

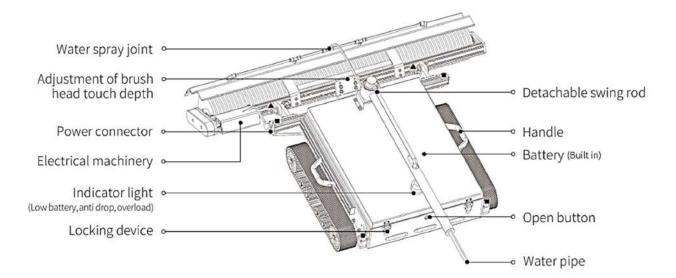
Solar Panel Cleaning Robot User Manual





Product parameters

- Cleaning width 110cm
- Working voltage 24V
- Motor power 150W
- Brush Speed 250rpm
- Robot max speed 22m/min
- Bristles Nylon
- Max water flow rate 22L/min
- Operating time: up to 4 hours
- Charge time 8 10 hours
- Size 1000x1200x350 (LxWxH)
- Total weight 37kg

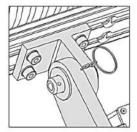


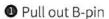
- Ultrasonic sensor
- ▲ Detachable brush head

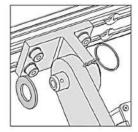




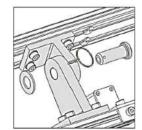
Brush Disassembly







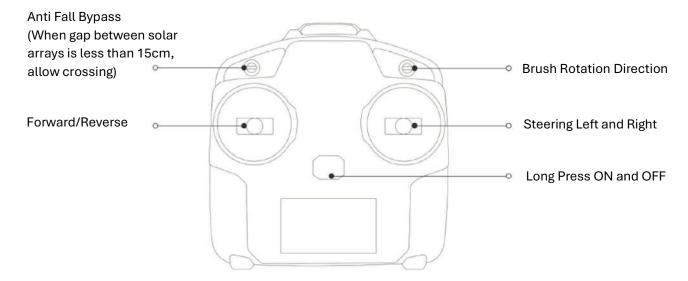
Remove the gasket



Pulling out the pin

4 Unplug the water pipe and waterproof joint

Remote



Charging

- Red light indicates charging
- Green light indicates that battery is fully charged
- From completely empty to full takes 2.5 hours

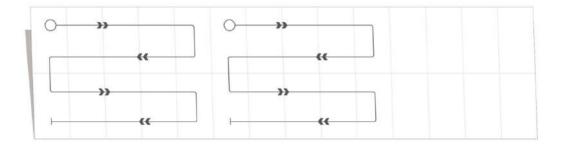


Precautions and Warning Indications

- **Red light constantly on**: Anti fall alarm robot has reached the edge, can only returned to safety in opposite direction.
- **Low Battery**: When battery level is below 15% red light flashes slowly, once every second. Replace with charged battery as soon as possible.
- Motor Overload: Red light flashes fast, 5 times in one second. Returns to normal after 3 seconds. If this happens multiple times, contact your supplier for after-sales assistance.
- Water pressure: Should not exceed 10 bar.
- **Solar tilt angle less than 20 degrees.** Should not operate on higher tilt angles than 20 degrees.
- Reduce travel speed towards the edge of the solar panels.
- Brush: Stored in upwards orientation preventing deformation of bristles.
- Batteries and Chargers are not waterproof: Do not splash them with water.

Poor Cleaning Trouble Shooting

- Heavy sedimentary dust or special pollutants
 - o Severe dust should be cleaned with multiple passes and high volumes of water.
 - Special pollutants like oil, rust and bird droppings must be cleaned with the advised cleaning agent from your solar module supplier.
- Has sufficient water flow been provided?
 - o Check that spray covers the width of the brush head
- Is cleaning route correctly planned?
 - o It is best to clean from top to bottom in a left to right movement. This allows dirt to flow downwards and not over already-cleaned solar panels.



- Poor edge cleaning effect
 - Solar panels at different heights due to uneven roof structure can cause the brush to touch the one panel and not the one that is lower. Reversing and focussing on the lower solar panel solves the problem.



- Excessively worn bristles, short or sparce
 - Lower the head slightly. Bristles should be touhing the solar panel by at least 15m. This means if just touching the surface slightly, lower by 15mm. Ask if uncertain!
 - o If bristles are worn too much, order a replacement head.
- Reduce travel speed
 - o Reducing the travel speed greatly improves the cleaning results.
- Overlap cleaning
 - o Overlap your cleaning runs slightly to prevent missing any spots.

Warranty:

This product has a 1-year drive-in warranty from the date of purchase. If you feel that the product has an issue which is factory related, you can bring it to our depot, we will make an assessment and give you the appropriate feedback according to the user manual and visual inspection. A warranty claim will be rejected if it falls under any of the non-covered reasons for warranty voiding. Please see our detailed warranty documentation on our website for more information.

Not Covered by Warranty:

- Unauthorized maintenance, mis operation, collision, abuse, liquid intake, modification, falling.
- Use the product incorrectly or tear the warranty label.
- Failure due to human error.
- Damage caused by force majeure.
- If warranty period has passed.