

## TRJZWA BSV-IC305

# TRJZWA Solar Drip Irrigation Kit User Manual

Model: BSV-IC305 | Brand: TRJZWA

## 1. INTRODUCTION

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The TRJZWA Solar Drip Irrigation Kit is an innovative and eco-friendly solution for automated plant watering. This system utilizes solar energy to power an intelligent controller, providing precise and consistent irrigation for your plants in various settings, including gardens, balconies, and potted plant arrangements. It is designed to simplify plant care, especially during vacations or busy periods, ensuring your plants receive optimal hydration without constant manual intervention.

This manual provides detailed instructions for the setup, operation, and maintenance of your TRJZWA Solar Drip Irrigation Kit. Please read it thoroughly before installation and use to ensure proper functioning and longevity of the product.

## 2. SAFETY INFORMATION

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To ensure safe and effective use of your irrigation kit, please observe the following safety guidelines:

- Use this kit with caution by connecting it to a water source, installing it, and using it to avoid leaks or water damage.
- Handle all materials and components with care to prevent breakage or injury.
- Place the solar panel in a location that optimizes its exposure to direct sunlight for efficient charging.
- Ensure all connections are secure to prevent water leakage.
- Do not submerge the control unit in water. It is designed to be water-resistant, not submersible.
- Keep out of reach of children and pets.

- Do not attempt to modify or repair the device yourself. Contact customer support for assistance.

### 3. PACKAGE CONTENTS

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Upon opening your TRJZWA Solar Drip Irrigation Kit, please verify that all the following components are included:

- 1 x Solar Panel
- 1 x Irrigation Programmer (Control Unit)
- 15m x Water Pipe (Tubing)
- 15 x Drippers
- 15 x Tee Connectors
- 1 x Ground Stake
- 1 x Anti-Siphon Device
- 1 x Filter
- 1 x Water Level Measuring Tube
- 2 x Screw Sets (for wall mounting)
- 1 x Instruction Manual

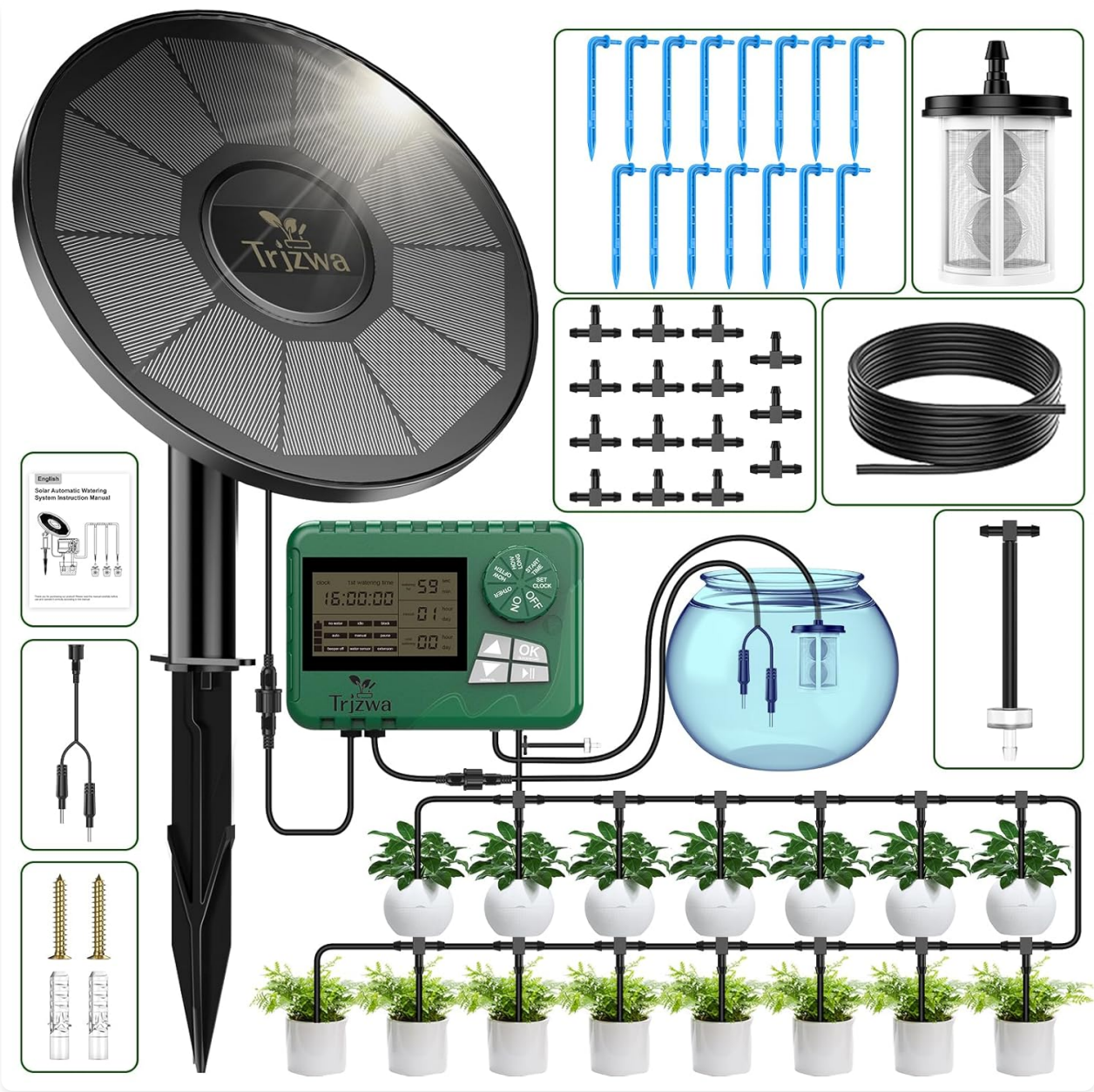


Figure 3.1: Overview of all components included in the TRJZWA Solar Drip Irrigation Kit.



<b>OFF</b>	Shut down
<b>ON</b>	Power on
<b>SET CLOCK</b>	Current time adjustment
<b>START TIME</b>	Adjustment of the 1st watering time
<b>HOW LONG</b>	Adjustment of watering time
<b>HOW OFTEN</b>	Interval adjustment
<b>OTHER</b>	Other settings

## Other accessories include:

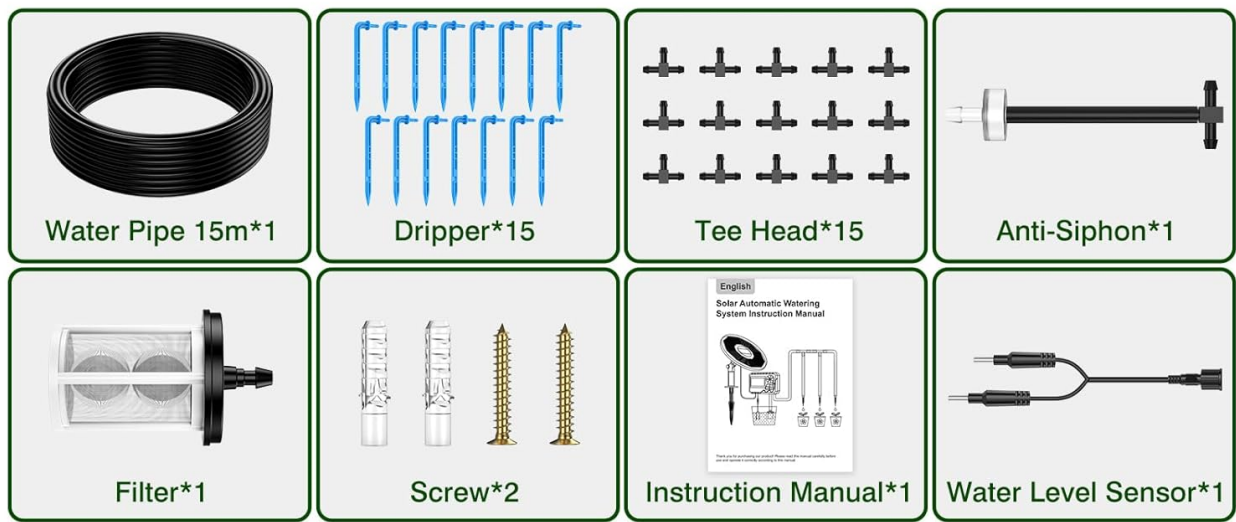


Figure 3.2: Detailed view of the control unit and various accessories.

## 4. PRODUCT FEATURES

- **Split Solar Design:** The kit features a separated solar panel and intelligent irrigation programmer, allowing for flexible placement and optimal sun exposure. The pump can lift water up to 2 meters, making it suitable for various garden layouts, lawns, greenhouses, balconies, and courtyards.
- **Automatic Solar Watering:** Equipped with a 3W solar panel and a built-in 2200mAh battery, the system can operate for up to 50 hours on a full charge. It supports both ground and wall-mounted installations, with an adjustable angle for maximum sunlight absorption. This solar-powered operation eliminates electricity costs, promoting a low-carbon and environmentally friendly approach.
- **Intelligent Programming:** The drip irrigation system includes advanced features such as rain delay, manual mode, and a low water alarm. The rain delay function automatically skips watering cycles during rain, preventing overwatering without disrupting other preset programs. The manual watering function allows for on-demand irrigation when needed.
- **Adjustable Irrigation:** The system allows for customization of watering quantity and frequency based on plant needs. The water pump delivers up to 400 ml per minute. Watering duration can be set from 1

second to 59 minutes, and interval frequency from 0 hours to 7 days, providing deep drip irrigation tailored to different plant requirements.

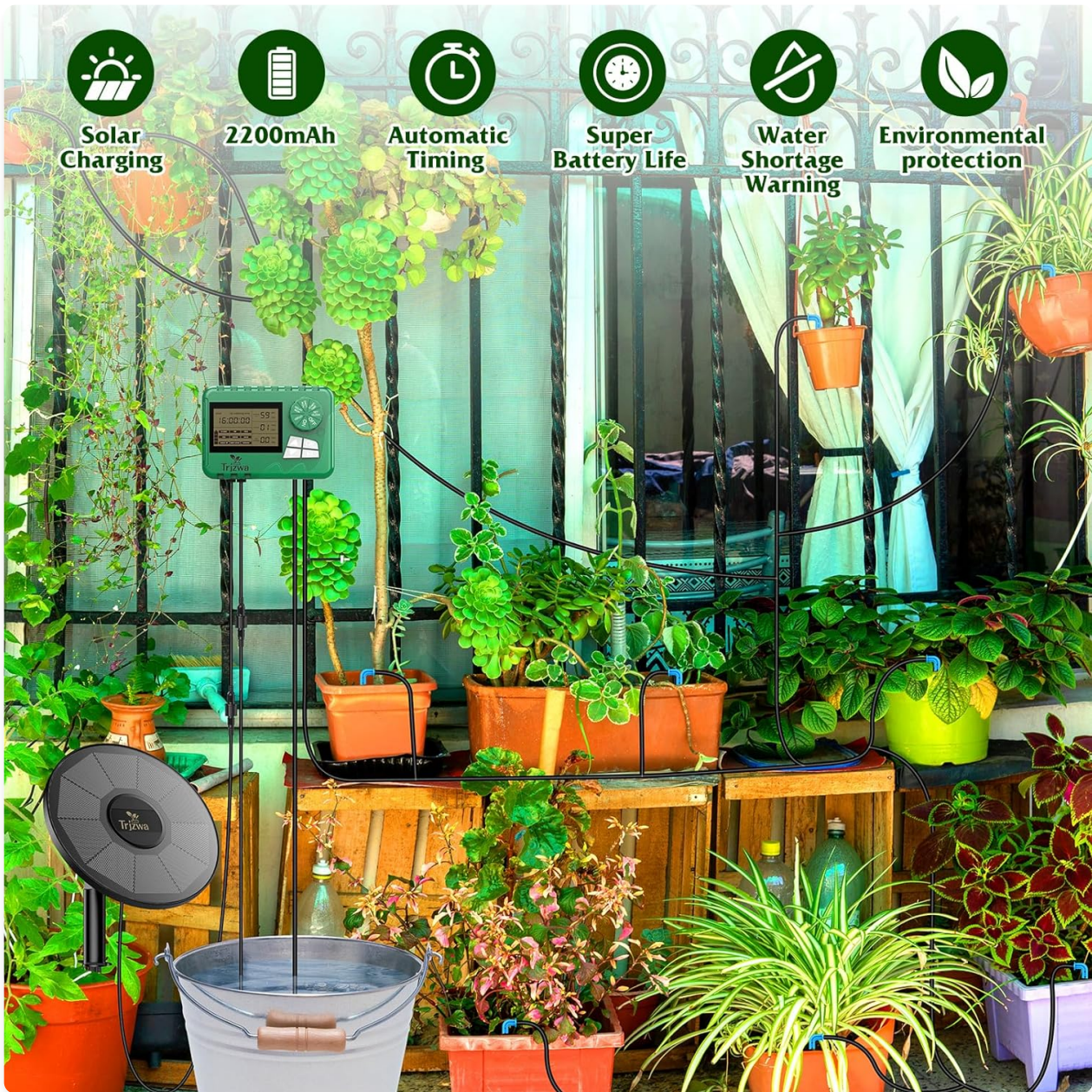


Figure 4.1: Key features of the TRJZWA Solar Drip Irrigation System.

# Deep drip irrigation, water saving and environmental protection



Figure 4.2: Illustration of deep drip irrigation, highlighting water efficiency.

# Drip irrigation system Suitable for different locations



Figure 4.3: Versatility of the system for different installation environments.

## 5. SETUP INSTRUCTIONS

Follow these steps to set up your TRJZWA Solar Drip Irrigation Kit:

1. **Prepare Water Pipe:** Divide the required water pipe length according to your plant layout. Use scissors or a sharp knife to cut the tubing.
2. **Connect Solar Panels:** Connect the cable from the solar panel to the designated port on the control unit.
3. **Connect Water Level Detection Line:** Plug the water level detection line into its port on the control unit. This sensor will monitor the water reservoir level.
4. **Connect Water Pipe to IN Port:** Connect one end of the main water pipe to the 'IN' port of the control unit. This is the water inlet from your reservoir.
5. **Connect Water Pipe to OUT Port:** Connect another section of the water pipe to the 'OUT' port of the control unit. This will be the main distribution line for irrigation.
6. **Connect Filter:** Attach the filter to the water inlet end of the pipe that goes into your water reservoir.

This prevents debris from entering the pump.

7. **Connect Anti-Siphon Head:** Connect the anti-siphon device to the outlet pipe. This prevents backflow and maintains water quality.
8. **Water Pipe Connection Tee:** Insert tee connectors along the main water pipe at points where you want to branch off to individual plants.
9. **Water Pipe Connection Dripper:** Attach smaller sections of tubing from the tee connectors to the drippers, then insert the drippers into the soil near your plants.
10. **Place Filter and Water Level Sensor:** Place the filter and the water level detection line into your water reservoir (e.g., a bucket or container). Ensure the filter is submerged and the sensor can accurately detect the water level.

## Installation Instructions

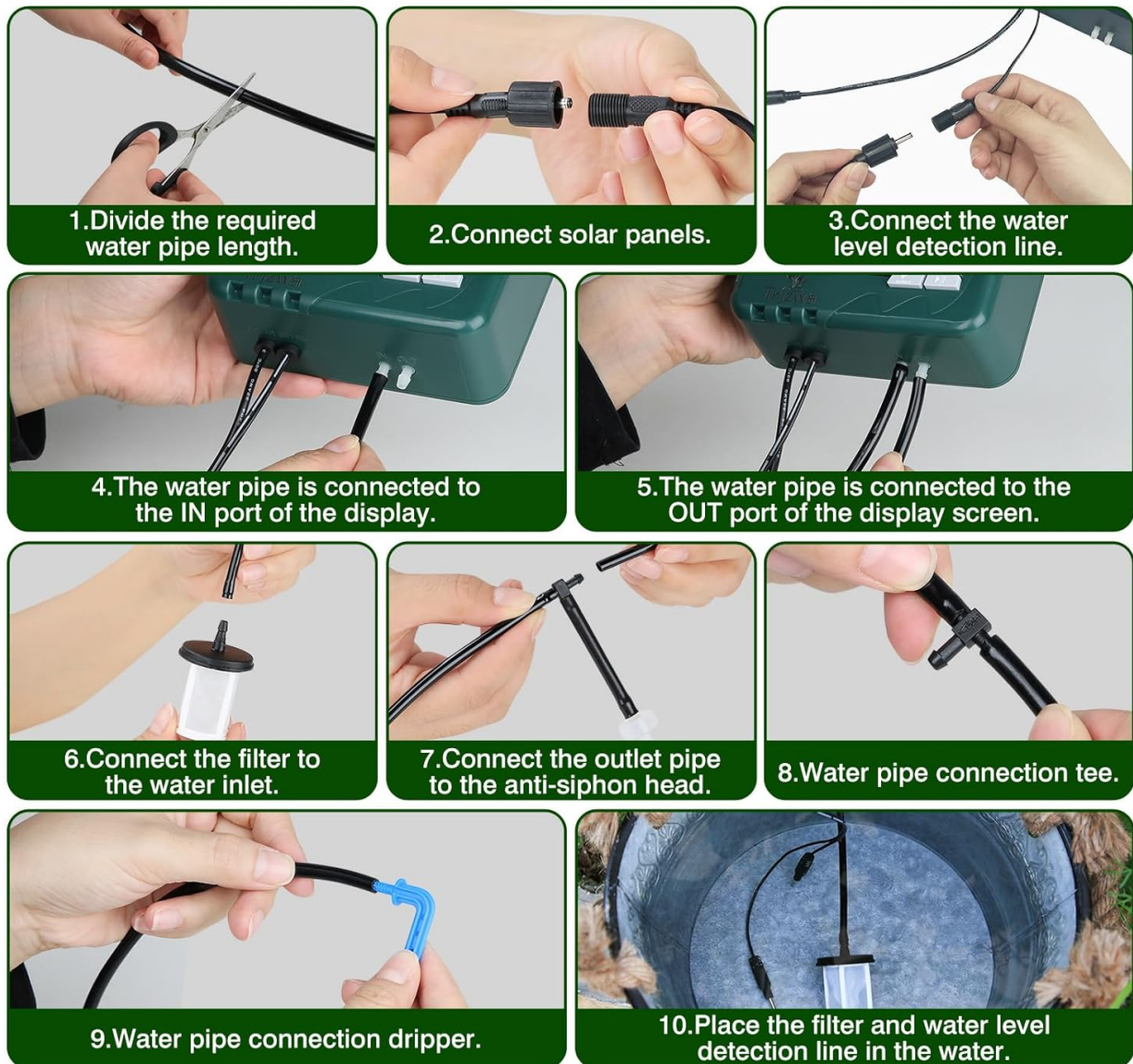


Figure 5.1: Visual guide for the installation process.

For optimal solar charging, position the solar panel in a location that receives direct sunlight for most of the day. The control unit can be mounted on a wall using the provided screws or placed on the ground using the ground stake.

## Deux méthodes d'installation



Figure 5.2: Examples of wall-mounted and ground-based installations.

## 6. OPERATING INSTRUCTIONS

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The TRJZWA control unit allows for precise programming of your watering schedule. Refer to the control panel diagram (Figure 3.2) for button identification.

### Control Panel Functions:

- **OFF:** Shuts down the system.
- **ON:** Powers on the system.
- **SET CLOCK:** Adjusts the current time.
- **START TIME:** Adjusts the time for the first watering cycle.
- **HOW LONG:** Adjusts the duration of each watering cycle (1 second to 59 minutes).
- **HOW OFTEN:** Adjusts the interval frequency between watering cycles (0 hours to 7 days).
- **OK:** Confirms selections.
- **Up/Down Arrows:** Navigate through settings and adjust values.

### Programming the Watering Schedule:

1. **Power On:** Turn the dial to 'ON' to activate the system.
2. **Set Current Time:** Rotate the dial to 'SET CLOCK'. Use the arrow buttons to set the current time, then press 'OK'.
3. **Set Start Time:** Rotate the dial to 'START TIME'. Use the arrow buttons to set the desired start time for the first watering cycle, then press 'OK'.
4. **Set Watering Duration:** Rotate the dial to 'HOW LONG'. Use the arrow buttons to set the duration for each watering event (e.g., 30 seconds, 5 minutes). Press 'OK' to confirm.
5. **Set Watering Frequency:** Rotate the dial to 'HOW OFTEN'. Use the arrow buttons to set the interval between watering cycles (e.g., every 12 hours, every 2 days). Press 'OK' to confirm.
6. **Activate Program:** Once all settings are configured, ensure the dial is set to 'ON' for the program to run automatically.

### Special Functions:

- **Rain Delay:** The system is designed to detect rainfall and automatically pause watering cycles to prevent

overwatering. This function operates without requiring manual intervention.

- **Manual Watering:** To initiate a watering cycle outside of the programmed schedule, press the 'MANUAL' button. The system will water for a preset duration or until manually stopped.
- **Low Water Alarm:** The system will emit an alarm or display a warning when the water level in the reservoir is low, indicating it's time to refill.



Figure 6.1: Detailed view of the time setting interface on the control unit.

## 7. MAINTENANCE

Regular maintenance ensures the optimal performance and longevity of your TRJZWA Solar Drip Irrigation Kit:

- **Clean Filter:** Periodically check and clean the water filter to prevent clogging and ensure smooth water flow. The frequency depends on the water source quality.
- **Inspect Tubing and Drippers:** Regularly inspect the tubing and drippers for any blockages, kinks, or damage. Clear any debris from the drippers to maintain consistent water output.
- **Check Water Reservoir:** Ensure the water reservoir is clean and free of algae or sediment that could clog the system. Refill the reservoir promptly when the low water alarm activates.
- **Solar Panel Cleaning:** Keep the solar panel clean from dust, dirt, and debris to ensure maximum sunlight absorption and charging efficiency. Wipe it gently with a soft, damp cloth.
- **Winterization (if applicable):** In regions with freezing temperatures, it is recommended to drain the system completely and store the control unit and pump indoors to prevent damage from freezing water.

## 8. TROUBLESHOOTING

If you encounter issues with your TRJZWA Solar Drip Irrigation Kit, refer to the following common problems and their solutions:

Problem	Possible Cause	Solution
System not watering	Low water in reservoir; clogged filter/drippers; pump blockage; incorrect programming; low battery.	Refill water reservoir. Clean filter and drippers. Check for kinks in tubing. Verify programming settings. Ensure solar panel is clean and receiving adequate sunlight.

Problem	Possible Cause	Solution
Water leakage	Loose connections; damaged tubing/drippers.	Check all connections and tighten them. Inspect tubing and drippers for cracks or holes and replace if necessary.
Inconsistent water flow	Partially clogged drippers/filter; insufficient water pressure (if using external source); air in the system.	Clean drippers and filter. Ensure water reservoir is sufficiently full. Bleed air from the system by running a manual cycle.
Difficulty programming	Unfamiliarity with interface; incorrect button sequence.	Refer to Section 6: Operating Instructions and the control panel diagram. Practice the programming steps without water connected until familiar.
Low water alarm constantly on	Water level genuinely low; sensor dirty or misplaced.	Refill water reservoir. Clean the water level sensor. Ensure the sensor is correctly positioned in the water.

## 9. SPECIFICATIONS

Feature	Specification
Model Number	BSV-IC305
Brand	TRJZWA
Power Source	Solar Powered
Battery Capacity	2200mAh (integrated)
Water Pump Flow Rate	Up to 400 ml/minute
Max Pump Lift	2 meters
Watering Duration	1 second - 59 minutes
Watering Frequency	0 hours - 7 days
Hose Length	15 Meters
Number of Drippers	15
Material	Acrylonitrile Butadiene Styrene (ABS), Plastic, Polyethylene (PE)
Special Features	Rain delay, Manual mode, Adjustable irrigation, Efficient watering system
Product Dimensions	23 x 22 x 7.9 cm

Feature	Specification
Product Weight	980 grams

## 10. WARRANTY AND SUPPORT

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Specific warranty details for the TRJZWA Solar Drip Irrigation Kit are not provided in the product information. For any warranty claims, technical support, or inquiries regarding your product, please contact the seller or manufacturer directly through the platform where you purchased the item.

Please retain your proof of purchase for any warranty-related requests.