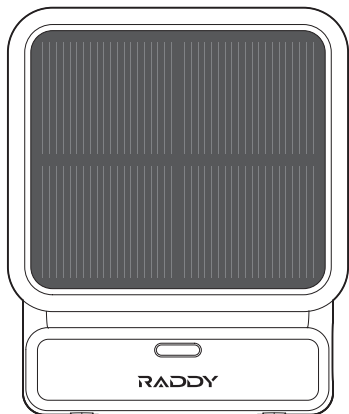


RADDY










USER MANUAL

Smart Solar Irrigation System

Model No. WS-2



What's in the box

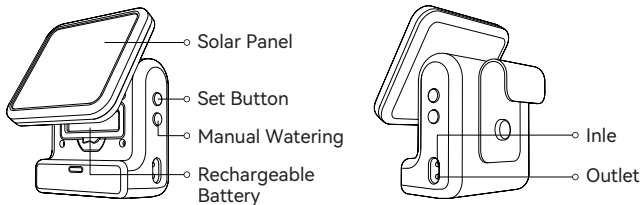
Accessories Included	Name	PCS	Function
	USB Cable	1	Charge the battery
	Tubing	1	Len:10m/32.8 Ft Inner diameter of pipe:0.17" (> 1/6") Outside diameter of pipe: 1/4"
	Filter	1	Filtering impurities from water
	Tubing End Caps	3	Stop water flow at the end of the pipe
	Micro Drip Emitters	10	Inserted into the soil to water the plant root directly
	Straight Barb Fitting	3	Connecting water pipes
	T Barb Fitting	10	Split water and connect pipes
	Cross Barb Fitting	3	Split water and connect pipes
	Check Valve	1	Prevents water from backing up in the pipes back to the pump

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1. INTRODUCTION

1.1 Product Overview



1.2 Specification

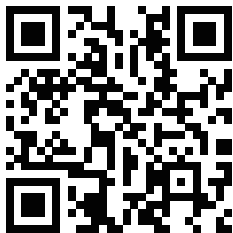
- **Flow Rate:** 36L/H (9.51 GAL/H)
- Pumping Head \geq 3 M
- Working Pressure \geq 0.3 bar (4.3 PSI)
- **Working Temperature:** 3°C~50°C(37°F~ 122°F)
- Work with 2.4G Wifi or dual band Wi-Fi
- **Waterproof Level:** IP54
- Inlet and Outlet are suitable for 4 mm pipe
- 2600mAh rechargeable 18650 lithium battery, charging by USE charging cable or top solar panel
- 5V 5W Solar Panel

1. INTRODUCTION

1.3 Product Features

- Real-time to set and view irrigation plan by remote control via APP.
- Build-in water pump for automatic watering.
- 24h delayed irrigation function.
- Efficient solar power supply.
- Water shortage alert.
- No water tap needed.
- Waters up to 10 plants.
- Flexible micro-drip irrigation system.
- Full DIY irrigation system, coming with different accessories.

2.CONNECTION AND INSTALLATION



Tips:

Please scan the QR code or search the link to access the video to easily and quickly view the operational details of the device.

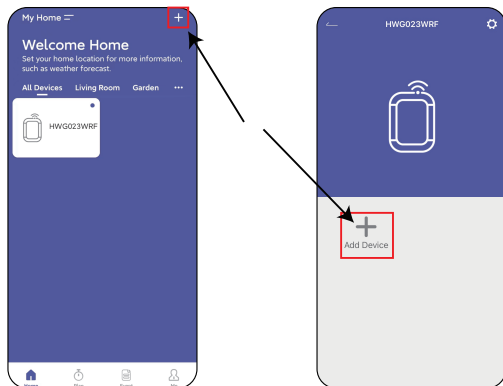
Video Address:


<http://bit.ly/3jgJQVA>

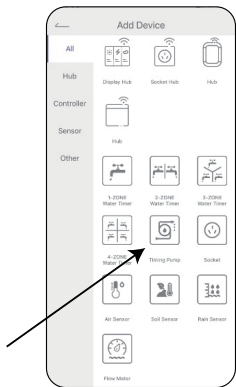
2.1 Pump Connection

This device is a sub-device, please connect the hub of Rainpoint Smart+ series before connecting this device.

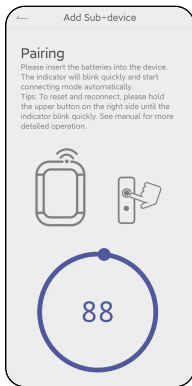
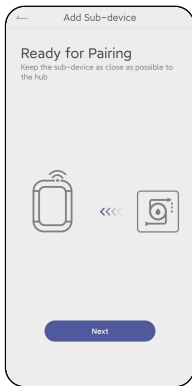
1. **After the hub is successfully connected.** select the **+** button on the top right corner of the APP home page to add device, or you can go to the hub's home page and use **"Sub-devices"** to add devices.



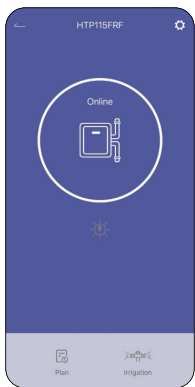
2. Find “Timing Pump” or the icon  to add HTP115FRF Smart Solar Timing Pump.



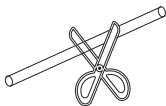
3. Hold the **SET** button on the side of the pump until the red LED light quickly blinking. Then select **“Next”** on the APP to start searching device.



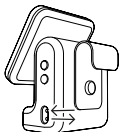
4. Keep the device and the hub close to each other so they can connect automatically.
5. Besides that, you can also hold the button to reset and reconnect if you fail to connect for the first time.



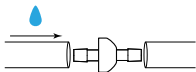
2.2 Pump Installation



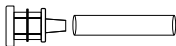
- 1 Cut the hose according to the distance of the device the plant or you need.



- 2 Connect the hose to water inlet and outlet.



- 3 Connect the check valve to the water outlet near the pump. Using a check valve may reduce water pressure. (The check valve must be installed correctly in accordance with the flow direction)

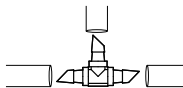


- 4 Insert the other end of the hose connected to the water inlet of the pump with the filter, and then put it into the container.

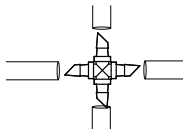


Connecting the suitable barb fitting:

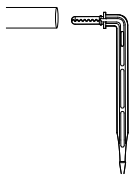
1) If only the hose needs to be connected, **you can use straight barb fitting.**



5) When you need to connect the hose while splitting to two ways, **you can use the "T" barb fitting.**



3) When you need to connect a hose while splitting to other 3 ways, **you can use the cross barb fitting.**



6)

When water needs to be delivered to the soil, you need to use the micro drip emitters.

Tips: Loosen the soil first, then insert the drips at least 3 inches deep, which will help water enter the plant roots.

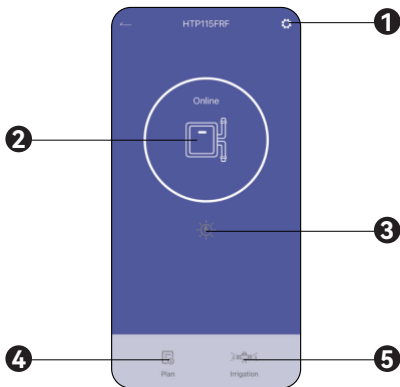


7)

Please install Tubing End Caps after water flows out from the end of the pipe to avoid air in the pipe so that the water can not flow smoothly to the end of the pipe.


3. APP FEATURES AND FUNCTIONS

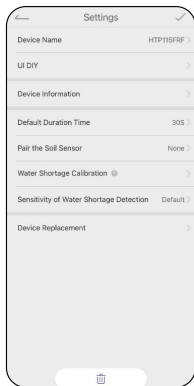
3.1 Device Home Page



- 1 Setting:** Basic settings for the timing pump.
- 2 Pump Status Icon:** Show the pump working status.
- 3 Solar indicator:** Show the solar charging status.
- 4 Plan:** To create and manage watering plans.
- 5 Irrigation:** Manual watering.

3.2 Basic Setting

Find the icon  on the top right corner of the APP home page to "**Settings**" page. In the basic settings, you can check and manage the device information, such as name, interface and description. There are also some advanced settings you can set up for the specific functions:



Default Duration Time: Set default watering duration for manual irrigation.


Pair the Soil Sensor: Pair with a soil sensor to display the data on the home page and activate the Stop irrigation plan humidity function.

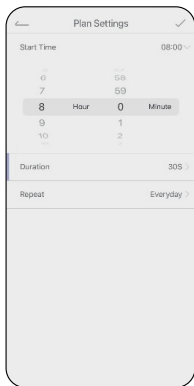
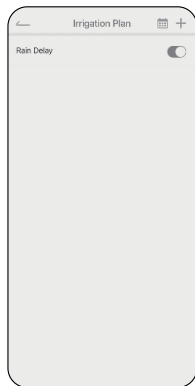
Stop irrigation plan humidity: Set atop watering value of the soil moisture to protect the plants from over watering. All the plans will be stopped once the soil moisture gets over the value, and will go back to work when the moisture return below the value.

Water Shortage Calibration: Calibrate the current water state of the pump as the water shortage level.


Sensitivity of Water Shortage Detection: Adjust the sensitivity level if the water shortage alarm is too sensitive or not sensitive enough.

3.3 Plan Setting

Select Plan  and start to create a new a uto-watering plan.



Set a watering mode first:

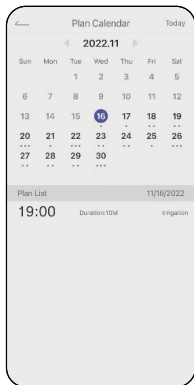
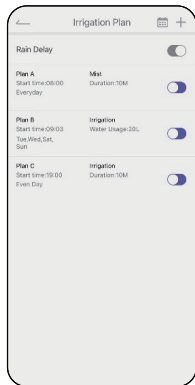
Press the icon  on the top right corner of the "Irrigation Plan" page to set irrigation plan.

Start Time: Set the time when to start the plan.

Duration: Set how long to water for the watering plan.

Repeat: Set the watering frequency for the plan.

After finish setting, press the top right button save your plan and you will see a plan overview appears in the list. Use the button on the right to turn on or off the plan. Up to **SIX** plans that can be created.



There is also a **Plan Calendar** for checking the overview of all the plans' schedule.

3.4 Manual Watering

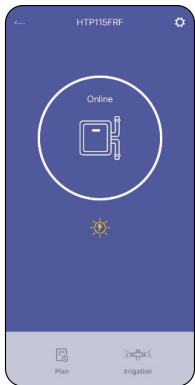
Select **Irrigation** in the home page to manually turn on a temporary irrigation plan with a settable time.



Note: When you turn on manual watering, if there is a plan running now or there will be a plan starting during your manual water time, the schedule will be skipped for this time.

3.5 Solar Charging Notice

When the timing pump is getting charged by solar power, the solar indicator on the app will turn on as yellow.



4. TROUBLESHOOTING

Problem	Possible Factors	Some Solutions
Pump can't connect with hub	<ol style="list-style-type: none"><li data-bbox="301 239 586 354">1. Too far from the hub or too many obstructions between pump and hub.<li data-bbox="301 360 547 447">2. Miss the searching time during connecting.<li data-bbox="301 453 581 506">3. The hub software low version.	<ol style="list-style-type: none"><li data-bbox="622 239 907 325">1. Stay close with the hub when connecting the pump.<li data-bbox="622 331 938 539">2. Try to start the device searching again first, and then hold the set button after the searching starting count down until red light blinking.<li data-bbox="622 545 915 719">3. Go to basic setting on the top right corner of the hub's home page, and then check for the new versions in the device information.
Pump no working or can't pump water from container	<ol style="list-style-type: none"><li data-bbox="301 757 591 843">1. Impurities get into the pump and damage the pump.<li data-bbox="301 850 567 936">2. Pump broken due to falling or during transportation.	If the pump can't work, or can't pumping water, please contact customer service from where you buy in the warranty time.

Problem	Possible Factors	Some Solutions
Water leakage from the pump inlet or outlet	he pipe is not tightly inserted or not fully inserted.	Re-install the water pipe to make sure the pipe end is fully and tightly insert to the inlet and outlet.
Weak water flow comes out	<ol style="list-style-type: none"> 1. Too far away from pots and water containers. 2. Air left in the end of pipe section. 	<ol style="list-style-type: none"> 1. Move the pump closer to the plants and reduce the pipe length. 2. When install the watering system, try to put on the pipe end caps when the water have fully fill the whole pipeline.
Hub can't connect	<ol style="list-style-type: none"> 1. Not using 2.4GHz Wi-Fi. 2. Incorrect Wi-Fi password. 3. Too far from the router or too many obstructions that blocks the signal. 	<ol style="list-style-type: none"> 1. Check and use 2.4GHz or dual band Wi-Fi to connect. 2. Check again the password when connecting 3. Try to stay close with the router when connecting the hub.

NOTES

- Please make sure to use 2.4GHz band WIFI to connect to this product.
- Do not mix old and new batteries or different types of batteries.
- Please install the timer vertically to avoid valve body damaged and inaccurate water flow meter.
- Under freezing temperatures, timers should be removed from the faucet and stored indoor to avoid potential freezing damage.
- Please clean filters regularly and replace if it is worn in order to prolong working life of timer.

5. WARRANTY

RADDY provides a 1-year limited warranty on this product against manufacturing defects in materials and workmanship.