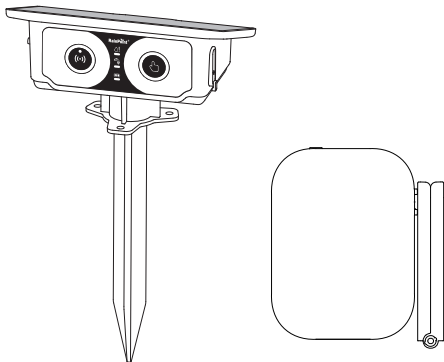


USER MANUAL

Wi-Fi Outdoor Solar Automatic Drip Irrigation Pump Kit with Gateway



Model: HTP160FRF + HWG023WBRF



Email: service@rainpointonline.com



US Hotline: +1 833-381-5659
DE Hotline: +49 800-182-0576

UK Hotline: +44 20-4628-3036

CONTENTS

1. INTRODUCTION	02
1.1 Package Contents	02
1.2 Product Overview	04
1.3 Specifications	08
2. INSTALLATION AND CONNECTION	09
2.1 App Installation and Pump Connection	09
2.2 Connecting the Gateway to Wi-Fi	10
2.3 Connecting the Pump to the Gateway	12
2.4 Pump Installation	14
2.5 Pump Charging	17
2.6 Pump Placement and Height Difference	18
2.7 Tubing Setup	20
2.8 Pre-Use Testing	23
3. APP INTRODUCTION	23
4. TROUBLESHOOTING	25
5. WARRANTY POLICY	27
6. CUSTOMER SUPPORT	27

WARM TIPS

PLEASE READ BEFORE USING



Make sure the tubing is fully inserted and firmly connected to the IN and OUT ports to prevent leaks.



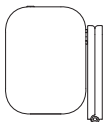
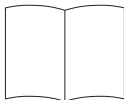
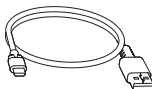
Position the pump higher than the water source to avoid siphoning.



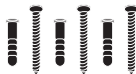
Only use with clean cold water.

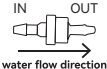
1. INTRODUCTION

1.1 Package Contents

**1****2****3****4****5****6**

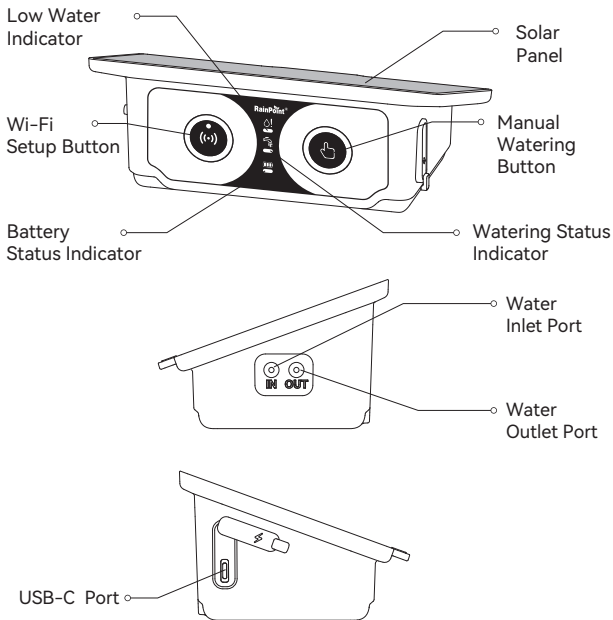
- 1. 1 X HTP160FRF Outdoor Watering Pump**
- 2. 1 X HWG023WBRF Wi-Fi Gateway**
- 3. 1 X Ground Stake**
- 4. 1 X Mounting Bracket**
- 5. 1 X User Manual**
- 6. 1 X USB-C Cable**
- 7. 3 X Expansion Screw Sets**
- 8. 1 X Detachable Back Hook**
- 9. 1 X Accessories Kit (See next page)**

**7****8**

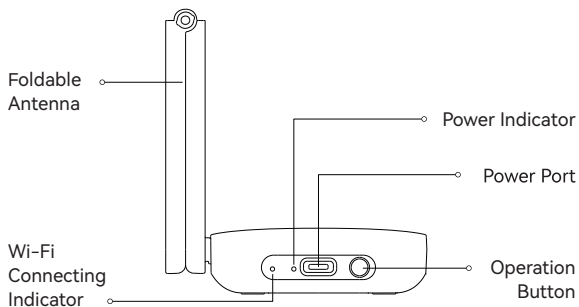
Accessories Included	Name	PCS	Function
	Tubing	1	Tubing for Main Line Length: 49.2 ft (15 m) Inner diameter: 1/6" (4 mm)
	Tubing	1	Tubing for Branch Line Length: 16.4 ft (5 m) Inner diameter: 1/8" (3 mm)
	Filter	1	Filter impurities from water
	End Plug	3	Stop water flow at the end of the tubings
	Micro Drip Emitter	15	Insert into soil to water the plant root directly
	T-shaped Barb	15	Split the water flow and connect the 1/6" (4 mm) tubing to the 1/8" (3 mm) tee
	Cross Barb	1	Split water flow and connect tubings
	Anti-Siphon Valve	1	Prevent siphoning and backflow
	Zip Tie	15	Secure and organize tubings

1.2 Product Overview

Wi-Fi Water Pump



Wi-Fi Gateway



Wi-Fi Pump LED Indicators and Buttons

Item	Status
Watering Status Indicator	• Watering: green flashing
Battery Status Indicator	• Device charging: green flashing • Charging complete: green solid on • Low battery: red flashing until depleted
Low Water Indicator	• Low water detected: red flashing • Water detected again: off
Wi-Fi Status Indicator	• Not paired: green flashing • Connecting: red fast flashing • Connected: green solid on for 30 seconds, then off • Offline: red flashing twice every 10 seconds
Wi-Fi Setup Button	• Press and hold for 3 seconds to enter pairing mode
Manual Watering Button	• Short press to start or stop watering

Wi-Fi Gateway LED Indicators and Buttons

Item	Status
Power on	• Power indicator: Solid on • Wi-Fi indicator: Flashes once
Smart network pairing (pairing mode)	• Power indicator: Solid on • Wi-Fi indicator: Flashes rapidly
Network pairing successful	• Power indicator: Solid on • Wi-Fi indicator: Solid on
Network pairing failed (pairing timeout)	• Power indicator: Solid on • Wi-Fi indicator: Off
Gateway disconnected (after successful pairing)	• Power indicator: Solid on • Wi-Fi indicator: Flashes slowly (attempting to reconnect to the network)

1.3 Specifications

Wi-Fi Water Pump	
Parameter	Value
Working Temperature	37-122°F (3-50°C)
Solar Panel Output	5V 1.5W
Charging Input	USB-C, 5 V / 1 A
Flow Rate	30 L/h
Max Head	3 m
Battery Capacity	2000 mAh
Waterproof Rating	IPX5
Inlet and Outlet Diameter	4 mm

Wi-Fi Gateway	
Parameter	Value
Range Between Gateway and Pump	Less than 492 ft (150 m)
Power Supply	USB-C power adapter
Operating Temperature Range	37.4-104°F (3-40°C)
Wi-Fi Frequency Band	2.4 GHz
Mobile Operating System Requirements	iOS 11.0 or later; Android 6.0 or later

2. INSTALLATION AND CONNECTION



Setup Video



Customer Support

Tips: Scan the QR code or visit the links below to access the setup video and customer support for quick installation.

Setup Video:

www.youtube.com/@rainpoint

Customer Support:

www.rainpointonline.com/pages/support

2.1 App Installation and Pump Connection

- 1) In Google Play Store or the App Store, search for "**RainPoint Home**", or scan the QR code to download and install the app.
- 2) Open the RainPoint Home app and select "**Register**". Follow the on-screen steps to create an account using an email address, or sign in with an existing account.

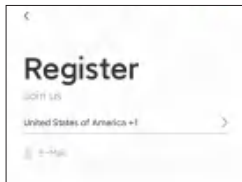


iOS



Android

RainPoint Home



2.2 Connecting the Gateway to Wi-Fi

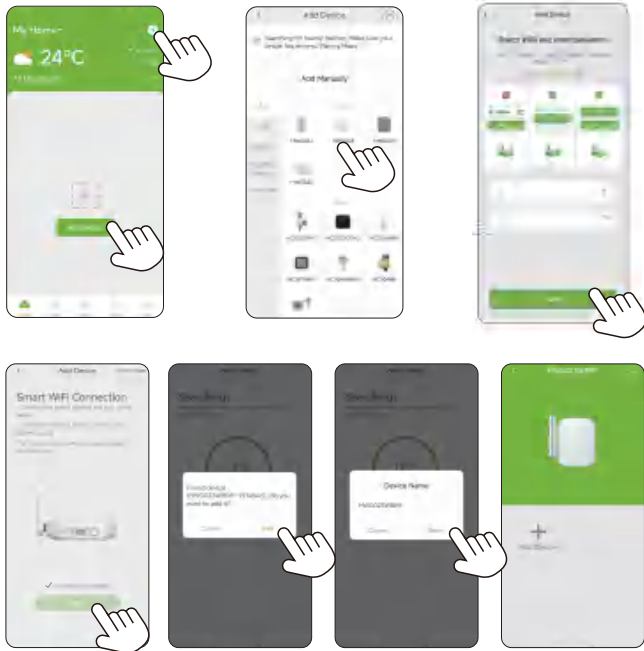
2.2.1 Preparation for Connection

Before connecting the gateway in the **RainPoint Home** app, make sure the following requirements are met:

- The smartphone is connected to a **2.4 GHz** private Wi-Fi network (public Wi-Fi is not recommended).
- The smartphone runs **iOS 11.0 or later**, or **Android 6.0 or later**.
- During pairing, keep the gateway and the smartphone within **10 ft (3 m)** of each other.
- To change the Wi-Fi network, reset the gateway and reconnect it in the app.

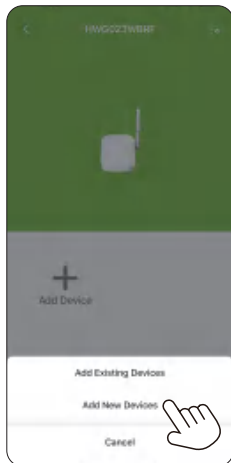
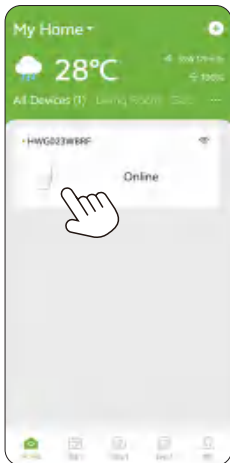
2.2.2 Connecting Steps

Follow the steps below to connect the gateway in the **RainPoint Home** app. During the process, keep the gateway close to the Wi-Fi router.



2.3 Connecting the Pump to the Gateway

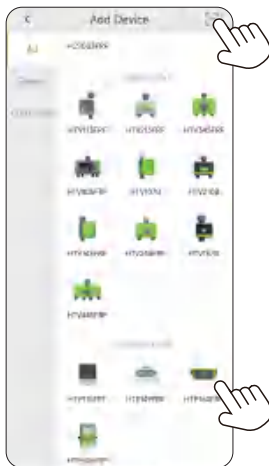
1. After the gateway is successfully connected, tap the gateway icon on the app home screen to open the gateway page. Tap **"Add Device"**, then tap **"Add New Devices"** to add the pump as a sub-device of the gateway.



2. In the device list, select "HTP160FRF" to add the pump. Alternatively, tap the icon in the upper-right corner to add the device by scanning the QR code or entering its serial number. The app will then open the pairing preparation page.

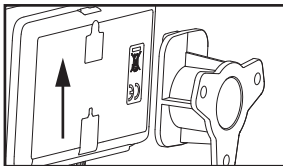


0240160300



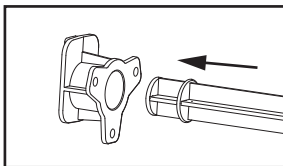
2.4 Pump Installation

2.4.1 Ground Stake Installation



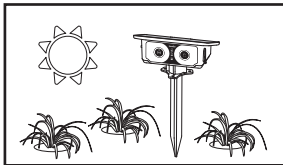
Step 1:

Align the mounting bracket with the slot on the bottom of the HTP160FRF unit, then slide it upward until it clicks into place.



Step 2:

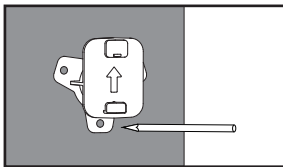
Insert the ground stake into the matching slot on the mounting bracket. Push it in fully and make sure it is secure.



Step 3:

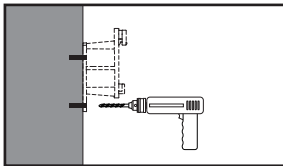
Insert the assembled unit into the ground in a suitable location with direct sunlight and minimal shading. Ensure the unit is stable.

2.4.2 Wall Mount Installation



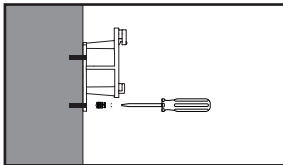
Step 1:

Mark the positions of the mounting holes on the wall.



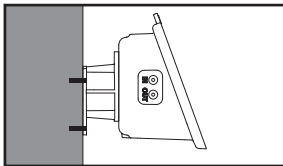
Step 2:

Drill holes at the marked positions.



Step 3:

Insert the wall anchors into the holes, then tighten the screws to secure the mounting bracket.
(3 expansion screw sets included)

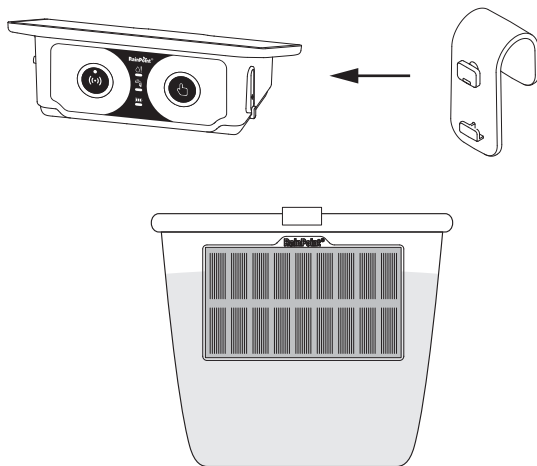


Step 4:

Align the HTP160FRF pump with the mounting bracket slot, then slide it upward until it clicks into place.

2.4.3 Back Hook Installation

Align the back hook with the slot on the pump, then slide it upward until it clicks into place. Hang the pump securely on a stable edge or hook, and make sure it sits steady.



2.5 Pump Charging

This pump features an integrated solar panel for daily use. USB-C charging is also available when needed.

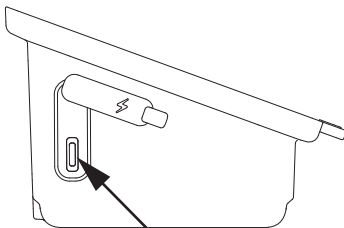
- **Solar Charging**

- 1) Install or place the pump where the solar panel can receive direct sunlight.
- 2) For best charging performance, keep the solar panel facing the sun and avoid shading.

- **USB-C Charging**

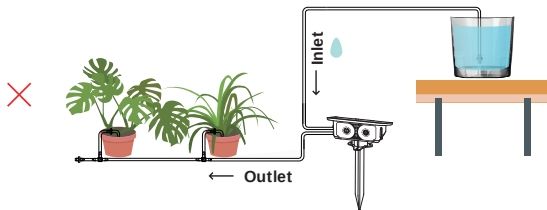
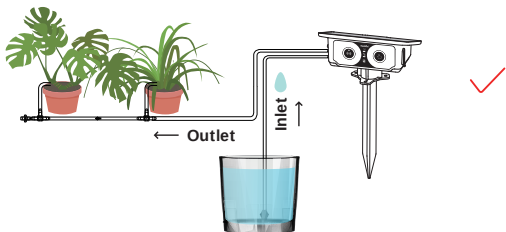
- 1) Plug the included USB-C cable into the USB-C port on the pump.
- 2) Connect the other end to a 5V/1A USB power adapter (not included).
- 3) When fully charged, the battery icon will stay .

Note: USB-C charging is recommended when sunlight is insufficient.

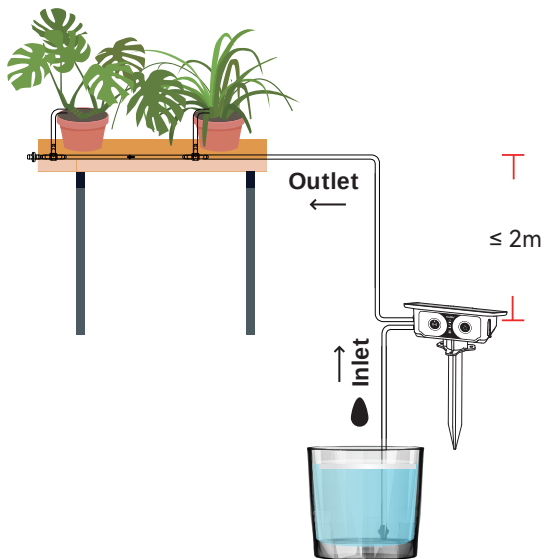


2.6 Pump Placement and Height Difference

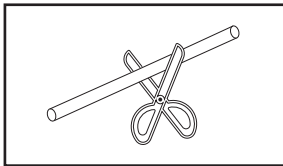
- Place the pump at or above the reservoir water level.
Do not place the pump below the water level.
This prevents siphoning/backflow and helps avoid leaks or overwatering.



- Maximum height difference ≤ 6.6 ft (2 m)

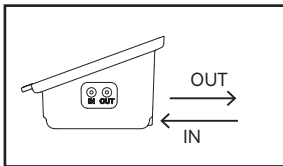


2.7 Tubing Setup



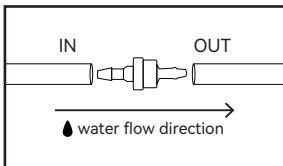
Step 1:

Plan the drip irrigation layout and cut the tubing into the required lengths.



Step 2:

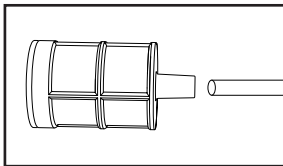
Remove the protective caps, then connect the 1/6" (4 mm) tubing to the water inlet and outlet ports.



Step 3:

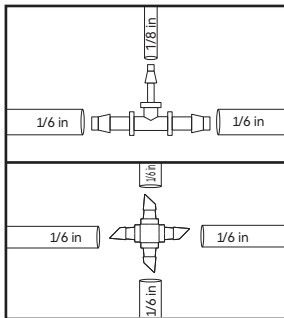
Attach anti-siphon valve to outlet tubing near the pump. This helps prevent backflow and siphoning.

Note: Ensure the valve is installed in the correct flow direction.



Step 4:

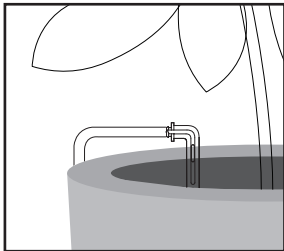
Insert the filter into the other end of the water inlet tubing and place it into the water container.



Step 5:

Connecting the appropriate barb fittings:

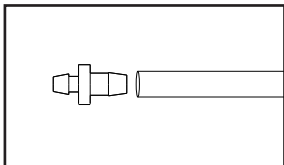
- 1) To split a 1/6" (4 mm) tubing into two directions, use a T-shaped barb fitting.
- 2) To split the tubing into three directions, use a cross barb fitting.



Step 6:

Connect a micro drip emitter to the end of each branch tubing to deliver targeted watering at the base of each plant.

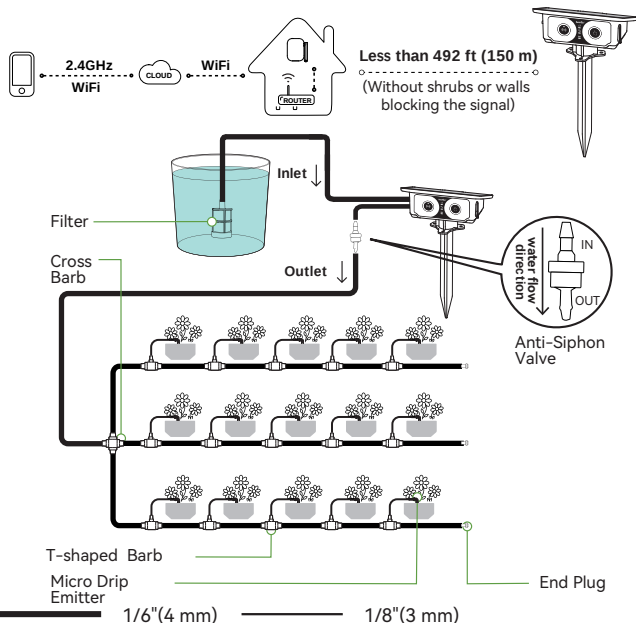
Note: Loosen the soil before inserting the emitter at least 3" (8 cm) deep. This helps water reach the plant roots effectively.



Step 7:

After water starts flowing from the end of the tubing and any trapped air has been released, install the end plug.

Connect components in the following order:



WARNING:

- Install the end plug only after water has flowed out of the end of the tubing.
- The pump communicates with the gateway via a 433 MHz RF signal. Keep it within 492 ft (150 m) of the gateway in line-of-sight conditions. Walls, metal objects, and dense plants may reduce the signal range.

2.8 Pre-Use Testing

1. Short press  to start the pump. Water will be pumped out and delivered to the plants through the tubing.
2. Check all tubing connections for leaks. If there is any leakage, the connection is not tightened properly. Tighten it until no leaks are found.
3. If the test is normal, proceed to the next step.

3. APP INTRODUCTION

Pump Home Screen



1. Settings:

Used to view and manage basic device information and access advanced options:

- Water Shortage Calibration
- Adjusting Sensitivity

2. Online Status Display, Next Plan Time:

After the watering schedules are set, the device page displays the next scheduled watering time.

3. Plan:

Up to six schedules can be set.

Rain Delay can be set to 24, 48, or 72 hours to avoid watering on rainy days.

4. Manual:

Control manual watering via APP.

5. Event:

The online or offline status and irrigation records can be viewed.

4. TROUBLESHOOTING

Pump Troubleshooting

Issue	Possible Cause	Solution
Uneven water flow	The pump is too far from the water source or the tubing is too long, reducing pumping efficiency.	• Reposition the pump and shorten the tubing if possible. • Check that all tubing connections are installed correctly.
Tubing is hard to insert or remove	The tubing material is stiff for durability.	• Soak the tubing end in hot water for about 10 seconds, or apply a small amount of vegetable oil to the tubing end before connecting.
No watering	No water at the inlet, so the schedule does not run.	• Check the water level in the container at the inlet and refill if needed.
Pump cannot connect	Too far from the router, or the pump is not in pairing mode.	• Move the pump closer to the router during setup. • Press and hold the Pairing button until the indicator flashes quickly, or delete the device in the app and add it again.
Router connection fails	Not using a 2.4 GHz Wi-Fi network, or the Wi-Fi password is incorrect.	• Confirm a 2.4 GHz Wi-Fi network is used. • Confirm the Wi-Fi password is entered correctly.

Issue	Possible Cause	Solution
Schedule does not run on time	The filter is clogged, or Rain Delay is enabled.	• Clean the inlet filter. • Check the Rain Delay setting.

Wi-Fi Gateway Troubleshooting

Issue	Solution
The gateway cannot connect to the network.	• Verify that the Wi-Fi password has been entered correctly. • During setup, keep the gateway and the smartphone close to the Wi-Fi router.
Gateway is disconnected or offline.	• Verify that the Wi-Fi router is functioning properly. • If there was a power outage, make sure the router has restarted properly, then reconnect the gateway by following the connection steps in this manual. • Check the Wi-Fi signal strength. If the gateway is too far from the router, move it closer to improve connection stability.
The gateway button is unresponsive.	Contact customer service for assistance.

5. WARRANTY POLICY

RainPoint provides a 1-year warranty against manufacturing defects in materials and workmanship from the date of purchase. During the warranty period, products found to be defective under normal use and service, as determined solely by RainPoint, will be replaced free of charge.

To request warranty service, email your order ID to **service@rainpointonline.com**. A response will be provided within 24 hours on working days.

6. CUSTOMER SUPPORT

For setup difficulties, search "**RainPoint**" on YouTube to view installation videos. If the required information is not found in this user manual or if further assistance is needed, contact customer support before returning the product to the store. The local customer support team will provide a solution within 24 hours on working days and may arrange a replacement or refund where applicable.

For efficient support, please provide the following information:

- Order number
- LOT NO. of the device
- Brief description of the problem

Contact information:

US Hotline: +1 833-381-5659

DE Hotline: +49 800-182-0576

UK Hotline: +44 20-4628-3036

Email: service@rainpointonline.com

FCC ID: 2AWDBHTP160FRF+2AWDBHWG023

This device 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. However, there is no guarantee that interference will not occur in a particular installation.

If this device does cause harmful interference to radio or television reception, which can be determined by turning the device 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 distance between the device and the receiver.
- Connect the device to an outlet on a different circuit from the one to which the receiver is connected.

If necessary, the user should consult the dealer or a qualified radio/TV technician for additional help. Changes or modifications to this device not expressly approved by the manufacturer may void the user's authority to operate the equipment.

EC REP

NAME: VIAJE ELECTRONIC COMPANY LIMITED

ADDRESS: E588, 13 ADELAIDE ROAD, DUBLIN, D02 P950,
IRELAND

EMAIL: VIAJEELE@outlook.com

UK REP

NAME: SUJE ELECTRONIC COMPANY LIMITED

ADDRESS: S211 92a Bury Old Road, Manchester, England,
M45 6TQ

EMAIL: SUJEELECTRONIC@outlook.com

Manufacturer/Hersteller/Fabricant/Produttore/Fabricante:

FUJIAN BALDR TECHNOLOGY CO., LTD

ADDRESS/ADRESSE/ADRESSE/INDIRIZZO/DIRECCIÓN:

Floor 3, Building 2, No. 71 Yangqi Road, Fuwan Industrial Area,
Cangshan District, Fuzhou, China 350008

EMAIL: service@rainpointonline.com



Points de collecte sur www.quefairedemesdechets.fr
Privilégiez la réparation ou le don de votre appareil !



Need Help?

Scan the QR code to
get fast support



or

US Hotline: +1 833-381-5659

DE Hotline +49 800-182-0576

UK Hotline: +44 20-4628-3036

Email: service@rainpointonline.com

