

Airbot

Self Cleaning Sweeping Robot X40 Ultra Operating Manual

Catalogue

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Tips:

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

Safety precaution

Usage restrictions

- This product is only used for floor cleaning in the home environment. Do not use it in outdoor, non-floor, commercial or industrial environments.
- This product is not intended for use by persons with physical, sensory or intellectual disabilities and persons without relevant experience and knowledge, including children, unless under the supervision or guidance of a guardian to ensure their safe use of this product.
- Do not let children use the mopping robot as a toy. Please supervise children and pets to keep them away when the main unit is working.
- If the power cord is damaged, it must be replaced with a dedicated cord or a dedicated component purchased from its manufacturer or service department.
- Do not place children or pets and any objects on the stationary or running robot.
- Do not place the cleaning brush in an area that can be touched by children.
- Do not lift the lidar protective cover directly when moving the robot.
- Do not use it in a suspended environment (such as duplex floors, open balconies, and the top of furniture) without guarantee.
- Do not use it in an environment higher than 35°C, lower than 0°C or with any liquid and viscous substances on the ground.
- Do not use to sweep any burning objects.
- Before use, please tidy up the ground wire at home, if it is used on the power line, it will be dangerous.
- Please put away the fragile items and sundries on the ground (such as vases, plastic bags, etc.) to prevent the robot from being blocked or slightly collided during operation, which may cause damage to valuables at home.
- Do not use mopping mode on the carpet, when mopping, please set up a virtual wall or restricted area in the carpet area.
- Do not let the robot pick up hard or sharp objects (such as decoration

waste, glass, iron nails, etc.).

- Please turn off and unplug the main unit and base station before cleaning and maintenance.
- Do not place the main unit upside down on the ground for a long time.
- If you need to transport the product, please ensure that the robot is turned off, and it is recommended to use the original packaging box for packaging protection.
- Do not use a damp cloth or any liquid to wash the main unit and base station. After daily cleaning of the washable parts, please dry them thoroughly before installing and using them.
- During the cleaning process, do not move the sweeping robot out of the base station to avoid equipment damage.
- Please use this product in accordance with the instructions in the manual. Any loss and injury caused by improper use shall be borne by the user.
- Do not use in direct sunlight.
- This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.

Battery and charging

- Do not use any third-party batteries, power cords, or base stations, and can only be used with base stations of model X40 Ultra.
- Do not disassemble, repair, or modify the battery or base station without permission.
- Do not wipe or clean the battery connector of the base station with a damp cloth or wet hands.
- Do not place the base station near heat sources (such as radiators, etc.).
- Do not throw away discarded batteries at will, and hand them over to a professional recycling organization.
- If you do not use it for a long time, please turn off the robot after fully charged and put it in a cool and dry place.
- It is recommended to charge the battery at least every 3 months to avoid damage to the battery.
- This appliance contains batteries that are only replaceable by skilled persons.
- This appliance contains batteries that are non-replaceable.

Environmental statement

The chemical substances contained in the lithium-ion battery built into this product may pollute the environment.

Please have it removed by a professional before being scrapped and handed over to a professional battery recycling station for centralized disposal.

Steps to remove the battery

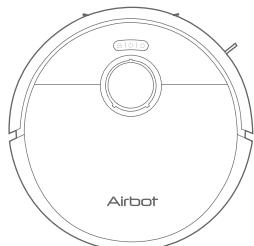
The following information is only applicable when discarding this mopping robot, not for daily operation instructions:

1. Let the sweeping robot run until the power is low and cannot be cleaned without touching the base station;
2. Shut down the sweeping robot;
3. Remove the battery cover at the bottom of the robot;
4. Press the buckle to pull out the connector plug of the battery and take out the battery.

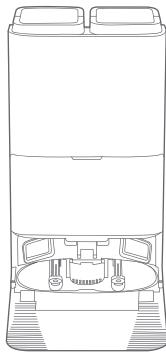
Notice:

- When removing the battery, make sure it is fully charged and operating away from the base station.
- Please disassemble the entire battery pack together, and do not damage the battery pack casing to avoid short circuit or leakage of dangerous substances. If accidentally comes into contact with the battery exudate, please rinse with plenty of water and seek medical attention in time.
- Before discarding the appliance, the battery must be removed from the appliance after the power is cut off, and the battery should be safely disposed of.
- State that during charging, the battery must be placed in a well-ventilated area (for chargers for batteries that release gases into the atmosphere during normal charging)

Product description



Robot



Base station

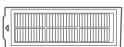
Note: The illustrations of products, accessories, user interfaces, etc. in the manual are schematic diagrams for reference only. Due to the updating and upgrading of the product, there may be slight differences between the actual product and the schematic diagram. Please refer to the actual product.

Parts List

Accessories installed on the robot:



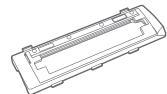
Dust box



Filter
(installed on
the dust box)



Main brush



Main brush cover

Accessories installed on the base station:



Sewage water tank



Clean water tank



Cleaning tray



Dust bag

Other Accessories:



Manual



Mop cloth
support*2



Mop*2
(Installed on the
mop support)



Movable base



Power cord



Cleaning
solution



Side brush



Cleaning
brush

Product description

Robot

AI visual recognition sensor

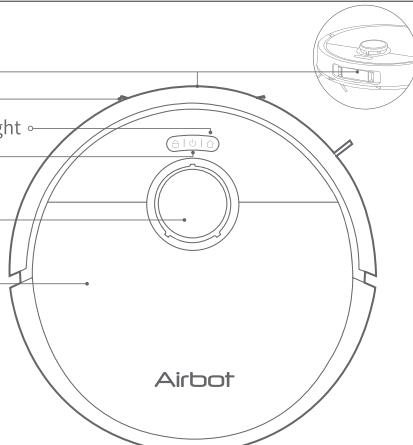
Collision sensor

Recharge button/Indicator light

Power button

Lidar (laser ranging sensor)

Top cover



Robot indicator status description

White light is always on	Standby/full/self-checking/relocating/in work/suspended/connect successful
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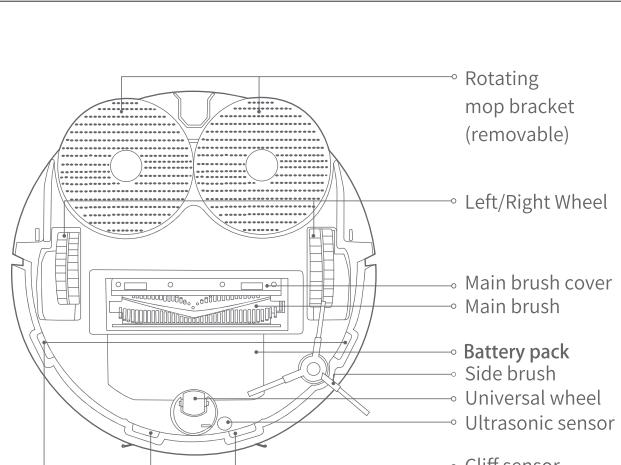
White light breathing	Charging/breakpoint charging/Power on
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White light flashes	Downloading firmware/Upgrading firmware/System reset/Recharging/Networking
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Orange light is always on	Offline
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White light flashes	Not enough starting conditions/abnormal
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White light breathing	Low charge in progress
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power button

Press and hold for 3s to turn on or off
Short press to start or pause
cleaning/sweeping

Recharge button

Short press when running to enter the
pause state
Short press when pausing to start recharge
Short press when recharging to stop recharging

Child lock button

Press and hold for 3s to turn on or off
the child lock

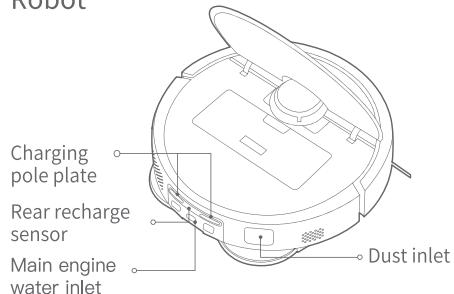
Base station indicator status description

White light is always on	Base station status normal
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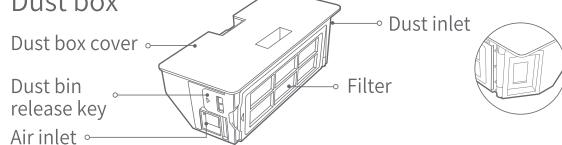
Orange light flashes	Base station abnormal status
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Product description

Robot

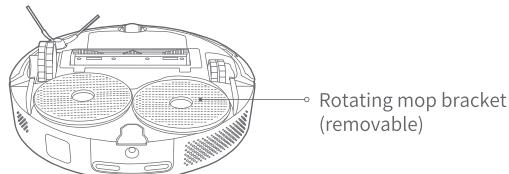


Dust box

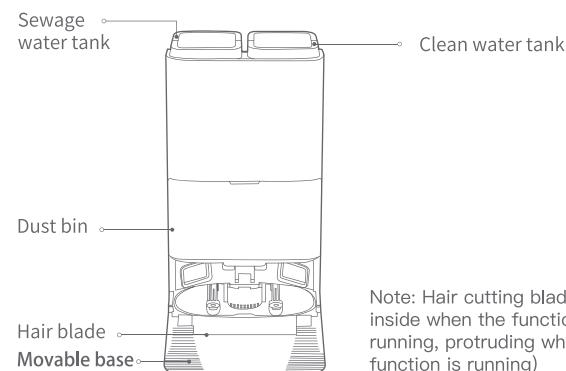
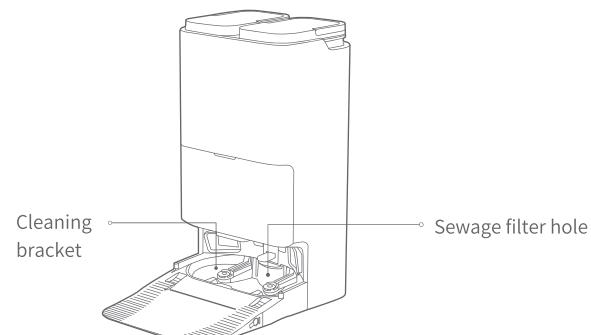


Note: The dust box must be installed in all cleaning modes, otherwise the host will not start.

Mop assembly (mop support + mop)



Base station (placed against a wall)



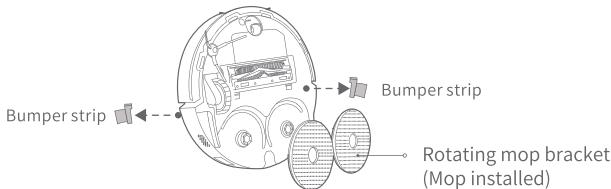
Note: Hair cutting blade (hidden inside when the function is not running, protruding when the function is running)

Install

Removal and installation

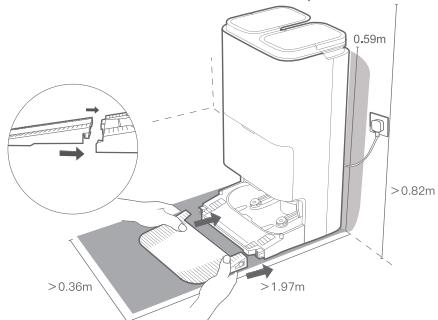
Remove the anti-collision strips on both sides of the host.

Install the mop assembly to the buckle of the shown position, and hear "click", indicating that the installation is in place.



Place the base station and install the movable base

As shown, the base station is placed against the wall. Before use, first align the base station mobile base to the position of the base station, hear "da" sound indicates that the installation is in place.

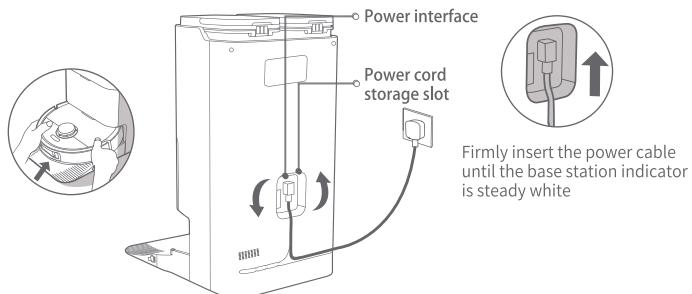


Tip:

- Do not place the base station in direct sunlight or block the signal transmission area with any object, otherwise the robot may not be able to return automatically.
- Do not place items within 5cm or so of the base station and 1.5m in front of it.
- The clean water tank, sewage tank, and cleaning tray must be installed in place.

Power on and charge

When using it for the first time, press and hold the power button for 3 seconds to turn it on. After turning it on, please manually place the robot on the base station, and align the charging pole piece with the battery connector. In daily use, you can directly press the recharge button to start the smart recharge.



Tip:

- The excess power cable can be wrapped around the storage slot, and the part of the power cable attached to the ground can be stuck into the bottom cable slot to prevent the host from dragging the power cable and causing the base station to shift or power off.
- When charging for the first time, please use it fully charged to protect the battery.
- When the battery is low, it may not be able to turn on, please place the robot on the base station for charging.
- The robot will automatically turn on after connecting to the base station, and cannot be turned off during the charging process.
- After the host is fully charged in the base station for 10 minutes, the indicator lights of the host and the base station are extinguished at the same time.
- For the first time, please complete the quick drawing according to the APP prompts. It is recommended to follow the host throughout the whole process to help clean up the items that may affect the work of the host.

Install

- Please ensure that the host starts from the base station, and remove the ground obstacles to ensure the accuracy of the drawing.
- If some areas may jam the host or scratch the furniture surface when the host is running, you can set a restricted area in the mobile APP.
- The host is blocked from entering such an area.

Connect APP

1. Scan QR code below to download and install the APP.



Android



iOS

2. Configure network

Press “” + “

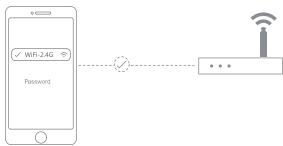
3. Add the machine on the APP interface and enter the Wi-Fi password to connect

- Android phones are tied to Wi-Fi

Next connect, press the mobile phone screen prompt operation.

- IOS phones are bound to Wi-Fi

Go to the mobile phone Wi-Fi Settings page, select a product hotspot, and wait until the connection is successful. Return to the APP interface, click next to complete the connection according to the prompt.



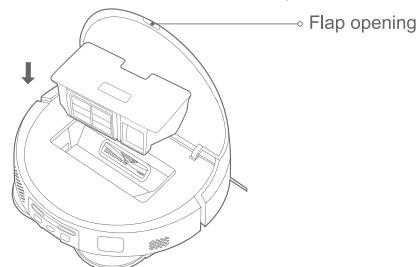
Tip: Only Wi-Fi networks in the 2.4GHz band are supported.

Use

Install accessories according to desired cleaning mode

Sweeping mode (make sure the dust box is installed on the host) :

Open the face cover from the flap opening, put the dust box into the main engine, and make sure that the buckle is firmly stuck.

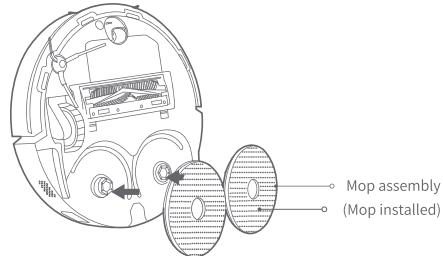


Use

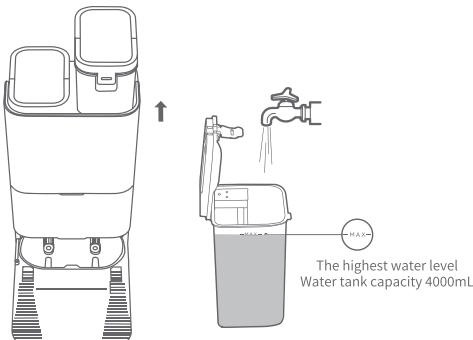
Tip: Please clean the dust box and filter regularly, so as not to affect the cleaning effect.

Mop mode (installation of dust box, mop assembly, cleaning tank, sewage tank) :

1. Install the mop assembly to the buckle in the shown position. If you hear "click", it means that the mop assembly is installed in place.



2. Fill the clean water tank to the maximum (MAX) water level.



Attention:

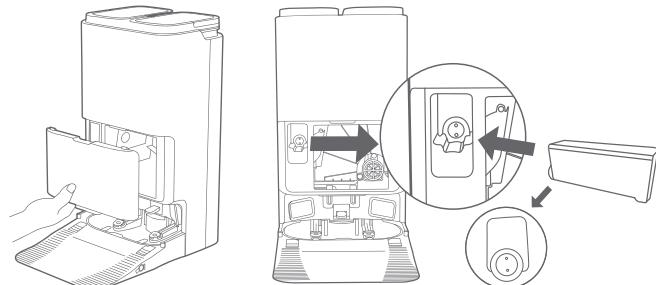
- Do not inject hot water into the clean water tank or sewage tank to avoid deformation of the clean water tank or sewage tank.
- When mopping the floor, it is recommended to set up a virtual wall or restricted area in the carpet area.
- In a stagnant environment, please clean up the stagnant water before using the sweeping or mopping function.

After mopping the floor, please remove and clean the sewage tank and cleaning tray in time to avoid odor and mildew.

The new product will be tested before leaving the factory, and a small amount of water stains may remain, which is a normal phenomenon.

3. Install the cleaning solution on the base station, as shown in the following steps.

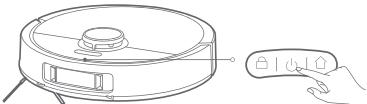
- (1) Remove the front cover
- (2) Place the cleaning liquid bottle horizontally and push it into the card slot according to the picture. Then it can be used normally.



Use

Start the host

Press the host key “” to start cleaning.



On/Off

Press and hold the “” for 3 seconds, the indicator light will turn on, and the host will be turned on. When the host is not charged and suspended, press and hold the “” for 3 seconds to shut down.

Pause

During cleaning or recharging, press any key on the host to pause, and then press “” to continue working.

Sleep mode

In the non-charging state, if the host does not run or operate for more than 10 minutes, it will automatically enter the sleep state, and it will automatically shut down if it sleeps for more than 6 hours; in the sleep state, the host can be woken up by pressing the button and control by the APP.

Tip: The host will not go to sleep when it is on the base station.

Recharge

When the power is too low during cleaning, it will be automatically recharged. When the power is sufficient, it will automatically return to the breakpoint to continue cleaning. In standby mode, press the “” key to start the recharge. During cleaning, press the “” key to pause the cleaning, press the “” key again, the host will start the recharge, and determine whether to clean the mop according to the cleaning mode.

Child lock

To enable or disable the child lock function, hold down the “” button on the host for 3 seconds to charge or pause.

Mode/gear selection

In the APP, you can choose a variety of cleaning modes and suction gears.

Memory map

In the APP, the host will automatically save and update the map after the quick construction or cleaning is completed and the recharge is successful. After the map is drawn successfully, you can divide and merge areas or customize room names in the APP.

Wash mop

In the process of sweeping, the host will automatically return to the base station to clean the mop, and continue to sweep after cleaning; after the mop is completed, the master will automatically return to the base station to clean the mop. After the cleaning is completed, the mop will start to dry and charge; When the host is on standby in the base station, select the cleaning function in the APP, and the cleaning mop will start. After the cleaning is completed, the mop will start to dry and charge.

Tip: The base station is powered off, the cleaning water tank is empty, the host machine leaves the base station, the sewage tank is full, and the cleaning tray is not installed in place. Please check before cleaning.

Use

Breakpoint continuation

This product has the function of breakpoint continuous scanning. During the cleaning process, when the power is low, the master will automatically look for the base station to charge, and the host will carry out intelligent charging. After reaching the set power, it will return to the breakpoint to continue cleaning. If cleaning, movement, or operation is manually ended during recharge or charging, the host will cancel the breakpoint resuming.

Scheduled cleaning

The APP can be used to set the scheduled cleaning time, the host will automatically start cleaning at the specified time, and automatically return to the base station when the cleaning is finished.

Tip: If Do not disturb mode is enabled, scheduled cleaning will not be performed during the do not disturb period.

Dust collecting function

After the host completes the cleaning task and automatically recharges, the base station will start collecting dust automatically.

Tip:

- When the host machine returns to clean the mop halfway, the base station will not automatically collect dust.
- If the automatic dust collection function is turned off in the APP, the base station will not automatically collect dust.
- If the dust collection frequency is modified in the APP, the base station will collect dust according to the set frequency.

Virtual Wall/Restricted Area

Use the APP to set up a virtual wall/restricted area to prohibit the host from entering the area that does not need to be cleaned.

Tip:

- Before using this function, you need to save the map in the APP.
- Moving the host or changing the home environment may cause the original map to fail and the virtual wall/restricted area to be lost.

Global cleaning

When the map is not saved, select global cleaning, and the host will clean a square area of $6m \times 6m$ area by area; after saving the map in the APP, select global cleaning, the host will automatically plan a path to clean room by room, and return to the cleaning station after cleaning.

Zone cleaning

Zone cleaning can be set in the APP, and the host will clean according to the planned area.

Tip: During cleaning, the host may go beyond the designated area, please pay attention to clear the ground obstacles around the designated area. Domain dashing does not serve as a security isolation.

Do Not Disturb Mode

In this mode, the host does not perform breakpoint continued scanning, scheduled cleaning and active voice broadcasting, and the indicator is off 10 seconds after the host returns to the base station. This mode can be turned on or off in the APP.

Tip: For more functions, please refer to the APP. The specific situation of each function is subject to the APP.

Reset Wi-Fi

Press “” + “” and hold for 3 seconds to configure the network.

Tip: Only Wi-Fi networks in the 2.4GHz band are supported.

Reset/restore system

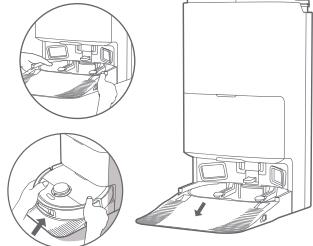
Press and hold the recharge button for 5S. After hearing that the system is reset successfully, the host automatically restarts, and the Settings such as scheduled cleaning and Wi-Fi are restored to factory defaults.

Maintenance and Maintenance

Cleaning tray

Take out the cleaning dish, rinse the cleaning dish fully, and clean the dirt on the cleaning dish with a rag. After cleaning, wipe the cleaning tray with a dry cloth and then put it back into the cleaning tray.

Base station assisted flushing



Tip: Do not tilt the base station during daily use and cleaning. If there is water on the cleaning tray or the bottom of the cleaning tray, dry it with a rag.

Sewage water tank

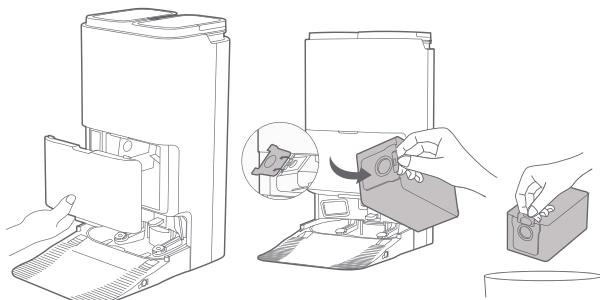


Tips:

- Please clean the sewage tank in time after the cleaning task is completed.
- The float in the water tank and the float in the sewage tank are all moving parts, do not use too much force when cleaning to avoid affecting the function.

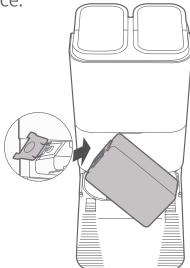
Replace dust bag

1. When a new dust bag needs to be replaced, open the cover of the dust collecting bin, pull the dust bag handle, take out the dust bag and discard it.



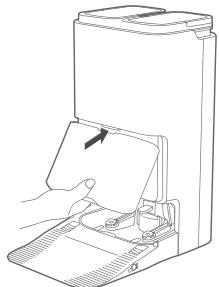
Tip: When taking out the dust bag, pulling the dust bag handle can seal the dust bag and effectively prevent dust and other dirt from falling out.

2. Install the new dust bag according to the figure, insert the dust bag handle into the card slot, and install it in place.



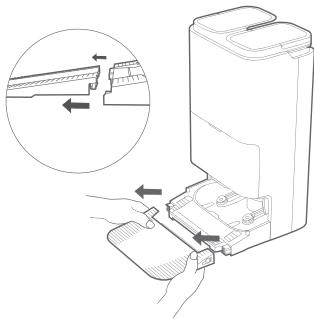
Maintenance and Maintenance

3. Clip the top of the dust collecting bin cover first, and then press the bottom until you hear the "click" sound to ensure that the dust collecting bin is completely closed.

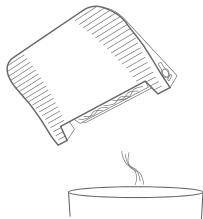


Chip box

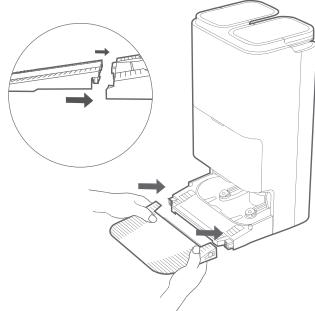
1. Hold the buttons on both sides of the movable base, press them and pull out the movable base.



2. Remove the movable base by referring to the figure, and clean the chip box.



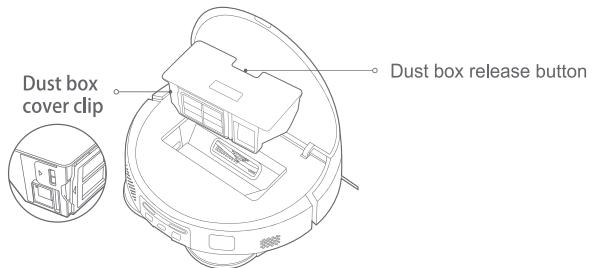
3. After cleaning the chip box of the movable base, align the active base with the connection point of the base station fixed base and install it back. If you hear a sound of "da", the active base is installed in place.



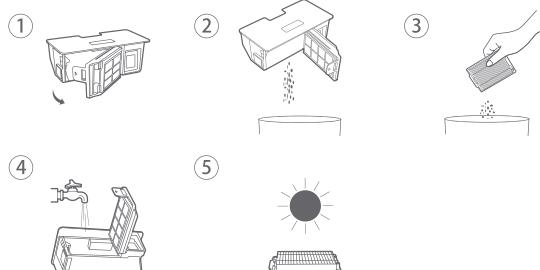
Maintenance and Maintenance

Dust box filter

1. Open the cover of the host, press the release button of the dust box, and take out the dust box.



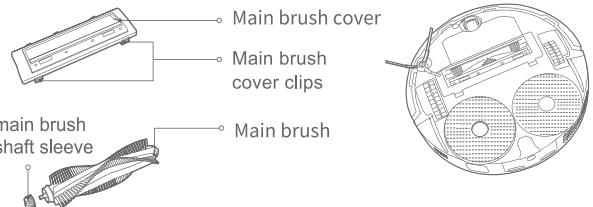
2. Take out the filter according to the figure, clean the dirt of the dust box and filter, clean the dust box and filter with clean water if necessary, dry it and put it back.



Tip: It is not recommended to wash the filter with water frequently. After washing, be sure to dry it completely before installing.

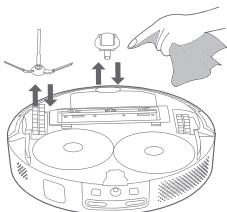
Main Brush

1. Turn the machine over, grab the two main brush cover clips and remove the main brush cover.
2. Take out the main brush, and then unplug the main brush sleeve to clean up the dirt.
3. After cleaning, install the main brush shaft sleeve, main brush and main brush cover in turn. When installing the main brush cover, a sound of "click" indicates that the installation is in place.



Side brush and universal wheel

1. Turn over the main engine and pull out the side brush and universal wheel upward.
2. Clean the hair and dirt on the side brush and universal wheel.
3. Reinstall the edge brush and universal wheel.



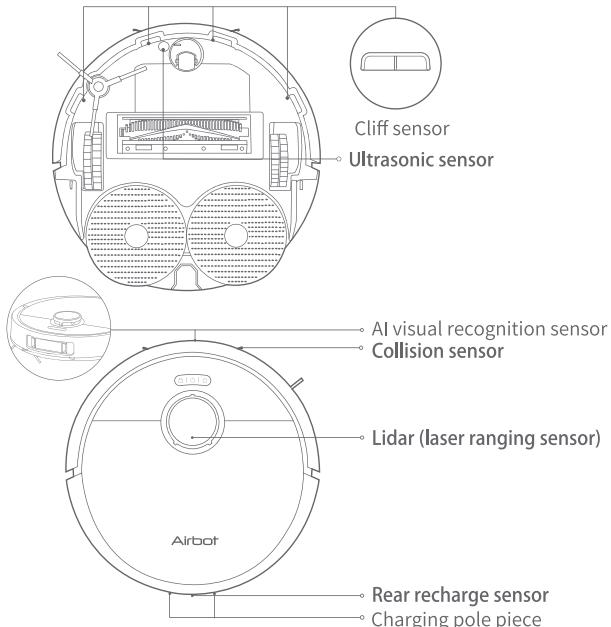
Align the side brush with the buckle when installing it back

Tip: It is recommended to clean the side brush and universal wheel every 2 weeks to ensure the cleaning effect. Clean the edge brush and universal wheel and put it back in time.

Maintenance and Maintenance

Sensor

Clean the sensor regularly with a soft dry cloth.



Note: Do not use chemicals such as detergents or sprays to clean the sensor.

To keep the host in good condition, it is recommended to refer to the following table for routine maintenance:

Unit	Cleaning frequency	Replacement frequency
side brush	Every 2 weeks	3-6 months
Main brush	Every 2 weeks	6-12 months
Filter	Every 2 weeks	3-6 months
Main brush cover	/	3-6 months (or wear and tear)
Mop	/	1-3 months (or wear and tear)
Chip box	Every 3 months	/
Dust box	Clean on demand	/
Clean water tank	Wash once every 2 weeks	/
Sewage water tank	Clean after each use	/
Cleaning tray	Clean once every 1 month	/
Universal wheel	Clean once every 1 month	/
Lidar (laser ranging sensor)	Clean once every 1 month	/
AI visual recognition sensor	Clean once every 1 month	/
Ultrasonic sensor	Clean once every 1 month	/
Cliff sensor	Clean once every 1 month	/
Charging pole piece	Clean once every 1 month	/
Collision buffer plate	Clean once every 1 month	/
Main engine dust collecting port	Clean once every 1 month	/
Main engine bottom	Clean once every 1 month	/
Base station body	Clean once every 1 month	/
Base station charging shrapnel	Clean once every 1 month	/
Base station signal transmission area	Clean once every 1 month	/
Dust bag	/	2.5 months (or full dust bag)

Tip:

- Replacement frequency is for reference only. If the parts are damaged, please replace them in time to ensure the cleaning effect.
- If you need to move or mail the product, please empty the sewage tank and clean the water tank to avoid damage to the machine during transportation.

Q&A

Fault phenomenon	Solution
Unable to start	The battery is low, please fully charge it before use
Unable to start cleaning	The battery is low, please fully charge it before use.
cannot be recharged	There are too many obstacles near the base station, please place the base station in an open area. The robot is too far from the base station, please try to place the host near the base station.
Abnormal behavior	Reboot after shutdown.
Abnormal noise when cleaning	The main brush, side brush or left/right wheel may be entangled with foreign objects, please clean it after shutting down.
Decreased cleaning ability or dust loss	The dust box is full, please clean the dust box. The filter is clogged, please clean it. The main brush is entangled by foreign matter, please clean the main brush.
machine offline	The Wi-Fi signal is not good, please make sure the host is in a good Wi-Fi signal coverage area. Wi-Fi connection is abnormal, reset Wi-Fi and download the latest APP to try to connect again.
Unable to continue scanning	Please make sure that the host is not in Do Not Disturb mode, which will not continue scanning. Operation of the host charging key, operation of the APP charging key, or moving the host back to the base station will not break and continue scanning
Can't charge	Make sure that there is enough space around the base station, and that there is no dust or obstructions on the surface of the base station charging shrapnel. The ambient temperature is too low (below 0°C) or too high (above 35°C).
Scheduled cleaning not working	If the device is not connected to the Internet, the time cannot be synchronized, and the scheduled cleaning will not start. Please make sure the main unit is not in Do Not Disturb mode, scheduled cleaning cannot be performed in this mode. Please make sure that the main unit is not in child lock mode, scheduled cleaning cannot be performed in this mode.

Fault phenomenon	Solution
Robot is always offline	Please ensure that the device is successfully networked and is always within Wi-Fi coverage.
Can't connect to APP	Please ensure that the base station and the host are within the Wi-Fi coverage, and the signal is good, reset the Wi-Fi according to the instructions in the manual, and then pair.
Unable to clean mop	The water tank is short of water. Please fill it up. The sewage tank is full. Please pour out and clean it. If the cleaning tank is full, clean the sewage filter holes in the cleaning tank.

Troubleshooting

Fault prompt	Solution	Fault prompt	Solution
Please confirm that the laser ranging sensor is not blocked and then start	The laser ranging sensor is blocked or stuck by a foreign object, request the blocking object or foreign object; if it cannot be removed, please move the host to a new location to start	Virtual wall or restricted area detected, please evacuate the host from this area	The robot is in the virtual wall or restricted area, please move the robot out of this area.
Please wipe the drop sensor and move to a new location to start	The main engine is suspended, please move to a new position to start; The anti-drop sensor is dirty, which may also cause the fault. Wipe the anti-drop sensor to remove the fault.	Please check and remove the collision sensor	The collision sensor is stuck, please tap several times to remove foreign objects; if there are no foreign objects, please move to a new location to start.
Please place the robot on a level ground to start	When the robot is detected to be tilted during startup, please place the host on a level ground to restart; or restart the device after the APP has leveled the device.	Make sure the cleaning bracket is installed	Please clean the cleaning bracket and make sure that the cleaning bracket is installed in place.
Please place the host on the ground to start	The wheels are in the air, please move to a new position to start.	The water tank is empty. Please add fresh water in time	Please check and replenish the water in the tank.
Please clear the obstacles around the host and try again	The console may be stuck or trapped, please clear any obstacles around the console.	The reservoir is full, please clean it immediately and check that the recovery tank is in place	Check and clean the cleaning tank and make sure the sewage tank is installed in place.
Please make sure the dust box is installed	Please replace the dust box and filter, and make sure that the filter and dust box are installed in place.	Recharge failed, please move the host back to the base station	The robot cannot sense the location of the base station, please put the host back to the base station to charge.
Make sure the mop is installed	The main unit cannot perform the sweeping and mopping function, please check and confirm that the mopping cloth has been installed in time	The battery is too low, please recharge	The power is too low, the host cannot start normally, please put the host back to the base station to charge.

Basic Parameters

Fault prompt	Solution
Make sure the dust bag is installed	The base station cannot collect dust, please check and confirm that the dust collection bag is installed in place.
The positioning failed, please move the host back to the base station to charge and rebuild the map	The power is too low, the host can not locate the cleaning area, please put the host back to the base station to charge and rebuild the map.
Failed to build the map, please rebuild the map	During the map building process, do not move the base station and rebuild the map.
The target area cannot be reached, and the cleaning is not completed	The target area is unreachable. Reset the target area.

Robot

Product name:	ROBOT VACUUM CLEANER
Product Model:	X40 Ultra
Main machine size:	φ350×100mm
Net weight of main engine	4.36kg
Rated power:	55W
Rated voltage:	14.4V ---
Charging voltage:	20V --- 2.1A
Battery capacity:	4800mAh (rated capacity), 5200mAh (nominal capacity)
Wireless connection:	Wi-Fi IEEE 802.11b/g/n 2.4GHz Bluetooth 5.0
Executive standard	GB 4706.1-2005, GB 4706.7-2014, GB 4343.1-2018, GB 17625.1-2022

Base station

Base station model:	X40 Ultra Station
Rated input:	220-240V~ 50/60Hz
Rated output	20V --- 2.1A
Power(Drying + charging)	90W
Power(Cleaning)	1500W
Power(Dust collecting)	650W
Base station size:	310×468×595mm

Manufacturer: Airbot Technology Co.,Ltd

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