

RGT Inc.

SIRBOT User Manual

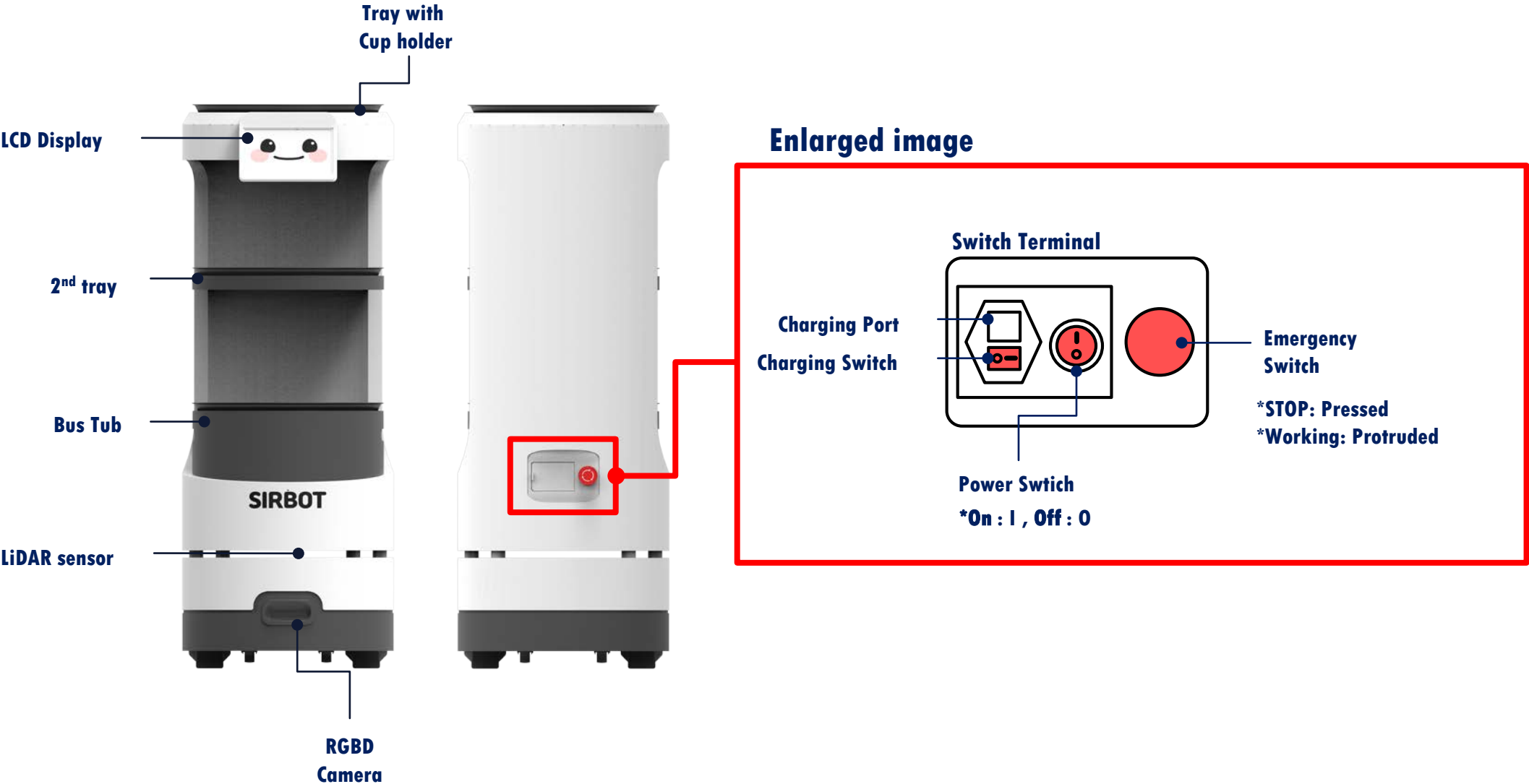
Round Type SIRBOT User Manual

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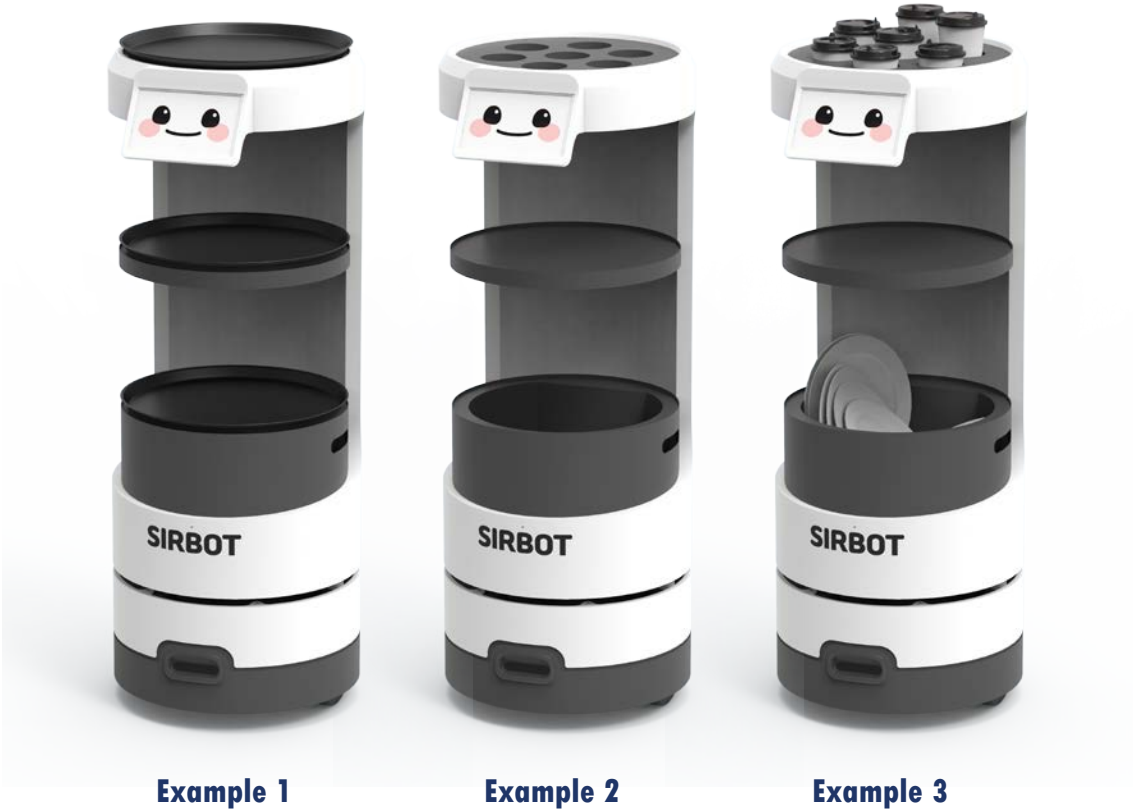
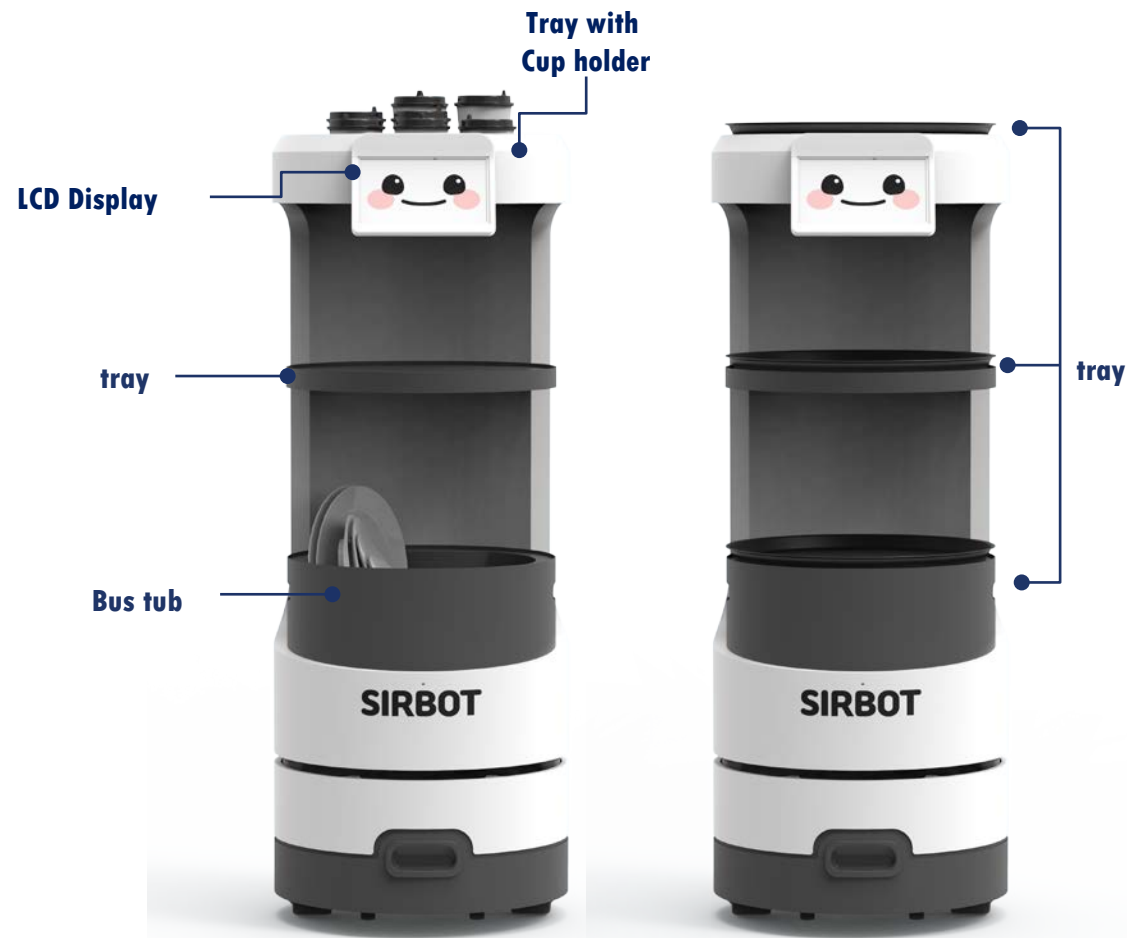
■ Product

1.1 Product Composition



■ Product

1.1 Product Composition



■ Product

1.2 Product Specification



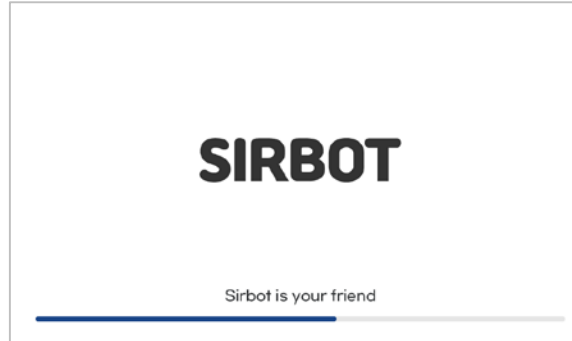
Specifications		Detail
Size(diameter, height)		440 x 440 x 1145 (mm)
Weight		about 50 kg
Speed		1.2m/s
Charging Method		Use charging code (240v ac 3.5A)
Charging Time		5hrs
Operating Time		3days (full working time)
Tray	Quantity/Size	3ea, 405mm
	Payload	135kg(45kg for each tray)

■ SIRBOT Setting

2.1 Power on



① Open the switch terminal at the bottom of the back of the robot and change the power switch to 'I'.



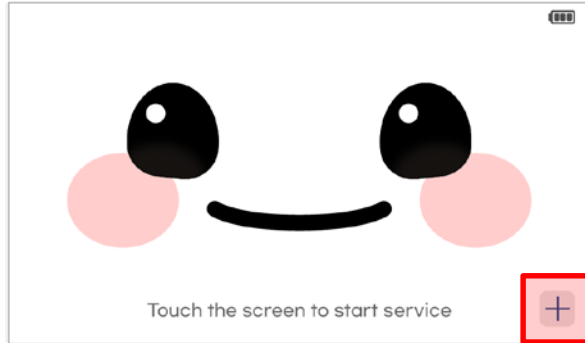
② It takes about 1 minute to complete booting.



③ A standby screen appears and booting is complete.

■ SIRBOT Setting

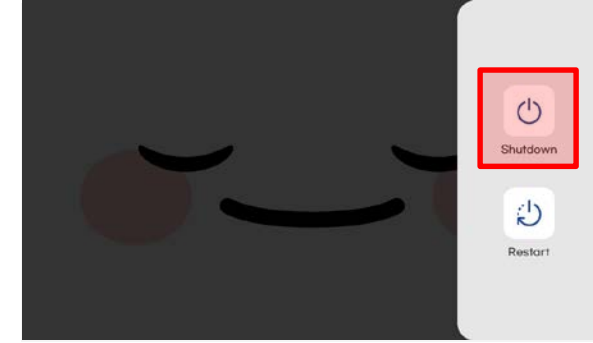
2.1 Power off



① Touch the + icon on the main screen.



② Touch the settings icon.



③ Touch the exit button.

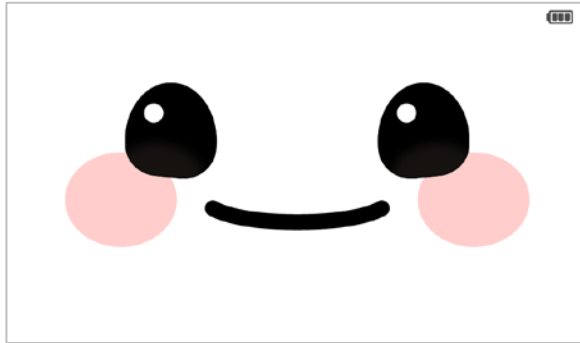


④ After about 5 seconds after exiting from the user screen, change the power switch at the bottom of the back of the robot to '0'.

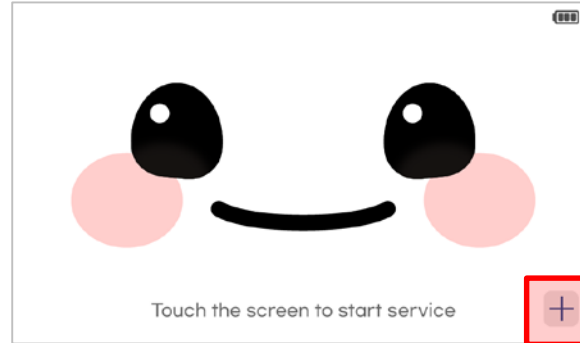
※ Prohibit forced shutdown using the power switch due to a possible error.

■ SIRBOT Setting

2.2 Volume Setting



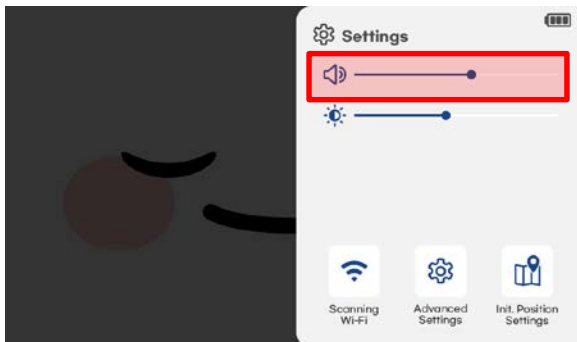
① Touch the standby screen.



② Touch the + icon on the main screen.



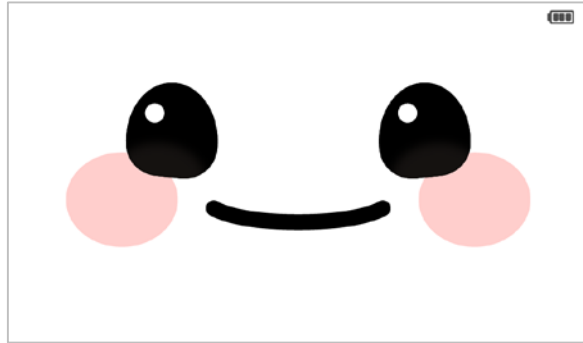
③ Touch the settings icon.



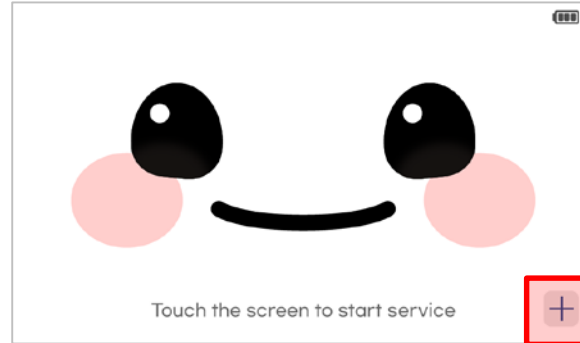
④ Adjust the volume by adjusting the volume setting bar with the speaker icon.

■ SIRBOT Setting

2.3 Screen Brightness



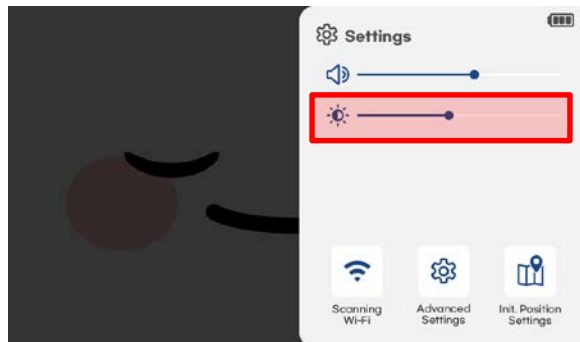
① Touch the standby screen.



② Touch the + icon on the main screen.



③ Touch the settings icon.

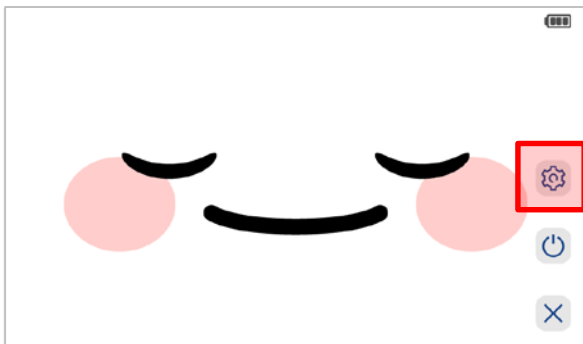


④ Adjust the brightness by adjusting the brightness setting bar with the brightness icon.

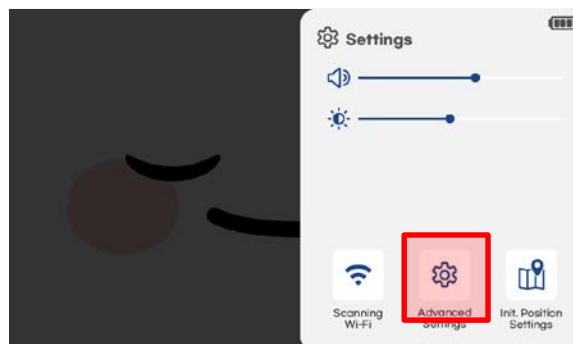
■ SIRBOT Setting

2.4 Advanced Settings - Detail Set.

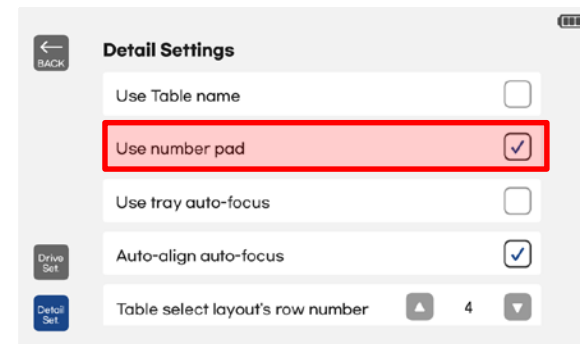
2.4.1 Table window number/table mode change



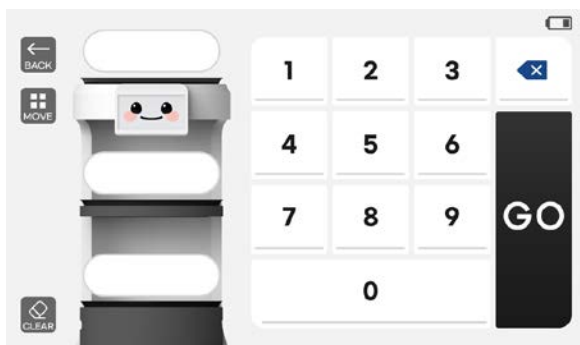
① Touch the settings icon.



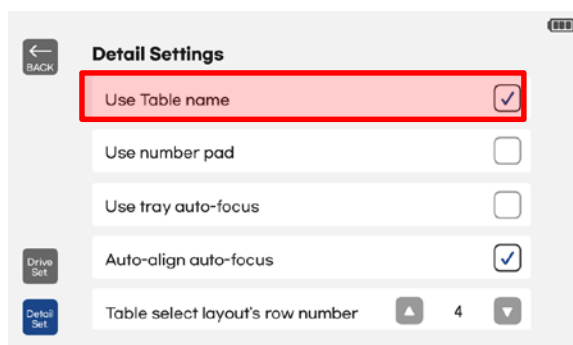
② Touch the Advanced settings icon.



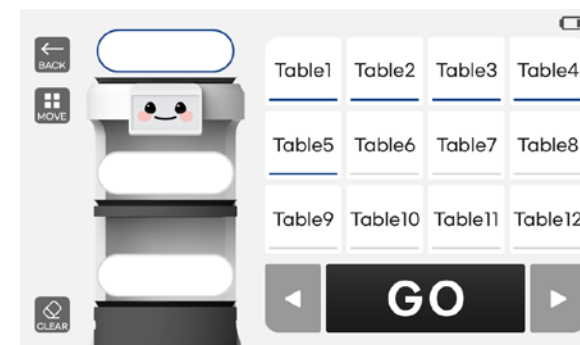
③ On the Advanced Settings screen, check the 'Use number pad'.



④ When serving, it can be used as a direct input method of table number rather than a preset table.



⑥ Uncheck '③' and check 'Use Table name'.

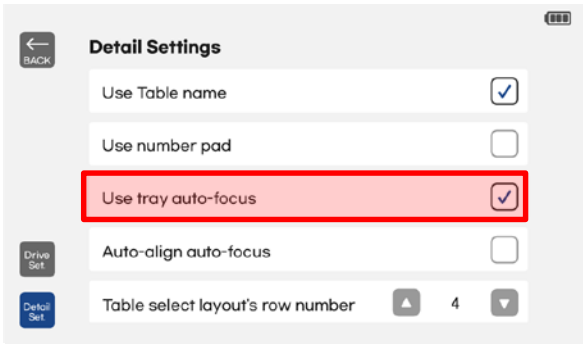


⑦ When serving, you can serve with a predefined table shortcut key.

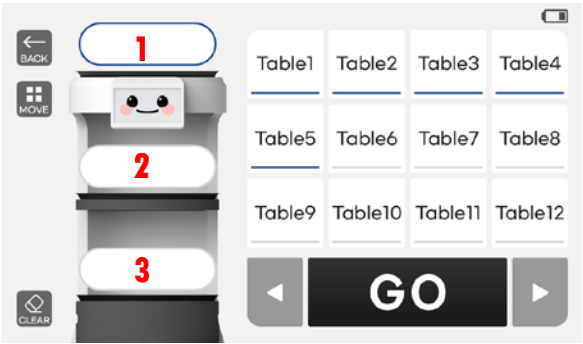
■ SIRBOT Setting

2.4 Advanced Setting - Detail Set.

2.4.2 Automatic tray selection

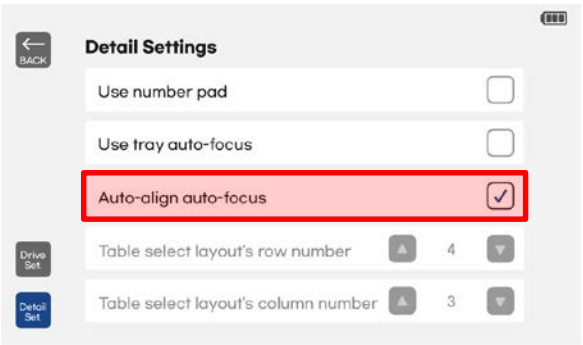


① Check 'Use tray auto-focus'.

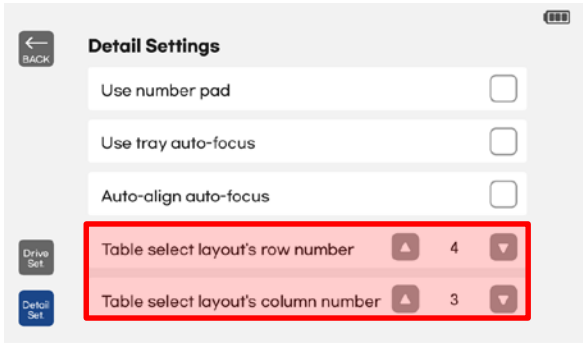


② When entering the serving position, it is automatically entered from the top of the tray.

2.4.3 table sort



④ When 'Auto-align auto-focus' is selected, the table selection window is automatically aligned in 4 rows x 3 columns.

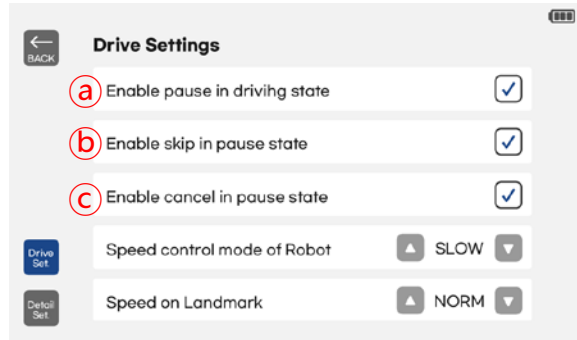


⑥ When 'Auto-align auto-focus' is turned off, you can directly designate rows and columns.

■ SIRBOT Setting

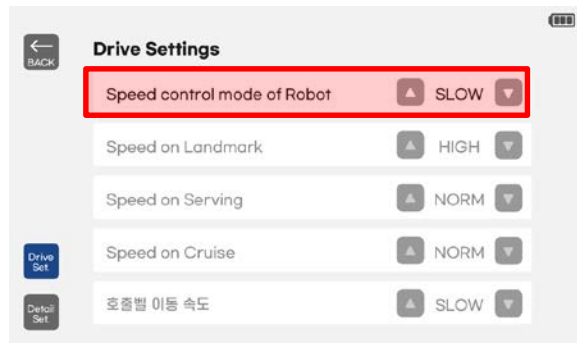
2.4 Advanced Setting - Drive Set.

2.4.4 Pause function setting

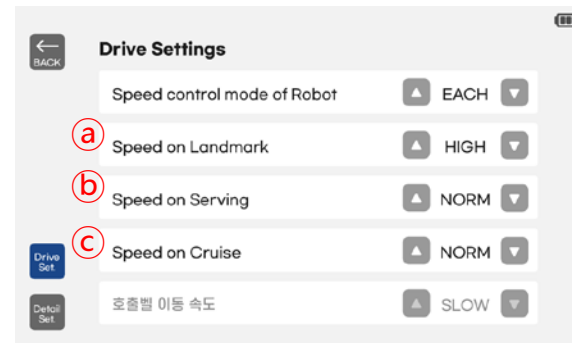


- ㉠ When this part is activated, if you touch the screen while driving the robot, it will be paused.
- ㉡ When this part is activated, the 'Skip' function is activated on the pause screen.
- ㉢ When the part is activated, the 'Cancel' function is activated on the pause screen.

2.4.5 Driving speed setting



- ① Four types of 'robot speed control method' of 'NORM, HIGH, SLOW, EACH' can be set.



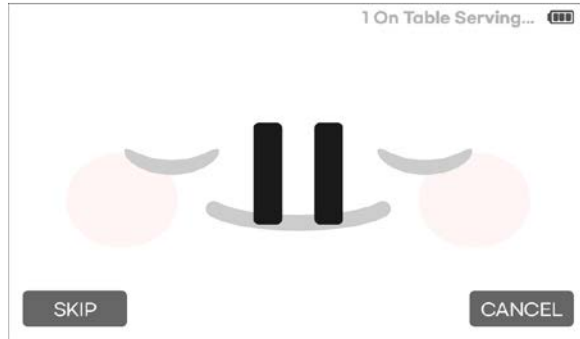
- ② When 'EACH' is set, ㉠, ㉡, ㉢ part can be individually set.

- ㉠ setting the speed of moving to the Landmark.
- ㉡ setting the speed of moving to the Serving
- ㉢ setting the speed of moving to the Cruise

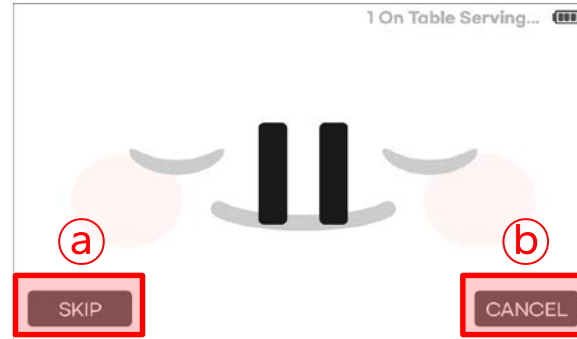
■ SIRBOT Setting

2.5 Stop During Operation

2.5.1 Stop during operation



① When the robot is moving, if you touch the expression screen, it will switch to a pause state.



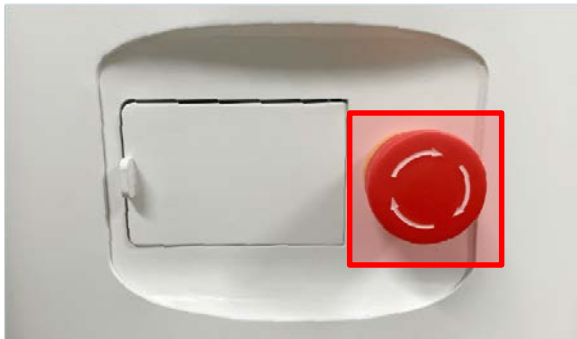
②-① . When the 'Skip' icon is touched in the stopped state, it moves to the next serving position.

②-② When 'Cancel' is touched, all movements are canceled.



③ If you touch the screen again in the paused state, it will drive along the set path.

2.5.2 Emergency



If the robot shows abnormal movements such as collision or deviation, you can force stop it by pressing the emergency stop button.

✗ When the emergency stop button is pressed, the robot can be moved by directly pushing it.

When the emergency stop button is pressed 16p 2.6.2 Refer to 2 to reset the location.

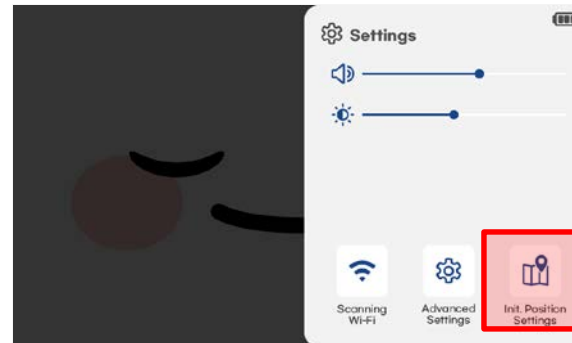
■ SIRBOT Setting

2.6 Reset Location

2.6.1 Reset from current location



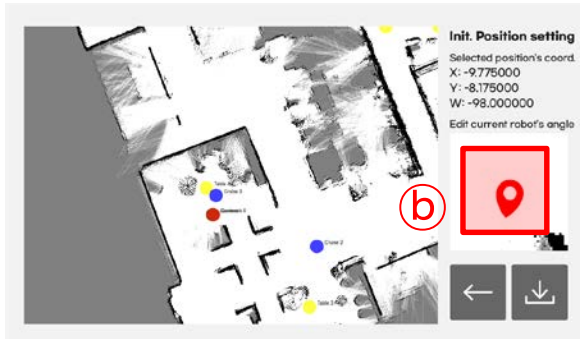
① Touch the setting icon.



② Touch the initial position setting icon.



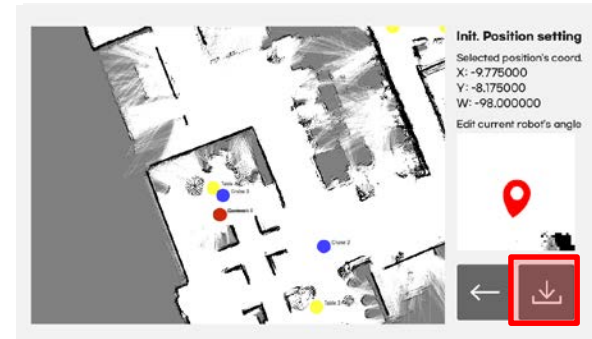
③ Check the robot's current location, and if the location is different, specify it directly on the map. The red circle (a) is the current position recognized by the robot.



④ Check if the direction (b) of the robot is correct based on the direction of the robot monitor and designate the direction.



⑤ Do not set the position where the background color of the 'Current robot angle setting' part changes to red. A location close to an obstacle.

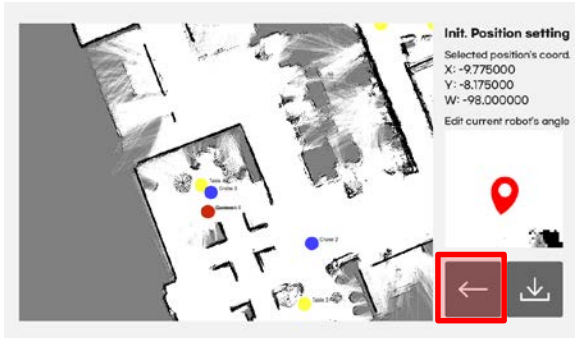


⑥ Save the current state.

■ SIRBOT Setting

2.6 Reset Location

2.6.1 Reset from current location

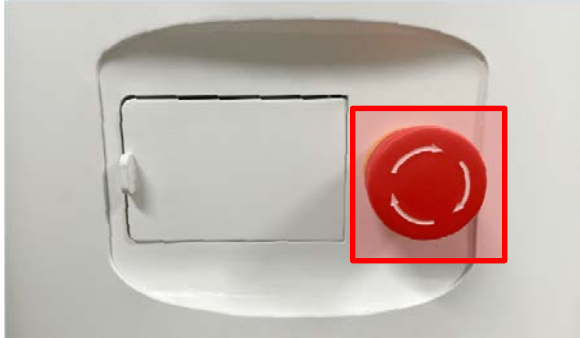


⑦ Touch the Return button.

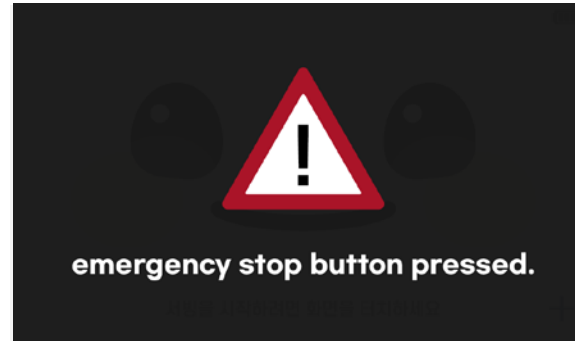
■ SIRBOT Setting

2.6 Reset Location

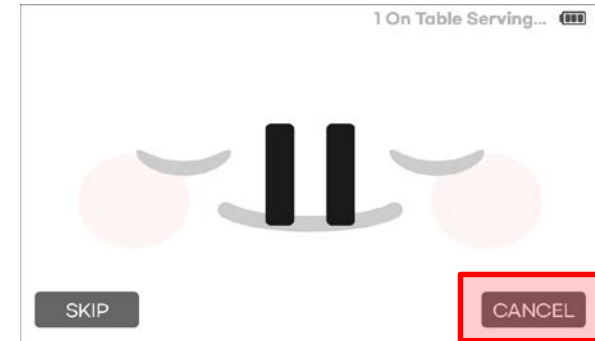
2.6.2 Reset after moving to initial position



① While pressing the emergency stop button, move it to the standby position as slowly as possible.



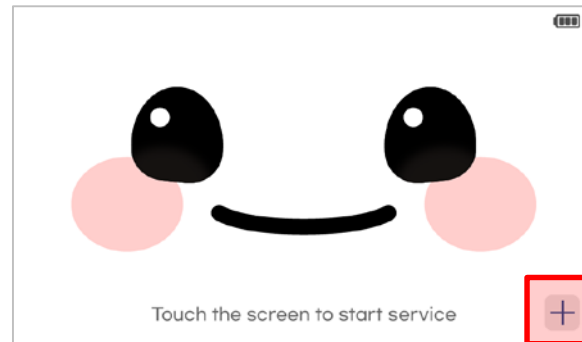
② Release the emergency stop button in the emergency stop screen state.



③ Touch the cancel button.



④ Touch the Back button.



⑤ Touch the + icon on the main screen.

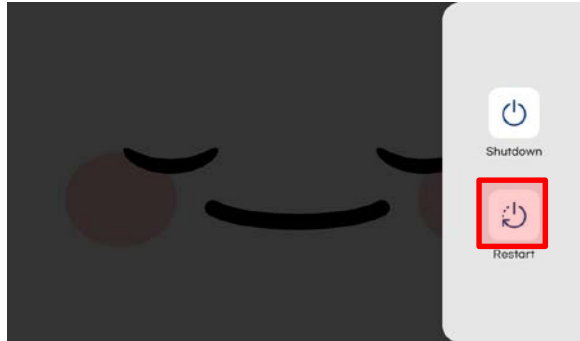


⑥ Touch the setting icon.

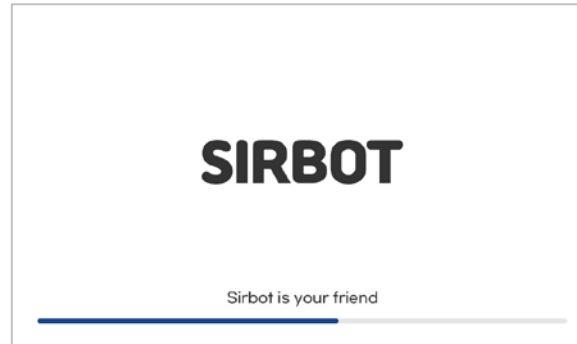
■ SIRBOT Setting

2.6 Reset Location

2.6.2 Reset after moving to initial position



⑦ Touch the restart button.



⑧ It will reboot. When rebooting, the current location is set to the initial location.

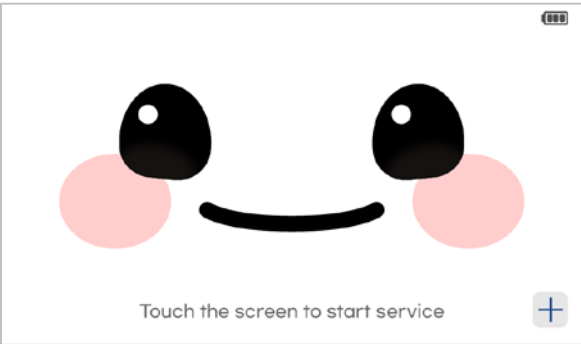
■ How to use

3.1 Serving Mode

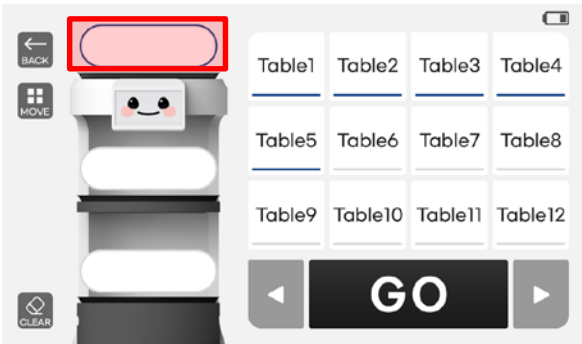
3.1.1 How to use serving mode



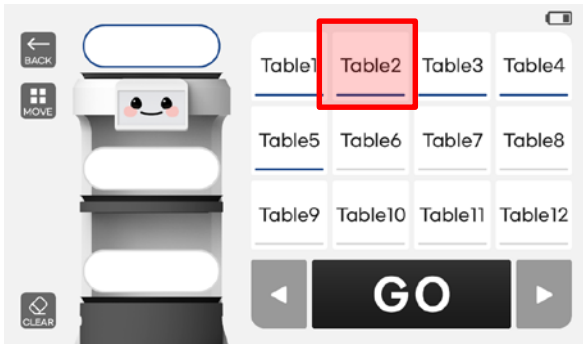
① Touch the standby screen.



② Touch the main screen.



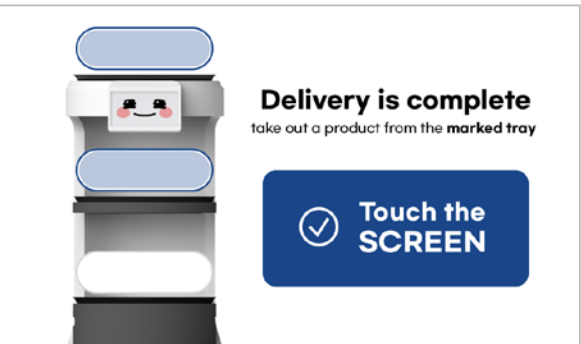
③ Touch the tray you want to serve.



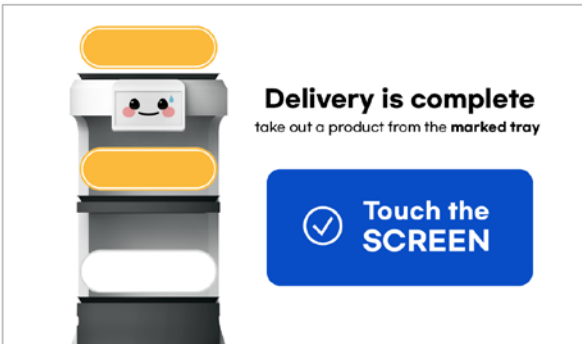
③ Please select the table number you want to serve. You can also enter the same table number in another tray.



④ Touch the 'GO' button and the robot will start serving in that position.



⑤ When you arrive at the table to be served, you take out the food and touch the screen.



⑥ If serving is delayed, the icon turns amber to indicate a non-receipt notification.

※ When some deliveries are completed, move to the next table
※ Return to standby position upon completion of delivery

■ How to use

3.1 Serving Mode

3.1.2 Table Favorites



① Touch and hold the table you want to Favorites for 3 seconds.



② When you click a table that needs setting as a favorite, the sort order is displayed in the upper right corner. Click the 'SAVE' button to save the settings.



③ When you have finished setting your favorites, at the bottom of the buttonA blue bar is displayed. The table is rearranged in the order you set.

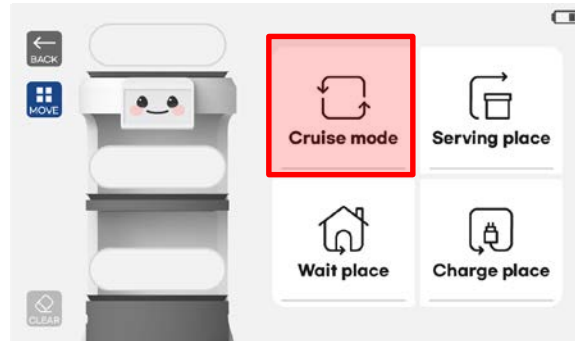
※ cancel the current table favorite setting by clicking the Back button.

■ How to use

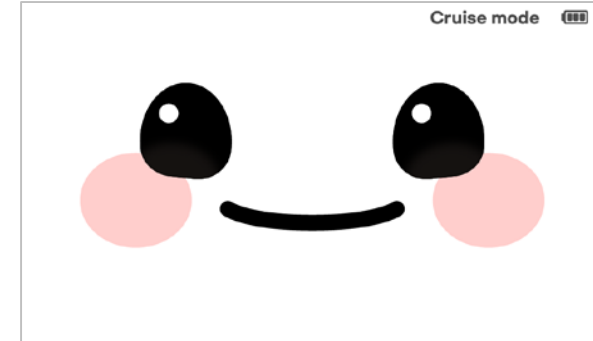
3.2 Cruise Mode



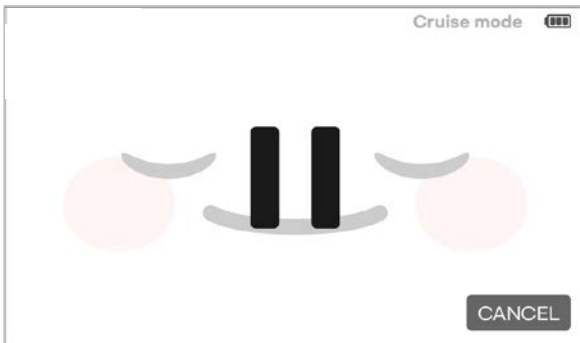
① Touch the move button in the upper left corner of the serving mode.



② When the menu icon is displayed, touch the cruise mode icon.



③ The word 'cruise mode' is displayed in the upper right corner and the cruise mode starts at the designated location. Move to the nearest location and then move in order.



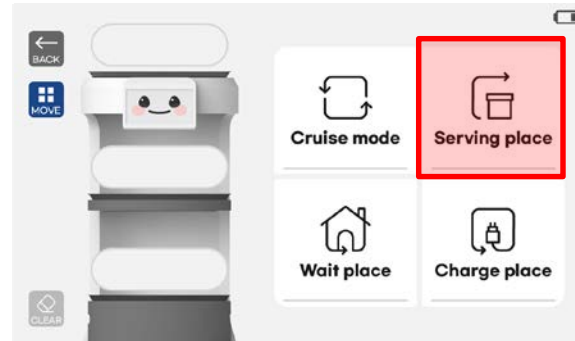
④ If you touch during cruise mode, 'II' appears and movement stops. Touch again to drive again. When you touch 'Cancel', all movements are stopped.

■ How to use

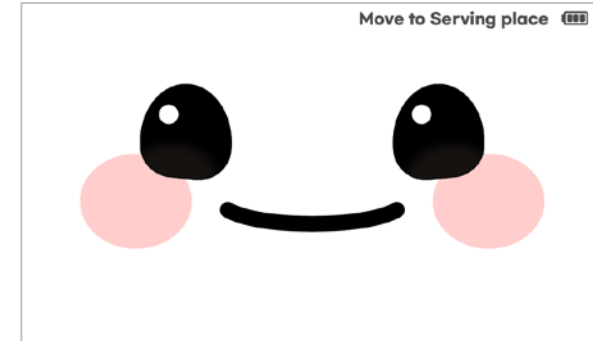
3.3 Serving place



① Touch the move button in the upper left corner of the serving mode.



② When the menu icon is displayed, touch the serving place icon.



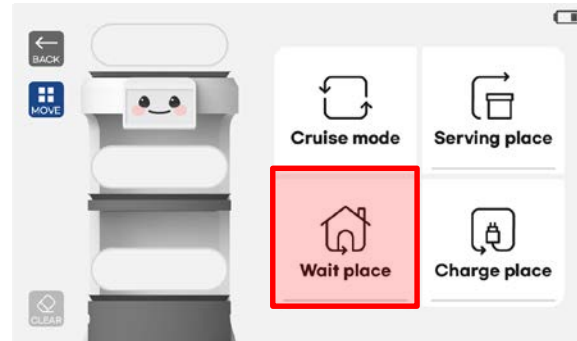
③ The word 'moving to Serving place' is displayed in the upper right corner, and it moves to the serving location.

■ How to use

3.4 Wait place



① Touch the move button in the upper left corner of the serving mode.



② When the menu icon is displayed, touch the wait place icon.



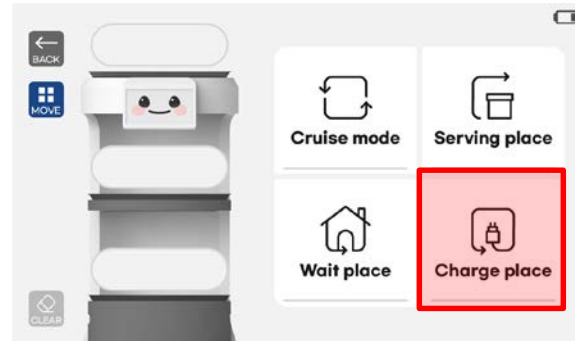
③ In the upper right corner, 'Moving to Wait place' is displayed and it moves to the standby location.

■ How to use

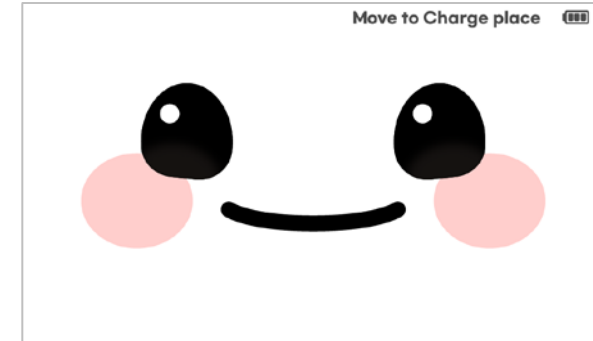
3.5 Charge place



① Touch the move button in the upper left corner of the serving mode.



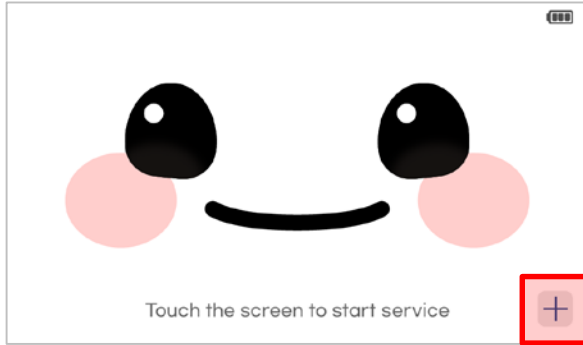
② When the menu icon is displayed, touch the charging place icon.



③ In the upper right corner, 'Moving to Charging place' is displayed and it moves to the charging location.

■ How to use

3.6 Charge Method



① Touch the + icon on the main screen.



② Touch the setting icon.



③ Touch the Power button.



④ Change the power switch at the bottom of the back of the robot to the 'O' position.



⑤ After the power is completely turned off, plug the cord into the charging terminal and switch the **charging switch** to the 'I' position.

- ※ When turning on the power, move it to the initial position and turn it on.
- ※ It is prohibited to turn on the power while the cord is plugged in.

■ Precautions

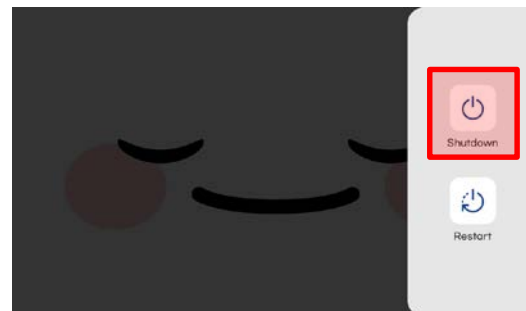
4.1 Precautions

※ If you do not follow the following precautions, it may cause product failure or shortening of life, so please read and follow them.

1. **When charging, change the robot power to OFF. It may cause malfunction.**
2. **When powering on the robot, the emergency power switch behind the robot must not be pressed.**
3. **When turning on the power of the robot, it must be placed in the same position and direction as the direction guided by the staff who installed it and then turned on.**
4. **When powering off the robot, it is necessary to change the power switch to OFF after a normal shutdown on the user screen.**
Frequent physical force shutdown with buttons can cause system failure.
5. **Environment cleanup is required before initial setting (mapping). Since the vehicle is driven by recognizing the terrain features of the initial setting, please minimize environmental changes after the initial setting.**
6. **Disassembly of the product is prohibited under any circumstances. A/S is not available when disassembling.**
7. **It is forbidden to remove the transparent seal of the bolted joint. When it is removed, it is regarded as product disassembly and A/S is not possible.**
8. **Remove low-height obstacles from the movement path. The robot may not recognize obstacles. (ex. wires, etc.)**



※ Reference image for '1'



※ Reference image for '4'



※ Reference image for '7'



※ Reference image for '8'

■ Precautions

4.1 Precautions

FCC Statement

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

User Warning

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

FCC RF Radiation Exposure Statement

The devices has been evaluated to meet general RF exposure requirement the device can be used in portable exposure condition without restriction.

■ Precautions

4.2 Frequently Asked Question & Answer

Q. Power does not turn on.

A. The robot may be discharged. Charge it and turn it on again.

Q. The robot does not drive.

A. ① Check for obstacles blocking or narrowing the path the robot is moving, and keep them out of the way.

② In the case of the serving location, please check that the designated angle is correct.

③ Check if there is any foreign material in the gap where the LiDAR sensor is located.

④ Check that the emergency button is pressed.

Q. The robot can't get to its destination

A. ① Check for obstacles blocking or narrowing the path the robot is moving, and keep them out of the way.

② If there is an object at the destination, it will not arrive. If you wait, it will stop at a nearby location.

Or, touch the screen to move to another location after 'Skip' or 'Cancel'.