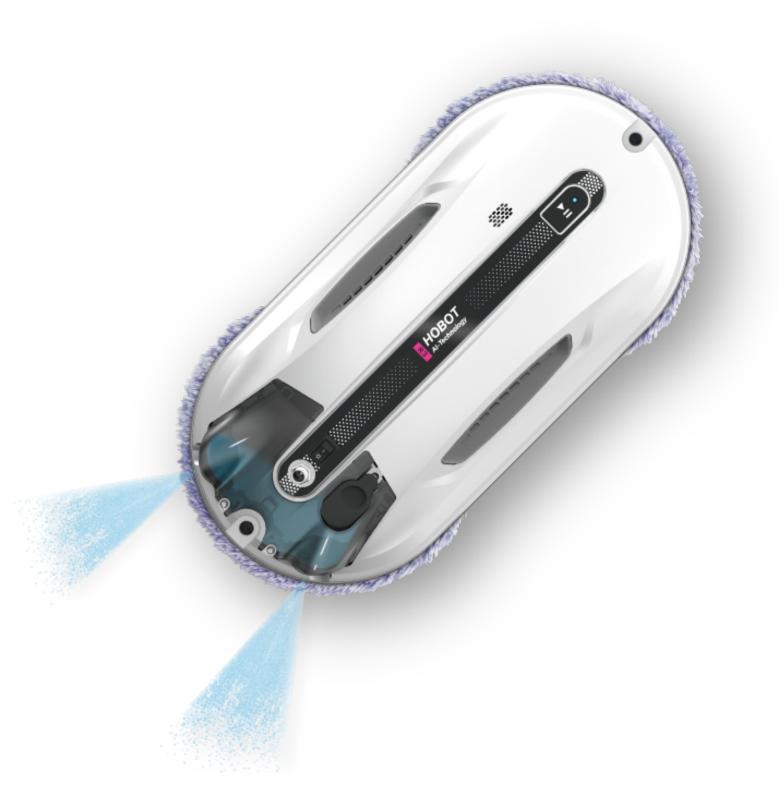
# HOBOT-R3



Exclusive Patent
WINDOW CLEANING ROBOT

User Manual



# Olmportant Safety Precautions

#### PLEASE READ ALL INSTRUCTIONS

- Read and follow the instructions and warning when setting up, using, and maintaining HOBOT.
- Please keep this manual in an easily accessible place for future reference.
- Keep HOBOT and the accessories out of reach of children and prohibit children from using the device.
- Keep HOBOT in cool and dry places, away from direct sunlight, naked flames, heat, humidity, water and any other liquids.
- Do not store HOBOT near oil, combustible spray or flammable materials.
- Product operating temperatures: 0°C ~40°C (32°F ~104°F)
- Product storage temperatures: -10°C ~50°C (14°F ~122°F)

## Operation Cautions

#### Before operation- check the environmental surroundings

- Do not operate HOBOT on rainy or humid days.
- Do not operate HOBOT on cracked glasses.
- Do not use on frameless glass.
- HOBOT is for domestic use only; it's not for commercial or industrial environments.
- Remove any obstacle on the glass/surface and clear away objects like pull cords, electrical cords and curtains.
- When cleaning windows on upper floors, a warning sign must be established on the ground to prevent people from approaching the area.

#### Before operation- check the device

- Check if the safety rope is broken or if the knot is loose.
- Fasten the safety rope and tie the end of the rope to a fixed object.
- HOBOT must be connected to an electrical outlet supply to operate.
- The UPS battery must be fully charged. (Green light ON)
- Make sure to put the cleaning ring onto the cleaning wheel correctly to avoid air leakage.
- Fill the water tank only with water or HOBOT window detergent. Other detergents are not allowed.

### Switching on and switching off

- Switch on the power before putting HOBOT onto the glass/surface.
- Make sure HOBOT is firmly attached to the glass/surface before letting go.
- Remove HOBOT from the glass/surface before switching off the power.
- Please be aware that reflective glass and coated glass could be scratched by the dust and dirt during cleaning.
- Always empty the water tank before storing HOBOT away by tapping the spray button to run out the water.
- Do not touch the ultrasonic nozzles and the sponge in any case.

# Safety Warnings

- Only plug the power adapter into a power outlet that matches the specifications. (100-240VAC)
- Do not attempt to repair the power adapter. Replace the whole unit if it is damaged or exposed to high moisture. Please contact local HOBOT dealer for help and maintenance.
- Always make sure that HOBOT and the power adapter are not trapped under heavy objects.
- Allow adequate ventilation around HOBOT and the power adapter. Do not cover them with objects.
- Do not use HOBOT and the power adapter in strong magnetic fields, humid or high heat environments.
- HOBOT has a non-removable battery, please contact the authorized service center for assistance.
- Please use the original power supply cord that comes with HOBOT window cleaning robot. Do not use unauthorized chargers. Use of an unauthorized charger could cause damage, malfunction and danger.
- Do not open, crush, cut, puncture, short-circuit, or incinerate the battery. Do not expose the battery to water, fire, or heat it above 60°C (140°F).
- Store HOBOT in a dry and safe place if you won't be using it for an extended period of time. Charge the battery every 3 months to preserve battery life.
- Never operate HOBOT if the power supply cord is damaged. Make sure the power cord is not stretched or exposed to sharp objects or edges.
- Do not use HOBOT if any part or accessory is damaged or defective.
- Always switch off the power and disconnect your robot from the charging station before cleaning or maintaining it.
- HOBOT is not waterproof. Damage may occur to the electronics if it is sprayed with water or submerged.
- Any procedure other than regular cleaning and care should only be performed by an authorized service representative.
- Contact your local waste management authority for recycling and disposal regulations of electronic appliances in your area. Do not dispose of HOBOT and the batteries as unsorted household waste.

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## **HOBOT**

## **O**Disclaimer

HOBOT Technology Inc. makes no claims or warranties, either expressed or implied, with respect to the contents hereof and specifically disclaims any warranties, tradability or suitability for any particular purpose. Furthermore, HOBOT Technology Inc. reserves the right to revise this publication and to make changes from time to time in the contents hereof without obligation of this company to provide notification of such revisions or changes. The user should follow the instructions provided in this user manual, but is ultimately responsible for assessing placement and safety when using this cleaning tool.

## Climited Warranty

If there are defects in your HOBOT due to faulty materials, poor workmanship, or malfunction within the warranty period from the date of purchase or delivery, please immediately contact a local retailer or local authorized dealer for repairs or replacement. This limited warranty does not cover:

- Normal wear and tear, including parts that might wear out over time (e.g. water tank, spraying nozzle, cleaning cloth, safety rope and packaging, etc.)
- Reduction in battery runtime due to battery age or use, as the life of the battery (1 year) and number of times the device is used.
- Transit, delivery or accidental damage or misuse and abuse that is not in accordance with the instructions.
- Faults or damage caused by:
  - Negligent use, misuse, abuse or careless operation of the device.
  - Use of the device which is not in accordance with this manual.
  - Use of anything other than normal domestic household purposes in the country in which it was purchased.
  - Use of parts not assembled or installed in accordance with this instruction.
  - Use of any unauthorized parts and accessories. Please contact a local retailer or local authorized dealer for spares and accessories.
  - Faulty assembly or installation.
  - Repairs or alterations carried out by parties other than HOBOT authorized dealer.

### **HOBOT**

# OProduct Description

HOBOT-R3 is a glass-cleaning robot with a vacuum motor inside that generates strong suction power to allow it to stay attached to the glass. The new patented invention carries a detachable water tank along with dual ultrasonic spray nozzle which nebulizes water to mists then sprays evenly on glass, simulating the effect of human breath on the glass. HOBOT-R3 is able to spray water when moving left, right and up-wards, to bring the best cleaning result. HOBOT-R3 has two specially-design cleaning wheels that can freely move on the glass, and even other vertical surfaces. Beside equipped remote control, with HOBOT App, the trimonthly cleaning reminder will help you to keep the windows clean, you can also replace the default voice prompt with any sound of your choice, creating more fun and a personal touch to your robot. The firmware can be updated easily through the App to stay up-to-date with the latest features.

## OProduct Features

- Dual Ultrasonic water spray.
- Spray water when moving left, right and up-wards.
- Update firmware through Over-The-Air technology (OTA)
- Voice prompt and Creative Voice
- Stops automatically upon completion of cleaning
- Designed for glass in any thickness
- Cleaning speed: 4 min/m<sup>2</sup>
- 3 automatic operation modes for cleaning the entire window
- Uninterruptible power system (UPS)
- Anti-falling control algorithm
- High sensitivity pressure sensor
- Auto-detects edges of window
- Extra secure DC power jack
- Microfiber cleaning cloth
- Remote and smartphone controlled

## Product and Accessories

Device × 1

Adapter × 1

AC power cord × 1

DC extension cord × 1

Remote control × 1

Cleaning rings × 2

Window detergent × 1

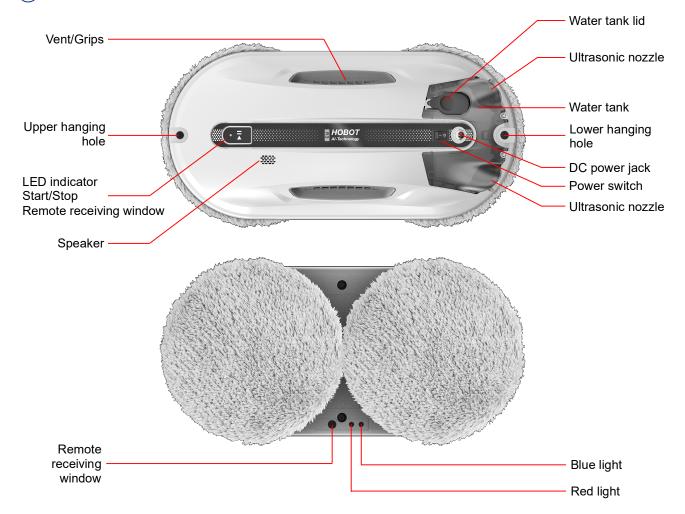
Microfiber polishing cloth × 12

Safety rope × 1

Ultrasonic nozzle × 2

User manual × 1

# **OAbout HOBOT-R3**



# ©Recommended Cleaning Procedures

- For the best window cleaning results, use HOBOT on sunny days or days with low humidity.
- To avoid water stains on your glass, do not use HOBOT on rainy days or days with high humidity.

## 1. Run "Dry Cleaning" First

Turn off the spray function. Put on a pair of clean and dry cleaning cloth. Run the 1st round to wipe dust and dirt off the glass/surface.

This step is to prevent dirt from turning into a muddy mess when mixed with water or detergent.

## 2. Run "Wet Cleaning" Later

Change the cleaning cloth. Turn on the spray function or spray a small amount of water/detergent on the cloth. Run the 2nd cleaning round.





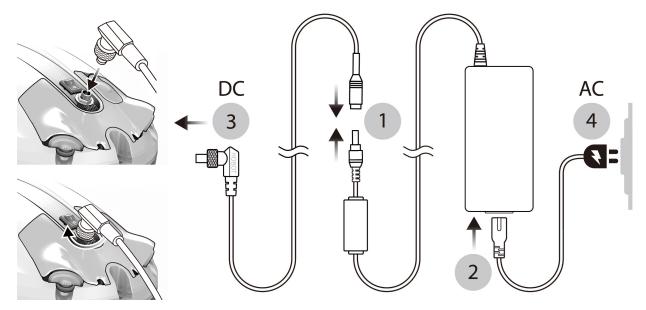






## **OInstructions**

#### 1. Setup



- (1) Connect the adaptor to DC power cord.
- (2) Connect the adaptor to AC power cord.
- (3) Plug L-shape connector into DC power jack on HOBOT and screw tight the L-shape connector.
- (4) Plug AC power cord into the socket.

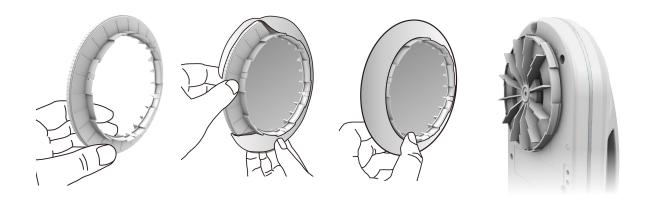
## 2. Charging the Battery

Make sure the battery is fully charged (green light ON) before use:

- (1) Turn off the power switch on HOBOT and then plug it into a power source. Orange light ON means charging.
- (2) Green light ON means the battery is fully charged.

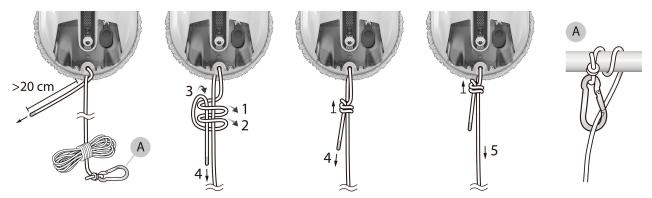
#### 3. Install Cleaning Cloth and Cleaning Ring

Make sure cleaning ring is perfectly covered by the cleaning cloth and attach the cleaning ring to the cleaning wheel correctly to avoid air leakage.



#### 4. Safety procedures

- (1) For windows with no balcony, a warning area must be established on the ground below to prevent people from coming near it.
- (2) Please check if the safety rope is broken or the knot is loose
- (3) Fasten the safety rope and tie to an indoor fixture before using HOBOT.



#### 5. Fill the Water Tank

Fill the water tank only with pure water or HOBOT window detergent to the "MAX" line and tighten the tank lid fully.

## 6. Put HOBOT onto the glass

- (1) Turn power switch on. Make sure fan is running.
- (2) Put HOBOT onto the glass and keep 10cm away from the edge.
- (3) Check if HOBOT is sticking to the glass before releasing it.

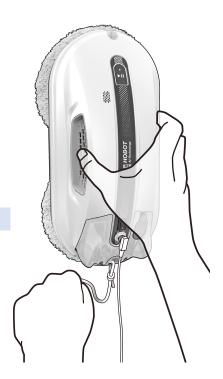
### 7. Cleaning with Auto Mode and Manual Mode

- (1) Press ♠⊗ or ♠⊗ or ⊗▶, HOBOT will automatically clean the entire window.
- (2) Press (STOP) to stop HOBOT.
- (3) Press to manually control the HOBOT's moving direction.

#### 8. Finish and Remove HOBOT from Glass

- (1) Hold the safety rope with one hand and grasp HOBOT tightly with the other hand to remove HOBOT off the glass.
- (2) Switch off HOBOT in a safe area.





# ○UPS (Uninterrupted Power System)

- (1) The UPS supplys power when there is power outage. The backup time of the UPS is 20 mins.
- (2)HOBOT will stop automatically, play alert, and flash red and blue light. Please take down HOBOT from the glass as soon as possible.
- (3) The safety rope can be used to pull HOBOT back. Gently pull the safety rope at an angle close to the glass to avoid it from falling.

# Cleaning & Maintainance

### 1. Clean Cleaning Cloth Care Instructions

- Washing under 40°C (104°F).
- Do not bleach.
- Do not use softener.
- Do not tumble-dry.
- Do not iron.
- Do not dry clean.

#### Care Frequency: After each use.

Please contact a local retailer or local authorized dealer for additional consumable spare parts.

## 2. Replace the water tank/ultrasonic spray nozzle

Replace the water tank:  $(1)\sim(2)$  and  $(7)\sim(8)$ 

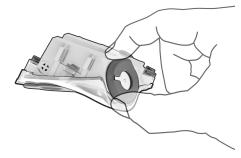
Replace the ultrasonic spray nozzle: (1)~(8)

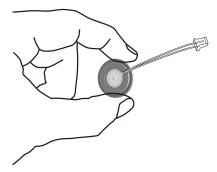
- (1)Use a Philips screwdriver to uncrew the water tank.
- (2) Disconnest the cables from the old water tank then slide out the water tank.
- (3)Lightly lift up the silicone ring and remove it from the water tank. Don't press the welding spot and/or ultrasonic nozzle.
- (4)Place the new ultrasonic spra y nozzle on the water tank, make sure the connecting cable is aligned to near the side of the water tank, then fit the bottom of the silicone ring to the water tank.
- (5)Press the silicone ring to secure it, then use another finger push the top of silicone ring into the water tank lightly.
- (6)Please check if the new ultrasonic spray nozzle fits the water tank tightly.



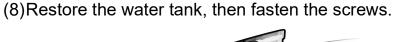


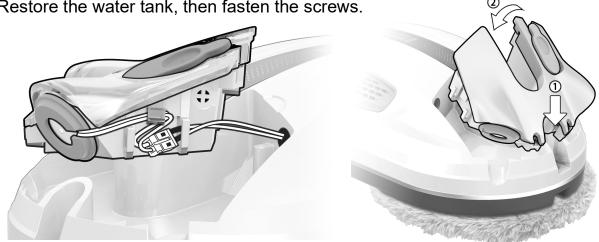






(7)When connecting the new water tank to HOBOT, please make sure the cables are tucked in.

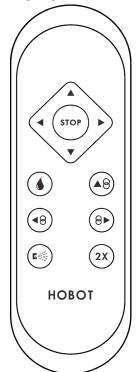




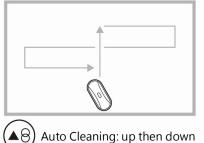
Care Frequency: When ultrasonic nozzle is clogged and cannot spray water. Please contact a local retailer or local authorized dealer for additional consumable spare parts.

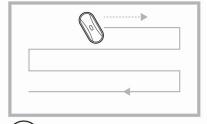
# Remote Control and App Control

HOBOT can be remote controlled from the front and back sides.



<b>(</b>	Spray Water: on/off				
	Spray Once				
	Auto Cleaning: up then down				
	Auto Cleaning: left then down				
	Auto Cleaning: right then down				
	Manually Control				
STOP	Stop Cleaning				
2X	Clean Twice				





Auto Cleaning: left then down

Auto Cleaning: right then down

# OApp Instructions

#### Install HOBOT App, Connect, and Start Cleaning

Scan the QR code on the right or search "HOBOT" on the App Store/Google Play to download the App.

- (1) Turn on Bluetooth and open HOBOT App.
- (2) To connect your robot to the App, turn on HOBOT and wait for the "Connected" sign to show on the App.
- (3) Start operating HOBOT with HOBOT App.
- (4) Please put HOBOT on the table before updating the firmware or recording the Creative Voice.



## **OLED** Indication

Status	LED indication	Audio Alert	Situation and handling	
Charing	Orange light on	×	UPS charging.	
	Green light on	×	UPS fully charged.	
	White and blue light flashing	Two beeps with voice prompt	Low UPS battery, please refer to FAQ Q1 to resolve.	
	Blue light on	Voice prompt	Cleaning with water spray.	
	White light on	Voice prompt	Cleaning without water spray.	
	White light flash once	×	Spraying water.	
	Blue/White light on	One long and two short beeps with voice prompt	Cleaning completed.	
	Light is off	One beep	Air leakage, HOBOT will reverse.	
Operating	Red and blue light flashing	Power disrupted, please reconnect to the power source.  Long sound alert with voice prompt unable to re-establish the power source, please refer to FAQ Q2 resolve.		
	Blue light flashing		Please refer to FAQ Q3 to resolve.	
	White light flashing	Two beeps with voice prompt	Please refer to FAQ Q7 and Q8 to resolve.	
	Red light flashing	voice prompt	Hardware failure. Please contact a local retailer or an authorized dealer for repairs.	

# OFrequently Asked Questions (FAQ)

#### 1. Charging UPS battery.

If HOBOT is not in use for a long period of time, store it in a dry and safe location. The battery will need to be charged every 3 months to maintain battery life. If the battery can not be fully charged after 3 to 4 hours, please contact a local retailer or an authorized dealer for battery replacement.

# 2. HOBOT stops working due to power outage with long alert and red, blue light flashing.

- (1) Hold the safety rope with one hand and grasp HOBOT tightly with the other hand to remove HOBOT off the glass.
- (2) Switch off HOBOT in a safe area.
- (3) Check if the power cord is damaged or broken.

# 3. Blue light flashing with beeping sound when HOBOT fails on completing the initiation check.

- (1) Whether the cleaning cloth is too dirty.
- (2) Glass stickers and window film have a friction factor that is too low.
- (3) If the window is cleaned many times, the glass will become very slippery.
- (4) The glass will become slippery if cleaned several times in a low humidity environment such as in an air-conditioned room.
- (5) Please keep it 10 cm or more away from the window frame when placing HOBOT to avoid false detection.

# 4. HOBOT slips and cannot detect the upper frame of window in "Auto Up then Down (AB)" mode.

Press (stop) and switch to (◄৪) or (৪▶) auto cleaning mode.

## 5. HOBOT slips and can't move upward to the top of the window.

- (1) The friction factor is too low, usually caused by the glass stickers or window film on the glass.
- (2) The cleaning cloth might be too wet.
- (3) If the window is cleaned many times, the glass will become very slippery.
- (4) The glass will become slippery if cleaned several times in a low humidity environment such as in air-conditioned room.
- (5) Please keep it 10 cm or more away from the window frame when placing HOBOT to avoid false detection.

#### HOBOT cannot finish cleaning the whole window and stops during the middle of the work.

Press(◀৪)or(৪▶)switch to left or right auto cleaning mode.

# 7. White light flashing with beeping sound when HOBOT stops at the edge of the glass.

Some glass sealing strips are very flat that HOBOT sometimes can ride/stuck on them and cause air leakage, please move HOBOT to 10 cm or more away from the window frame and use (48) or (8) auto cleaning mode to continue.

#### 8. HOBOT does not move smoothly, or it moves irregularly.

- (1) Cleaning cloth is too dirty, please replace it.
- (2) The friction factor difference due to glass stickers, window film, etc. Please avoid using HOBOT on the glass with special finish.
- (3) The screw of the cleaning wheel might have become loose. Just tighten it.
- (4) The cleaning ring is broken, please replace it.

#### 9. After cleaning, swirl marks are left on the glass.

Cleaning cloth is too dirty or too wet, please replace it.

# 10. How to avoid leaving swirl marks on the glass which is visible under strong light?

Use a pair of clean and dry cleaning cloth to wipe dust and dirt off the glass, then use another pair of clean and dry cleaning cloth, spray small amount of detergent or rubbing alcohol only on the lower cleaning cloth while keeping the upper cleaning cloth dry and clean the glass again.

#### 11.HOBOT does not stop cleaning after completing the task.

Please press (stop) button to stop HOBOT.

### 12. Unable to link to App/HOBOT

- (1) Please restart HOBOT and App.
- (2) Please turn on Bluetooth function on your smartphone and connect.
- (3) Please check the Bluetooth device list on your smartphone and select "HOBOT".

### 13. HOBOT does not spray water.

- (1) Check if you have turned on the spraying function.
- (2) Clean the of the ultrasonic nozzle with a soft, dry and clean cloth.
- (3) Replace the water tank after tried (1) and (2).

If any problems occur and this manual cannot provide the solution you need, please contact a local retailer or local authorized dealer.

# **HOBOT**

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Model	HOBOT-R3		
Adhesive type and shape	Vacuum, Round		
Weight	955 g		
Device size (LWH)	295×148×95 mm (11.6×5.8×3.7 in)		
Cleaning method	Rotating, Zigzag		
Auto water spray	•		
Replaceable water tank	•		
Suitable glass thickness	All thickness		
Input voltage	100-240V, 50/60Hz		
Power consumption	90W		
Un-interrupt Power System (UPS)	20mins		
Certifications	CE, FCC, RoHS		



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