

FEIDER



ROBOTIC WINDOW CLEANER

FRWC1

USER GUIDE

CAUTION : Read the instructions before using the machine !

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1. SAFETY INSTRUCTIONS

Attention! Must read before use

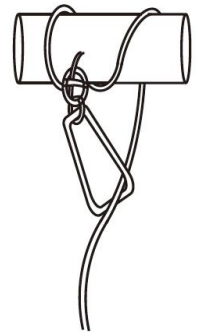
- Do not allow children to operate this product. Users with physical, sensory or psychological disorders, or those who lack knowledge of the functions and operation of this product must be supervised by a fully competent user after being familiar with the use procedures and safety risks. Users must use the product under the supervision of a fully capable user after familiarizing themselves with the use process and safety risks. This product should not be used by children as a toy.
- This product can only be used to clean framed windows and glass (this product is not suitable for cleaning windows and glass without frames). If the window or glass frame has a damaged silicone rubber edge, please be sure to pay special attention to prevent the machine will leak and fall off during the cleaning process. User must observe the using scenario to ensure that the product is used safely and securely.

Safety matters

- Please use the original adapter! (Using a non-original adapter may cause product failure or damage the product.)
- Make sure the adapter has enough space for ventilation and heat dissipation during use. Do not wrap the power adapter with other objects.
- Do not use the adapter in a humid environment. Please do not touch the power adapter with wet hands during use.
- Please charge the window cleaner at the voltage that the power adapter can withstand.
- Do not use a damaged power adapter, charging cable or power plug. Before cleaning and maintaining the machine, the power plug must be unplugged and do not disconnect the power by unscrewing the extension cord to prevent electric shock.
- Do not disassemble the power adapter; if the power adapter is faulty, replace the entire power adapter. For assistance and repair, contact your local customer service or distributor.
- This product battery if not handled properly, there is a risk of combustion or chemical dissection injury to the body. Please do not disassemble the battery, so as not to cause a short circuit. Please do not use in fire and high temperature environment above 60°C.
- Please hand over the used battery to the local professional waste battery product recycling center for recycling, the disposal and recycling of used batteries must comply with national laws and regulations.
- Do not immerse this product in liquids (such as beer, water, drinks, etc.) or leave it in a humid environment for a long time.
- Do not expose this product to sunlight and keep this product away from heat sources (such as radiators, heaters, microwave ovens, gas stoves, etc.).
- Do not place this product in a strong magnetic scene.
- Please store this product out of reach of children.
- Please use this product in 0°C~40°C (32°F~104°F) ambient temperature.
- Do not clean damaged glass and objects with uneven surface, this product will not produce enough vacuum suction adsorption on uneven surface or damaged glass machine.
- The built-in battery of this product can only be replaced by the manufacturer or designated dealer /after sales center to avoid danger.
- Before removing the battery or handling the battery, the power must be disconnected.
- Please operate this product in strict accordance with the instructions, if any property damage and personal injury caused by improper use, the manufacturer is not responsible for any.

Attention!

- Before use, please make sure that the safety rope is not broken and one end is firmly connected to the machine and the other end is firmly connected to other. The other end should be securely attached to other objects in the room to prevent the window cleaner from falling and injuring people or objects.
- If the window glass glue is falling off in the middle section or chipped at the corners due to aging, please be careful to use the machine and make sure it is working during the working period. Please use caution and make sure that there is a user supervising the machine during the working period to prevent the machine from falling down and hurting people or objects.



Risk of electric shock

- Make sure the power is completely disconnected and the machine is off before cleaning the body or maintaining the body.
- Do not drag the power plug through the extension cord, power off should be properly unplugged.
- Do not continue to use the product if the machine is damaged/the power supply is damaged.
- Machine is damaged, please contact your local after-sales center or dealer for repair.
- Do not use water to clean the machine body and power adapter.
- Do not use this product in dangerous areas such as open fire, bathroom with water flowing from the open nozzle, by the swimming pool, etc.
- Do not damage or twist the power cord. Do not put heavy objects on the power cord or adapter to avoid damage.

Warnings

- Before operation, make sure to attach the safety rope and tie it securely to a stable indoor unit.
- Before turning on the machine, check the safety rope for damage and secure knotting. Make sure there is no damage and that the knot is secure before using the product.
- When cleaning the glass of a window or door without a blocking table, please set up a safety warning area downstairs.
- Fully charge the built-in backup battery before use (green light on).
- Do not use in rainy or wet weather.
- Turn on the machine first and then place it on the window glass.
- Make sure the machine is safely attached to the window surface before releasing your hands.
- Before turning off the machine, please hold the machine to avoid dropping it.
- Do not use this product to clean frameless windows or glass .
- Make sure the cleaning cloth is properly attached to the bottom of the machine to prevent air leakage when the window cleaner is adsorbed.
- Do not spray the machine or the bottom of the machine. spray water only on the cleaning cloth.
- Do not allow children to use the machine.
- Please remove any items on glass surface before use.
- Please let hair, loose clothes, fingers or other parts of body keep distance with the working parts of machine.
- Do not use the machine in area of flammable and explosive solids or gases.

2. PRODUCT DESCRIPTION & PARAMETERS

Product Description

1. Window Cleaning Robot It has a vacuum motor, which can make the machine adsorb on the glass surface and walk freely on the vertical glass surface. Power failure protection (backup battery) can supply power to the equipment to prevent the equipment from falling due to power

failure.

2. Window Cleaning Robot has two well-designed cleaning wheels with suction cup, has walking and cleaning functions. The cleaning wheel can absorb and walk on the vertical glass surface. The cleaning cloth on the cleaning wheel can be easily removed and replaced. The cleaning cloth is made of microfiber cloth. the cleaning result is very good.
3. The Window Cleaning robot has artificial intelligence, can plan the path, detect the frame, and automatically clean the entire window. Manual remote control mode, you can freely control the robot.
4. The Window Cleaning robot is upgraded with more advanced artificial intelligence technology, with a more fashionable appearance and a lighter and thinner body. It has better cleaning performance in more different home environments.

Specifications

Adaptor input	AC100 - 240V, 50Hz - 60Hz, 1.5A
Adaptor output	24 V d.c. 3.0A, 72W
Battery	14.8V d.c. 650mAh
Rating	24 V d.c. 3.75A
External dimensions	295*145*78mm
Suction power	2800Pa
Net weight	1115g
Power failure protection time	40min
Way to control	Remote control
Noise	65-70dB(A)
Border detection	automatic
Fall arrest control	Power failure protection (backup battery) safety rope
Cleaning mode	Intelligent path planning modes
Water tank capacity	50ml
Water spraying method	Manual / Auto
Frequency range	2402-2480MHz
Max. Output power	1.48 dBm Max.
Modulation	GFSK
Max. Antenna gain	2.5dBi
Type of Antenna	PCB Antenna

Product component name



Power light

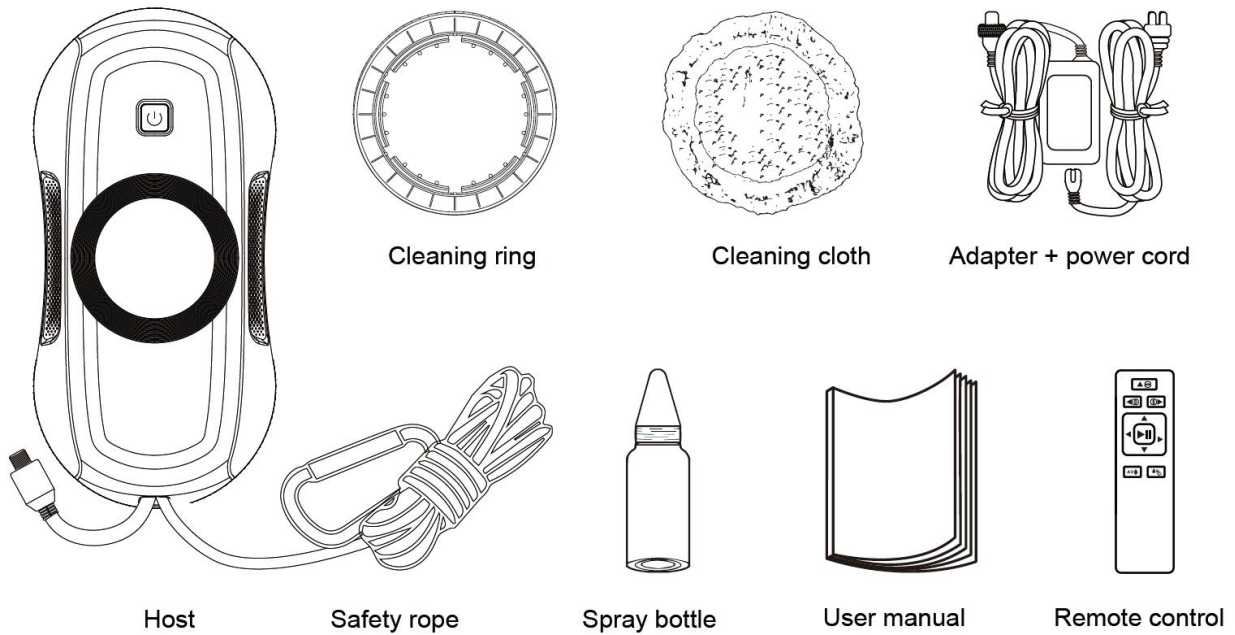
● Blue light : machine is normal

● Orange light : charging

● Red light : machine abnormality

● Green light : charging complete

Product accessories



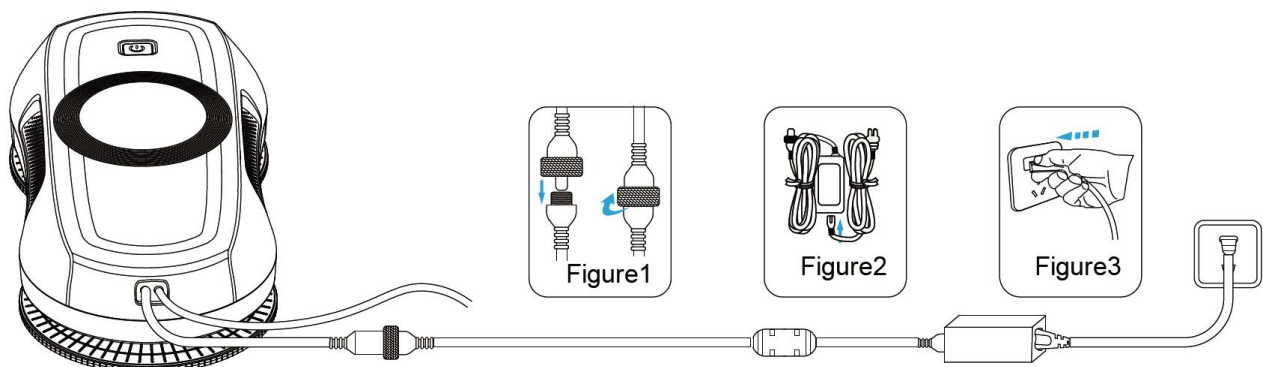
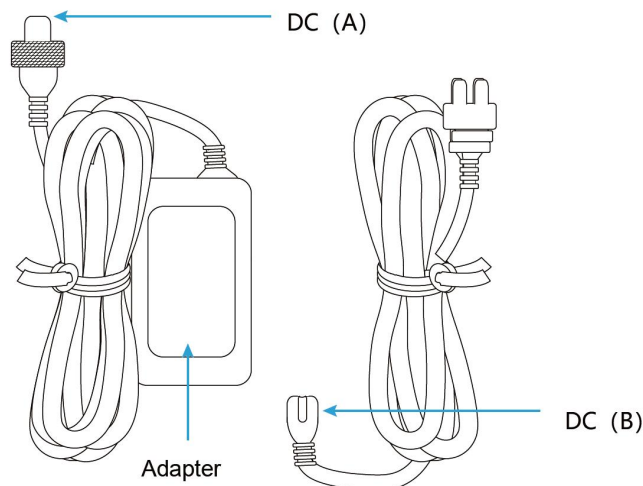
3. USE STEPS

Power connect

A. Insert the DC connector (connector A) into the power interface of the machine, and tighten the nut. (Figure1).

B. Connect the DC plug (connector B) to the adapter. (Figure2).

C. Connect the power supply. (Figure3)



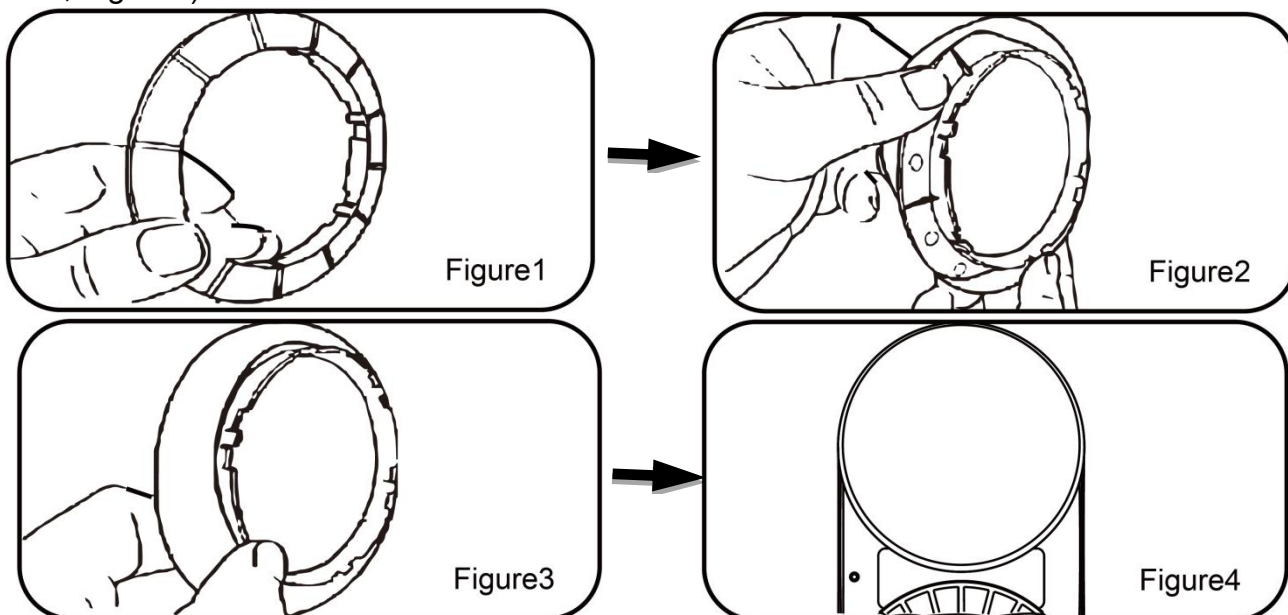
Our device has built-in battery for standby power supply in case of power failure. Please make sure the battery is fully charged before use (green light is on).

A. First turn off the power switch on the device, connect the power cord, and the orange light is on, indicating that it is in the charging state.

B. When the green light is on, means the battery is fully charged.

Install the cleaning cloth and clean ring

According to the diagram, Please make sure the cleaning cloth is put on the cleaning ring, and the cleaning ring is correctly put on the cleaning wheel to prevent air leakage.(Figure1, Figure2, Figure3, Figure4)

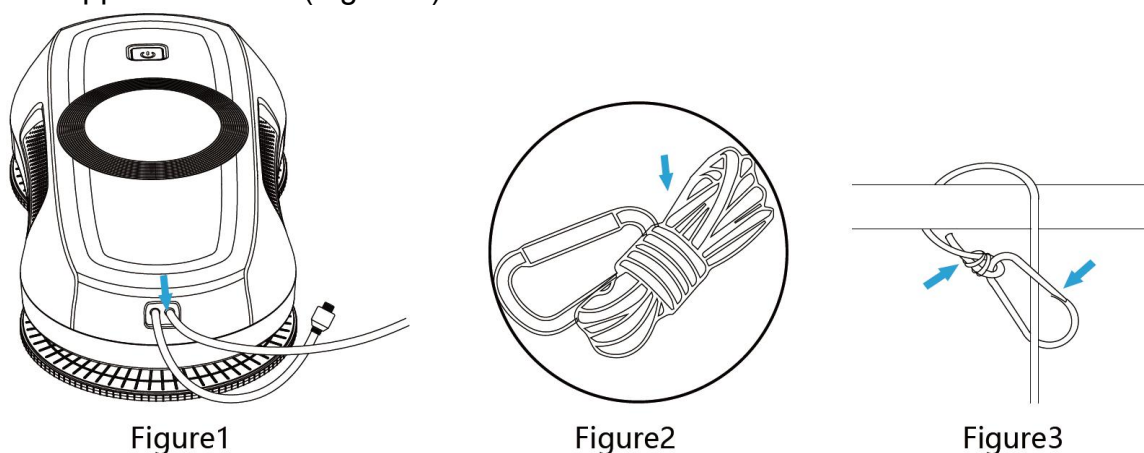


Attach a safety rope

A. Check that the safety rope is not broken and the connection with the robot is firm.

(Figure1, Figure2)

B. Fix the other end of the safety rope on other objects in the room to ensure that the tightening will not be dropped or fall off. (Figure 3)

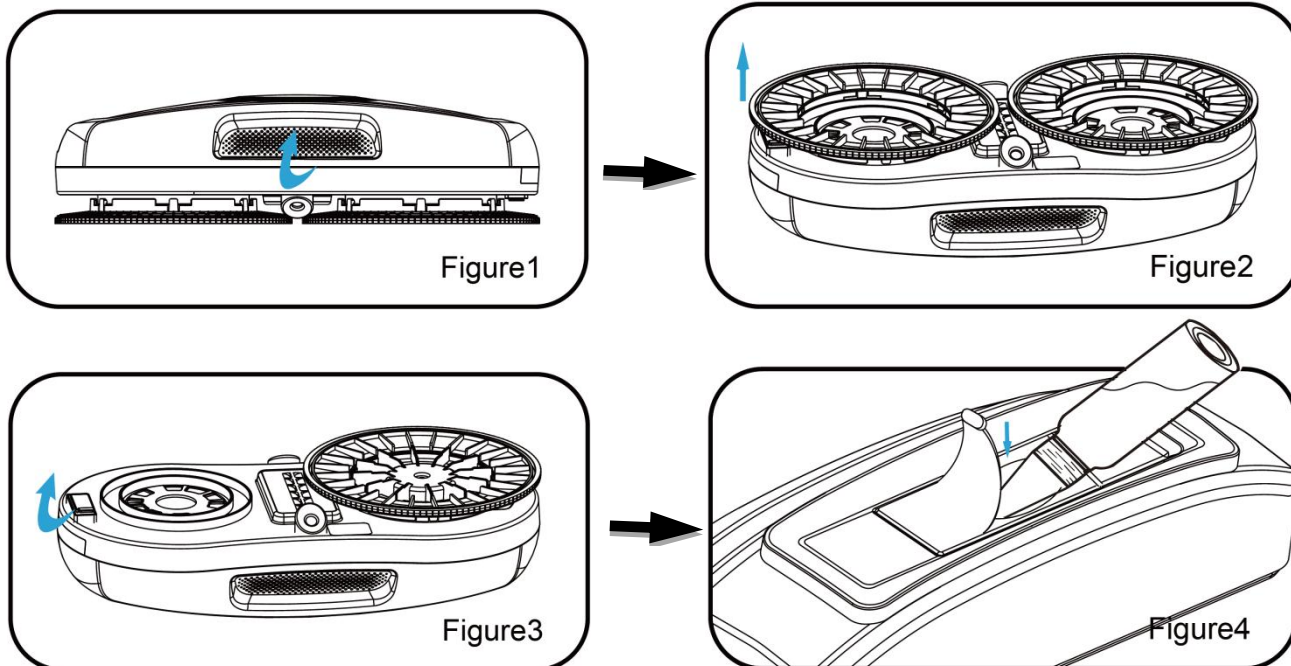


Water tank add water


A. Please do not add any other cleaning agents to the water tank.

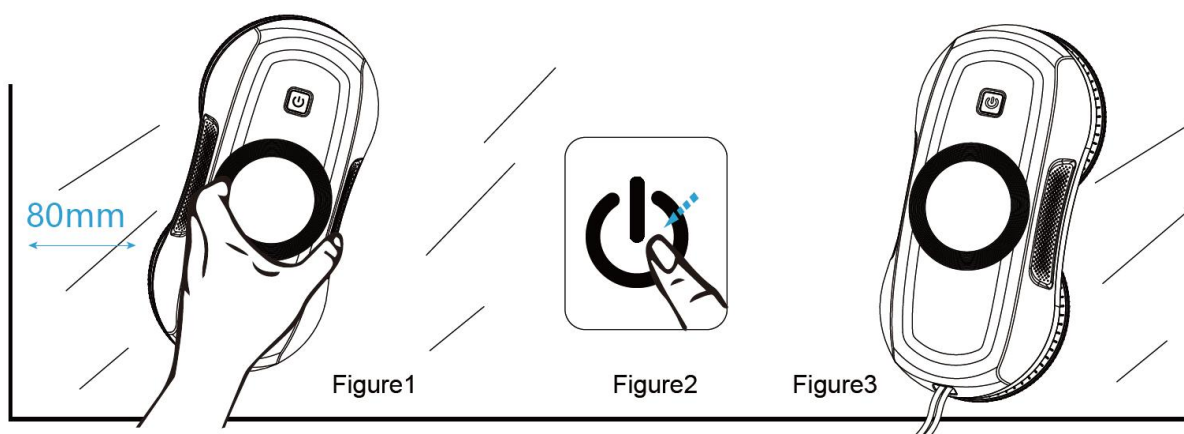
B. Turn the machine over, remove the cleaning ring, open the silicone cover, and add clean and impurities free water. (Figure1, Figure2, Figure3 Figure4)

C. Do not fill the water tank with water (80% is sufficient) to maintain stable air pressure.



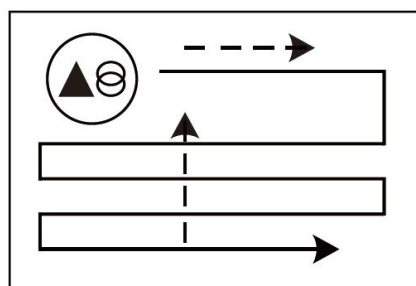
Attach the machine to the glass

- B. Put the machine on the glass and keep a certain distance from the window frame.(Figure1)
- A. Press and hold the key  for 2 seconds to turn on, and confirm that the fan rotates.(Figure2)
- C. Make sure that the machine can be attached to the glass, and then let go.(Figure3)

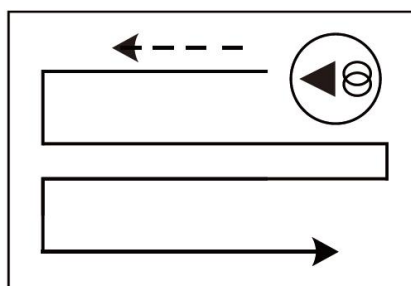


4. CLEANING FUNCTION

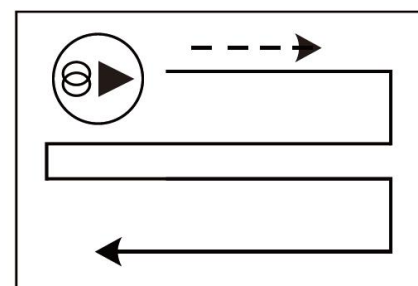
Intelligent path planning modes



Climb to the top and then automatic clean



Auto clean from right to left



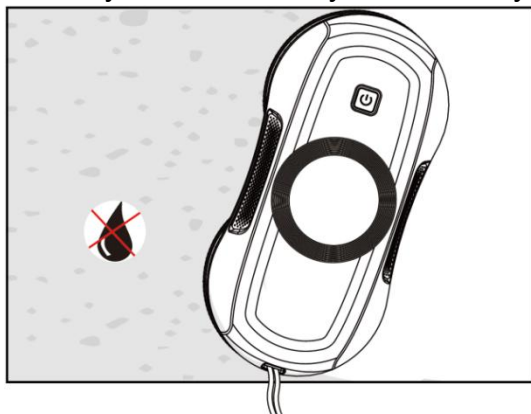
Auto clean from left to right

Dry wipe

- A. The first time you wipe, be sure to "dry wipe" without spraying water, first remove the sand on the surface of the glass.

B. If you spray some water (detergent) on the cleaning cloth or glass first, the water (detergent) will mix with the sand and turn into yellow mud, and the wiping effect will be poor.

C. When the machine is used in sunny or low-humidity weather, dry wipe is the best



Spray water function

Window cleaning robot set one water spray holes on each side of the left and right sides, when the robot to the left cleaning, the left side spray water, when the robot to the right cleaning, the right side spray water.

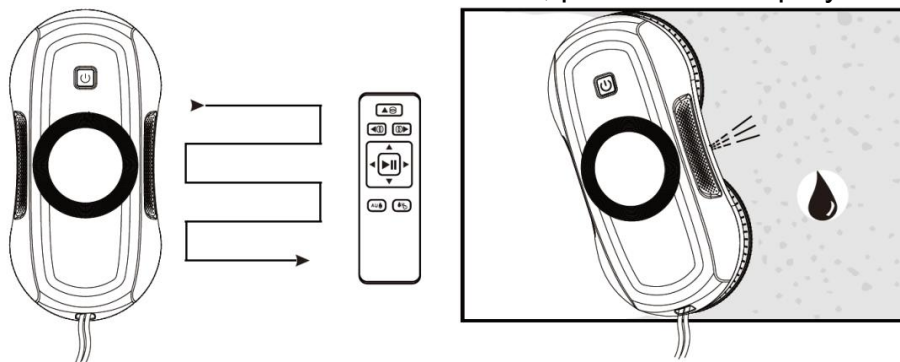
1. Automatic water spray AU

A. When the window cleaning robot is in the auto cleaning mode, the machine is in the forward direction, press the "AU" button on the remote control, the machine will make two "beep...beep", the automatic water spray mode has been turned on, and the water will be sprayed intermittently.

B. Press the "AU" button on the remote control and the machine will make a "beep" sound, indicating that the water spray mode has been turned off.

2. Manual water spray

When the window cleaning robot is in the auto cleaning mode, the machine is in the forward direction, press the " " button on the remote control, press once to spray water once.

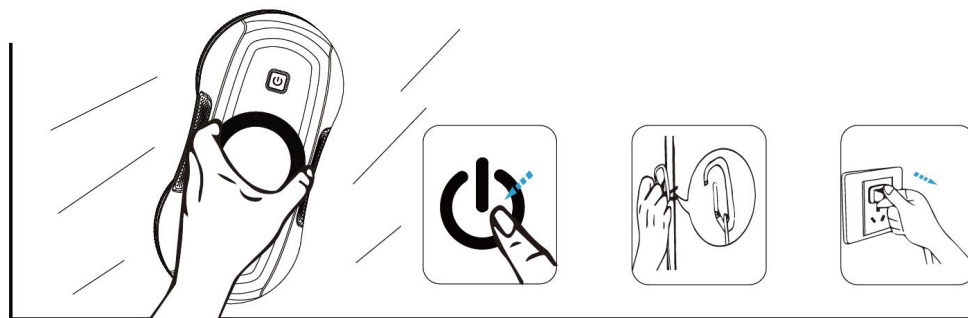


Cleaning completed

A. Hold the window cleaner with one hand and press the button for 2 seconds with the other hand to turn off the power.

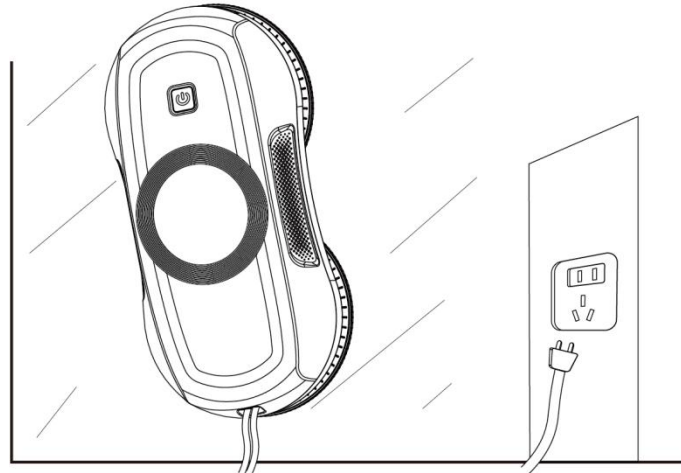
B. Remove the window cleaning robot from the window.

C. Untie the safety rope and place the machine and its related accessories in a dry and ventilated environment for next use.





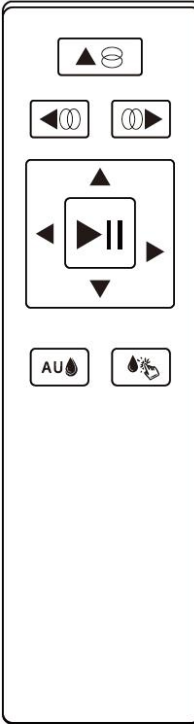








5. POWER FAILURE PROTECTION (BACKUP BATTERY)

- A. In case of power failure, the device will start the built-in backup battery power, which can last for 40 minutes (when the battery is fully charged).
- B. In the event of a power failure, the machine will stay in place and will not move forward, and will emit a warning sound.. The red/blue lights will flash alternately. Return to the machine as soon as possible to avoid falling from the glass due to the power failure.
- C. Use the safety rope to gently pull the device back; when pulling the safety rope, keep it as close to the glass as possible to avoid falling.



6. THE REMOTE CONTROL

- A. Do not charge the remote control battery, do not disassemble the battery, do not put the battery in fire, there is a possibility of detonation.
- B. Please use No. , AAA/RL batteries of the same specification as required, please do not use different types of batteries, there is a danger of burning the circuit, when the battery is installed and removed, push the remote control cover down, open the battery cover, and install .When using the battery, align the negative pole with one end of the spring first, press it down, the reverse installation of the battery is invalid, and then cover the battery cover.
- C. New and old batteries or different models, different types of batteries cannot be mixed.

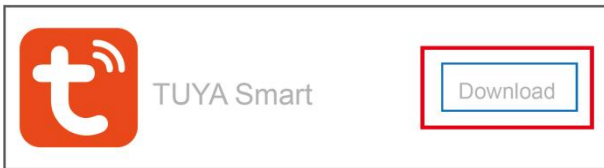
 Auto clean up and then down	 Manual upward movement	
 Auto clean left and then down	 Manual downward movement	
 Auto clean right and then down	 Manually move to the right	
 Automatic water spray	 Manual move left	
 Manual water spray	 Start / Pause	

7. TUYA APP OPERATION GUIDE

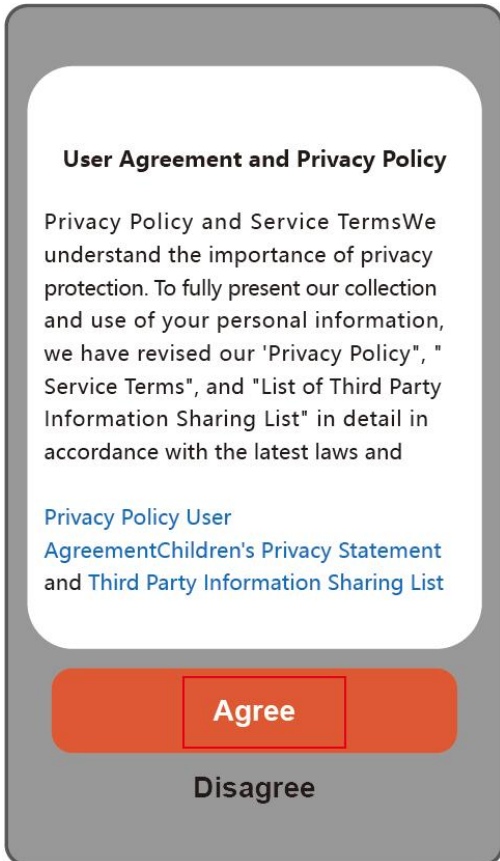


TUYA smart

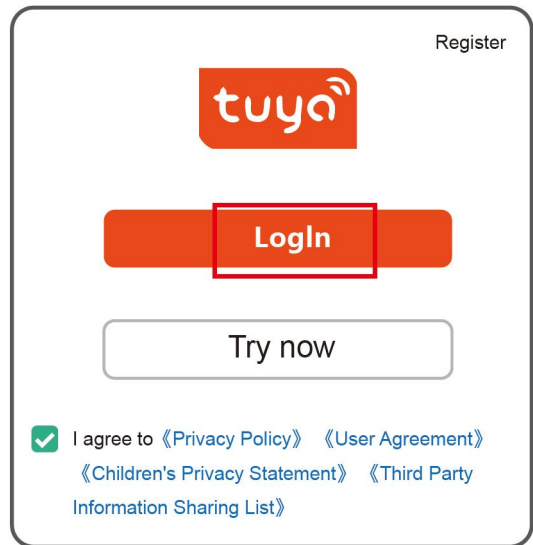
1. Open the App store your phone.
2. Search for "Tuya" App.
3. Click to download and install.



4. Click to open the "Tuya" App.
5. Click on "Agree".

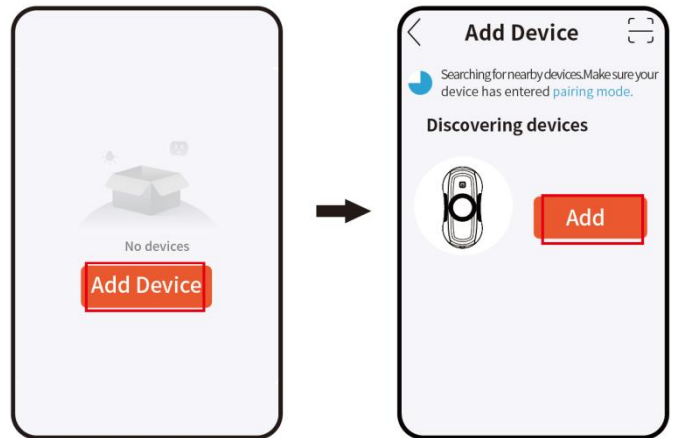


6. Type "✓" and then click "Click Login"

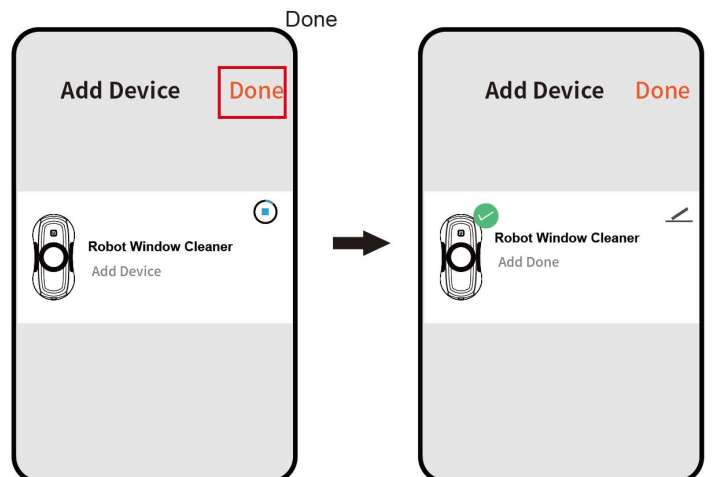


7. Turn on Bluetooth:
The robot connects power and open the bluetooth on smart phone.

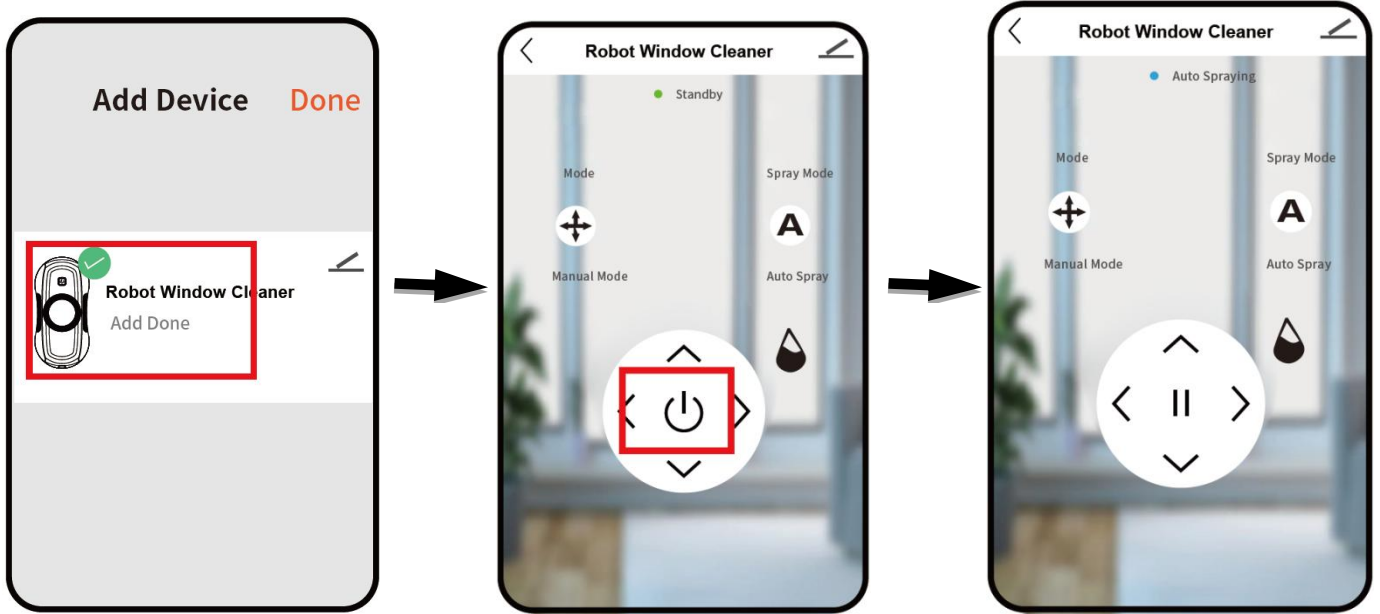
8. Click on "Add Device":
Make sure your device has entered pairing mode



9. Click on "Done"



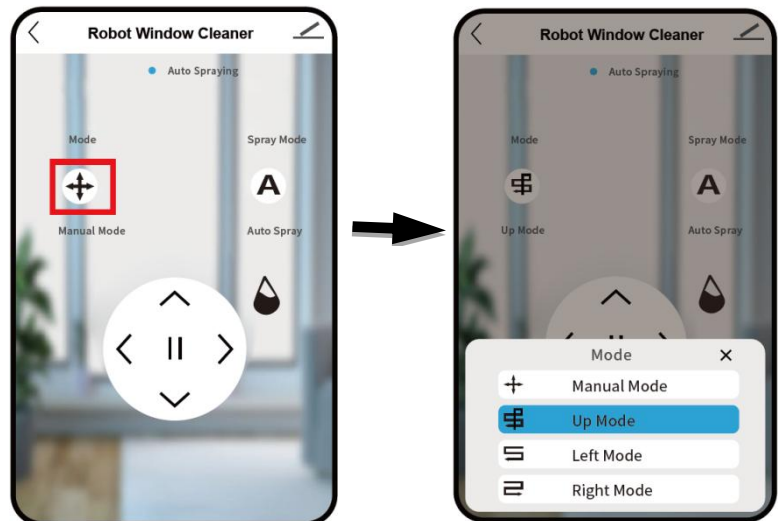
10. (1) Click "window cleaning robot" (2) Click "⏻" to start the robot



11. Click on Control panel to enter clean mode ⬆

Clean mode:

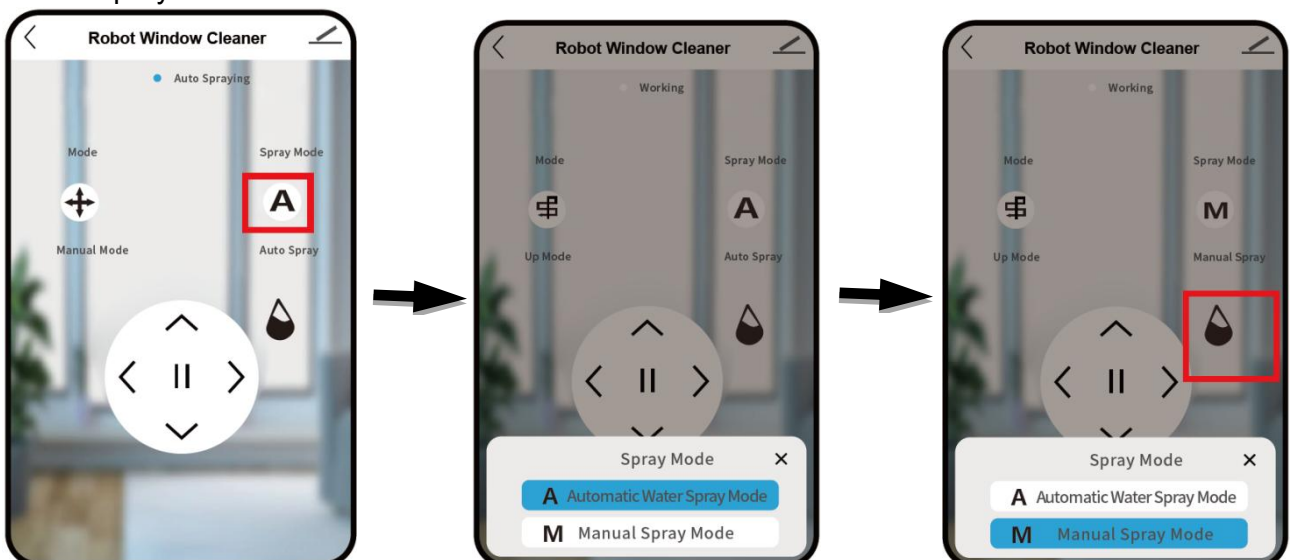
- ⬆ Manual Mode
- ⬆ Up Mode
- ⬆ Left Mode
- ⬆ Right Mode



12. Click on the control panel to enter the water spray mode **A**

Water spray mode:

- A** Automatic Water Spray Mode
- M** Manual Spray Mode



8. TROUBLESHOOTING

1. When the cleaning cloth is used for the first time (especially in the dirty environment of the outer window glass), the machine may run slowly or even fail:

A. When unpacking the machine, clean and dry the supplied cleaning cloth before use.

B. Spray a little water or glass water evenly on the cleaning cloth or the surface of the glass to be wiped.

C. After the cleaning cloth is dampened and wrung out, put it into the cleaning ring of the machine for use.

2. The machine will test itself at the beginning of operation. If it can not run smoothly and there is a warning sound, it means that the friction is too large or too small:

A. Whether the cleaning cloth is too dirty.

B. The efficient of friction of glass stickers and fog stickers is relatively low, so they are not suitable for use.

C. When the glass is very clean, it will be too slippery.

D. When the humidity is too low (air conditioning room), the glass will be too slippery after wiping for many times.



3. When pressing the up automatic cleaning button  , the machine can't detect the upper edge of the window due to the sliding of the upper edge of the window:

Please press the  key to switch to  or  auto clean mode.

4. The machine cannot wipe the upper left side of the glass:

You can use the remote control manual window cleaning mode to wipe the part that has not been wiped (sometimes the glass or cleaning cloth is slippery, the width of the wiped glass is larger, and the top line slides a little, resulting in the upper left position can not be wiped).

5. The machine can't clean the windows completely, but finish the cleaning work ahead of time:




You can press  or  auto window mode to continue the unfinished part.

6. Possible reasons for slipping and not climbing when climbing:

A. The friction is too small. The friction coefficient of stickers, thermal insulation stickers or fog stickers is relatively low.

B. The cleaning cloth is too wet When the glass is very clean, it will be too slippery.

C. When the humidity is too low (air conditioning room), the glass will be too slippery after wiping for many times.

D. When starting the machine (press  or  or ), please place the machine at a distance from the window frame to avoid wrong judgment.

7. After cleaning, round wheel marks remain on the glass surface:

The cleaning cloth is too dirty. Please replace it with a clean cloth and wipe it again.

8. The machine doesn't run smoothly. Possible reasons:

A. The cleaning cloth is too dirty. Please replace it.

B. There are different areas on the glass surface (glass area, sticker area, thermal insulation sticker area or fog sticker area). Please use it in a single area.

C. If the screw of the cleaning wheel is loose, please lock it (do not lock it too tightly, otherwise it may affect the glass glue thickness at the bottom of the window frame or the performance of the

beveled window frame).

9. How to deal with the warning sound and red light flashing when the machine stops operation due to power failure:

A. Gently pull the safety rope back to the machine; when pulling the safety rope, it should be close to the parallel glass as far as possible to avoid falling.

B. Turn off the machine power switch.

C. Check the wire for poor contact or broken wire.

10. The machine stops when encountering unknown obstacles, the red light flashes and there is no warning sound. How to deal with it:

A. Let the machine back to safe position via remote control. Or gently pull the safety rope back to the machine, when pulling the safety rope, it should be close to the parallel glass as far as possible to avoid falling.

B. Remove the obstacles on the window.

C. Check if there is the reason caused air leak.

11. There are arc marks on the polished glass when the light is shining at night:

For the first time, please turn off the water spraying function and use a clean cloth to remove the sand. For the second wipe, clean and replace the clean cloth, turn on the water spraying function, or keep the upper cleaning wheel clean and dry, and spray a little detergent or alcohol on the lower cleaning wheel (1 or 2 spray), which can not be completely wet, and can eliminate the arc trace. All wet cleaning cloth will affect the operation of the.

12. The machine has cleaned all the windows, but it can't stop automatically:

Please press the  key to stop the operation.

13. The machine will not spray water:

A. Please confirm whether the water spray function switch is on.

B. Clean the ultrasonic nozzle with a clean soft cloth.

C. Please check the water tank whether there is water and whether the added cleaning solution is clean and pure.

9. PRODUCT CARE



When the product has reached the end of its life, it and the Li-Ion battery should not be disposed of with general household waste. The battery should be removed from the product and both should be disposed of properly at a recognized recycling facility.

FOR HOUSEHOLD USE ONLY



Electrical products should not be discarded with household products. According to the European Directive 2012/19/EU on waste electrical and electronic equipment and its implementation into national law, electrical products used must be collected separately and disposed of at collection points provided for this purpose. Talk with your local authorities or dealer for advice on recycling.

10. DECLARATION OF CONFORMITY



BUILDER SAS

32 rue Aristide Bergès - Z.I. du Casque - 31270 Cugnaux - France

Declares that the machine indicated below:

Designation: ROBOTIC WINDOW CLEANER

Model: FRWC1

Serial number: 20240712460-20240712559

Is in conformity with the European Directives:

Radio Equipment Directive 2014/53/EU

EMC Directive 2014/30/EU

ROHS Directive: (EU) 2015/863 amending 2011/65/EU

This product is also in conformity with the following standards:

EN 60335-1:2012+A11:2014+A13:2017+A1:2019+ A2:2019+A14:2019+A15:2021

EN IEC 60335-2-29: 2021/A1:2021

EN 60335-2-2:2008+A11:2010+A11:2012+A1:2013

EN 62233 :2008

EN 50663: 2017; EN 62479: 2010

ETSI EN 301 489-1 V2.2.3 (2019-11)

ETSI EN 301 489-17 V3.2.4 (2020-09)

EN IEC55014-1:2021

EN IEC55014-2: 2021

EN IEC 61000-3-2:2019+A1:2021

EN 61000-3-3:2013+A1:2019+A2:2021

ETSI EN 300 328 V2.2.2 (2019-07)

Philippe MARIE / PDG

Cugnaux, le 18/06/2024

Responsible of technical file: M. Olivier Patriarca

FEIDER



CE

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32 rue Aristide Bergès - Z.I. du Casque - 31270 Cugnaux - France
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