Vacuum 40 V1.6 User Manual-AIO

1. Scope of Application

This document is applicable to all VC40 robots with a machine version of V1.6 and a software version of AIO1.3.

2. Update Instructions

2024/12/16 — Created

Developed based on the machine version VC40–V1.6 and the software version AIO1.3 as examples.

3. Appearance Introduction

3.1 Front View

3.2 Rear View

	Sterilizing backpack spray nozzle
	Backpack disinfectant liquid level
	Charging pile electrode sheet
	Rear camera
	Rear camera
	Dust panels

3.3 Left View

	Push handrail
	Sterilized backpack
	Left side door
	Left door buckle
	Left hand brush

3.4 Right View

Right door (removable roller brush and dust box)

Right door buckle

Right side brush

3.5 Top View

Sterilizing backpack spray nozzle

Emergency stop button

Display screen

4. Introduction to Power On and Power Off

(1) Locate the main power switch and slide it towards the inner side of the machine. There should be a uniform resistance during the operation, which indicates that the main power switch is closed.	(2) Lift the machine's head cover upward; turn the key switch to the 'ON' position.

(3) Close the machine's head cover, enter the login password, and click on 'Log In'.	(4) Lift the machine's head cover upward; turn the key switch to the 'OFF' position to power off the robot.

Precautions:
① The main power switch is installed on the right side of the robot's small front door. There is noticeable resistance when the switch is turned on, and there is noticeable no resistance when the switch is turned off (i.e., sliding towards the back of the machine to turn it on).
② Do not directly turn off the main power switch while the machine is powered on.
③ If the main power switch is in the closed position and the key switch is in the 'ON' position, but the machine still cannot be powered on, try using the charger to charge the battery to activate it.

5.Manual Pushing

(1) Enter the password and log in to the machine.	(2) Click on "Manual" on the operation screen to switch to manual mode.
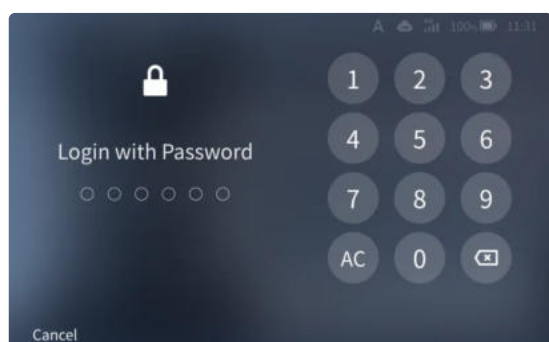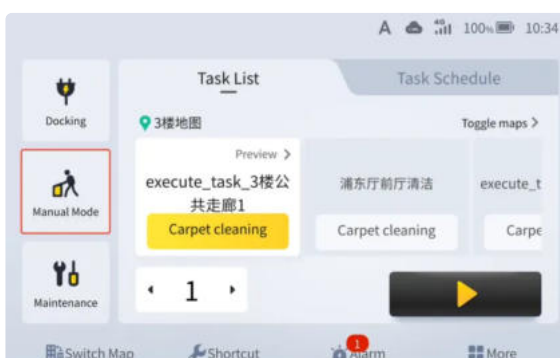
(3) Press the buttons on both sides of the armrest and pull the armrest outwards until you hear the "click" sound indicating that the armrest is locked.	(4) Use the armrest to push the machine to the desired location.

6.Charging Introduction

## 6.1Charge using the charging cable.

(1) Manually push the machine to the charging station.	(2) Take the charging cable from the side of the charging station and insert the red end into the machine's charging port.
(3) Observe the machine screen displaying a charging plug icon to confirm that the robot is being charged.	(4) Once the battery is fully charged to 100%, remove the red charging plug; return the charging cable to the charging station and replace the charging port dust cover.
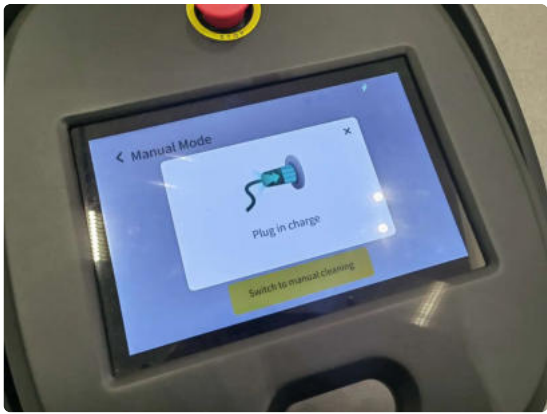
6.2Manual Docking Charging

(1) Manually push the machine to the charging dock.	(2) Rotate the machine to align its charging electrode plates with the electrode plates on the charging dock.
(3) Push the machine until the automatic charging interface appears on the machine's screen.	
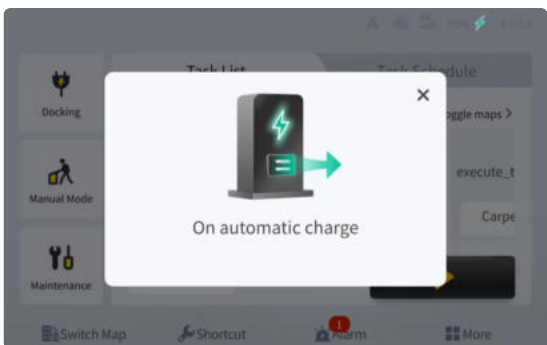
6.3Automatic Docking Charging

(1) Enter the password to log in to the machine.	(2) Check the machine's positioning icon to confirm that the positioning is normal. If the positioning is abnormal, refer to "Transfer Positioning" to help the machine regain its positioning.
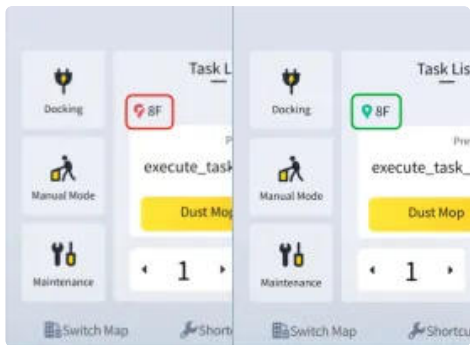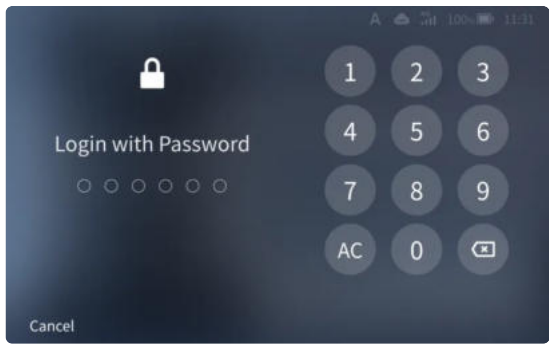
| (3) Click on the "Home" button on the screen; then click on "Charge". | (4) The machine will automatically navigate back to the charging dock and charge itself. |
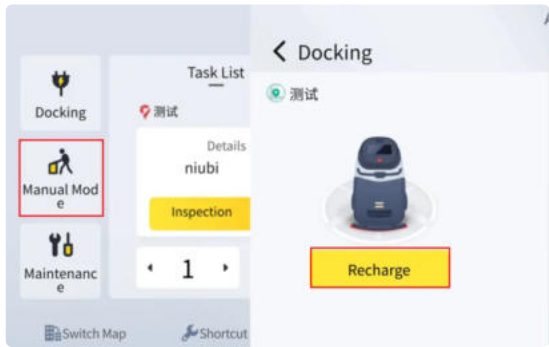
7.Emergency Stop for Risk Avoidance

| (1) During the process of automatic cleaning or returning to the charging dock autonomously; | (2) If an emergency arises, press the emergency stop button to put the machine into an emergency stop state. |

| (3) At this point, the screen displays the following interface, and the machine cannot be manually pushed. | (4) To reset the emergency stop button, turn it clockwise. |
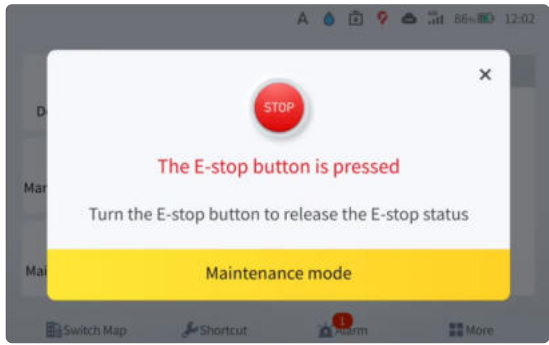
8.Cleaning Mode
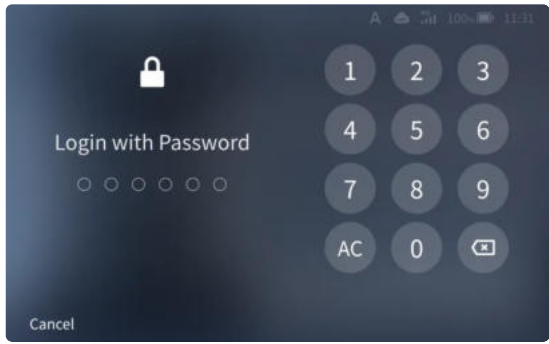
(1) Enter the password to log in to the machine.	(2) On the screen, click the "More" button.
(3) Click the "Cleaning Mode" button.	(4) You can select different cleaning modes, and within each cleaning mode, you can choose different levels, then click to save the current scenario.
(5) Click the "Device Level" button.	(6) On this page, you can click the settings button to adjust the cleaning speed, cleaning pressure, and brush rotation speed, among other settings.
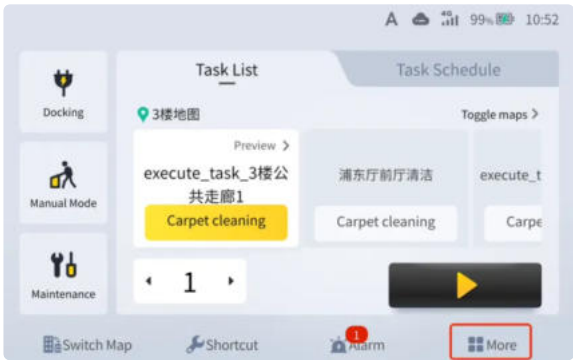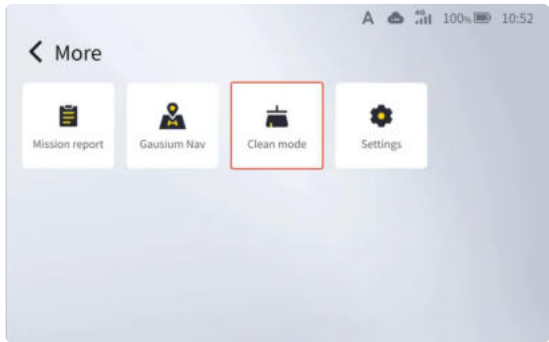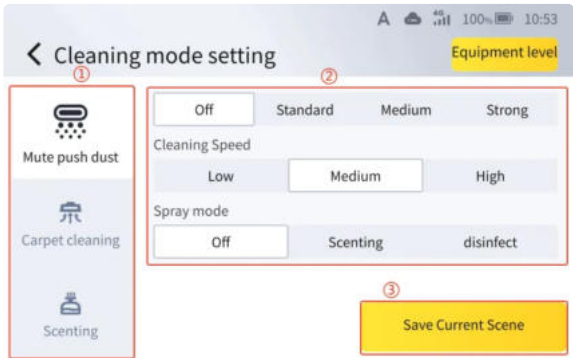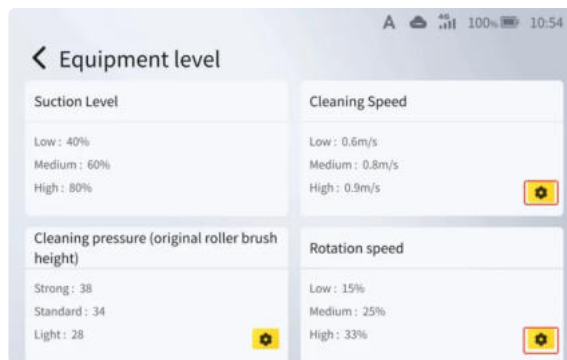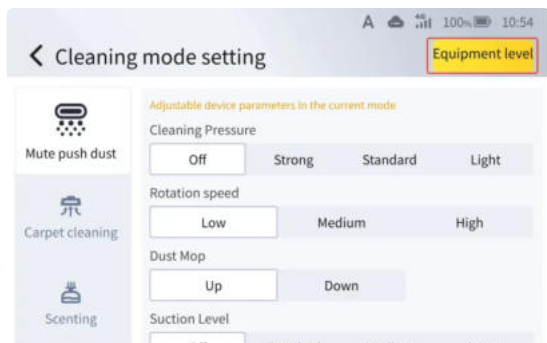
(7) Return to the initial interface and click the yellow button to select the cleaning mode.	(8) Based on your requirements, select the cleaning mode you need, and then click "Confirm".
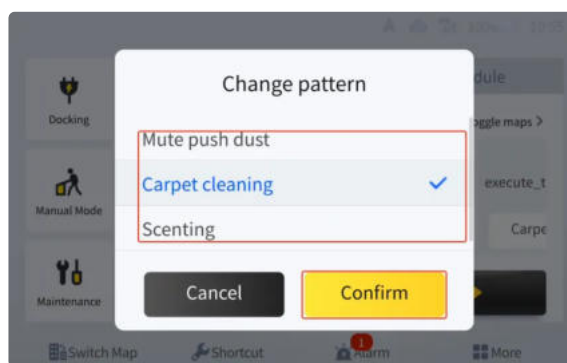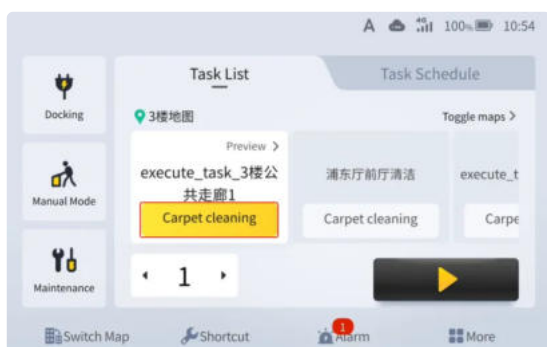
9.Manual Operation

| (1) Click on the "Manual" button on the screen.	(2) Click on "Switch to Manual Cleaning".
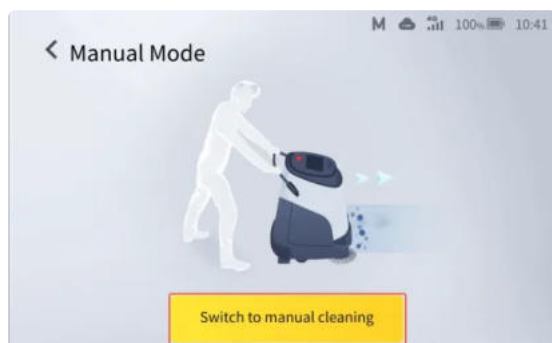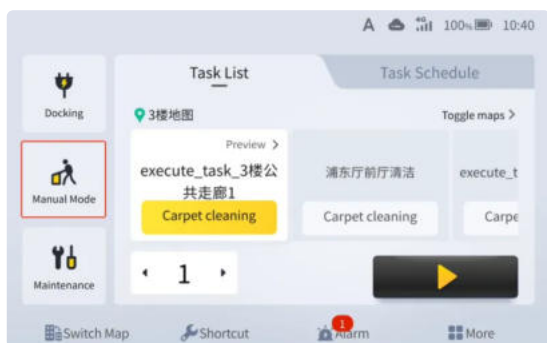
(3) ①You can select the desired "Cleaning Mode"; ②Click on "Parameter Configuration".	(4) ①Adjust the cleaning pressure, brush rotation speed, dust pusher status, etc., of the cleaning mode as needed; ②Click on "×" to close the parameter configuration.
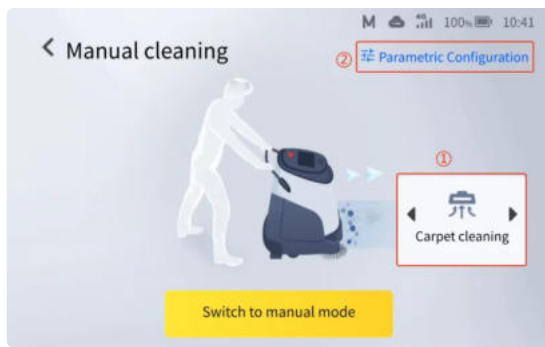
|	
(5) Manually push the machine to the area that needs cleaning and proceed with the cleaning.	(6) After cleaning is complete, click on the " <" button to exit manual cleaning mode.
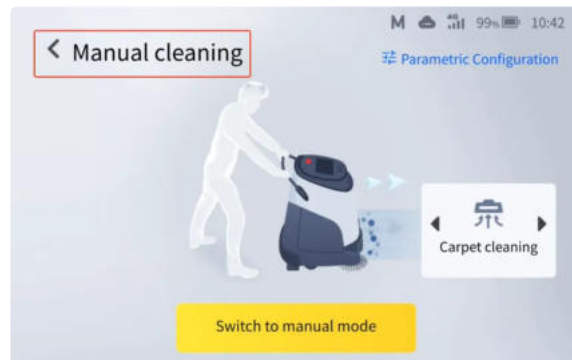
10.Automatic Operation

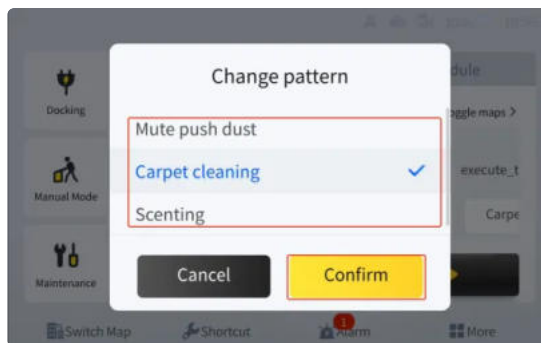|	
(1) Click on "Combined Tasks" on the screen.	(2) Check the machine's positioning icon to confirm that the machine's positioning is normal.
(3) Swipe left or right through the task list to find the combined task you need to use by the task name.	(4) Click the yellow button to adjust the cleaning mode. Select the cleaning mode you need to use and click "Confirm".
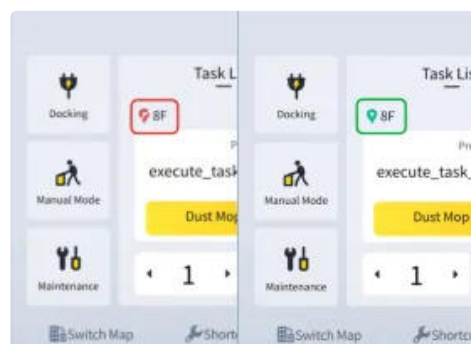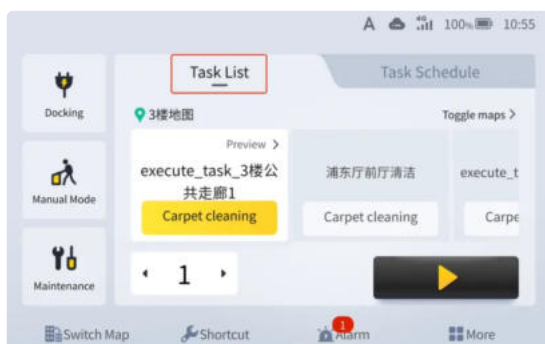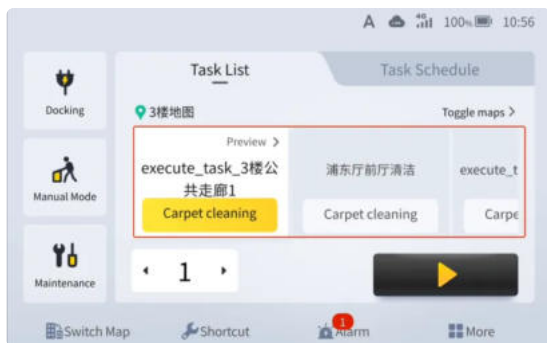
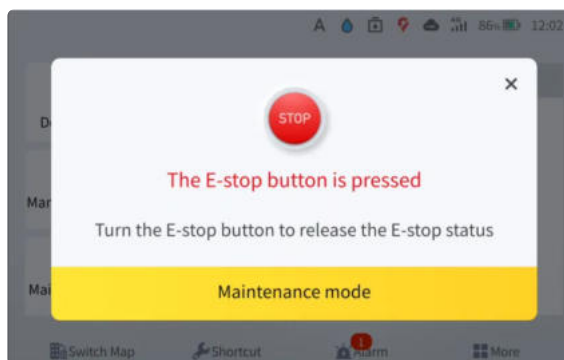|	
(5) Adjust the number of task cycles as needed; and then click the start button.	(6) The machine begins automatic operation.
(7) If you need to pause or stop the automatic operation, you can click the "Emergency Stop" button to make the robot stop running.	(8) If the screen is locked, you need to log in with a password first. After logging in, click on the "×" to close this interface.
(9) At this point, the automatic operation has been paused; if you want to end the automatic operation early, click the end button on the screen.	(10) Click the continue button to resume the task; if you cannot continue the task, first turn the emergency stop button clockwise, and then click the continue button on the screen.
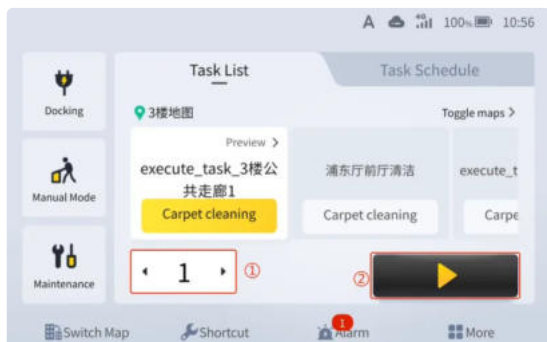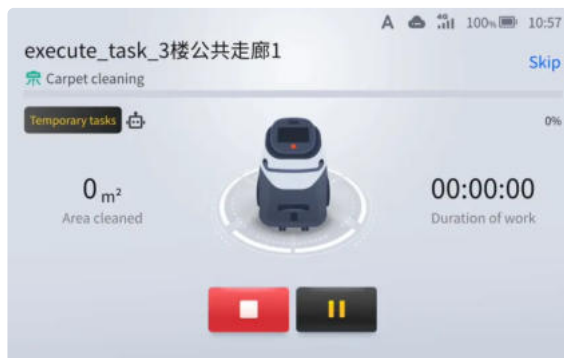
11.Schedule Setting

11.1Setting schedules via Gaussian Mobile.

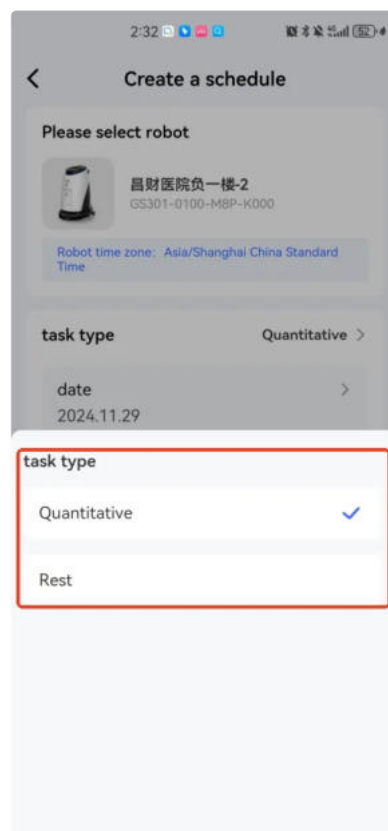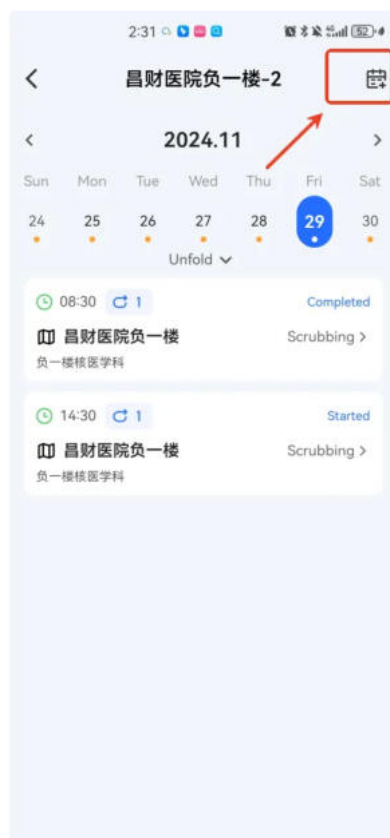|	
(1) Open the "Gaussian Mobile" mobile app and log in with your account; if you have not activated an account, please contact the Gaussian after–sales engineer.	(2) ①Click on "Robots"; ②In the list of my robots, find the corresponding robot and click on it; if the corresponding robot is not in the robot list, please contact the Gaussian after–sales engineer.
(3) Click on the "⚙" icon in the top right corner.	(4) Click on "Scheduling Tasks".
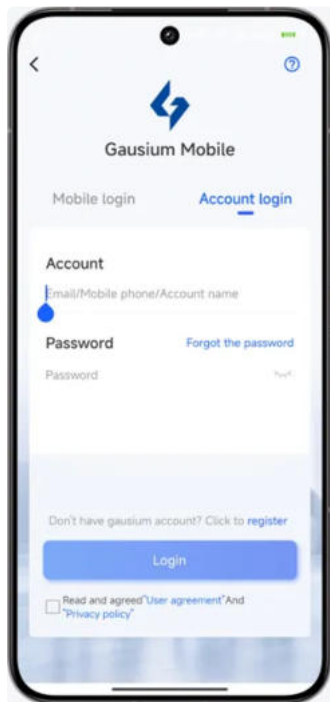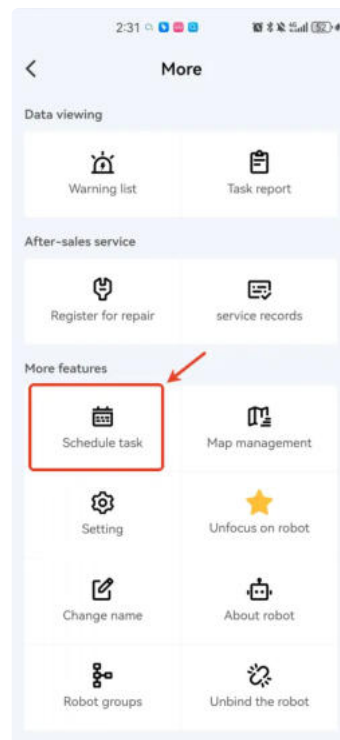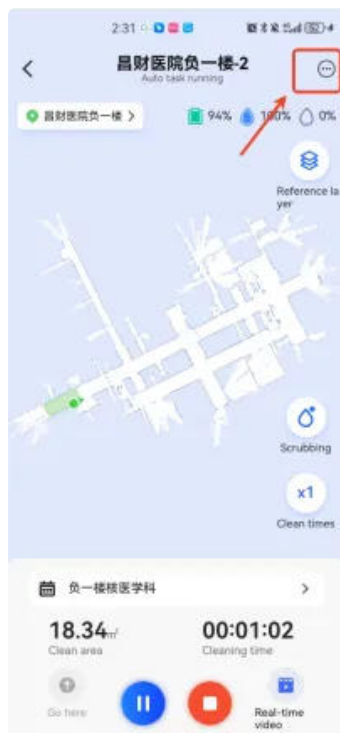
|	
(5) Click on the "▦" icon in the top right corner.	(6) ①Click on "Task Type"; ②Select "Quantitative" or "Rest"; Quantitative: Specify the start time and the number of cycles; Rest: Do not perform any tasks.
(7) Set the start date, time period, and recurrence for the task.	(8) ①Click on "Repeat"; ②Check the days of the week; ③Click "Confirm" to set the repeat cycle for the scheduling task by week; Never: This means the scheduling task does not repeat and is executed only once on the scheduled start date.
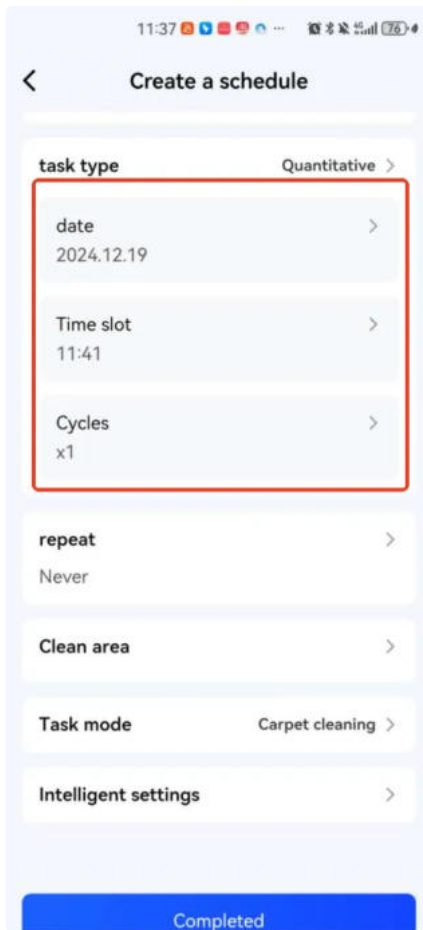
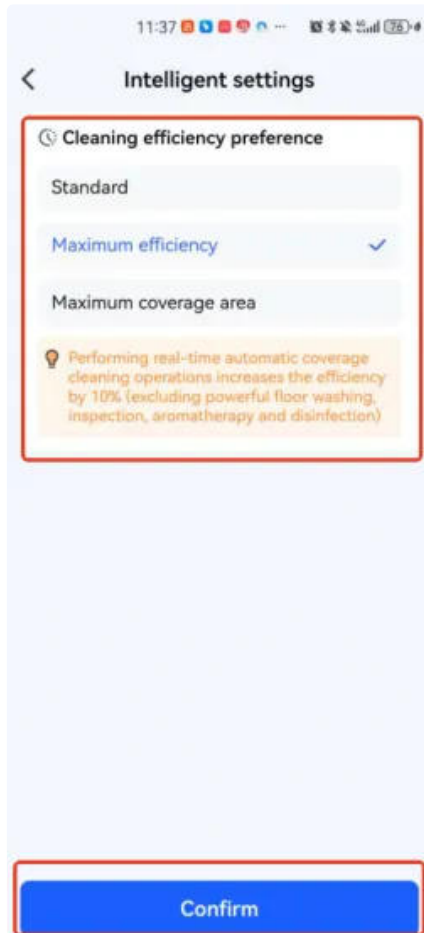| (9) Click on "Cleaning Location". | (10) Click on "Select Location" to choose the map for the scheduling task; click on "Clean Where" to select the area for the scheduling task's cleaning. After making your selection, click "Confirm". |
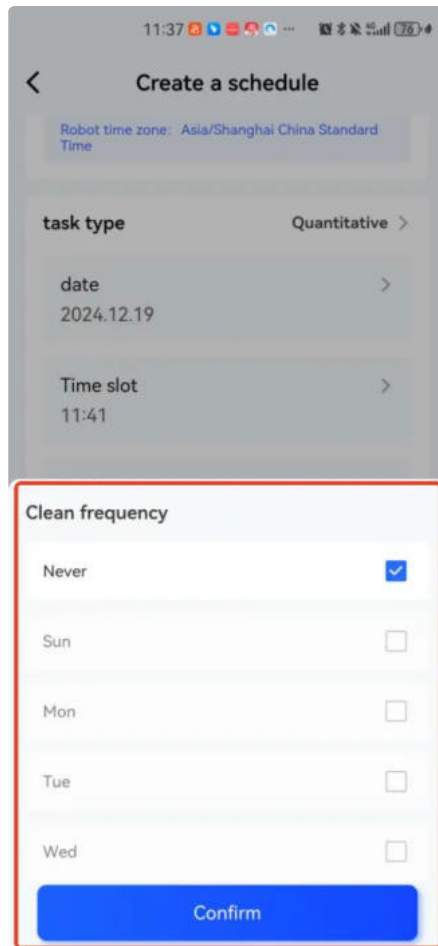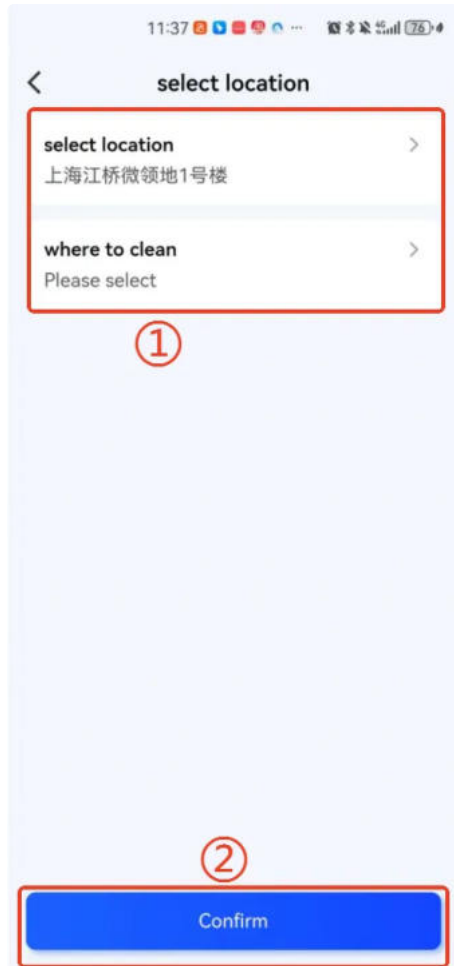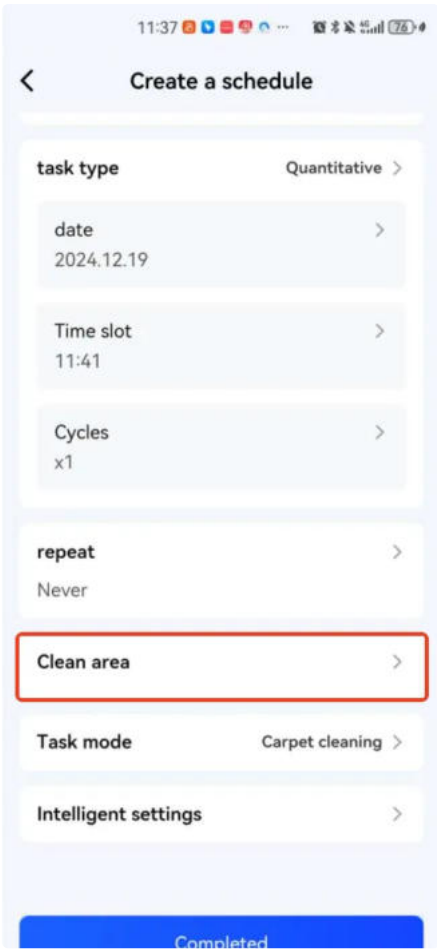
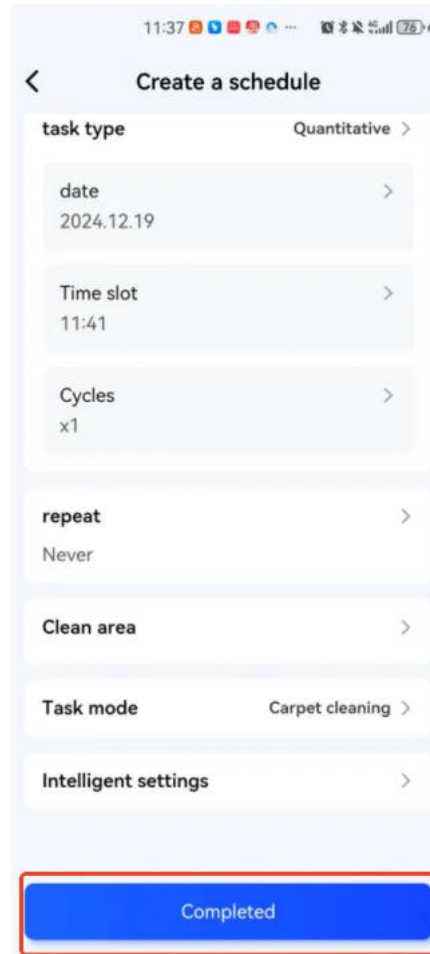(11) Click on "Operation Mode" to set the cleaning mode for the scheduling task.

(12) Click on "Intelligent Settings" to modify the cleaning efficiency.
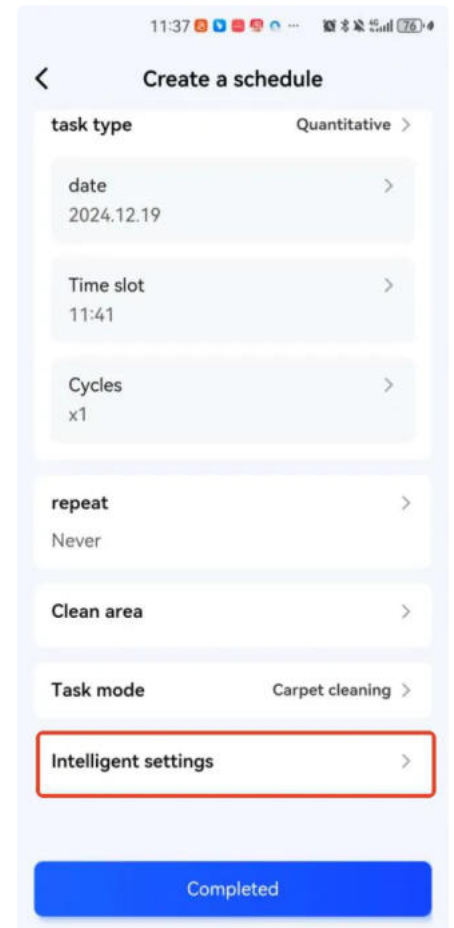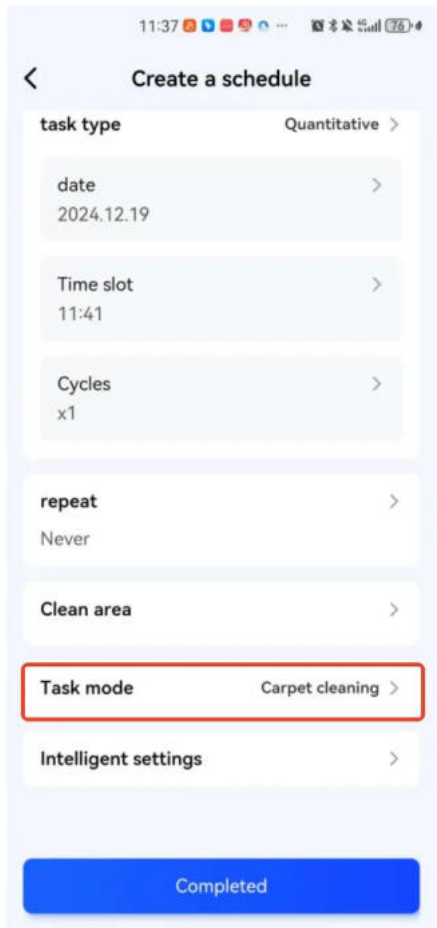
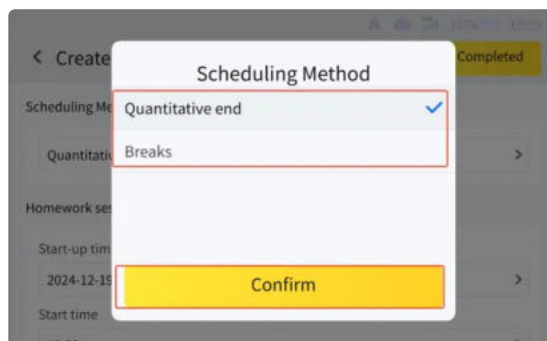| (13) Under cleaning efficiency preferences, you can choose "Standard," "Maximum Efficiency," or "Maximum Coverage"; after setting, click "Confirm."	(14) Click "Complete" to finish setting up the scheduling task.

11.2 Setting schedules via the machine's screen.

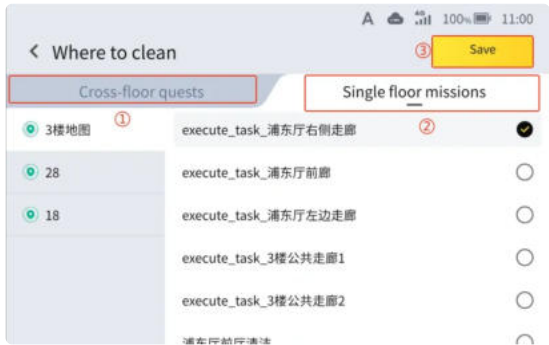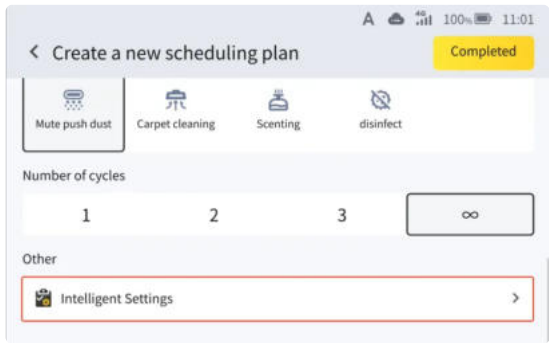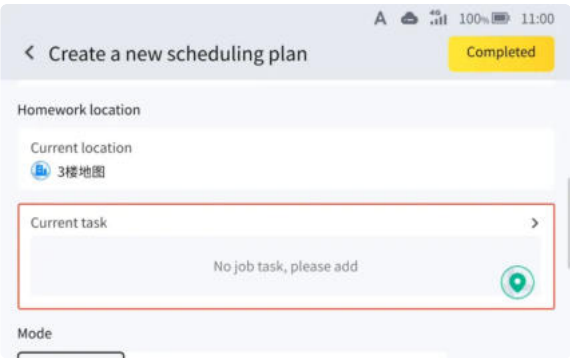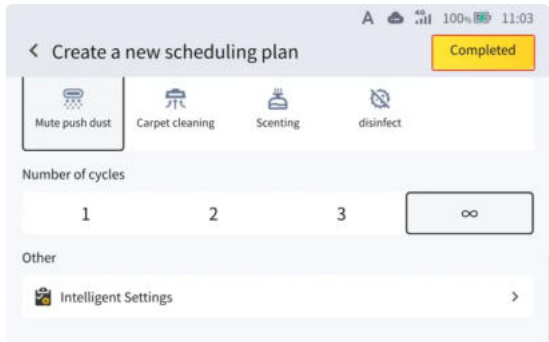| (1) ① Click on "Scheduling Tasks"; ② Click on "New Scheduling".	(2) Click on "Scheduling Method"; choose "Quantitative End" or "Rest"; after making your selection, click "Confirm".
(3) Set the operation time period.	(4) Set the current task.
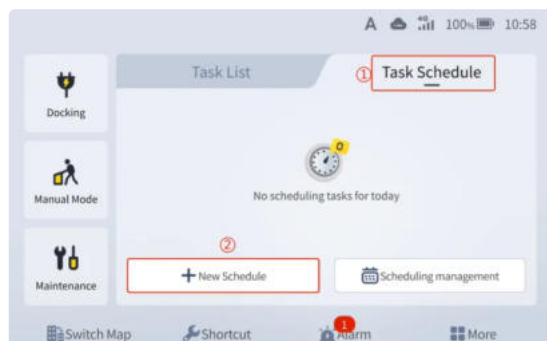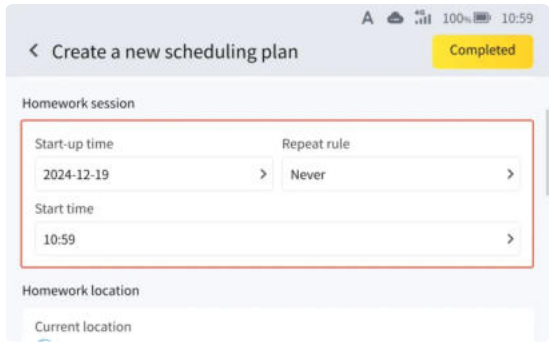
(5) You can choose between multi–floor tasks or single–floor tasks, and after making your selection, click "Save".

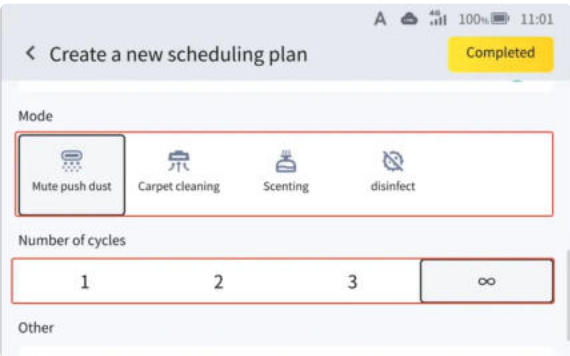(6) ① Set the operation mode; ② Set the number of cycles.

(7) Click on "Intelligent Settings".

(8) Configure cleaning efficiency preferences, where you can choose between Standard, Maximum Efficiency, or Maximum Coverage.
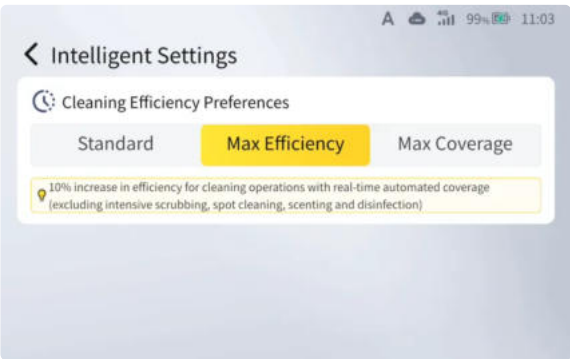

(9) Click the "Complete" button to finish setting the scheduling task.

12.Transition Positioning

12.1 Pile Positioning
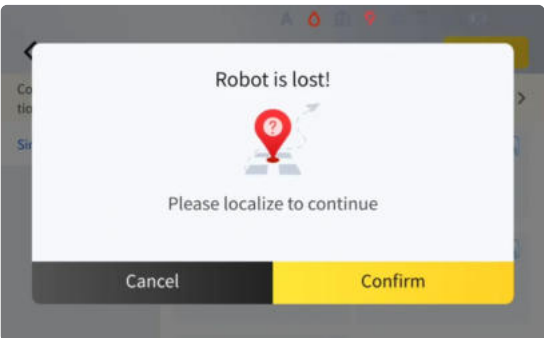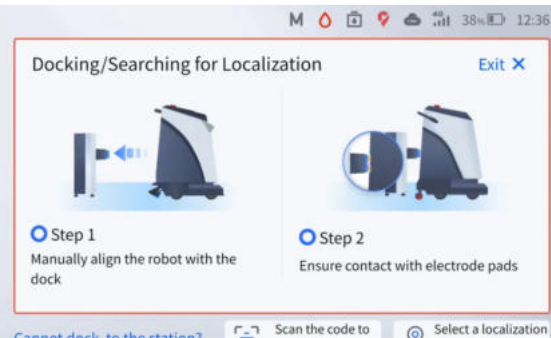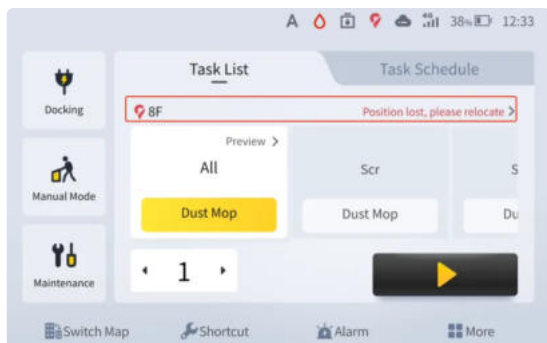
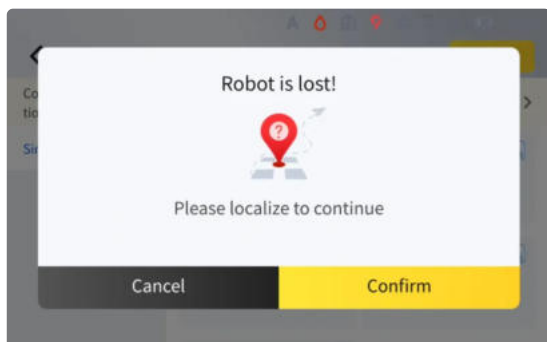|	
(1) If the positioning is abnormal or the machine has completed manual relocation, click "Positioning Lost, Please Retrieve".	(2) ① Select the map where the machine's current actual position is located; ② Click "Confirm".
(3) Upon seeing the "I am lost" prompt, click "Confirm".	(4) Follow the pile positioning guidance to manually align with the pile.
(5) Manually push the machine to the vicinity of the charging dock. Rotate the machine to align its charging electrode plates with the charging dock's charging electrode plates.	(6) When the screen displays a successful positioning message and you can hear the machine's voice prompt saying "Positioning successful," it indicates that the machine has successfully completed the initial positioning.

12.2 Waypoint Positioning

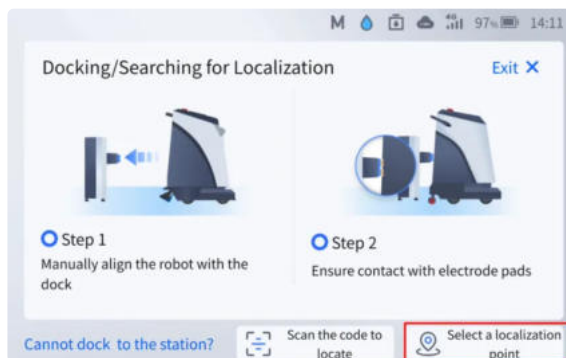|	
(1) If the positioning is abnormal or the machine has completed manual relocation, click "Positioning Lost, Please Retrieve".	(2) ① Select the map where the machine's current actual position is located; ② Click "Confirm".

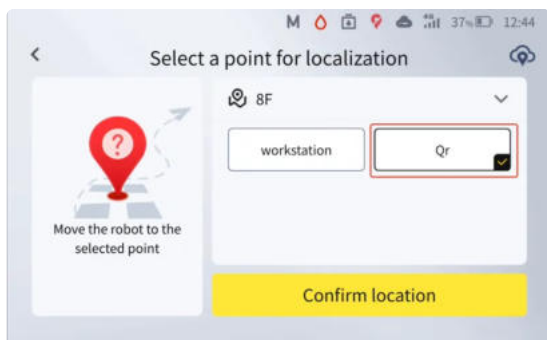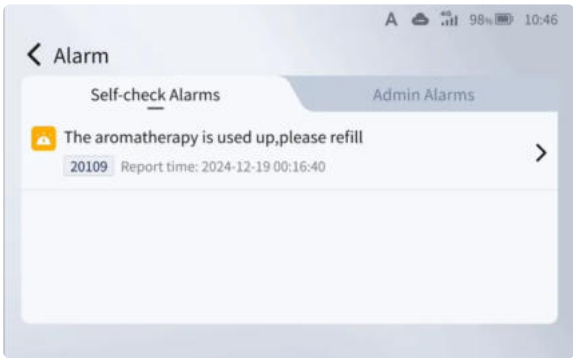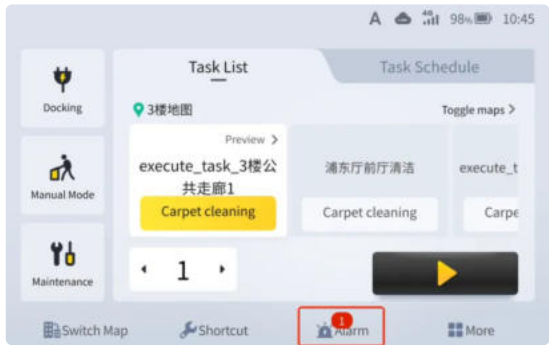|	
(3) Upon seeing the "I am lost" prompt, click "Confirm".	(4) Click on "Waypoint Positioning".
(5) Select the point for positioning	(6) Push the machine to the vicinity of the actual location corresponding to the waypoint.
(7) After pushing the machine to the designated location, click "Arrived".	(8) When the screen displays a positioning success message and you can hear the machine's voice prompt saying "Positioning successful," it indicates that the machine has successfully completed the initial positioning.
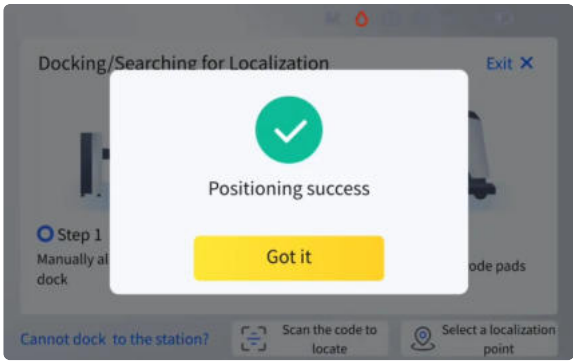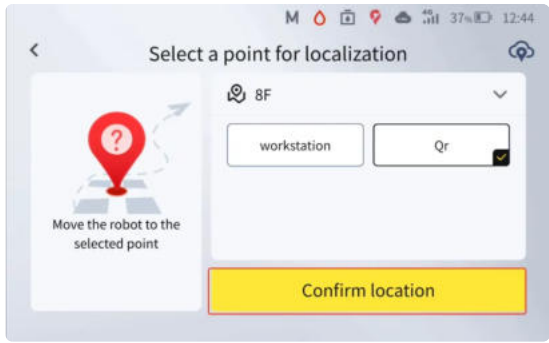
13.Check Alarms

(1) If the screen is locked, you need to log in with a password first, then click on "Alarms" in the bottom right corner.	(2) If the machine is operating normally, there will be no alarm messages; if there is an abnormality with the machine, alarm messages will appear.
(3) When the machine triggers an abnormal alarm, there will be a red pop–up at the bottom of the screen. Click "View Details" to quickly check the alarm information.	