

# Deligo Food Delivery Robot Manual

**Version:1.0.3**

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## 1、 Robot introduction

### Safety use requirement

- ✧ Use the robot in the range of 5°C to 40°C and store the robot and its accessories in the range of 0°C to 50°C.
- ✧ Do not use the robot immediately after a great temperature change (e.g. from cold outdoor to warm indoor).
- ✧ Do not use the robot in a dust, wet, rainy, dirty or close to the magnetic environment.
- ✧ Do not use the robot in a flammable, explosive, and an environment close to the heat source.
- ✧ Do not place the robot in direct sunlight for long time.
- ✧ The ground of the robot operation area should be solid and smooth, and It is not recommended to use it on carpet, soft and trench ground and outdoor places.

(As the robot can move and complete all kinds of actions intelligent, please pay special attention: do not move on the slope, to prevent accidental dumping or uncontrolled operation of the robot, damage caused by robot damage and equipment, facilities, items damage, if

moving in the slope of the road, need to have special care)

- ✧ Please note that there are steps or step positions to avoid the robot movement in this area in case of falling.
- ✧ In all glass doors and all-glass walls, be sure to paste safety identification signs 22cm-25cm from the ground.
- ✧ Do not fall, drop, squeeze, bend, poke, cut, microwave, burn or paint the robot and part.
- ✧ Do not attempt to dismantle the robot and its accessories, the dismantling operation can only be performed by authorized professionals.
- ✧ Do not apply too much pressure on the screen and device to avoid damage, Please use your fingers to interact with the touch screen.
- ✧ To ensure the reliability of the product, please use the exclusive accessories of the robot.
- ✧ Avoid obstacles with too low height (the obstacle height shall not be lower than the ultrasonic sensor and laser sensor installation position, do not lower than 25cm).
- ✧ Avoid escalators, stairs, steps and other environments with a drop of more than 2cm.

## Charging precautions

- Please use the robot's original DC power supply cable and charging pile to charge the robot.
- Please use the power supply with the correct grounding, which meets the local regulations and this manual , otherwise it will cause electric shock and damage to the robot.
- Do not fall or impact the charging pile.
- Do not touch the power cord with a wet hand, or pull out the charging pile by pulling on the power cable.
- Pay attention to the charging pile to avoid being soaked, wet, damp.
- If you don't use the robot for a long time, it is recommended that you charge it every 15 days or so to keep the battery active.
- Do not use this batteries for other devices
- Do not try to contact the charging pile and the robot's charging port output end, there may be some risks.
- The charging pile should be close to the wall and empty within a radius of 2 meters.

 **Special attention: improper operation of the battery will cause battery explosion, fire, leakage**

corrosion and other accidents.

## 1.1 Robot component summary



- 1, 7-inch display
- 2, microphone
- 3, Intelligent lighting effect
- 4, ladar
- 5, Deep visual camera
- 6, Infrared sensor
- 7, Automatic charging contact sheet
- 8, emergency stop switch
- 9, Visual camera
- 10, One button to return
- 11, Power switch

## 2、 Use introduction

### A. Meet your robot

**Start on: Continue** pressing the figure below [switch button], about 1~2 seconds, the buzzer a short "Click", the light bar in the machine will turn on, waiting for the machine to turn on.



**Shut down: Continue** pressing [switch button] for about 3 seconds, the beep "Click" screen will first rest screen shutdown, and then the motor power off.

**Charging:** Insert the adapter plug into the voltage of 110-220V, the DC head plug into the automatic charging pile, when the green light of the charging pile will be green, indicating the ready charging state.

① Manual charging: Push the robot on the charging pile, so that the charging tablet behind the robot can fully contact the charging tablet on



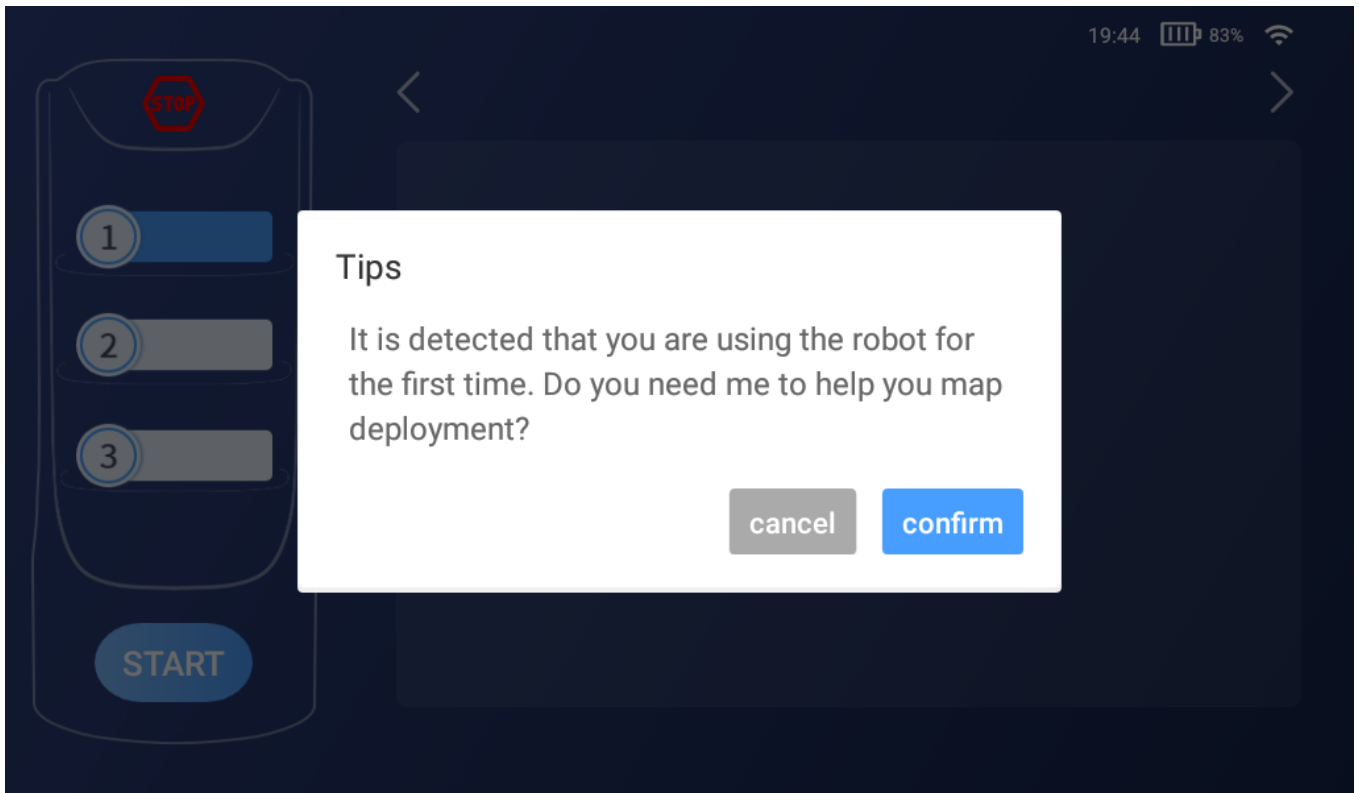
the charging pile. The charging pile display light shows in red indicating that the machine is charging

② Automatic charging: Refer to the following navigation deployment, deploy the charging pile point, open the [Deligo] application on the Android screen, and customize the power value that can trigger the automatic recharging

## **B. Debugging robot**

a. After the following interface will pop up, please select the language you need, and then make the network connection.

b. After enterinmain interface, there will be an interface guidance. Please follow the following operation in the guide language, and click "confirm" to enter the map deployment interface.



c, Start scan — by pressing the emergency stop switch and start pushing the robot to scan the environment.

Lift the yellow lid on the top of the robot and press the red emergency stop switch inside



People stand behind the robot and push the robot for map construction

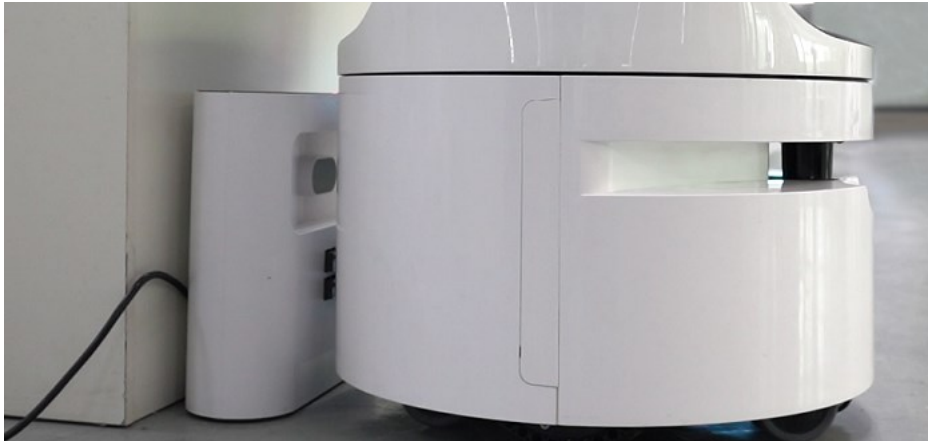
d. After scan — scan is completed, do not move the robot and wait in place for 2 minutes, and click on "Save Map" - "confirm" on the screen.

e. Mark the table point — Move the robot to the distribution point, click

"Add a delivery point" on the screen to make calibration, there is no upper limit on the point.

f. Mark the production point —— "production point" refers to the window where the robot takes the meal, move the robot to the food collection window and click the "production point location" on the screen.

g. Mark the charging pile —— connects the robot and the charging pile shrapnel, then click the "charging pile position" on the screen, as shown in the figure below. (Click " Exit map deployment" when complete).



**Note:** After the setting, please contact the corresponding technical personnel to check the map and confirm that there is no problem.

## C. Function explanation

a, Slide from the right of the screen for more convenient operation, the interface below



① **Go to the charging pile:** The robot will go to the charging pile for charging

② **Go to the production point:** The robot will go to the meal pick up point

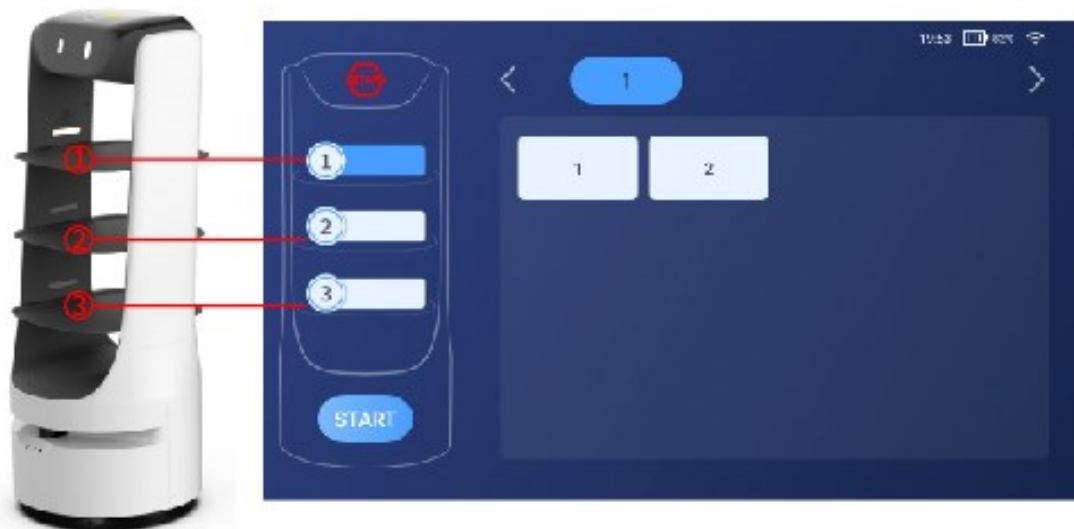
③ **More settings**

- Current language: The languages can be changed
- Robot waiting time when arrived in tables: you can adjust the time according to your requirement
- Repositioning: Move the robot to the repositioning location and turn right the robot emergency stop switch , and click the repositioning button, the robot will reposition the current position
- Work time: Switch on the robot, it will automatically go to the production point according to working time set, after the off work time , it will automatically return to the charging pile for charging.
- Automatic charging power: Set a battery remaining rate, when it arrived the rate you set, automatically back to charging pile for charging

- Current version: The version number of the application
- ④ **WiFi connection:** You can change to other WIFI name
- ⑤ **Map deployment:** You can re-enter the map to add points or rebuild the map

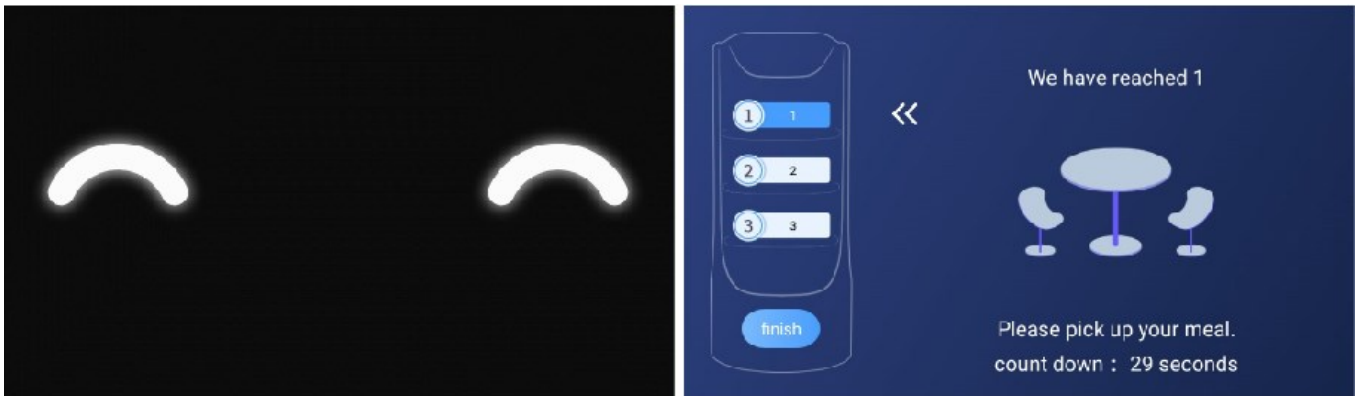
## **b, Select the table**

As shown below: the 1,2 and 3 displayed on the selection table interface correspond to the meal tray on the delivery robot, and one meal tray can only choose one delivery point



## **c, food delivered**

- ① The robot will deliver meals according to the selection table of the plate , the robot will arrive at the target point after the countdown, after the countdown will go to the next delivery point or use the shortcut key (the shortcut key is located at the top of the robot to put the hand in the touch sensing area after the machine senses the countdown ends early)
- ② When the robot arrives at the delivery point, the tray light will turn on and the rest of the tray light will turn off

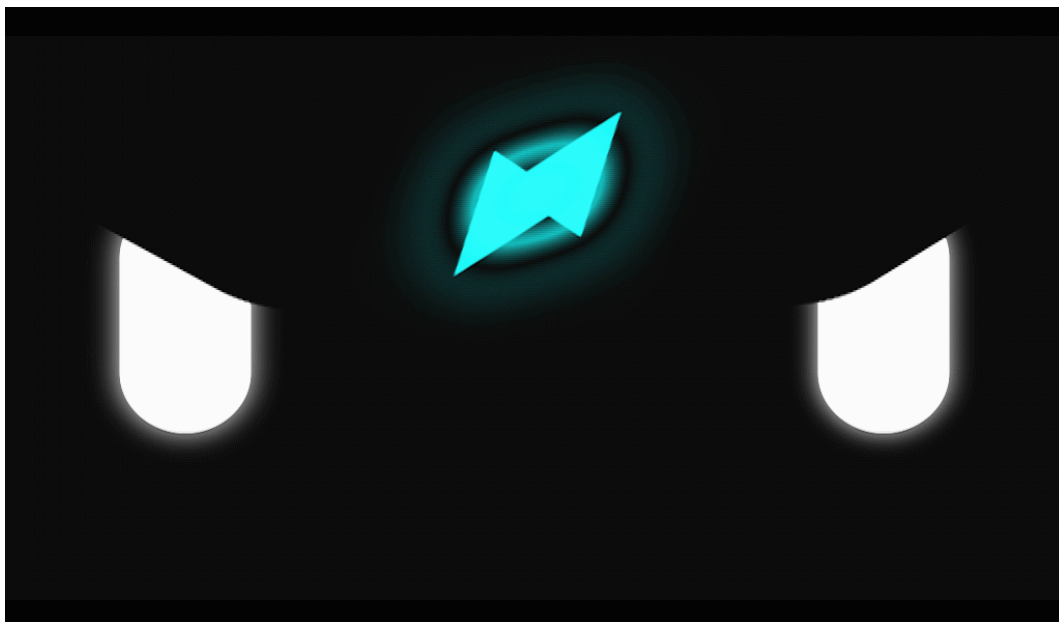


Interface status during delivery

The interface state after reaching the target

## d, Charge

- ① When the robot switch on, the robot will return to the charging pile for charging after the battery lower than the battery remaining rate you set, The low power rate plus 20% , the robot will continue to delivery working.
- ② The robots start charging is shown in the picture as below. If put hand on the top side of the robot, the robot will move forward 20cm away from the charging pile and exiting charging status.



**Note:** This manual is a simplified version of the operation , if you need to know more, please take detailed manual a.s reference.