

2025/01/15

C40-APP User Manual

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01

APP Interface

APP Interface

1. Immediate Cleaning

Click to start manual or temporary cleaning tasks

2. Scheduled Tasks

Schedule cleaning task, the robot will start cleaning on time

3. Manual Push Cleaning

Select the manual push cleaning mode (vacuuming or dusting)

4. Teaching Mode

Push the machine to form a customized cleaning path

5. Function Settings

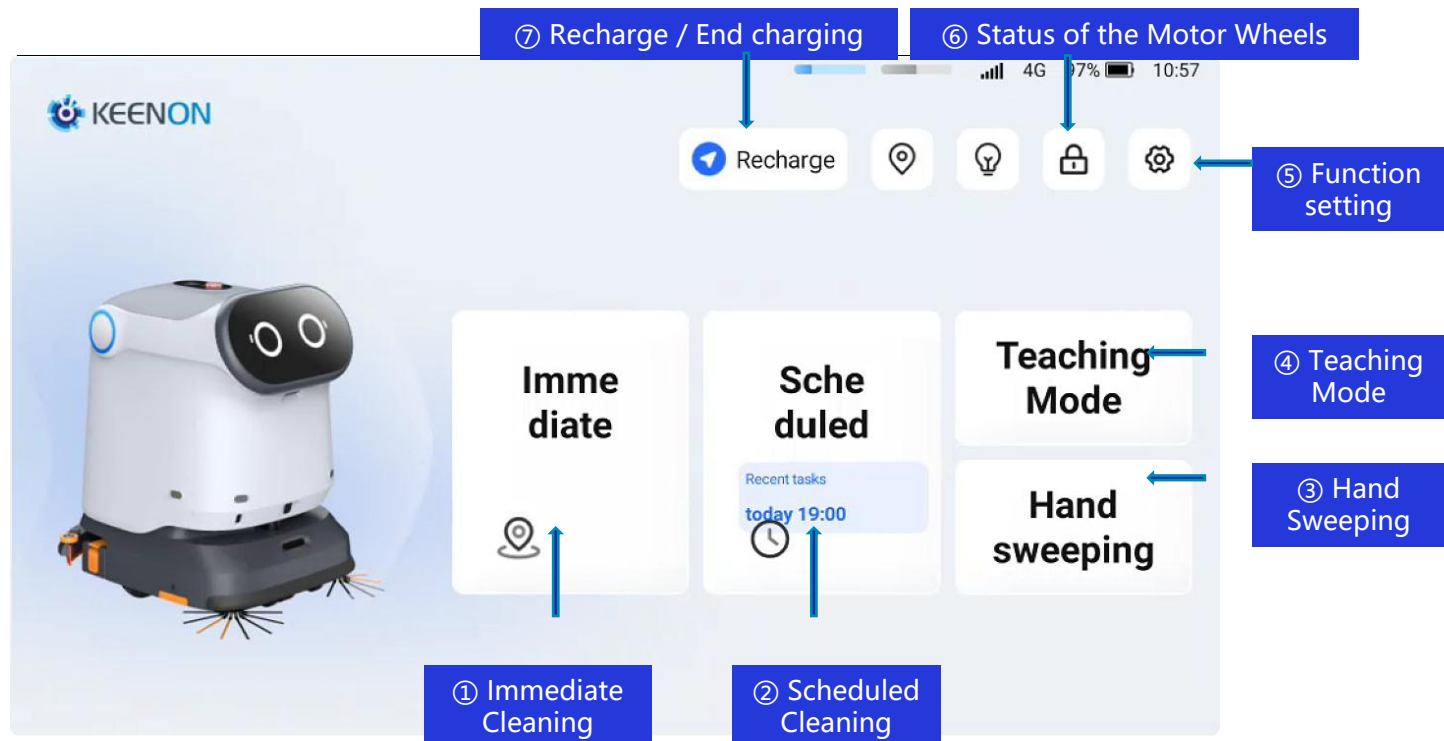
Configuration of various functions (not required for customers)

6. Status of the Motor Wheels

Click to manually select the motor wheel status.

7. Recharge Operation:

Pressing recharge, the robot will return to the charging dock and display its status



02

Immediate Cleaning

2.1 Two Modes of Immediate Cleaning

Modes:

- ① Immediate Cleaning
- ② Tasking

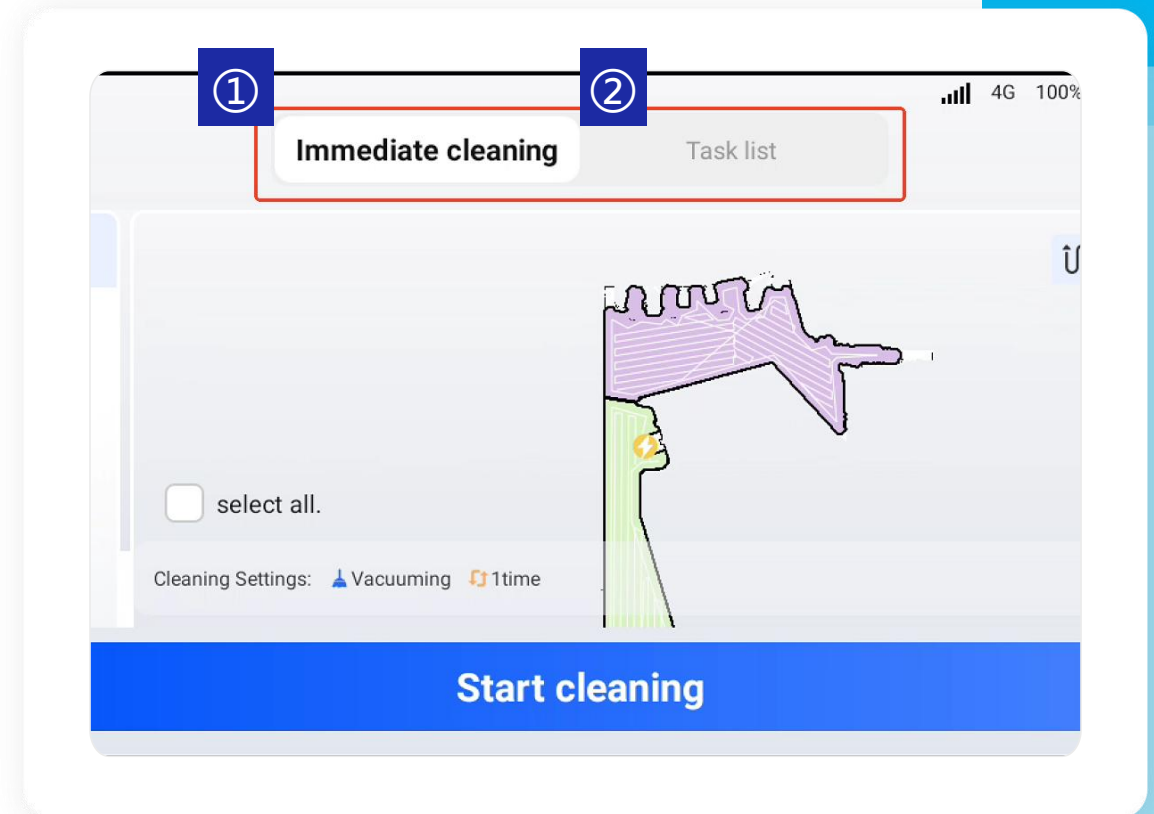
Differences

Immediate Cleaning Mode:

- Not support performing cleaning tasks across multiple floors.
- Each execution requires selecting the area.

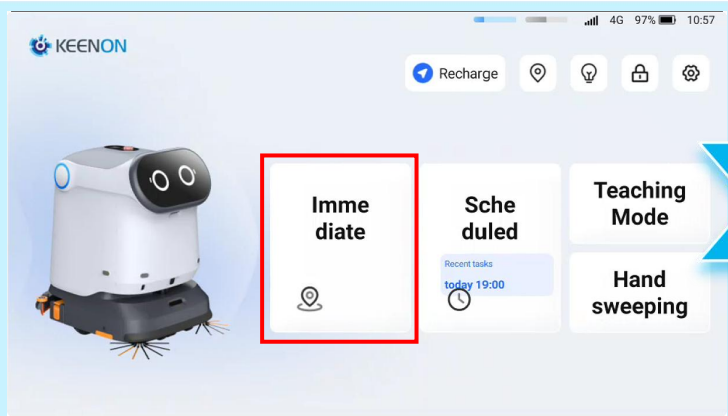
Tasking Mode

- Support performing cleaning tasks across multiple floors.
- Each execution not requires selecting the area.

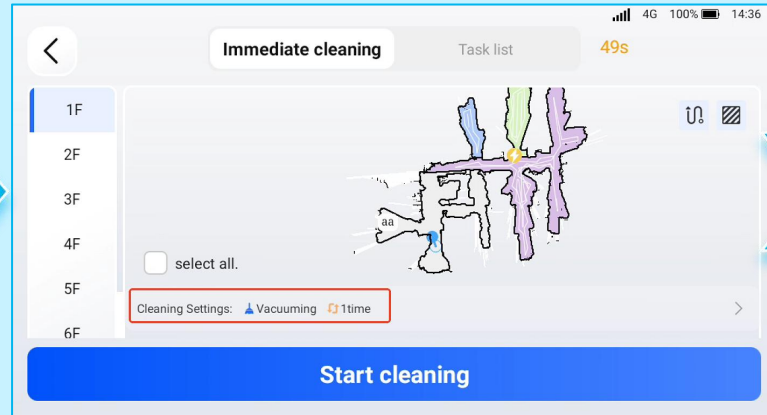


2.2 Immediate Cleaning Mode

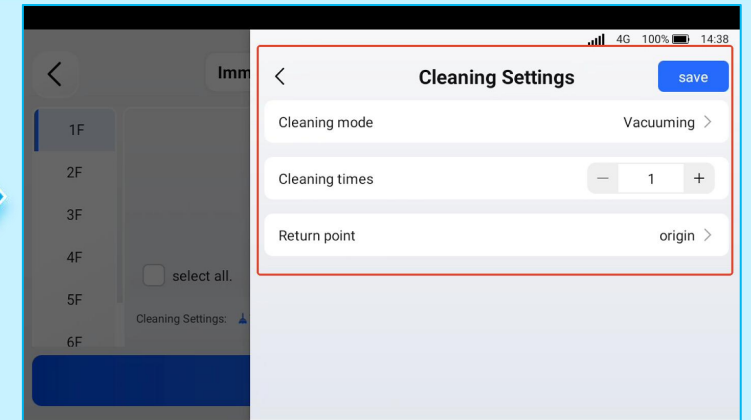
Steps: (Click **Immediate Cleaning** ---> Select **Cleaning Method**---> Select **Cleaning area**--> Click **Start Cleaning**--> Return to charging pile)



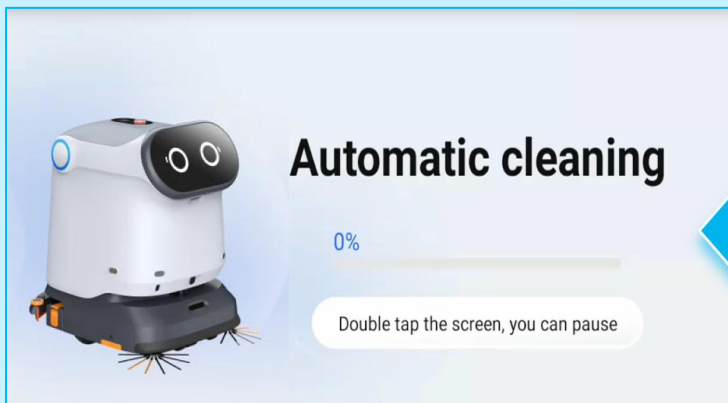
1. Click immediate cleaning



2. Select cleaning method

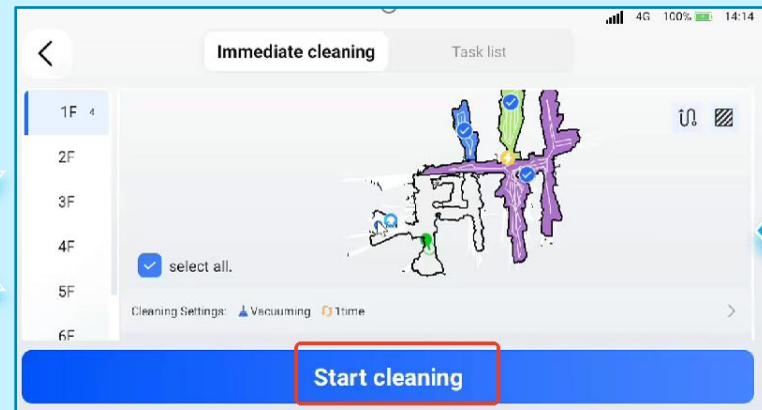


Following cleaning modes are available:
sweep and wash, water uptake, sweep suction, scan and push, sweeping.



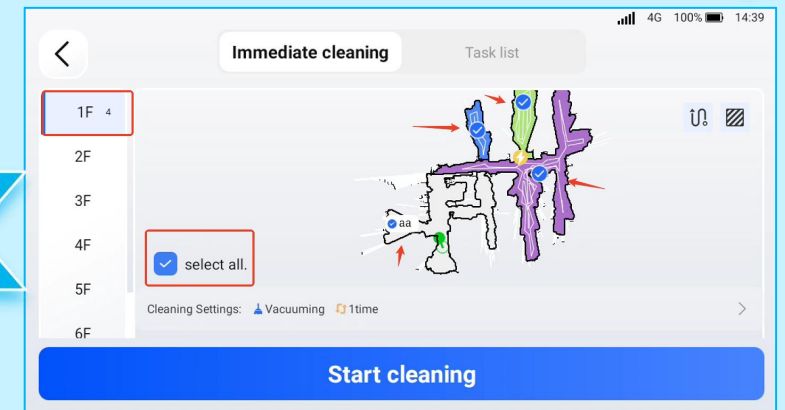
5. Start cleaning and display the progress.

After completing the cleaning, the robot will proceed to the next area. If there are no more areas to clean, it will return to the charging pile.



4. Click start cleaning

The machine navigates to the cleaning area from the charging dock.

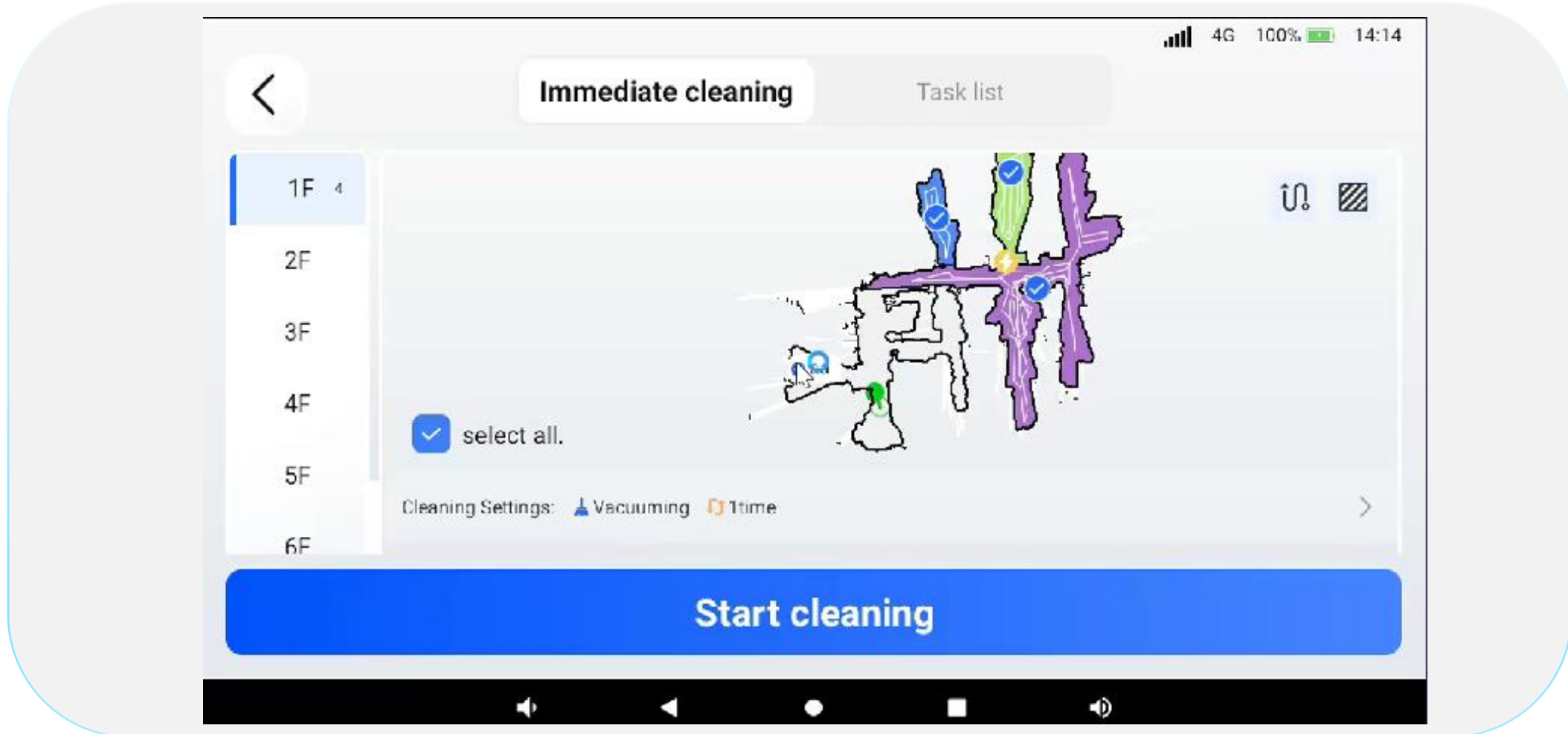


3. Select cleaning area (Not support across multiple floors)

First select floor, then select area.

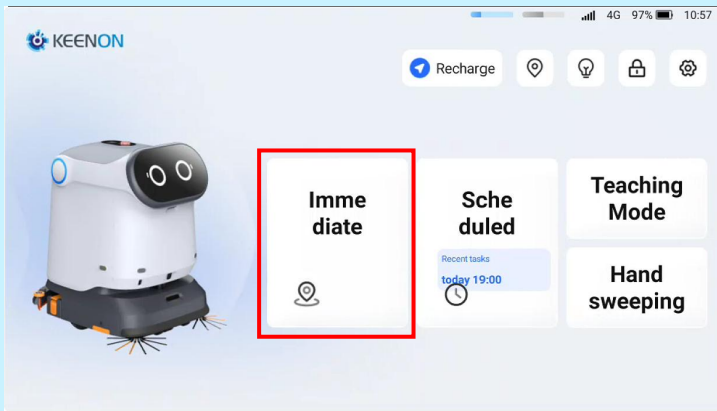
2.3 Video Demonstration

Video on using **Immediate Cleaning Mode**

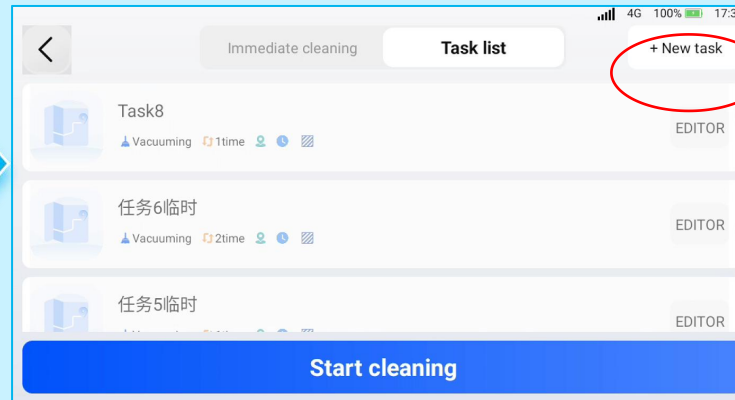


2.4 Tasking Mode

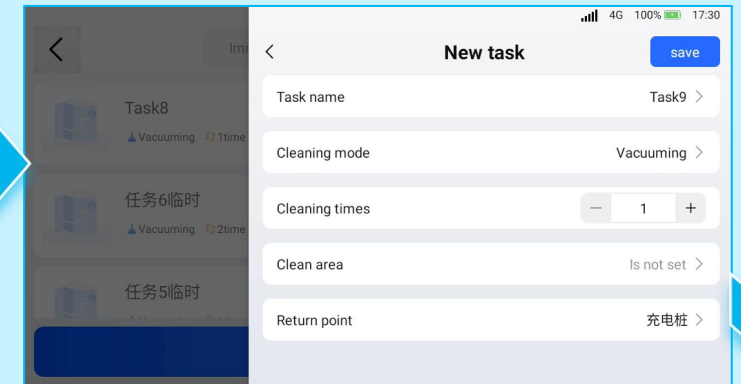
Click on **Immediate Cleaning** ---> Select from the task list ---> Create a task or choose an existing one ---> Set the cleaning method ---> Select the cleaning area ---> Start the task.



1. Click on immediate cleaning

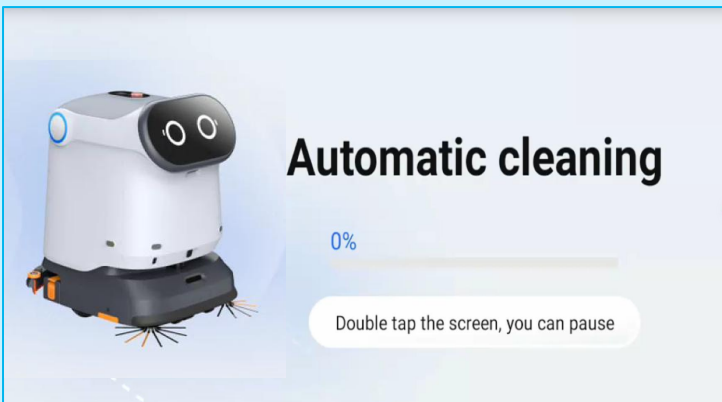


2. Create a task



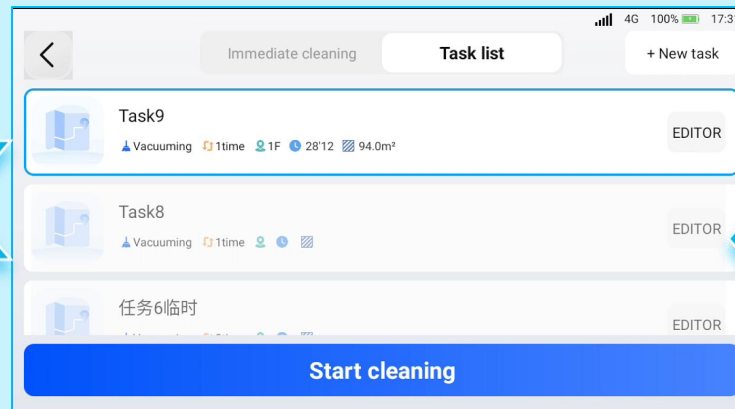
3. Settings:

- Task name
- Cleaning mode (sweep and wash, water uptake, sweep suction, scan and push, sweeping)
- Cleaning area (to step 4)
- Cleaning times
- Returning points



6. Start cleaning and display the progress.

After completing the cleaning, the machine will return to the charging dock.



5. Select the task and click to start cleaning.

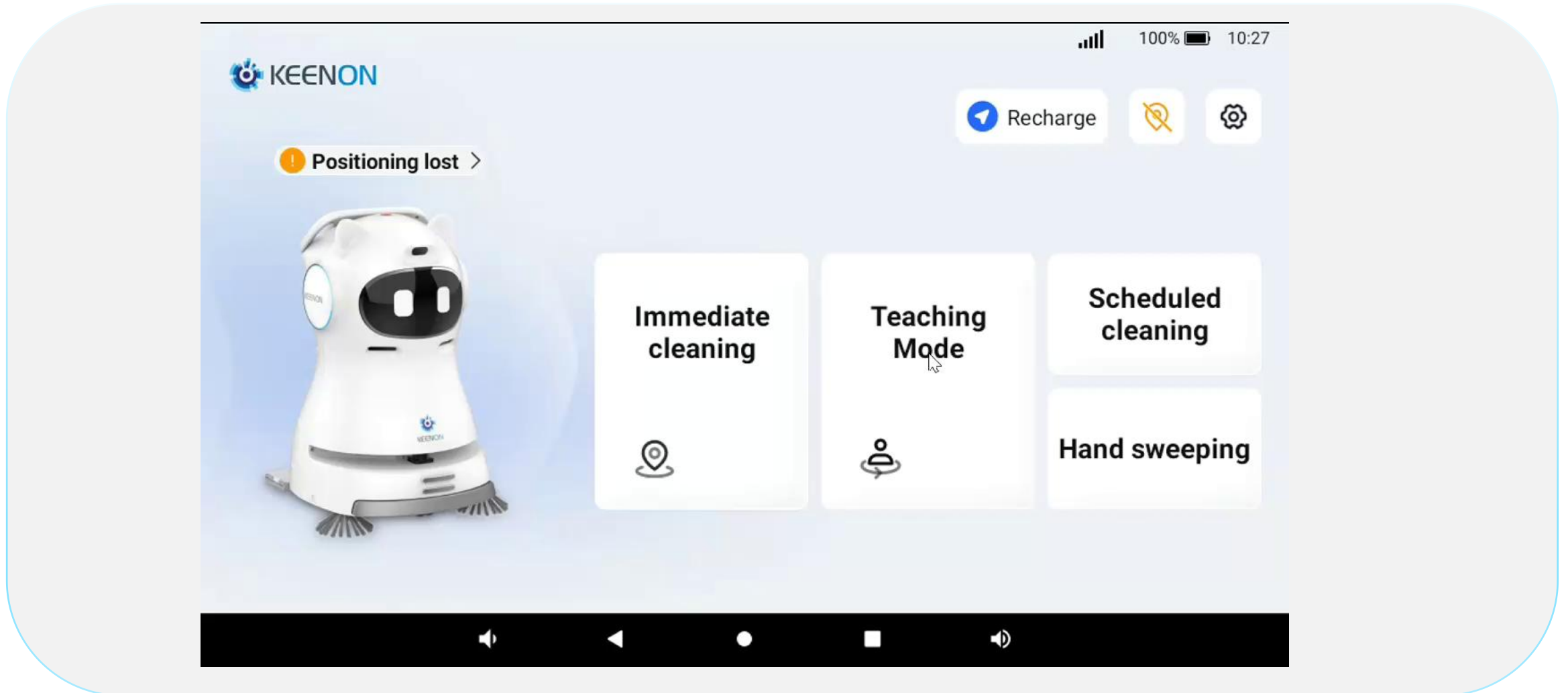


4. Select the Cleaning Area (You can choose areas across multiple floors, but this requires a stair control system to be available.) After setting, save and exit.

- The cleaning areas can be dragged and rearranged.

2.5 Video Demonstration

Cleaning Task Operation Video



03

Scheduled Cleaning

3.1 Introduction to Scheduled Tasks



Instruction of Scheduled Tasks Function:

Scheduled task means combining a series of task with different working hours, cleaning areas, as well as operations such as device charging and personnel maintenance, thus enabling the robot to start cleaning tasks automatically and continuously.

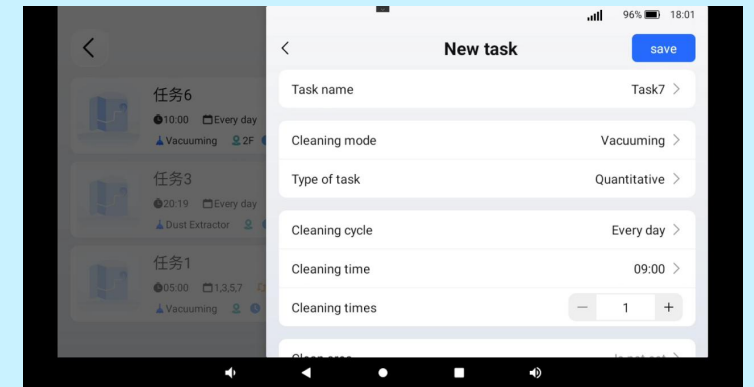
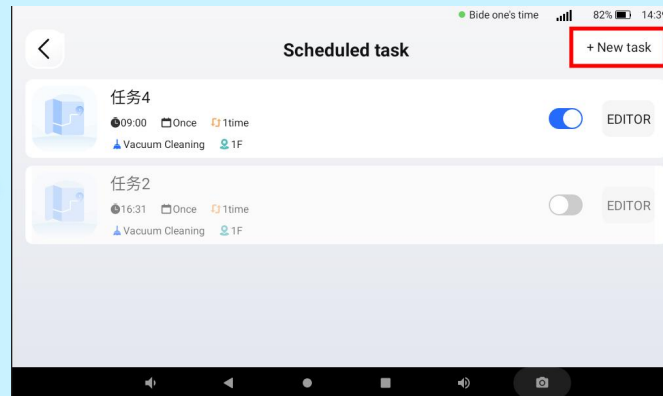
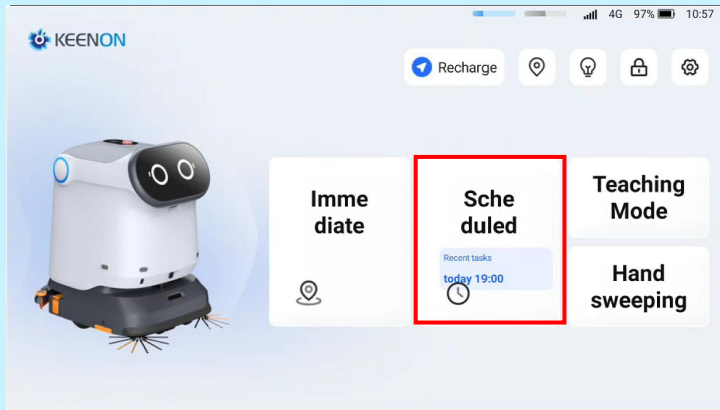


Applicable Scenarios:

Areas that require regular cleaning and maintenance.

3.2 Operation Process for Scheduled Tasks

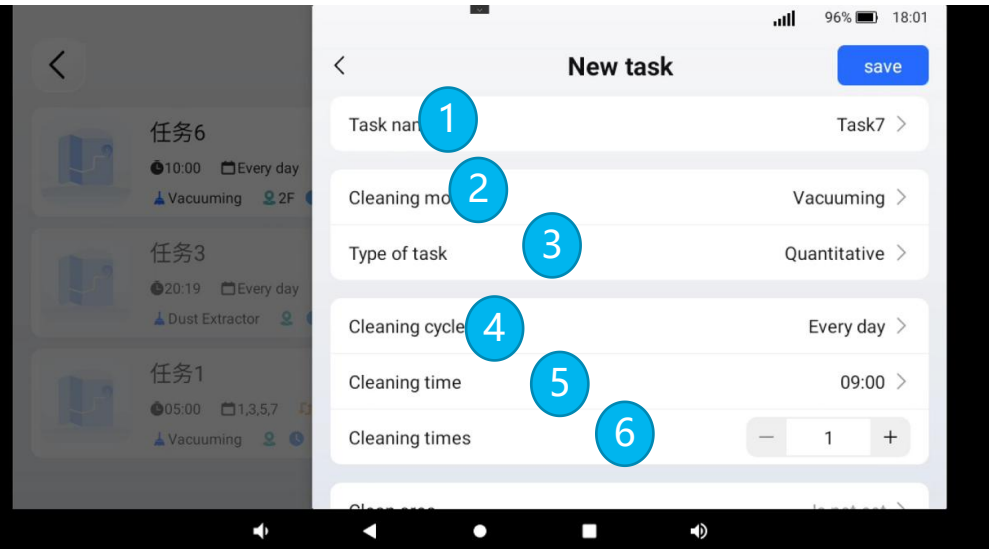
Steps: Click on "Scheduled Cleaning" --> Select from the task list --> Create a new task or choose an existing one --> Set the cleaning method --> Select the cleaning area --> Choose the task to start cleaning.



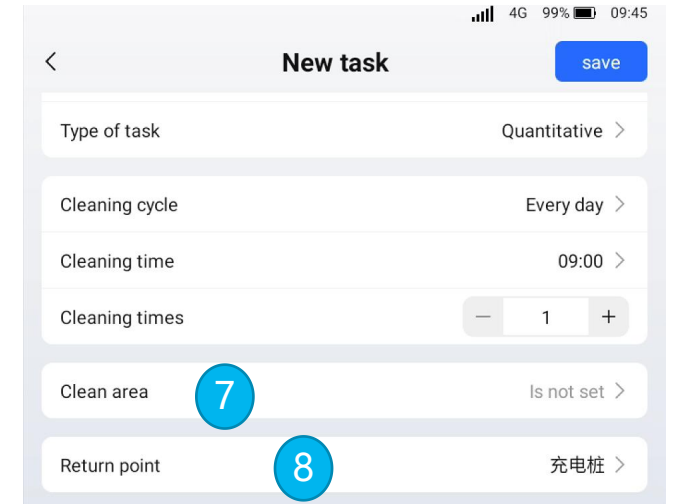
1. Click on "Scheduled Tasks."

2. Create a New Task

3. Set the scheduling parameters. (Saving completes the process.)



- Introduction to Configuration Parameters**
1. Task Name
 2. Cleaning Mode (sweep and wash, water uptake, sweep suction, scan and push, sweeping)
 3. Task Type (Fixed Amount/Timed)
 4. Cleaning Cycle (Daily/Weekly/One-Time)
 5. Cleaning Time (User-Selected Time Period)
 6. Number of Cleaning Cycles
 7. Cleaning Area
 8. Return Point (The location to return after task completion, usually the charging dock)





Teaching Mode

4.1 Teaching Mode



01 Teaching Path Definition:

- This is a method for generating a cleaning path. The user manually pushes the machine to record a custom cleaning path, and the machine will follow this recorded path for cleaning.

02 Applicable Scenarios:

- Specific areas are dirty and require targeted cleaning.
- The robot will repeatedly clean along the recorded path to thoroughly clean the area.
- The robot is expected to clean along a predefined trajectory.
- POC (Proof of Concept) demonstration:
- A predefined route can be set up with simulated dirt to showcase the cleaning effectiveness.

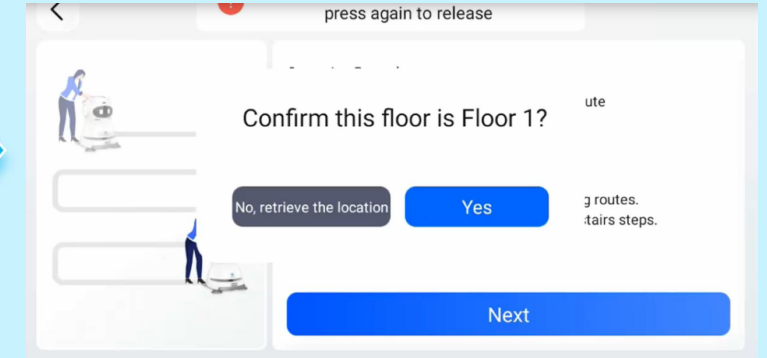
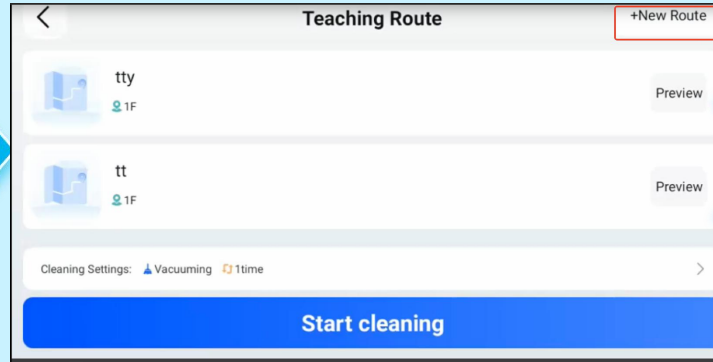
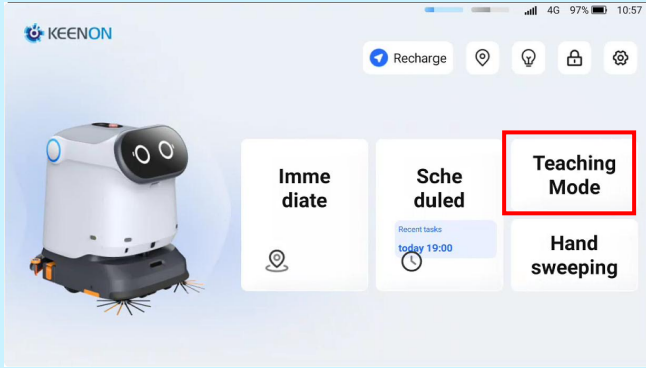
03 Precautions:

- Avoid hazardous areas such as:
- Steps, overhangs, staircases, escalators, irregular walls, low obstacles, glass doors, etc.
- During recording, maintain a distance of >10 cm from obstacles and walls.
- Pushing too close may cause the machine to scrape against the obstacles.
- Maintain a normal walking speed of <0.6 m/s.
- Avoid sudden turns; instead, make smooth, gradual turns.
- Avoid making small circles, as the machine may not be able to follow such a tight path accurately.

4.2 Teaching Mode

Steps:

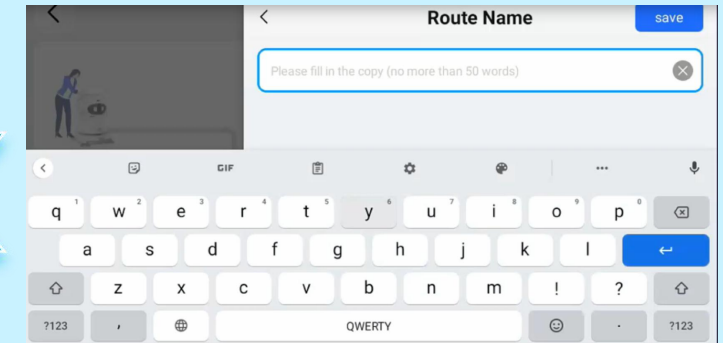
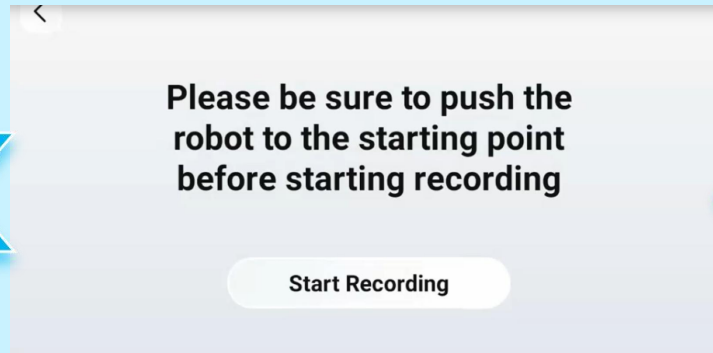
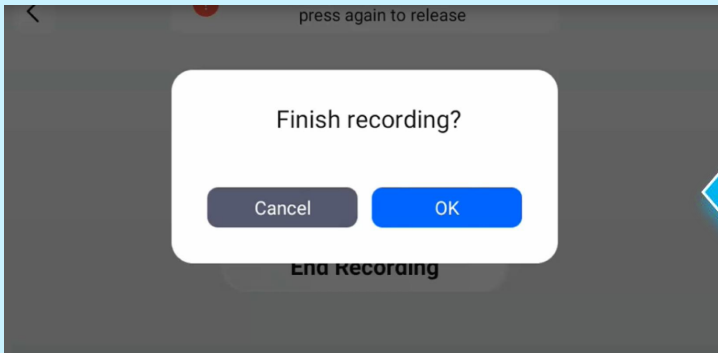
Click on "Teaching Mode" --> Create a new task or select an existing one --> Confirm the current floor --> Enter the task name --> Start recording the path and push the robot --> Select the task to start cleaning.



1. Click on "Immediate Cleaning" (Do not set up teaching mode while the machine is on the charging dock.)

2. Create a new task

3. Confirm whether it is the current floor.



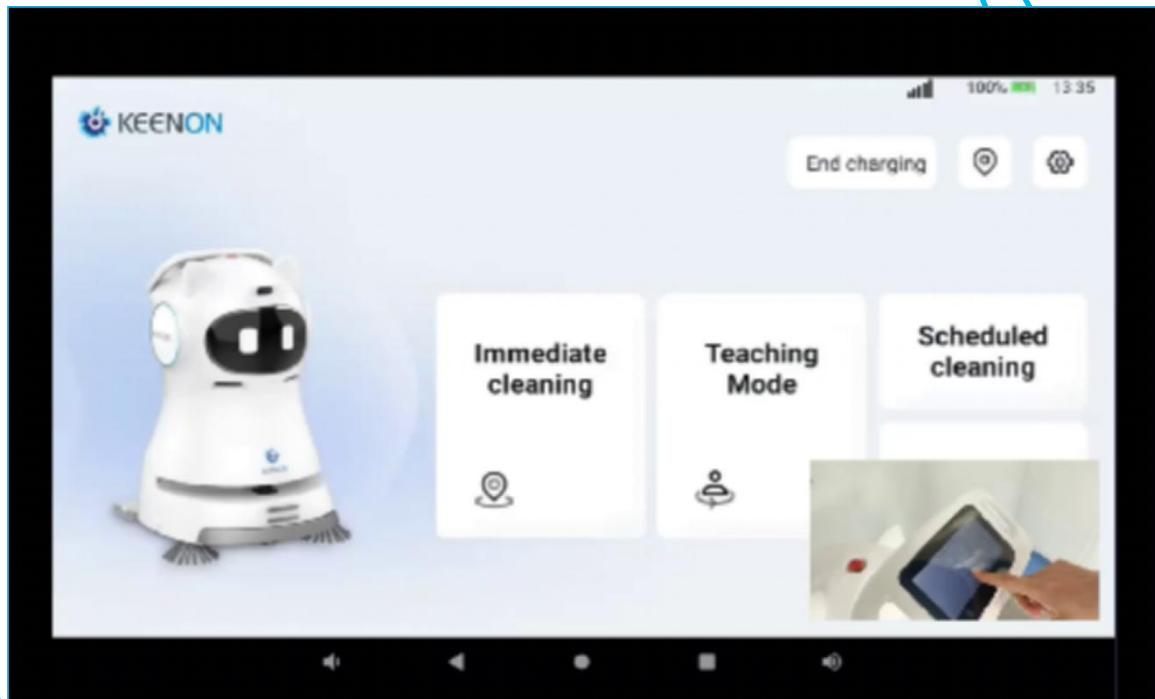
4. After completing the recording, confirm it. Then go back to Step 2. Select the task you just recorded to start cleaning.

5. Click to start recording and push the robot.

4. Enter the path name.

4.3 Video Demonstration

Teaching Mode Cleaning Operation Video



Effect Demonstration



05

Hand Sweeping

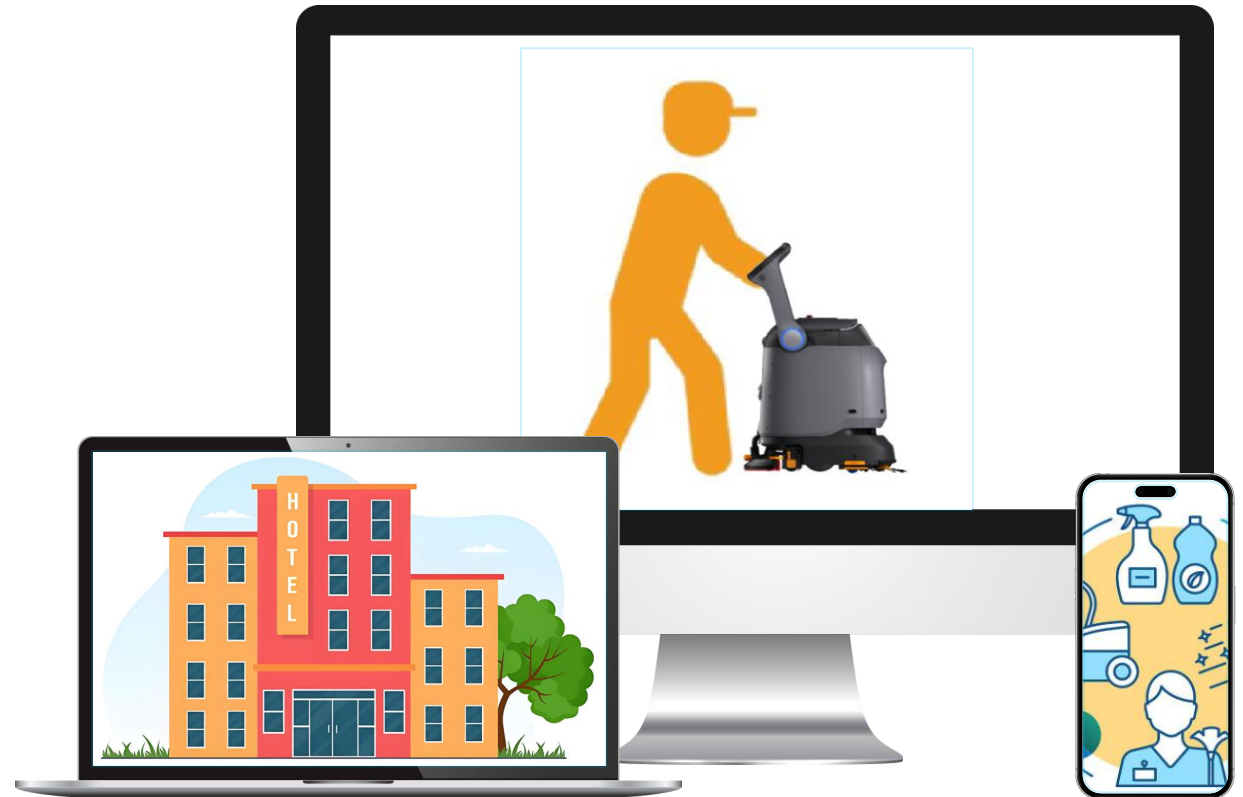
5.1 Introduction to Hand Sweeping

Steps for Hand Sweeping:

Set the mode in the APP, and adjust the cleaning intensity as needed.

Applicable Scenarios:

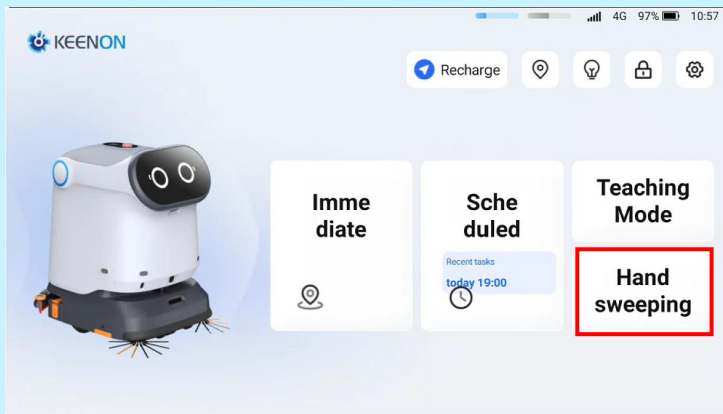
- Areas the machine cannot automatically clean
- Areas that are infrequently used can be manually pushed to for cleaning.
- If something has just been spilled or dropped in an area that has already been cleaned, you can push the machine over to clean it immediately.



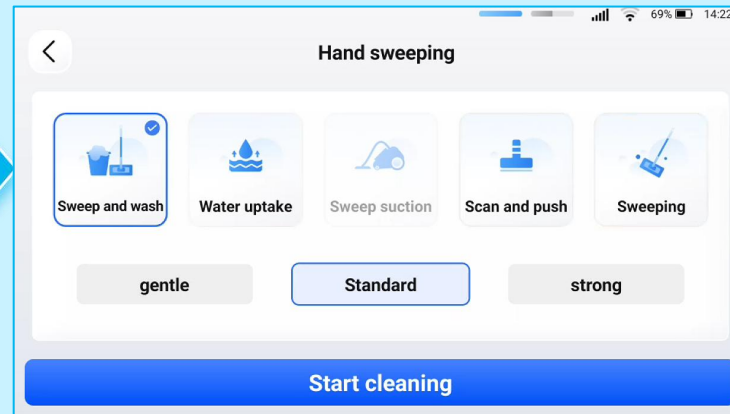
5.2 Operation for Hand Sweeping

Steps:

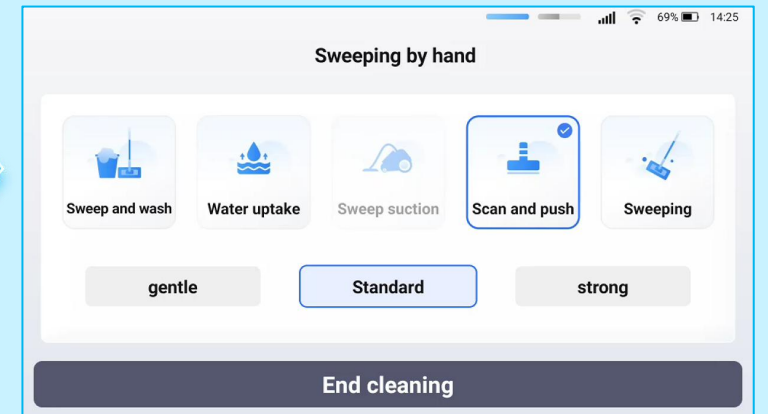
Click on "Immediate Cleaning" --> Select from the task list --> Create a new task or choose an existing one --> Set the cleaning method --> Select the cleaning area --> Choose the task to start cleaning.



1. Click on **Hand sweeping**



2. Select the Mode (Click "Start" after setting up)



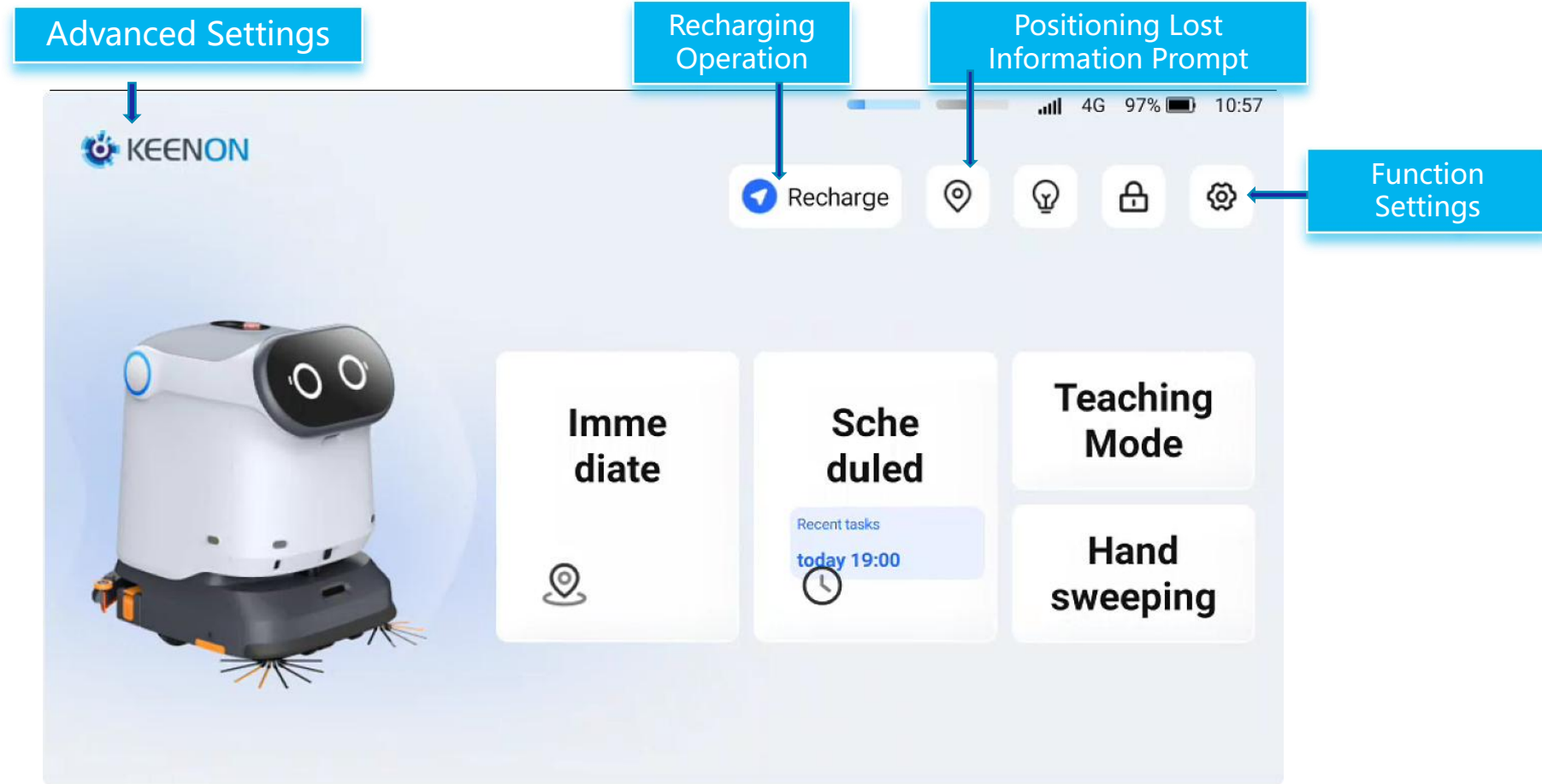
3. Click "End cleaning" after the cleaning is complete.

- Choose between sweep and wash, water uptake, sweep suction, scan and push, sweeping Mode.
- There are three intensity levels to select from.
- Adjust the settings according to the actual situation.



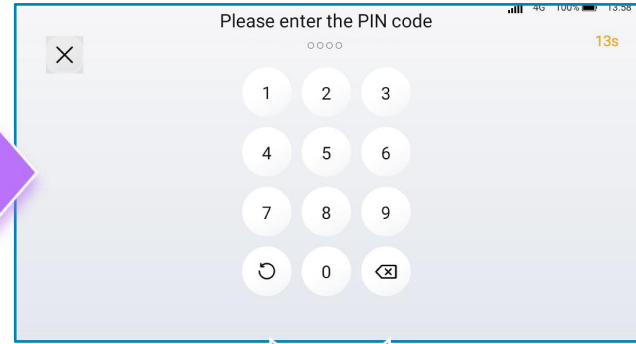
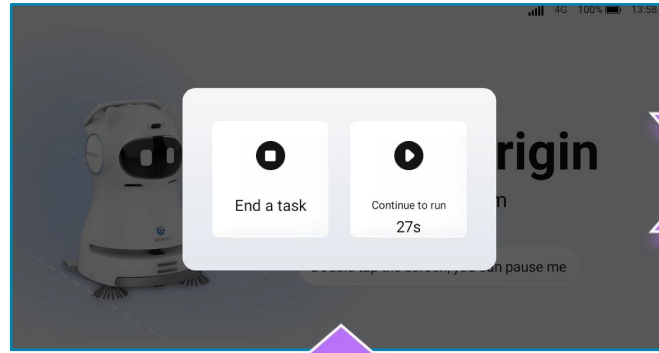
Functions Introduction

The function introduction:
Charging and Recharging
Positioning Loss Recovery
Settings and Advanced Settings



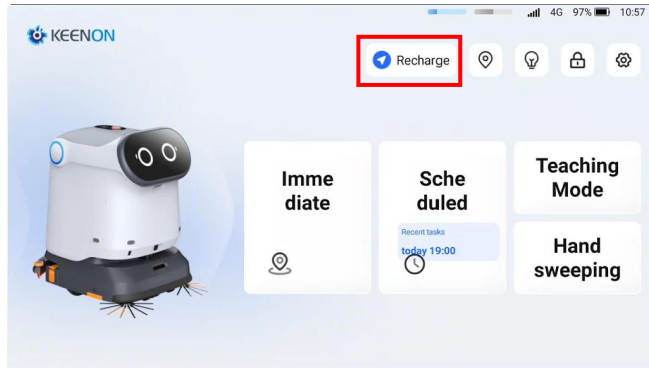
6.1 Operation Process for Returning to Charge

2.1 End Task
(Return to Interface 1)
2.2 Continue Recharging
If no action is taken, the machine will automatically resume recharging after 30 seconds by default.

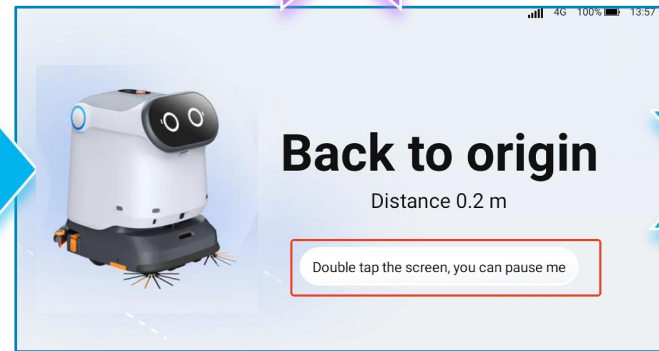


Double-tap the screen.

Enter the password.

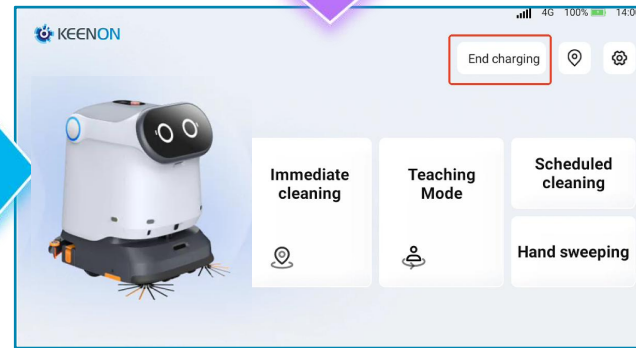


1. Click on "Return to Charge."



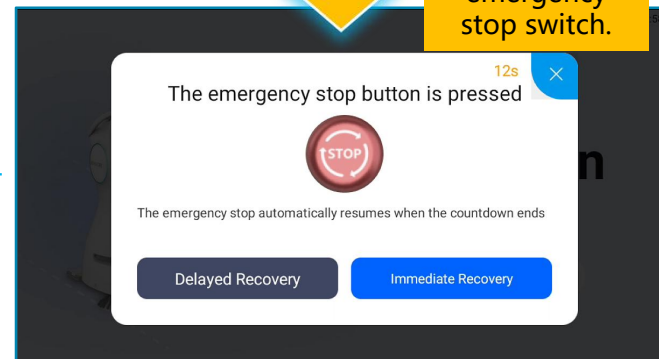
2. Display the return-to-charge

Press the emergency stop switch.

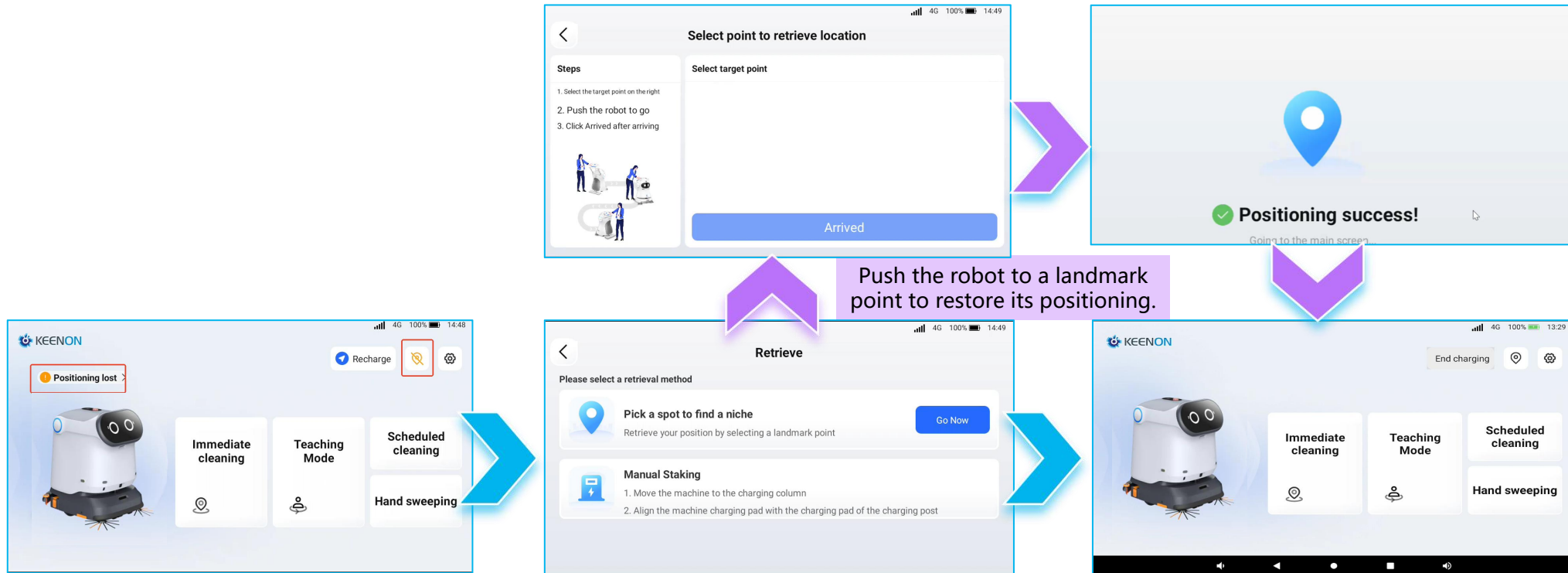


Return-to-charge is complete.
(Displays "Stop Charging" or "Charging Complete")

2.3 Delayed Recovery
(Each press delays the recovery by 120 seconds, after which automatic recharging will begin.)
2.4 Immediate Recovery and Recharge
If no action is taken, the machine will automatically resume recharging after 30 seconds by default.



6.2 Localization Loss Recovery Operation Process



Push the robot to a landmark point to restore its positioning.

Manually push the robot to the charging pile for recovery.

Manually push the robot to the charging pile to restore its positioning.



1 Click on the positioning lost

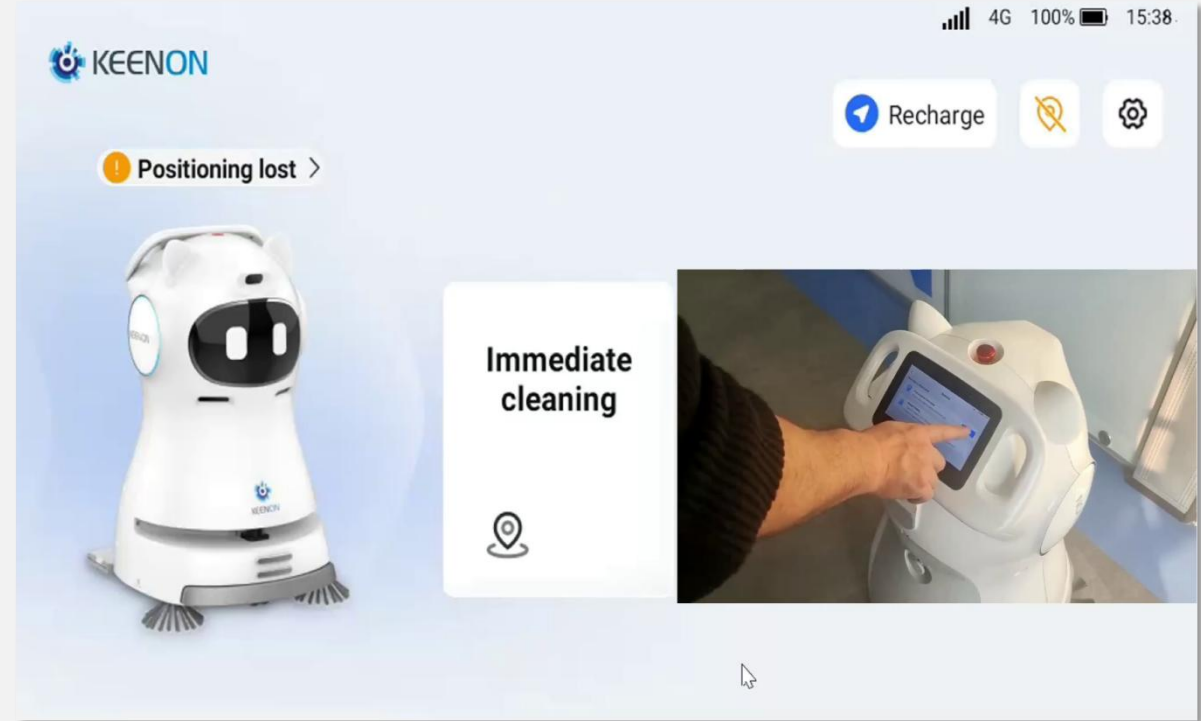
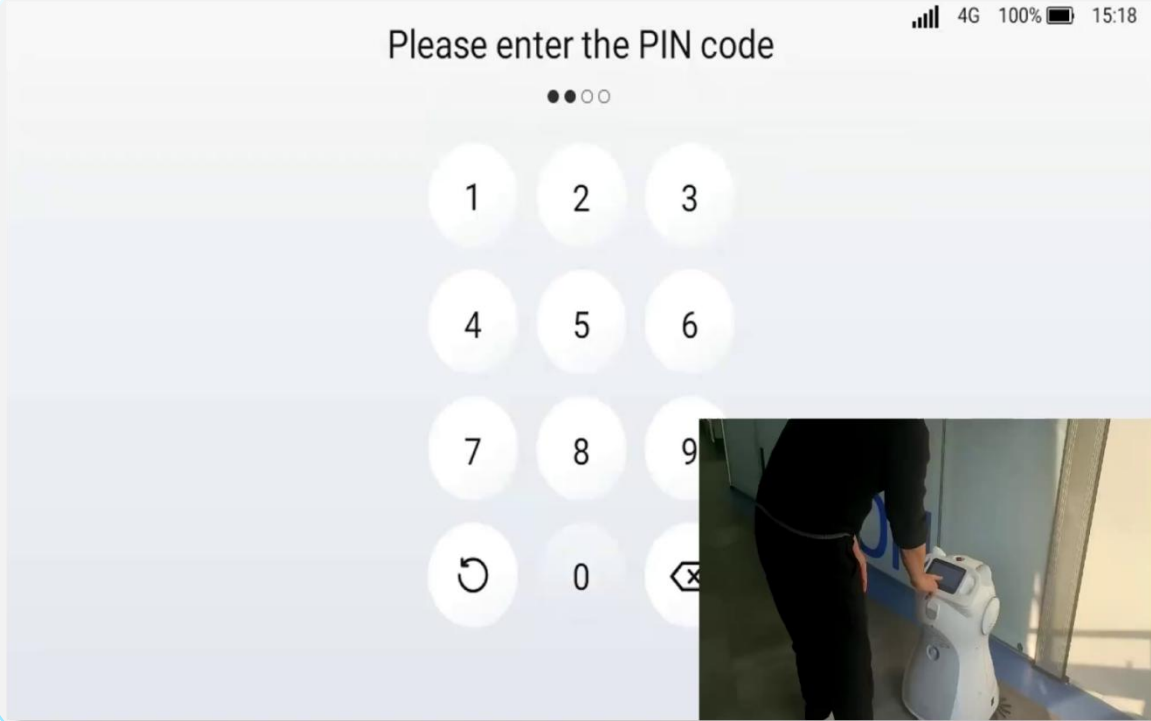
2. There are two ways to recover positioning.

3. The positioning lost is no longer displayed means the robot has returned to normal.

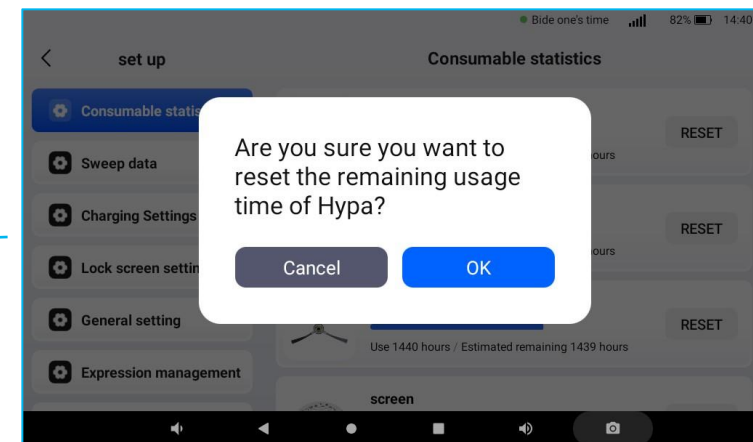
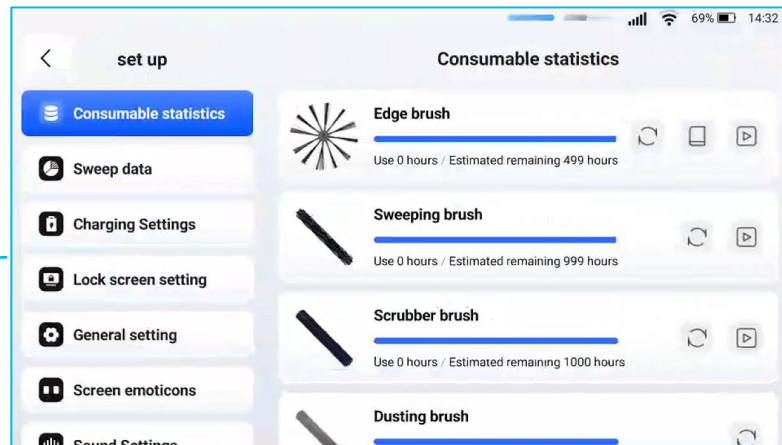
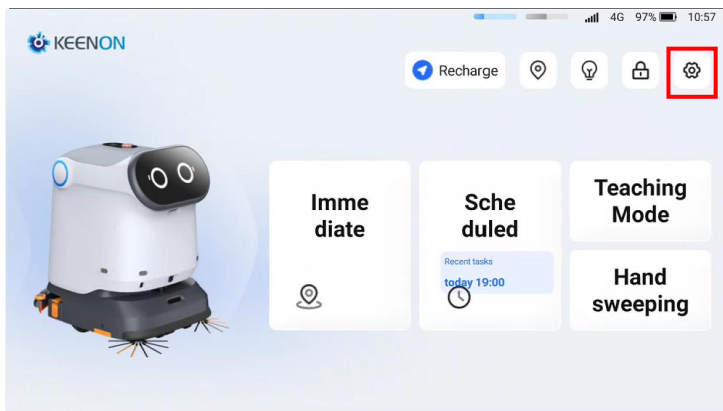
6.3 Localization Loss Video Demonstration

Push the robot to charging pile for re-positioning.

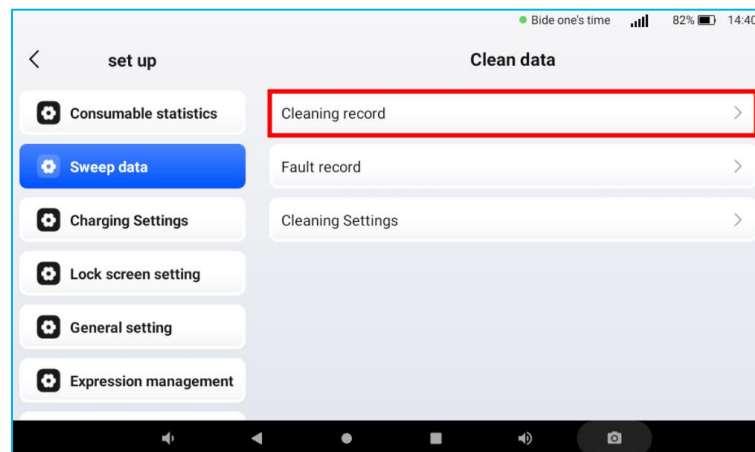
Landmark Recovery Operation Video



6.4 Introduction to Settings

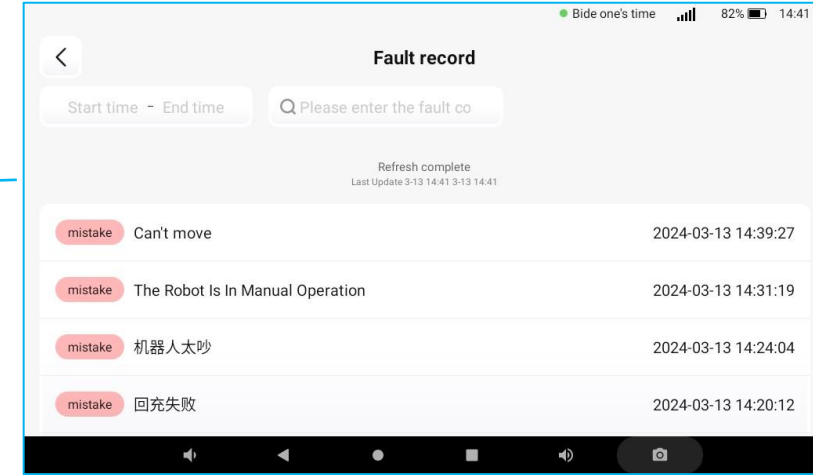
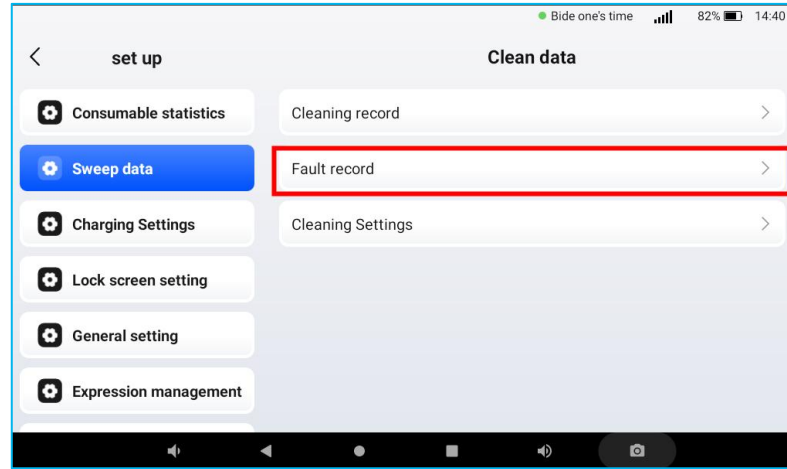
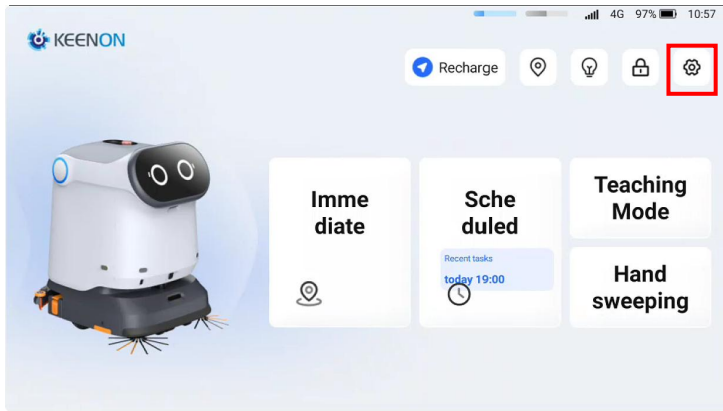


1. The consumables statistics show the usage time and remaining time for the Edge brush, Sweeping brush, Scrubber brush, Dusting brush, Rubber squeegee, HEPA filter, dust bag (Please reset here after replacement).

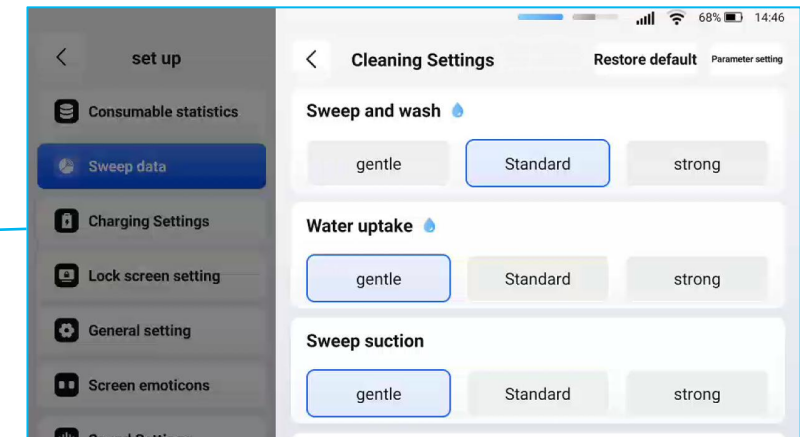
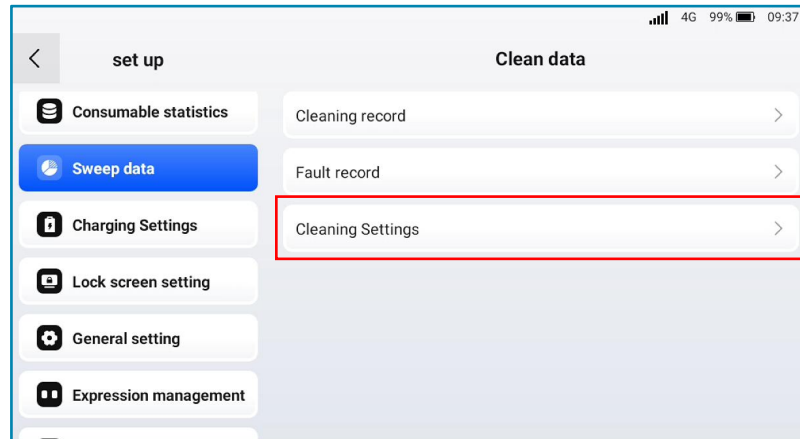


2. Click on **Cleaning Records** to view the machine's operation trajectory, accumulated cleaning time, area, number of times, and task completion status.

6.4 Introduction to Settings

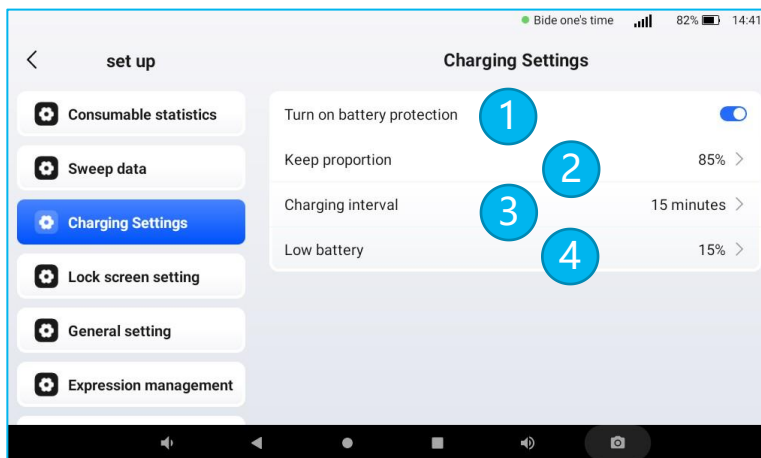
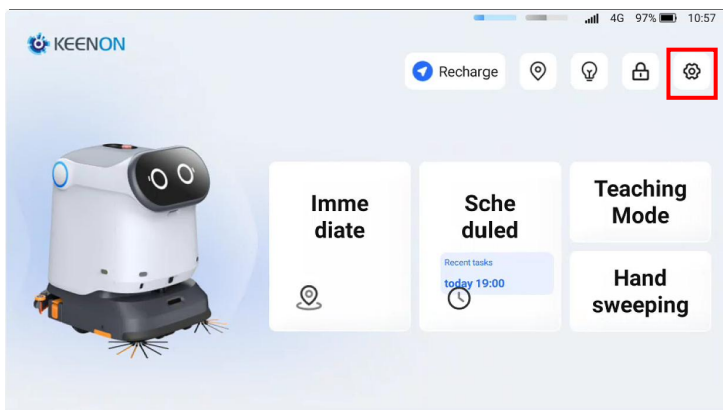


3. Click on Fault Records to view historical faults.



4. Click on Cleaning Settings to access customizable cleaning modes (customizable cleaning levels).

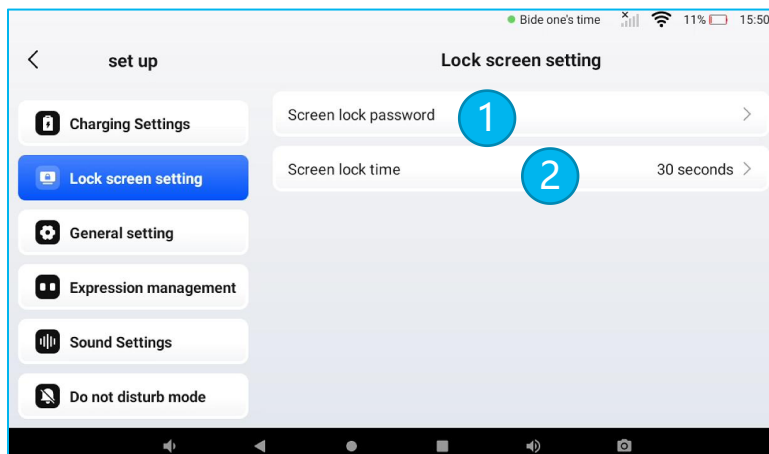
6.4 Introduction to Settings



5. Charging Settings

Enable Battery Protection:

1. When enabled, the machine will trigger a return-to-charge action if the battery level is too low.
2. If the machine's standby battery level falls below 85%, it will trigger a return-to-charge action.
3. If the return-to-charge action fails, the machine will attempt to trigger a return-to-charge action again every 15 minutes.

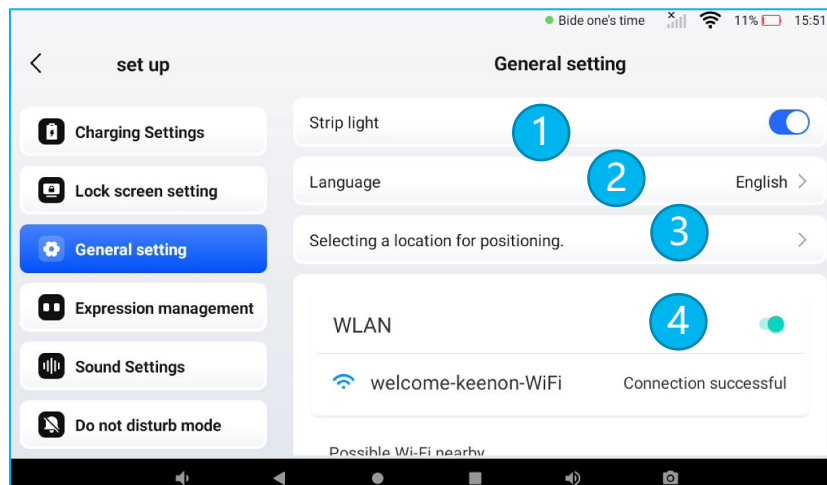
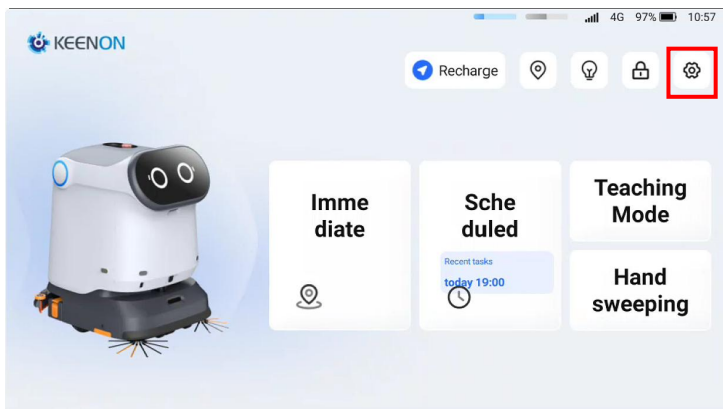


6. Lock Screen Settings

Lock Screen Password:

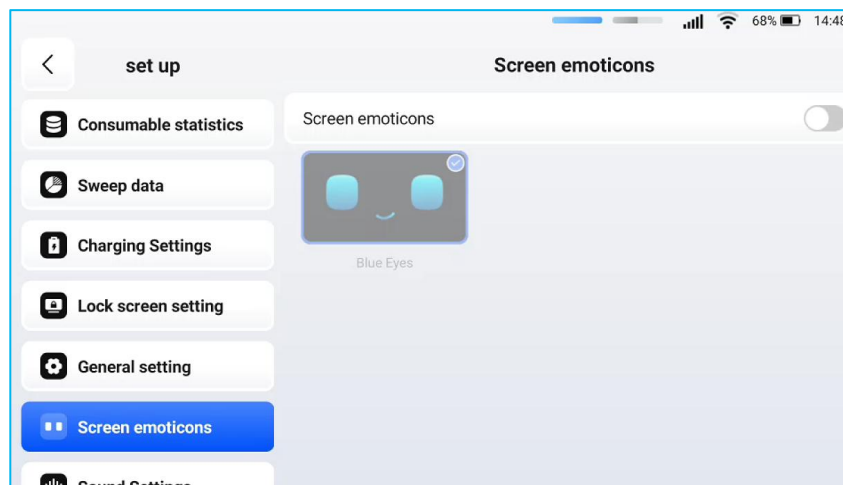
1. The default password is 0000, which can be modified to change the machine's lock screen password.
2. If the machine's screen is not touched for 30 seconds, it will lock automatically.

6.4 Introduction to Settings



1. Light Strip: There are light strip switches on both sides of the machine's head.
2. Language: Selectable languages include Simplified Chinese, Japanese, English, Korean, Thai, Traditional Chinese, and German.
3. Select a positioning point and push the machine to that point for positioning.
4. WLAN: WiFi connection

7. General Settings

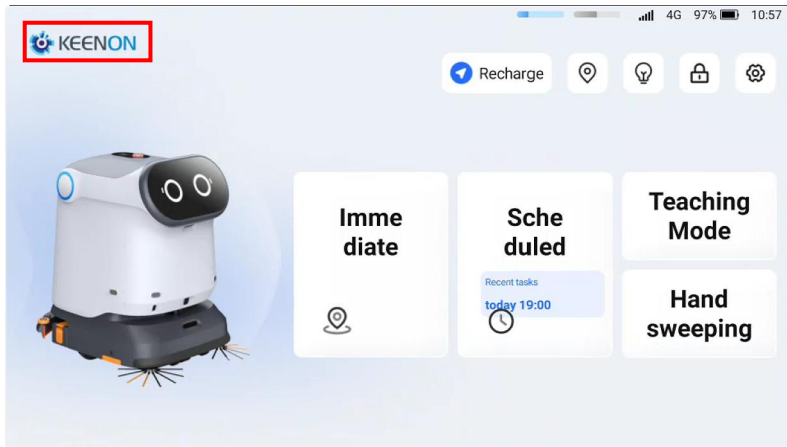


- Facial Expression: Switch on the facial display screen which can display or hide the expression
- Custom Text: You can customize the text displayed on the facial screen.
- Switch Time Adjustment: The interval between each facial expression.
- Text Color: Supports customizable colors.

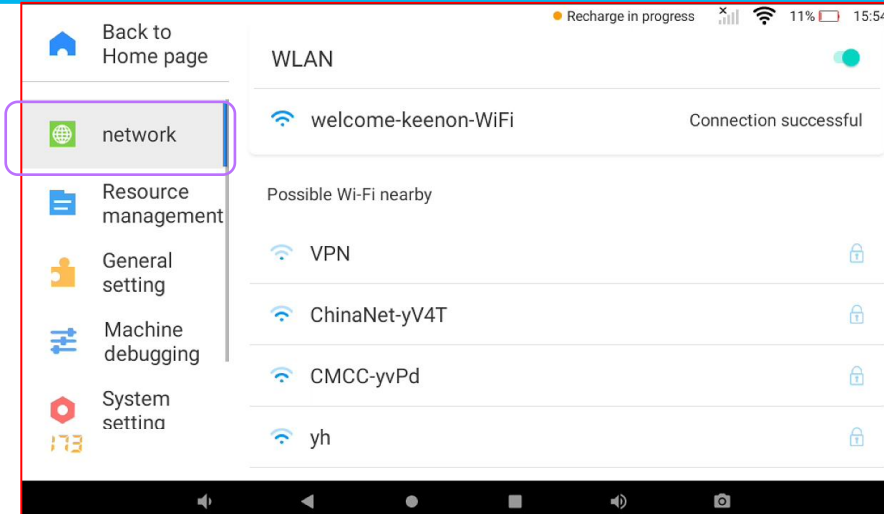
8. Expression Management

6.5 Advanced Settings

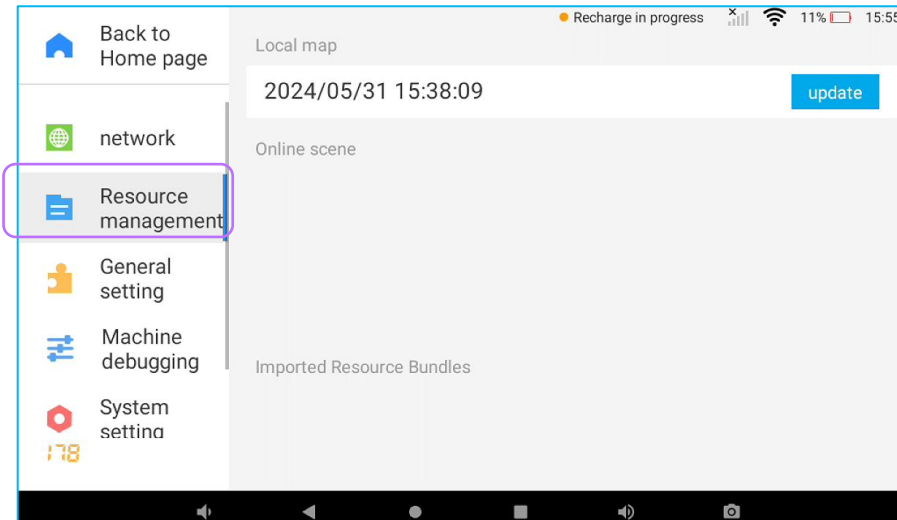
Advanced Settings Introduction



Press and hold the LOGO in the upper left corner for 5 seconds to enter the password. Enter 870051 to access the super settings.



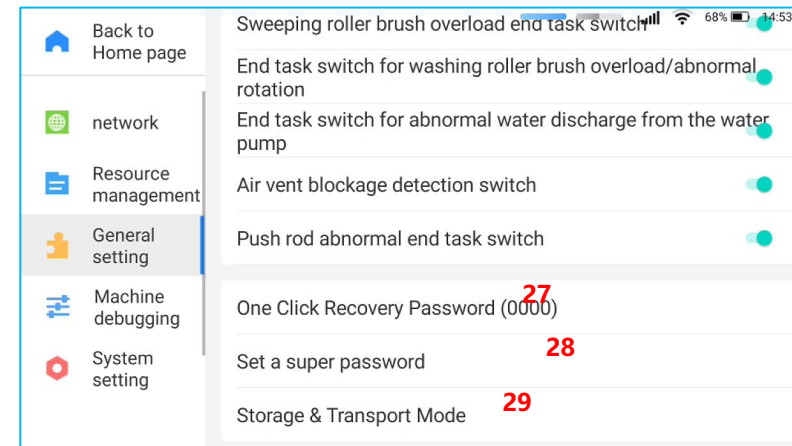
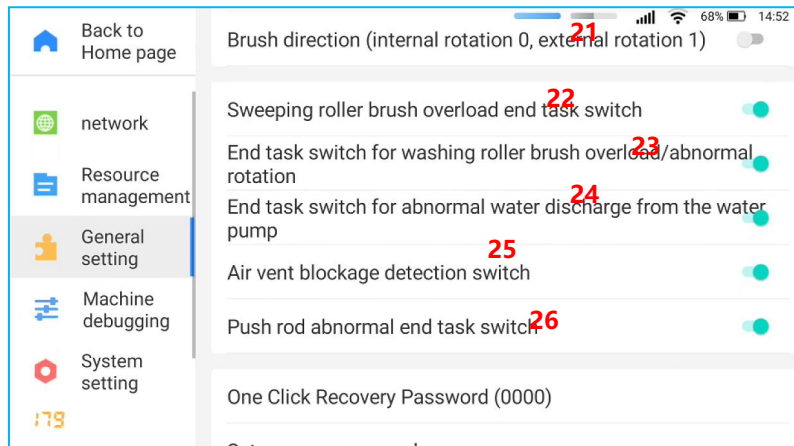
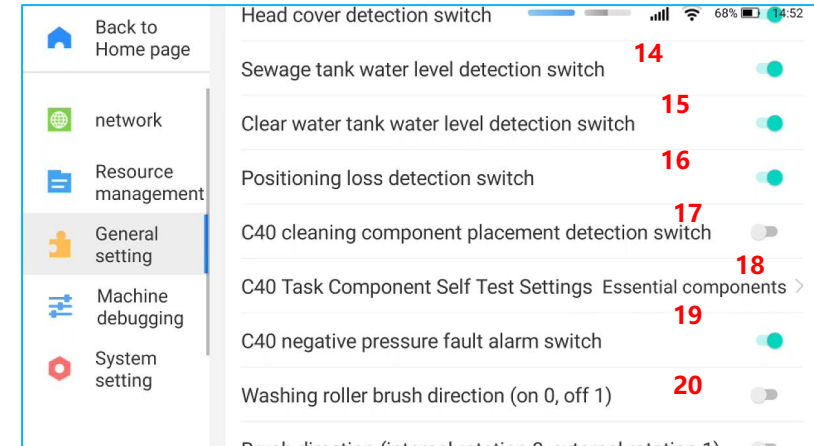
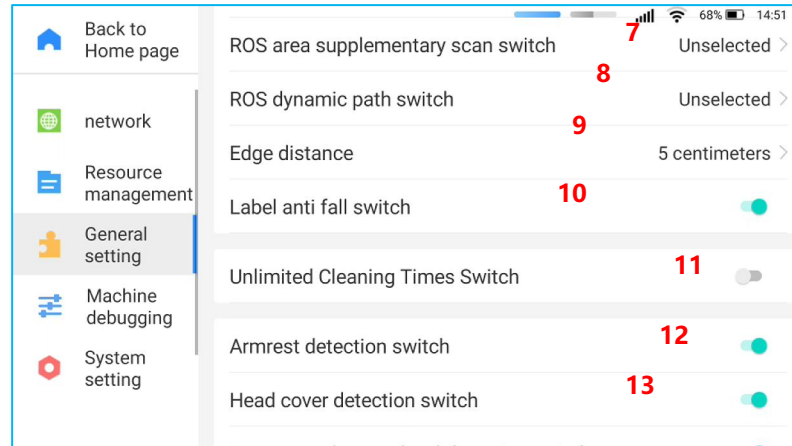
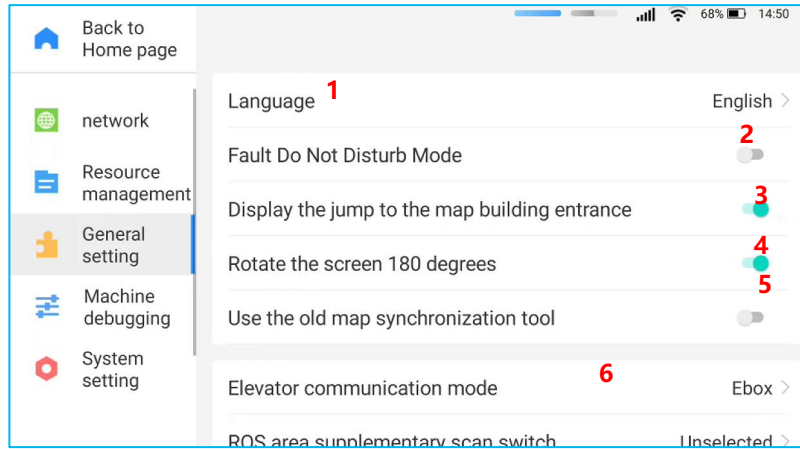
1. Network: Connect to WiFi



2.Resource Management, Local Map Management

6.5 Advanced Settings

Advanced Settings Introduction



6.5 Advanced Settings

debugging

General Status

Emergency stop status: close **1**
Wheel hub motor status: locked **2**

IMU

Heading angle:119.38 **3**
Pitch angle:-0.54
Roll angle:-0.10

battery

electric current: -1307ma
voltage: 26265mv
Remaining battery capacity:30322 10mAH **4**
Full charge capacity of battery:50918 10mAH
Cell temperature 1:29 °C
Cell temperature 2:29 °C

Component in place status

Left brush **5** Installed
Right brush **6** Installed
Front roller brush chamber (sweeping brush/dust push brush/fiber brush/garbage bin) **7** Installed
Rear roller brush chamber (floor wash brush) **8** Installed
Dust box/dust bag **9** Not Installed
bilge tank **10** Installed
Is the armrest in place Already pulled up

debugging

battery

electric current: -1368ma
voltage: 26265mv
Remaining battery capacity:30313 10mAH
Full charge capacity of battery:50918 10mAH
Cell temperature 1:29 °C
Cell temperature 2:29 °C
Protection board temperature:30 °C
Charging and discharging MOS temperature:30 °C

Rear roller brush chamber (floor wash brush) Installed
Dust box/dust bag Not Installed
bilge tank Installed
Is the armrest in place **13** Already pulled up
skull **14** Put it down

Wheel hub speed **11** Left 0.00 m/s, right 0.00 m/s

Negative pressure sensor **12**
Negative pressure inside the box:0.00 kpa
Negative pressure of pipeline:0.00 kpa

debugging

Clear water volume **15** already full
Sewage volume **16** centre

Component&Speed Debugging

fan **17** 1 2 3 customize - 20 +

Edge brush (speed) **18** 1 2 3
Gear position 1 2 3 **19**

Sweeping brush/Dust push/Fiber brush rotational speed0r/m
Gear position 1 2 3 **19**

Floor scrubber rotational speed0r/m
Lift/Lower

debugging

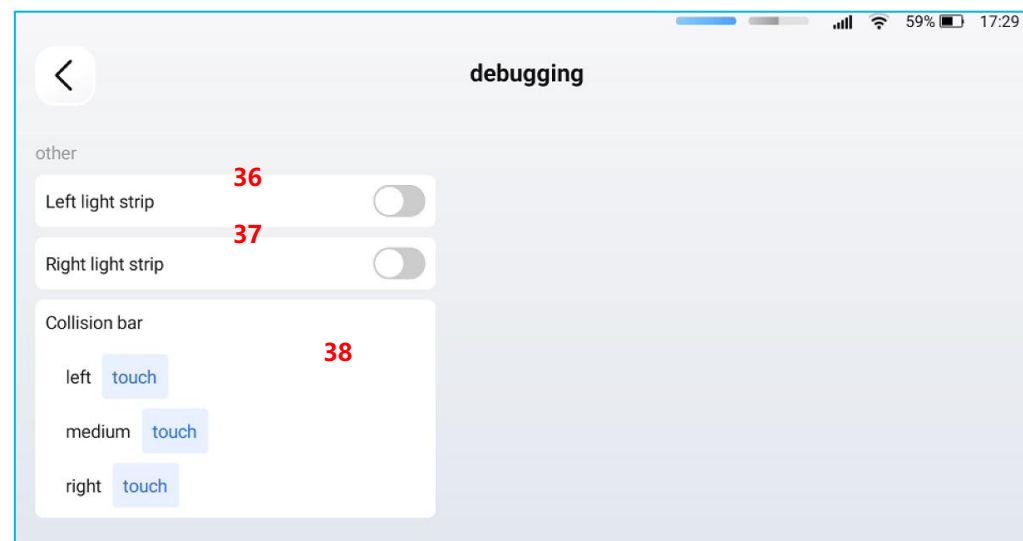
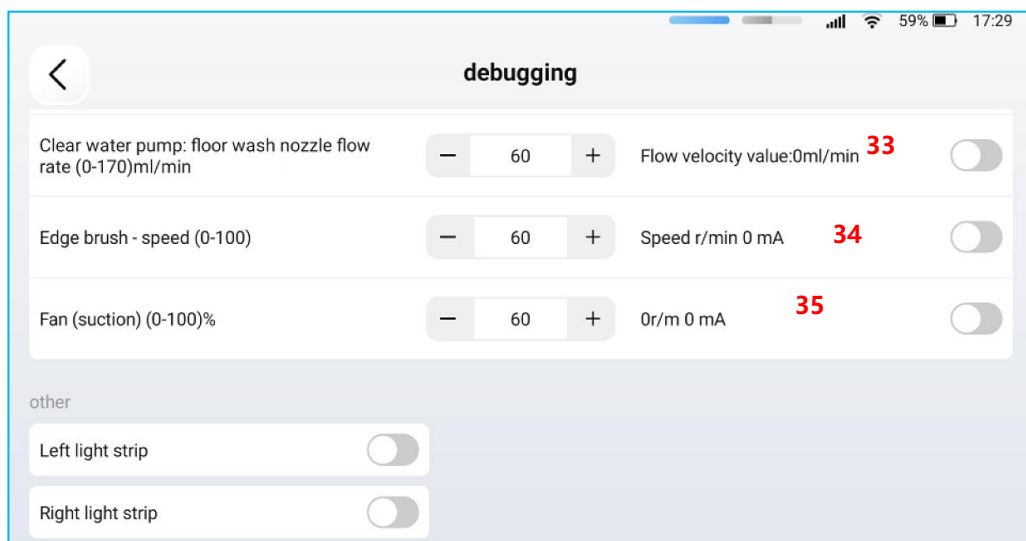
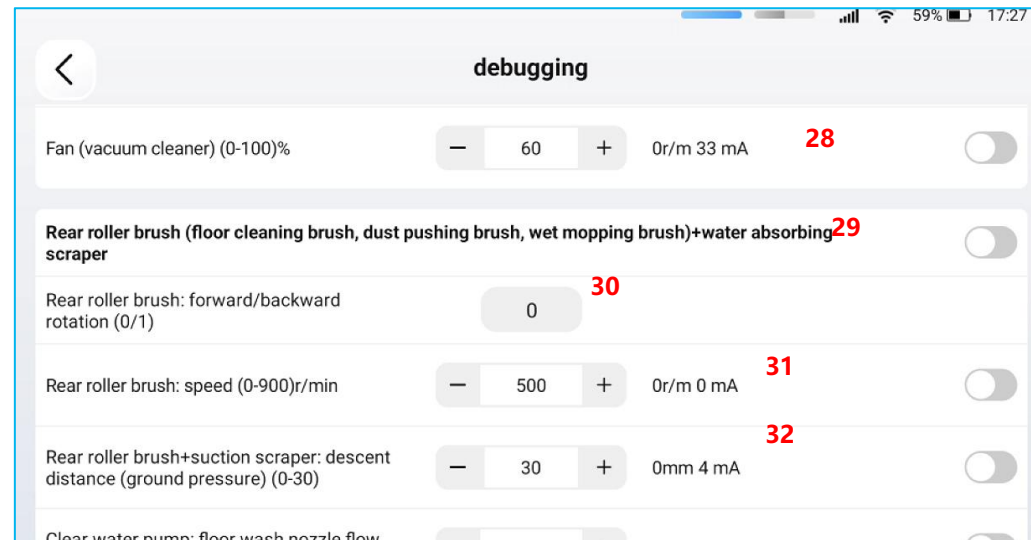
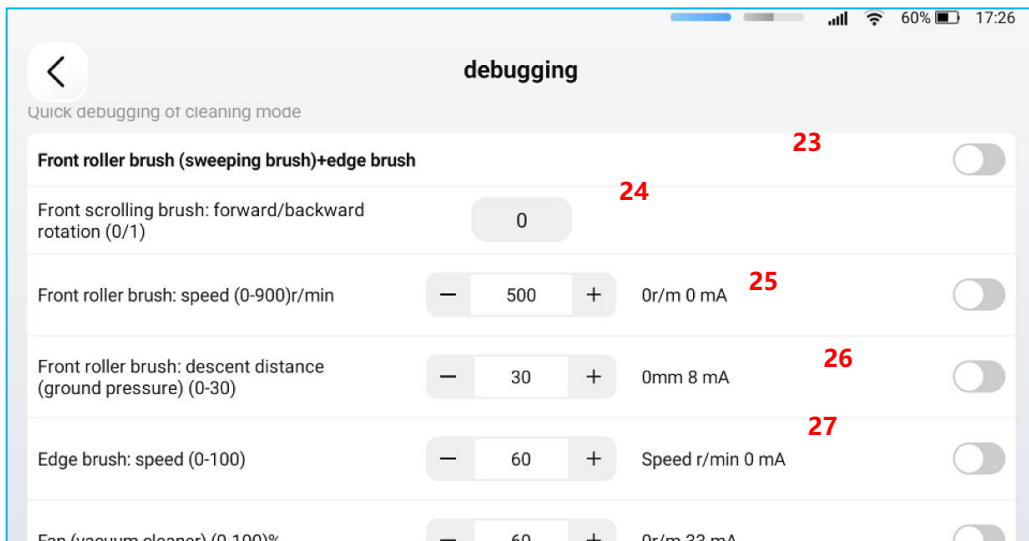
Floor scrubber rotational speed0r/m
Gear position **20** 1 2 3
Lift/Lower **22**

clean water pump **21** Flow velocity value:0ml/min
Floor scrubber nozzle flow rate (0-100)%: 60

forward
turn left stop turn right
retreat

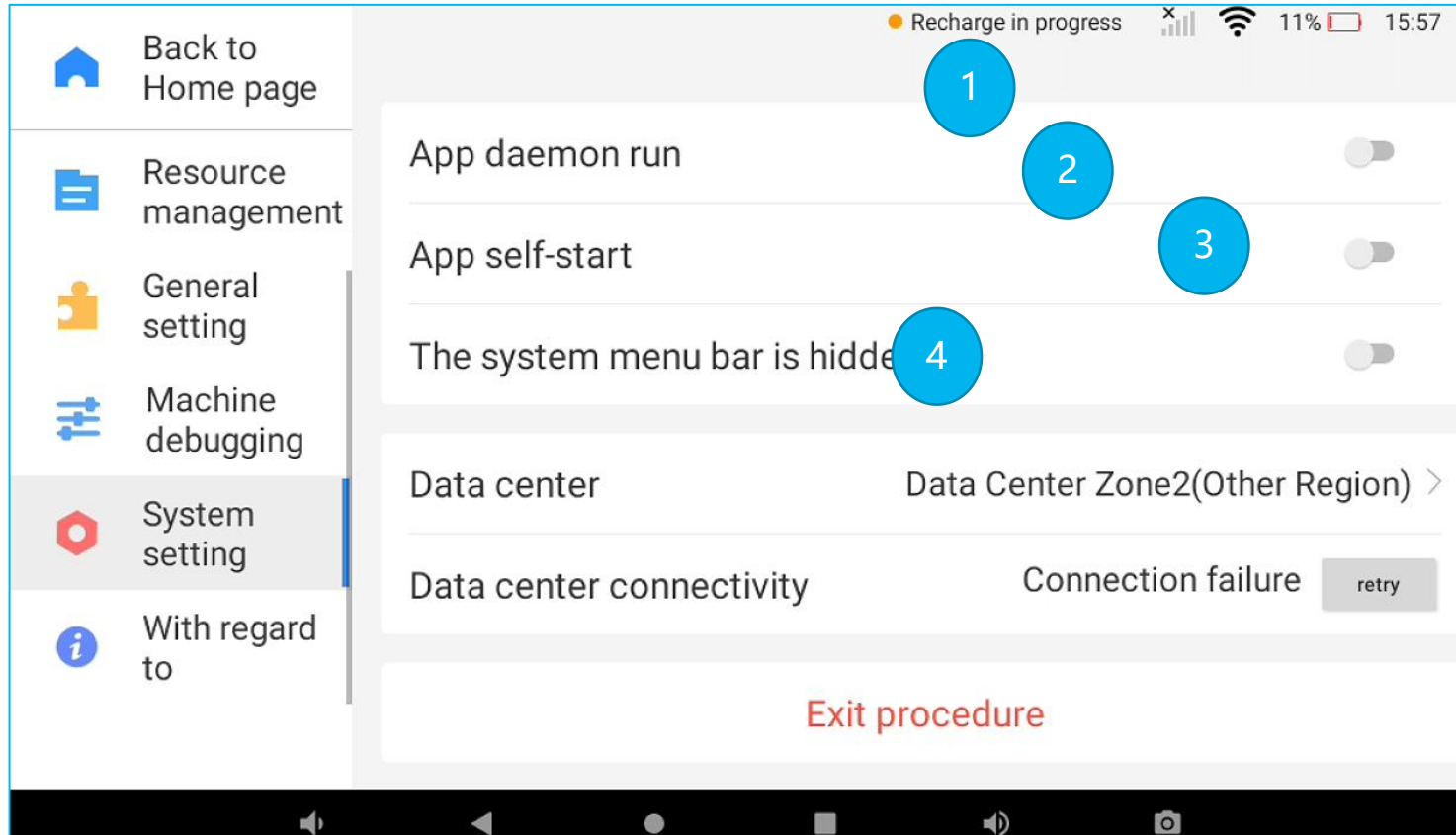
Quick debugging of cleaning mode

6.5 Advanced Settings



6.5 Advanced Settings

Advanced Settings Introduction



1. APP Guarded Operation
2. APP Auto-Switch on
3. System Menu Bar Hidden by Default
4. Data Center Selection:
China, Japan, or Europe.