UBTECH

CADEBOT L100

Delivery Robot

User Manual

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Introduction

- We would like to thank you for purchasing the product CADEBOT delivery robot from our company. To ensure safe usage and quickly master the method of use, please read this manual carefully.
- In this manual, "CADEBOT", "robot", and "it" refer to the CADEBOT delivery robot, and "you" refer to the user.
- This manual is for reference only and may not provide detailed descriptions. If you encounter problems that cannot be solved, please contact our company for technical support.
- This manual will be updated periodically, and the latest user manual will include the latest content and images. Please contact your dealer for obtaining it.

Statement

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Disclaimer

- The malfunction and damage caused by the user's failure to use the product in accordance with the instructions in this manual.
- The malfunction and damage caused by using an after-sales service agency not designated by the company for repair.
- The malfunction and damage caused by modifications or repairs made to the product's components, circuits, etc. by the user.
- Losses caused by uncontrollable factors such as fires, earthquakes, weather, etc.
- Malfunctions and losses caused by using non-designated power sources (voltage, frequency) or abnormal voltage.
- Malfunctions and losses caused by using non-designated charging stations or charging cables.

PART I Product Introduction

1.1 Package List

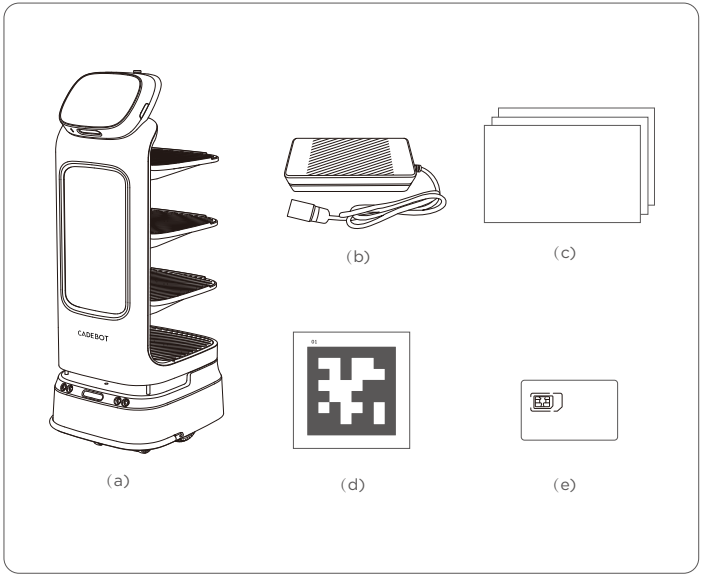
a. Cadebot*1

b. Charger*1

c. Files （User Manual*1\Certificate of Compliance*1\Warranty Card*1）

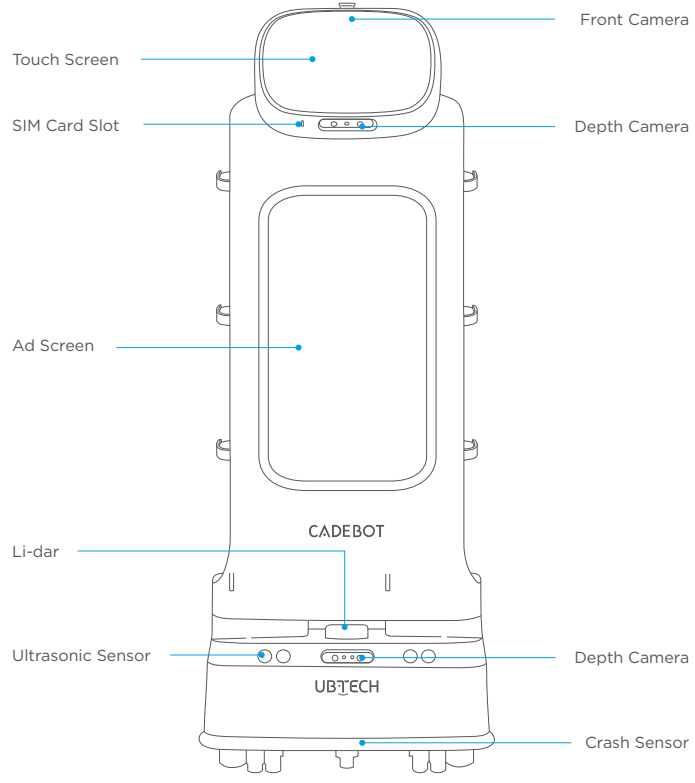
d. Positioning QR Code

e. 4G SIM Card*1 **(Self-Supplied Material)**
Note: For optimal functionality experience, it is recommended to use a 4G SIM card with this product.

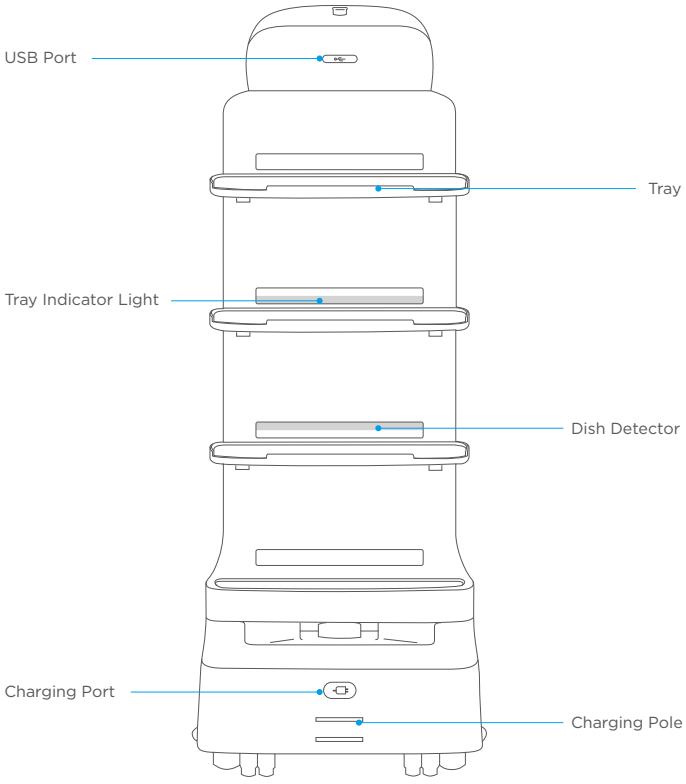


1.2 Appearance Introduction

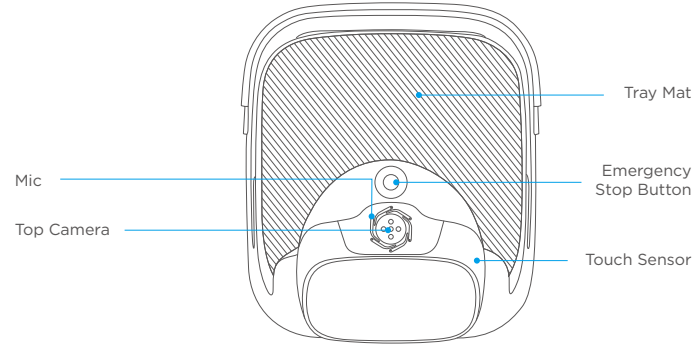
• Front View



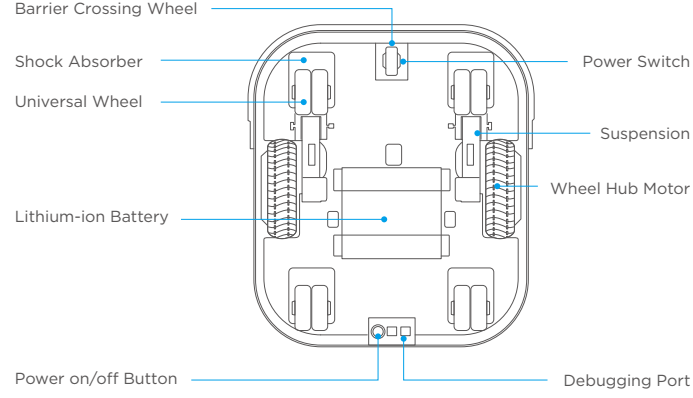
• Back View



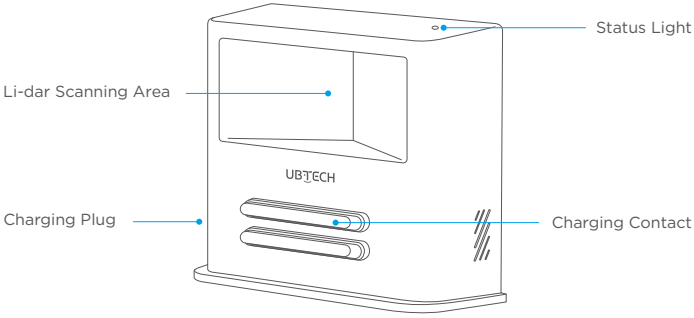
• Top View



• Bottom View

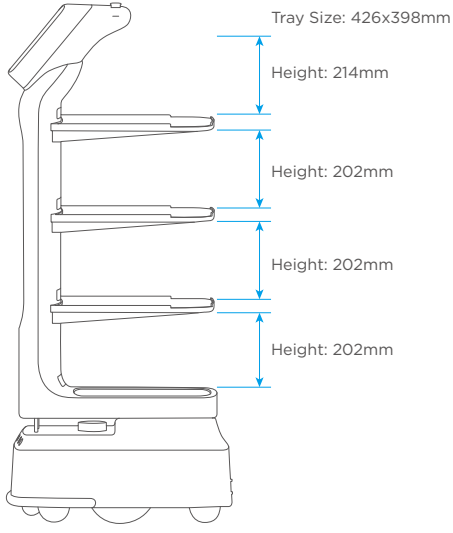


• Charging Station*



***Note: Charging station is an optional accessory, please purchase separately.**

1.3 Tray Size and Height



1.4 Product Specifications

• Basic Parameters

Product Name	CADEBOT-L100
Model	XCAD101
Product Dimensions	550(L) * 485(W) * 1265(H) (mm)
Product Weight	55kg
Load Capacity	40kg
Number of Trays	4pcs
Maximum Weight per Tray	10kg
Touch Screen	10.1inch, resolution 1920X1200
AD Screen	21.5 inch, resolution 1920x1080, 16:9
Moving Speed	0-0.8m/s
Passage Width	⩾650mm
Trench Width	⩽40mm
Climbing Ability	⩽5°
Barrier Crossing Height	⩽15mm
Charging Method	Adapter or charging station
Operating Temperature	0-40°C (for indoor use only)
Operating Humidity	10-90% (for indoor use only)

Storage Temperature	-20°C-60°C
Storage Humidity	⩽90%
Acoustic Device	Speaker*1
Network	WiFi 2.4GHz/5G
4G	B1/B2/B3/B4/B5/B7/ B8/B12/B13/B14/B18/ B19/B20/B25/B26/ B28/B66/B71
Bluetooth	Bluetooth 5.1
Battery Capacity	25.6V 20Ah
Charging Time	appr. 4h
Working Time	appr. 8h
Standby Time	12h
Input Voltage	AC100-240V
Output Voltage	DC29.4V

PART II Safety Issues

2.1 General Information

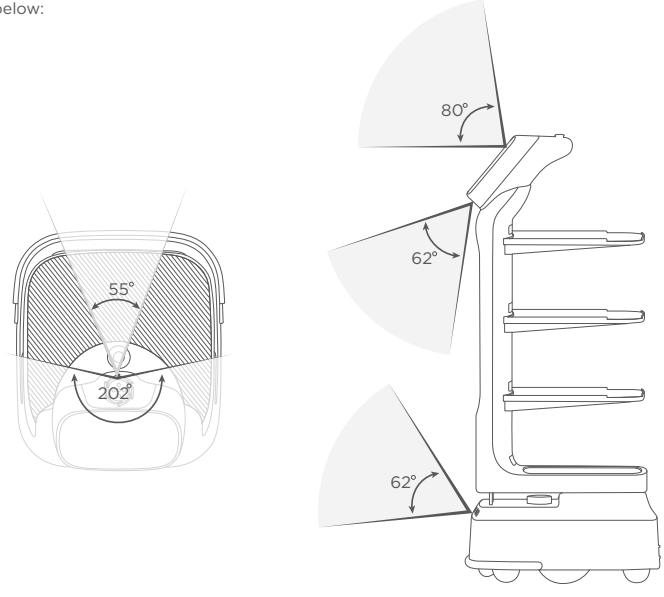
Please read the following information carefully. The company does not assume any direct or indirect losses resulting from improper use of the product.

Note

- To ensure safety, it is strongly recommended that users follow the following safety regulations when operating the robot.
- This manual does not guarantee that all possible situations are included.
- If you do not have experience in operating the robot, you need to be extra careful; please have a professional operate the robot.
- CADEBOT has multiple safety sensors available to ensure safe operation, which work in parallel to minimize any risk to users or anyone else.
- Do not operate the robot illegally for your personal safety.
- Guardians should ensure that children under 6 years old stay away from CADEBOT.
- Never place your feet near the robot at any time to prevent foot injuries caused by walking.
- Keep a certain distance from the robot and do not get too close to avoid accidental falls or other injuries.
- Regularly check the basic condition of the robot, make sure all external parts are secure, not loose, falling or damaged, walk without any strange noises, and no continuous alarms.

2.2 Safety Notice

- Do not carry the robot with its wheels suspended while it is in use for transportation.
- Do not hit or push the robot with excessive force.
- Do not disassemble or alter the robot's structure without permission.
- Do not obstruct the charging location of the robot.
- In case of emergency, immediately press the robot's emergency stop button.
- Avoid using the robot in risky or inappropriate places such as deep holes, cracks, pedestrian stairs, steep slopes above 5 degrees, trenches deeper than 35mm, passages smaller than 650mm, etc.
- Do not place any flame-resistant stoves or any flammable solids, gases, or liquids on the tray.
- Do not clean and maintain the robot while it is in use.
- To ensure safety, adjust the robot speed to less than 0.8m/s and do not play or fool around in front of the robot to avoid unnecessary injuries.
- Do not make temporary tray loading adjustments while the robot is moving. All operations should be done by clicking on the screen to pause the robot before proceeding.
- Do not handle food or drinks on the tray while the robot is delivering to the designated table area until the robot has stopped and stabilized, to prevent accidental collisions that may result in food loss and personal injury.
- Before using the robot, clear any wires or sharp objects on the ground to avoid damaging the machine's base.
- Do not pour any liquids into the robot's interior.
- Do not place any non-transportable objects (including children and pets) on either the stationary or moving host.
- The robot has automatic obstacle avoidance features, but do not block the robot suddenly while it is traveling at high speeds, as this may cause a safety accident.
- The robot is equipped with downward sensors, whose recognition range is shown below:



2.3 Usage Guidelines

- For safety reasons, do not remove or place dishes while the robot is in operation. If you need to remove or place dishes, please pause the task first.
- Do not pull or push the robot while it is running. If you need to move the robot, please pause it first.
- Do not push the robot backwards while it is turned on.
- Do not obstruct the robot's components or place items beyond its loading space, as this may cause the robot to walk abnormally or lose its positioning.
- Do not hit or press the device aggressively, as this may damage the device.
- Do not clean and maintain the robot while it is in operation.
- It is not recommended to use the robot for soup delivery unless it has been specially customized. If soup delivery is necessary, please be aware of potential spills and high temperatures that may cause burns. When delivering hot utensils or pots, avoid the robot to prevent collisions with hot items and potential injuries.

2.4 Environmental Notice

- This robot is suitable for flat ground, such as floors, tiles, thin carpets, etc. It is not suitable for environments with steps, steep slopes, or too crowded places.
- It is not recommended to use the robot on wet or water-logging surfaces.
- The robot may be tripped over or entangled by scattered power cords and other debris on the ground. Please clear them before use.
- Obstacles on the ground (such as thresholds) may cause food spills, so please confirm that the height of the obstacle is less than 0.5cm.
- The optimal width for the robot's passage should be more than 0.65m. The width of a long passage should be more than 0.6m to ensure smooth passage. When the passage width is more than 1.6m, two robots can run opposite to each other (the specific width is evaluated by technical personnel according to the actual scene).
- The maximum slope angle of the robot is 5°， but to prevent food spillage, it is recommended that the slope be no greater than 4° when carrying food. During uphill or downhill travel of the robot, do not pause the robot to prevent safety risks caused by slipping after the robot has skidded. The slope width should not be less than 0.8m, and the side-slipping angle should not exceed 5° to prevent the robot from accidentally falling off the slope.
- Please increase fences or other protective barriers around the edges of stairs and entrances to downhill areas where there is a risk of the robot falling.

2.5 Electricity Notice

- When the robot's battery is below 20%, please charge it in a timely manner. Running the robot for a long time on low battery power will shorten the battery life.
- After charging is complete, please unplug the power immediately and do not keep the robot plugged in while the battery is fully charged.
- Please use the original factory-matched rechargeable batteries and charging equipment, and do not use non-original chargers.
- Please ensure that the power supply voltage matches the voltage indicated on the charger, otherwise it may damage the charger.
- Please handle the power cord carefully to avoid pulling and twisting.
- Please assign a designated person to be responsible for charging the robot, and do not charge the robot or individual batteries without supervision.
- Do not place the robot near flammable or explosive items while charging.
- The charging and storage locations for the robot should remain dry and at normal temperature. It is strictly prohibited to place the robot and charger in high-temperature areas (>40°C) or to allow them to enter water.
- If you find that the charger is damaged or the charging current is abnormal, please replace the charger in a timely manner.

PART III Usage Guide

3.1 Charging

Connect the charging cable to the charging port of the robot, ensuring that the charging port of the robot is connected to the charging cable. If the connection is successful, the base light of the robot will turn green and breathe. If you have purchased a charging station, you can also charge the robot through the charging station.

Notes for Charging:

1. To ensure the efficiency of the robot and the battery life, please keep the robot's battery level at 10% or higher at all times;
2. When the battery level is below 10%, the robot is in a low-battery state and needs to be charged promptly;
3. When the battery level is below 1%, the robot is in battery protection mode and cannot be used until it is charged.

3.2 Power On/Off

Before Powering On:

To power on for the first time, open the power switch, and the green flashing light indicates that the power switch is turned on.

Please short-press the power button to power on while ensuring that the power switch is turned on: Pressing the power button will display a blue light on the bottom of the screen.

Power Off:

Long-press the power button for 3 seconds, and the screen will prompt you to power off. The robot will successfully shut down when the screen goes black. If you do not use the robot for an extended period, please turn off the power switch.

3.3 Light Indication

The light effects and corresponding states of the body bottom atmosphere lamp are as follows:

Function description	Status indicators
Working	Blue constantly on
Waiting for food delivery	Blue quick flash
Delivery completed	Blue running around the rim
Idle	Blue breathing
Lost direction	Yellow breathing
Faulty	Red breathing
Turning on power switch	Green flashing (1s)
Charging	Green breathing
Fully charged	Green continuously on
Taking an emergency stop	Red flashing

The light effects of the robot's head and ear are as follows:

Status	Light
Speaking	Blue flashing
Touching head	Pink flashing

3.4 4G Network

Operations such as robot speech interaction, data uploading, and remote maintenance require a network environment. Currently, the robot supports Wi-Fi and 4G networks, and users can choose according to actual needs. If 4G network is needed, users need to install a 4G SIM card and turn on the 4G network before using it. If both 4G and Wi-Fi are turned on simultaneously, Wifi will be used first. If the robot detects a weak Wi-Fi signal, it will automatically switch to 4G network.

Installation of SIM Card:

Please insert the SIM card in a non-operational state after turning off the robot. If you insert the SIM card while the robot is on, you need to restart the robot.

3.5 Software Functions

Note: The software functions are regularly updated and improved. All features are subject to the actual functions provided. You can visit the official website at any time to obtain the latest software version information.

3.5.1 Delivery

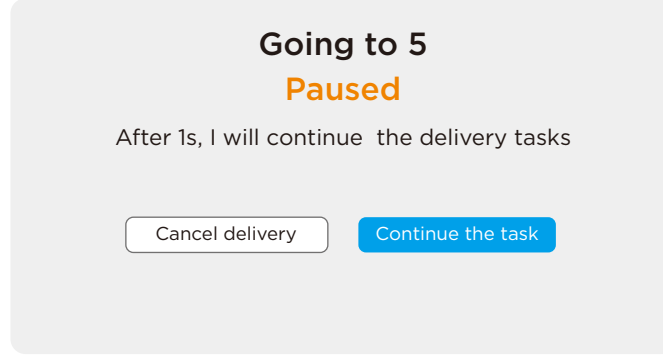


Button Explanation:

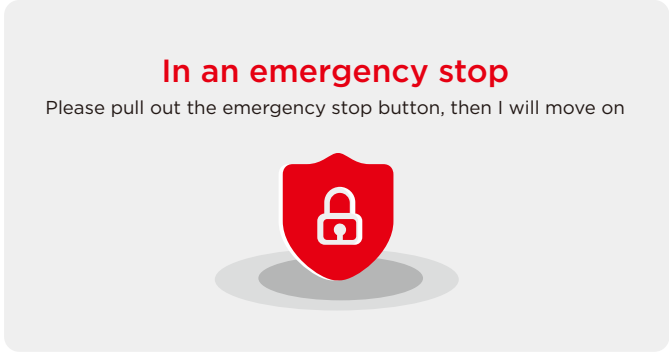
Button	Definition
	Exit key, returns to the expression interface
	Greeting key, enters the greeting interface
	Settings key, enters the settings interface
	Charging station, executes back-to-station charging task
	Pick-up point, executes return-drop-off task
	Plate-return point, executes return-collection point task

Process Description:

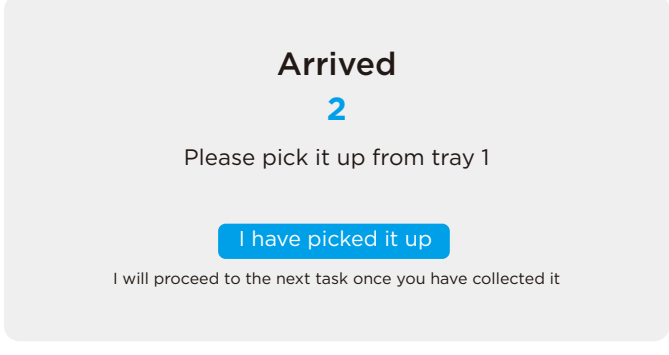
1. Place dishes on tray.
2. Click on the tray where the dish is placed to use and select the destination table number. Click ⊗ the delete button to remove the selected destination and task on the tray. Users need to manually select the tray and destination (e.g. table number), and can choose the same destination for different trays or different destinations for different trays.
3. After entering the destination table number, click start to begin the task. The robot will start executing the task.
4. The robot will navigate to the task destination according to the route mapped in the map. If there is no route mapped, it will navigate freely and quickly reach the destination. When it reaches the destination, the corresponding tray will light up automatically and remind users to get food.
5. During the robot's journey, double-click the screen and enter the unlock password to pause the task. Click cancel delivery to stop the task, and click continue to continue completing the task.



6. While the robot is moving, you can press the emergency stop, which will immediately stop the robot and pause the task. If you rotate the emergency stop button, you can release the emergency stop status, and the robot will automatically continue to complete the task.



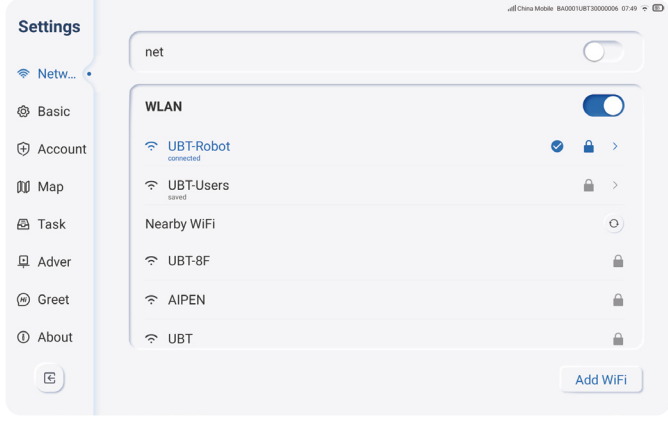
7. Once the robot arrives at the destination, the screen displays "Arrived". After clicking **I have picked up**, if there are multiple tasks, the robot will automatically perform the next delivery task, and if there are no remaining tasks, the robot will automatically return.



3.5.2 Settings

After entering the settings interface, if there are no operations for more than 5 minutes, it will automatically return to the delivery page. If you enter the delivery page and there are no operations for more than 5 minutes, it will automatically exit to the expression page.

- **Network Settings**

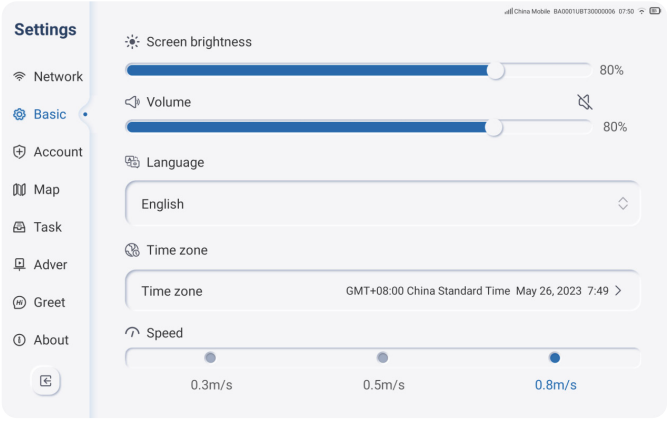


Click the settings icon, select Network, and connect to the Internet.

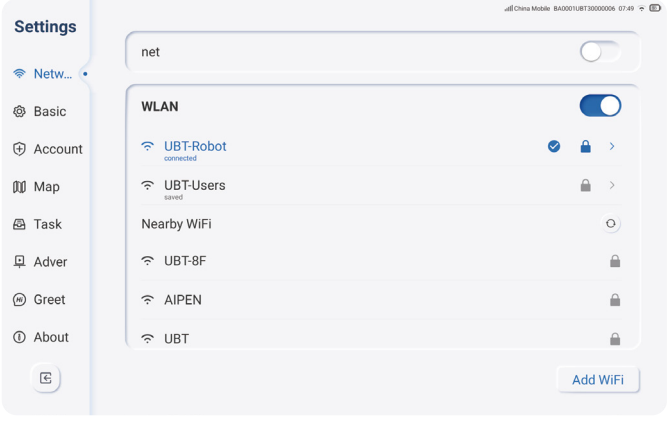
1. You can choose WLAN mode, select a nearby WiFi network, enter the password, and the robot will automatically connect to the network. If the WiFi connection fails, please confirm that the WiFi information is correct.
2. If you need to connect to a hidden network, you can click "Add Network" and manually add it.
3. If you have inserted a 4G data card, you can also choose to turn on the data network and access the cellular network.

Note: WiFi in some public places requires double verification, and such WiFi connections are not supported.

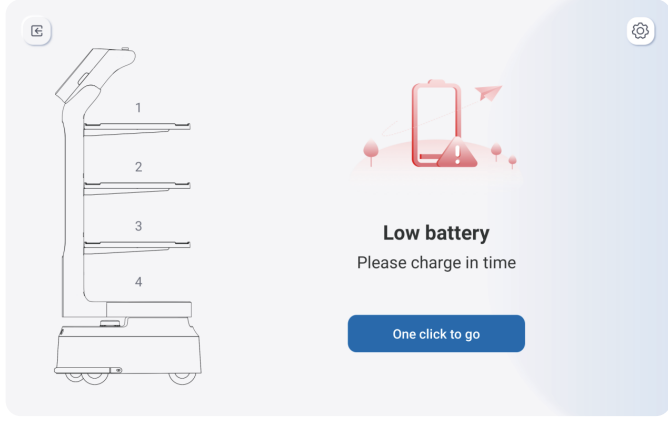
• Basic Settings



1. Click the settings icon, select Basic, and perform basic operations.
2. Users can manually drag the progress bar to adjust the screen brightness and volume.
3. You can set the robot's voice broadcast language.

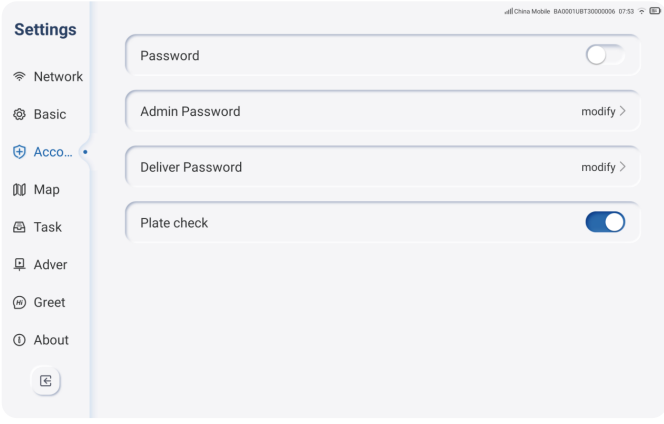


4. Select the robot's walking speed.
5. After completing a task, you can choose return setting options such as staying in place, returning to the charging station, returning to the drop-off point, returning to the collection point, or returning to the greeting point.
6. Set the minimum battery level for the robot to complete a task. If the battery level is below the set value, the robot will automatically return to the charging station. At this point, it cannot create a new task.



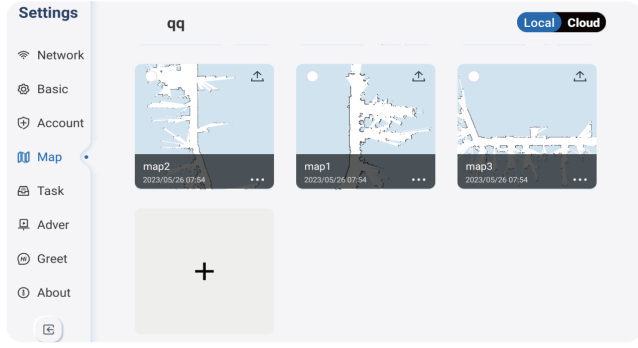
7. If the robot's battery level is below the minimum level for completing a task, it will automatically alert you. Click on "One click to go" and it will automatically return to the charging station.

• Account Settings

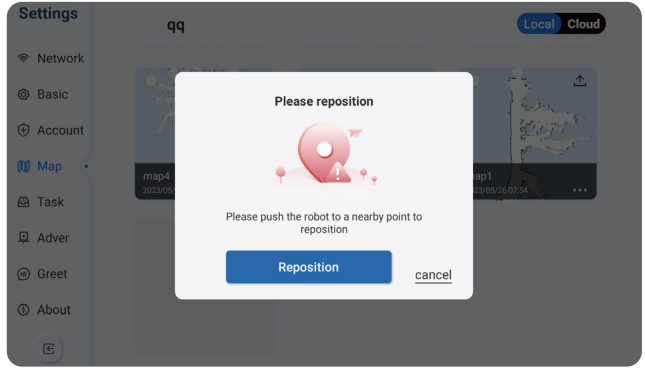


1. Click the settings icon, select Account, and perform security settings.
2. The robot software has two role types: administrator and delivery person. Among them, the administrator has the highest authority and can enter the setting interface to set the overall configuration of the whole robot; the delivery person has general business permissions and can set the machine to execute delivery tasks, etc.
3. Click on the password to modify it, and you can enter a new password for the administrator's password and the delivery person's password.
4. Click on the toggle to turn on/off tray detection. When this function is turned on, if the tray is detected as being taken, the robot will automatically enter the next delivery task without requiring the user to click on the screen to confirm.

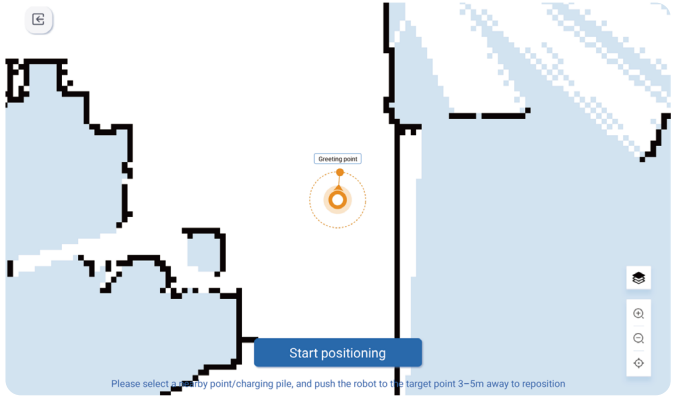
• Map Settings



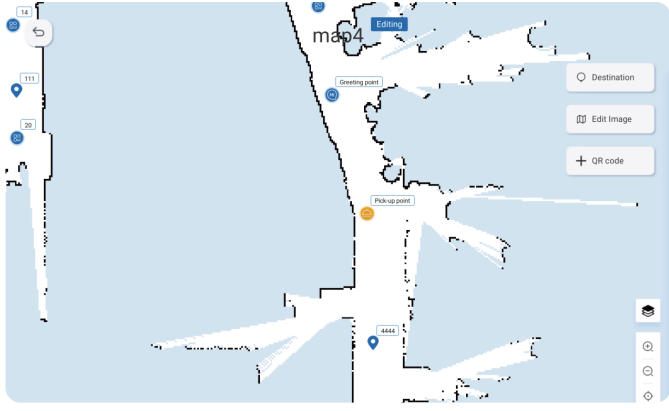
1. Click the settings icon, select Map, and perform map settings. You can view the currently selected maps that are being used.
2. Select the "Local" map by checking the map top left corner, and it will be considered as selected.
3. When selecting the local map, check the map top right corner to upload the selected local map to the cloud.
4. Click on the specific map's bottom right corner icon to rename or delete it.
5. The maximum number of local map storage is 10, and if you need to store more maps, you need to upload them to the cloud.



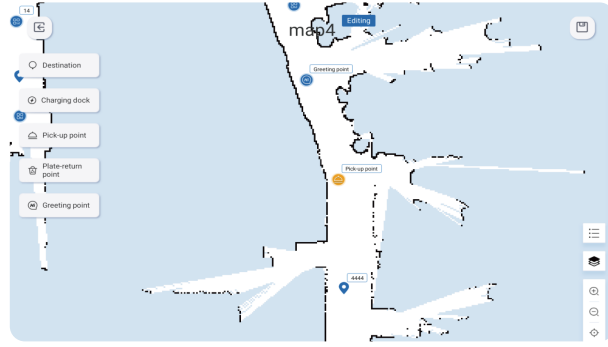
6. The robot must re-locate when switching to a new map or making changes to the current map.



7. Users can push the robot to the nearest positioning point and click on the specific location of the robot to locate it.



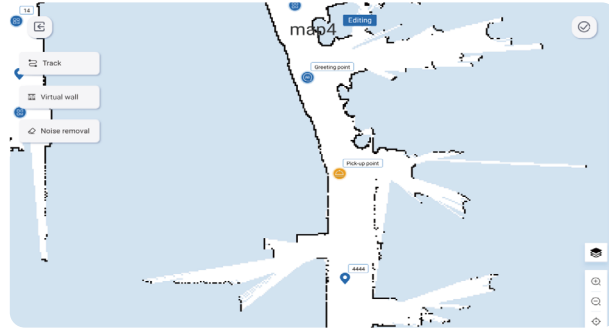
8. After entering a map, you can enter the preview interface to edit the map in detail.



9. Click on the destination point to enter the target point editing, where you can add new points.

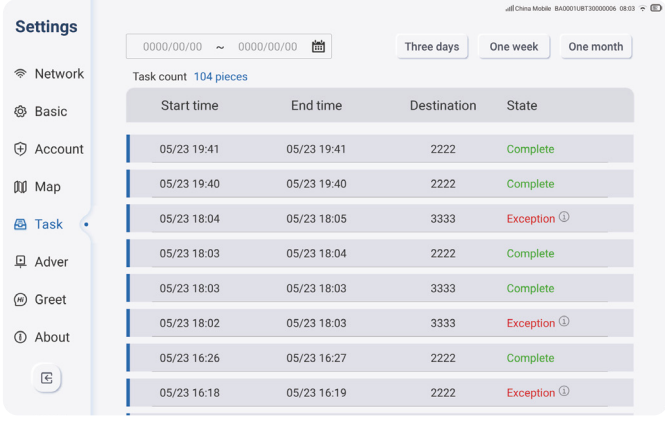
10. By clicking on the point list on the right side, users can group destinations. Multiple points can be selected to create a new group, and a new group name (e.g. A zone) can be entered. Clicking the cancel button to cancel the group and the points remain unchanged. Ungrouped points are automatically assigned to the default group.

11. Opening the point list on the right side, selecting existing points will automatically zoom in the map to display the location of the selected point, long-pressing and dragging the point can switch its position, and clicking on the point below can rotate its direction.



12. Click on Edit to enter the track and virtual wall editing interface.
13. Click on the virtual wall, click and create anchor points on the map, and the virtual wall will be generated automatically (i.e. the robot cannot continue to move forward after reaching the area, and must turn around to find a new route).
14. Click on Noise Removal, users can erase the obstacles that were automatically scanned by the lidar.
15. Click on Track, select points on the map, connect them with lines, and the track will be generated automatically. If the robot's route is close to the track, it will prefer to take the track.
16. After saving the map edit, you can choose to upload it to the cloud or not.

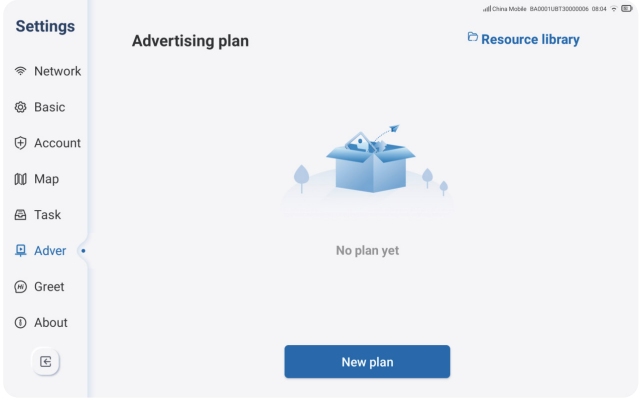
• Task Record



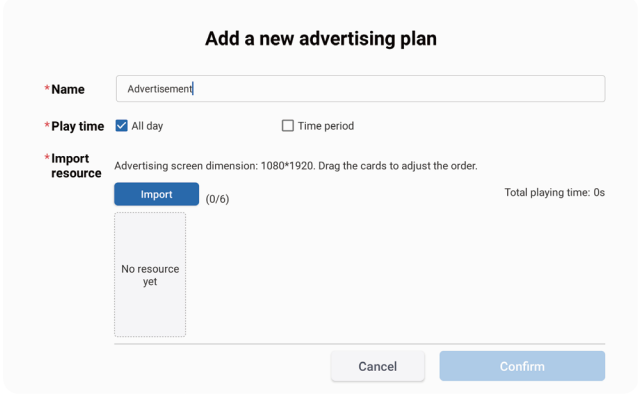
1. Click on the settings icon, select Tasks, and view the task list.
2. You can choose the desired time span or click on the most recent three days/one week/one month to view your task history. The task history includes the start time, end time, destination, and task status.

• Advertising Settings

Advertising settings provide functions for adding, replacing and customizing advertising plans. The following are the steps for adding a new advertising plan:



1. Click "New plan" to edit the plan name and select the playing time period. All-day playback/split-time playback can be set.

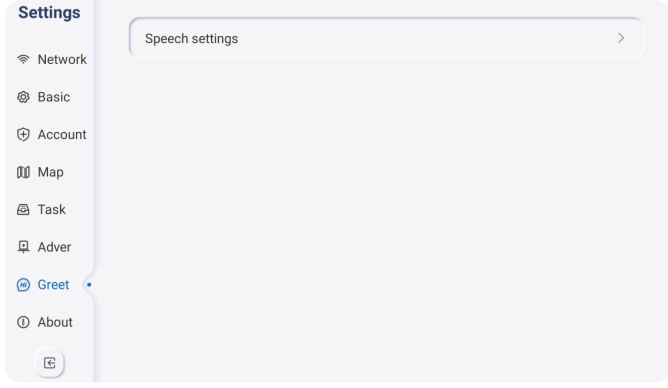


2. Click "Import materials" to enter the material library, select the required materials, and the maximum number of materials you can select is 6. After selecting the materials, you can view the total playing time in the upper right corner, confirm that there is no error, and then click "OK" to play it cyclically within the selected period.

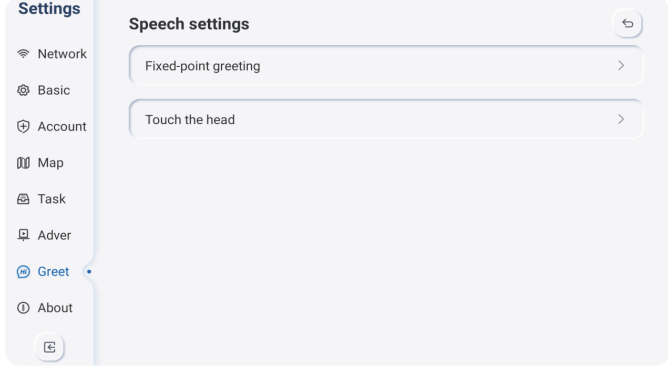


3. Users can independently choose the specific playing time of each image material. Click the editing key below the image material to adjust the playing time of the image material. Click the material to enter the preview interface. Long press the material to perform drag operations. After importing the materials, you can remove them from the top right corner.
4. Materials support USB import. After clicking on USB import, check the required USB files and click OK to automatically import them. After successful imports, the materials will be stored in the library and available for selection. The library has a memory limit of 20GB. The materials included in the current playing plan cannot be deleted from the library.
5. The advertising screen size is 1080*1920 with a ratio of 9:16. If the image material does not meet the size ratio, it will be automatically centered and cropped.
6. If the total playing time of the selected materials is longer than the playing period, incomplete playback of materials within the plan will occur.
7. During non-plan playing time, the robot advertising screen will display a default image.
8. After adding a new plan, you can view the local advertising plan in the first interface, choose to use/delete the plan.

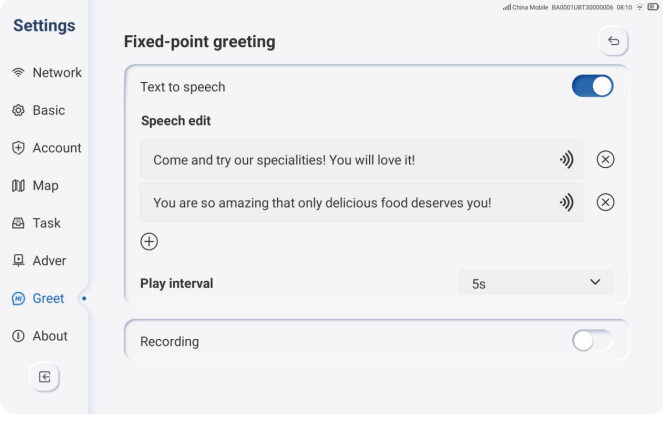
• Greeting Settings



1. Clicking on the settings icon and then selecting greet to enter welcome setting. Click on the speech setting where users can configure the fixed-pointed greeting phrases and phrases spoken when the robot touches its head.

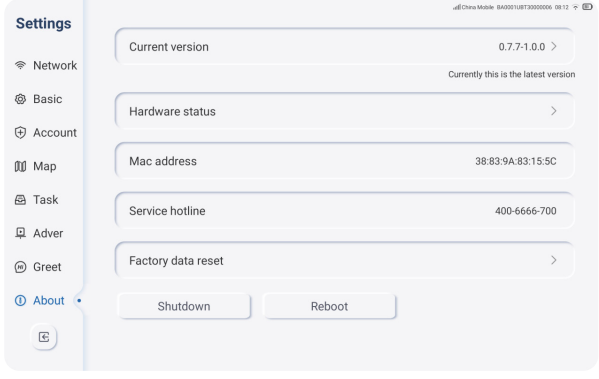


2. Clicking on fixed-pointed greeting allows users to select either text-to-speech input or autonomous recording, neither of which can be enabled simultaneously. However, both can be disabled simultaneously, indicating that the robot will not say any fixed-point phrases during the greeting task.
3. The speech setting supports both Chinese and English languages. Under Chinese and English language systems, users can choose between text-to-speech input or autonomous recording. Under other languages, only recording is available.



4. The speech setting has two default phrases for text-to-speech and five maximum allowed for autonomous recording. The maximum number of characters per text-to-speech message is 500 and the maximum duration for each recorded phrase is 60 seconds.
5. The phrases are played in order from top to bottom with a specified interval time of 5 seconds. If users select text-to-speech, they can click the play button to preview after inputting the text, and the delete button to remove the phrase. If users select recording, they can click on the recording box to replay after finishing, and the delete button to remove the phrase.
6. Touching the head allows users to access the head touching setting. Users can choose either manual input of text-to-speech or autonomous recording, neither of which can be enabled simultaneously but both can be disabled simultaneously. The speech setting supports both Chinese and English languages. Under Chinese and English language systems, users can choose between text-to-speech input or autonomous recording. Adding up to five allowed for each type of recording. The specific process and details of the welcome setting can be referenced above.
7. When a guest touches the robot, it will only play one phrase after saying the previous one. After the current phrase finishes playing, the robot will play the next phrase in sequence.

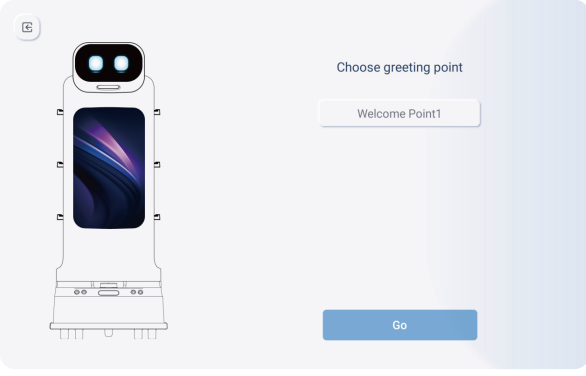
- **About**



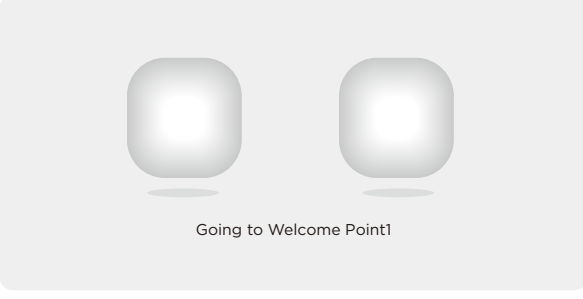
1. Click on the settings icon, then click on about to enter about settings.
2. Users can view current version information, hardware status, Mac address, service hotline, and user operation QR code.
3. If the robot detects a new software version, users can choose to upgrade or not.
4. Clicking the power button/restart key will automatically shut down/restart the robot.

3.5.3 Greeting Mode

1. After clicking the Greeting key on the main page, the robot enters the greeting mode.



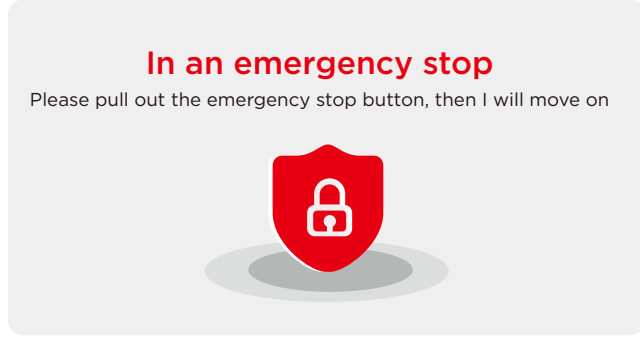
2. Select the desired greeting point and click to start, then the robot will automatically go to the selected greeting point.



3. When arriving at the greeting point, the robot will scan the surrounding environment, identify guests, and broadcast according to the content of the greeting settings.
4. Guests can touch the top left and right sides of the robot to trigger the voice broadcast of "patting the head", thereby conducting human-robot interaction.
5. Administrators or service staff can double-click with two fingers to input a password, then automatically exit the greeting mode and enter the delivery home page.

3.5.4 Emergency Stop

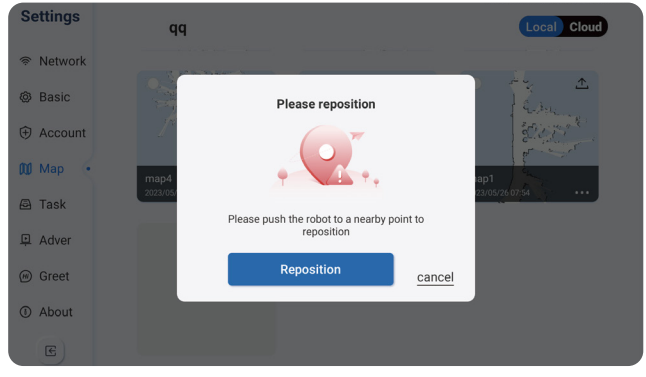
1. While the robot is moving, you can press the emergency stop button on the top of the robot. After pressing it, the robot will immediately stop running and unlock the wheels after it stops moving.



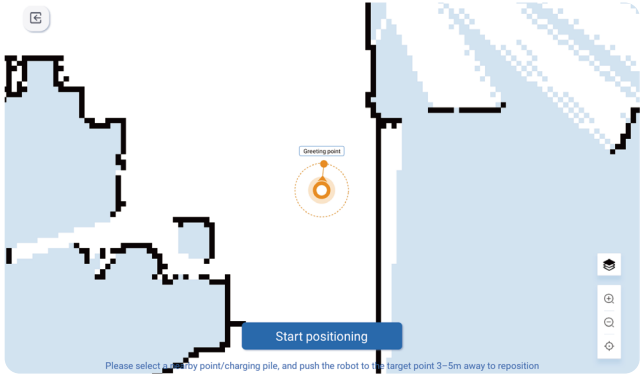
2. Turning the button clockwise can release the emergency stop status, and then the base drive wheel returns to the locked state.

Note: After pressing the emergency stop button on a slope, please hold the robot firmly to prevent the base drive wheel from unlocking and sliding down the slope.

3.5.5 loss of location



1. The robot may experience a loss of location when it starts up or switches to a specific map. If this occurs, you need to select a nearby location on the map and push the robot to the vicinity for re-positioning. After clicking the re-positioning key, the robot will automatically locate itself and display a successful message on the page.



2. Location points can be selected from greeting points, pick-up points, plate-return points, destination points, charging stations, etc.

3.5.6 Map Deployment



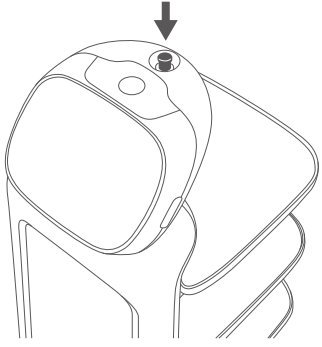
Button	Definition
	Map zoom out key, used to zoom out the map
	Map zoom in key, used to zoom out the map
	Map reset key, which restores the map size to 100% and centers the position
	Location list key, which displays the created target points

1. Click the settings icon, select the map, and perform map settings. Click the "+" button to add a new map. You can zoom in or out the map by two fingers.
2. Users must set at least five specific locations, including destinations, charging stations, plate-return points, pick-up points, and greeting points.
3. First, move the robot to the location you need to mark, scan the destination face-forward, adjust the robot tray orientation, click Add, enter the destination name (such as table number), and confirm. The point will be automatically generated on the map. Users can add multiple destinations. Tapping on it allows you to edit the name.
4. Move the robot to connect with the charging station, click the charging station button, and click Add .It will automatically generate the point on the map. If you need to rename or delete it, you can use the corresponding keys below.
5. Setting plate-return points, pick-up points, and greeting points is similar to setting destinations.
6. After building the map, save it with a name and choose to upload it to the cloud or not.

3.6 Emergency Stop

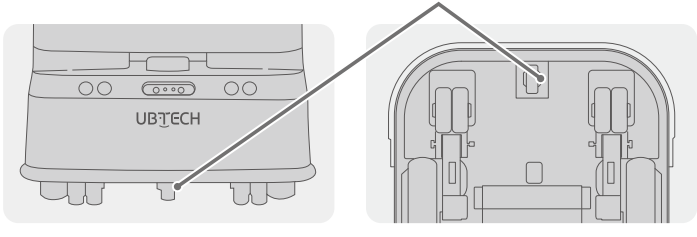
In case of emergency situations such as when the robot is operating abnormally or experiencing unexpected events that may cause harm to the surrounding environment, users can stop the robot by pressing the top emergency stop switch. After the robot stops moving, the chassis drive wheel unlocks and the machine can be pushed.

Note: After taking a picture at the slope while pressing the emergency stop button, please hold the robot steady in time to prevent the chassis drive wheel from unlocking and sliding down the slope.



3.7 Power Switch

When the machine is not in use or undergoing maintenance, please turn off the power switch located on the side of the front directional wheel of the chassis to disconnect the entire machine circuit. When using it again, please turn on the power switch first. After successful switching on, the chassis light will flash to indicate that the machine is ready to be operated normally.



PART IV Maintenance and Cleaning

Note:

- Do not use abrasive agents, aerosols, liquids containing alcohol or other liquids to clean CADEBOT, as they may contain flammable substances or damage the plastic casing of CADEBOT;
- Do not spray or wet CADEBOT with water or other liquids; please keep CADEBOT dry and do not use irritant-containing cleaning agents or organic solvents to wipe the camera lens;
- Please only use soft microfiber cloths to clean dust on the camera and sensor;
- If you find that the robot is damaged, making abnormal sounds or cannot work normally, please contact the local after-sales service.

4.1 Cleaning the Robot

Follow these steps to operate safely and avoid damaging the robot:

1. Press the base power button to turn off the robot and make sure it is completely powered off;
2. Clean the exterior of the robot with a soft, damp cloth;
3. Wipe the exterior of the robot thoroughly with a soft, dry cloth;
4. Check if the robot is dry.

4.2 Cleaning the Adapter

If there is dust attached:

1. Unplug the adapter from the wall outlet.
2. Check if the adapter is dry.
3. Use a soft, dry cloth to clean the power cord plug and the adapter.

PART V Common FAQ

• The robot cannot turn on normally:

1. If the battery is low, please charge the robot via the adapter.
2. Check if the power switch of the base is turned on. If it is in the closed state, please turn it on after turning it on.
3. Contact customer service for other issues.

• The robot cannot be charged:

1. Check the color of the adapter's indicator light and touch the adapter to feel if it is heating to determine if the adapter is charging.
2. If the indicator light of the adapter is red and the adapter is heating up, it means that charging has successfully occurred, otherwise, charging has not succeeded.
3. If it is confirmed that charging has not succeeded, check if there is voltage output from the charging socket or the adapter plug.
4. Check if the charging plug is firmly inserted or if the robot's recharging pole is touching the charging spot.
5. Check if the power switch is turned on.
6. Contact customer service for other issues.

• When pairing with the network, WiFi connection fails:

1. Confirm whether the WiFi password is correct;
2. Confirm whether the robot is close enough to the WiFi;
3. WiFi requires two-factor authentication (logging in separately with username and password), and this type of situation does not support connection.

• The robot cannot move:

1. Restart the robot;
2. Motor overcurrent protection, please press the emergency stop button and unlock it to recover.

• The robot suddenly shuts down:

1. Restart the robot;
2. Battery overcurrent protection, try restarting after 5 minutes;
3. Low battery, please charge before trying to turn on again.

• The robot's positioning fails:

1. Check if the map and positioning points are correct;
2. Check if the sensor is dirty;
3. Check if the environment has changed or if the characteristic features of the positioning point have changed.