UBTECH | ADIBOT

ADIBOT A

USER MANUAL

AI Fearless | Clean Endless

Shenzhen UBTECH Robotics Corp Ltd.

CONTENTS

Preface

◆ Thank you for purchasing ADIBOT-A equipment from UBTECH Robotics Corp. This user manual is only applicable to the operation of ADIBOT-A.

◆ In order to ensure safe use of ADIBOT-A and quickly grasp the usage method,please read this manual carefully.

◆ "ADIBOT-A", "robot", and "it" mentioned in this manual refer to the ADIBOT-A robot, and "you" refers to the user.

◆ This manual is for user's reference and guidance only, and the description may not be detailed enough. If you encounter any problems that can not be solved, please contact UBTECH for technical support.

◆ This manual will be updated from time to time, and the latest user manual will add the latest content and pictures without further notice.

◆ The functions of Wireless Access Systems including Radio Local Area Networks(WAS/RLANs) within the band 5150-5350 MHz for this device are restricted to indoor use only within all European Union countries (BE/BG/CZ/DK/DE/EE/IE/EL/ES/FR/HR/ IT/CY/LV/LT/LU/HU/MT/NL/AT/PL/PT/RO/SI/SK/FI/SE/TR/N O/CH/IS/LI/NI).

Disclaimer

- Failure or damage caused by the user not following the method described in the operating instructions.

- Failure or damage caused by the repair being operated by a non designated service organization.

- Failure or damage caused by unauthorized modifications of parts and circuits of this product.

- Failure or damage caused by force majeure factors (such as fire, earthquake,weather, etc) .

- Failure and damage caused by using a non-designated power supply (voltage or frequency) or abnormal voltage.

- Failure and damage caused by using a non-specified charging dock or charging cable.

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Part I Product Overview

1.1 Packing List

（a）　　　（b）　　　（c）　　　（d）

（e）　　　（f）　　　（g）　　　（h）

（i）　　　（j）　　　（k）

1. **Packing list**

   a. Robot Body*1

   b. Protective Cover*1

   c. Safety Sign*1

   d. Charging Dock*1

   e. Power Adapter*1

   f. User Manual*1

   g. Dosimeter card*10

   h. UVC goggle*1

   i. USB Dongle(4G)*1

   j. Tablet PC*1

   k. 3*50mm Cross Screwdriver*1

（a）　　　（b）

2. **List of self-provided materials**

   a. USB 4G SIM Card*1

   b. Eight AA batteries*1

1.2 Product Overview

ADIBOT-A adopts the strongest ultraviolet sterilization band 253.7nm. It destroys the gene structure of pathogens to deprive their reproductive capacity and make them lose infectivity. Strong irradiation can eliminate more than 99.99% of harmful pathogens, including COVID-19 virus, SARS virus, fungi, and bacteria.

1. Front View

Lidar Sensor

Indicator

RGBD TOF Camera

HD Camera

UVC Lamp

Hand Pusher

Reflector

UVC Lamp

LIDAR Sensor

Speaker

Ultrasonic sensor

Anti-Collision Bar

2. Rear View

Antenna

PIR Sensor

ON/OFF

Emergency Button

Debug Interface

USB Dongle(4G)

Warning Sticker

Power Cord Port

Air Vent

Network Settings Button

Omni-Directional
Wheel

Infrared Receiver

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3. Bottom View

Infrared

Charging Copper
Sheet

Hub Motor

Omni-Directional
Wheel

Magnetmeter

4. Charging Dock

LED Indicator

Radar Identification
Board

Infrared Transmitter

HALL Sensor

Electrode Contactor

Front View

Charging Port

Back Elevation

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1.3 Product Specifications

Basic Parameters	
Chinese Abbreviation	ADIBOT 净巡士 (智能版)
English Abbreviation	ADIBOT-A
Product Model	ADAA201
Product Design	Mobile tower-type robot, with lamp Set on the flanks
Product Color	Grey lower body and stainless steel armrest
Product Size	555(L) * 609(W) * 1725(H) (mm)
Package Size	780(L) * 840(W) * 1880(H) (mm)
Product Weight	79kg
Gross Weight of Product	160 kg(including the packing box)
Tablet PC	Lenovo Tab M10 FHD Plus
Working Temperature	0 to 40℃ (for indoor use only)
Working Humidity	10% to 85% (for indoor use only)
Storage Temperature	-20℃~60℃
Storage Humidity	≤95%
Bactericidal Factor	UVC(ultraviolet ray)
After-sales Service	1-year warranty, 2-year extended warranty can be purchased
Acoustic Equipment	amplifier speaker*2
Acoustic Equipment Power	6W*2
UVC Lamp	
Disinfecting Lamp	UVC lamp 1 * 8"+"UVC lamp 2 * 8
Radiation Wavelength	253.7nm
Irradiation Intensity of Lamp 1	141μW/cm²
Power of Single Lamp 1	41W

Length of Lamp 1	851mm
Life of Lamp 1	12000h
Power of Single Lamp 2	14W
Irradiation Intensity of Lamp 2	40μW/cm²
Length of Lamp 2	295mm
Life of Lamp 2	12000h
Total Power of Lamps	440W
Main Chip and Memory	
CPU	Intel X86 processor
RAM	8G
ROM	64G
Operating System	Ubuntu 18.04
Network	
WiFi	2.4GHz/5GHz 802.11b/g/n/ac
Bluetooth	Bluetooth 5.1
Battery	
Battery Type	Lithium iron phosphate Battery
Battery Capacity	24V100AH
Charging Duration	About 3.5 H
Disinfection Duration	About 5H (in-place disinfection)
Input Voltage	AC100-240V
Output Voltage	DC29.2V
Frequency	50/60Hz
Output Current	30A
Motion Capability	
Number of Chassis Wheels	2 driving wheels "+" 2 driven wheels
Move Mode	Forward
Turn Mode	Spin turn supported
Obstacle Clearing Capability	≤7mm

Ditch Crossing Capability	≤2cm
Climbing Height	≤5°
Ground Friction Coefficient	≥0.5

Part II Safety

2.1 Gerneral Rules

Please read the following information carefully. Any direct or indirect losses caused by the unnormal operation of the product will not be beared.

Cautions

◆ To ensure safety, you are strongly recommended to follow the safety rules below when operating the robot.

◆ We do not guarantee that the manual covers all the possible circumstances.

◆ Please operate the product carefully and ask UBTECH technical suport for help if not familiar with the operation.

◆ ADIBOT-A is equipped with multiple safety sensors that can ensure safe operation. They work in parallel to minimize risks to r others

◆ Please do not use the robot to perform any operations related to personal safety.

◆ Please keep children under 6 years old far away from ADIBOT-A.

◆ Please keep any other persons , animals and plants far away from ADIBOT-A.

2.2 Safety Precautions

Danger	Danger is a situation that will cause very serious injuries if not being avoided.
Warning	Warning is used to indicate a dangerous situation,which may cause severe injuries if not being avoided.
Caution	Caution is used to remind you of a dangerous situation,which may cause minor or moderate injuries if not being avoided.
Notification	Notification is used to indicate the safety practice that is not harmful to human body such as maintenance informations which may cause the robot damaged.

Danger

◆ Do not touch ADIBOT-A when it is working, unless emergency circumstances.

◆ Do not put your toes into the chassis of ADIBOT-A, which may damage your toes.

◆ Do not stare at a turned-on UVC lamp for a long time,for the UV light may burn your skin and eyes, which may cause temporary blindness.

◆ Do not allow ADIBOT-A to be used in areas with incline, cliff or ladder.

◆ Do not allow any other substances fall into the gap of the robot, which may cause an electric shock or short circuit fault.

◆ When ADIBOT-A is operating, do not stand in a place directly exposed to UVC light (unless you are wearing qualified protective clothing). Standing there might hurt you.

Warning

◆ Please make sure that ADBOT-A is operated by professional and technical personnel or those who are familiar with the product.

◆ Please avoid any other substances fall into the gap of the robot, which may cause an electric shock or short circuit fault.

◆ Please keep ADIBOT-A dry,and prevent it from being operated in a humid environment, that can prevent the camera of the robot body from coming into contact with substances such as oil, steam, water vapor, moisture and dust. The normal operating humidity range of ADIBOT-A is 10% to 85%.

◆ Please keep ADIBOT-A away from open fire and heat sources, for the purpose of avoiding direct sunlight, which may damage the imaging sensor of the camera,lidar and other sensors . For the normal operating temperature range of ADIBOT-A is 0 to 40°C (32 to 104°F).

◆ Please do not cover any sensor of the product, which can affect the normal operation of its sensor.

◆ Please do not use irritating detergent or organic solvent to wipe the camera lens.

◆ Please make sure that all the maintenance operations be performed under the guidance or supervision of a technician of ADIBOT-A.

Cautions

◆ Please do not lean on ADIBOT-A.

◆ The ADIBOT-A ultraviolet sterilization lamp produces very little ozone during use, but the ozone concentration is harmless to human body.

◆ Please choose a three-phase plug to reduce the risk of electric shock.

◆ Please press the emergency button if your robot is out of control.

◆ Please make sure that ADIBOT-A is used indoors only.

◆ Please do not allow ADIBOT-A to be used on sloping areas.

◆ Please ask assistance to help pass when the ground bulge is higher than 5mm, the free push of Adibot-A is easily blocked.

◆ Please dispose any broken lamp according to the local laws and regulations based on mercury which is in the lamps.

◆ If ADIBOT-A failed to operate normally, especially when you detect unusual sound, smell, or smoke. Please take protection measures, and immediately press the emergency button, turn off the power supply of the robot, unplug the power cord, and contact the ADIBOT-A technical support for help.

◆ Please be sure to stick a geomagnetic stripe near the area where the robot may falling.

Battery Safety Alerts:
◆ Risk of explosion if the battery is replaced by an incorrect type.
◆ Disposal of a battery into fire or a hot oven, or mechanically crushing or cutting of a battery, that can result in an explosion.
◆ Leaving a battery in an extremely high temperature surrounding environment that can result in an explosion or the leakage of flammable liquid or gas.
◆ A battery subjected to extremely low air pressure that may result in an explosion or a leakage of flammable liquid or gas.

2.3 Warning Sign

2.4 Charging Indicator

The lamp signals of different colors provide the operator effective status indication of the robot. You can indicate the various states of the robot through the indicator light.

Body Lights Status

LED	Status
◯ Normally on in white	Normal operation
◯ White breathing	Standby mode
🔵 Normally on in blue	In disinfection with lights on
🔵 Blue breathing	In disinfection task
🟢 Normally on in green	Charge finished
🟢 Green breathing	In charging
🔴 Normally on in red	Robot status abnormal
🔴 Flashing red	Emergency button pressed
🔴 Red Breathing	Low battery reminder

Part III Device Operations

3.1 Power on/off

3.1.1 Power-on

Steps:

Step 1. Press the power button (Figure 3.1.1.a) on the chassis;

Step 2. Press and hold the On/Off button (Figure 3.1.1.b) on the back for 3 seconds to start the robot.

Cautions:

1. Perform step 1 only if the power button is turned off, i. e. for first time use;

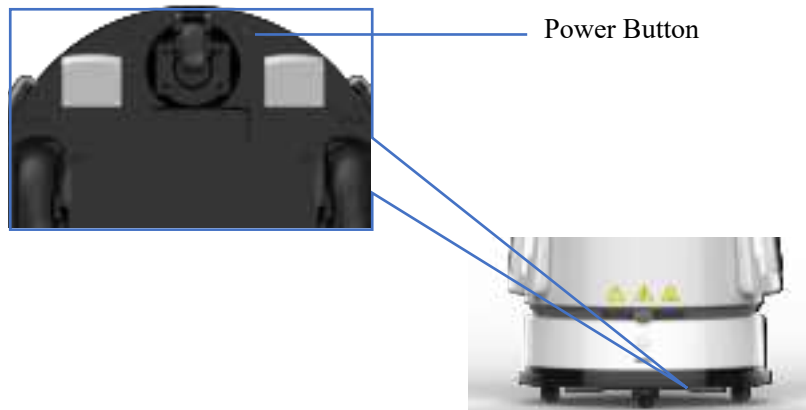2. If the power button is turned on, just go to step 2.
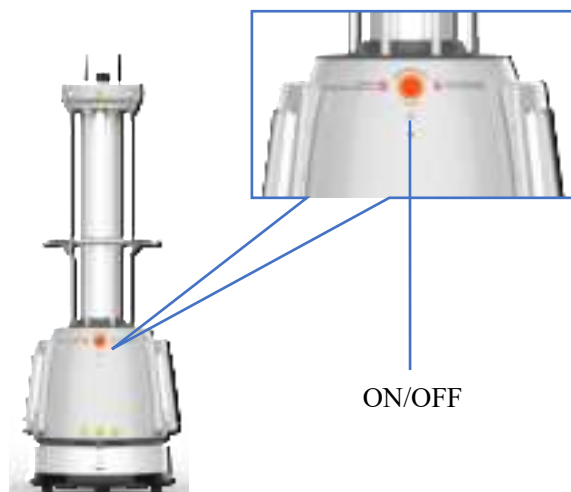
Power Button

Figure 3.1.1.a

ON/OFF

Figure 3.1.1.b

3.1.2 Power-off

Steps:

Step 1: Press and hold the On/Off button (Figure 3.1.1.b) on the back for 3 seconds to shut down the robot;

Step 2: (If the product will be used in a long time) Press the power button (Figure 3.1.1.a) on the chassis to turn off the power supply.

Cautions:

1. Decide whether to turn off the power supply according to the actual situation;

2. It is strictly forbidden to Shut down the robot by perform step 2 before step 1, as it may damage the robot.

3.2 Install the Charging Dock

Cautions:

1. Plug the charging cable into the dock and keep the back of the robot against a wall.

2. Place the charging dock on a dry and flat ground and beside a wall where few people pass by.

3. We highly recommend that no obstacles within 2m in front and 1m on the left and right of the charging dock.

Figure 3.2

Charging Dock Lights Status

LED	Status
🟢Green light for a long	In charging
🔴Red light for a long	Waiting for charge
🔴Red lamp flashing	Charging Dock abnormal

3.3 Charging

1. Method 1: You can select a suitable power adapter and insert it into the charging port of the robot straightly(Figure 3.3.a).

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Figure 3.3.a

2. Method 2: You can insert the adapter into the charging dock (with the alignment of the positive and negative poles), which allowing the robot to be charged on the dock (Figure 3.3.b).
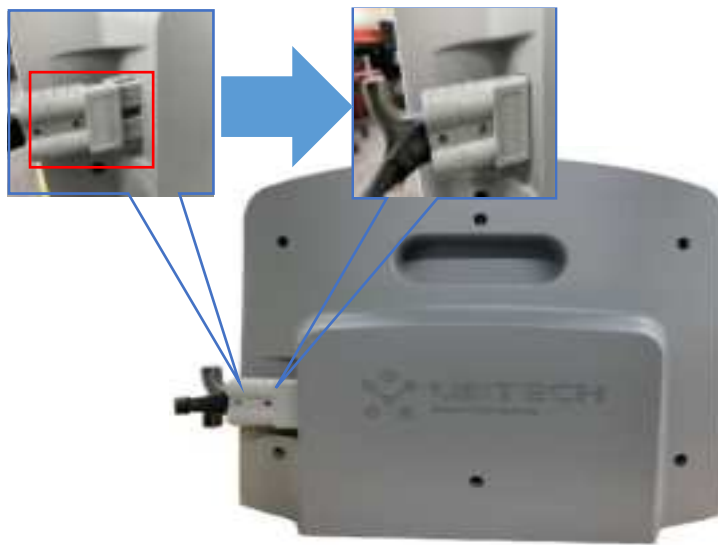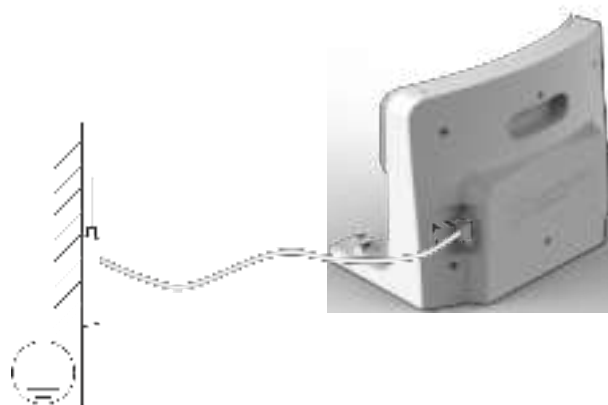

Figure 3.3.b

Figure 3.3.c

3. Adapter Lights Status

LED	Status
🔵Blue lights flashing	In charging
🟢Green light for a long	Charging finished/standby
🔴Red lamp flashing	Charging abnormal

3.4 Hand Push Function

The chassis motor is locked by default and the robot cannot be moved even the power is on. To push the robot, you should double press the On/Off button in a second of time when the robot is powered off (Figure 3.4) to unlock the robot chassis, and then push the robot when the robot is powered on.
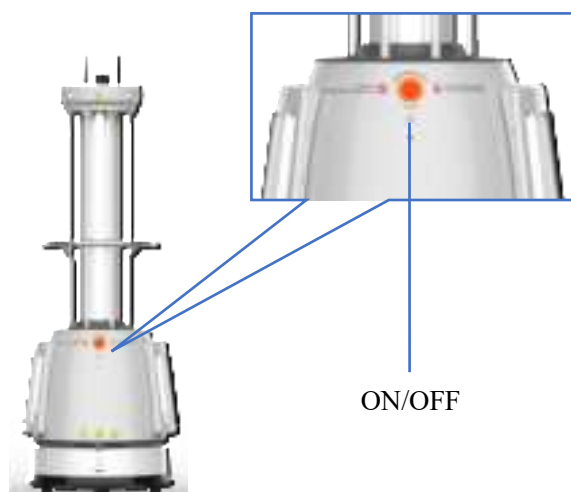

ON/OFF

Figure 3.4

3.5 Disinfecting Process

ADIBOT-A is intended to function as a supplement of routine disinfection and should not be considered as a substitute for usual disinfection equipment. Standard processures need to be carried out simultaneously with the deployment of ADIBOT-A and also ensure that ADIBOT-A has been set correctly before use to maximize the disinfection effect.

To help you get started quickly, please follow the instructions below:

Step 1 Perform basic cleaning and maintenance operations for the robot. (Refer to section 5.3 for the specific operations.)

Make sure that the emergency stop button has not been pressed before starting the robot.

Step 2 Manage the room requiring disinfection, and then deploy ADIBOT-A to start disinfection.

Cautions:

◆ Plese clean up any inflammable and explosive objects and paper to prevent a fire caused by high temperature on the surface of UV lamp,

◆ Please move away plants and animals in case the UV lamp can kill organic cells.

◆ Please make sure that the target place or object can be exposed to ultraviolet light. If any furniture in the room is moved, a new round of disinfection will then be needed.

Step 3 Place the robot at the disinfection position in the room and the safety sign in front of the door.

Please ensure that all the other doors and of the disinfection room is closed and all windows are closed before starting disinfection.

Caution: The robot will return to the charging dock automatically after finishing the disinfection if it was started at the dock.

Step 4 Select the in-place disinfection/auto-exploration disinfection solution (Refer to section 4.3.1 for details).

Step 5 After you tap to start disinfection on the tablet, ADIBOT-A will notify that ready for disinfection, please leave as soon as possible and counting down in seconds. Be sure to leave the disinfection site within the specified time to avoid being injured.

Figure 3.5.a

① If the robot automatically starts the safe disinfection mode: Both the PIR sensor and the safety sign will be working.

② To suspend disinfection halfway, tap **Suspend task**, the robot will turn off the UV lamp and stop the disinfection task.If someone breaks into the room, the safety sign and PIR sensor will trigger the command for suspending the disinfection task.

Figure 3.5.b

③ To end disinfection halfway, tap **End task**, the robot will turn off the UV indicator and end the disinfection task.

Figure 3.5.c

Step 6 After disinfection, use the hand pusher (Refer to section 3.4 for details) to move to the next target room; or to shut down the robot, perform the power-off operation (Refer to section 3.1.2 for details), and then store the robot..

Part IV Functions of Tablet PC Software

4.1 User Login

The tablet PC software is a system for the administrator to check and operate the robot after the robot is connected. It is used by the robot administrator. The table below shows the basic functions of the software:

No.	Main Function		Description
1	User login	Login	Input the enterprise number, Username, and Password
2	Robot settings	Network settings	4G inside the robot body or WiFi
		Volume settings	Set the robot's volume
		Language settings	Set the robot to broadcast in both Chinese and English in
		Safety sign settings	Replace/match the safty sign
		Server settings	The server address needs to be synchronized when the robot is initialized and activated
		Version Information display	Input the ip address of the server to init and active the robot
3	Disinfection tasks	Create disinfection task	Create disinfection tasks and set the disinfection time
		Fixed point disinfection	In-place disinfection at the fixed point
		Auto-exploration disinfection	Perform auto-exploration disinfection in an enclosed space
		Disinfection detail page	Display details of the disinfection task
		Execute disinfection task	Start, suspend, or end the task
4	Robot	Robot status	Display the name, current battery level, and total disinfection records of robot

		Task list	The latest task and historical task record
5	Security policy	Intrusion detection by the safety sign	Detect intrusion once the safety sign is moved
		PIR intrusion detection	Detect human intrusion in the static disinfection status
6	Routine maintenance	Robot self-check	Sensor exception and data exception
		Reset to factory settings	Reset to factory settings

4.1.1 Login

1. Open the tablet, click **application** to go to the login page,then click **advanced settings** to change the **Server Address** or input the server ip(contact the after-sales to get the server ip address), select the **language (Chinese/English)**, input the **Company Name**, the **Username** and **Password**.
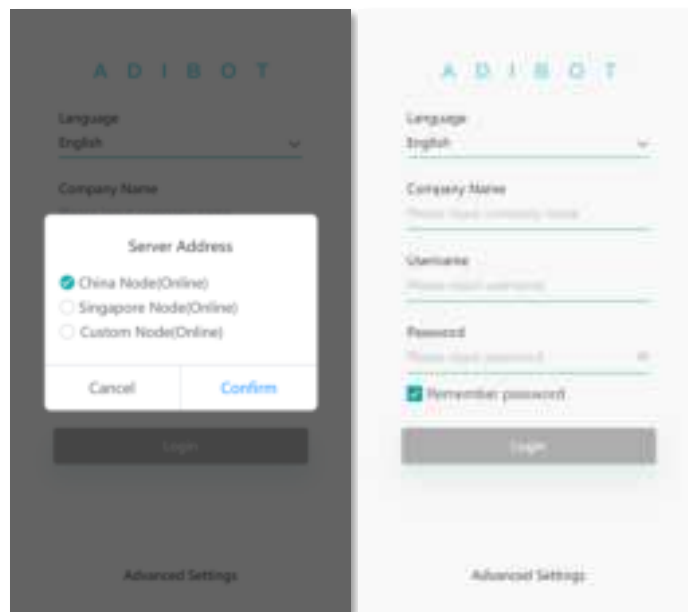
Figure 4.1.1a

2. Click **Login** to enter the homepage of the robot, and you will get the serial number and status of the robot bound under the current enterprise number.
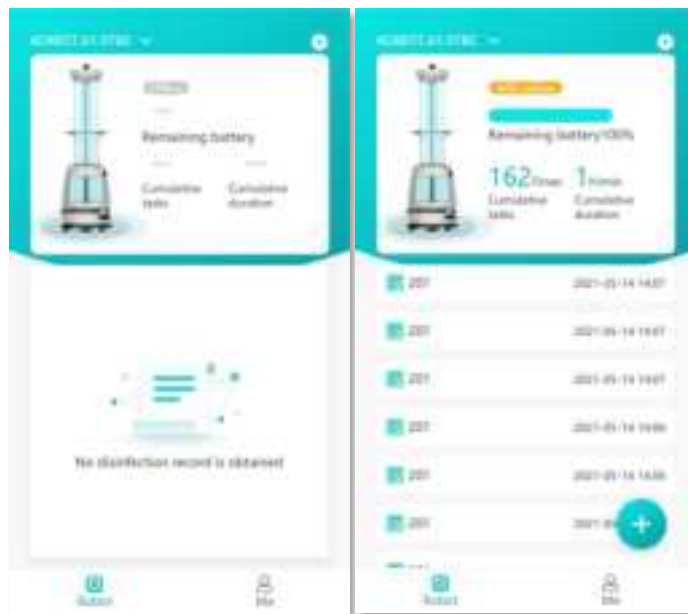
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Figure 4.1.1b

4.2 Robot Settings

4.2.1 Network Settings

1. Tap the setting button in the upper right corner to enter the setting interface, then tap **Network** to set the network.
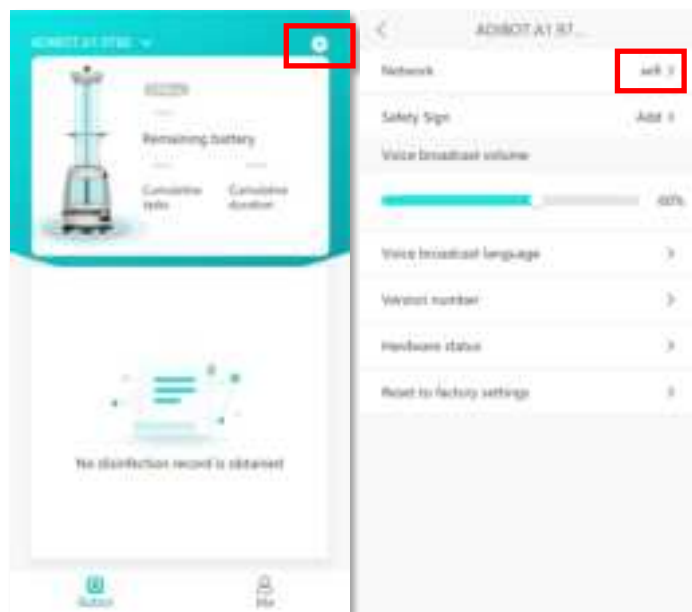

Figure 4.2.1a

2. Turn on the robot. About more details, please refer to section 3.1.1.

4G network mode (A 4G card that can access Internet need to be prepared)

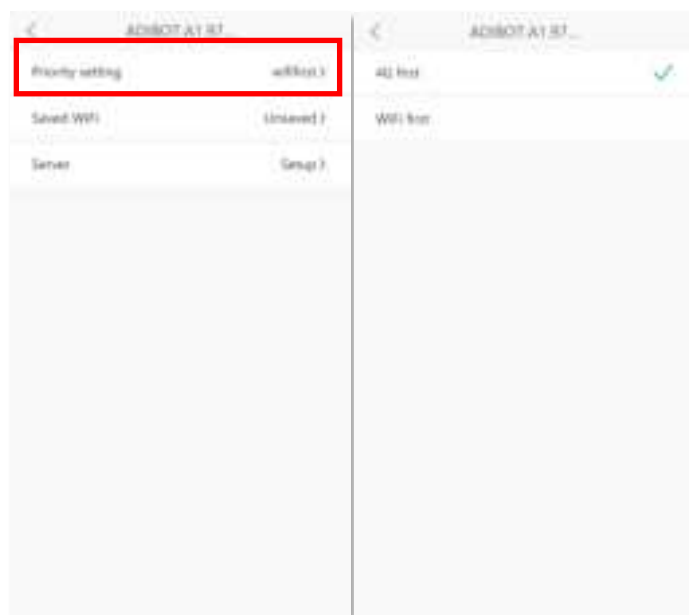**4G first** if the robot needs the 4G.

i

Figure 4.2.1b

How to install the 4G network card:

1. Open the back cover of the 4G network card, and insert the 4G Micro SIM network that can access Internet into the PC, as shown in Figure 4.2.1b. You can first insert network card into the OC. When the 4G network card in the USB port changes from red indicator to blue indicator flashing every 2 seconds, you can confirm that the 4G network card can connect to Internet provided that the PC can access the Internet normally.

Figure 4.2.1c

2. Use a screwdriver to unscrew the back cover of the robot debug interface, open the back cover, and insert the 4G network card into the robot, as shown in Figure 4.2.1d.
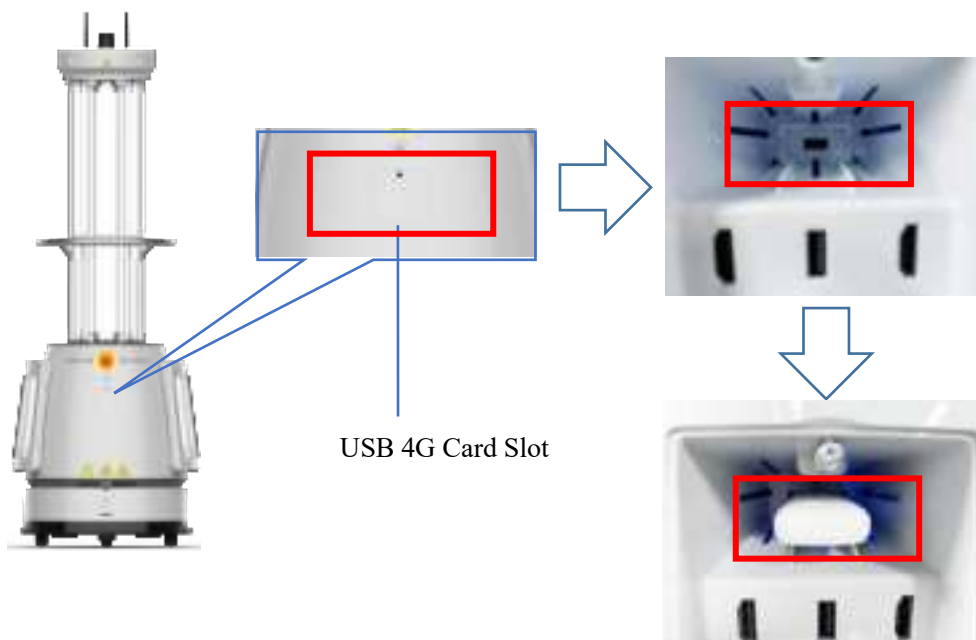
USB 4G Card Slot

Figure 4.2.1d

WiFi network mode

◆ If the robot has no 4G network, select **WiFi first**, tap **Connect/Switch WiFi**, turn on the mobile phone/tablet Bluetooth, power on the robot as prompted, and long press the network settings button for 3 seconds to set the network.
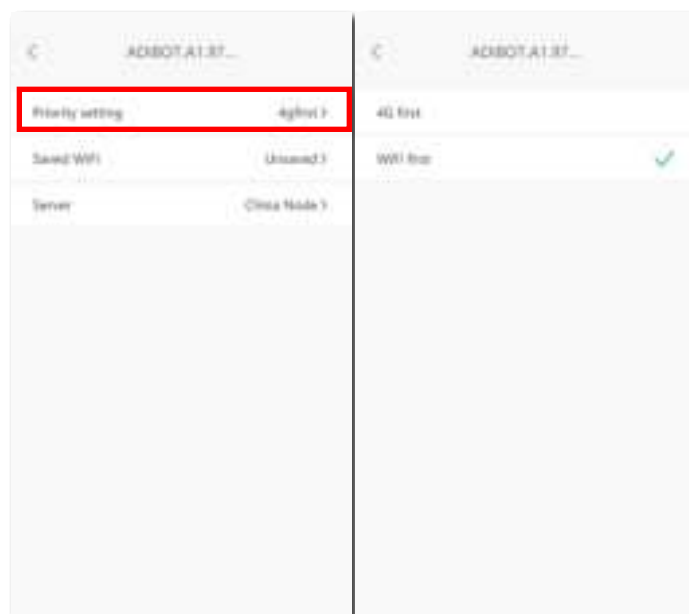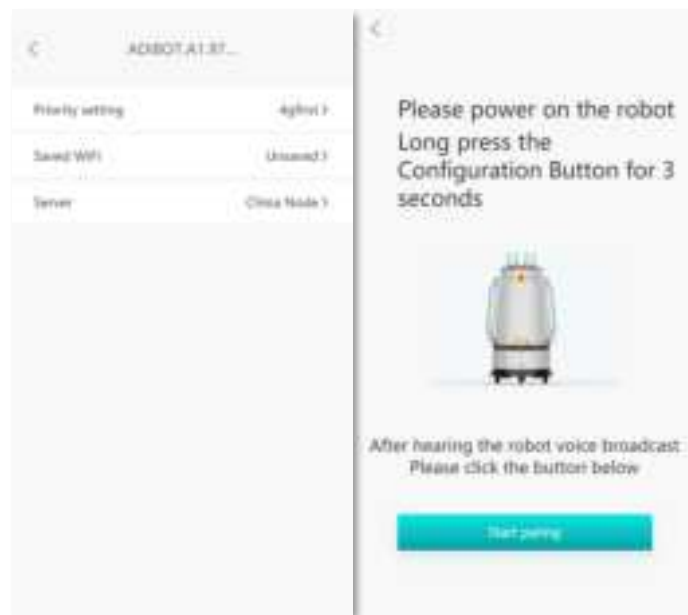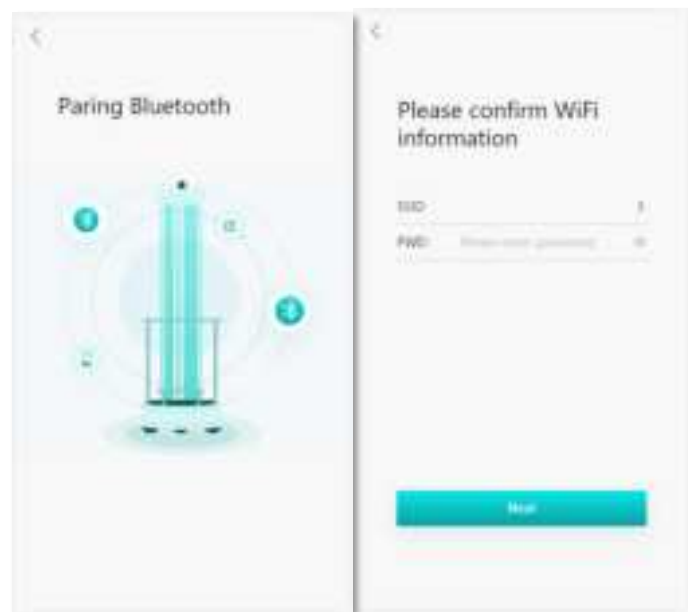

图 4.2.1e

图 4.2.1f

图 4.2.1g

3. The App sends the WiFi SSID and password, and the robot connects to the network. If the WiFi connection fails, check whether the WiFi information is correct and keep the WiFi device close enough to the robot.
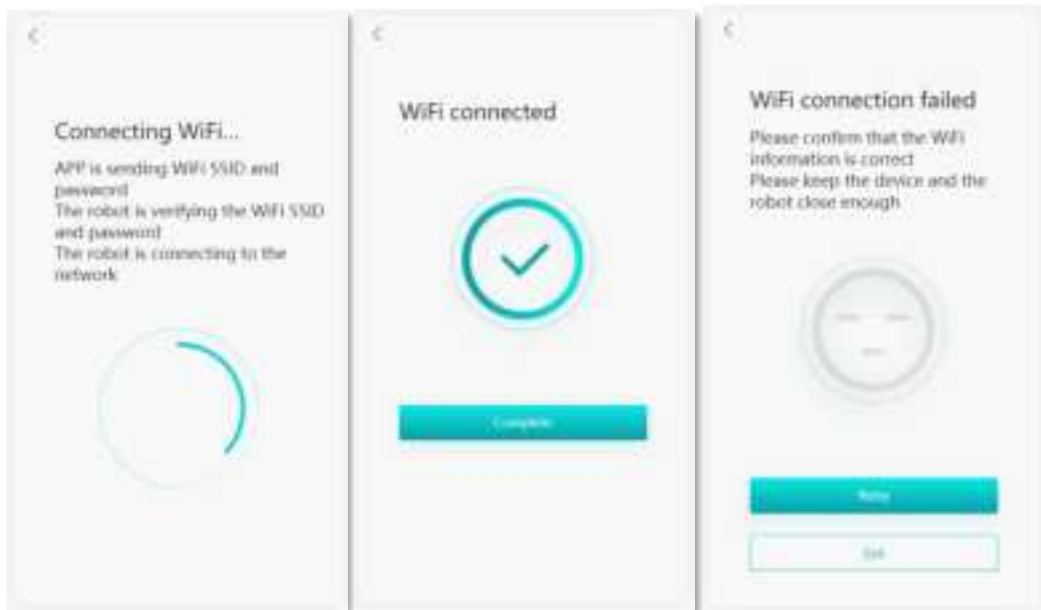
Figure 4.2.1g

Cautions

If Bluetooth pairing recognition fails, please check the following items:

1. Check whether the tablet PC/mobile phone Bluetooth is turned on; 2. Check whether the positioning switch is turned on.

4.2.2 Volume Settings

Tap the setting button and select **Voice announcement volume** to adjust the volume.

Figure 4.2.2

4.2.3 Language Settings

Set the language for the robot's voice announcement. Chinese and English are available.

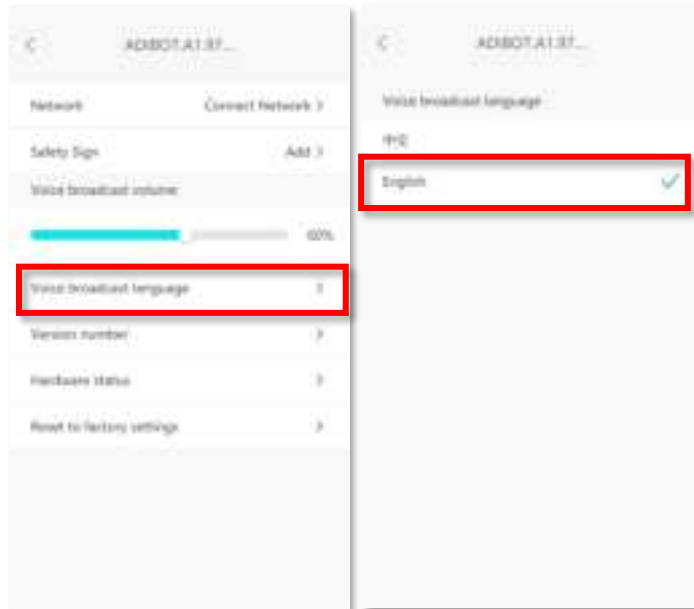

Figure 4.2.3

4.2.4 Safety Sign Settings

To bind/replace a safety sign, you can bind the target/new safety sign.
When the robot is delivered from the factory, the matched safety sign will be bound by default. To replace the safety sign, first tap **Unbind**, tap **Add** to turn on the safety sign switch, and then enter the serial number of the safety sign.
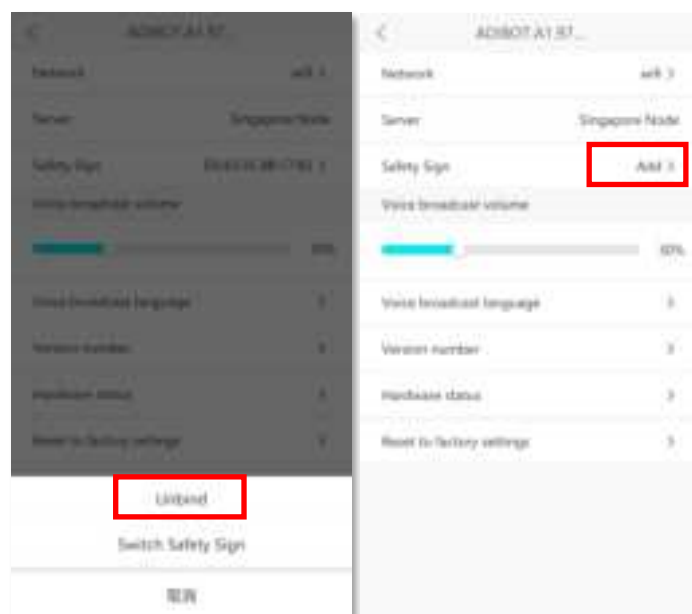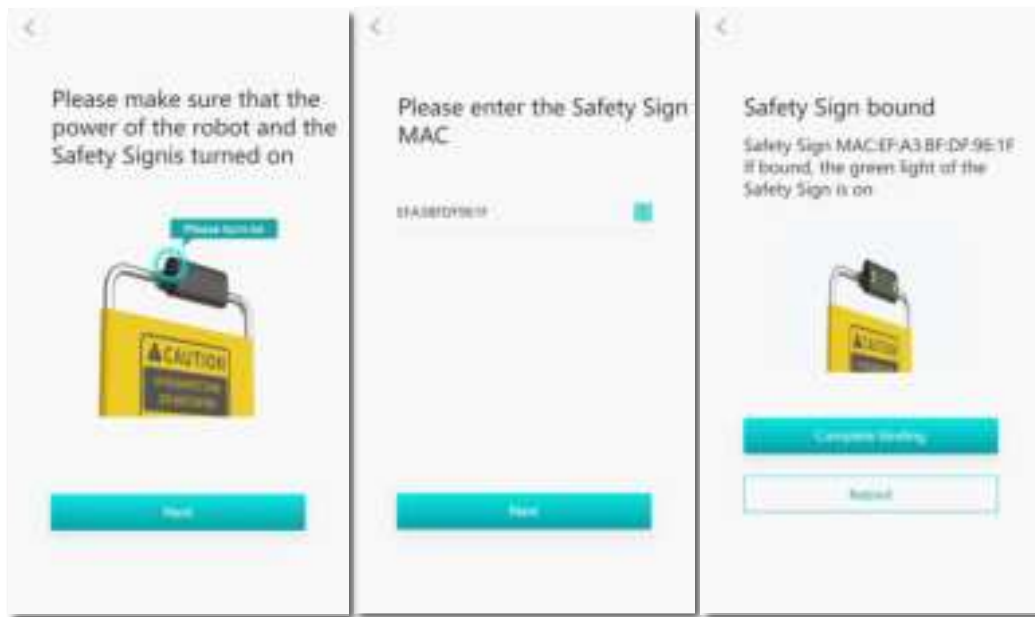

Figure 4.2.4a

Figure 4.2.4b

4.2.5 Server Settings

Tap **server**, turn on the tablet PC/mobile phone Bluetooth, press the network settings button of the robot and hold it above 3s for Bluetooth pairing. After the Bluetooth is paired successfully, it will automatically connect to the server.
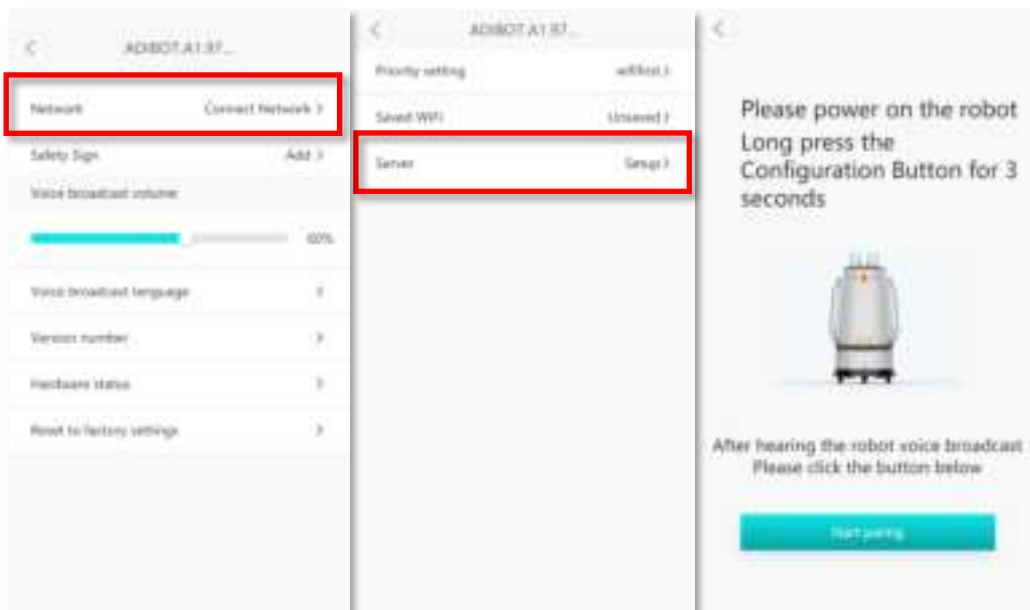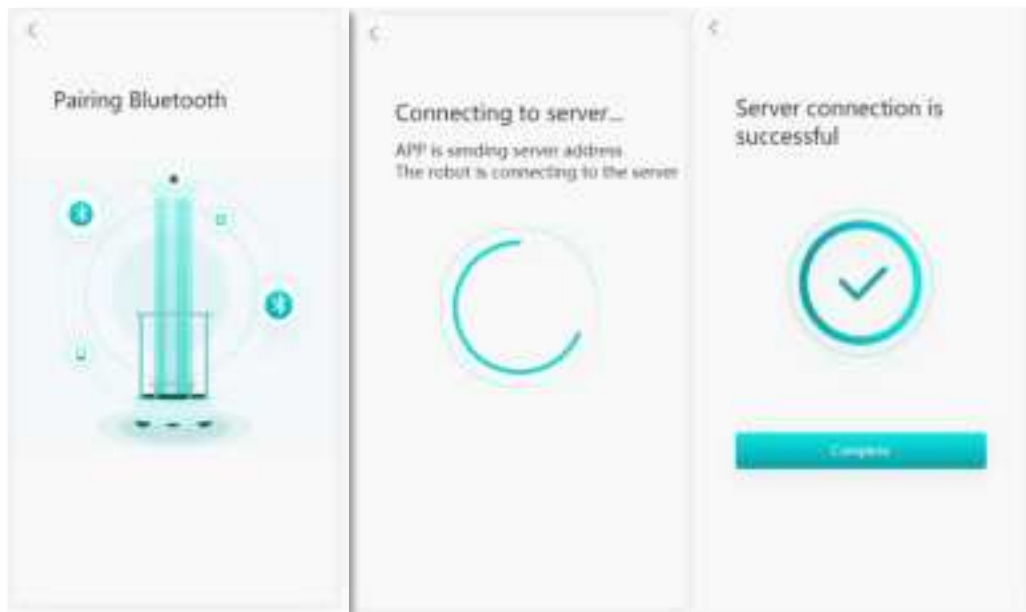

Figure 4.2.5a

Figure 4.2.5b

4.2.6 Version Information Display

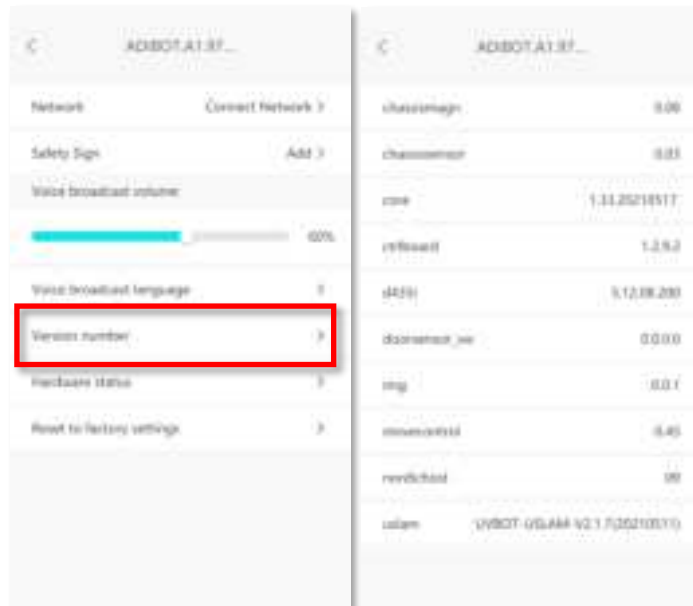Tap **Version number** to view the software version information of the current robot.

Figure 4.2.6

4.2.7 Reset to Factory Settings

Tapping **Reset to factory settings** and restore to the system status before delivery.
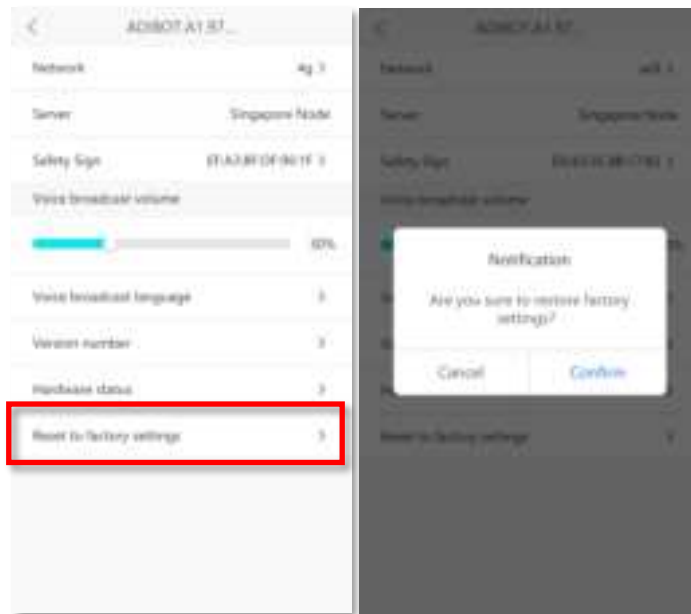
Figure 4.2.7

4.3 Disinfection Task

4.3.1 Creating Disinfection Task

A. **In-place disinfection solution:**

Advised disinfection time:

Area≤ 50m³   Disinfection time：5min

50m³ ≤Area≤90 m³   Disinfection time：10min

(it is preferred to place the robot in the center of the disinfection space.)

④   Tap **Robot→Create disinfection task** →"+", and then select **In-place disinfection**.

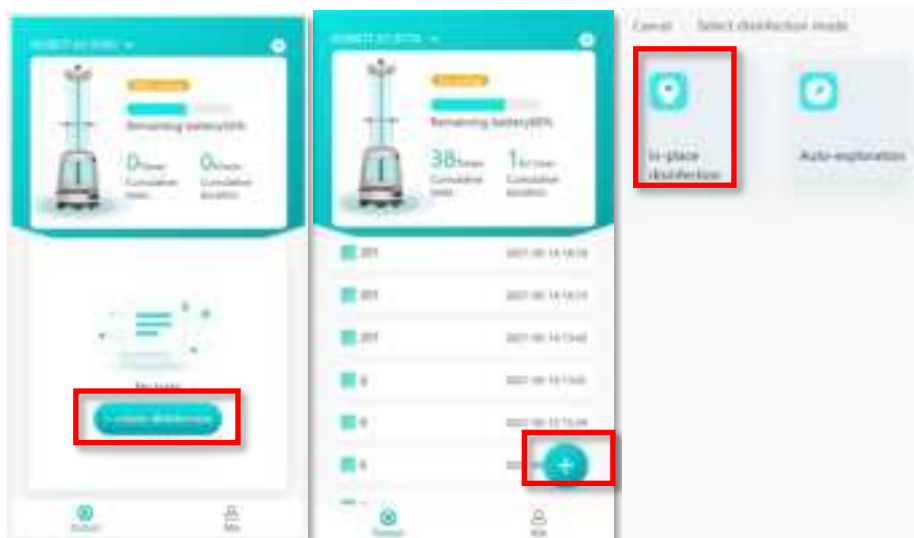Figure 4.3.1a

B. Auto-exploration disinfection：

Advised disinfection time:

Area≤ 50m³   Disinfection time：5min

50m³ ≤Area≤90 m³   Disinfection time：10min

(it is preferred to place the robot in the center of the disinfection space)

⑤　Tap **Robot→Create disinfection task →"+"**, and then select **Auto-exploration disinfection**.
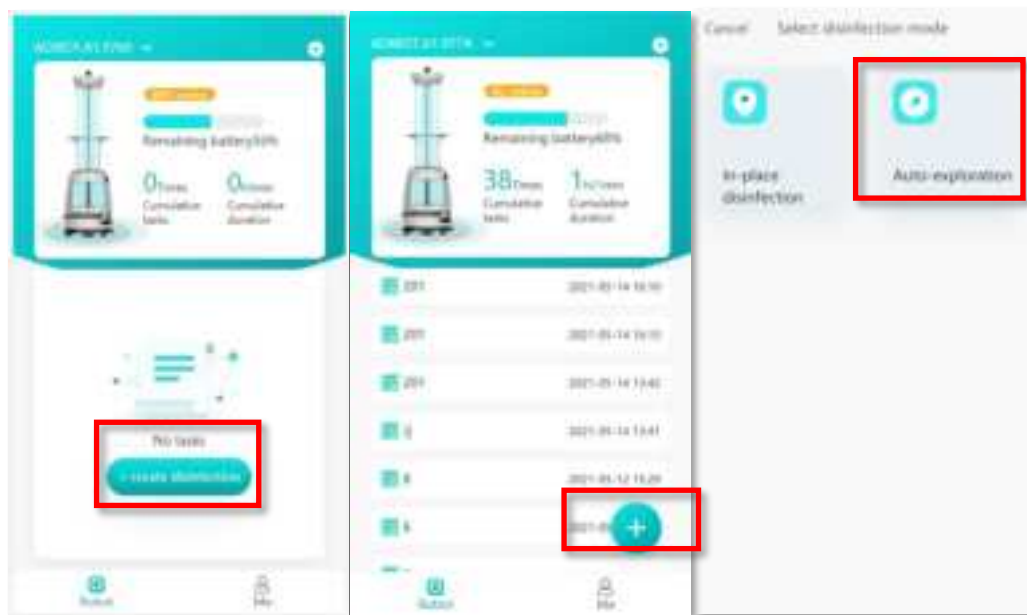

Figure 4.3.1b

Cautions

● The robot will judge whether the site is suitable for auto-exploration disinfection after performing preliminary exploration. If not, it will prompt that "**this room is not suitable for auto-exploration disinfection, please select other modes for disinfection**". You can tap **Forced disinfection** to continue with auto-exploration disinfection.

Figure 4.3.1c

4.3.2 Disinfection Detailed Information

After a disinfection starts, the page will display details of the disinfection task.

Figure 4.3.2

4.3.3 Executing Disinfection Task

You can start a task, suspend a task (active or passive), or end a task.

Figure 4.3.3a
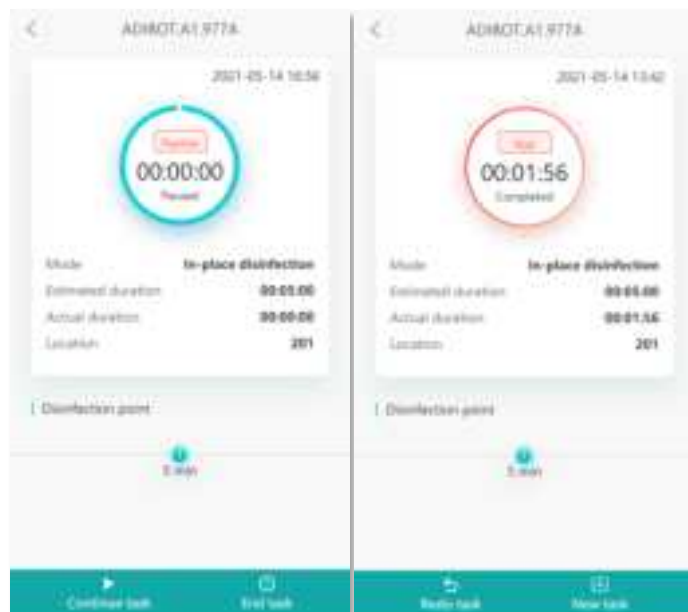
Figure 4.3.3b

4.4 About Me

Tap **Me** to enter the **Me** page of the App.

Figure 4.4

4.4.1 Room Management

1. Tap **Room Management**→"+" in turn to create a new area name.
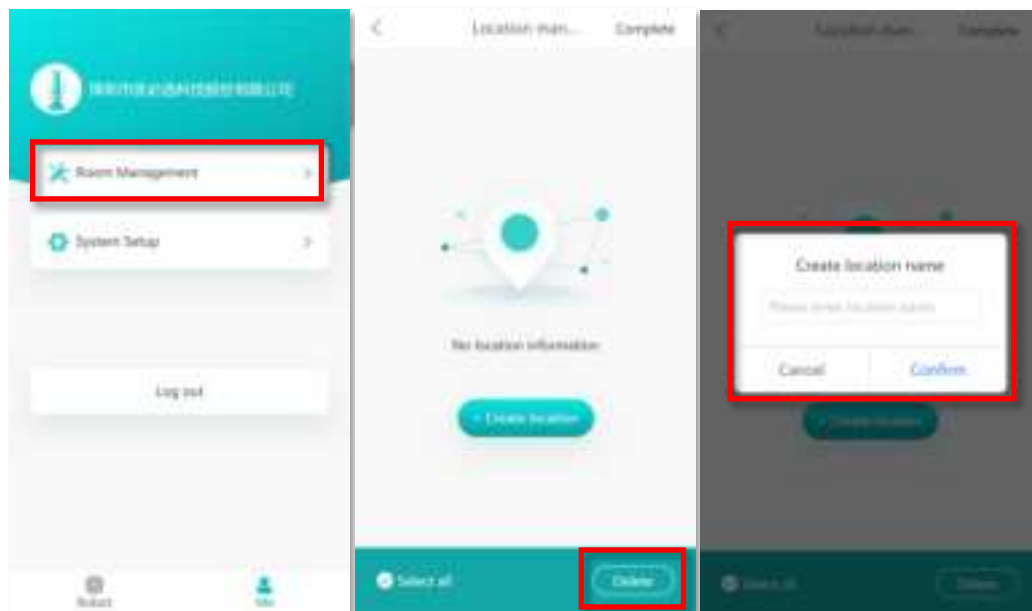
Figure 4.4.1a

2. To change the room name, tap the changing sign.
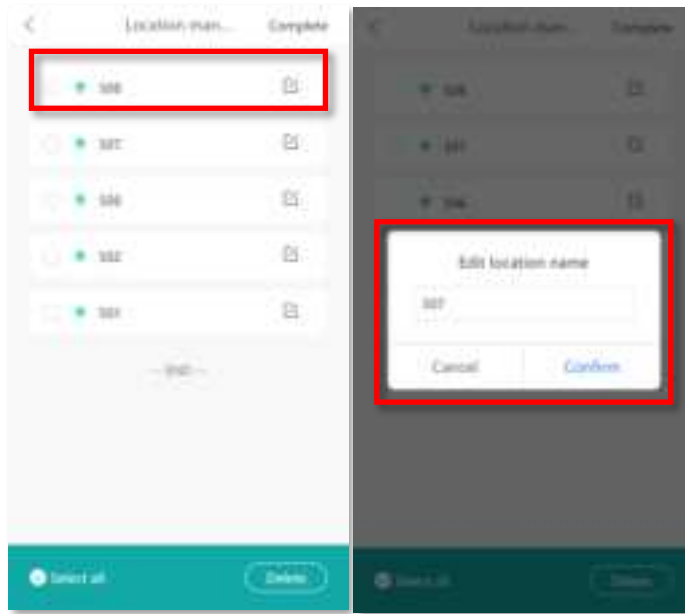
Figure 4.4.1b

3. To delete a single room, slide leftward on the room number to delete and tap **Delete**.
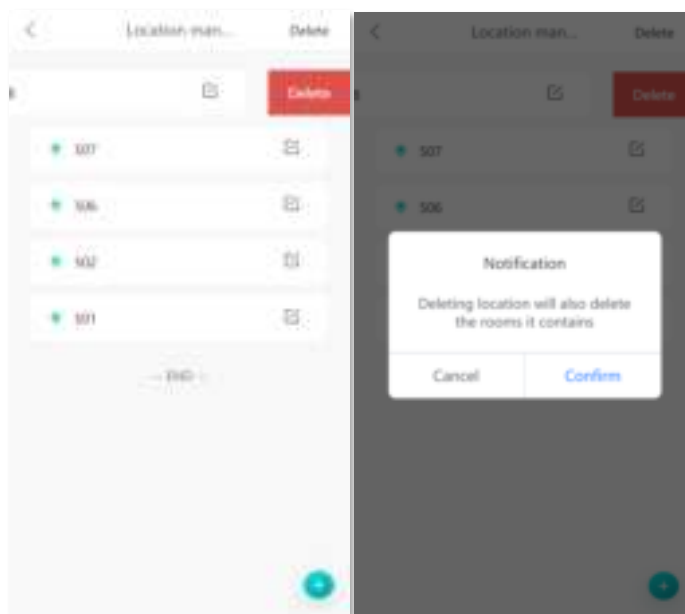
Figure 4.4.1c

4. To batch delete multiple rooms, directly tap **Delete** in the upper right corner, tap to check the rooms that need to be deleted, then tap **Select All** and tap **OK** to delete the selected room numbers.
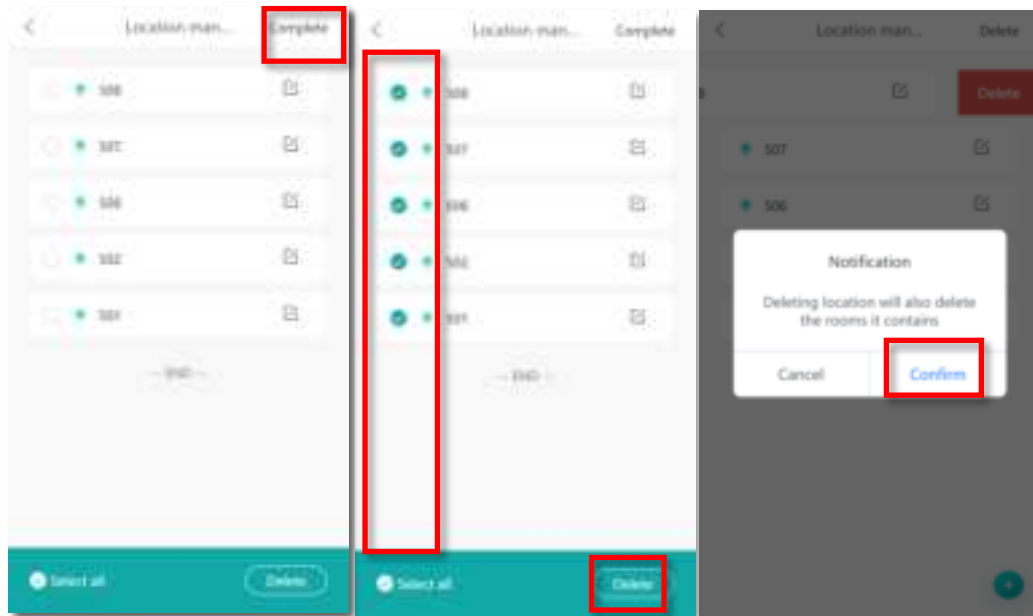
Figure 4.4.1d

4.4.2 System Settings

1. Tap **System Settings** to enter the system settings interface of the App to complete relevant settings.
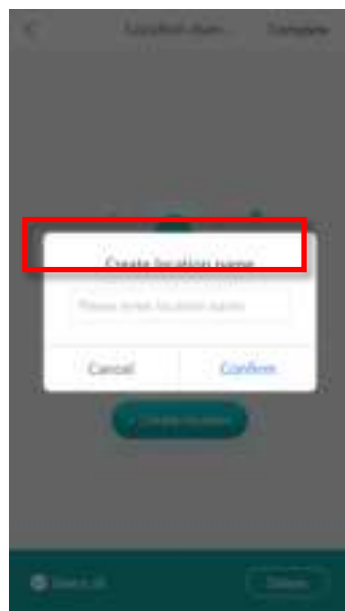
Figure 4.4.2a

2. After entering **System Settings**, you can select 中文 or **English** as a system language.

Figure 4.4.2b

3.　After entering **System Settings**, you can view the version number of the current App.
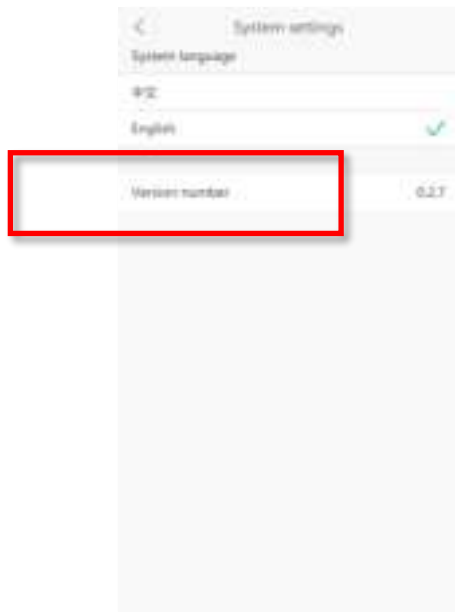
Figure 4.4.2c

Part V Transportation, Unpacking, Cleaning, and Storage

5.1 Packing and Transportation

If you need to transport ADIBOT-A, disassemble the lamps from the robot, put them into the special cylindrical packing box provided in the sale package, and then put ADIBOT-A into the packing box for transportation.

5.2 Unpacking

5.2.1 Opening the Package

Check whether the package is damaged before using ADIBOT-A. If so, please contact UBTECH by emailing to *adibot.service@ubtrobot.com*

Please follow the instructions below to unpack the ADIBOT-A:
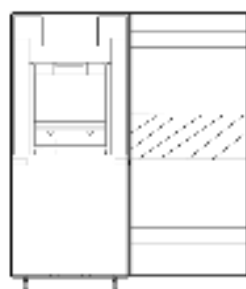
1. Stand the box upright and remove the all packagesl
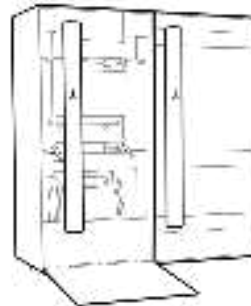
2. Take out the lamps ①②
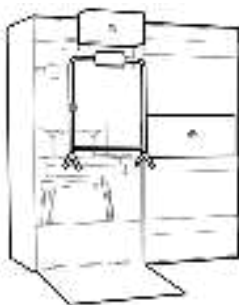
3. Take out the charger ③, safety sign ④, and accessory bag ⑤

4. Remove the two pieces of foam in the front

5. Push out the robot ⑥ from the packing box

6. Remove the upper inner foam to take out the charging dock ⑦

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> **Cautions:**
>
> 1. Put the foam and other packing materials back into the packing box, and keep the packing box dry for next use.
> 2. If you need to transport ADIBOT-A to another place, put the safety sign of ADIBOT-A and its accessories back to the packing box as original.

1. Please make sure the power is off and the charging cable is unplugged before installing the UVC lamps.

2. Insert the lamp holder (for the end without pins) into the top socket of the ADIBOT-A frame.

3. Press down the lamp holder (for the end with four pins) by aligning it with the four pin holes on the ADIBOT-A base, ensuring that the four pins are fully inserted into the socket.

4. Repeat the above steps until all the 16 UVC lamps are properly installed around the ADIBOT-A base.

End without pins

End without pins

End with four pins

End with four pins
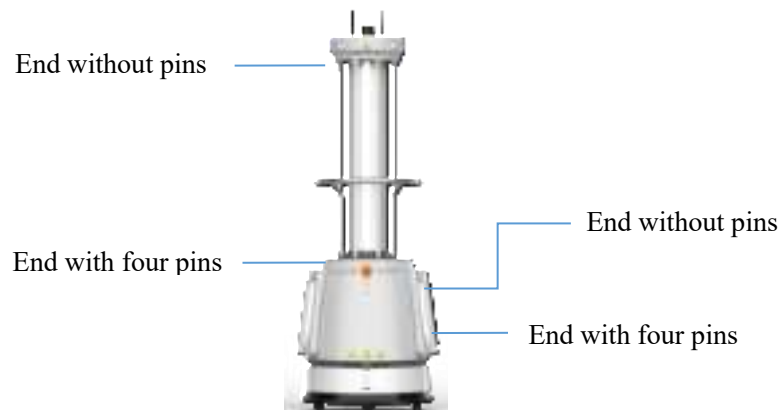
Caution: If the four pins are not aligned and cannot be inserted downward for connection, rotate the UVC lamp by 90° horizontally before inserting the pins downward, ensuring that the alignment between the pins and the socket holes matches.

5.3 Maintenance and Cleaning

Cautions:

1. Do not use abrasives, aerosols, liquid containing alcohol or any other liquids to clean ADIBOT-A because of the uncertainty that whether the liquids contain flammable substances that may damage the plastic cover of ADIBOT-A.

2. Do not use water or any other liquids to spray or drench ADIBOT-A. Keep it dry because of the self-cleanning function of the product. Do not use irritating detergent or organic solvent to wipe the camera lens.

3. Please only use soft microfiber sheets to clean up the dust from the camera and sensor.

4. Do not clean the reflectors behind the lamp in case of being scratched.

5. If the robot is found damaged, or with abnormal sound, or failed to operate normally, please contact the local constumer service.

5.3.1 Cleaning the Robot

Follow the instructions below to operate safely and avoid damaging the robot:

1. Press the power button on the chassis to power off the robot.

2. Disconnect the charging cable from ADIBOT-A, and ensure that the robot is completely powered off.

3. Check whether the lamp is damaged. If not, then move to the next steps.

4. Use a soft wet sheet to clean the outside of the robot.

5. Use a soft dry sheet to wipe dry the outside of the robot.

6. Check whether the robot has been wiped dry.

Warning

1. Please clean up the dust which affect normal operation on the camera and sensor.

2. Once a lamp is broken, ventilate the room for 20 minutes, and then dispose of the glass fragments. In this way, the gas in the lamp will not be inhaled into human respiratory tract.

5.3.2 Cleaning the Adapter

If dust adheres to the adapter:

1. Remove the adapter plug from the wall socket.

2. Check whether the adapter is dry.

3. Use a soft dry sheet to clean the charging cable and the adapter.

5.3.3 Cleaning the Lamp Tubes

Method and Steps:

1. Before cleaning the lamps, make sure that the robot is completely powered off. Turn off the ADIBOT-A power button, and unplug the charging cable.

2. First put on cotton fibre-free protective gloves which will avoid leaving hand print or sweat on the UV lamps during cleaning.

3. Remove the UV lamps from ADIBOT-A after the UV lamps are cooled naturally.

4. Clean the lamp surface carefully and gently by using the designated alcohol cleaning cotton.

5. Turn over the lamp and clean the order side in the same way.

6. Replace alcohol cotton to wipe and clean the lamp tubes twice or more.

7. Check whether the UV lamp glass is transparent to make sure it is in good condition.

8. nslucent. Free of stains and hand prints.

9. Install the lamp back into the ADIBOT-A holder and check for proper connection.

5.4 Storage Instructions

Carefully follow the following steps to ensure safety and avoid damage to the robot.

1. Unplug the charging cable to disconnect the charging power, then press the bottom power switch button to turn off the total power supply of the robot.

2. Use the hand pusher to push ADIBOT-A to the storage area.

3. Please let the ADIBOT-A keep a best safe posture.

4. Please store the ADIBOT-A in a dry place without dust at a temperature of 0 to 40°C (32°F to 104°F).

Part VI Application Scenarios

The ADIBOT-A robot has been on duty in public scenarios such as hospitals, schools, libraries, star hotels, and metro stations, ect. Which is suitable for all surface disinfection and air disinfection.

Hospital Scenario

School Scenario

Library Scenario

Hotel Scenario

Metro Scenario

Cautions:

1. Please do not allow the robot work in the area with channel less than 90cm, or the robot may not be able to pass.
2. Please do not allow the robot work in the area with cliffs and stairs, it may fall.
3. Please do not allow the robot work in the area with stairs and grooves more than 7mm ,and keep the ground flat.
4. Please do not allow the robot work in the area with overhanging cables.

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Part VII FAQs/Troubleshooting

No.	Symptom	Solution
1	ADIBOT-A failed to start.	◆ Check whether the charging plug on the chassis is loose. ◆ Check whether the power button on the chassis is turned on. ◆ If the problem persists, contact the ADIBOT-A Technical Support Center.
2	Partial of none of the UV lamps was on after the robot was turned on and a disinfection command was sent.	◆ Stop the disinfection task first, and check whether the lamps are installed properly. ◆ Check whether the full power mode is enabled. ◆ Replace the lamp that cannot light up. ◆ If the problem persists, contact the ADIBOT-A Technical Support Center.
3	The robot chassis can not move, or the motor overcurrent protection	◆ Shutdown and restart the robot
4	Bluetooth cannot be recognized for pairing.	◆ Make sure that the Bluetooth function is enabled on the tablet PC. ◆ Make sure that the positioning function is enabled on the tablet PC.
5	A WiFi connection failure prompted when you tired to connect to the internet.	◆ Check whether the WiFi password is correct. ◆ Make sure the robot is close enough to the WiFi device.

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6	The robot failed to execute the task commands by the tablet.	◆ Check whether the network connected to robot is normal. ◆ Check whether the network of the tablet PC is normal.

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Part VIII Declaration of Conformity

7.1 FCC compliance 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.

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

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

7.2 FCC Radiation Exposure statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body. This transmitter must not be colocated or operating in conjunction with any other antenna or transmitter.

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