RAINPOINT 115+023

RAINPOINT WiFi Solar Drip Irrigation System User Manual

Model: 115+023 | Brand: RAINPOINT

PRODUCT OVERVIEW

The RAINPOINT WiFi Solar Drip Irrigation System is an automatic watering solution designed for potted plants, gardens, and various indoor/outdoor applications. It features a solar-powered pump, smart app control, and anti-siphon devices for efficient and hassle-free plant care.

Figure 1: Overview of the RAINPOINT WiFi Solar Drip Irrigation System, including the main unit with solar panel, Wi-Fi hub, and various drip irrigation accessories.

Key Features:

- **Solar Powered & Ultra-Lasting:** Equipped with a 90° adjustable solar panel and a 2600mAh rechargeable battery for continuous operation.

- **Customizable Schedules:** RAINPOINT Home APP allows flexible irrigation scheduling (duration, repeat options).

- **User-friendly APP Easy Setup:** Remote modification and temporary watering plans via the RAINPOINT Home APP, supporting up to 6 auto irrigation plans.

- **Just Hang & Go:** Unique rotatable metal back hook for easy installation without additional tubing or power lines.

- **Pro Garden Manager:** Integrates with other smart RAINPOINT devices (WiFi soil meters, thermo-hygrometers, rain gauge) for automated watering based on real-time conditions.

- **Water Shortage Alert:** Sends email and push notifications for water outages or clogged tubing.

- **Wide Applications & Full DIY Setup:** Suitable for various scenarios like pot edges, balconies, fences, raised beds, and RV gardens. Comes with all necessary installation accessories.

WHAT'S IN THE BOX

- 1* Smart Solar Water Pump Gen1
- 1* Drip Irrigation Accessories Kit (includes 4mm main tubes, 3mm branch tubes, siphon attachment, stakes, etc.)

Note: A water container (e.g., a bucket or reservoir) is required but not included in the box. Ensure you have a suitable container for your water source.

SETUP GUIDE

1. Prepare Your Water Source:

Select a suitable water container (not included) for your irrigation system. The size of the container should be appropriate for the number of plants and watering frequency. Place the container near your plants and the main pump unit.

2. Position the Main Pump Unit:

The main pump unit features a solar panel for power. Position it where it can receive ample sunlight. The unique rotatable metal back hook allows for versatile placement on pot edges, fences, railings, or windowsills.

Figure 2: Examples of how to mount the RAINPOINT pump unit using its rotatable hook, demonstrating its adaptability for different garden setups.

3. Connect Tubing:

1. **Main Line (4mm tubes):** Connect the 4mm main tubing to the pump unit. Ensure the siphon attachment is correctly oriented (refer to the manual for direction) to prevent water flow issues.
2. **Branch Lines (3mm tubes):** Use the 3mm branch tubing to extend from the main line to individual plants. You can cut these tubes to your desired length.
3. **Drip Stakes:** Insert the provided drip stakes into the end of the 3mm tubing and place them into the soil near your plants. This ensures precise water delivery.

Figure 3: Illustration of the main pump unit connected to the Wi-Fi hub and the tubing extending to potted plants for efficient watering.

4. Connect to Wi-Fi and App Setup:

The system connects to your home Wi-Fi via a small adapter (hub) included in the box. Plug the adapter into a wall outlet within range of your Wi-Fi network. Download the RAINPOINT Home APP and follow the in-app instructions to connect your device. The app is designed for user-friendly setup and control.

Figure 4: The RAINPOINT Home App interface, demonstrating its user-friendly design for managing irrigation plans and viewing soil data.

OPERATING INSTRUCTIONS

Scheduling Watering Plans:

Use the RAINPOINT Home APP to create and manage up to 6 automatic irrigation plans. You can customize the duration (from 0 seconds to 60 minutes) and frequency (Everyday, Even Dates, Odd Dates, or Custom) for each plan. The app allows for remote modification and temporary watering adjustments anytime, anywhere.

Manual Watering:

For immediate watering needs, you can initiate manual watering directly from the pump unit's button or through the RAINPOINT Home APP.

Figure 5: Options for manual watering, either by pressing a button on the timer unit or through the dedicated button within the RAINPOINT Home App.

Rain Delay Function:

To prevent overwatering during rainy periods, utilize the Rain Delay feature in the app. You can set delays for 24, 48, or 72 hours, which will automatically skip scheduled watering cycles.

Figure 6: The Rain Delay function within the app, allowing users to pause watering schedules for specified durations to avoid overwatering.

Integration with Smart Devices:

For advanced automation, pair your irrigation system with other RAINPOINT smart devices such as WiFi soil meters or thermo-hygrometers. This allows the system to adjust watering based on real-time soil moisture levels and weather conditions, optimizing water usage and plant health.

Maintenance

Charging the Battery:

The integrated 2600mAh lithium-ion battery is primarily charged by the solar panel. In periods of continuous rainy or cloudy weather, the battery can be recharged via a micro-USB cable (included). A full charge can sustain the system for up to 14 days without solar support.

Figure 8: The RAINPOINT solar pump unit being charged via a USB cable, an alternative charging method for prolonged cloudy periods.

Water Shortage Alert:

The RAINPOINT APP will send a water shortage alarm via email and push notification if there is a water outage or clogged tubing. This feature helps protect your plants by alerting you to potential issues promptly. Ensure the water pump pipeline is properly installed and perform water shortage calibration as needed.
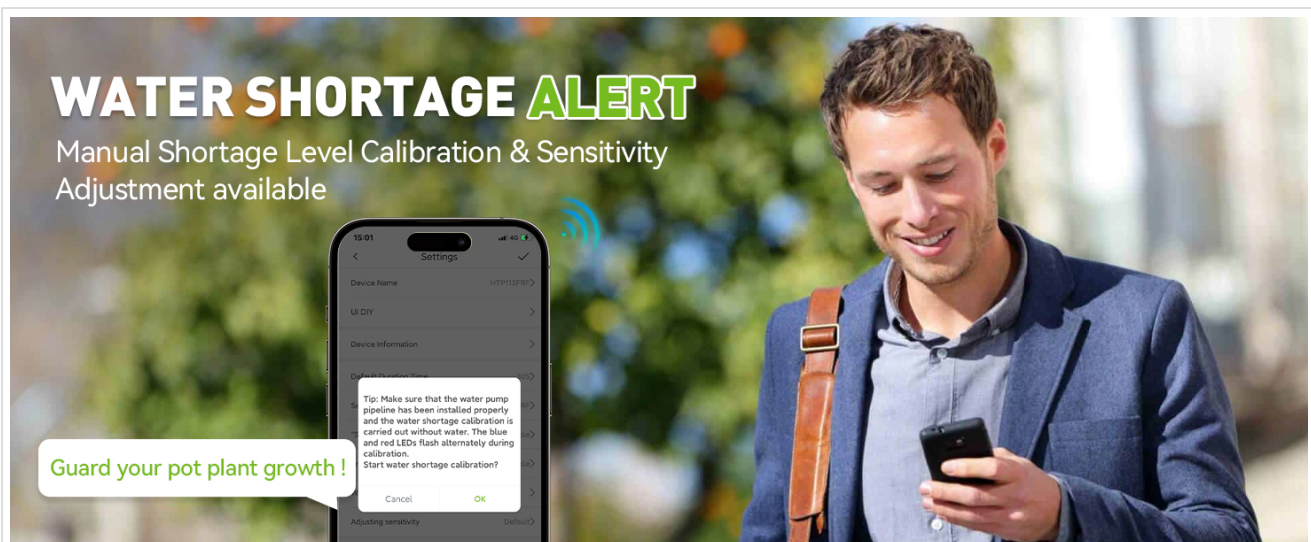

Figure 9: A smartphone displaying a water shortage alert from the RAINPOINT app, indicating a need for attention to the water

supply.

Anti-Siphon Valve:

The system includes an anti-siphon valve to prevent backflow and ensure precise irrigation. This mechanism stops siphoning, maintaining consistent water delivery to your plants.

Figure 10: A visual representation of the anti-backflow valve, highlighting its role in preventing siphoning and ensuring accurate water distribution.

TROUBLESHOOTING

Common Issues:

- **No Water Flow:**

  - Check the water source: Ensure the water container has sufficient water.
  - Siphon attachment: Verify the siphon attachment on the main tubing is installed in the correct direction. Incorrect orientation will prevent water flow.
  - Clogged tubing/emitters: Inspect the tubing and drip emitters for any blockages. Clean or replace as necessary.

- **Wi-Fi Connection Issues:**

  - Router compatibility: Ensure your Wi-Fi network is 2.4GHz, as some smart devices may not support 5GHz networks.
  - Signal strength: Place the Wi-Fi hub within optimal range of your router.
  - App issues: If the app loses connection or data, try restarting the app or re-pairing the device following the manual's instructions.

- **Battery Not Charging:**

  - Solar panel exposure: Ensure the solar panel is clean and receives direct sunlight for several hours daily.
  - USB charging: If solar charging is insufficient, connect the micro-USB cable to recharge the battery.

SPECIFICATIONS

Feature	Detail
Product Dimensions	5 x 4 x 6 inches; 2.31 Pounds
Item Model Number	115+023
Batteries	1 Lithium Ion battery required (included)
Manufacturer	RAINPOINT
Brand	RAINPOINT
Size	Gen1
Material	Plastic, Metal
Power Source	Solar Powered

WARRANTY AND SUPPORT

For warranty information, technical support, or any inquiries regarding your RAINPOINT WiFi Solar Drip Irrigation System, please visit the official RAINPOINT website or contact their customer service directly. Refer to the product packaging or the RAINPOINT Home APP for specific contact details.