

# ***Mamibot***

## **Robot Vacuum Cleaner**

### **All-In-One Station Ultra T20**



**USER MANUAL**

**20251201 Ver.**

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## Safety Instructions


To avoid electric shock, fire or injury caused by improper use of the appliance, please read the user manual carefully before using the appliance and keep it for future reference.

### Usage Restrictions

- This product should not be used by children younger than 8 years old, nor persons with physical, sensory, intellectual deficiencies, or limited experience or knowledge without the supervision of a parent or guardian to ensure safe operation and to avoid any risks. Cleaning and maintenance shall not be performed by children without supervision.
- The appliance is only to be used with the power supply unit provided with the appliance.
- This appliance contains batteries that are only replaceable by skilled persons.
- Clear the area to be cleaned. Children shall not play with the appliance.
- Ensure children and pets are kept at a safe distance from the robot while it is operating.
- Do not install, charge or use the appliance in the bathrooms or around the pools.
- This product is for floor cleaning in a home environment only. Do not use it outdoors, on non-floor surfaces, or in a commercial or industrial setting.
- Ensure that the appliance operates correctly in a proper environment. Otherwise, do not use the appliance.
- If the power cord or adapter is damaged, it must be replaced by a special party or assembly available from the manufacturer or its service agent.
- Do not use the robot in an area suspended above ground level without a protective barrier.
- Do not place the robot upside down. Do not use the LDS cover, robot cover, or bumper as a handle for the robot.
- Use the robot in environments with an ambient temperature above 0°C and below 45°C. Make sure there is no liquid or sticky substance on the floor.
- To prevent damage or harm from dragging, clear any loose objects from the floor, and remove cables or power cords on the cleaning path before operating the appliance.
- Remove fragile or small items from the floor to prevent the robot from bumping into and damaging them.
- Keep hair, fingers, and other body parts away from the suction opening of the robot.
- Keep the cleaning tool out of reach of children.
- Do not operate the appliance in a room where an infant or child is sleeping.

- Do not place children, pets, or any item on top of the robot regardless of whether it is stationary or moving.
- Only clean water and the officially approved cleaning solution can be added to the clean water tank. Do not add any other liquid, such as alcohol or disinfectant. Check the ratio of the cleaning solution if there is. Keep the cleaning solution out of reach of children.
- Do not use the robot to clean any burning objects. Do not use the robot to pick up flammable or combustible liquids, corrosive gases, or undiluted acids or solvents.
- Do not vacuum hard or sharp objects. Do not use the appliance to pick up objects such as stones, large pieces of paper or any item that may clog the appliance.
- Plug must be removed from the socket-outlet before cleaning or maintaining the appliance.
- Do not wipe the robot or the base station with a wet cloth or rinse them with any liquid. After cleaning washable parts, fully dry the parts before reinstalling and using them.
- Please use this product in accordance with the instructions in the User Manual. Users are responsible for any loss or damage that arise from improper use of this product.

## **Batteries and Charging**

- Do not use any third-party battery or base station. The robot can only be used with the model BST20 base station.
  - Do not attempt to disassemble, repair, or modify the battery or the base station on your own.
  - Do not place the base station near a heat source.
  - Do not use a wet cloth or wet hands to wipe or clean the base station's charging contacts.
  - Do not improperly dispose of old batteries. Unneeded batteries should be discarded at an appropriate recycling facility.
  - If the power cord becomes damaged or broken, stop using it immediately and contact after-sales service.
  - Make sure the robot is turned off when being transported and kept in its original packaging if possible.
  - If the robot will not be used for a long period of time, fully charge it, then turn it off and store it in a cool, dry place. Recharge the robot at least once every 3 months to avoid over-discharging the batteries.
- Warning against recharging non-rechargeable batteries.
- Rechargeable Battery Type: Lithium-ion battery  
Rated Voltage: 14.4V   
Rated Capacity: 5200 mAh

**Laser Safety Information**

The laser sensor in this product meets:

IEC 60825-1:2014/EN 60825-1:2014/A11:2021 Standard for Class 1 laser products. Please avoid direct eye contact with it during use.

CLASS 1 LASER PRODUCT

CONSUMER LASER PRODUCT

EN 50689:2021

**Battery Disposal and Removal**

The built-in lithium-ion battery contains substances that are hazardous to the environment. Before disposing of the battery, make sure the battery is removed by qualified technicians and discarded at an appropriate recycling facility.

- the battery must be removed from the appliance before it is scrapped;
- the appliance must be disconnected from the supply mains when removing the battery;
- the battery is to be disposed of safely.

**CAUTION:**

Before removing the battery, disconnect the power and run out the battery as much as possible.

Unneeded batteries should be discarded at an appropriate recycling facility.

Do not expose to high temperature environment to avoid the risks of explosion.

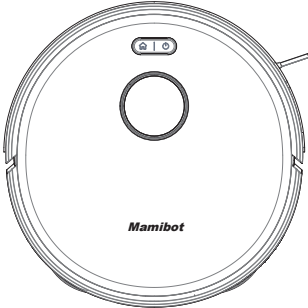
Under abusive conditions, liquid may be ejected from the battery. If contact occurs, flush with water and seek medical help.

**Removal Guide:**

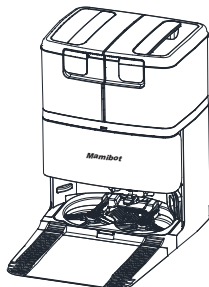
1. Unplug the power source.
2. Turn over the robot, use a proper tool to remove the screws on the back of the robot, and then remove the cover.
3. Unplug the terminals between the battery and PCB board to remove the battery.

# Specification

## Robot

	
Product Model	Ultra T20
Size of Robot	345*103.5 mm
Unit Net Weight	About 3.80 KG
Robot Input	19V $\overline{\text{---}}$ 1.25A
Robot Rated Power	75W
Robot Battery Type	Li-ion Battery
Battery Capacity	5200mAh
Rated Battery Voltage	14.4V
Dust Box Capacity	250 ml
Water Tank Capacity	70 ml
Working Time	> 200 mins (Quiet Mode)
Charging Time	< 7 hours
※ The data come from the lab of Mamibot Manufacturing USA Inc. It may be slightly different from the users data, please subject to the actual products. For continous products improvement, we reserve the right to any technical and design change without prior notice.	

## All-In-One Station

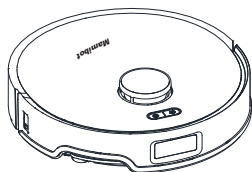


Product Model	BST20
Size of Station	340*292*479.5 mm
Unit Net Weight	About 7.60 KG
Input	EU 220-240V~ 50/60Hz 0.7A
Base Station Output	19V $\equiv$ 1.25A
Self-Emptying Rated Power	1000W
Clean Tank Capacity	5.0 L
Dirty Tank Capacity	4.2 L
Dust Bag Capacity	About 2.8 L

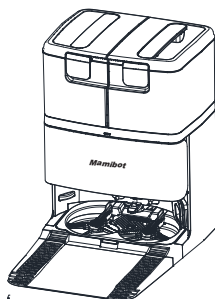
※ The data come from the lab of Mamibot Manufacturing USA Inc. It may be slightly different from the users data, please subject to the actual products. For continous products improvment, we reserve the right to any technical and design change without prior notice.

# Product overview

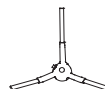
## Package Contents



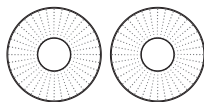
Robot x 1 pcs



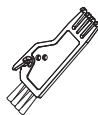
All-In-One Station x 1 pcs



Side Brush x 1 pcs



Mop Padx 2 pcs



Cleaning Brush x 1pcs

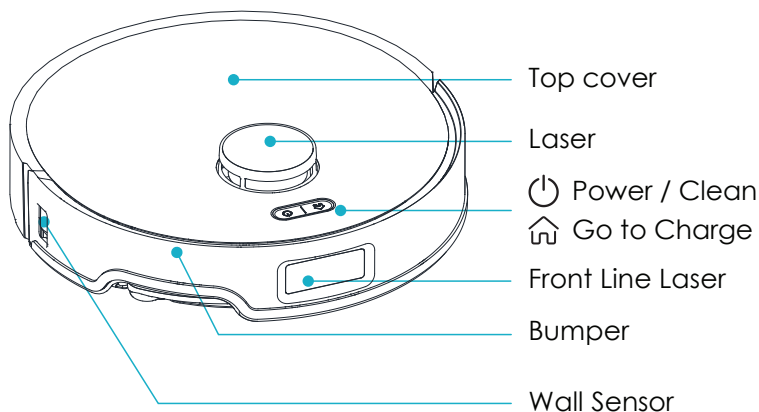


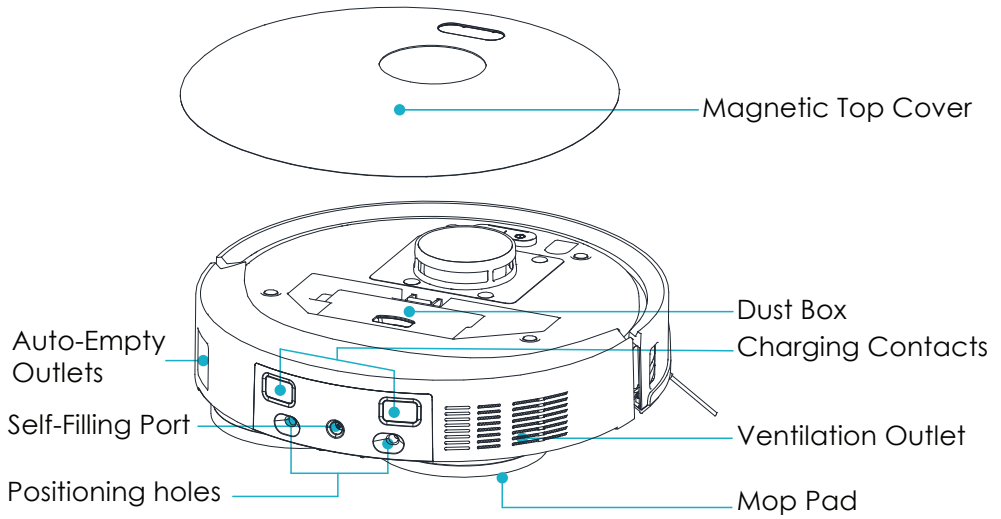
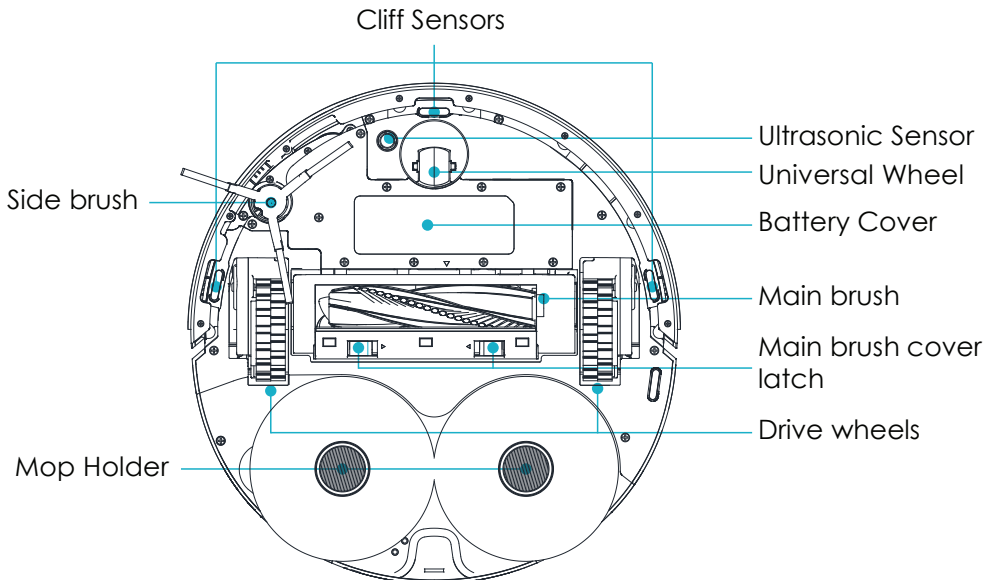
User Manual x 1 pcs

Accessories of different batches may be slightly different and they are subject to the actual received products.

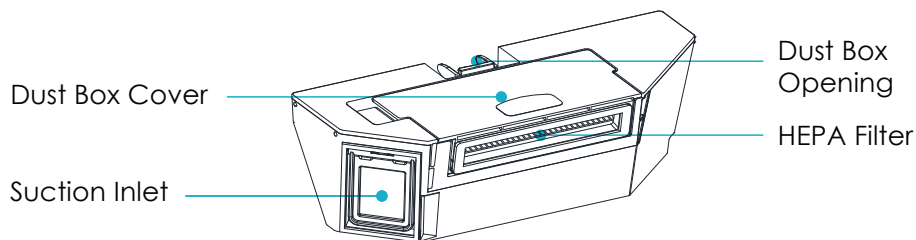
## Anatomy

### Robot (Top View)

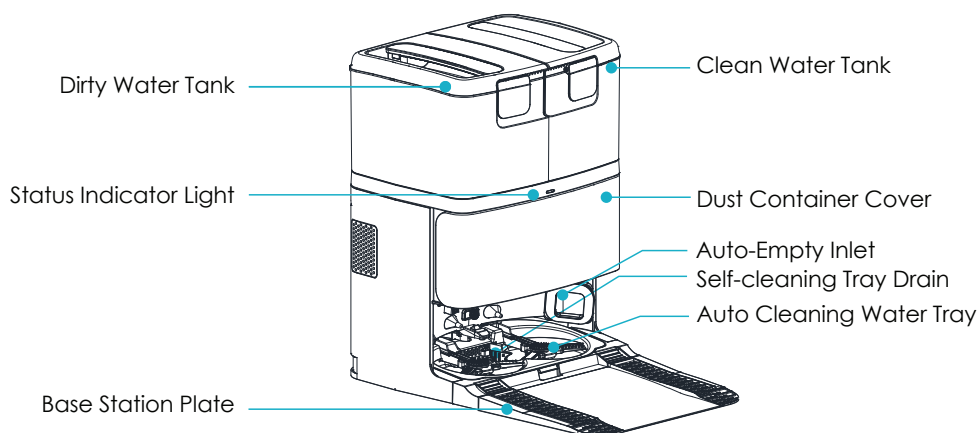


**Robot (Top Cover Removed)****Robot (Bottom View)**

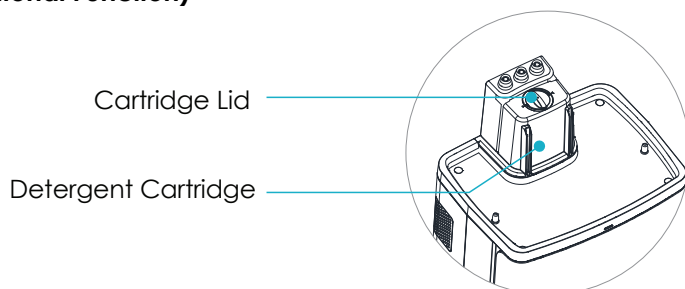
## Dust Box



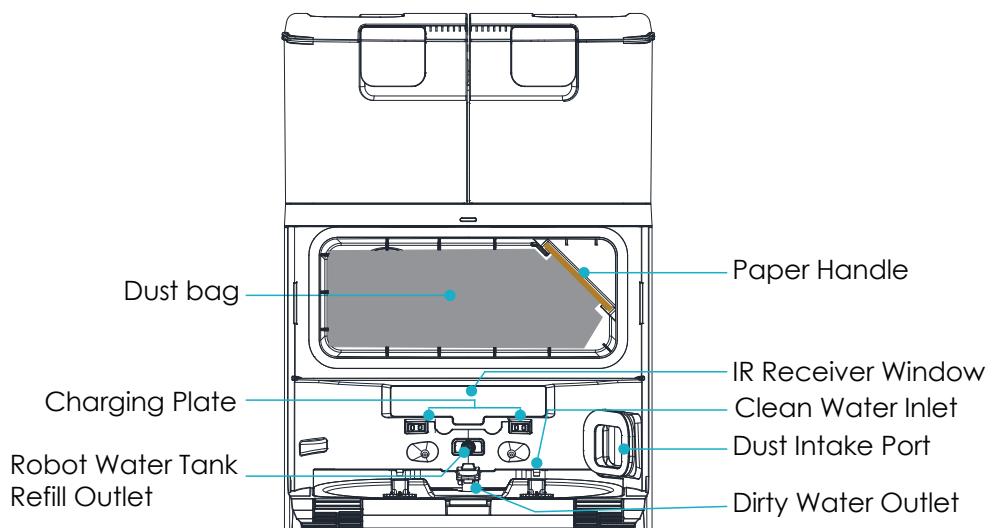
## All-In-One Station (Front side)



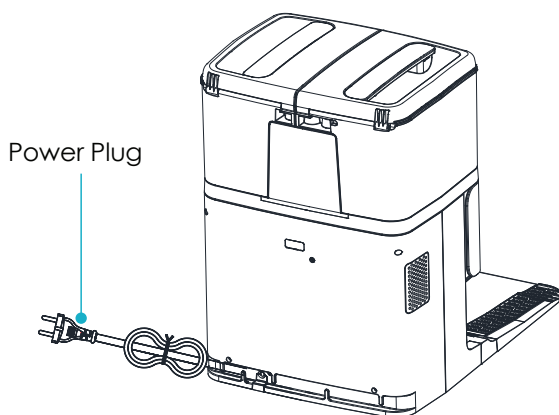
## (Optional Function)







### **All-In-One Station (Back Side)**



## Status Indicator Light

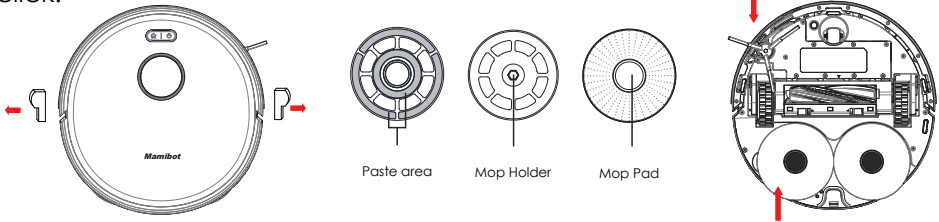
Robot Ultra T20 Buttons Light Definition		
Status	Power Button Light	Charging Button Light
WiFi reset	Flashing blue	Flashing blue
Power on	Blue breathing	Blue breathing
Stand by	Solid blue	Solid blue
Stand by-low battery status	Red breathing	Red breathing
Sleeping mode	Off	Off
Cleaning	Solid blue	Solid blue
Paused	Solid blue	Solid blue
Searching for Charging	Blue breathing	Blue breathing
Searching for Charging-low battery	Red breathing	Red breathing
Charging	Blue breathing	Blue breathing
Error	Flashing red	Flashing red
Fully charged	Solid blue	Solid blue
Do not Disturb Mode	Off	Off
Power off	Off	Off
OTA	Blue breathing	Blue breathing

Station BST20 Buttons Light Definition		
NO.	Status	Lighting
1	Powerd on	Solid blue
2	The dust bag is not packed or in place	Solid red
3	Air ducts blocked	Solid red
4	Not energized	Off
5	Do not Disturb Mode	Off
6	Charging	Blue breathing
7	Full charged	Solid blue
8	Self-Emptying	Flashing blue

## Before Use

### Side Brush & Mop Pads Installation

1. Remove the robot protections first.
2. Stick the mop pads on the mop holders in position and firmly.
3. Snap the side brush on the brush shaft firmly.
4. Align and install the mop holders into the robot in place until you hear a click.

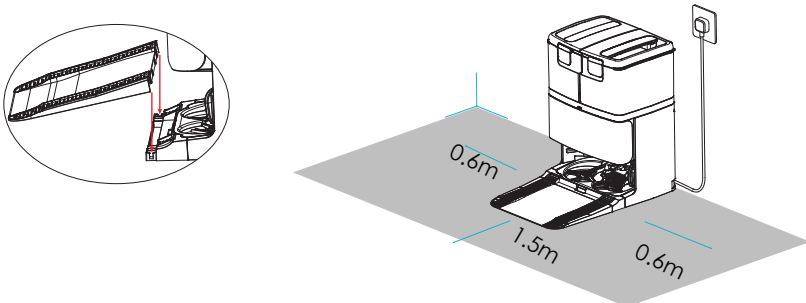


### All-In-One Station Installation

1. Reserve a space of at least 0.6m in width at both left&right side and 1.5m in depth. Make sure that the location has good WiFi access for a better experience with the mobile app. Plug in and make sure that the status indicator light is on.
2. Attach the base station plate by pressing down both sides of the base firmly, and then pressing the connecting part in the middle until you hear a click.

#### **Note:**

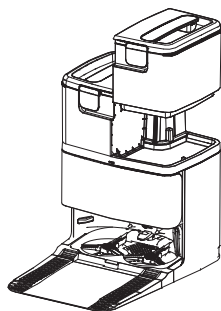
- Place the station against a wall on a hard, flat floor (wood/tile etc.).
- Tidy cords, hard or sharp objects (such as nails and glass), and loose items from the ground and move any unstable, fragile, precious, or dangerous items which may block or slow down the operation of the robot vacuum cleaner.
- When using the robot in a raised area, always use a physical security barrier to prevent accidental falls that may result in personal injury or property damage.
- All stations are subject to water-based tests during production. It is normal that a small amount of water remains in the waterway of the station.



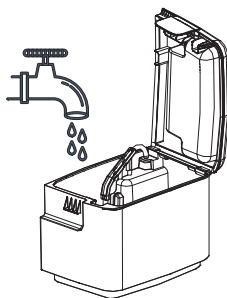
## Clean Water Tank Installation

Lift the clean water tank, open its top cover, and then fill it with tap water. After filling, close the cover and put the clean water tank back to the station, make sure that the station indicator is solid blue.

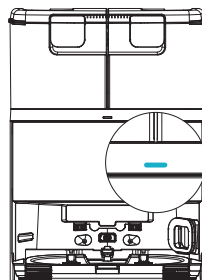
**Note:** Do not add hot water into the water tank, as this may cause the tank to become deformed.



1



2



3

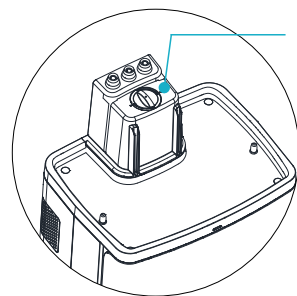
## Adding Detergent (Optional Function)

Step 1: Remove the dirty water tank and clean water tank.

Step 2: Rotate the cartridge lid to open, then add detergent.

Step 3: Install the dust container cover in place to make sure the dust container is securely sealed.

**Note:** To prevent corrosion or damage, do not use any disinfectant and only use detergent recommended by Mamibot in the cartridge.



Cartridge lid

**Important Note:**

To ensure all functions operate properly and achieve the best cleaning results:

- Fully charge the robot before first use.
- Fill the clean water tank with water prior to initial operation.

## App Connection

Please scan the "Smart Mamibot" App or "Smart Life" App from App store (IOS) or Google play (Andorid), and refer to the Quick Start Guide, connect the network, then use it via App.



Smart Mamibot



Smart Life


**Note:**

Firmware upgrade

- Check the firmware upgrade function in the smart phone App, if new firmware is detected, you can upgrade it as prompted.
- Ensure the battery level is above 30% to upgrade the firmware.

## How to Use



### Turning On/Off

Press and hold power button  to turn on/off the robot. The power indicator light will come on when robot is turned on.

### Quick Mapping


After configuring the network for the first time, follow the instructions in the app to quickly create a map. The robot will start mapping without cleaning. When the robot returns to the base station, the mapping process has been completed and the map will be saved automatically.

### Pause


When the robot is running, press any button to pause it, press  to resume cleaning. Press  to send it back to the station.

Note: Placing a paused robot on the station manually will end the current cleanup.

### Charging

After cleaning, the robot will automatically return to the station to charge. In Pause mode, press the  button to send the robot back to the station.

### Start cleaning

Press the  button to start cleaning. The robot will plan its cleaning route according to its scan of the room. It splits a room into zones, first draws out zone edges, and then fills the zone in a zigzag pattern. In so doing, the robot cleans all zones one by one, efficiently cleaning the house.

**Notes:**

- To allow the robot to automatically vacuum and return to the station, start the robot from the station. Do not move the station during cleaning.
- Cleaning cannot start if the battery level is too low. Allow the robot to

charge before starting the cleanup.

- Before cleaning, tidy cords (including the power cord of the station) and valuables from the floor, loose items may be dragged by the robot, resulting in the disconnection of electrical appliances or damage of cords and property.
- If the battery runs low during a cleaning cycle, the robot will automatically return to the station. After charging, the robot will resume where it left off.
- The robot will retract mop cloth mounts when cleaning the carpet. You can also set the carpet as a no-go zone in the app to avoid it.
- Before starting each cleaning task, make sure that the mop cloths have been properly installed.

## **Customized Mode**

### **suction power and mopping water volume:**

Switch on 'Customize mode' button on the App and then set the suction power or mopping water volume according to usage.

## **Do Not Disturb Mode**

When the robot is set to the Do Not Disturb (DND) mode, the robot will be prevented from resuming cleaning and the power indicator goes out. The DND mode is disabled by default at the factory. You can use the App to enable the DND mode or modify the DND period.

### **Note:**

The scheduled cleaning tasks will not be performed during the DND period. The robot will resume clean up where it left off after the DND period expires.

## **Manual Mode**

The robot vacuum cleaner can be moved manually by selecting manual mode in the App and using the arrow keys.

## **Restricted Area Mode**

Mark out specific areas on the map that you do not want the robot vacuum cleaner to clean.

## **Selected Room / Area Cleaning**

Mark out specific rooms or areas on the map that you want the robot vacuum cleaner to clean.

## **Sleep Mode**

If no operation is performed beyond 10 minutes, robot will enter the sleep mode automatically, and the power indicator will be off. In sleep mode, users can press any button to wake up the robot. The device will automatically power off after being in standby for more than 13 hours.

## How to Use

### Vacuum and Mop

Note: When using the mop assembly for the first time, the robot performs the "Vacuum and Mop" task by default.

#### 1. Start cleaning

Press the start button on the robot, or use the App to make the robot start from the base station. Then the robot will plan the optimal cleaning route and perform the cleaning task based on the created map.

#### 2. Auto mop washing

When cleaning, the robot will automatically return to the base station to wash mop pads based on the mop pad cleaning frequency specified in the App.

##### **Note:**

- 1).The mop pads will be cleaned before the robot starts mopping, please wait patiently.
- 2).To ensure the robot easily returns to the base station after cleaning, it is strongly recommended to make the robot start from the base station.
- 3).Do not move the base station, the clean water tank, the used water tank, or the **auto cleaning water tray** during operation.

#### 3. Automatically wash and dry the mop pads

After the robot finishes a cleaning task and returns to the base station to charge, the base station will automatically wash and dry the mop pads.

#### 4. Clean the dirty water tank

After the robot has completed its task, please clean the dirty water tank to prevent any odour.

### Vacuum Only

Enable the vacuuming function in the App, and the robot will automatically lift the mop assembly and start vacuuming.

### Vacuum Followed by Mop

Enable the mopping after vacuuming function in the App, and the robot will automatically lift the mop assembly to vacuum the floor. After vacuuming is completed, the robot will start mopping after lowering the mop assembly.

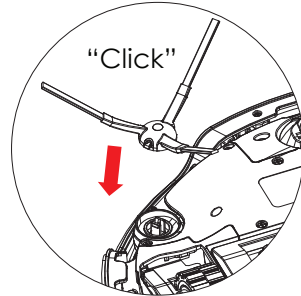
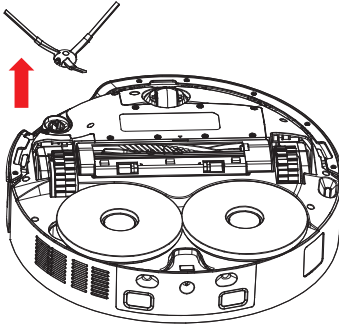
### Mop Only

Enable the mopping function in the App, and the robot will check if the mop assembly is installed. If not, manually install the mop assembly, and then the robot will automatically start mopping.

## Maintenance

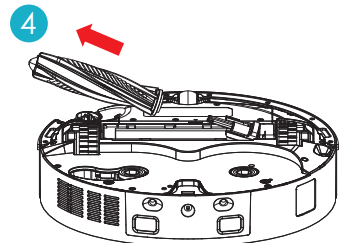
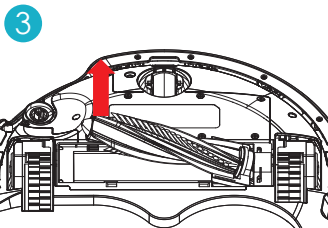
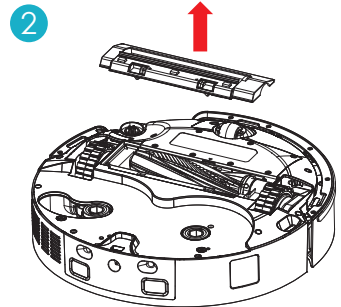
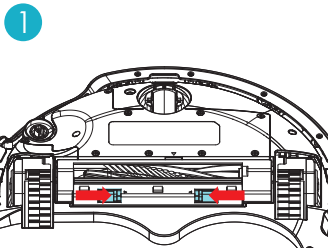
### Side Brush

1. Pull up to remove the side brush.
2. Remove debris from the brush and brush sockets.
3. Reinstall the side brush



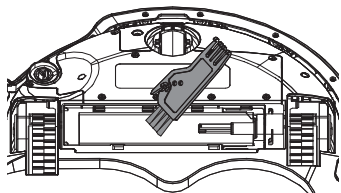
### Main Brush

1. Softly press the main brush cover's two latches inwards to remove the main brush cover.
2. Pull out the main brushes and remove any entangled hair or dirt on brush or fixed end of the main brush.
3. Reinstall the main brush and it's cover.

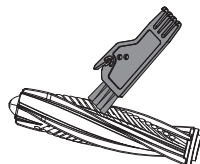




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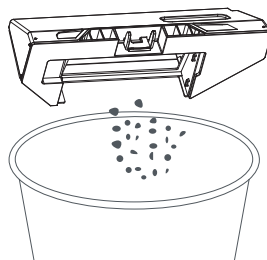
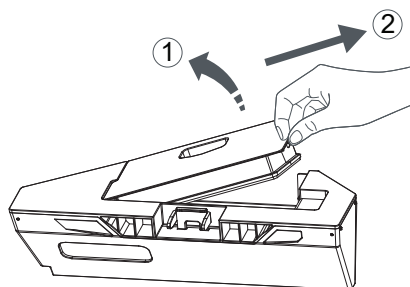
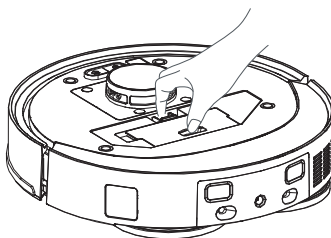
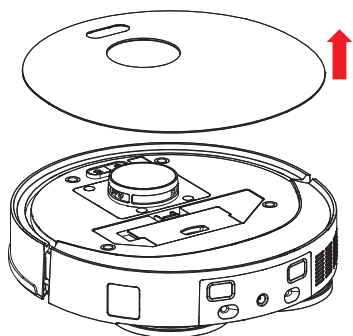


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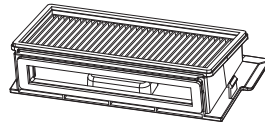
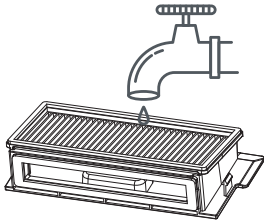
## Dust Box

1. Lift the top cover of robot.
2. Press the dust box removal button and remove the dust box.
3. Use the cleaning brush to clean the inside of the mixed box.
4. You can clean the dirt tank with water, without immersing the tank.
5. Reinstall the dust box on the robot vacuum cleaner.



## Filter

Remove the filter and tap it to remove as much dirt as possible, clean it with tap water if necessary, then dry it completely before next use.



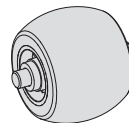
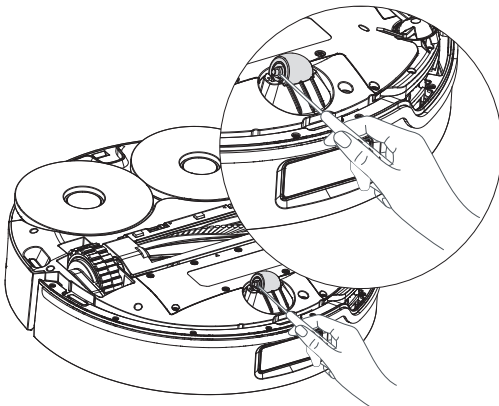
## Sensors

Use a soft, dry cloth to wipe and clean all sensors.

**Note:** Robot's LiDAR is a sensitive sensor. Do not apply force, insert objects, or adjust the LiDAR. Do not sit or place items on top of robot.

## Universal wheel

1. Using a flat head screwdriver for leverage, grip the wheel firmly and pull.
2. Clean the wheel and all its components, including the assembly and wheel socket.
3. Push down the wheel to lock it into place firmly.

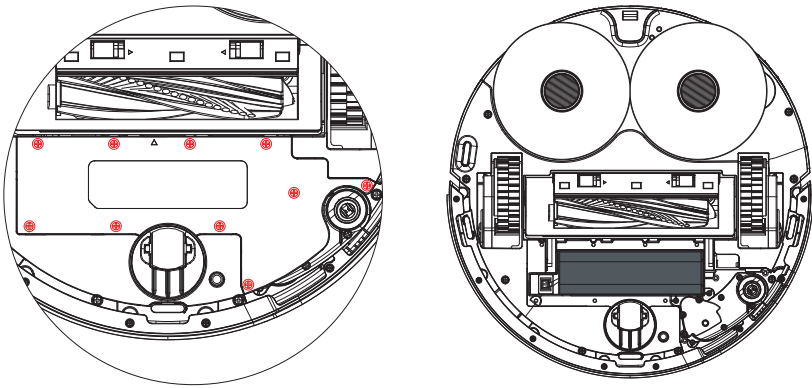


## Charging and Replacing the Battery

1. Turn off the robot.
2. Use a Phillips head screwdriver to open the battery compartment.
3. Unplug the old battery and plugin your new one and refasten the battery cover.

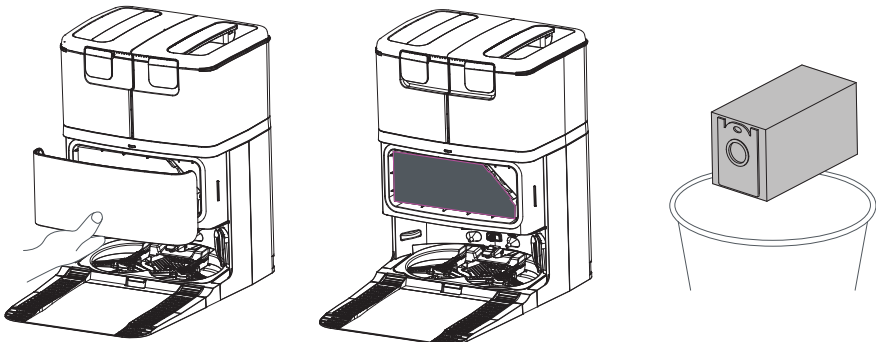
### Note:

- To extend battery life, leave the robot vacuum cleaner charging on the base station whenever not in use.
- Remove the battery and store it in a safe, dry place if the robot vacuum cleaner will not be used for a long period of time.
- Do not use the rechargeable battery of this product in other devices.



## Replacing the Disposable Dust Bag

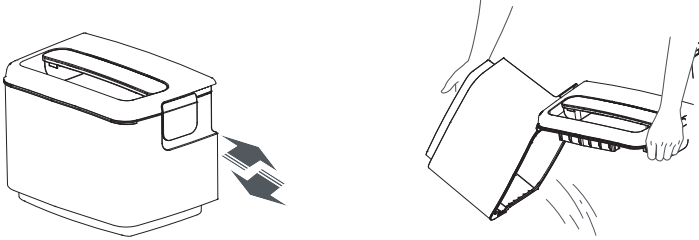
To change the dirt-disposal bag, open the dust container cover, pull the handle, remove the bag and discard it.



## Dirty Water Tank

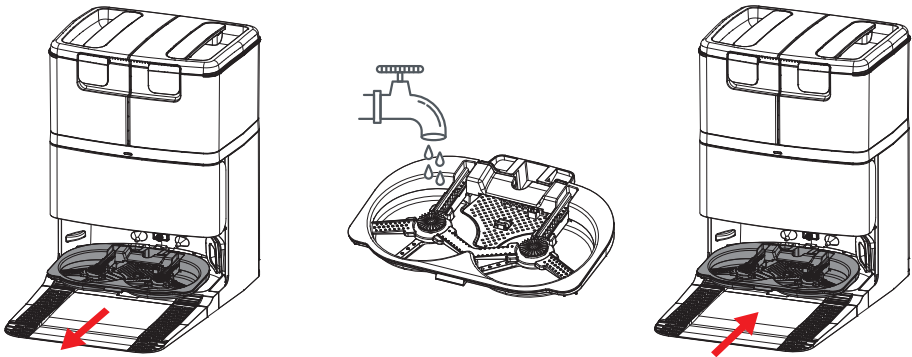
Open the dirty water tank lid and pour out the dirty water. Fill the tank with clean water close the lid, lock it, and shake. Pour out the dirty water. Lock the lid and reinstall the tank.

**Notes:** To avoid deformation, only use cold water. If any water stains remain on the outside of the water tank, wipe them with a soft, dry cloth before reinstalling the tank.



## Cleaning the Tray

1. Unplug the station.
2. Remove the tray as shown in the diagram.
3. Rinse the tray and the tray filter screen with water.
4. Use the soft dry mop to clean the try and reinstall the tray.



## Recommend Maintenance Frequency

To keep the robot in good condition, it is recommended to refer to the accessory usage in the App or the following table for routine maintenance.

Part	Maintenance Frequency	Replacement Period
Dirty water tank	Once every week	Depends on usage
Clean water tank	Once every 2 weeks	
Main brush		Every 6 to 12 months
Dust box's filter		Every 3 to 6 months
Side brush		
Mop pad holders		Depends on usage
Water Tray	Once every month	Depends on usage
IR Receiver Window		
Charging contacts		
Universal wheel		
Laser Distance Sensor (LDS)		
Front line laser sensor		
Carpet sensor		
Cliff Sensors		
Bumper	Once every month	/
Robot's auto-empty vent		
Bottom of the robot		
Station auto-empty inlet		
Dust box	Clean it as needed	
Dust bag	/	Every 1 to 2 months
Mop pads		Every 1 to 3 months

**Note:** The maintenance and replacement frequency will depend on your usage of the robot. If an exception occurs due to special circumstances, the parts should be maintained or replaced promptly.

## Troubleshooting

Troupe	Solution
Unable to power on	<ul style="list-style-type: none"> <li>● Battery low. Put the robot on the base station and charge it before use.</li> <li>● Battery temperature too low or too high. Only use the robot within the range of 0-45°C.</li> </ul>
Unable to charge.	<ul style="list-style-type: none"> <li>● Station not connected to power. Check whether the plug is properly connected.</li> <li>● Poor contact. Clean the charging contacts of the station and the robot.</li> <li>● Confirm that the station indicator light is on solid blue.</li> </ul>
Unable to Station.	<ul style="list-style-type: none"> <li>● Too many obstacles near the station. Move it to an open area.</li> <li>● The robot is too far from the station. Place it closer and retry.</li> <li>● The laser head may be dirty. Wipe them with a dry cloth.</li> </ul>
Unable to connect to WiFi.	<ul style="list-style-type: none"> <li>● WiFi disabled. Reset the WiFi and try again.</li> <li>● Poor WiFi signal. Move the robot to an area with good WiFi reception.</li> <li>● Abnormal WiFi connection. Reset the WiFi, download the latest mobile App and retry.</li> <li>● The Wi-Fi connection is unstable. Reset the router, check if there are any App updates, and try again.</li> </ul>
Noise during cleaning.	<ul style="list-style-type: none"> <li>● The main brush, side brush, drive wheels or universal wheel may be jammed.</li> <li>● Turn off the robot and clean them.</li> </ul>
Cleaning does not resume after recharging.	<ul style="list-style-type: none"> <li>● Make sure that the robot is not in Do not Disturb mode.</li> <li>● Carpet ignorance is switched on in App. Check in App setting.</li> </ul>
Schedules are not effective.	<ul style="list-style-type: none"> <li>● Make sure that the robot is not in Do not Disturb mode.</li> <li>● Schedules will only take effect when the battery is higher than 20%.</li> </ul>

Unable to auto-empty.	<ul style="list-style-type: none"><li>● Auto-emptying is disabled. Check in App settings</li><li>● Dust container cover is not installed. Check and install.</li><li>● Auto-emptying will not be triggered if the robot returns to the station without cleaning.</li><li>● The robot will not auto-emptying after returning to the station in the Do Not Disturb (DND) mode. Adjust cleaning or DND duration, or start emptying manually.</li></ul>
Reduced emptying performance or unusual noise when emptying.	<ul style="list-style-type: none"><li>● The main brush or main brush cover is not properly installed. Check and install in place.</li><li>● The filter, air duct, suction inlet, air inlet, dust box or dust bag is blocked. Clean to remove blockages.</li></ul>
Unable to start auto-drying.	<ul style="list-style-type: none"><li>● Auto-drying is disabled. Check in App settings.</li><li>● Auto-drying starts only after mopping or mop washing.</li><li>● Use the App and dry the mop manually.</li></ul>
Unable to wash the mop cloths.	<p>The mop will not be washed if not used.</p> <ul style="list-style-type: none"><li>● Check clean water tank placement or refill as required.</li><li>● Check dirty water tank placement or empty as required.</li><li>● Check that the dust box or dust box filter has been correctly installed.</li><li>● Empty the dirty water tank, and add clean water.</li></ul>
Unable to extend the mop cloth.	<ul style="list-style-type: none"><li>● The mop cloth will only extend along walls and certain obstacles.</li><li>● Please check if the mop retractable structure is stuck.</li></ul>
Unable to extend the side brush.	<ul style="list-style-type: none"><li>● The side brush will only extend in corners.</li><li>● Please check if the side brush retractable structure is stuck</li></ul>

If the problems can not be solved by the mentioned methods, please contact the local seller for further services

## Warranty

- The Ultra T20 has a 1-year limited warranty against original defects in workmanship or material.
- The warranty only applies to the authorized distributors of Mamibot.
- Improper usage or not in accordance with the user manual will void the warranty.
- The application of force majeure will be invalid.
- Normal reductions, such as battery aging, hepa aging, and dust bag aging are not guaranteed.

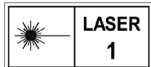
Please keep and provide your proof of purchase, S/N when make a claim.



### **WEEE Information**

The symbol on the product or on its packaging indicates that this product may not be treated as household waste. Instead it, should be taken to the appropriate collection point for the recycling of electrical and electronic equipment. By ensuring this product is disposed of correctly, you will help prevent potential negative consequences for the environment and human health, which could otherwise be caused by inappropriate waste handling of this product. For more detailed information about the recycling of this product, please contact your local council, your household waste disposal service or the shop where you purchased the product.





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