3. Turning on the robot and recalling it to the base station

Lift the upper cover of the robot and long press the power button to turn it on. After that, short press the left button on the base station to recall the robot. (When placing your robot into the base station, please make sure it is placed with the buttons facing toward the base station.)



4. Preparations before mapping

Prior to mapping, please remove miscellaneous items on the floor, take in power cords, and open the doors of rooms to be cleaned.



5.The mapping mode

Press and hold the left button on the base station to start mapping, the robot will start scanning and create a cleaning map. (The robot will not start mapping until the vacuuming module is installed)





6.Precautions for mapping

The robot should not be followed or blocked by human or pet during the mapping process. The aisle or doorway should be kept clear, otherwise there may be a mapping omission.



7.Completing mapping and automatic planning

Do not move the base station after a successful mapping. Otherwise, the map would need to be created again. It is recommended to recreate the map if large items in the cleaning area have been relocated.



8.Starting cleaning

Select either the vacuuming module or mopping module for cleaning based on needs. Short press the right button of the base station to start a default task.



Vacuuming Function Introduction

1.Install the vacuuming module to the robot.

2.Check that the dust bin has been properly installed inside the robot.





3.Short press the left button on the base station to recall the robot.

4.Short press the right button on the base station to start vacuuming.





5. The robot will plan an optimal cleaning sequence according to the map created and start by default from the room where the base station is located.



6. If the dust bin is filled up during vacuuming, the robot will give a voice prompt to clean the dust bin.

7. After the vacuuming task is completed, clean the dust bin as instructed on P41.





Mopping Function Introduction

1. Install the mopping module to the robot.



3. Add Narwal detergent into the clean water tank for improved mopping results. Please be reminded not to add detergents of other brands, otherwise the robot may not function properly.

2. Fill up the clean water tank and make sure to keep the water level below the Max mark on the tank. Lift the water tank only when its cover is buckled, so as not to damage the rotating shaft



4. Install the clean water tank and wastewater tank properly in the base station after verifying that there is no wastewater in the wastewater tank.





5. Short press the left button of the base station to recall the robot.

6. Short press the Start button on the right of the base station to start mopping.





7.Prior to executing a mopping task, a mop cleaning task will be executed. Please wait for the cleaning task completion.



8. The robot will plan an optimal cleaning sequence according to the map created and start by default from the room that is farthest from the base station.



9.During the mopping process, the robot will automatically return to the base station to get the mop cleaned.

10.Please do not move the base station, water tanks, or cleaning board during the mopping process.





11. When clean water is used up or the wastewater tank is full during the mopping process, the robot will give a voice prompt to check the clean water tank or wastewater tank.

12.After completing a mopping task, the robot will return to the base station to get the mop cleaned and air dried automatically.





13.Upon mopping completion, please clean the wastewater tank in time to prevent the wastewater from deteriorating and stinking.



Other precautions

1. If there is no task and the robot has stood by for 5 minutes, it will go into the low power mode.

2. The robot will automatically end the current task and go into the low power mode if the idle time is over 2 hours after the robot task is temporarily suspended or there is an error prompt, or the power of the robot is lower than 10%.

3. The robot will return to the base station to charge after it finishes a task or if the battery level drops below 20%. After being fully charged, the robot will resume an interrupted task automatically.

Cleaning path

The vacuuming mode and mopping mode differ in room cleaning sequences but they share the same logic. Specifically, in both modes, the robot cleans along the walls first, and then zigzags to cover the entire room space. (By default, mopping starts from the room that is farthest from the base station while vacuuming starts from the room that is nearest to the base station)





Cleaning along the wall

Zigzagging to cover the entire room

Maintenance cycle

Part location	Part name	Maintenance cycle
Robot	Dust bin	Clean it after each vacuuming operation
	Filter	Clean it every two weeks and replace it every three to six months
	Vacuuming module - side brushes	Clean it every two weeks and replace it every three months
	Mopping module - mop	Replace it every one to three months
	Caster wheel	Clean it monthly
zigzagging to cover	Cleaning board and bottom slot	Clean it every two weeks
the entire room	Clean water tank	Clean it every three months
	Wastewater tank	Clean it after each mopping operation

CLEANING AND MAINTENANCE

Dust bin

It is recommended to clean it after each vacuuming operation

1.Pull out the dust bin handle and lift the dust bin up.







3. Align the dust bin to the groove, press the handle downward to tuck the dust bin in.



Filter

It is recommended to clean the filter every two weeks and replace it every three to six months

1.Release the filter replacement buckle and take out the filter box.

2.Wash the filter and dry it. (Do not use a hook cutter, brush or other tools to clean the filter. It takes 24 hours to naturally dry a water-washed filter. It is recommended to use two filters in turn)





Clean water tank

It is recommended to clean the tank once every three months

1.Following the instructions in the figure and release the water pipe buckle.

2.Remove the pipe and take out the filter sponge for cleaning or replacement.





3. Put the filter sponge back in place, and buckle the water pipe.



Wastewater tank

It is recommended to clean the tank after every mopping operation

1.Take out the wastewater tank and empty it.



2.Rinse the wastewater tank and put it back in place. (The floating ball in the wastewater tank is a moving part and must be cleaned softly so as not to affect its performance.)



Vacuuming module

It is recommended to clean it every two weeks and replace its side brushes every three months

1.Use the hook cutter included to remove hair tangled on the side brushes.

directly with water and dried before it is again.

to the vacuuming module. Note: The vacuuming module can be washed

2.Remove other debris attached

3.Replace damaged side brushes with new ones if any.

Replacement steps:

Place the vacuuming module as shown in the figure above.
 Hold the brush head and pull it up.

3. Install the side brush with an L mark on the left side of the vacuuming module, and the one with an R mark on the right side of the vacuuming module. (You must pay attention to the left and right directions of the side brush during installation. Incorrect installation may lead to brush deformation).



Mopping module

It is recommended to replace the mop every one to three months

1. Remove the old mop.

2. Attach a new mop to the mopping module along with its profile.

3. Press the mop with hand to attach it firmly.



Cleaning board and bottom slot

It is recommended to clean them once every two weeks

1. Lift the handle of the cleaning board, and take them out.

2. Rinse the cleaning board.





3. Remove stains in the bottom slot of the base station.



Caster wheel

It is recommended to clean it monthly

 Pull out the caster wheel and remove the debris on the caster wheel and its spindle. (There is a metal sheet inside the caster wheel, please do remember to put it back) 4. Put the cleaning board back in place



2.Re-install the caster wheel and press to fasten it.





FAQs

Symptom	Possible Cause	Solution
APP installation and usage		
Failing to install the APP on the phone	Low OS version of the phone	Upgrade the phone OS
Unable to log in or register with the APP	Not authorized to access network	Allow the APP to access network
APP registration		
Failing to register with the APP	The phone number has already been used for binding through third-party login	Log in to the APP by verifying an SMS on the phone
APP network configuration	1	
The robot does not enter network configuration mode	 The buttons are not pressed in the expected sequence The robot is not in stand-by state Internal error of the robot system 	 Press and hold the two buttons of the robot at the same time Ensure that the robot is in stand-by state Restart the robot
APP cannot connect to the Wi-Fi that the phone is connecting	1. The Narwal APP is not authorized to obtain position information 2. GPS positioning is not enabled on the phone	1. Grant the Narwal APP with authorization to obtain position information on the phone 2. Enable GPS positioning on the phone

Faults and Troubleshooting

Symptom	Possible Cause	Solution	
Cannot find a hotspot name starting with Narwal	 The robot is not in the network configuration mode The robot quits network configuration after 2 minutes 	 Press and hold the two buttons of the robot at the same time to start network configuration Perform network configuration and complete it in 2 minutes 	
After manually searching for a hotspot name starting with Narwal and connecting, the APP prompts connection failure	 Network configuration is done in the APP without connecting to the hotspot with a name starting with Narwal The phone system has identified that the hotspot with a name starting with Narwal is not connected to the Internet 	 Please connect the hotspot named Narwal-XX-XX-XX-XX Please connect home Wi-Fi first after manually searching for the device. After the connection is successful, select the hotspot with a name starting with Narwal and return to the APP to continue network configuration 	
The robot prompts network configura- tion failure	1.The Wi-Fi password is incorrect 2.The robot is assigned with a 5G Wi-Fi 3.Signal of the Wi-Fi that the robot connects to is weak	1.Input the Wi-Fi password correctly 2.Connect to a 2.4 GHz network 3.Ensure that the robot is well covered by the router network and the Wi-Fi signal strength is stable	
The robot is offline			
APP shows the robot is offline	1. The robot is not turned on, so it cannot be connected by the APP	1. Press and hold the power button on the robot to turn it on	

2. The robot is in a network

with weak signals or poor

stability

2. Going offline does not

affect ongoing cleaning.

online state

After the network improves, the robot will recover an

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Symptom	Possible Cause	Solution
Failing to turn on or turn of	f	
The robot cannot be turned on/off by long pressing the Power button	 The robot is at a low battery level An internal error occurs in the robot system 	 Place the robot in the base station to charge Restore the robot to factory settings. If the problem persists contact after-sales customer service
Cannot connect the robot		
The base station displays robot connection failure	1. The robot is not turned on 2. An internal error occurs in the robot system. The indicator blinks white	 Press and hold the Power button of the robot to turn it on Restart the robot. If the problem persists, contact after-sales customer service
The robot does not respon	d to button operations	
The robot does not respond to work instructions sent from the base station	 An internal error occurs in the robot system. The indicator blinks white The radar of the robot does not rotate properly and gives out red light 	 Restart the robot. If the problem persists, contact after-sales customer service If the robot radar is not rotating and sends out red light, contact after-sales customer service for help
Abnormal noise		
The robot makes a clicking sound when vacuuming the floor	Side brushes of the vacuuming module are entangled with hair	Please check whether the side brushes of the vacuuming module are entangled with foreign objects and clean the side brushes. If the abnormal noise is still heard after cleaning, please dismantle the side brushes, and remove the hair entangled inside.

FAULT NUMBER INDICATION

The robot is faulty when its loop indicator blinks red and the loop indicator on the screen of the base station breathes red. Check the fault number on the base station screen and troubleshoot the fault against the below table.

Base station

Fault No.	Message	Voice	Solution
2001	Place the robot in the base station	Please place the robot in the base station and restart mapping	 If the robot is not in the base station, short press the left button on the base station to recall the robot If the robot is already in the base station, please check whether the base station is normally powered on and the robot is being charged
2002	Mapping error	Mapping error. Please remove the items that obstruct the robot and move the robot to its original location to work	 Remove obstructions around the robot If the robot prompts this error in an open location, please check whether there are foreign objects trapped in the robot
2003	Mapping failure, please recreate the map	Mapping failure. Please place the robot in the base station and restart mapping	Place the robot in the base station and short press the right button on the base station to restart mapping
2004	The robot is trapped	Please remove the items that obstruct the robot and move the robot to a new location to work	 Remove obstructions around the robot If the robot prompts this error in an open location, please check whether there are foreign objects trapped in the robot

Fault No.	Message	Voice	Solution
2005	System error, please restart	System error. Please open the upper cover and press the power button to restart the robot	1. Check whether the base station is properly powered up 2. Restart the robot. If the fault persists, contact after-sales customer service for help
2006	No map available	No map available. Please press and hold the left button on the base station to create a map	For details, refer to P30
2007	Cannot locate base station	Cannot locate the base station. Please place the robot back in the base station If the base station has been relocated, the map needs to be recreated	 If the base station has been relocated, the map needs to be recreated If the robot is blocked on the way back to the base station, please remove obstructions and bring the robot back into the base station For any persistent faults, please contact after-sales customer service for help
2008	Failed to exit the base station	Failed to exit the base station, please clear the way near the base station	The way in front of the base station has been blocked. Please remove the obstacle and press the Start button to resume operation
2009	Robot in the off-limit area	The robot is in the off-limit area. Please move the robot out of the off-limit area	If the robot is inside an off-limit area or touches an off-limit area, move the robot outside the off-limit area and press the Start button to resume operation

FAULTS AND TROUBLESHOUTIN	ID TROUBLESHOOTIN	G
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Fault No.	Message	Voice	Solution
2011	In a mapping task and cannot be recalled	\	Press and hold the right button on the base station to forcibly end the current task and recall the robot
2012	In a cleaning task and cannot create a map	1	Press and hold the right button on the base station to forcibly end the current task, and place the robot back in the base station to start mapping
2013	Do not repeat the operation while mapping	\	Press and hold the right button on the base station to forcibly end the current task, and place the robot back in the base station to start mapping
2014	Abnormal mop moisture level	The mop moisture level is abnormal. Please wait for mopping to continue after the mop is cleaned again	The mop moisture level is not in line with the system requirement, and the robot will have the mop cleaned again. Please wait
2015	Partitioning in progress,do not operate the robot	Intelligent room partitioning in progress, please wait	Do not operate until room planning is completed by the robot
2016	Mapping in progress, cannot be operated	Mapping in progress, cannot be operated. Please short press the right button on the base station to continue mapping	Place the robot back in the base station and short press the right button on the base station to continue mapping
3001	Side brush error	The side brush has encountered an error. Please clean the side brush or replace it	 If the side brush is entangled by hair or wire, disassemble the side brush and clean it Replace the side brush if it is damaged

Fault No.	Message	Voice	Solution
3002	Install the dust bin	Please install the dust bin correctly	The dust bin is not installed in place or is taken out. Please check whether the dust bin is inside the robot, and install it correctly
3003	Check the dust bin	Please clean the dust bin, the filter or the vent	 Empty the dust bin, or clean the filter or vent The dust bin filter is not dried after being cleaned. Please dry the filter before assembling it into the robot to work.
3004	Install the vacuuming module	Please install the vacuuming module correctly before creating a map	To create a map, the vacuuming module must be in position. Check whether the module has been installed properly
3005	Install the vacuuming /mopping module	Please install the modules correctly before starting working	Check whether the vacuuming /mopping module has been properly installed before working
3006	Low battery, please wait	Low battery, please wait until the robot is charged to continue operation	The robot will return to the base station to charge when the battery level drops below 20%. The cleaning task will be resumed when the robor is fully charged
3007	Low battery, cannot work	Please wait until the robot is charged to start operation	The robot cannot start operating if the battery level is below 40%. Please wait until the robot is fully charged to start
3008	Robot is by a cliff	Cliff detected, please move the robot to a new location to work	If the cliff sensor is triggered by mistake, please clean the cliff sensor at the bottom of the robot and move the robot to an open area to work

FAULTS AND TROUBLESHOOTING

Fault No.	Message	Voice	Solution
3009	Check LIDAR	Check LIDAR	LIDAR is blocked or jammed. Please remove the obstruction or move the robot to a new location to work
3010	Check the collision bumper	Check the collision bumper	Please check whether there are foreign objects stuck in the top and bottom of the collision bumper in the front of the robot. If any, remove them
3011	Check the cliff sensor	The cliff sensor is abnormal. Please remove stains from the sensor surface	Clean the cliff sensor and place the robot on a flat area to work
3012	Abnormal magnetic field	Abnormal magnetic field, please check the nearby environment	Move the robot to an open area away from the base station or the magnetic strip to work
3013	Check the battery	Abnormal battery, please check the battery	The battery temperature is too high or too low. Please wait for the battery temperature to go back to normal before starting the robot
3014	Check the wall sensor	The wall sensor is abnormal. Please remove stains from the sensor surface	Clean the wall sensor and place the robot on a flat area to work
3015	Dust suction fan error	The dust suction fan is abnormal. Please empty the dust bin and ensure proper installation of the dust bin in the robot. Press the Power button to restart the robot	 Empty the dust bin, or clean the filter or vent The dust bin filter is not dried after being cleaned. Please dry the filter before assembling it into the robot to work.
3016	Check the drive wheels	The wheels are abnormal. Please check the driving wheels	Check whether there are foreign objects stuck in the wheels. Remove the foreign objects and move the robot to a new location and restart it

Fault No.	Message	Voice	Solution
3017	The base station overflows, please check	The base station overflows. Please check the base station according to the instruction manual	 Check whether the cleaning board, the base station bottom slot, or the overflow sensor are heavily contaminated. If yes, clean them Check whether the sealing strip of the wastewater tank or the silicone sealing rings at the base station air intake, the wastewater inlet, and the clean water outlet have fallen off. If yes, please press them back in position.
3018	Check the clean water tank	Check the clean water tank	The clean water tank is empty. Please fill it up and install it in the base station properly
3019	Check the wastewater tank	Check the wastewater tank	The wastewater tank is full. Please empty it and install it in the base station properly
3020	Check the cleaning board	Please check whether the cleaning board are correctly installed	Please verify that the cleaning board have been properly installed in the base station
3021	Robot skids	The robot skids, please check	1. If the wheels of the robot are contaminated, wipe them with a wet cloth and leave them to dry 2. If there are stains on the base station slope, wipe the slope with a wet cloth, and leave the slope to dry
3022	Base station error	The base station has encountered an error. Please clean the electrodes of the base station	The base station charging base is wet or moldy. Please clean the charging electrodes

1. For faults that cannot be resolved by following instructions in the preceding table, contact Narwal Intelligence customer service for more help.

2. This type of robot works only with the accompanied base station. Do not use other Narwal robots, or third-party robots or base stations.

3.Please follow this manual to use this product. Any loss caused by improper use shall be undertaken by the user.

Other Problems

Q: After network has been configured for my robot, can I control it with several phones?	A: Yes. The robot can be shared. After successful network configuration, the main user can click on Family Member Settings on the setting page of the Narwal APP, and send an invitation to the user account to be shared, hence allowing the robot to be controlled by several phones.	a later cleaning operation? Q: Do I need to recreate the map if the furniture has been moved?	
Q: If there are stairs in my home, what precautions should I take for the robot to work properly?	A: The floor sensor of the robot can automatically identify a level difference of more than 10 cm. If the level difference in the scene is smaller than that, the robot will move to a lower location and cannot go back if the stair is higher than 1.5 cm. To prevent the robot from falling, you may attach a magnetic strip along the edge of the place with a level difference, or set this area as an off-limit area on the APP.	Y ee ne Q: If there are stairs in my home, and the robot does not get in certain rooms during mapping, can I bring the robot into the rooms for cleaning? ne Q: Can the dust bin filter be washed with water? Can it be used immediately after being washed? n Q: Why is there still dust on the floor that has been cleaned by the robot? Q: When the robot is mopping the floor, do I need to take away the carpet?	
Q: If there is more than one floor in my home, can I bring the robot to other floors for cleaning?	A: Currently, only one map can be saved in the robot memory.If you want the robot to clean other floors, please relocate the base station first and recreate a map to start cleaning.		
Q: After the robot is turned on and exits the base station, why does it make a full rotation in place before starting to clean?	A: The robot needs to perform a self-check by making a full rotation in place. Self-check is the preparation made for robot operation. In case of any exceptional situation, an error will be prompted.		
Q: During map creation, why does the robot not get in certain rooms?	A: While the robot is mapping, for a better mapping effect, open the rooms to be cleaned and do not walk around or follow the robot.		

Q: After the robot creates a map, why is the map not saved?	A: The map will not be saved until the robot autonomously completes a mapping scan and returns to the base station with a voice prompt reminding that mapping has been completed. Before the robot completes the above actions do not manually move the robot back in the base station or forcibly end the mapping task.
Q: If a room is closed and not covered in the mapping scan, will it be cleaned by the robot if the door is open during a later cleaning operation?	A: For areas not covered in the mapping scan, the robot will provide limited cleaning and cannot clean them completely. If mapping is incomplete, it is recommended to recreate the map so that the robot can develop an optimal cleaning schedule.
Q: Do I need to recreate the map if the furniture has been moved?	A: In case of a major change in the furniture layout at home, it is recommended to recreate the map. If only a single piece of furniture has been moved, there is no need to recreate the map, because the robot can update the map in real time while cleaning.
Q: If there are stairs in my home, and the robot does not get in certain rooms during mapping, can I bring the robot into the rooms for cleaning?	A: The robot needs to position itself in the map saved while it works. In an area that is not included in the map, the robot cannot position itself, hence cannot execute the cleaning task.
Q: Can the dust bin filter be washed with water? Can it be used immediately after being washed?	A: The dust bin filter can be washed with water, but it has to be completely dried before being put back into the dust bin again. Therefore, it is recommended that you dry the washed filter for at least 24 hours so that the robot can work properly.
Q: Why is there still dust on the floor that has been cleaned by the robot?	A: It is recommended that you clean the dust bin on a regular basis to prevent the dust from spilling during the cleaning process.

A: If you don't want the robot to enter the carpet area during cleaning process, you may set the carpet as an off-limit area on the APP, or attach a magnetic strip along the edges of the carpet to keep the robot away from it.

Q: After the robot finishes mopping and the air-drying tasks, the mop is still wet. Is it because the base station does not execute air-drying?	A: After mopping is completed, the robot will return to the base station to get the mop cleaned. The base station will start a fan to dry the mop for 6 hours. Please do not take the robot out of the base station or dismantle the mopping module during this period, otherwise, air drying will be discontinued. The air-drying result will be affected by the ambient humidity. If you are in a relatively humid region or season, the mop air-drying result may not be very good.
Q: I have changed the mop moisture level from regular to low on the APP. Why does water consumption in the clean water tank remain the same?	A: Mop moisture level is dependent on for how long and at what rotation speed the mop is dried after being cleaned. To ensure that mop is always effectively cleaned, the same amount of water is used to clean the mop.
Q: How come the robot ends a cleaning task by itself before the task is completed?	A: During the cleaning process, if the robot is paused for 2 hours with no further operation, or there is no operation in 2 hours after an error prompt, the robot system will forcibly end the current task.
Q: The robot in the base station starts to get its mop cleaned all of a sudden when there is no human intervention. Why?	A: During a mopping cycle, if the mopping task is ended unnaturally, such as forced ending by user, or forced ending by the robot system after being paused for 2 hours, the robot will automatically get the mop cleaned once to ensure the cleanliness of the mop and air dry the mop afterwards.
Q: Do I need to shut down the robot and the base station after cleaning is finished? How do I shut down the base station?	A: After the robot completes a cleaning task, it will automatically return to the base station to get charged. After a while, the robot goes into low power mode and the base station automatically turns off its screen. The base station shuts down only when it is disconnected from power supply. To shut down the base station, please unplug its power cord. While the base station is powered off, the robot cannot be charged. If the robot is not charged for a prolonged period of time, its battery runs out and the robot shuts down. Prior to using the robot again, please connect the base station to power supply and get the

robot charged.

Q: The base station screen has been		
turned off, can the robot be charged in		
the base station?		

Q: Why does the robot automatically shut down?

A: After the robot goes into low power mode, the base station screen will turn off. As long as the base station is powered up, the robot will be charged in either on or off status.

A: The robot automatically shuts down when the battery level drops to 0. If there is no operation for more than 10 hours on a robot on standby, and the robot is not being charged in the base station, it will also automatically shut down.

Product Specifications

Robot (Model: YJCC007)	base station (Model: YJCB007)
Dimensions: 314*345*107mm	Dimensions: 401*358*437mm
Color: White	Color: White
Weight: 3.8kg	Weight: 7.3kg
Battery: ≥5000mAh	Rated input: 100-240V~
Rated voltage: 14.4V	Rated output: 20V 3.0A
Rated power: 45W	Rated frequency: 50 / 60Hz
	Rated power: 85W

PRODUCT SPECIFICATIONS



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