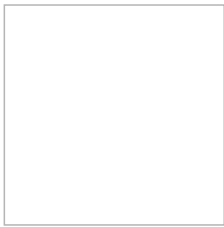


# WINDOW CLEANING ROBOT

---

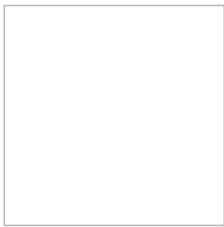
Instruction Manual



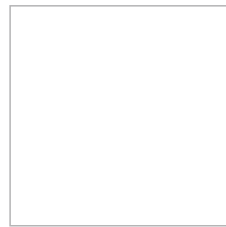
Official app Download



Track wipe video



Product calibration video



Product operation video



# CONTENTS

<b>1. Safety Criteria</b>	2
<b>2. Product Composition</b>	5
2.1 Package contents	5
2.2 Technical parameters	5
2.3 Part name	6
<b>3. Product Manual</b>	7
3.1 Precautions before use	7
3.2 Install the cleaning cloth	8
3.3 Connect the adapter	9
3.4 Assemble the safety rope assembly	9
3.5 Product work	10
3.6 Product pause	12
3.7 End the work	13
<b>4. Maintenance</b>	14
4.1 Cleaning cloth	14
4.2 Bottom components	15
<b>5. APP Usage</b>	17
<b>6. Route Plan</b>	18
<b>7. Fault Description</b>	19
<b>8. Warranty Card</b>	21

## 1. Safety Criteria

**Please read this manual carefully before using the product.**

Save the manual.

When using the product, please maintain consistent vigilance and keep the following precautions:

 **1. This product is strictly forbidden to use under the following conditions:**

- 1.1 Products can not be used by children under 12 years old and the person physically or mentally impaired. Please do not allow children close to the working robot or as robot be a toy to play.
- 1.2 Do not use this product on glass that has broken marks, ad paper, or bumps to avoid the risk of broken glass, dropped product, and so on.
- 1.3 Do not use this product on non-planar glass such as curved surface and beveled surfaces.
- 1.4 Do not use this product on framed glass with a glass frame thickness of less than 5 mm.
- 1.5 Prohibit the use of large areas of wet or oily glass to avoid slipping products caused by the risk of falling.
- 1.6 After cleaning, you can use detergent to clean the cleaning cloth. After cleaning, please dry it in time.
- 1.7 Do not place this product in water or other liquids to reduce the risk of electrical shock. Do not store this product where it may fall or be pulled into the tub or sink.
- 1.8 Do not use the product in a situation where the product is not completely adsorbed or has been significantly damaged.
- 1.9 Do not touch the plug or the product with wet hands.
- 1.10 Do not place the machine on household appliances, damp or have a fire source to charge, so as to avoid unnecessary losses.
- 1.11 Even if the product has been seriously damaged, the products can be banned. The battery may cause an explosion.
- 1.12 Strictly prohibit the use of this product without fixing safety rope assemblies.
- 1.13 Do not use the product with a damaged power cord or an electrical

## 1. Safety Criteria

---

outlet. Do not use the product when it is not working properly due to dropping, damaging or water ingress. To avoid injury, the product should be repaired by the manufacturer or its after-sales service department.

1.14 The cleaning cloth can be applied to the wet glass surface, Non-reflux of water droplets on glass. When the flow of water on the glass is left, it is strictly prohibited to use this product.

### **2. The following conditions should be noted when using this product:**

2.1 Products just can use for outside when the temperature at 0-40 degrees, no heavy wind, no rain and dry air. When using the product through the safety rope and safety buckle must be properly connected.

2.2 Always keep the product powered on while the product is in operation. Products built-in security backup battery is only used to maintain the product and then a sudden power failure, in a limited period of time to maintain adsorption on the glass does not fall, not as a normal work power supply, so as not to bring the risk.

2.3 Use only in a domestic environment. Do not use in commercial or industrial areas.

2.4 Please use the product as indicated in the instructions, use only the accessories recommended or sold by the manufacturer; use only the original rechargeable battery and adapter made by the manufacturer, and ensure that the voltage of the power supply is in line with the voltage marked on the adapter.

2.5 Please use the power line carefully to avoid the damage. It is forbidden to use the power line to drag, pull the product or use the power line as a handle; it is forbidden to close the glass window with the power line or put the goods on the power line in the process of use, and the power line should be far away from the heat source.

2.6 If the soft wires of the power cord are damaged, they must be replaced by the manufacturer, his or her maintenance department or similar professionals in order to avoid danger.

2.7 The plug must be unplugged from the socket before maintaining or cleaning the product, but not from the socket by pulling the power cord.


## 1. Safety Criteria

---

2.8 Battery charging can not be carried out in an overheated or undercooled environment to avoid affecting battery life. If you don't use it for a long time, please charge the battery every 1-2 months for 2 hours.

2.9 The battery must be replaced by the professional staff of the manufacturer, its maintenance department or similar department. Before the product is scrapped, the battery must be removed and discarded according to local laws, regulations and environmental regulations.

2.10 If you need to scrap the product, please cut off the power supply and remove the battery from the product. Please comply with local laws and regulations and environmental regulations to handle used batteries.

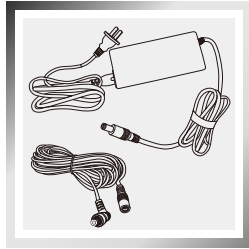
 **Please use the product in accordance with the instructions of this manual. The company is not responsible for any loss or injury caused by improper use.**

## 2. Product Composition

### 2.1 Package Contents



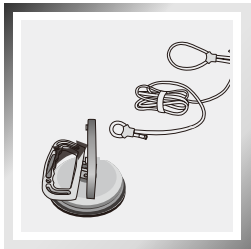
Host



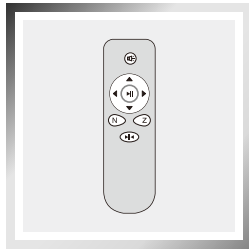
Adapter Components



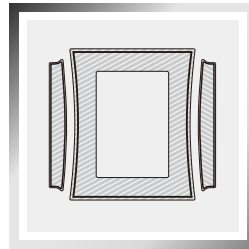
Instruction Manual



Safety Rope Components



Remote Control



Cleaning Cloth

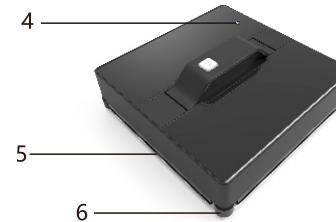
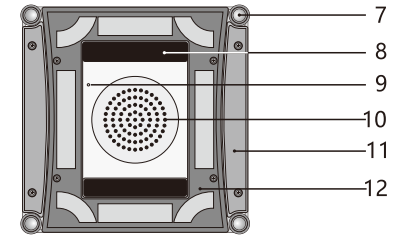
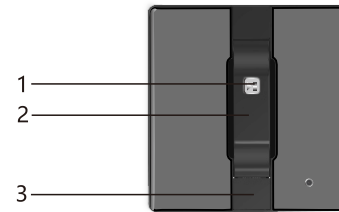
### 2.2 Technical Parameters

Operating Voltage (V)	24	Rated power (W)	80
Remote control			
Rated input voltage (V)	3		
Adapter Type: WT-2403750			
Input: AC110-240V 50/60Hz	Output: DC24V 3.75A		

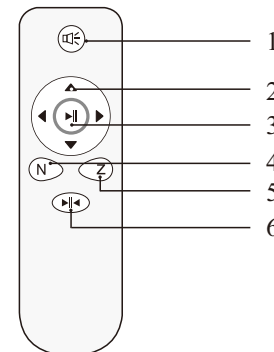
## 2. Product Composition

### 2.3 Part name

Host



1. Start/Pause
2. Handle
3. Power Switch/Safety Lock
4. Supply Hub
5. Movable chassis
6. Guide Roller
7. Anti-falling Sensor
8. Driving wheel
9. Suction Sensor
10. Air Inlet
11. Area 1 for Cleaning Cloth
12. Area 2 for Cleaning Cloth

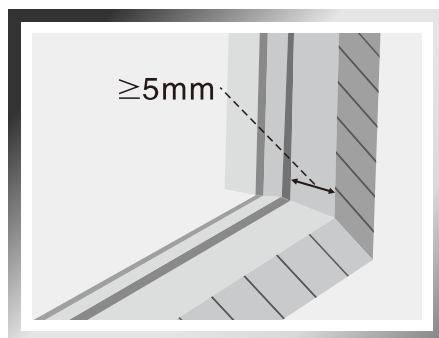


1. Alternate key /Match code key (short press water spray / long press match code)
2. Arrow key(forward/reverse/ left rotation/right rotation)
3. One button start/pause button
4. N mode button
5. Z mode button
6. Calibration key (only available during calibration)

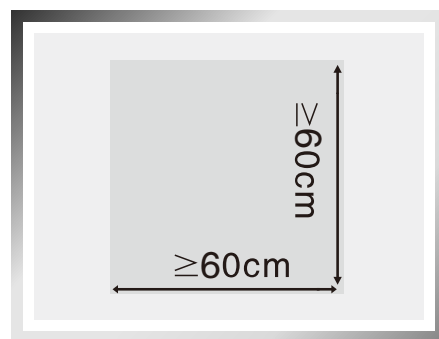
### 3. Product Manual

#### 3.1 Precautions before use

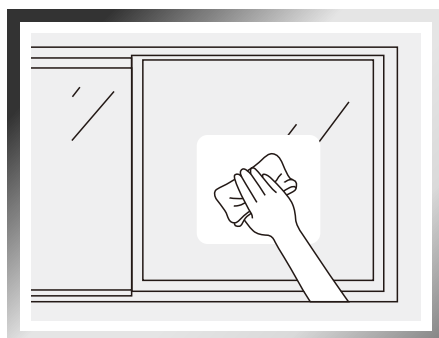
It is strictly forbidden to use this product on framed glass with a thickness of the border (height difference from the glass surface to the bezel) of less than 5 mm.




Use this product in a framed or frameless ratio of  $\geq 60 * 60\text{ cm}$




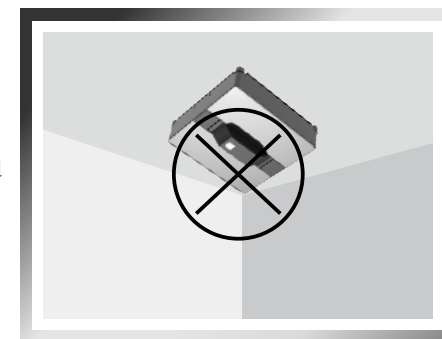
If there is too much dust on the surface of the glass, wipe out a clean area of product size before using the product for product adsorption.



### 3. Product Manual

 When the product is working on a horizontal glass surface, the remote control should be used to control the operation of the product. If you use this product on windows that are not completely vertical, the product may not work normally. Make sure that you are in the side care area and, if necessary, assist the product.

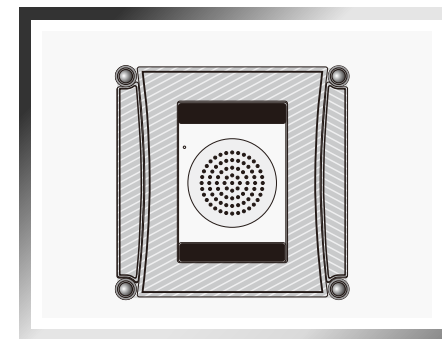
 This product can not be used in the inverted case.



#### 3.2 Install the cleaning cloth

Place two small cloth evenly on the left and right sides of the machine.

Place the square cloth evenly on the middle of the machine.

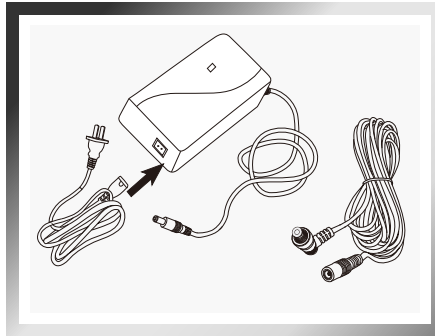


Before use, spray a small amount of water on the cleaning cloth and place it on the surface of the glass. Please do not spray too much water on glass surface or on the product.

### 3. Product Manual

#### 3.3 Connect the adapter

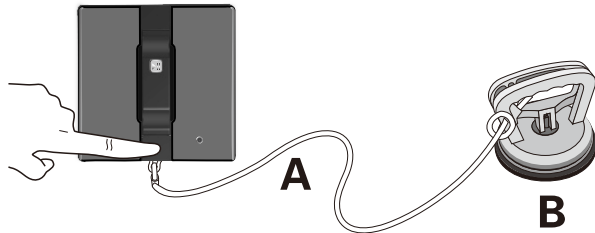
Disassemble the power line end of the product and the power line of the adapter, connect both ends of the extension line to the power line end of the product's power supply line and the adapter power line, and tighten up the power line at the end of the power supply line and the adapter.



#### 3.4 Assemble the safety rope assembly

When using this product to wipe the glass, use a safety rope assembly to secure the product and improve the safety of the product.

1. Press the power switch cover (below).
2. Connect the safety rope assembly. Connect the end of the safety rope with the buckle to the metal ring, and the suction cup is firmly fixed in place.



A. Safety Rope

B. Suction Cup



#### Note: Suction cup direction for use

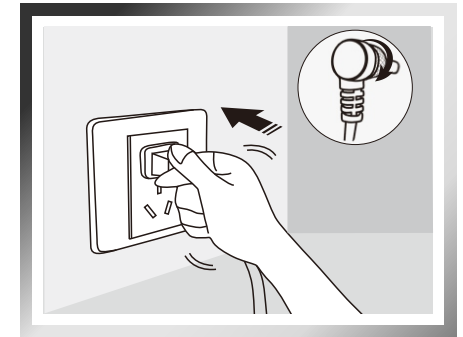
1. The suction cup can only be used on the surface of dry and clean glass; other surfaces such as walls and desktops cannot be used.
2. Slowly press firmly onto the glass surface with the suction cup handle separated, lift the handle, and close the suction cup handle together.
3. Please confirm that the suction cup is firmly adsorbed before use.
4. It is recommended that the suction time of the suction cup on the glass should not exceed 2 hours when the suction handle is separated.

### 3. Product Manual

#### 3.5 Product work

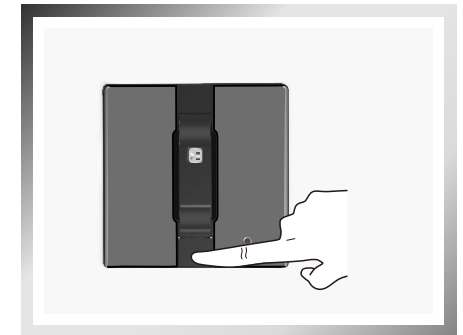
- 1 Connect the power supply and make sure the machine is locked by the metal locking.

Do not disconnect the power supply while the product is running. Otherwise, the product may fall down.



- 2 Turn on the power switch

Keep the machine away from hair or other small objects, in case those little things block the fan.

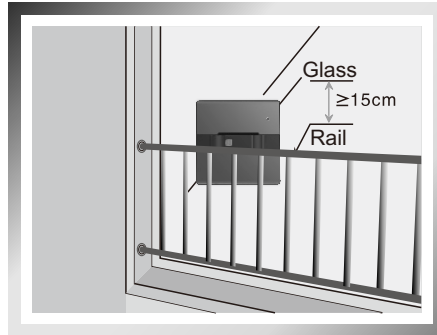


### 3. Product Manual

#### 3 Secure placement

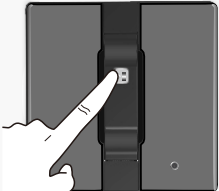
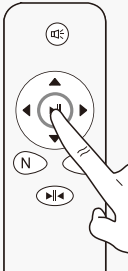
Make sure the product is in the normal operating state, place it on the glass surface, make sure the product is completely adsorbed on the glass, then release the handle.

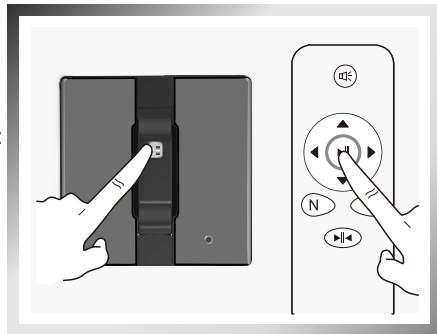
If there is an immovable obstacle (such as a guard rail, furniture, etc.) in front of the window, then the window and obstacle spacing greater than 15cm can use this product.



#### 4 Start working

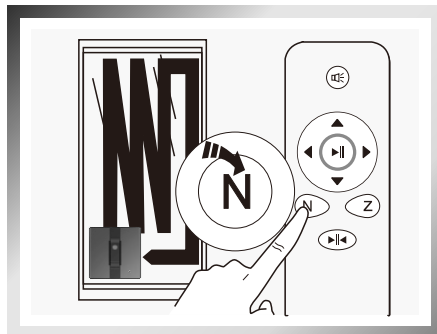
Automatic Mode:

There are two ways to start the work: Press the button  on the host or the button  on the remote control, all can start the automatic mode.



N Mode:

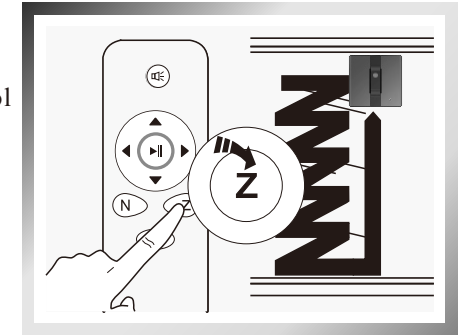
Operation via remote control mode key N key: for vertical glass, the product to "N" route to work.



### 3. Product Manual

Z Mode:

Start the work by the remote control mode key Z key: for horizontal glass, the product to "Z" route to work.

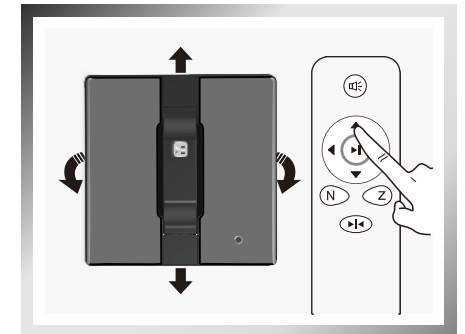


Manual Mode:

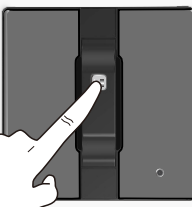
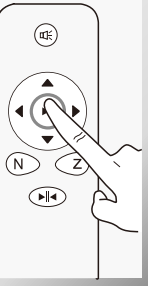
Use a remote control to control the operation of the machine and the up, down, left and right.

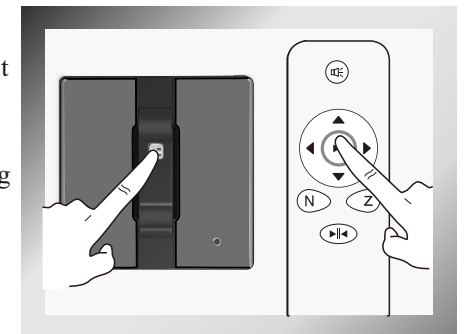
Among:

Up and down keys are forward / backward. Right and left keys to adjust the machine direction.

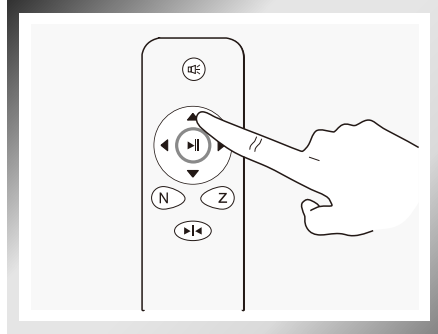


#### 3.6 Product pause

In the process of working, by host or remote control  to pause, need to restore work, again press , machine is shipped according to the original route.



In the case of pause, the direction of the product can be controlled by the direction key on the remote control, and the work route of the product can be switched. (machine no longer memorize the precious route)

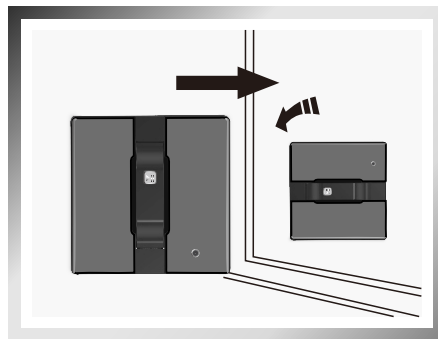


#### 3.7 End the work

End glass cleaning, the product will return to the start position, the beep sounds.

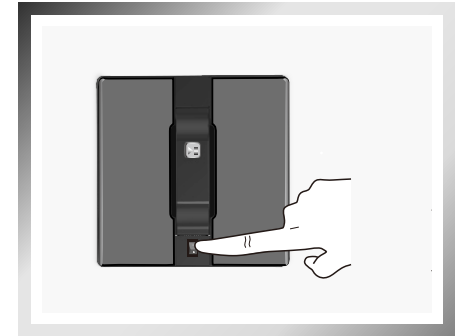
##### 1 Remove the product

**Grip the product handle**, press about 5 seconds, the fan stops working, then remove the host from window. Use a dry cloth to gently wipe off the mark on the glass.



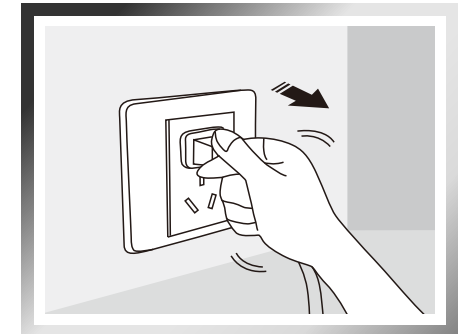
##### 2 Power off

Open the lower cover and turn off the power switch.



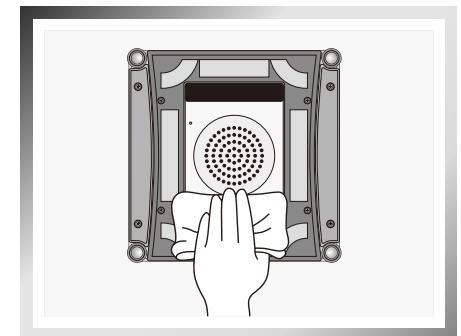
##### 3 Disconnect power


Remove the safety clip and disconnect the power supply.



##### 4 Clean Walking Belt

Clean the walking belt with a wet cloth.



 **When cleaning the cloth and bottom components, unplug the power and turn off the host.**

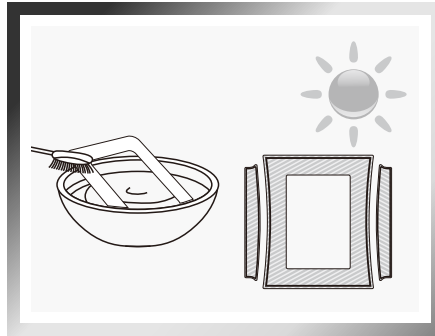


## 4. Maintenance

### 4.1 Cleaning cloth

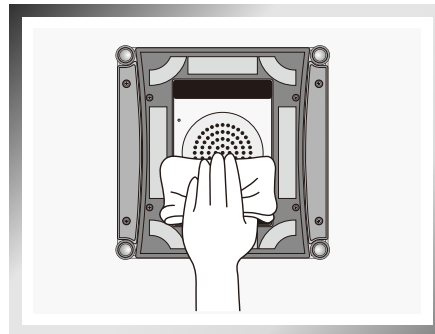
Remove the cleaning cloth, soak in water at 20°C for 2 minutes, then with a soft brush clean.

Do not rub or wring dry, dry naturally before use.



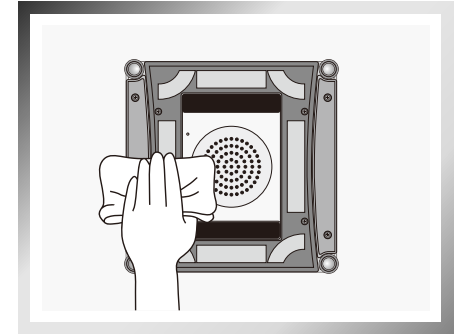
### 4.2 Bottom components

**Fan:** Clean with a dry cloth so as not to damage the product suction.

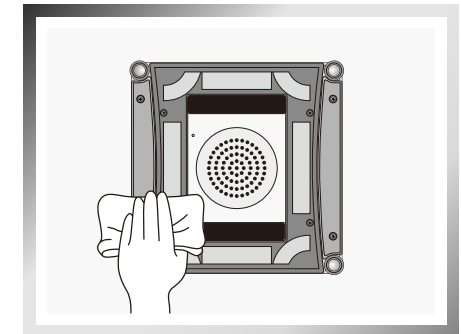


## 4. Maintenance

**Walking belt:** Clean with a dry cloth so as not to damage the product suction.



**Fall prevention sensor:** Clean with a dry cloth to maintain its sensitivity.

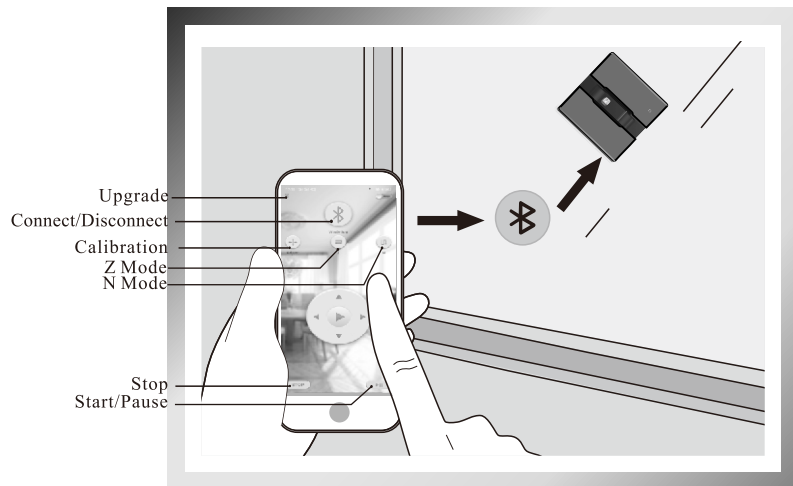


## 5. APP Usage

---

### APP Usage:

1. Android phone, please scan the box QR code to download and install, iPhone, please search WinRobot in the App Store application store to download and install.
2. After installation, please open the phone Bluetooth, enter the software and click the Bluetooth logo to search for the device.
3. The device name of the window cleaning robot is “WinRobot”, click “WinRobot” to connect and match.
4. After the system prompts the connection is successful, you can use the APP function.



## 6. Route Plan

---

“N” key: The machine from left to right in accordance with the N route wipe. Automatic wipe complete will back initial position.

“Z” key: The machine from top to bottom in accordance with the Z route wipe. Automatic wipe complete will back initial position.

Up and down keys are forward / backward.

Right and left keys to adjust the machine direction.

## 7. Fault Description

### I Troubleshooting Solution:

Number	Appearance	Solution
1	Machine walking is laborious, not smooth	Wipe the track or replace other wipes according to the way of track wiping.
2	Machine walks to the glass frame stop	Use the up and down keys to keep the machine away from the edge of the clamp. After the machine is out of trouble, restart, do not adjust the direction at the edge.
3	The machine can't walk straight	The error of pressing the calibration key of the remote control in machine running is caused. According to machine calibration method in clear book will re-calibrate the machine.
4	Press the remote control key without reaction	Please check whether the battery of the remote control is electrified first, if the remote control finger If the remote control indicator lights up, press the code button on the remote control to match the machine.
5	The status indicator does not light after the power is turned on	The machine must connect the power cord and extension line and check the power cord connection if right. Or contact the after sales service center.
6	Insufficient suction after placing the machine on the glass	Check that the wipes are in place. Or contact the after sales service.
7	Leakage of some glass areas	1. Check if the four-corner borderless detection sensor rebounds well. If there is foreign matter, please take out the foreign object. 2. Please check if the belt is dirty and slippery. If yes, please clean the belt with a damp cloth. 3. Change clean cloth wipe again.

## 7. Fault Description

### Product calibration:

The product has been calibrated at the factory, and the user does not need to calibrate it under normal use. The calibration steps are as follows:

1. Please power on the product.
2. The hand-held machine is attached to the surface of the window glass to keep the machine head up;
3. Long press and hold the remote control calibration button, the machine will make a drip sound;
4. long press the N button, the machine emits di di sound;
5. Keep the machine head vertical to the left, short press the Z button, the machine will make di di sound, and the calibration is completed.



Do not use the calibration key while the machine is wiping.

## 8. Warranty Card

### Warranty Card

Dear client!

Thanks for using product. In order to offer perfect after sale service, our service team would like to give you promise for standard service hereby. Please keep well your valid document of purchasing as an evidence to get our after sale service.

Product Quality Assurance Description:

1. Warranty time: start from purchasing date, 12 months for main body.
2. Warranty service not include following situation: ①Instruction Manual ②damage caused by accident or wrong operation ③repair by yourself without our permission ④Exceed the warranty period
3. After warranty time, please consult our after sale service center about repair cost.

WARRANTY CARD			
Purchasing date	Year	Month	Date
Purchasing way			
Order No.			

The contents of this manual are for reference only, please refer to the actual product.

This product complies with the radio interference requirements of the European Community.

Product name: WINDOW CLEANING ROBOT

Product model: 1080

Manufacturer: Zhengzhou Bangmi Smart technology CO.,LTD.

Frequency Range: 2.4GHZ-2.48GHZ,

Max. Transmit Power: BT5.0 : 1.87dBm Max (BLE)

SIMPLIFIED EU DECLARATION OF CONFORMITY

The simplified EU declaration of conformity referred to in Article 10(9) shall be provided as follows:

Hereby, Zhengzhou Bangmi Smart technology CO.,LTD. declares that radio equipment type 1080 is in compliance with Directive 2014/53/EU, and this product is allowed to be used in all EU member states.

The full text of the EU declaration of conformity is available at following

This product can be used across EU member states.

BATTERY Warning: CAUTION RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE DISPOSE OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS

FCC STATEMENT :

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

This device may not cause harmful interference, and

This device must accept any interference received, including interference that may cause undesired operation.

Warning: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures: Reorient or relocate the receiving antenna.

Increase the separation between the equipment and receiver.

Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

Consult the dealer or an experienced radio/TV technician for help.

FCC Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.