

BooCax 布科恩

Better Robot Better Life

Hamster Mini Delivery Robot

Product Manual

V 1.0.1



BOOCAX

400 -161- 8661



Contents

1.	Introduction	2
1.1	Features.....	2
1.2	Specifications.....	3
1.3	Appearance.....	4
1.4	Components.....	4
2.	Assembly Instruction	5
2.1	Check Items	5
2.2	Start to Assemble.....	5
3.	System Composition	6
4.	App Download and Use	7
4.1	App Download.....	7
4.2	Get Started	8
4.3	Other settings	12
	Appendix: Firmware Update.....	13

1. Introduction



BooCax's "Hamster Mini" robot is built for high-efficient delivery requirements of various indoor scenes, such as hotel, office building, community, government affairs hall and nursing home. Featured with a smart & efficient scheduling system and excellent movement performance, the robot is suitable for all kinds of super complex scenes. It can reduce labor costs, improve distribution efficiency and provide an ultimate user experience.

1.1 Features



Autonomic elevators-taking

With autonomic scheduling of elevators and connection with access controls and gates, it can run in various scenes unimpededly. Also, it can deliver across floors to cover the whole space, supporting 95% commercial elevator controls on the market.



Outstanding distribution capabilities

High-performance chassis is equipped with high-speed navigation engine and AI intelligent engine, which can evaluate and deal with road risk in real time, with no single task missed.



Intelligent obstacle avoidance

Equipped with the laser radar +TOF radar sensor matrix and high-efficient algorithm engine, it can detect obstacles ahead to avoid them accurately.



Easy-to-use App

Mobile App operation, cloud light deployment and innovative demonstrative performance of route planning make it closer to user habits.



Multi-purpose

Support for delivery in hotels and office buildings and being flexible switching between different scenes turn it to a real multi-purpose machine.



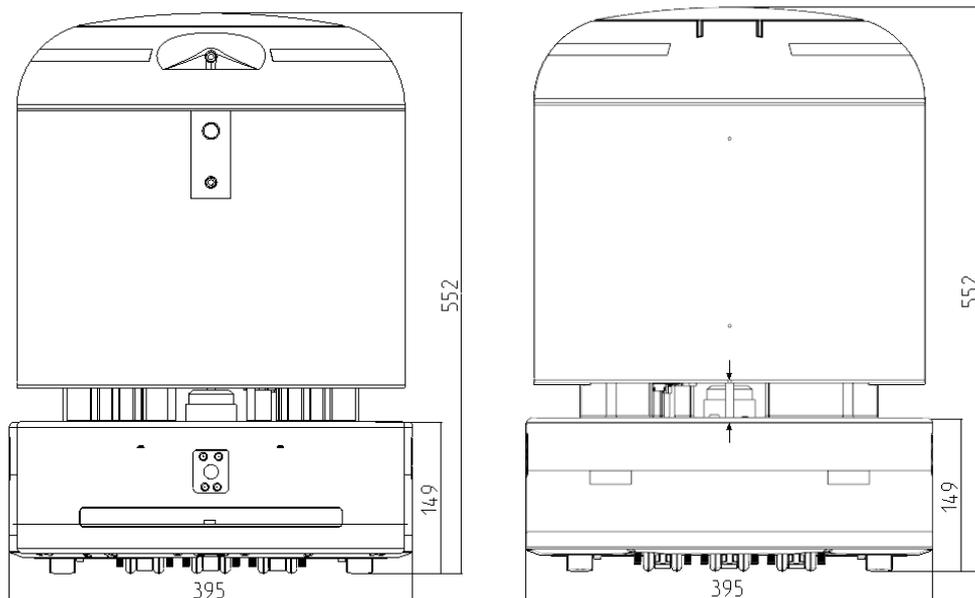
Small size, Large capacity

Its small body has a 30L ultra large cabin, with a load capacity of 15 KG. Besides, it provides built-in weighing function, and supports a variety of lid-opening methods.

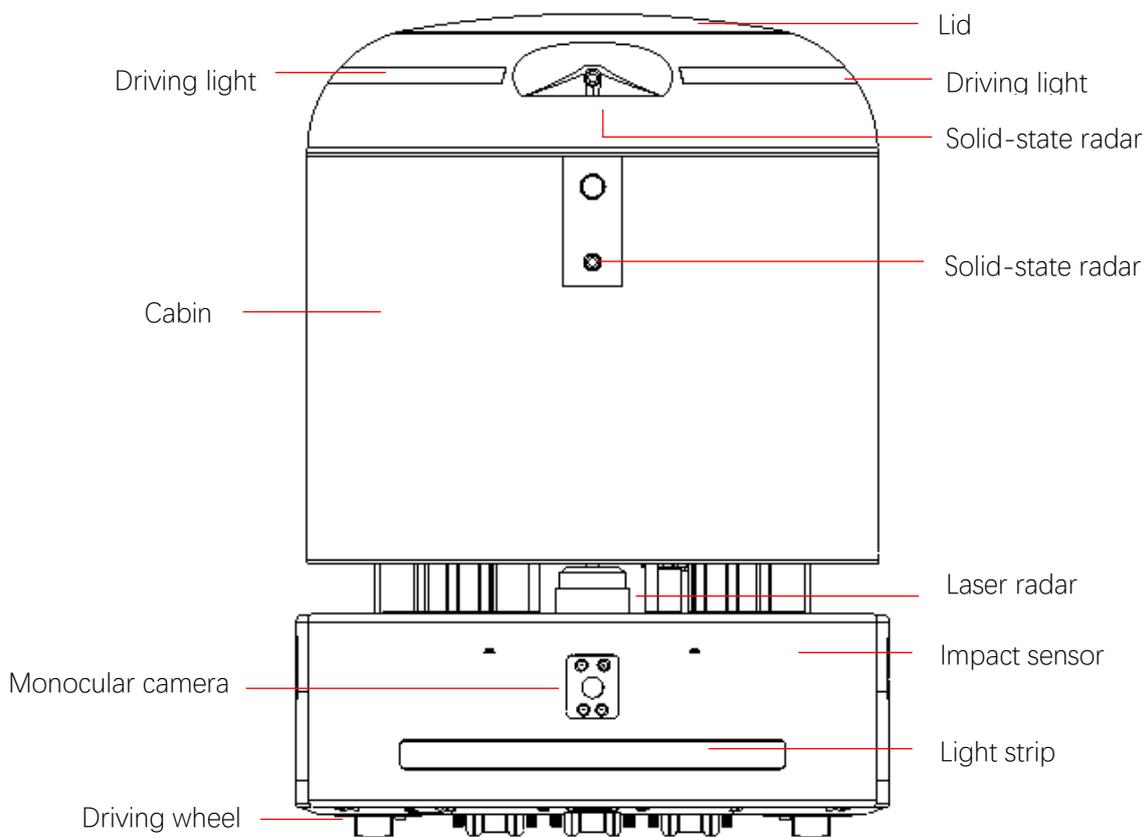
1.2 Specifications

Type	Name	Indoor Delivery Robot
Basic parameters	Model	Hamster Mini
	Dimension	Diameter 430mm * Height 552mm
	Weight	18 kg
	Rated load	15 kg
	Cabin volume	30L
	Operating mode	Mobile App
	Applicable scenes	Hotel, office building, community, etc.
	Cabin mounting	Magnetic type
	Cover opening	Automatic, opening angle 90°
	Communication	WiFi / 4G / Bluetooth
Operation parameters	Maximum speed	1.0m/s (adjustable)
	Positioning accuracy	±30 mm
	Gradeability	≤8°
	Aisle width	≥600 mm
	Obstacle crossing	Vertical height 10 mm, horizontal length 30 mm
Battery / Endurance	Endurance	10h (with load), 8h (with load)
	Charge Time	4h
	Charge method	Automatic contact-charging
Safety ability	Obstacle avoidance	Laser radar, 3D obstacle-avoidance sensor
	3D obstacle-avoidance	Yaw angle 45°, pitch angle 65°
	Fault Alarm	Voice alarm + indicator light
Work environment	Indoor	Cement, tile floor
	Work temperature	-5°C ~ +50°C

1.3 Appearance



1.4 Components



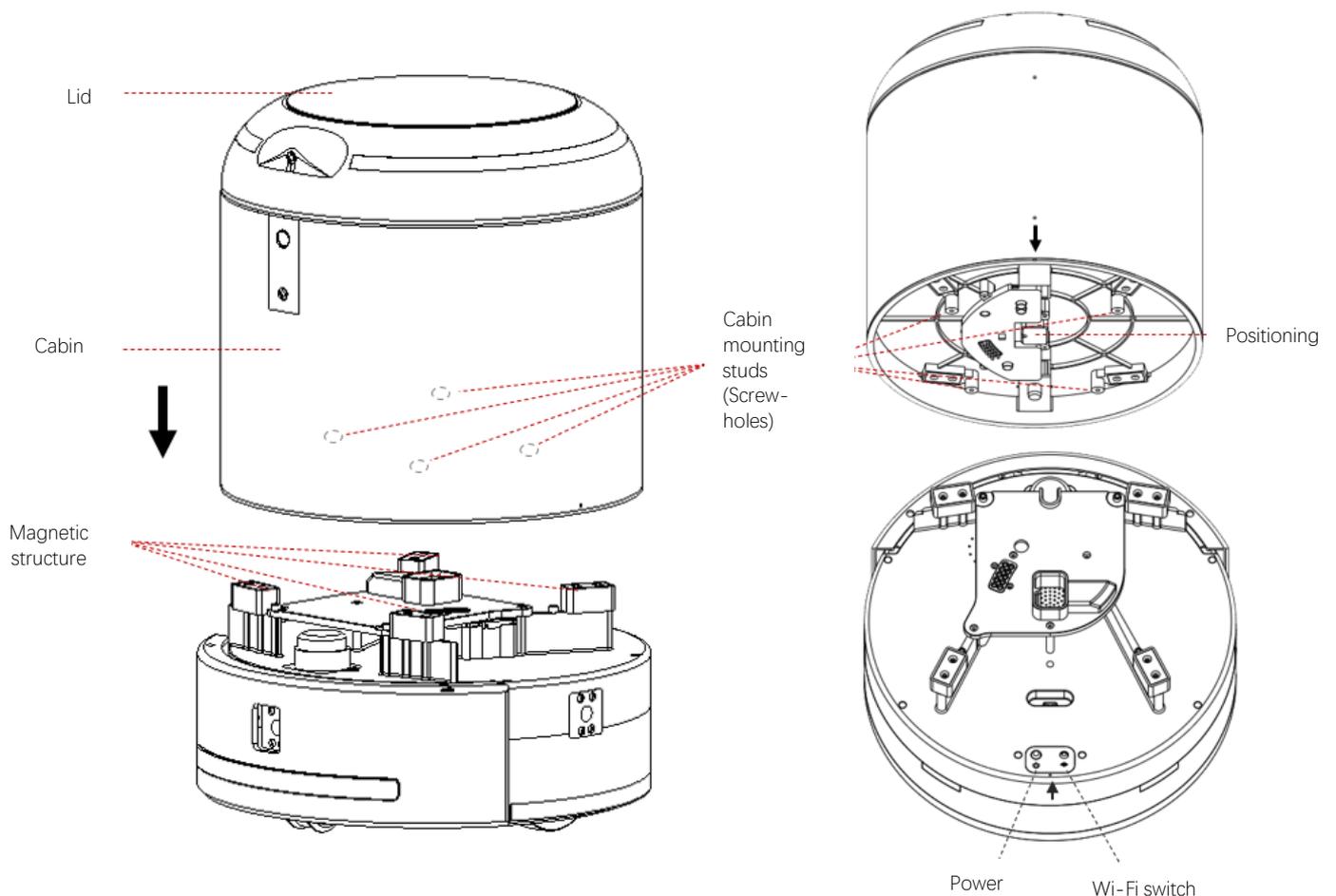
2. Assembly Instruction

2.1 Check Items

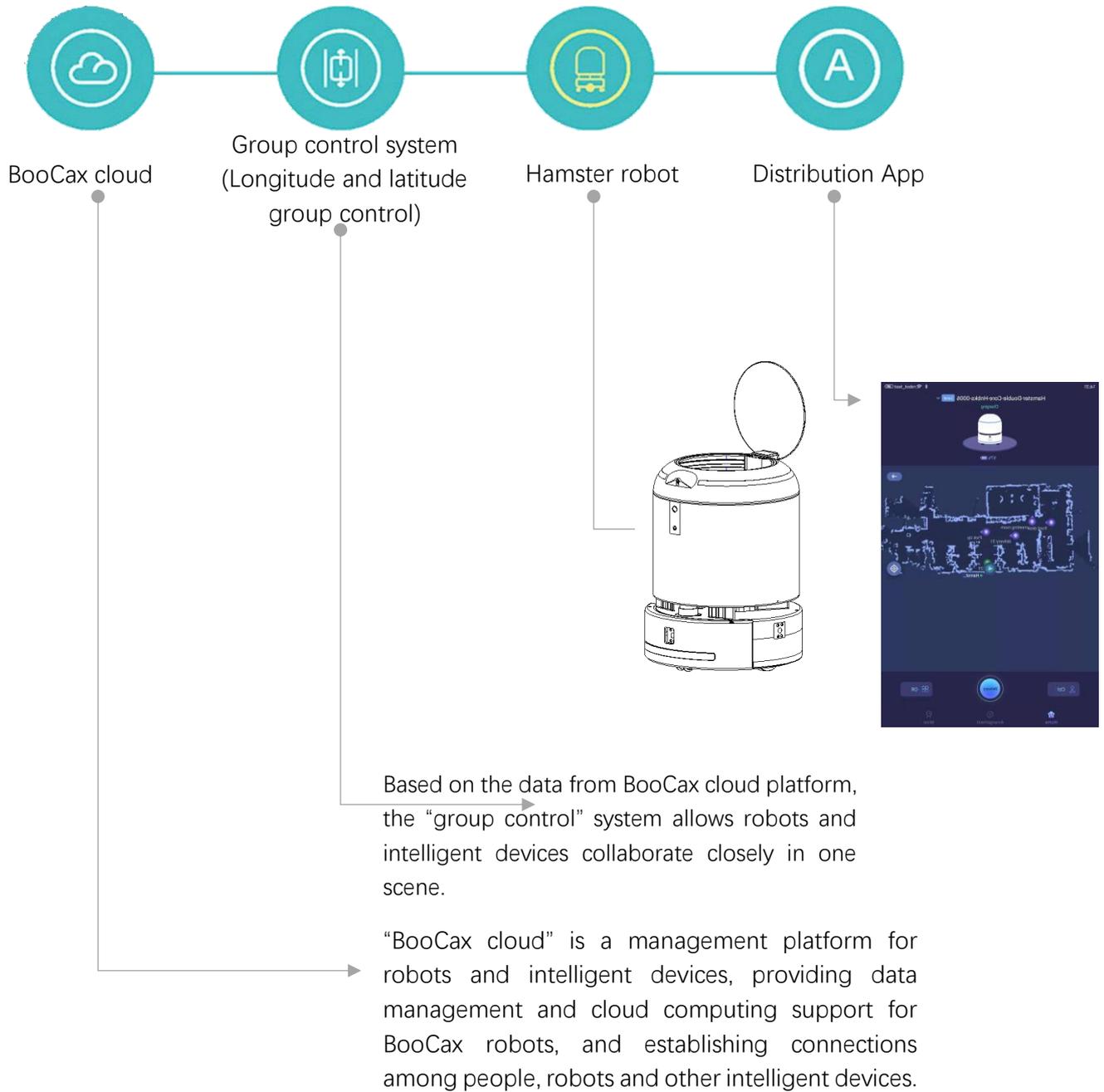
- ① Cabin; ② Chassis; ③ Charging Pile, power cord; ④ Warranty card, certificate of compliance; ⑤Fastening screws, screw driver

2.2 Start to Assemble

- ① Hold the cabin with your hands to align with the chassis (follow the arrows at the back of the robot), put it down steadily, and press gently to ensure it fits in place;
- ② Open the Lid, and fit 4 fastening screws to complete the assembly according to the figure below.



3. System Composition



4. App Download and Use

4.1 App Download

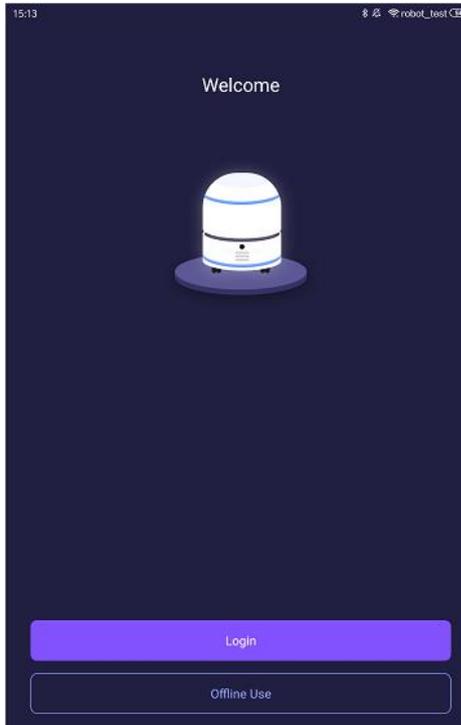
Hamster Mini delivery robot is operated via App. After robot assembly, use your WeChat or browser in an Android phone to scan the QR code to download the App:



Hamster Mini Robot App

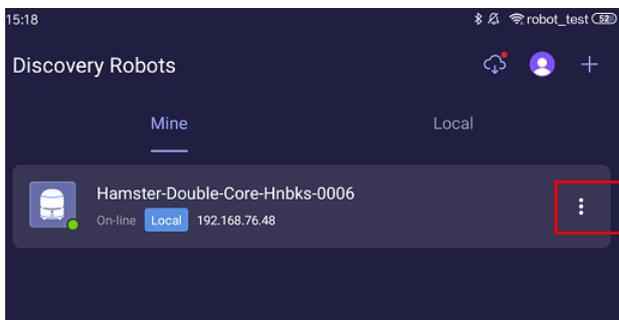
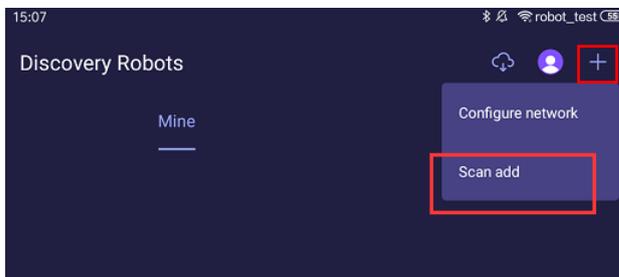
4.2 Get Started

① Switch on - Sign up / login - Bind an administrator mobile number



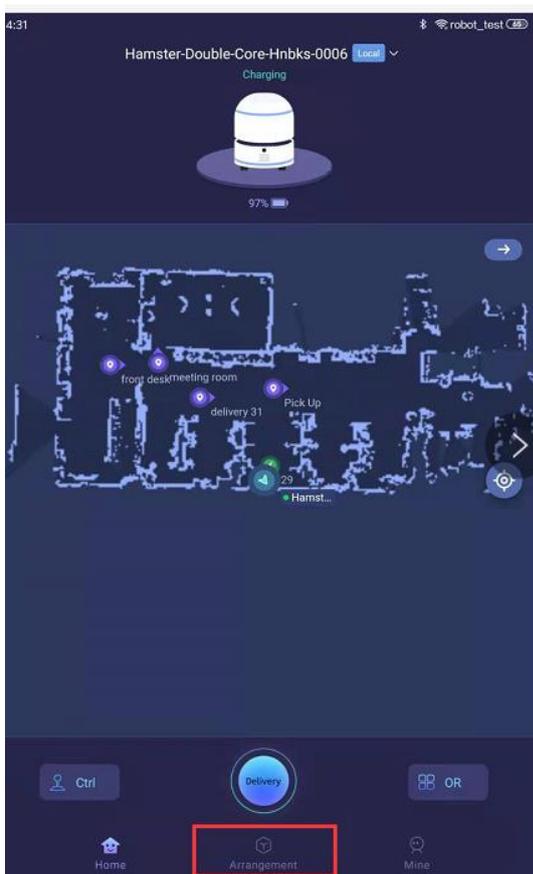
- ① The power switch is directly on the back of the robot. Before power-up, place the **charging Pile** against the wall, connect the power cord, and press the power switch to power up;
- ② For the first time of login, the App will require you to register. Enter the administrator mobile number - verification code to register;
- ③ Follow the **voice prompt** step by step.

② Configure Network

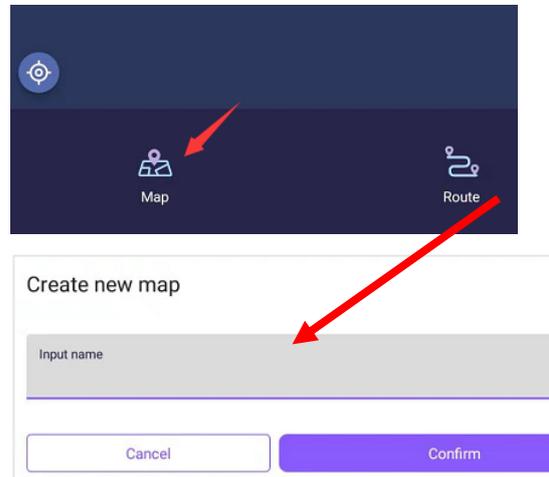


- ① After login, click “+” button in the top right corner. In the pop-up “Scan add” window, scan the provided **QR code**, the App will be able to connect with the Hamster Mini robot (please keep the provided QR code properly);
- ② After connection, “**Mine**” will show the successfully bound robot with a code **Hamster-00xx**. If you click “⋮” button beside it, you can also authorize other operators to use the robot.
- ③ “Configure network” function is enabled when you want to change the network (**WiFi** or **4G**, or configure both at the same time).

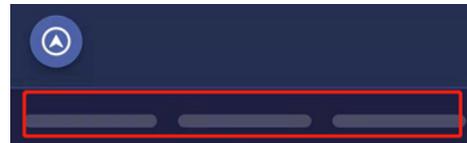
③ Build scene map



① App home - **Arrangement**. In the pop-up window, click “+” button in the top right corner to build a scene map (you can name the newly built map now);

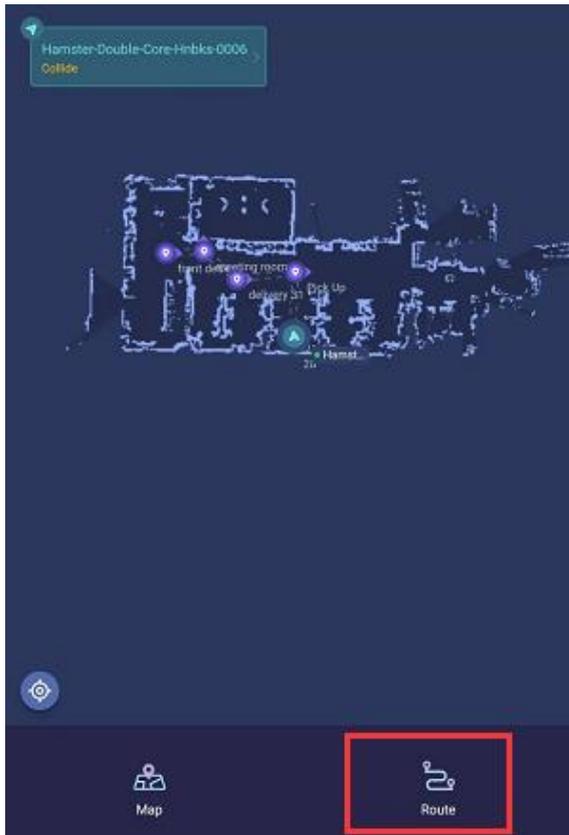


② During building, it is recommended to **move** the robot by your hands to increase efficiency.

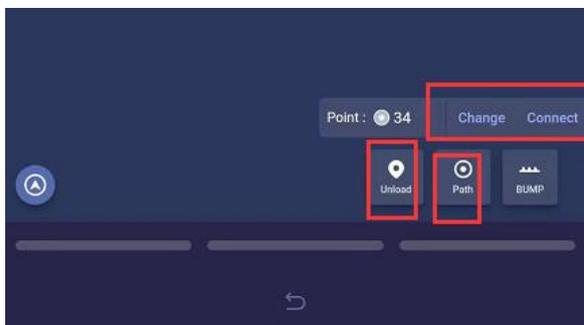


Three buttons under the building window are turn left, move forward and turn right. You can also use them to operate your robot during building process.

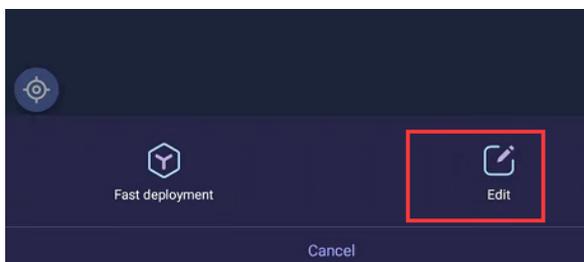
④ Deploy the route



① Interior layout - **Route**. Set “**route**” and “**distribution point**” according to the prompts;

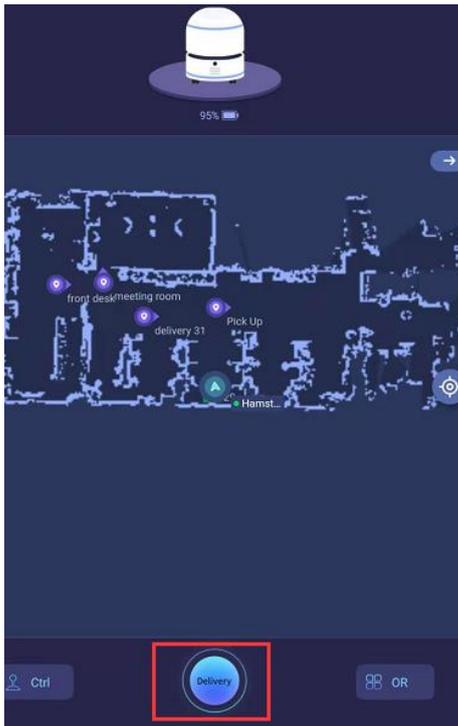


② When set the movement route, you can use “Switch” and “Connect” buttons to increase efficiency. “**Change**” means to switch waypoints, i.e., switch the current point from the robot current position to a nearby waypoint. After **Change**, use “**Connect**” to connect the two waypoints;

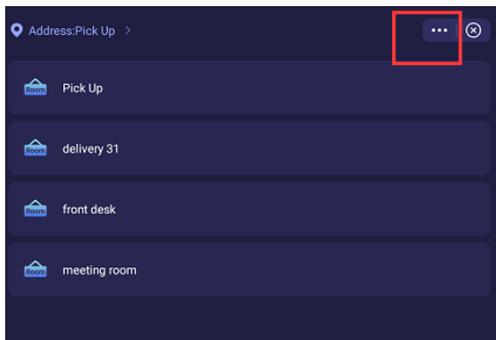


③ Route planning supports **Edit**, so it is easy to adjust the travel route of the robot at any time.

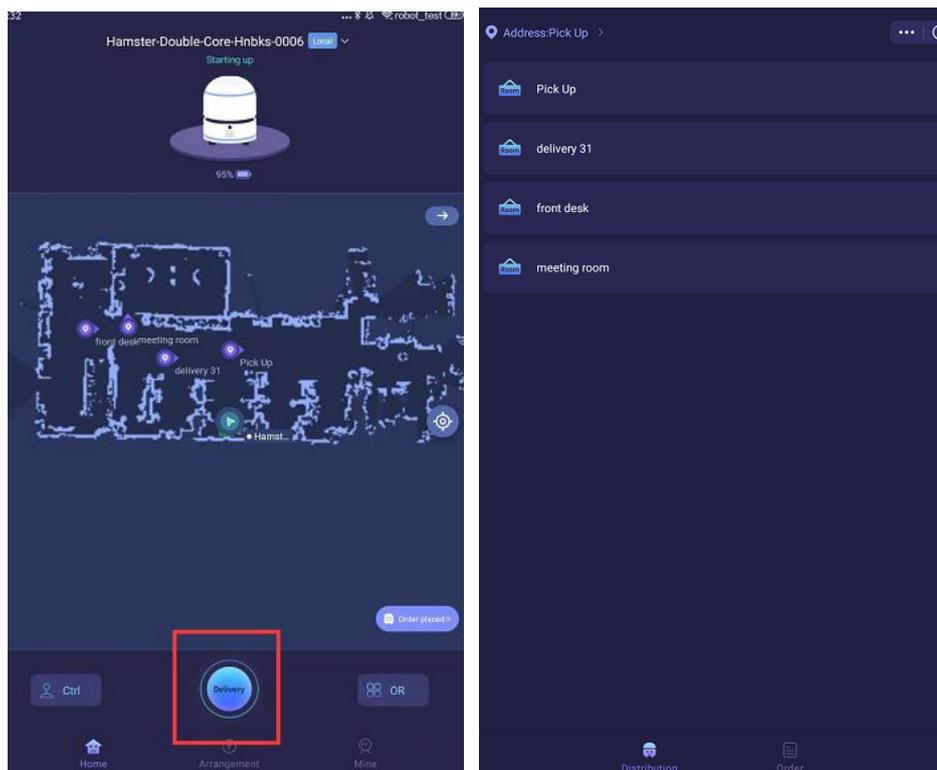
⑤ Set Delivery point - Get Started



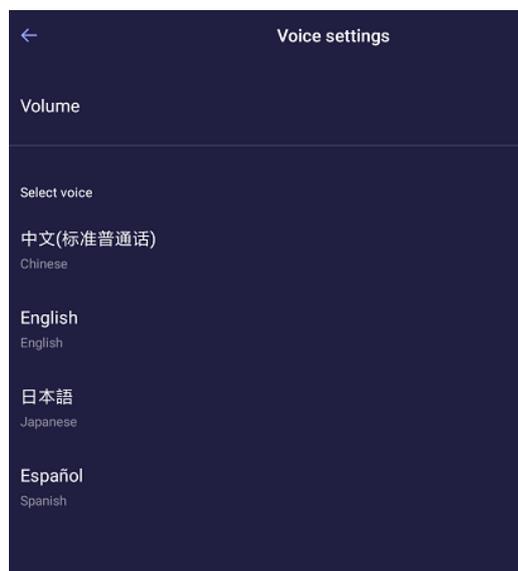
- ① When the route is deployed, return to the App home, click “delivery”. In the pop-up window, click “...” button, choose one from all task points as the shipping point (you can modify the name of shipping/receiving point, such as “front desk”, “Room N”);
- ② Now, mapping - route deployment - Delivery point setting is completed, the robot is ready to work.



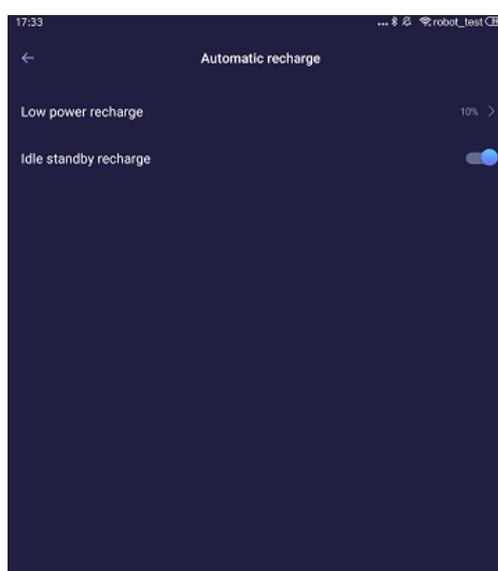
When everything is ready, return to the App home, click “delivery” button, choose a destination task point, then the robot start working according to the set path.



4.3 Other settings



Voice adjustment



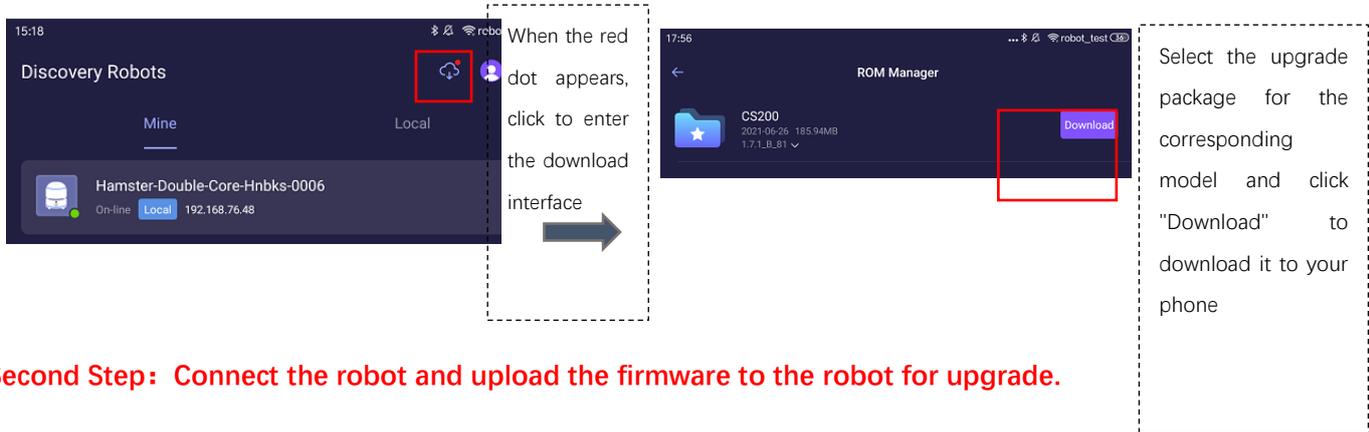
Automatically recharge after service

Appendix: Firmware update

△Attention: The firmware upgrade process takes about 5 to 10 minutes, during which no manipulation of the robot is allowed.

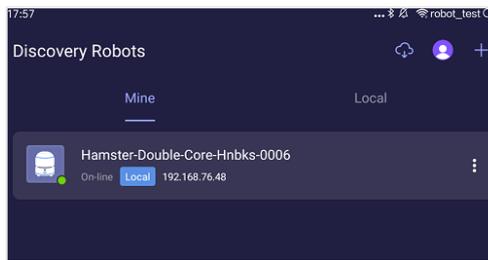
First step: Download Firmware

When the mobile phone is connected to the external network (4G/ LAN), open the APP and find the robot. At this time, if a red dot appears in the upper right corner, it means that there is a new version of firmware that can be upgraded:



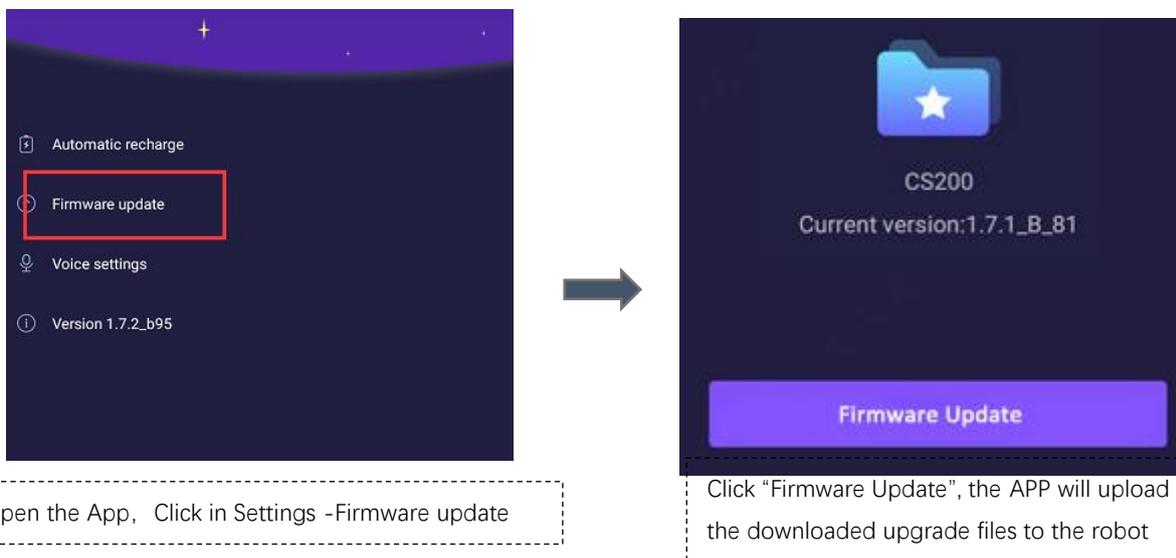
Second Step: Connect the robot and upload the firmware to the robot for upgrade.

Steps to connect, referenced to 4.2 contents



Third Step: Updates the firmware to the robot on APP

Open the App, Settings - Firmware Update, click "Firmware update", and wait for about 5-10 minutes to complete the upgrade:





BooCax.com

Business cooperation / After-sales support: 400-161-8661

Beijing headquarter:	Shenzhen branch:	Shandong branch:	Henan branch:
Room 606, Jianjin Center, No. A1, Qinghe Yongtai Garden, Haidian district, Beijing	Room 302, No. 90-10, Dayang road, Xintian community, Fuhai street, Bao'an district, Shenzhen	No.269, Hengfeng road, Zoucheng Center Electromechanical Industrial Park, Jining city, Shandong	No. 1, West side of OMCE barrel Co., Ltd, Park road on the south side of Dizhu road, Economic development zone, Sanmenxia city, Henan