

**ARLEC**

GRID CONNECT

**SMART**  
**ROBOTIC**  
**WINDOW**  
**CLEANER**

SH172HA



**USER GUIDE**

IMPORTANT! READ THESE  
INSTRUCTIONS CAREFULLY  
BEFORE USE

remora

# 1.0 IMPORTANT SAFETY INSTRUCTIONS

## READ ALL INSTRUCTIONS CAREFULLY BEFORE USING THIS APPLIANCE.

### GENERAL CAUTIONS

- This product is not a toy. Children should be supervised to ensure they do not play with this product.
- Cleaning and maintenance should be done only qualified personnel.
- This product can only be used to clean framed windows and glass with a minimum thickness of 3mm, so it is **NOT SUITABLE** for windows and glass without frames (physical barriers). If the window or glass frame has damaged silicone rubber edge, please pay special attention to prevent the robot from falling off during operation.
- Always MONITOR the robot while in operation.
- Do not walk underneath the operating area while in use.
- Always attach the safety rope to a fixed object.

### SAFETY CAUTIONS

- Use only the original charging adaptor with rated output 24VDC 3A supplied with the product. Incorrect power charging can damage the Robotic Window Cleaner. Do not use a damaged adaptor (e.g. damaged cable, cracked housing etc.)
- Place the power adaptor on a dry, safe and well-ventilated surface while the robot is in operation.
- Do not use the adaptor in very humid or wet environments, do not touch the adaptor with wet hands during use. Do not plug in and charge the Robotic Window Cleaner with a different voltage/current than specified.
- Do not disassemble the power adaptor; if it's faulty, replace it with the same type/model.

- Do not spray liquids on your window cleaning robot or adaptor.
- Unplug the power plug before cleaning and maintenance, to prevent electric shock.
- This product contains a built in Li-ion battery. Please do not disassemble or tamper with the appliance or battery to avoid short circuit or malfunction. Please do not use it in high temperatures above 60°, and do not dispose of it in fire. If handled incorrectly there is a risk of combustion or chemical reaction which could cause injury.
- Always inspect the edges of window frames to ensure that they aren't damaged or chipped, as this may affect the operation and suction ability of the window cleaning robot.
- Do not expose this product to direct sunlight for prolonged periods of time and keep this product away from heat sources such as radiators, heaters, microwave ovens, BBQs, etc.
- Do not place this product into strong magnetic fields.
- Do not use this product on damaged/ cracked glass as existing damage may be amplified by this product.
- Do not use this product on uneven, rough glass surfaces, or when glass contains residues of dirt marks which may reduce suction power, as this could result in the robot falling from the window.
- Please use as described in this manual, to avoid any property damage and personal injury caused by improper use. The warrant will be void if used incorrectly.

- Use this product within temperature range of 0-40C.
- Store this product at room temperatures and keep it out of reach of children.
- **Lithium-ion Battery**  
This product contains a Lithium-ion battery, and it is not removable or replaceable. Please do not use it in high temperatures above 60°, and do not dispose it in fire.
- **Power supply adaptor**  
The power supply adaptor will charge the battery while in operation. Use only the original power supply adaptor with this product. Using any other power adaptor may result in damage to the product or fire hazards.
- **Attaching the safety rope**  
Before usage, it is recommended to attach the safety rope to another object higher than the window, e.g . building structure, fascia, roof batten, beams, rafters, or brackets in gutters etc. to prevent the window cleaner robot from falling to the ground. Measure the distance from your object to the lowest point of the window, then adjust the required length of the rope.

**DO NOT WALK UNDER  
THE WINDOW CLEANER  
WHILE OPERATING**

- Always supervise the machine while in operation to ensure it does not fall and cause damage and/or injury.

### RISK OF ELECTRIC SHOCK

- The Robotic Window Cleaner is designed to work in extra low voltage range (24VDC) and it is detachable from power supply adaptor. It is safe for operation, however

precautions must be always taken into consideration when using this appliance.

- Keep the power supply adaptor in dry, clean areas when in operation.
- Do not operate it in wet environments where it could come in contact with water. The power supply adaptor is suitable for **INDOOR USE ONLY**.
- Do not use water to clean the machine body and power adaptor
- Turn the power to the machine OFF before performing cleaning or maintenance.
- It is recommended to avoid using extension cords where possible as the plug may be accidentally pulled and disconnected. However, if an extension cord must be used exercise extra caution by ensuring the connection is firm and that the plug will not be disconnected if the cord is accidentally pulled. If the power is disconnected the Robotic Window Cleaner will activate its back up battery power and remain attached to the window. Restore the power immediately or alternatively take it down by holding with both hands and turning the power OFF from the power button (refer to the operating instructions for more information).
- Do not continue to use the product if the machine or the power supply cord is damaged.
- Do not use this product in dangerous areas near water, open fire, smoke, excessive heat, excessive humidity, etc.
- Do not damage or twist the power cord. Do not put heavy objects on the power cord and/or adaptor to avoid damage.

## 1.0 IMPORTANT SAFETY INSTRUCTIONS

### WARNINGS

1. Before operation, it is recommended to attach the safety rope and tie it securely to a stable object.
2. Before turning on the machine, check that the safety rope is not damaged and that the knot on the carabiner clip is tightened well.
3. Set up a sign or safety warning zone around the cleaning area to keep the area underneath the robot clear.
4. Fully charge the unit's built-in backup battery before use (green light on).
5. Do not use in rain or wet weather conditions or when the glass has moisture on it.
6. Turn the machine ON first and then place it on the centre of the window glass. Make sure the machine is firmly attached to the surface of the window before releasing your hands.
7. Before turning it OFF hold the machine with both hands as it will fall off straight away after the switch is turned off.
8. Do not use this product on frameless windows or glass.
9. Make sure the cleaning cloth is properly attached onto the cleaning ring of the machine to prevent air leakage.
10. Do not spray water on the machine, it is suggested to spray water only on the cleaning cloth.
11. Do not allow children to play with the machine.
12. Please remove any rough residues from the glass surface before use.
13. Please keep clothing, your hair, or fingers or other parts of body away from the machine.
14. Do not use the machine in areas with flammable and explosive gases.

## 2.0 DESCRIPTION & SPECIFICATIONS

The Robotic Window Cleaner has a built-in vacuum motor, which allows the machine to adhere to and freely move on vertical glass surfaces.

It has a built-in backup battery, which can provide power to the machine in case the power is lost, preventing it from falling.

It has advanced navigation that can plan a cleaning path, detect the edges/frame, and automatically clean the entire window.

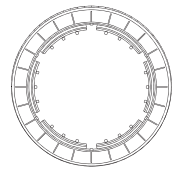
It also has a manual remote control which can be used to freely control the robot.

The machine has two rotating cleaning wheels with suction that can adhere to vertical glass, which have dual functions of moving across and cleaning the surface of the glass. The cleaning cloth is made from microfibre and is replaceable and washable.

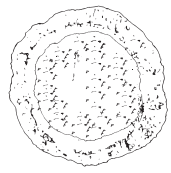
This Robotic Window Cleaner has a light, thin and easy to handle body, and with fantastic cleaning performance, it is a useful addition to your home environment.

Power Supply Input Voltage	AC100 ~ 240V 50Hz ~ 60Hz
Power Supply Output Voltage	24V DC, 3A
Rated Power	72W
Battery	Li-Ion, 650mAh, 14.8V, 9.62Wh
External Dimensions	295mm x 145mm x 78mm
Net Weight	1.115kg
Power Failure Protection tTime	Up to 30 minutes
Control Methods	Grid Connect App via Bluetooth and/or Remote Control
Noise	65-70dB
Border Detection	Automatic
Fall Arrest Control	Power failure protection (backup battery), safety rope
Cleaning Mode	Automatic path planning modes, manual mode
Water Tank Capacity	50ml
Water Spraying Method	Manual / Auto
Safety Rope	Yes
Cable Length	5m total

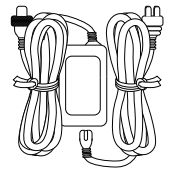
### 3.0 ACCESSORIES



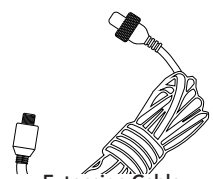
Cleaning Ring x 2



Cleaning Cloth x 8



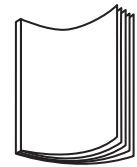
**Power Supply Adaptor**  
Complete with detachable mains input cable and SAA plug and 1m output ELV cable and barrel plug



**Extension Cable**  
4m complete with barrel connectors



**Water Bottle**



**Instruction Manual**

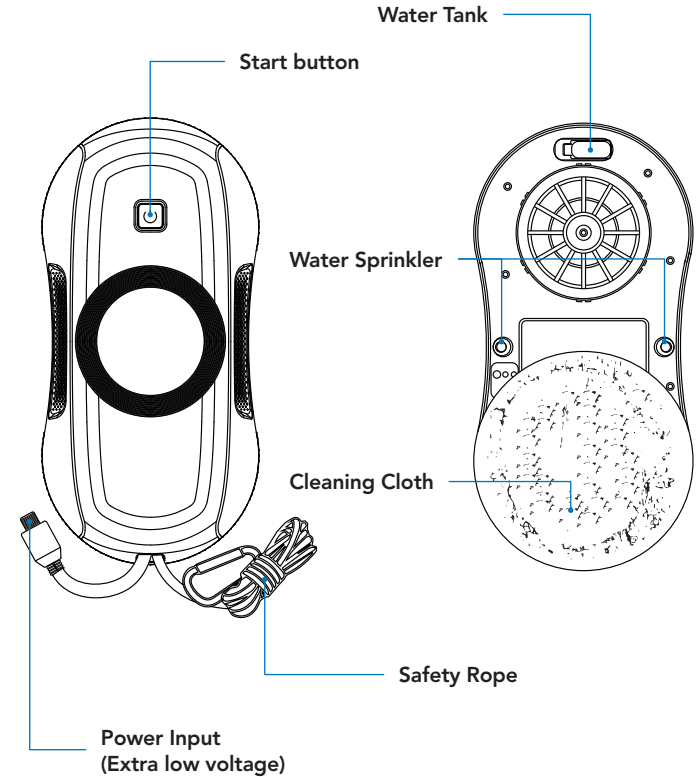


**Remote Control**

### 3.1 POWER LIGHT INDICATOR

<i>Robot status</i>	<i>Quick start button light</i>
<i>Operating normally</i>	Blue Light
<i>Charging</i>	Orange Light
<i>Warning or error</i>	Red Light
<i>Charging complete</i>	Green Light

### 3.2 IDENTIFICATION



Note: Figures and illustrations are for reference only and may differ from actual product.

### 3.3 ASSEMBLY INSTRUCTIONS

Unpack the fitting carefully and dispose of the packaging material thoughtfully. Follow these instructions step by step even if you are familiar with this type of product.

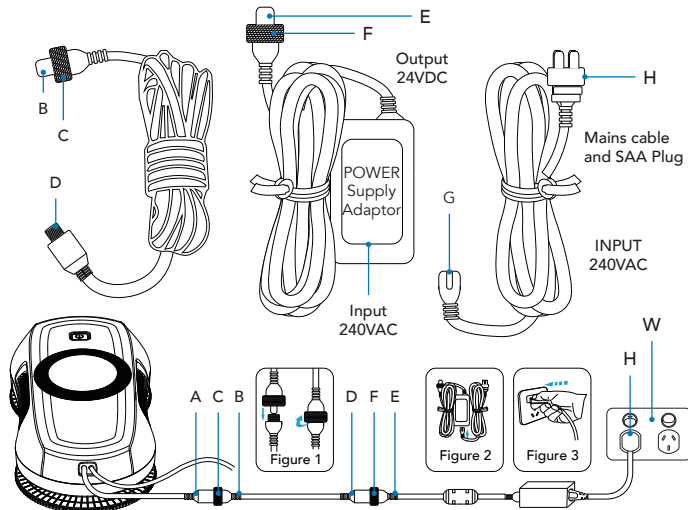
1. Insert the extension cable DC output connector **B** into the window cleaner DC Connector **A** and tighten the securing nut **C** firmly.
2. Repeat by connecting the power supply output **E** to the extension cable input **D** and securing with **F**.
3. Connect the AC plug **G** into the power supply adaptor.

4. Plug the SAA plug **H** into mains power socket **W**.

The Robotic Window Cleaner has built-in battery, to supply standby power in case of mains failure. Please make sure the battery is fully charged before use.

When the power supply is connected:

- Orange light indicates that the battery is being charged, please wait for the light to turn green.
- Green light indicates that the battery is fully charged and the device is ready to use.



### 3.4 INSTALLING CLEANING RING

Gently slide the cleaning cloth onto the cleaning ring, ensuring that it is fitted over its entire surface. If fitted incorrectly it may result in air leakage and incorrect operation of the window cleaning robot.

Attach the assembled plastic ring with cloth onto the machine by placing it onto the receiving ring of the machine. Align it onto the 6 x slots on the receiving ring of the machine (it fits only one way) then push it ON until it clicks.

Check it that it doesn't come off.

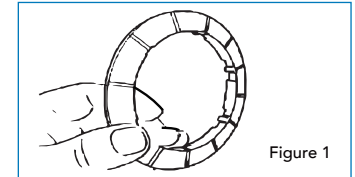


Figure 1

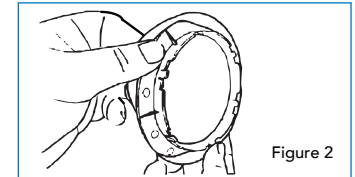
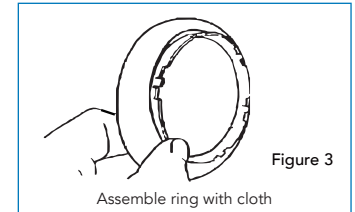


Figure 2



Assemble ring with cloth

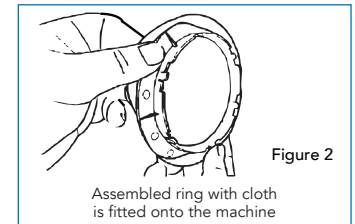


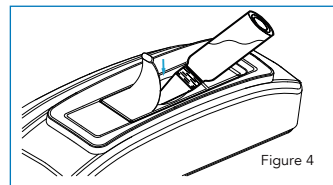
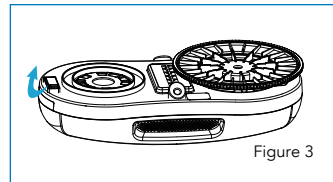
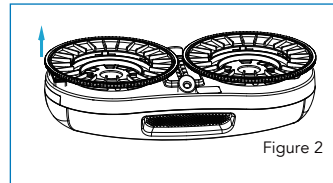
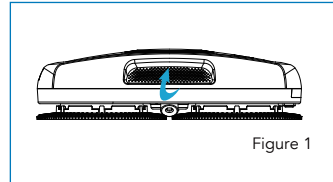
Figure 2

Assembled ring with cloth is fitted onto the machine

## 3.5 FILLING THE WATER TANK

**WARNING: PLEASE DO NOT ADD ANY CLEANING DETERGENT OR CHEMICALS INTO THE WATER !**

1. Turn the machine over to access the base.
2. Remove the top cleaning wheel, it is a simple clip and can be removed with small amounts of force.
3. Open the silicone plug, using the raised tab for convenience.
4. Add distilled water to fill the tank to around 80% capacity. Do not over-fill the water tank.

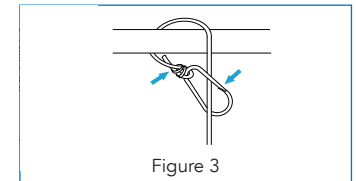
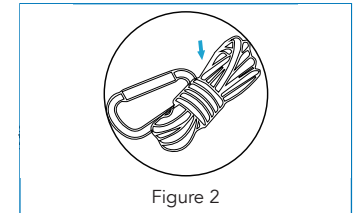
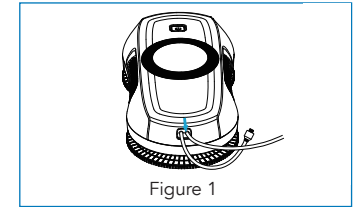


## 3.6 ATTACHING THE SAFETY ROPE

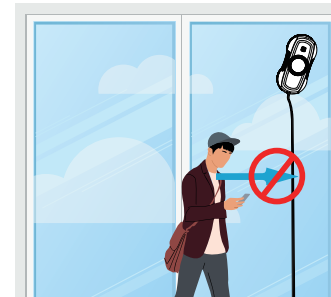
Before use, we recommend securing the safety rope, especially in outdoor environments. To do so, attach the safety rope to another object higher than the window (e.g. building structure, fascia, roof batten, beams, rafters, or brackets in gutters etc). to prevent the window cleaner robot from falling accidentally down on the ground. Measure the distance from your object to the lowest point of the window, then adjust the required length of the rope.

Always supervise the machine while in operation to ensure it does not fall and cause damage and/or injury.

It is recommended to safeguard the area underneath the operating machine to keep it clear.



**DO NOT WALK UNDER THE WINDOW CLEANER WHILE OPERATING**

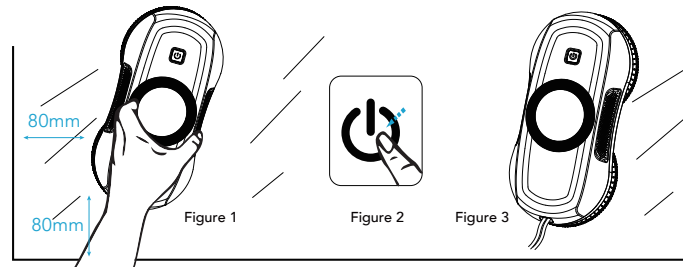


## 3.7 ATTACHING ONTO THE GLASS

Place the machine onto the glass and hold it in place, noting the minimum distance from the window frame. (Figure 1)

Note : The power supply must be connected at this stage. The **ON/OFF** power button should be green to indicate a fully charged backup battery.

Press and hold the **ON/OFF** switch button for 2 seconds to turn 'ON'. (Figure 2)



The machine will start and will make a noise and the **ON/OFF** button will turn blue.

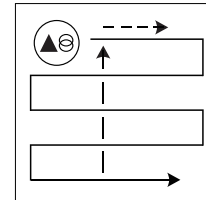
Check that the machine is attached to the glass by holding it and pushing it on the glass.

Ensure that the robot is securely attached to the glass before releasing. (Figure 3)

## 3.8 OPERATION

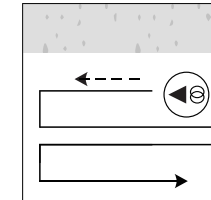
### Auto/Up Mode

The machine will climb to the top of the window then start cleaning automatically



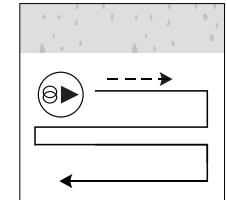
### Left Mode

Auto clean from right to left and then downwards, starting from the robot's current location



### Right Mode

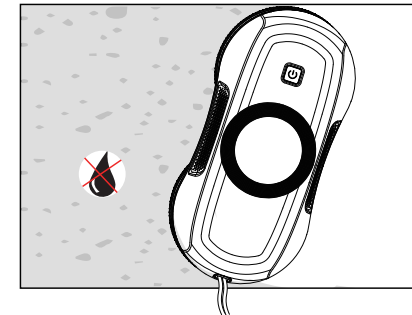
Auto clean from left to right and then downwards, starting from the robot's current location



In auto mode, the machine will move to the top right corner of the window and continue cleaning until the whole surface is completed.



## 3.9 DRY CLEANING

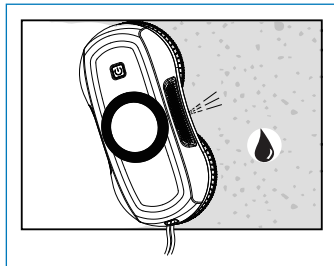
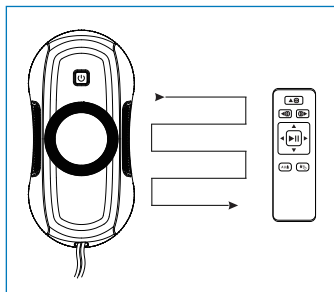
If there is a large amount of dry dirt on the glass in sunny or low humidity environments, it is recommended to first run a dry cycle without water, as adding water may mix with the dirt and create muddy marks.





## 3.10 WET CLEANING

### Automatic water spray function

- The window cleaning robot has two water spray nozzles, one on the left and one on right side. The spray nozzle in the direction of movement will activate during cleaning.
- Press automatic water spraying button on remote:  or adjust the setting from the app. The machine will make 2 beeps, acknowledging that the automatic water spray mode is activated. It will automatically spray water along its path. To turn OFF the automatic spraying mode, press the  button again. The Robot will beep once, acknowledging that the automatic spraying mode is turned OFF.



### Manual water spray function

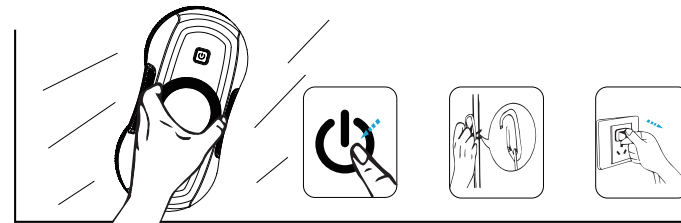
- Pressing  button on remote or  on the app, the machine will beep and it will spray water on the glass once

## 3.11 REMOVING THE ROBOT

When cleaning is completed the machine stops moving. The suction will continue and the blue light behind the ON/OFF switch continues blinking. The machine can only be removed manually.

### To remove the robot

- Hold the machine with two hands.
- Press and hold the ON/OFF button for 2 seconds.
- The machine will stop working and it will fall into your hands.
- The light in the ON/OFF button light will turn green.
- Remove the window cleaning robot from the window and disconnect the power. Remove the safety rope.



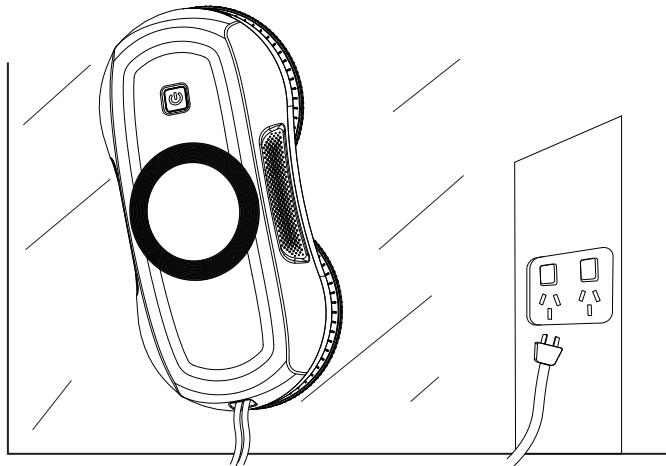
## 3.12 POWER FAILURE PROTECTION

In case of power failure, the device will immediately activate the built-in backup battery power, which will run for about 30 minutes when fully charged.

The machine will stay in place and will emit an intermittent warning sound and the red light in the ON/OFF switch will flash alternately. Restore the power as soon as possible to prevent the machine from falling off.

If the power cannot be restored, use the safety rope to gently pull the machine down.

Procedure: Keep the safety rope as close as possible to the glass to avoid falling. Gently pull the safety rope. The machine will slowly slide towards the direction of pull. When the device is within reach, hold it securely with both hands and press the ON/OFF button for 2 seconds.

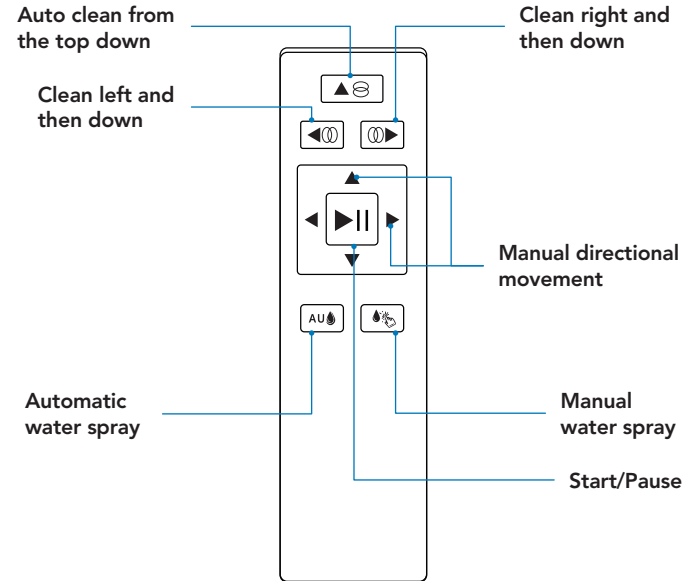


## 3.13 REMOTE CONTROL

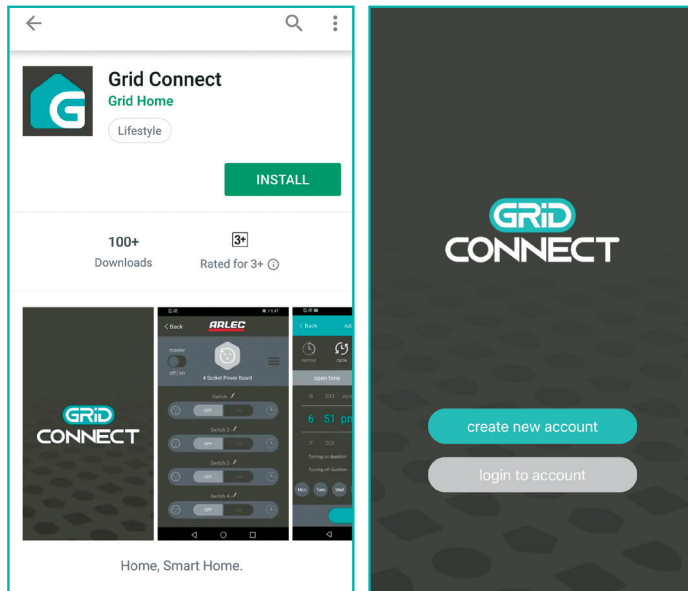
- The remote control unit uses 2 x AAA/RL type batteries.
- Do not use different types of batteries and don't mix up different model and type of batteries.
- Don't mix up old and new batteries.
- Do not try to disassemble them and do not dispose them into fire.

Ensure they are inserted in the correct orientation. Open the battery cover align the negative pole with one end of the spring first, then press it down.

**Note that there is a danger of damaging the circuit, if wrong battery is used or the battery is installed incorrectly.**



## 4.0 DOWNLOAD THE APP



Reference phone screens on the proceeding pages may vary depending on the operating system version of your phone and any updates to the Grid Connect app. Contact our customer service team if you are unsure on how to pair your product.

### NEW ACCOUNT LOG IN SETUP



Download and install the **GRID Connect** App from Play Store (Android) or App Store (iOS).

Open the **GRID Connect** App.

If you are a new user, tap **create new account** and follow the prompts to complete account setup.

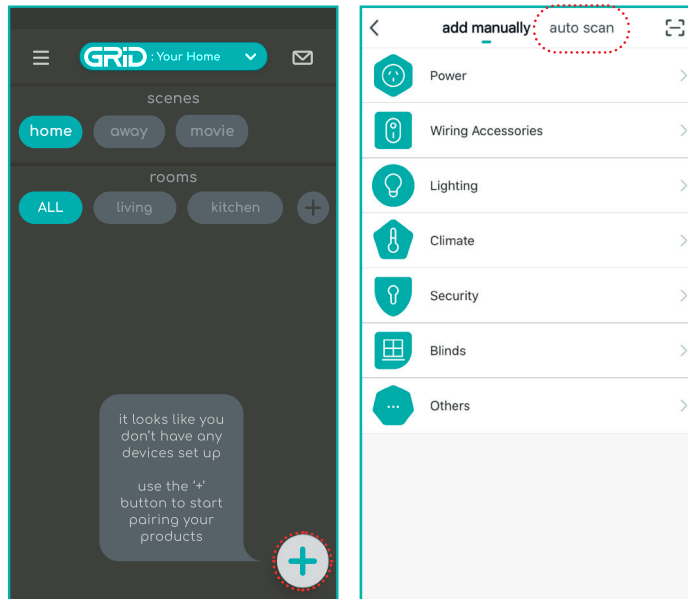
[create new account](#)

*Note: You must agree with the Privacy Policy to be able to use the App.*

If you already have an existing account, just tap **login to account** and enter your login details to continue.

[login to account](#)

## 4.1 APP PAIRING



Check that your mobile device has Bluetooth enabled, with appropriate permissions on the Grid Connect app.

1. Ensure that your window cleaning robot is connected to power.
2. To enter pairing mode, press the power button 4 times quickly.
3. The device will beep 4 times to indicate that it is in pairing mode.

From the Grid Connect app, tap '+' in the bottom right corner, then select 'auto scan'. Follow the prompts to complete pairing.

## 5.0 TROUBLESHOOTING

<p><i>When the cleaning cloth is used for the first time (especially when the glass is very dirty), the machine may run slowly or even fail</i></p>	<ul style="list-style-type: none"> <li>• Clean, wash and dry the supplied cleaning cloth before use.</li> <li>• Spray some water evenly on the cleaning cloth or onto the surface of the glass to be wiped. Alternatively use a clean moist cleaning cloth.</li> </ul>	<p><i>The machine doesn't run smoothly</i></p>	<ul style="list-style-type: none"> <li>• The cleaning cloth is too dirty. Please clean or replace it.</li> <li>• There are a mix of different glass surfaces (e.g. tinted or frosted)</li> <li>• If the screw of the cleaning wheel is loose, please lock it in place but do not tighten excessively</li> </ul>
<p><i>The device emits a warning sound after powering on, it may be unable to establish suction against the surface</i></p>	<ul style="list-style-type: none"> <li>• If the cleaning pads are too dirty, wash or replace with clean pads.</li> <li>• If the glass is rough or excessively dirty, the robot may be unable to move across the surface. Clean obvious dirt marks and try again.</li> <li>• If the glass has a surface treatment or a mix of different surface types (e.g. tinted or frosted), the vacuum may be unable to adhere. Wipe this section manually.</li> <li>• In very low humidity, the glass may become too slippery after cleaning. Turn air conditioning OFF and wait for a while before trying again.</li> </ul>	<p><i>The device emits a warning sound and red light during a power failure</i></p>	<ul style="list-style-type: none"> <li>• Gently pull the safety rope to bring the machine back within reach; when pulling the safety rope, it should be as close to parallel to the glass as possible to avoid falling.</li> <li>• Hold the device with both hands and press the power switch for 2 seconds to switch it off.</li> <li>• Check the wire for loose connections or damage.</li> </ul>
<p><i>When pressing the up automatic cleaning button, the machine can't detect the upper edge of the window due to sliding</i></p>	<p>Please switch to left or right cleaning modes.</p>	<p><i>The red light flashes after encountering an obstacle</i></p>	<ul style="list-style-type: none"> <li>• Move the machine within reach using the manual controls on the remote or app. Alternatively, gently pull the safety rope to bring the machine back within reach, when pulling the safety rope, it should be as close to parallel to the glass as possible to avoid falling.</li> <li>• Remove any obstacles on the window.</li> <li>• Check if there is any potential cause of air leakage.</li> </ul>
<p><i>The machine cannot wipe the upper left side of the glass</i></p>	<p>You can use the remote control manual window cleaning mode to wipe the part that has not been wiped.</p>	<p><i>There are marks on the glass after cleaning</i></p>	<p>For the first cycle, please turn off the water spraying function and use a clean cloth to remove the sand. For the second cycle, clean and replace the cloth, turn on the water spraying function, keep the upper cleaning wheel clean and dry, and spray a small amount of cleaning agent (1-2 sprays) on the lower cleaning pad only. Avoid getting liquids on the robot and ensure that the cleaning pads are not excessively wet.</p>
<p><i>The machine exits the cleaning cycle before cleaning the entire window</i></p>	<p>You can use the left or right cleaning modes to continue cleaning.</p>	<p><i>The machine has cleaned the whole window but will not stop</i></p>	<p>Please press the play/pause key to end the cleaning cycle. After stopping, the product can only be removed from the window manually by pressing and holding the power button on the device.</p>
<p><i>The robot slips while moving</i></p>	<ul style="list-style-type: none"> <li>• If the glass is damp or has a surface treatment, it may be too slippery to adhere to.</li> <li>• The cleaning cloth is too damp.</li> <li>• When starting a cleaning cycle, do not place it too close to the edge of the window.</li> <li>• There are a mix of different glass surfaces (e.g. tinted or frosted).</li> </ul>	<p><i>The machine will not spray water</i></p>	<ul style="list-style-type: none"> <li>• Please confirm whether the water spray function switch is on.</li> <li>• Clean the water spray nozzle with a soft clean cloth.</li> <li>• Please check that there is pure water in the water tank.</li> </ul>
<p><i>After cleaning, round wheel marks remain on the glass surface</i></p>	<p>The cleaning cloth is too dirty. Please replace it with a clean cloth and try again.</p>		

**ARLEC**

GRID CONNECT

**ARLEC**

GRID CONNECT

## WARRANTY

Arlec guarantees this product in accordance with the Australian Consumer Law and all other applicable Australian and New Zealand laws that are unable to be excluded.

Arlec also warrants to the original first purchaser of this product ("you") from a retailer with which this document is given that this product will be free of defects in materials and workmanship for a period of 12 months from the date of purchase; provided the product is not used other than for the purpose, or in a manner not within the scope of the recommendations and limitations, specified by Arlec, is new and not damaged at the time of purchase, has been maintained in accordance with the recommendations specified by Arlec, has not been subjected to abuse, misuse, neglect or damage, has not been modified or repaired without the approval of Arlec and has not been used for commercial purposes ("Warranty").

If you wish to claim on the Warranty, you must, at your own expense, return the product, and provide proof of original purchase and your name, address and telephone number, to Arlec at the address below or the retailer from whom you originally purchased the product within 12 months from the date of purchase.

Arlec will (or authorise the retailer to) assess any claim you may make on the Warranty in the above manner and if, in Arlec's reasonable opinion, the Warranty applies, Arlec will at its own option and expense (or authorise the retailer to) replace the product with the same or similar product or repair the product and return it to you or refund the price you paid for the product. Arlec will bear its own expenses of doing those things, and you must bear any other expenses of claiming on the Warranty.

**For goods purchased in Australia (only):**

The Warranty is in addition to other rights and remedies you may have under a law in relation to the product to which the Warranty relates.

Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

**For goods purchased in New Zealand (only):**

The Warranty is in addition to, and does not affect, other rights and remedies you may have under a law in relation to the product to which the Warranty relates.

Our goods come with guarantees that can only be excluded under the New Zealand Consumer Guarantees Act 1993 to the extent you are acquiring the product for a business purpose and it would be fair and reasonable for Arlec to contract out of those guarantees.

Arlec Australia Pty. Ltd. ACN 009 322 105 gives the Warranty for goods purchased from a retailer in Australia by you and Arlec New Zealand Limited NZBN 9429030738294 gives the Warranty for goods purchased from a retailer in New Zealand by you (collectively Arlec).

Arlec's telephone number, address and email address for purposes of giving the Warranty are:

Telephone Number:  
**1800 826 859 (in Australia)**  
**0800 003 329 (in New Zealand)**

Street Address:  
**36 Lakeview Drive, Scoresby,  
 Victoria, 3179, Australia**

Postal Address:  
**PO Box 2596, Rowville, Victoria, 3178, Australia**  
 Email: [cs@arlec.com.au](mailto:cs@arlec.com.au)

