

Cleaning robot and charging pile

instruction manual

Please read this instruction manual carefully before using the product and store it properly.

1. Welcome to use

Dear user , thank you for purchasing SVBR01CL cleaning robot and SVBR01CP charging pile, this manual will guide you to fully understand and use this product, and provide important information about robot maintenance to help you get the best product experience.

Users will enjoy the technical support and upgrade services provided by Sveabot for a long time from the date of purchase. If you have any questions during use, please call the service hotline or visit the official website of Sveabot, and the technical support staff will answer you in time.

(Phone icon) + 852 5272 7620

(Website icon) www.sveabot.com

2. Instructions for use

Usage restrictions

The product must be used after training, and any loss and injury caused by improper use shall be borne by the user ;

The products or services you purchase are subject to commercial contracts or terms, and some of the products or services described in this manual may not be within the scope of your purchase or use; Sveabot will not explain otherwise;

This product is only used for floor cleaning in indoor commercial environments, do not use it outdoors, off-ground or other unsuitable scenarios;

It is forbidden to disassemble the robot without permission;

Do not stand or sit on the robot or its charging pile, and do not place any debris above it;

Do not use on stairs or where there is a gap; do not use in a large amount of water or similar environments; keep away from open flames, heat sources or areas that may make the robot dangling ;

Do not use the robot in an environment above 50 ° C and below 0 ° C;

Do not use it to clean any burning objects, such as unextinguished cigarette butts, matches, ashes, etc.; do not clean any flammable and explosive materials;

When the robot is working, do not close to the rotating position of the brush head to avoid injury;

Please read the various warning labels on the product .

Do not look directly at the UV lamp;

Battery and charging

Do not use any third-party chargers, charging piles, charging cables; if the standard charging accessories are damaged, please stop using them immediately and contact Customer Service in time;

Please ensure that the qualified power supply with reliable grounding is used; ensure that the access voltage meets the product requirements;

It is strictly forbidden to disassemble the battery without permission.

Please hand over the waste battery to a professional organization in accordance with local laws and regulations;

Do not use wet cloth, wipes or wet hands to wipe the charging shrapnel on the charging pile;

If you need to transport the product, please ensure that the robot is in a power-off and shutdown state, and it is recommended to use the original packaging box.

3. Know your robot

SVBR01CL is a commercial cleaning robot suitable for indoor environment, supporting multi-mode free switching of cleaning and washing.

Multi-sensor fusion technology and advanced navigation Algorithm ensure that it can operate independently, intelligently avoid obstacles, and run safely and reliably. SVBR01CL comes with a 10.1-inch screen mesh , which is convenient and friendly to operate, and provides a mobile App and management operation platform to realize remote control and digital management of robots.

Product Specifications

Category	Specifications	
production parameters	function	Cleaning, floor washing and self riding elevator
	Cleaning mode	Manual cleaning, automatic cleaning
	manual handle	√
	Manual assistance	√
	operating system	Android
	Host size	495x645x585mm

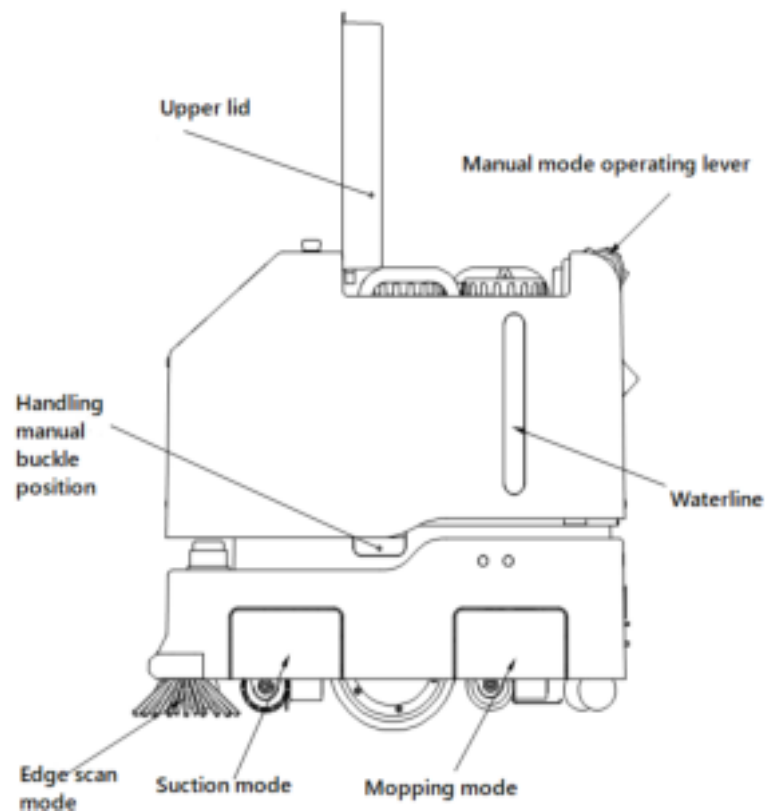
	Host material	Metal + plastic Metal + plastic
	Host net weight	61kg
	waterproof and dustproof	IP54
	brake assembly	Motor electronic brake
	speed of travel	0.1m/s~1.2m/s
	The higher the barrier	$\leq 10\text{mm}$
	Climbing Angle	8°
	minimum turning radius	$\leq 1\text{m}$
	Run the noise	$\leq 70\text{dB}$
	Operating environment requirements	0-50°C
	Storage environment requirements	-10°C-55°C
	humidity	10%-95%
Clean the module	Brush body form	2 Side brush 1 roll brush 2 mop
	Brush body self-cleaning and disinfection	ultraviolet disinfection
	Clean the width	510mm
	Washing efficiency	1000 m ² /h
	Work width	0.6m
	Replacement dust collection box	√
	vacuum degree	$\geq 13\text{ Kpa}$
	Ground type detection	√
	Net tank capacity	12.5L
	Automatic drainage	√
	Automatic turn off the water	√
	Water flow size is adjustable	√

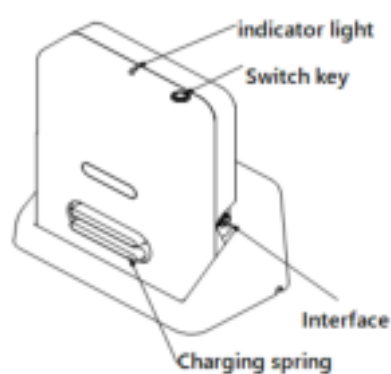
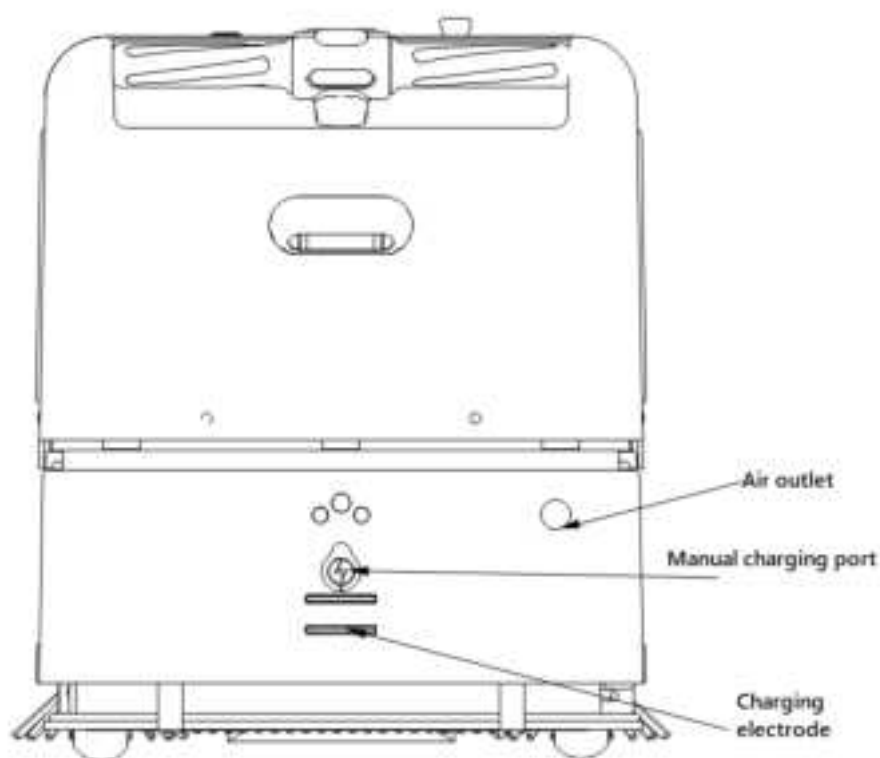
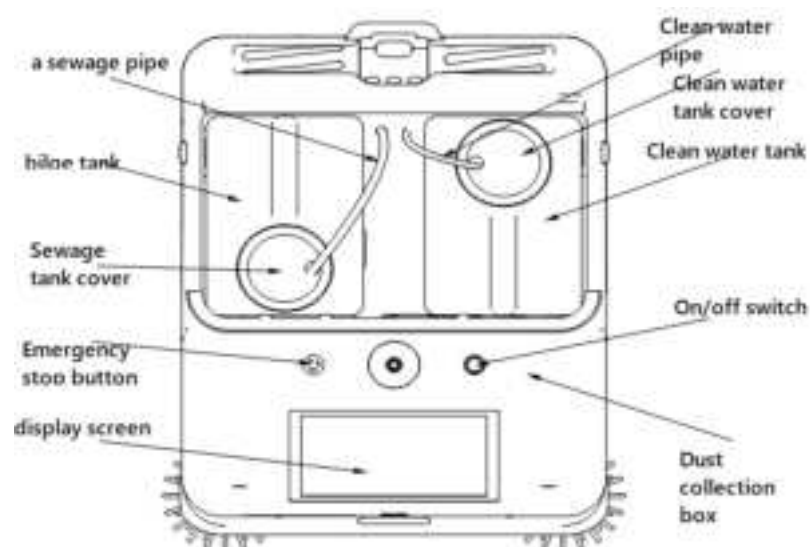
	Sewage tank capacity	12.5L
	Easy filter element (dust cartridge)	√
	Real-time monitoring of water level	√
Network communication	WIFI	2.4GHz ISM BAND 5GHz UNII BAND, 40m
Human-computer interaction	mains switch	√
	screen	10.1'Screen, Touch
	voice broadcast	Support, China, Japan and the UK
	alarm lamp	√
	ambient lighting	√
	emergency stop switch	√
	Automatic recharge	√
	Manual charging	√
	telecontrol	Mobile APP: remote control, instruction issuing, task management, message reminder, consumables management 等
		Operation platform: remote control, instruction issuance, task management, message reminder, consumable management, etc
Navigation System	ladar	√
	gyroscope	√
	The top vision	√
Security system	Lidar obstacle avoidance	√
	Ultrasonic radar for obstacle avoidance	√
	Deep visual obstacle avoidance	√
	collision detection	√
	Anti-falling cliff detection	√
	Infrared to pile	√
	Front vision camera	√

	TOF obstacle avoidance	√
Power system	battery capacity	1008wh
	Battery operating voltage range	37.8V~58.8V
	Battery type	Lithium battery pack
	operate time	4-6H
	charging interval	≤3hours
	Maximum battery charging voltage	58.8V
	Input voltage of the charging pile	DC 58.8V 9.5A (Base: AC 100-240V 50/60Hz)
	Voltage / current output of the charging pile	DC 58.8V 9.5A

1. Meet your robot and charging pile


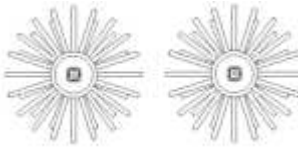





The modules of the cleaning robot are as follows:





2. Check the parts list

Packing list:

serial number	Name	Quantity	image
1	mainframe	1	
2	side-scrolling	2	
3	manual	1	
4	Cleaning brush	1	
5	Dust bag	12	
6	wrench	1	
7	Charging pile (individually packaged)	1	

4. Get started with bots

Several prerequisites for the use of cleaning robots:

- A. The emergency stop button is not pressed;
- B. Clean water tank and sewage tank are installed in place;
- C. Sufficient water and less sewage;

- D. The upper cover is in a closed state;
- E. Sufficient electricity;

1. Quick Start – wassim.wang

1. power on

Press and hold the power button above the robot for 3s, and the robot will start;



2. Start APP

1. After the boot animation is played, the APP is automatically started;
2. When starting the APP, the page pops up the permission grant pop-up box, which needs to grant the robot Bluetooth connection permission. After the robot has the permission, it can automatically connect the hand putter through Bluetooth;
3. After the robot completes the self-test, enter the homepage;



3. Start work (manual cleaning)

1. When manual cleaning (need to pull up the hand push rod), the robot can be controlled by the hand push rod, including: forward, backward, stop, steering, mode switching (cleaning, washing);
2. You can configure different modes (cleaning, washing) of the work gear through the page, after the configuration is completed, click "Complete Settings", the corresponding gear takes effect ;
3. If you do not configure the cleaning work gear, you can directly pull up the hand push rod for manual work, and directly use the last saved configuration by default (the initial gear is low by default) ;

1. cleaning mode

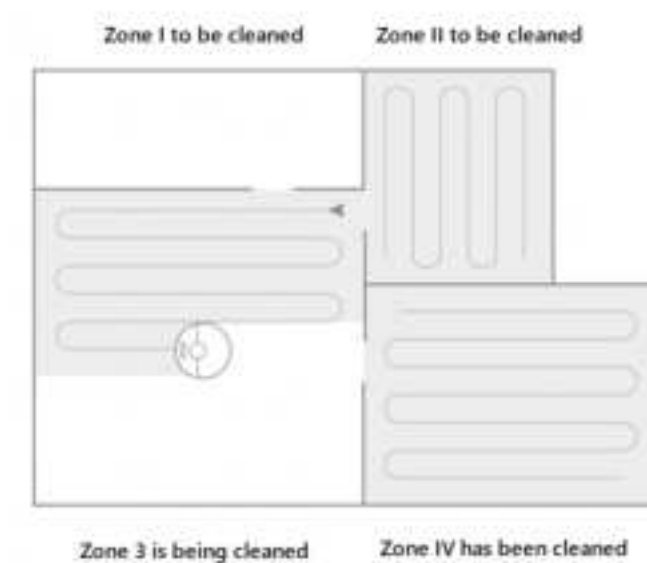


2. Washing mode

2. Automatic cleaning

This product supports the creation of tasks to achieve automatic cleaning, after starting the cleaning robot will

- ① In the designated area, intelligent Dynamic Programming cleaning route, using Z-shaped filling to complete the cleaning of each partition one by one
- ② Accurately reproduce the cleaning route along the specified Path.



1. Preparations

1. Connect to WLAN (WiFi)

When you are ready to enable automatic cleaning, make sure the cleaning robot is connected to a nearby WLAN (WiFi).

2. Configure map

Please contact the FAE (field technical support engineer) to complete the map creation configuration in the cleaning robot APP according to your needs before enabling the automatic cleaning function for the first time.

3. Collapsed lever

Please make sure the lever is retracted before enabling the automatic cleaning function



2. constituency task

Using the machine-side APP (or mobile-side APP), you can create a **selection task**, and the cleaning robot will perform the cleaning task according to the single or multiple partitions checked on the APP map.



3. zoning task

Use the machine-side APP (or mobile APP) to create **zoning tasks** , and by long-pressing on the APP map to adjust the scope and size of the quadrilateral area, the cleaning robot will clean according to the planned area.



4. Advanced tasks

Using the machine-side APP can create **advanced tasks** , and the cleaning robot will clean according to advanced parameters customized APP.

Customizable advanced parameters are: ① Modify the task name; ② Add area/Path (each area/Path can also adjust the number of cycles, cleaning mode, gear parameters); ③ Select execution mode; ④ Select task end point

Tip: Due to APP continuous development and upgrading, the functions and details may be slightly adjusted, please refer to the actual version.

5. Instant execution

Using machine-side APP (or mobile APP) can **instantly perform** single or multiple saved tasks in the task list, and the cleaning robot will immediately clean the selected tasks in sequence .

6. timing execution

Use the machine-side APP (or mobile APP) to create a **schedule** for saved tasks in the task list, and the cleaning robot will clean them at the scheduled time. To modify (/enable/disable) the schedule, you can do so in the "Timing Schedule" interface.

7. More features

Map updated in real time	Scan and build pictures directly to the mobile phone	Hand lever remote control
Robot positioning real-time view	Noise removal	light effect reminder
Robot status view in real time	restricted area management	Voice broadcast
Cleaning record view	Area & Path Management	Automatic return charging
Clean suction adjustment	point management	auto-break scan
Clean water output regulation	Environmental management	Automatic obstacle avoidance
Ground pressure regulation	Push notifications	Consumables Timing
Firmware update	

Tip: Due to the continuous development and upgrading of the machine APP, the functions and details may be slightly adjusted, please refer to the actual version.

3. Charge the robot

Technical support will guide you through the charging pile installation. In the automatic cleaning mode, after the cleaning task is over or the battery is lower than 20%, the robot will automatically return to the charging pile to charge. You can also click on the App interface and click "Terminate and Return" to force terminate the task and return to the charging pile.

In manual cleaning mode, you can manually push the robot to the position of the charging pile, so that the charging shrapnel on the back of the robot contacts the charging shrapnel of the charging pile, and you can start charging .

5. Get started with robot charging pile

The charging pile requires an external charger to provide 58.8V DC voltage input. The external charger supports 90–260V(50Hz/60Hz) AC input. When the self-locking switch KEY is pressed, the charging pile enters the standby state. At this time, the charging indicator LED light is red and the cooling FAN starts. When the host needs to be charged in low power, it will come to the vicinity of the charging pile, connect the WIFI module of the charging pile (ESP32), MCU of the charging pile (APM32F103CBT6) detects that the battery of the host is connected normally through the limit switch and BAT-IN, and turn on the relay 1 and relay 2. At this time, the charger is normally connected to the battery until the battery is charged to 100%/ or after the machine leaves, disconnect relay 1 and 2 and stop charging. The battery power status information is sent by the host to the charging pile through WIFI. When the battery power is 100%, the indicator light on the charging pile will be red. During the charging process, the indicator light will alternately flash red and green.

6. How to manage bots through the platform

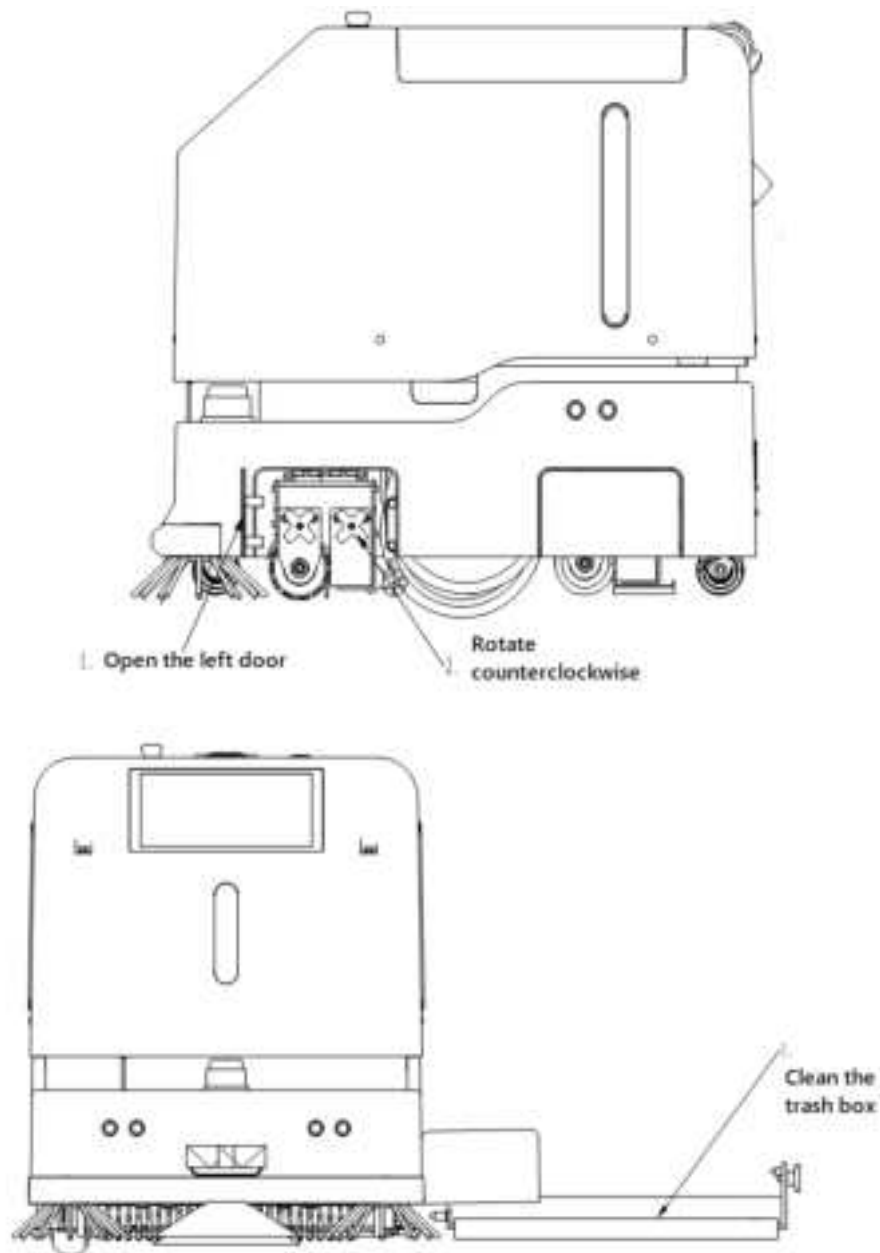
Please contact the corresponding technical support for account opening. After the account is successfully opened, you can log in: <https://xxxxxxx.com> Use "Fengjiang Robot Management Platform". "Fengjiang Robot Management Platform" provides Cloud as a Service capabilities such as "Facility Management", "Task Management", "Organization Management", and "Operation Data Analysis" to help you make better robot products.

7. Maintenance robot

1. Clean garbage box, filter tank-wad e

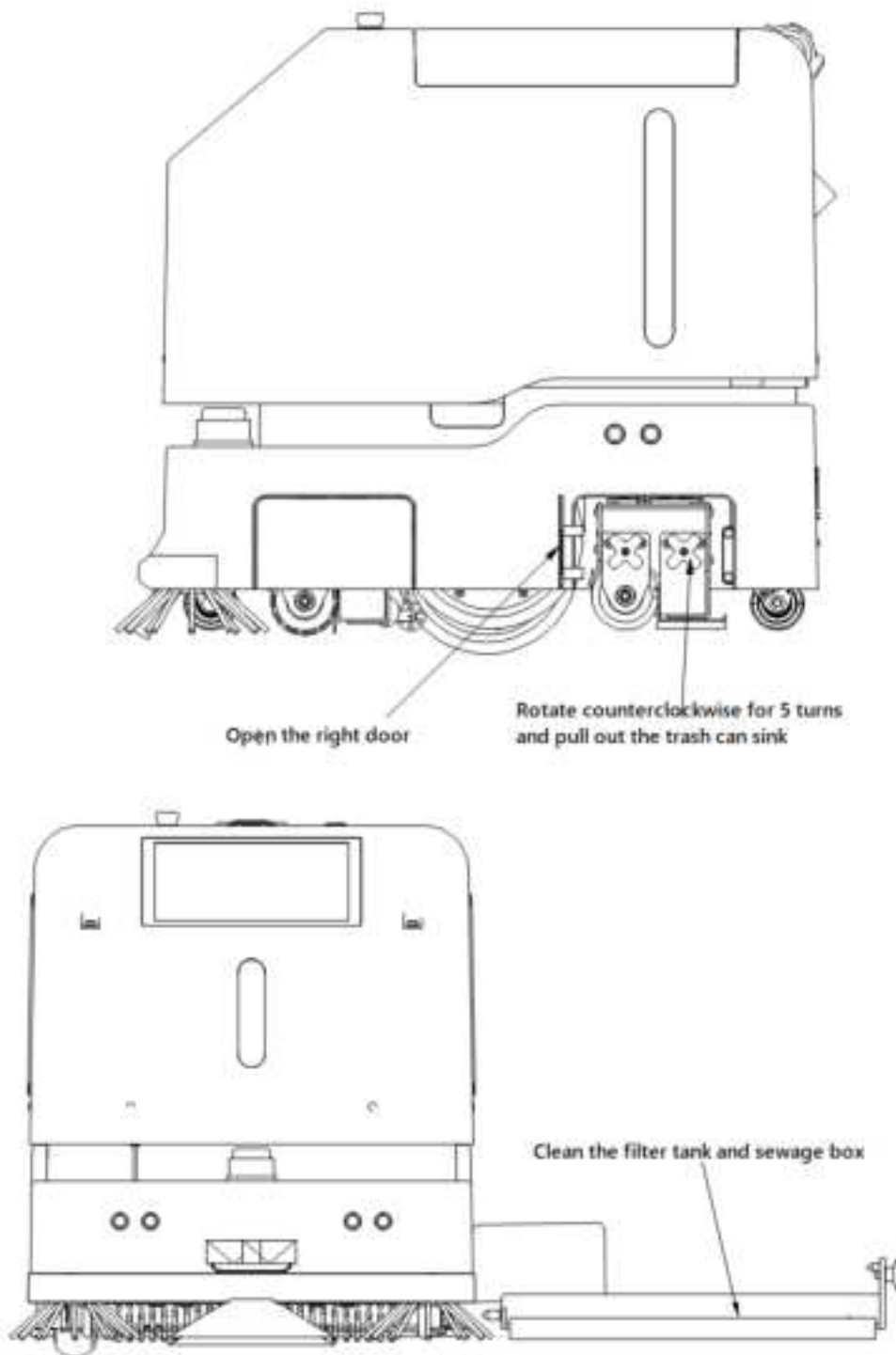
1. Garbage box cleaning

The garbage box stores large garbage with a capacity of 0.5L. The garbage box needs to be cleaned regularly according to the actual garbage situation. After cleaning, keep it dry and put it back. The cleaning method is as follows:



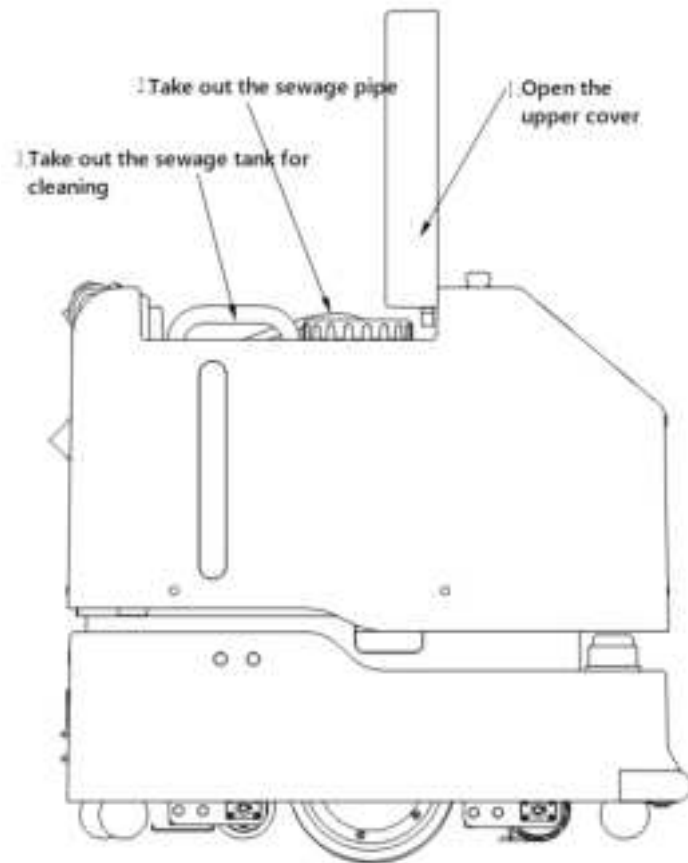
2. Filter tank and sewage box cleaning

The filter tank filters the larger garbage in the sewage. It is necessary to regularly clean the sewage tank and sewage box according to the actual situation. After cleaning, keep it dry and put it back. The cleaning method is as follows:



2. Clean the sewage tank -wade

If the sewage tank is used for a long time, there will be garbage precipitation, which needs to be cleaned regularly. The cleaning method is as follows:



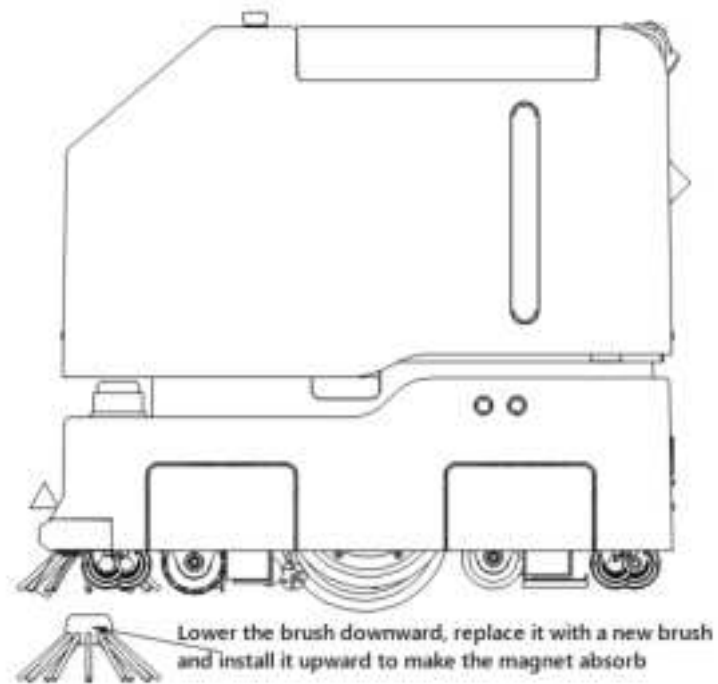
3. Consumables maintenance-wade

The use cycle of each consumable (according to the use environment, there will be changes) ;

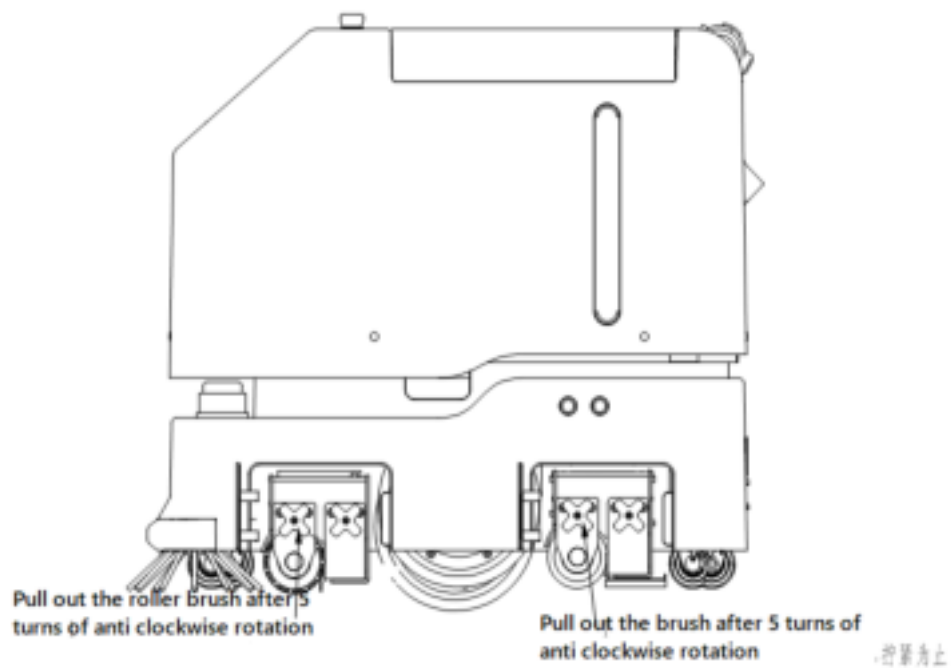
serial number	consumables	Use time
1	side-scrolling	6 months
2	roller brush	6 months
3	drag brush	6 months
4	Flat mop	3 months
5	Dust bag	1 month

How to replace consumables, etc ., pictures. (Side brush, dust bag)

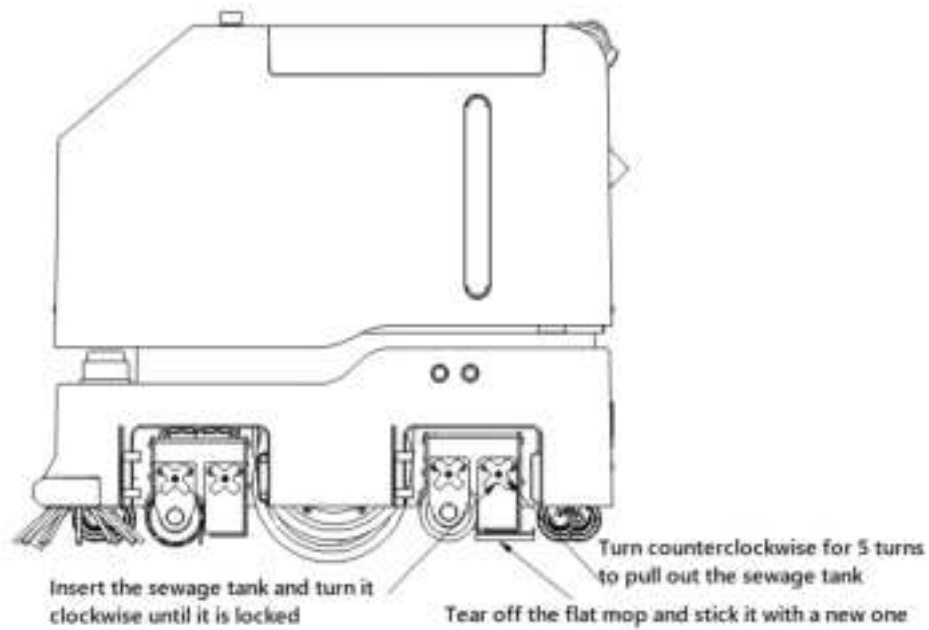
1. Side brush replacement



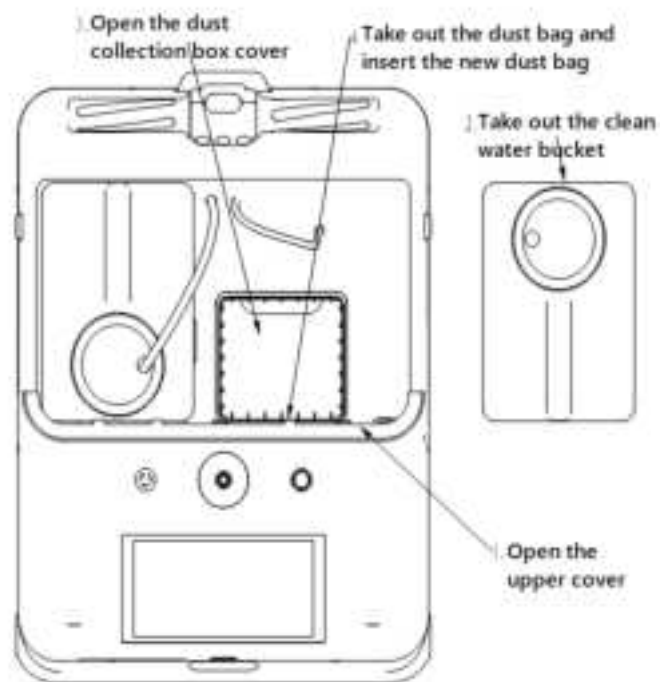
2. Roller brush, drag brush replacement



3. Flat mop replacement



4. Dust bag replacement



4. Other

1. When the machine is not used for a long time, please turn off the machine and charging pile after flushing the power supply of the machine to 50%. It is recommended to carry out a charging and discharging cycle for 2-3 months, try to avoid moving the charging

pile position and the machine position, and remove the liquid in the water tank ;

2. Ensure that the charging pile is placed against the wall, in a flat ground, no object should be placed in front of the charging pile, no object should be placed within 2 meters from the left and right, the machine is charging, avoid operating the machine, and ensure that the machine is stationary;
3. When the cleaning effect of the machine is not satisfactory or there is more residual water, the actual state and loss of the brush and mop should be checked;
4. Try to synchronize the operation of adding water and draining to ensure the optimal working state of the machine. After the operation is completed, ensure that the water tank is placed in place, and whether the water tank cover and water pipe are installed in place.

8. Common troubleshooting

The user can deal with the fault in time, or prompt how to deal with the obstacle of the machine.

serial number	description	countermeasures
1	Machine not working	Observe whether the APP interface prompts abnormal problems of the machine, and remove the abnormality according to the corresponding operation. If there is no prompt, please contact after-sales
2	The machine cannot charge automatically	Check whether the charging pile is turned on and whether the indicator light is normal. If not, please contact FAE.
3	Abnormal machine positioning	Before creating a new map and starting the machine, ensure that the machine is normally seated on the charging pile. If there is an abnormal positioning, the robot can be pushed back to the charging pile and restarted, and stand for a period of time to wait for the positioning correction to be completed.

9. FCC Warning

NOTE: 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

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

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.

FCC RF Exposure Warning Statements:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment shall be installed and operated with minimum distance 20cm between the radiator & body.

10. IC Statement

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

- (1) This device may not cause interference.
- (2) This device must accept any interference, including interference that may cause undesired operation of the device.

L' émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d' Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence.

L' exploitation est autorisée aux deux conditions suivantes:

- (1) L' appareil ne doit pas produire de brouillage;
- (2) L' appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d' en compromettre le fonctionnement.

IC Radio Frequency Exposure Statement:

This equipment complies with IC exposure limits set forth for an uncontrolled environment. This equipment shall be installed and operated with minimum distance 20cm between the radiator & body.

Cet équipement est conforme aux limites d'exposition IC établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec une distance minimale de 20 cm entre le radiateur et le corps.