and charging efficiency, use a power extension cord purchased from AIRSEEKERS. Alternatively, use a waterproof power strip to extend household electricity outdoors.**
- **The RTK base station is a core component for the mower's positioning and navigation. Choose its installation location based on the surrounding environment.**

3.4 TRON Mudguard Installation

When installing the mudguard, do not flip the robot upside down to prevent scratching the casing or damaging the camera.



3.5 Placing the Tron

Tron and Charging Station Contact Indicators

Placing Tron on the Charging Station:

1. The charging station will automatically detect if Tron is correctly placed.
2. The charging station light will change from white to green, indicating that Tron is in position.

Charging Status Indicators:

1. Blinking Green Light: Indicates that Tron is currently charging.
2. Solid Green Light: Indicates that charging is complete.

Light Effects When Charging Starts:

Tron’ s front and rear lights will display a flowing green light effect, indicating that charging has started.

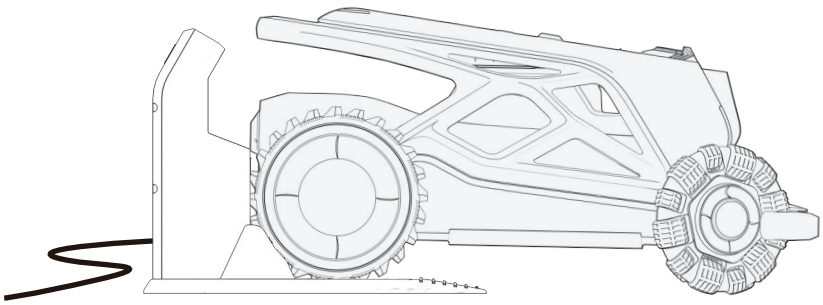
Light Effects After Charging is Complete:

After charging is complete, Tron's front and rear lights will remain solid green, indicating the charging process has finished.

Note

For reference only. Please refer to the actual product for accurate information.

Please place the Tron on the charging station.



4. OPERATION

4.1 Preparatory Steps

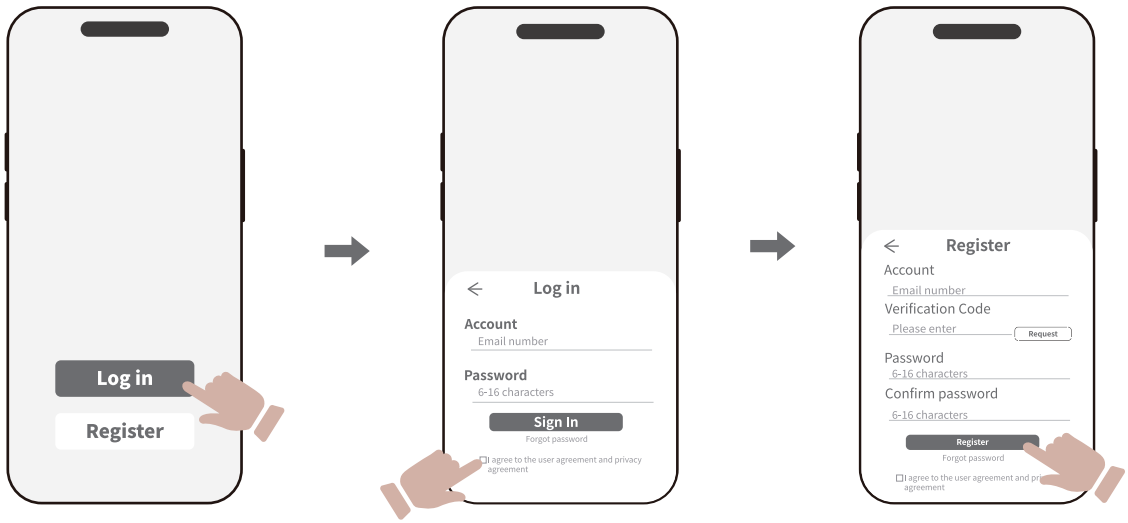
1. Before operation, please read and understand the safety manual.
2. Ensure that the charging station and RTK base station are properly installed.
3. Make sure Tron is docked on the charging station.
4. Ensure a stable wireless network or hotspot signal is available.
5. Keep Bluetooth enabled on your phone.

4.2 Downloading the Airseekers App

Tron operates in conjunction with the Airseekers app. Please download the free Airseekers app first. You can download it by scanning the QR code below or searching for “Airseekers” in the Android or Apple app store.

4.3 Airseekers Account Registration and Login

After installing the Airseekers app on your phone, you can create an account. Follow the on-screen instructions to register. Please read the User Agreement and Privacy Policy carefully. You must agree to the terms before using Airseekers' software services.



Registration

1. Click “Register”.
2. Enter your email address.
3. Click “Send”. A verification code will be sent to your email.

If you do not receive the verification code, please check your spam or junk mail folder.

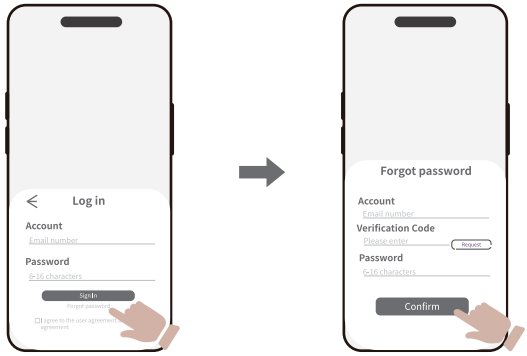
Login

Log in using your Airseekers account.

Note

If you forget your password, click “Reset Password” and follow the on-screen instructions.

Enter your email address and password, check the boxes for "Privacy Agreement" and "User Agreement," then click "Login."



4.4 Adding Your Robot

PRECAUTIONS

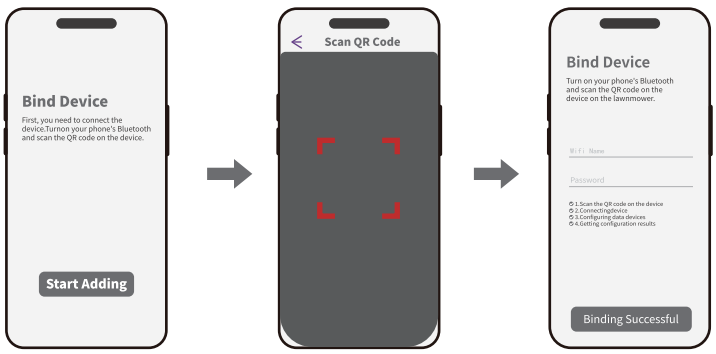
1. Ensure the distance between your phone and the robot is less than 3 meters (10 feet).
2. Turn on your phone's Bluetooth.
3. Ensure the Wi-Fi signal is strong.
4. Power on your Tron.

Ensure the charging station is powered on and that the device is placed on it. The charging station light should be green.

Press and hold the power button for 3 seconds until the indicator light turns on, then release the button.

Add Tron

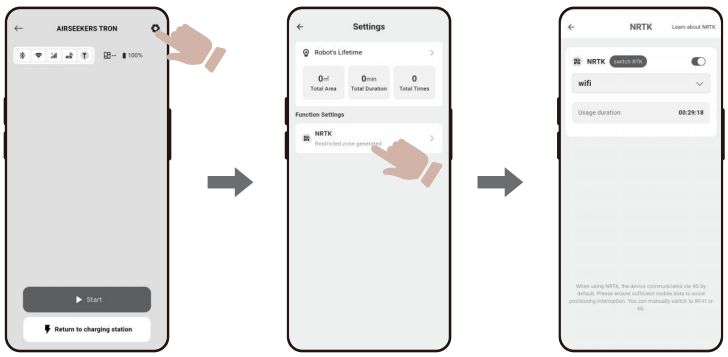
1. Ensure Tron is powered on and the indicator light is on.
2. Open the Tron battery compartment to reveal the QR code.
3. Scan the QR code as instructed in the app and wait for the success message.



Using NetRTK Service

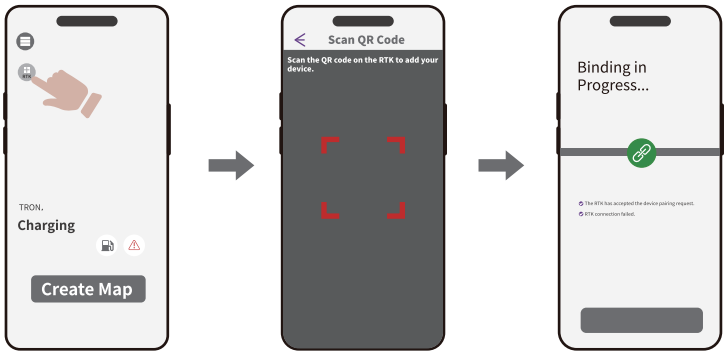
NetRTK is an advanced positioning technology. Unlike traditional RTK systems, NetRTK lawnmowers connect to cloud services via built-in 4G or Wi-Fi networks to correct positioning errors in real time. This provides centimeter-level mowing precision without the need to install or wire a physical base station in your yard.

(Note: A stable 4G cellular or Wi-Fi connection covering your lawn is required for NetRTK to function optimally.)



Pair Tron with RTK Base Station

1. Ensure the RTK base station is powered on and the green indicator light is solid.
2. Follow the on-screen instructions to scan the QR code on the RTK base station and complete the pairing.

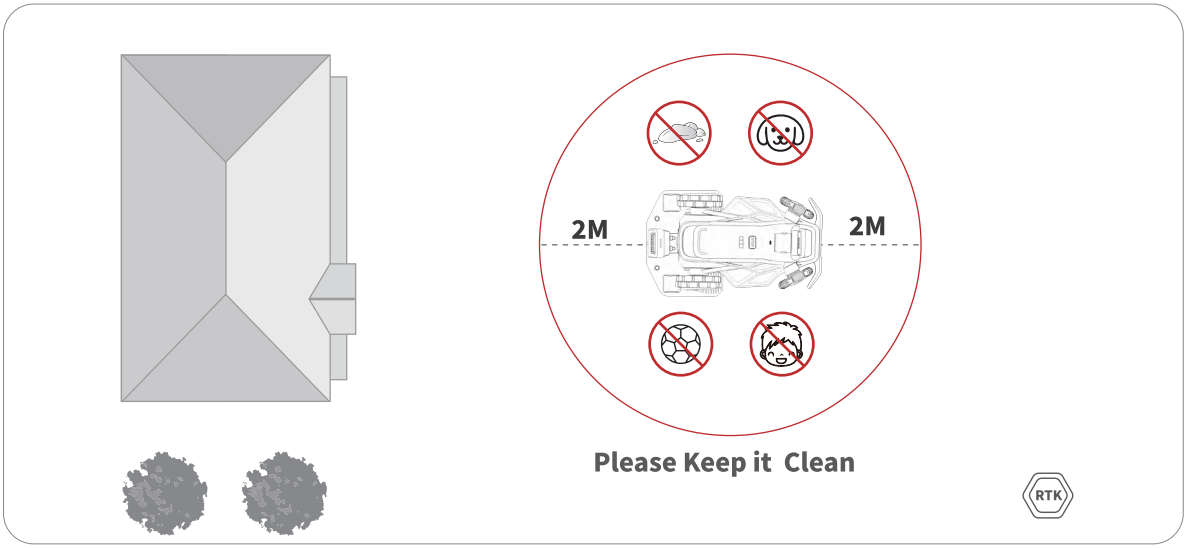


4.5 Creating a Map

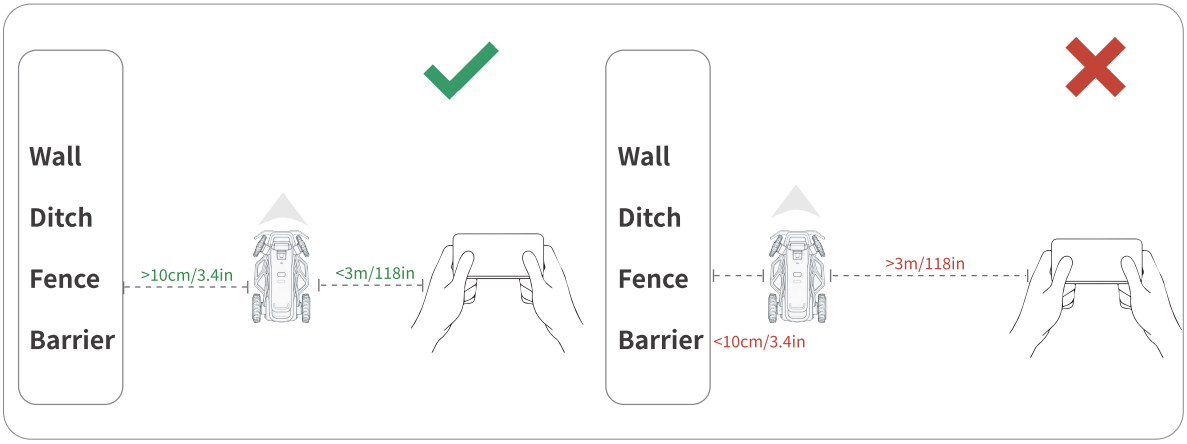
Before creating a map, it is important to understand the key precautions.

Map Preparation

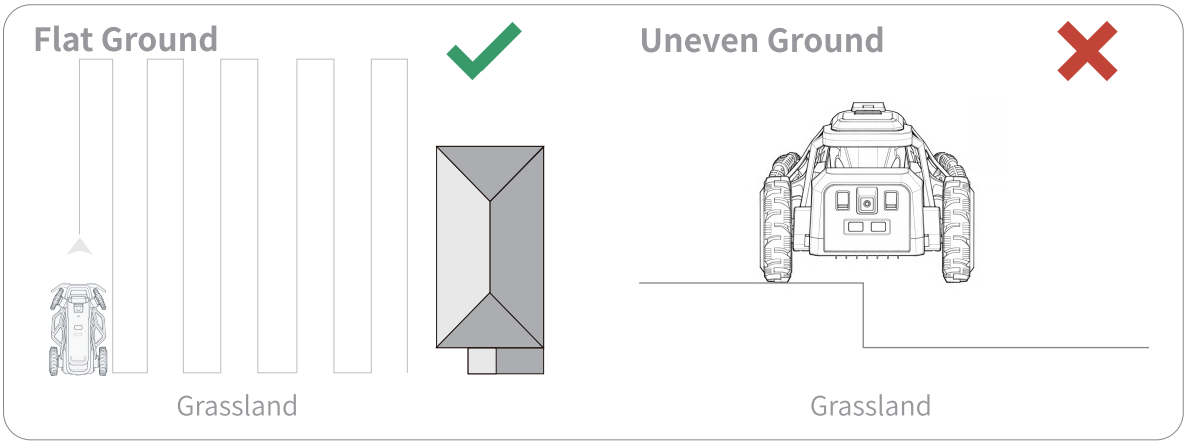
1. Clear the lawn of any debris.
2. Remove all obstacles such as animals, toys, children, small stones, branches, or any other items that may interfere with the mower's operation.



3. It is strongly recommended to keep Tron at least 10 cm (3.4 inches) away from edges such as walls, fences, obstacles, or ditches while creating the map. When using the remote control, remain within 3 meters (10 feet) of Tron to maintain a stable Bluetooth connection and ensure safety. Do not guide Tron over uneven terrain. Instead, guide Tron along flat lawn edges during the mapping process.



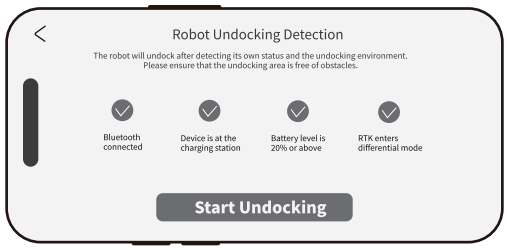
4. Please draw the task area along the perimeter of the lawn.



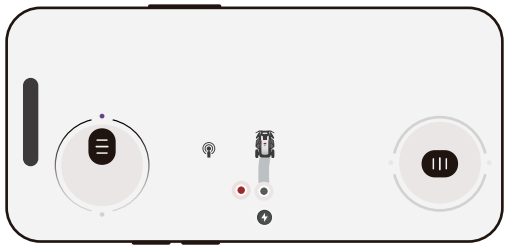
Create a Map in the App

The app will verify the necessary conditions for map creation. The following four conditions must be met: a stable Bluetooth connection, the robot docked at the charging station, battery level of at least 20%, and RTK successfully connected.

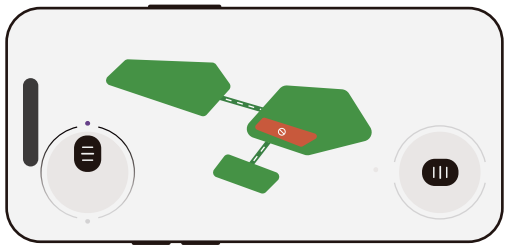
1. Each fulfilled condition will be indicated with a checkmark. Please ensure all four are checked.
2. Tap the “Start” button in the center to begin. The robot will then leave the charging station.



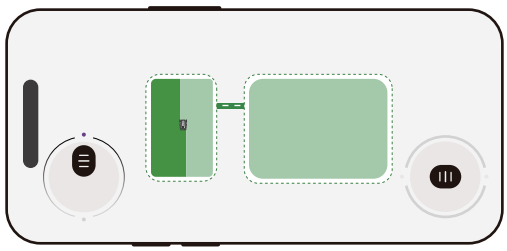
3. Once the robot leaves the charging station, simply guide it to the lawn using the remote control to begin setting up the working area, no-go zones, and paths.



4. After the setup is complete, their boundaries will be automatically outlined.



5. At this point, you can generate the mowing map. When mowing is started in the app, the robot will follow the defined mowing areas.



4.6 Preparing for Tall Grass and Mowing

The height and density of the grass significantly affect TRON's navigation and mowing efficiency. For the first mowing, refer to the height marker on the driving wheel hub to assess the grass height.

1. If the grass reaches the 15 cm (6 in) reference line and is particularly dense, it is advisable to use other mowing tools for the initial cut.
2. If the grass reaches the reference line but is not very dense, TRON can proceed with mowing as usual.

IMPORTANT NOTICE

The shape and density of the grass may affect TRON's vision module. If the grass is too tall or obstructs the module, TRON may recognize it as an obstacle and activate smart avoidance.

Recommended Lawn Mowing Height for the First Mowing

Grass Height Range	Recommended Cutting Height Setting	Notes
40mm~60mm (1.57in~2.36in)	30mm setting (About 1.18in)	
60mm~90mm (2.36in~3.54in)	50mm setting (About 1.97in)	
90mm~120mm (3.54in~4.72in)	70mm setting (About 2.76in)	If the grass is particularly dense, start with the 9cm setting for better mowing results.
120mm~150mm (4.72in~5.91in)	90mm setting (About 3.54in)	If the grass is particularly dense, it is recommended to use other mowing tools for the first cut.
⩾15cm (5.91in)	Use other mowing tools first.	If the grass is particularly dense, using other mowing tools for the first cut is recommended to ensure optimal results.

IMPORTANT NOTES

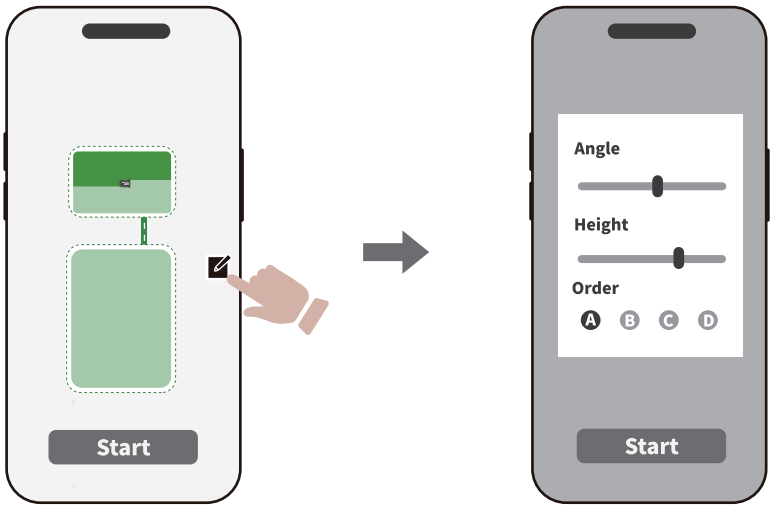
- **Lawn Type Compatibility: TRON is suitable for most common residential lawn grasses, such as Bermuda, Zoysia, St. Augustine, Bahiagrass, and Fescue.**
- **Issues with Tough-Rooted Grass: If your lawn includes grass species with particularly tough rhizomes, they may become entangled in the blade disc, preventing TRON from functioning properly. In such cases, it is recommended to use other mowing tools.**

4.7 Starting the Mowing Process

Task Settings

To start mowing, tap “Start” to begin operation. If no mowing parameters are set, TRON will proceed using the default settings.

You can click “Settings” to enter the mowing settings and adjust the map height, angle, and work area priority.



Safety Instructions for Use

1. Keep hands and feet away from the rotating blades while the robot is operating. Do not reach under the robot.
2. Do not lift or move the robot during operation.
3. Do not place objects on the robot or charging station. Never allow people or animals to ride on the robot or charging station.
4. Pause operation if there are people or animals in the working area.
5. Before mowing, clear the lawn of stones, branches, wires, hoses, tools, and toys. Contact with such objects may damage the blades.
6. Do not use the robot in heavy fog, typhoons, rain, thunderstorms, snow, or when there is standing water in the area. Store the robot and charging station in a safe place and disconnect the power.
7. Do not operate the robot on public roads or walkways. Do not use the app to control the robot in such areas.
8. Prevent the robot from colliding with people, animals, toys, or structures.

5. MAINTAINING YOUR EQUIPMENT

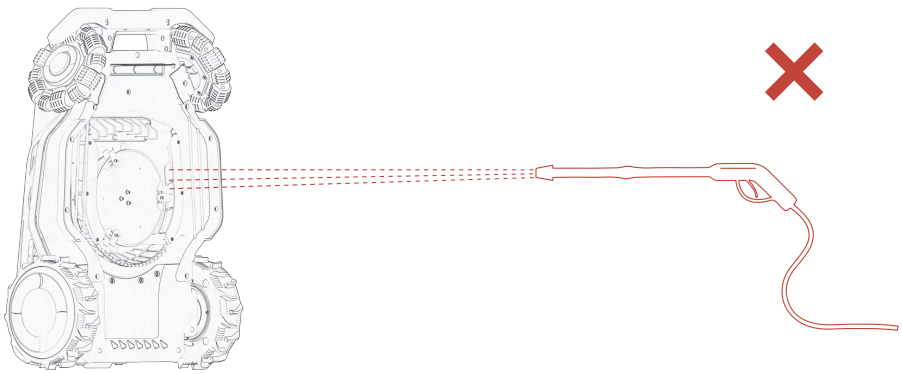
5.1 General Maintenance

Overall Cleaning

1. Ensure that the robot's battery is completely powered off before cleaning.
2. Wipe the robot with a clean, damp cloth or rinse it with water. Do not use alcohol, chemicals, or other corrosive substances for cleaning.
3. When cleaning, you may lift the front of the robot, keep the Driving Wheels on the ground, and stand it upright for cleaning. Do not flip the robot over to avoid scratching the outer shell and damaging the cameras.

WARNING

Do not use a high-pressure water jet to clean the lawn mower to avoid damaging the mower.

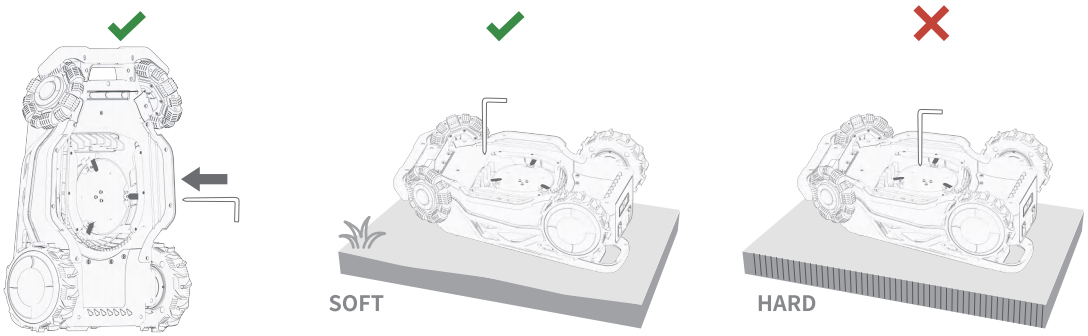


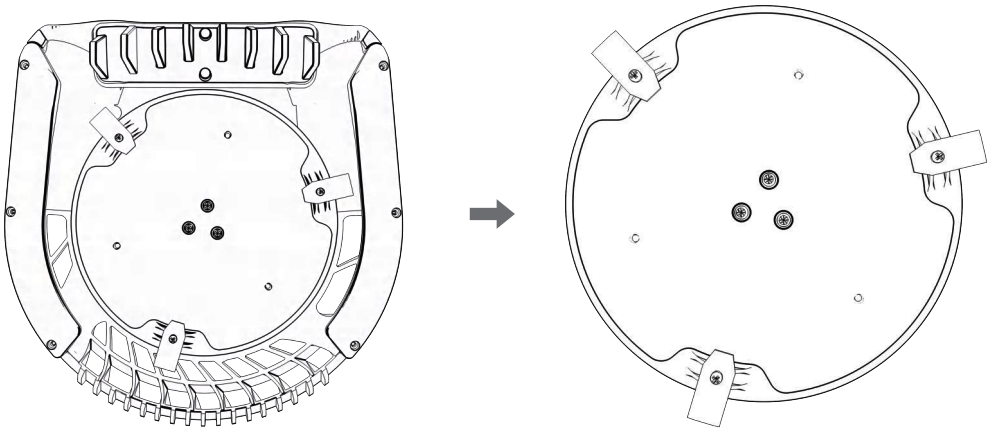
Replacing the Blades

1. If the robot has been in use for a long period, it is recommended to replace the blade edge or the entire blade every 1-2 months to ensure the robot's safety and performance.
2. Ensure the robot’ s battery is powered off.
3. Use the provided screwdriver to remove the screws securing the blade or cutting deck.
4. Replace the blade or blade edge and screws, ensuring that all screws are tightened securely after installation.
5. When replacing the blade, take care to avoid contact with the front and rear cameras to prevent scratches or damage to the robot's exterior and sensors.

WARNING

- **Always wear protective gloves when inspecting or replacing the blade.**
- **Do not reuse old screws.**
- **Use only original replacement blades and screws provided by AIRSEEKERS.**





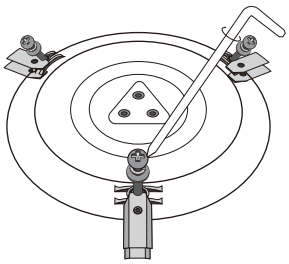
Standard Mowing Disk

Large Mowing Disk
(Non-standard parts)

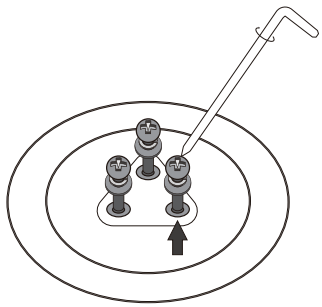
WARNING

1. This blade is sharp and operates at high rotational speed. Potential hazards include:
2. Always disconnect the power supply before servicing or handling the blade.
3. Wear protective gloves when handling to avoid injury.
4. Do not use the blade if it is damaged, bent, or cracked.
5. For use only with designated AIRSEEKERS lawn mower models. Improper use is at the user’ s own risk.
6. Keep out of reach of children.
7. Improper use may result in serious injury or death.

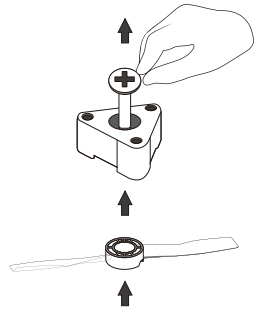
Installing the Large Cutter Disk



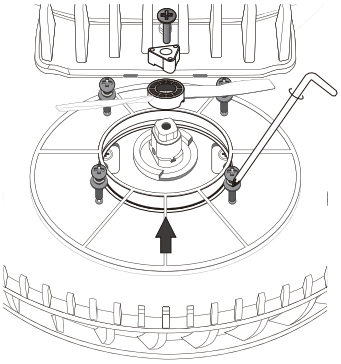
Use a Phillips screwdriver to fasten 6 blades onto the new large disk with M3 screws.



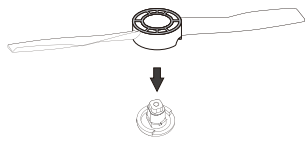
Remove the 3 M4 screws in the center and take off the old standard disk.



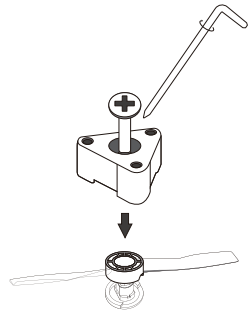
Remove the M4 screws on the triangular metal piece and take off the piece and the fan.



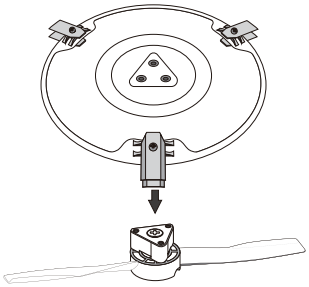
Remove the 4 M5 screws from the blade guard and take off the guard.The original blade guard is not compatible with the large cutter disk. Please store it safely.



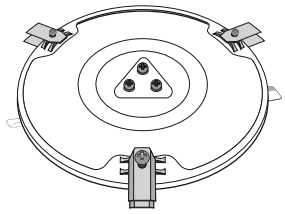
Install the fan onto the rotating shaft (grooved side facing the mower).



Reinstall the triangular metal piece (grooved side facing the mower) and tighten the M4 screws.



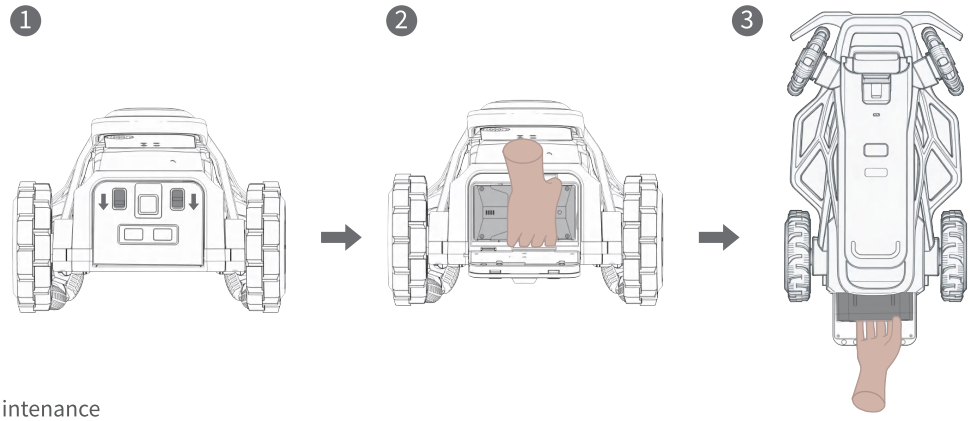
Align the triangular slot of the new disk with the metal piece and press it in.



Tighten the 3 M4 screws to secure the new large blade disk.

Replacing the Battery

1. Ensure the robot is completely powered off.
2. Press the battery latch to remove the battery.
3. Insert a fully charged battery into the battery compartment, press it firmly into place, and close the compartment securely.



Power Maintenance

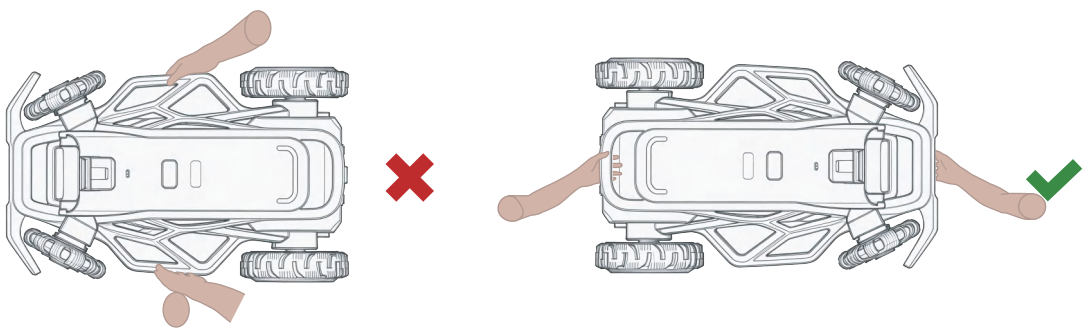
1. Always disconnect the power before inspecting, cleaning, or removing grass clippings or obstructions.
2. After any abnormal operation or unexpected collisions, check if the power supply is functioning properly.
3. Regularly inspect the charging station and charger. If the housing, cables, or plugs are damaged or show signs of aging, discontinue use immediately.

WARNING

- Do not use a damaged power supply. If the battery, charging station, or charger is damaged, it must be replaced by the manufacturer, an authorized service agent, or a qualified professional.
- Only use original power supplies and accessories provided by AIRSEEKERS to ensure product safety.
- Do not use damaged or broken battery and accessories.
- Do not connect a damaged charger to a power source, and avoid touching a damaged charger or any exposed electrical components.
- The battery is not waterproof. Do not replace the battery outdoors in rainy conditions or rinse it directly with water.

Transporting the Robot

When lifting or moving the robot, always hold it by the designated handle.



5.2 Long-Term Storage

Robot

1. Ensure the robot's battery is fully charged before powering it off.
2. Store the robot in a location inaccessible to children and pets.
3. Keep the robot in a cool, dry place.
4. Avoid storing the robot near heat sources, corrosive substances, or other hazardous materials.

Charging Station

1. Please disconnect the charger plug from the power outlet.
2. Please store the charger and charging station in a cool, dry place.

RTK Base Station

1. Please disconnect the power cable from the power port.
2. Please store the RTK base station in a cool, dry place.

NOTE

When using again, place the RTK base station in a location with a good signal. A restart of the RTK base station requires remapping.

Batteries and Battery Disposal

1. If storing the robot for a long period, it is recommended to charge the battery fully every 6 months to prevent damage caused by over-discharge. When the ambient temperature is below 5°C or above 40°C, the battery will not charge. Please use the robot within the temperature range of 5°C to 40°C, and store the robot in temperatures between -20°C and 60°C.
2. When disposing of the battery, please follow local laws and regulations regarding battery recycling and disposal. Fully discharge the battery before placing it in a designated battery recycling bin. The battery contains hazardous chemicals and should not be discarded in regular trash bins.

NOTE

The battery lifespan depends on the frequency and duration of use. Once the battery reaches the end of its lifespan, it will no longer charge properly. Do not dispose of discarded or faulty batteries casually. The limited warranty does not cover battery damage caused by over-discharge.

Handling and Transportation

1. Ensure that the robot's battery is powered off before handling.
2. When lifting the robot, use the front or rear handles. Do not lift by the blade cover to avoid contact with the internal blades, which could cause injury.
3. For transportation, you can use the packaging box provided by AIRSEEKERS. If the packaging box is unavailable, securely fasten the robot to prevent movement during transport. Wrap important components such as the camera, battery, and others in soft materials to avoid compression or collision that could cause damage during transportation.

6. PRODUCT SPECIFICATIONS

6.1 Technical Specifications

BASIC INFORMATION		
No.	Configuration/Features	Parameter
1	Product Name	ROBOTIC LAWN MOWER
2	Brand Name	AIRSEEKERS
3	Product Model	TRON SE
4	Lawn Mower Dimensions	718mm x 470mm x 352mm (28.27in x 18.5in x 13.86in)
5	Lawn Mower Weight	18.5kg
6	Material	PVC/ABS/ASA+PC+METAL
7	Warranty Period	2 years
POSITIONING AND NAVIGATION		
No.	Configuration/Features	Parameter
1	Positioning Method	Vslam+NetRTK
2	GNSS Working Mode	Full Frequency RTK / NetRTK Positioning
3	Path Planning	Full Coverage Path Planning
4	Obstacle Avoidance Method	140° RGB camera
MOWING PARAMETERS		
No.	Configuration/Features	Parameter
1	Mowing Efficiency	200㎡/h - 240㎡/h
2	Cutting Width	Standard Mowing Disk: 200mm (7.87in)(Included in the carton), Large Mowing Disk: 270mm (10.63in)(Need to pay)
3	Mowing Height	30mm-90mm（1.18in-3.54in）
4	Mowing Motor Rated Speed	3000rpm
5	Motor Type	BLDC
6	Mowing Slope	⩽46.6% (25°)
7	Noise Level	65dB (A)

MOVEMENT PARAMETERS

No.	Configuration/Features	Parameter
1	Speed Of Movement	0.45m/s
2	Climb Abilty	⩽65% (33°)
3	Obstacle Climbing Height	⩽60mm (2.36in)
4	Rated Speed Of Drive Motor	43rpm
5	Drive Mode	Two - wheel Differential Direct Drive
6	Front Wheels	190mm x 40mm, Omni-directional Wheel
7	Driving Wheels	225mm x 60mm, Direct-drive Brushless Hub Motor

OPERATING CONDITIONS

No.	Configuration/Features	Parameter
1	Working Temperature	0°C-45°C (32°F-113°F)
2	Storage Temperature	-20°C-60°C (-4°F-140°F)
3	Waterproof Rating	IPX6

CONNECTIVITY

No.	Configuration/Features	Parameter
1	Bluetooth Frequency	BT: 2402~2480MHz: 3dBm BLE: 2402~2480MHz: 3dBm
2	Wi-Fi Frequency	WIFI2.4G:2412~2472MHZ:16dBm WIFI 5G U-NII-1 Band:5150~5250MHz:17dBm WIFI 5G U-NI-2A Band: 5250~5350MHz:17dBm WIFI 5G U-NI-2C Band: 5470-5725MHz:17dBm WIFI 5G U-NII-3 Band: 5725-5850MHz:17dBm
3	Cellular Network	LTE Band 1: Tx: 1920~1980MHz/ Rx: 2110~2170MHz: 25dBm LTE Band 3: Tx: 1710~1785MHz/ Rx: 1805~1880MHz: 25dBm LTE Band 7: Tx: 2500~2570MHz/ Rx: 2620~2690MHz: 25dBm LTE Band 8: Tx: 880~915MHz/ Rx: 925~960MHz: 25dBm LTE Band 20: Tx: 832~862MHz/ Rx: 791~821MHz: 25dBm LTE Band 28: Tx: 703~748MHz/ Rx: 758~803MHz: 25dBm

BATTERY

No.	Configuration/Features	Parameter
1	Battery Type	Lithium-ion Battery
2	Rated Voltage	21.9V

3	Rated Capacity	10Ah
4	Charge Time	100min-120min
5	Mowing Time Per Charge	120min
6	Battery Replacement Method	Plug-and-play Battery Design
7	Charging Method	Charging with Charging Station
8	Protection System	Overheat, Short-circuit, Overcurrent, Overvoltage, Undervoltage, Balance Charging, Low Temperature Protection
9	Battery Life	800 Charge Cycles, With ⩾70% Initial Capacity
10	Discharge Temperature	-20°C～60°C (-4°F～140°F)
11	Charging Temperature	0°C～55°C (32°F～131°F)
12	Storage Temperature	12 Months: -5°C～30°C (23°F～86°F), 3 Months: -5°C～35°C (23°F～95°F), 1 Month: 35°C～45°C (95°F～113°F)
13	Dimensions	174mm x 94mm x 99mm
14	Weight	1.44kg
15	Specifications	10Ah DC 21.9V 219.0Wh
16	Certifications	UN38.3, MSDS, Eu Battery Regulation

CHARGING STATION

No.	Configuration/Feature	Parameter
1	Dimensions	520mm x 380mm x 294mm (20.47in x 14.96in x 11.57in)
2	Weight	1.75kg
3	Input Voltage	28V DC
4	Input Current	7A (Max)
5	Output Voltage	28V DC
6	Output Current	7A (Max)
7	Connection Method	QR Code Recognition
8	Charging Method	Contact-based Charging
9	Operating Frequency	50Hz-60Hz

CHARGING STATION ADAPTER

No.	Configuration/Features	Parameter
1	Specifications	Input Voltage: 100-240V Input Current: 3A AC Frequency: 50Hz-60Hz Working Environment Temperature: -20°C-60°C (32°F-140°F) Output Voltage: 28V Output Current: 5A DC

RTK BASE STATION

No.	Configuration/Features	Parameter
1	Specifications	RTK positioning module BDS/GPS/GLONASS/Galileo full-system multi-frequency high-precision RTK positioning module, capable of simultaneously tracking BDS B1I/B2I/B3I/B1C/B2a、GPS L1/L2/L5、GLONASS G1/G2、Galileo E1/E5b/E5a L1/L2/L5、SBAS, and other signal frequencies. Independent tracking of satellite frequencies with 60 dB narrowband anti-jamming technology
2	Dimensions	Top Box Size: 164 x 150 x 90mm Black Aluminum Tube Size: 613mm x 30mm，Quantity: 3
3	Weight	0.35kg (RTK Box), 1.9kg (Mounting Part Included)
4	Time Accuracy	20 ns (RMS)
5	Cold Start Positioning Time	< 120s
6	Positioning Accuracy	RTK (RMS) Plane: 0.8 cm + 1 ppm Altitude: 1.5 cm + 1 ppm
7	Channels	1408 Channels, Based on NebulasIVTM
8	Power Consumption	1.1 W
9	Operating Temperature	-40°C to 85°C (-40°F to 185°F)
10	LORA	Supports Global ISM 868/915MHz Frequency Communication Between Base Station and Mower. Maximum Effective Communication Range: 120m

RTK BASE STATION ADAPTER

No.	Configuration/Features	Parameter
1	Technical Specifications	Input Voltage: 100-240V Input Current: 0.5A Working Frequency: 50Hz-60Hz Working Environment Temperature: -20°C-60°C (32°F-140°F) Output Voltage: 12V Output Current: 1A
2	Standard Cable	Standard Cable Length: 2.4m Quantity: 1

STANDARD ACCESSORIES

No.	Configuration/Features	Parameter
1	Robotic Lawn Mower Main Unit	Quantity: 1
2	Charging Station	Quantity: 1
3	RTK Base Station	*Quantity: 1
4	RTK Upright Support Tubes	*Quantity: 2
5	RTK Ground Stake	*Quantity: 1
6	Charger	Quantity: 1
7	Base Plate Screws	Quantity: 10
8	Charging Station Ground Stakes	Quantity: 10
9	Charging Station Adapter	Quantity: 1
10	Tools	Hex Key Screwdriver (2-in-1), Quantity: 1
11	Blade Spare Screws	Quantity: 6
12	RTK Adapter Standard Cable	*Quantity: 1
13	Mudguard	Quantity: 1
14	Mudguard Screws	Quantity: 3
15	Spare Blades	Quantity: 6
16	Documents	Manual, Quantity: 1 Quick Start Guide, Quantity: 1
17	Special Screwdriver	Quantity: 1

* Available on select models only.

6.2 LED Indicators

ABNORMAL LIGHTING				
No.	Error Category	Module	Error Message	Light Indicator
1	Sensor Error	Bumper	Bumper malfunction	Red light
		Camera system	Camera connection failure	Red light
			Camera malfunction	Red light
			VSLAM camera offline	Red light
2	Charging Error	Charging station	Charging station path blocked	Red light
			Charging station malfunction	Red light
3	Area Error	Area management	Robot exceeds geofencing	Red light
			Robot leaves working area	Red light
4	Environmental	Environmental impact	Boundary change	Red light
		Grass slope	Grass slope issue	Red light
5	Hardware Error	Lifting motor	Not in position	Red light
			Robot electronic error	Red light
		Drive system	Both drive wheels suspended	Red light
		Drive motor	Current abnormal	Red light
			Emergency stop triggered	Red light

BASIC INDICATOR LIGHT			
No.	Action	Trigger Action	Color
1	Task Working Mode	Click “Start Task” button on the APP task status panel / Robot auto-starts task	White
2	Mapping Mode	Click “Create Map” button on APP	White
3	Standby Mode	Robot task status ends / Robot has no task	White
4	Power On	Long press the power button for 3 seconds	White

5	Power Off	Long press the power button for 3 seconds	White
6	Start Task	Click “Start” button on APP task status panel / Robot triggers automatic task start	White
7	OTA Upgrade	Click firmware upgrade function on APP	Blue
8	Upgrade Complete	Firmware upgrade completes successfully on APP	White
9	Pairing	Pairing Robot with the APP	Blue
10	Task Paused	Click “Pause” button on APP task status panel / Robot triggers pause button	Yellow
11	Start Charging	Robot detects and successfully connects to the charging station	Green
12	Charging	Robot is charging	Green
13	Charging Completed	Charging completes after reaching the set charge percentage	Green
14	Stuck, Fault condition, Alarm	Robot is stuck and unable to move, or fault occurs, or alarm is triggered	Red
15	Emergency Stop, Lifted	Click “Stop” E-STOP / Robot is lifted	Red
16	Mowing Disk Rise	Adjust blade height	Red
17	Mowing Disk Descent	Adjust blade height	Red
18	Manual Remote Control	White light stays on when controlling robot manually	White

ACCESSORY INDICATOR LIGHT

No.	Content	Details	Color
1	Charging Station	Mower not on charging station	White
		Signal issue	Yellow
		Fault	Red
		Charging	Green
		Charging complete	Green
2	RTK	Powering on	Green
		Positioning check normal	Green
		Positioning check abnormal (RTK base station adjustment required)	Yellow
		RTK fixed solution (working normally)	Green
		RTK damaged (needs repair or replacement)	Red

6.3 Vehicle Audio Signals

VEHICLE SOUND	
No.	Task
1	Task Termination
2	Start Task
3	OTA Upgrade
4	Upgrade Complete
5	Pairing Successful
6	Start Charging
7	Low Battery
8	Power off Imminent
9	Returning to Charging Station
10	Failed to Return to Charging Station
11	Mowing Disk Rise
12	Mowing Disk Descent

7. WARRANTY SERVICE

Thank You for Choosing AIRSEEKERS

We are committed to providing you with high-quality products and excellent service. AIRSEEKERS offers a warranty for all original products (hereinafter referred to as “products”). Below are the terms and conditions of our limited warranty service. Please read these terms carefully and make sure you register your product to enjoy the full warranty benefits.

Warranty Period

You will enjoy a two-year limited warranty service after registering the product. The warranty period begins from the activation date of the product.

Warranty Exclusions

The warranty does not cover the following:

1. Products that have been modified or altered without authorization.
2. Parts subject to normal wear and tear due to typical use (e.g., wheels, blades, fan blades, bumpers, ground pegs), consumable accessories (e.g., batteries), or tool attachments.
3. Damage resulting from failure to follow the instructions in the user manual.
4. Damage caused by using improper accessories or parts for purposes other than their intended use.
5. Damage caused by foreign objects or accidents due to personal reasons.
6. Claims where proof of purchase and product registration (including warranty confirmation emails) cannot be provided.

Warranty Service

The warranty does not cover the following:

1. Products that have been modified or altered without authorization.
2. Parts subject to normal wear and tear due to typical use (e.g., wheels, blades, fan blades, bumpers, ground pegs), consumable accessories (e.g., batteries), or tool attachments.
3. Damage resulting from failure to follow the instructions in the user manual.
4. Damage caused by using improper accessories or parts for purposes other than their intended use.
5. Damage caused by foreign objects or accidents due to personal reasons.
6. Claims where proof of purchase and product registration (including warranty confirmation emails) cannot be provided.

Non-Warranty Service

If an authorized AIRSEEKERS dealer confirms that the product is an official original product, but the defect or damage does not meet the warranty conditions, the dealer will provide paid repair services for the defective product. This warranty does not cover services not mentioned, which may incur additional fees.

Warranty Scope

Warranty service is only available in the respective AIRSEEKERS service regions where you purchased AIRSEEKERS products. If fulfilling the warranty violates national or international trade regulations, embargoes, and/or other sanction provisions, AIRSEEKERS will be exempt from its warranty obligations.

Warranty Service Process

Please register your product and fill out the relevant information on our website https://www.airseekers-robotics.com/ to initiate the warranty process.

The warranty periods and maintenance recommendations for each component are shown in the diagram below.

ROBOTIC LAWN MOWER

No.	Name	Warranty Period	Maintenance Advice	Maintenance Notes
1	Hub Motor	2 years		Issues like burning out, demagnetization, or other problems caused by non-abnormal usage
2	Mowing Motor	2 years		Issues like burning out, demagnetization, or other problems caused by non-abnormal usage
3	Vision Module	2 years	Keep lens clean	Faults or quality issues not caused by human or external force
4	PCBA	2 years		Faults or quality issues not caused by human or external force
5	Charging Station	2 years	Keep contact terminals clean	Faults or quality issues caused by non-abnormal usage
6	RTK Base Station	2 years		Faults or quality issues caused by non-abnormal usage
7	Charging Adapter	2 years		Faults or quality issues caused by non-abnormal usage
8	Bumper	2 years	Keep gap clean	Faults or quality issues caused by non-abnormal usage
9	Battery	1 years		Malfunctions or quality issues resulting from causes other than human error or external forces, specifically including: voltage abnormalities preventing charging or discharging; capacity below 60% (verified by discharge tester) with fewer than 800 charge cycles; and other defects not attributable to abnormal use

CONSUMABLE PARTS

No.	Name	Warranty Period	Maintenance Advice	Maintenance Notes
1	Driven Wheel	No warranty	Keep clean, replace if damaged	Wear and tear requires replacement
2	Mowing Disk	No warranty	Keep clean, replace if damaged	Wear and tear requires replacement
3	Mowing Disk Protective Strip	No warranty	Keep clean, replace if damaged	Wear and tear requires replacement
4	Blade	No warranty	Replace every 6 months	Worn blades need to be replaced
5	Driving Wheel Tires	No warranty	Keep clean, replace if heavily worn	Wear and tear requires replacement

OTHER

No.	Name	Warranty Period	Maintenance Advice	Maintenance Notes
1	Giveaway	No warranty		Promotional items and free gifts are not covered by warranty

8. FREQUENTLY ASKED QUESTIONS (FAQ)

THIS GUIDE PROVIDES SOLUTIONS TO COMMON ISSUES ENCOUNTERED WITH THE AIRSEEKERS ROBOTIC LAWN MOWER

Binding				
No.	Type	Problem	Possible Cause	Solution
1	Account & Authorization	Unauthorized app permissions	Permission popup rejected or blocked by security software	Grant the app the necessary permissions in your phone's system settings. Alternatively, reinstall the app and confirm permissions in the authorization popup
2	Robot Binding	Robot in use	Robot already bound to another user	Contact the currently bound user to unbind the Robot before connecting
		Robot not powered on	Robot is off	Turn on the robot and reconnect
		Network interference	Weak Wi-Fi/4G signal causing prolonged binding time	Ensure a stable network connection Try switching Wi-Fi networks or moving to an area with a stronger signal
3	RTK Binding	RTK power failure	Adapter loose or power not connected	Check power connections. Ensure the adapter is securely plugged in; a lit green light indicates proper connection

Map				
No.	Type	Problem	Possible Cause	Solution
1	Map Creation	Mapping failure	Bluetooth not connected to robot	Check if Bluetooth is enabled and not in use by another Robot
			Robot not initially positioned on the charging station	Place the robot on the charging station and ensure proper connection to the charging station
			Charging station not powered on	Check if the charging station is plugged in and observe the indicator light
			RTK signal abnormality	Redeploy the RTK base station to ensure a stable signal
			Low robot battery	Charge the robot on the charging station or replace with a fully charged battery
			Obstructions in front of the charging station	Remove any obstructions in front of the charging station to ensure smooth docking

		Map building error	"Start" button not pressed	Press the "Start" button on the app interface before scanning the map
			Bluetooth disconnected	Maintain a distance of less than 3 meters between the Robot and the phone to ensure stable Bluetooth connection
			RTK signal obstructed	Avoid buildings, trees, metal objects, etc., to ensure stable RTK signal
2	Map Editing	Map name editing failure	Character length limit	Enter the map name according to the app's specifications
3	Map Saving	Saving failure	Unstable network	Switch to a stable network environment and try again
4	Map Deletion	Deletion failure	Unstable network	Switch to a stable network environment and try again

MOWING

No.	Type	Problem	Possible Cause	Solution
1	Mowing Start Failure	Unable to leave station	Obstructions at the charging station	Remove obstructions to ensure the robot can start smoothly
		Network fluctuation	Poor Wi-Fi or 4G network	Switch to a more stable network and try again
2	Mowing Interruption	Outside work area	Terrain slippage causing the robot to deviate from the work area	Manually move the robot back into the work area
		Battery abnormality	Low battery	Fully charge the battery before resuming operation
			Excessive heat or cold	Avoid using the robot in extreme temperatures
		Obstruction	Excessive debris on the lawn	Clean debris from inside the robot and around the blades
		Terrain trapped	Stuck in mud or a deep hole	Remove the robot from the obstacle and optimize the work area planning
		Passageway obstruction	Obstructions in the passageway	Clear obstructions in the passageway to ensure smooth robot passage
		Poor RTK signal	RTK base station too far or obstructed	Adjust the RTK Robot's position to ensure a clear signal

		No eesumption of mowing	User manually moved the robot to the charging station	Restart the mowing task
		Lift detection	Robot triggered lift detection while operating on uneven terrain	Continue operation. If this occurs frequently, optimize the work path
3	Poor Mowing Results	Blade wear	Blades have reached their service life	Replace the blades
		Excessive weeds	Exceeds standard mowing capacity	Mow in multiple passes to improve results
		Uneven lawn	Robot operating on uneven terrain	Optimize the work area and avoid uneven areas

OBSTACLE AVOIDANCE

No.	Type	Problem	Possible Cause	Solution
1	Obstacle Avoidance Failure	Dirty camera lens	Wind, rain, etc	Clean the camera lens to ensure clear visibility
		Obstacles too low or obscured by grass	Visual blind spot	Set mowing restricted areas in the app to avoid difficult-to-detect obstacles
		Insufficient turning space for obstacle avoidance	Obstacles on both sides	Adjust the work area to ensure sufficient space for obstacle avoidance
		Insufficient light	Mowing at night	Avoid mowing at night; operate in sufficient light
		Excessive light	Direct sunlight	Avoid direct sunlight and continue operation
2	Excessive Obstacle Avoidance	Inaccurate identification	Grass or leaves similar in shape to programmed avoidance objects causing misidentification and excessive avoidance	Continue operation; the avoidance algorithm may be optimized in future updates

AUTOMATIC RETURN TO CHARGE				
No.	Type	Problem	Possible Cause	Solution
1	Return Failure	Outside work area	Robot outside the passageway, unable to return to charging station	Ensure the robot is within the work area and adjust its position
		Unstable RTK signal	Excessive distance or obstructions	Check RTK signal strength; if weak, move the robot to an open area and try again
		Unable to pass through passageway	Passageway blocked by obstructions	Clear obstructions in the passageway before continuing operation
2	Docking Failure	Extreme temperatures	Abnormal temperatures preventing battery operation	Move the robot to a suitable temperature environment and charge once the temperature returns to normal
		Obstructions around charging station	Affects docking accuracy	Clear obstructions around the charging station to ensure smooth entry
		Uneven charging station	Poor contact with charging terminals	Place the charging station on a level surface
		Light interference	Strong sunlight during return	Adjust the charging station's position or change the return time
		QR code obscured or soiled	Wind, rain causing blurred QR code	Clean the QR code area to ensure clear recognition
		Rear camera obscured or soiled	Wind, rain affecting recognition	Clean the camera lens to ensure clear visibility
		Charging terminals obscured or soiled	Wind, rain causing poor contact	Clean the charging terminals to ensure smooth charging

SPECIAL PROJECT ISSUES

No.	Type	Issue	Possible Cause	Solution
1	RTK	RTK red light	Damage	Contact customer service for repair or replacement
2	Battery	Cannot charge	Temperature too high or too low	Place the robot in an environment with a suitable temperature (room temperature) and try charging again
			Not used for a long time	Activate the battery first (try charging for 30 minutes, then restart the Robot) before charging
		Battery draining	Recalculating battery each time it is turned on	This is a normal occurrence; no action is required
		Reduced lifespan	Long-term use or overheating	Replace the battery to ensure battery life and performance
3	Wheels	Not smooth	Sand or debris blocking	Clean the wheels to ensure no foreign objects are interfering
		Noises or wear	Long-term use leading to aging	Replace the damaged or worn parts
4	Bumper	Deformed or worn	Long-term use leading to aging	Replace the bumper with a new one to ensure the obstacle avoidance function works properly

9. COMPLIANCE AND CERTIFICATIONS

CE、UKCA、RED、FCC、IC、EMC、RoHS、REACH、WEEE、CB、MSDS、UN38.3.

10. WIRELESS

BT: 2402~2480MHz: 3dBm
BLE: 2402~2480MHz: 3dBm
WIFI 2.4G/5G Output Power：±2 dB
WIFI 2.4G: 2412~2472MHz: 16dBm
WIFI 5G U-NII-1 Band: 5150~5250MHz: 17dBm
WIFI 5G U-NII-2A Band: 5250~5350MHz: 17dBm
WIFI 5G U-NII-2C Band: 5470~5725MHz: 17dBm
WIFI 5G U-NII-3 Band: 5725~5850MHz: 17dBm
LoRa: 863~870MHz: 20dBm
LTE Band 1: Tx: 1920~1980MHz/ Rx: 2110~2170MHz: 25dBm
LTE Band 3: Tx: 1710~1785MHz/ Rx: 1805~1880MHz: 25dBm
LTE Band 7: Tx: 2500~2570MHz/ Rx: 2620~2690MHz: 25dBm
LTE Band 8: Tx: 880~915MHz/ Rx: 925~960MHz: 25dBm
LTE Band 20: Tx: 832~862MHz/ Rx: 791~821MHz: 25dBm
LTE Band 28: Tx: 703~748MHz/ Rx: 758~803MHz: 25dBm

AT&T: 700MHz（Band 12/17/29）、850MHz（Band 5）、1700/2100MHz（Band 4/66）、1900MHz（Band 2）、2300MHz（Band 30）
Verizon：700MHz（Band 13）、850MHz（Band 5）、1700/2100MHz（Band 4/66）、1900MHz（Band 2）
T - Mobile：600MHz（Band 71）、700MHz（Band 12）、1700/2100MHz（Band 4）、1900MHz（Band 2）
Sprint：800MHz（Band 25）、1900MHz（Band 2）

This equipment complies with CE radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance of 20 cm between the radiator and your body.
Hereby, Guangdong Changyao Innovation Technology Co., Ltd declare that AIRSEEKERS ROBOTIC LAWN MOWER with model TRON E1 supports BT, WIFI, 4G, LoRa, GNSS functions. It is in conformity with the relevant union harmonization legislation: Radio Equipment Directive: 2014/53/EU.

The full text of the EU declaration of conformity is available at the following internet address: www.airseekers-robotics.com.

The appliance is only to be used with the power supply unit provided with the appliance.
This appliance contains batteries that are non-replaceable.
WARNING: For the purposes of recharging the battery, only use the detachable supply unit provided with this appliance.

AT&T: 700MHz (Band 12/17/29)、850MHz (Band 5)、1700/2100MHz (Band 4/66)、1900MHz (Band 2)、2300MHz (Band 30)
Verizon: 700MHz (Band 13)、850MHz (Band 5)、1700/2100MHz (Band 4/66)、1900MHz (Band 2)
T - Mobile: 600MHz (Band 71)、700MHz (Band 12)、1700/2100MHz (Band 4)、1900MHz (Band 2)
Sprint: 800MHz (Band 25)、1900MHz (Band 2)

This equipment complies with CE radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance of 20 cm between the radiator and your body.
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The appliance is only to be used with the power supply unit provided with the appliance.
This appliance contains batteries that are non-replaceable.
WARNING: For the purposes of recharging the battery, only use the detachable supply unit provided with this appliance.

FCC Requirement

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

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.

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

Note: 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.

This device complies with FCC radiation exposure limits set forth for an uncontrolled environment. This device should be installed and operated with minimum distance 20cm between the radiator & your body.

ISED Requirement

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

(1) This device may not cause interference.

(2)This device must accept any interference, including interference that may cause undesired operation of the device.

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

1)L'appareil ne doit pas produire de brouillage;

2)L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

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

Cet émetteur ne doit pas être colocalisé ou fonctionner en conjonction avec une autre antenne ou un autre émetteur.

The device meets the exemption from the routine evaluation limits in section 2.5 of RSS-102 and compliance with RSS-102 RF exposure, users can obtain Canadian information on RF exposure and compliance.

Le dispositif rencontre l'exemption des limites courantes d'évaluation dans la section 2.5 de RSS 102 etla conformité à l'exposition de RSS-102 rf, utilisateurs peut obtenir l'information canadienne surl'exposition et la conformité de rf.

This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body.
Cet émetteur ne doit pas être Co-placé ou ne fonctionnant en même temps qu'aucune autre antenne ouémetteur. Cet équipement devrait être installé et actionné avec une distance minimum de 20 centimètres entre le radiateur et votre corps.
This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:
(1) This device may not cause interference.
(2)This device must accept any interference, including interference that may cause undesired operation of the device.

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux
CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :
1)L'appareil ne doit pas produire de brouillage;
2)L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.
(i) the device for operation in the band 5150–5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems.

(i) l'appareil pour fonctionner dans la bande 5150-5250 MHz est réservé à une utilisation en intérieur afin de réduire les risques d'interférences nuisibles à la co-canal systèmes mobiles par satellite.