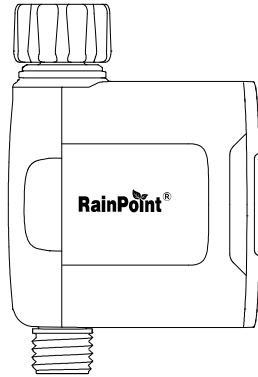




USER MANUAL

1-Zone Smart Water Timer

Model NO. HTV145FRF

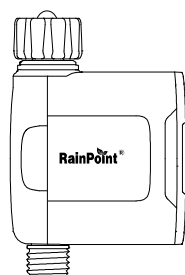


Welcome to the **RAINPOINT** family! Please read the manual before using to learn about the features and functions.

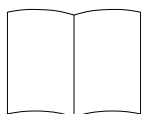
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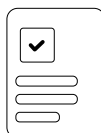
1. Contents in the box



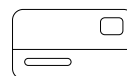
1



2



3

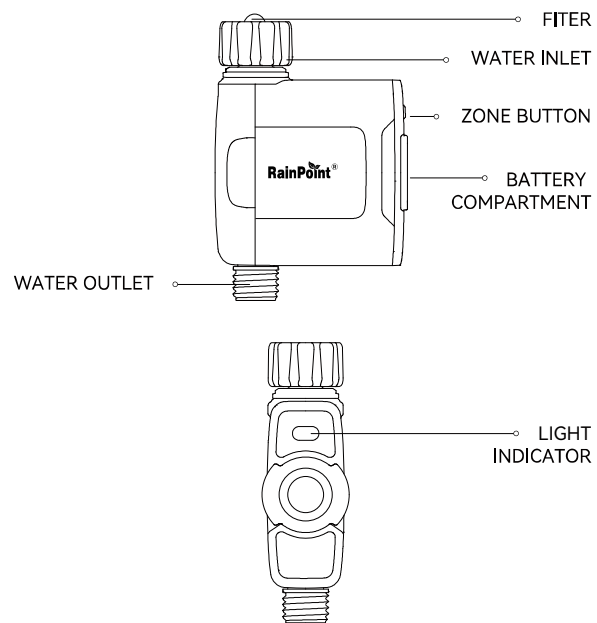


4

1. 1× HTV145FRF 1-Zone Smart Water Timer
2. 1× User Manual
3. 1× Quick Guide
4. 1× Warranty Card

2. Introduction

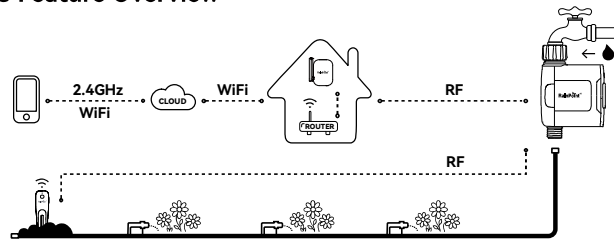
2.1 Product Overview



2.2 Specification

ITEM	SPECIFICATION
Range Between Gateway And Timer	An open distance up to 250 m/820 ft
Working Water Pressure	0.5-8 bar (7.25-116 PSI)
Water Flow Rate	5-35 L/Min (1.32-9.25 GAL/Min)
Working Temperature Range	3-50 °C (37.4-122 °F)
Powered By	4*AA alkaline batteries (not included)
Waterproof Level	IP65
Water Inlet	NH (US) for 3/4" faucet BSP (EU) for 3/4" or 1" faucet
Water Outlet	For 3/4" standard garden hose

2.3 Feature Overview



1. **WiFi Remote Control:** Connect with 2.4GHz WiFi, set and check irrigation schedules by APP.
2. **Scheduled Watering:** The timer can set up to 6 separate watering plans for all three different modes.
3. **Manual Watering:** Manually turn on/off watering and set watering duration for three different modes.
4. **Automatic Watering:** When the WiFi timer is paired with the WiFi soil sensor (not included), it can automatically irrigate or stop watering according to the soil temperature and humidity data, when you locate the home address for the timer, the APP will automatically synchronize the local weather information, and the timer can be automatically executed according to the weather trigger conditions you set.
5. **Rain Delay:** Manual rain delay and automatic rain delay can be set.
6. **Water Flow Meter:** Built-in water flow meter to track water usage in the last 30 days or the last year.
7. **Three Watering Mode:** Normal Irrigation, Cycle&Soak, Misting Irrigation.

8. **Comanagement with family:** Home management allows you to add family members and give them premissions to manage the irrigation of your home garden together.
9. **Low Battery, Water Shortage, Valve Failure (leakage) Alarm:** APP will send you alert messages when low battery, water shortage or valve failure.
10. **One WiFi gateway can pair with maximum 4 WiFi water timers.**
11. **Each valve of the WiFi water timer can pair with one WiFi soil sensor.**

3. Connection



Setup Video

Tips: Please scan the QR code or search the link for setup video or customer support to install the device quickly.

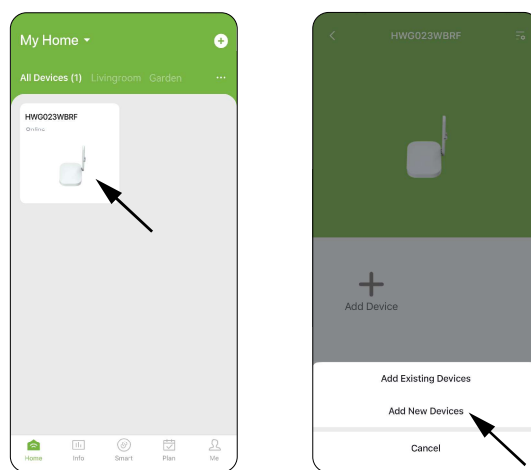
Setup Video: www.youtube.com/@rainpoint

Customer Support: www.rainpointonline.com/pages/support

3.1 Pair timer with hub

In order to remote control and manage irrigation plans, this timer needs to be paired with hub. Please refer to hub user manual to download app and connect the hub with WiFi network first.

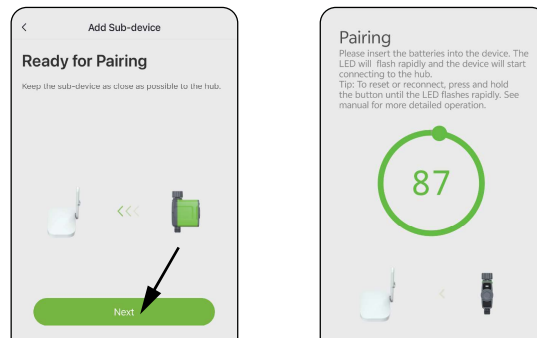
1. After the hub is successfully connected with WiFi, select hub device on app home page, touch **"Add Device"** on hub home page.



2. Find and select **"HTV145FRF"** to add it, or press  on the top right corner to scan product QR code and enter pairing below.

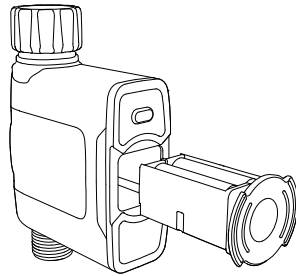
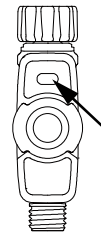


3. Tap **Next** and move onto Pairing page.



4. **Please Insert 4 new AA batteries** (Not Included) into the device. The **LED** will flash red rapidly and the device will start connecting to the hub.

Tip: To reset or reconnect, press and hold the button until the LED flashes rapidly.

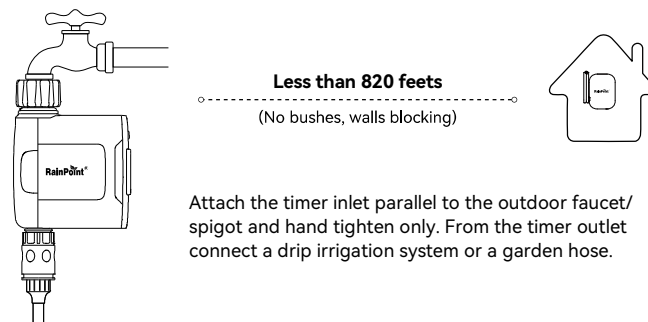


- ① Open the battery compartment cover of the timer.
- ② Insert 4 new AA (1.5V) alkaline batteries (not included).
- ③ Close the battery compartment cover and press down firmly to ensure it is fully sealed.

ATTENTION:

- If the timer will not be used for an extended period, please remove the batteries and dispose of them properly.
- Replace the batteries when the low battery indicator appears on the display.
- Do not throw batteries into fire, as they may explode or leak.
- To ensure longer life, use 4 new AA alkaline batteries (not included).
- Do not mix new and old alkaline batteries, standard batteries (carbon zinc), or rechargeable batteries.

3.2 Install the Timer to the Faucet

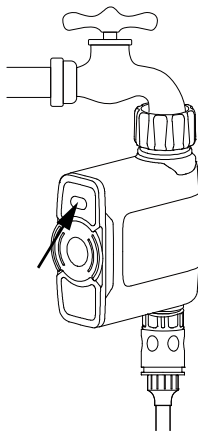


WARNING:

- The water timer can only be used for cold water.
- The water timer uses a 433mHz RF connection to communicate with the WiFi Hub, and must be within a 820ft range, line of sight, of the WiFi Hub. **If there are walls, iron gates or bushes blocking, please shorten the distance between them to better receive the signal.**
- Soil will absorb WiFi and RF signals, the best location of the timer is on the faucet 4 to 8 feet (1.2 to 2.4 meters) above the ground.
- Do not place the water timer in an underground valve box or anywhere your WiFi and RF signal will be obstructed.
- Under freezing weather, the water timer should be removed from the tap and placed properly indoor to avoid any danger of freezing.

3.3 Activate the Timer Before Use

Please activate the valves when getting the timer for the first time, or it's been a long time since your last time to use it.



1. Pulling out the battery box and install 4*AA batteries.
2. Keep the faucet closed.
3. Press the button and you can hear a click sound indicating that the valve is open for manual watering. After a few seconds, press the button again and you will hear a click sound indicating that the valve is closed.
4. **Test:** Turn on the faucet a little bit. Press the button to check if the water flows out or shuts off as expected.

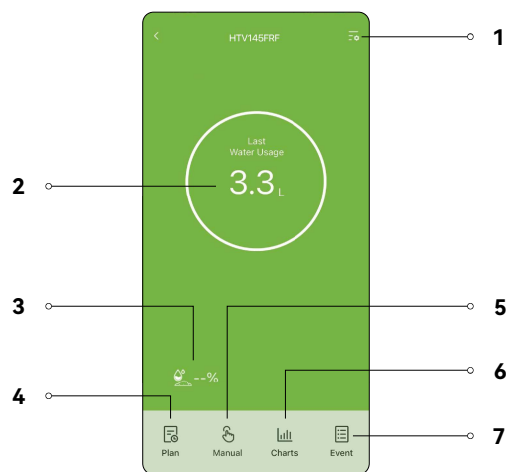
If yes, the timer valves are activated successfully, please use the timer with confidence.

If not, please repeat the step 2~4 for several times, or contact us immediately for support.

NOTE: When testing, please keep away from the water timer outlet to avoid being splashed and wet.

4. App Introduction

4.1 Timer Homepage



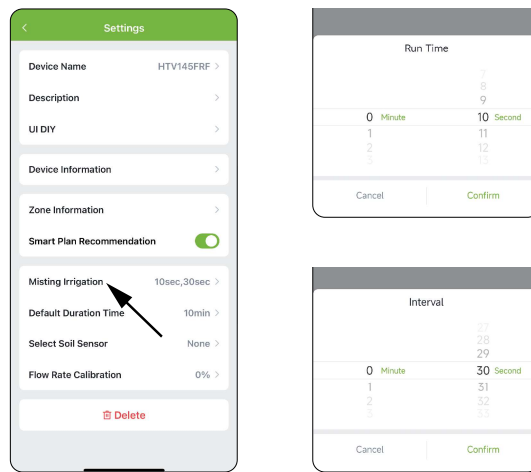
1. **Setting:** Tap the setting icon on the top right corner, you will enter the page for device setting, pair with soil sensor and customize the device watering.
2. **Last Water Usage:** The water timer has a built-in water flow meter, it will calculate the water usage and display the last time irrigation water usage here.

3. **Soil Moisture:** If you have paired a soil sensor with the timer, it will display the soil moisture here.
4. **Plan:** Tap **"Plan"** and you will enter the plan set page, up to 6 plans are available. You can choose from **"Normal Irrigation"** **"Cycle&Soak"** **"Misting Irrigation"** to set your irrigation plans according to your irrigation needs. You can also set **"Rain Delay"** for rainy days by 24/48/72H and set seasonal adjustment to adjust the working time according to the moisture difference of different seasons. Tap the calendar icon to check your plans.
5. **Manual:** Tap **"Manual"** and choose **"Normal Irrigation"** to set the watering time from 1min to 12h for one-time manual watering, and then tap **"Confirm"** to start watering. While the manual watering is running, tap **"Manual"** and then tap **"Confirm"** to stop watering. You can also choose **"Cycle&Soak"** or **"Misting Irrigation"** to set interval watering to set water time and interval time for 1s to 60mins or 1min to 12h according to your irrigation needs.
6. **Chart:** Tap **"Chart"** to check the last 30 days or the last year's water usage.
7. **Event:** Tap **"Event"** to check the online/offline status and irrigation records.

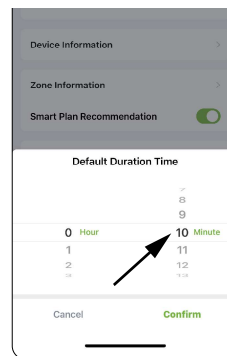
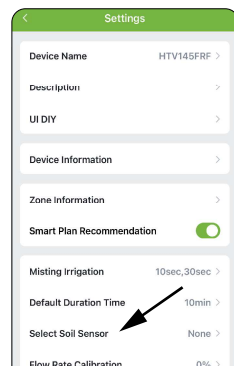
4.2 Basic setting

Find the icon in the top right corner of the app's homepage to access the **"Setting"** page. You can view and manage the timer's basic information, and you can also set some advanced settings for specific functions.

Misting Irrigation: You can set for the water time and mist time from 1s to 60mins.



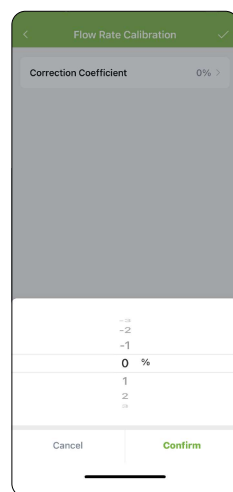
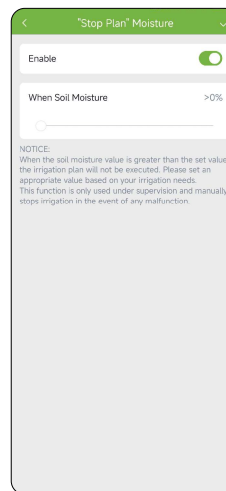
Default Duration Time: You can set the default duration time from 1min-12h.



Soil sensor: If you have a WiFi soil sensor, you can pair the soil sensor to the timer here. It will display the soil moisture on the timer's homepage and stop the plan automatically when the moisture reaches to the set value for irrigation delay.

NOTE: The soil sensor is not included, if you need one, please contact us to know more information of the soil sensor that can pair with the timer.
Email: support@rainpointonline.com

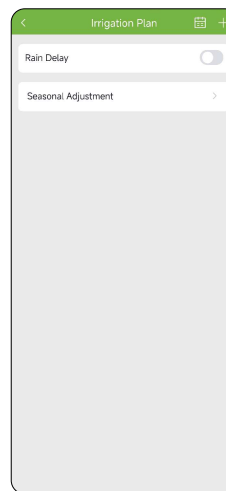
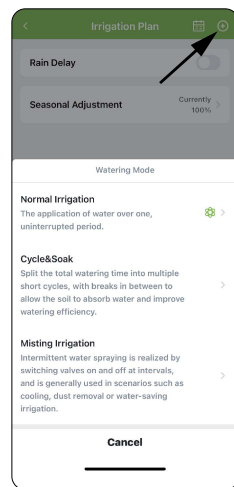
Stop Plan Moisture: After pairing a WiFi soil sensor, you can set the **"Stop Plan" moisture** value for soil moisture to prevent overwatering of plants. Once the soil moisture exceeds this value, all scheduled plans will stop, and they will resume when the moisture drops below this value.



Flow Rate Calibration: When the water usage record is incorrect, you can calibrate the record here from -20% to 20%.

4.3 Plan Setting

Tap **"Plan"** at the bottom left corner of the timer's homepage to set the irrigation plans. **Up to 6 plans can be set for a valve.**



First tap the "+" icon on the top right corner of the **"Irrigation Plan"** page to choose your desired irrigation mode from **"Normal Irrigation"** **"Cycle&Soak"** **"Misting Irrigation"**.

Normal irrigation: Set the watering frequency, duration, start time, effective date and water usage limit.

Plan Settings

Watering Mode ⓘ Normal Irrigation

Repeat ⓘ Every 3 Day >

Irrigation Duration ⓘ 10min >

Adjustment by Season 10min

Start Time ⓘ 08:00 >

Effective Date 2026-01-04 >

Water Usage Limit ⓘ ☐

Tips: ⓘ stands for smart recommended parameters. The data is calculated by a smart algorithm based on the pipeline information you have set. Go to the Zone information settings.

Plan Settings

Watering Mode ⓘ Cycle & Soak

Repeat ⓘ Every 3 Day >

Irrigation Duration ⓘ 10min >

Adjustment by Season 10min

Each Watering ⓘ 5min >

Soaking After Watering ⓘ 30min >

Est. Total Schedule 40min

Start Time ⓘ 08:00 >

Effective Date 2026-01-04 >

Water Usage Limit ⓘ ☐

Tips: ⓘ stands for smart recommended parameters. The data is calculated by a smart algorithm based on the pipeline information you have set. Go to the Zone information settings.

Cycle & Soak: Set the water cycle frequency, duration, cycle duration, soak duration, start time, effective date and water usage limit. You can set the cycle and soak duration from 1min to 12h.

Misting Irrigation: Set the watering frequency, duration, run time, interval time, start time, effective date and water usage limit. You can set the run time and interval time from 1 s-60 mins.

The screenshot shows a mobile application interface titled "Plan Settings" with a green header bar containing a back arrow and a checkmark. The settings are organized into several sections:

- Watering Mode:** A dropdown menu currently set to "Misting Irrigation".
- Repeat:** A dropdown menu set to "🌱 Every 3 Day" with a right-pointing chevron.
- Irrigation Duration:** A dropdown menu set to "🌱 10min" with a right-pointing chevron.
- Run Time:** A dropdown menu set to "10sec" with a right-pointing chevron.
- Interval:** A dropdown menu set to "30sec" with a right-pointing chevron.
- Adjustment by Season:** A dropdown menu set to "10min".
- Start Time:** A dropdown menu set to "🌱 07:51" with a right-pointing chevron.
- Effective Date:** A dropdown menu set to "2026-01-04" with a right-pointing chevron.
- Water Usage Limit:** A toggle switch that is currently turned off.

At the bottom of the screen, there is a small tip: "Tip: 🌱 stands for smart recommended parameters. The data is calculated by a smart algorithm based on the pipeline information you have set. Go to the [Zone information settings](#)."

Water Frequency: Set the watering frequency for your schedule with five options: everyday, odd days, even days, interval, and custom.

Everyday	✓
Odd Dates	
Even Dates	
Interval	
Custom	
Cancel	Confirm

Plan Settings

Watering Mode ⓘ Normal Irrigation

Repeat 🔄 Every 3 Day >

Irrigation Duration 🕒 10min >

Adjustment by Season 10min

Start Time 08:00 >

Effective Date 2026-01-04 >

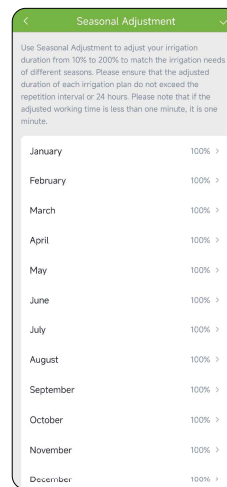
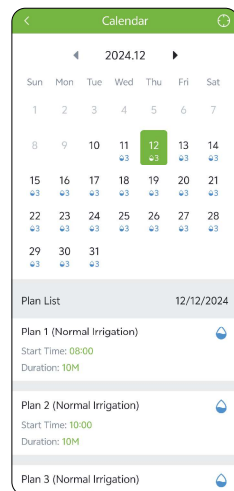
Water Usage Limit ⓘ ☐

Tips: ⓘ stands for smart recommended parameters. The data is calculated by a smart algorithm based on the pipeline information you have set. Go to the [Zone information settings](#).

Delete

Save and Delete A Plan: After completing the settings, press the "✓" in the top right corner to save your plan. You will see a plan overview displayed in the list on the "**Irrigation Plan**" page. If you need to delete a plan, click on the plan to enter the plan details page, then click the delete button to remove it.

Seasonal Adjustment: You can set the seasonal adjustment value from 10%-200% for different seasons to adjust the actual watering time for the timer according to the different moisture in different seasons.



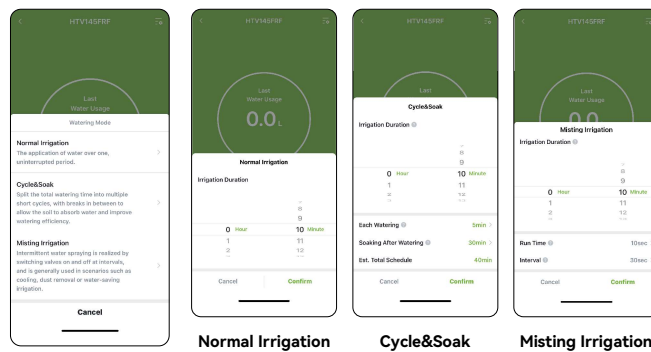
Calendar: Tap the calendar icon on the top right corner on the "Irrigation Plan" page, and you can check the overview of all your watering schedules.

4.4 Manual Water Setting

Select **"Manual"** at the bottom of the timer's homepage to choose the type of manual irrigation: **Normal Irrigation, Cycle&Soak, Misting Irrigation**. Default watering is 10mins. You can start the manual watering by 2 methods:

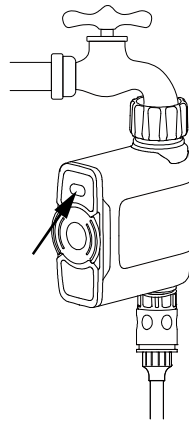
Method 1: Timer Homepage

On the timer's homepage, click **"Manual"** to select the manual watering mode and time to start and stop the manual watering automatically.



Method 2: Timer Button

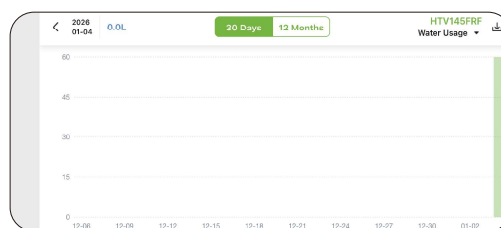
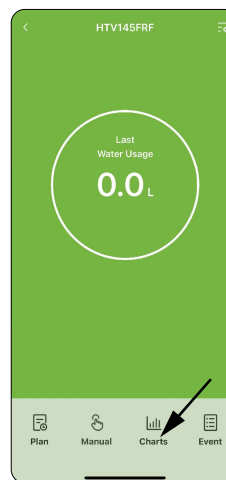
Short press the button on the timer to open valve for manual watering, short press again to close the valve.



NOTE: When you start manual watering, if there is an existing schedule currently running or if a schedule is set to start during your manual watering time, that scheduled plan will be skipped.

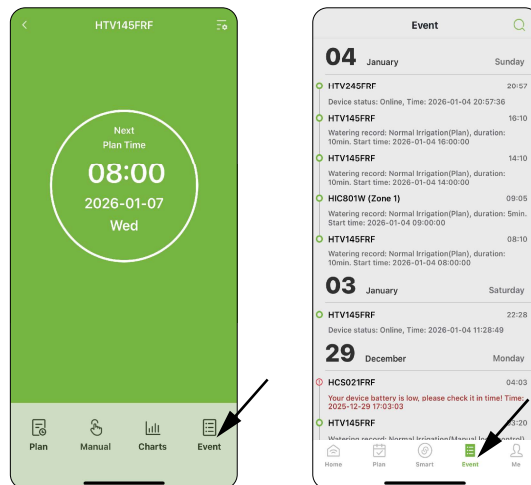
4.5 Built-in Water Flow Meter & Chart

The timer is designed with a built-in water flow meter, it will record the water usage for the irrigation. You can tap **"Charts"** at the bottom of the timer's homepage to check the last 30 days or the last year's water usage records.



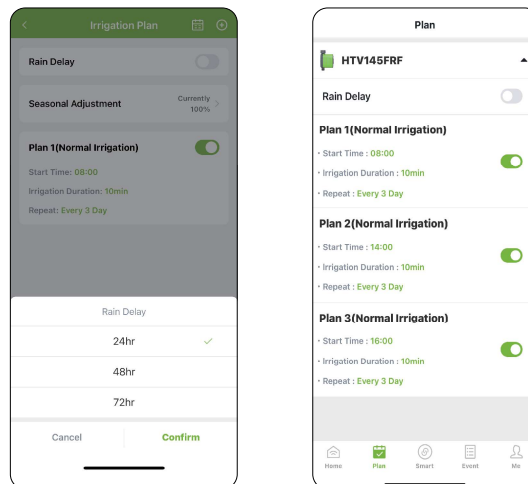
4.6 Device Status Record & Event

Tap **"Event"** on the bottom of the timer's homepage to check the online/offline status and irrigation records. You can also check the **"Event"** on the bottom of APP's homepage.



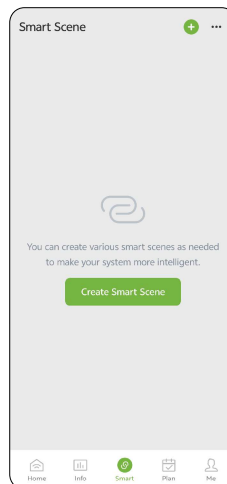
4.7 Rain Delay

You can set the **"Rain Delay"** time on the **"Irrigation Plan"** page by tapping **"Plan"** on the bottom of the timer's homepage, or you can set it on the **"Plan"** page below. Rain delay is applicable on rainy days or during other weather conditions that cause high soil moisture. During the rain delay, the timer will stop watering. Once the rain delay ends, the timer will proceed according to the next scheduled watering plan. The timer can be set for a rain delay of **24, 48, or 72 hours**.



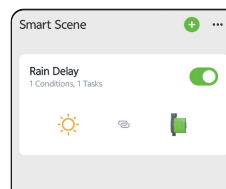
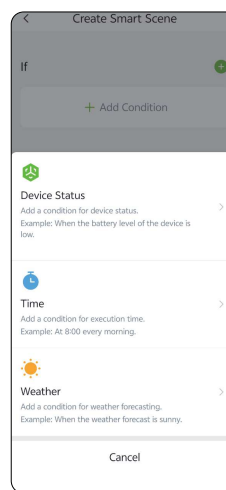
4.8 Smart Scene

The **Smart Scene** function allows you to set schedules for the devices execute automatically according to the set conditions such as device status, time and weather. For example, RAINPOINT HOME APP can obtain weather forecast information of your home location. When you set the condition for immediately delaying the watering plan when it rains, the timer will automatically execute the watering delay when it rains in your local area. You don't need to worry about whether it is raining at home when you are traveling.



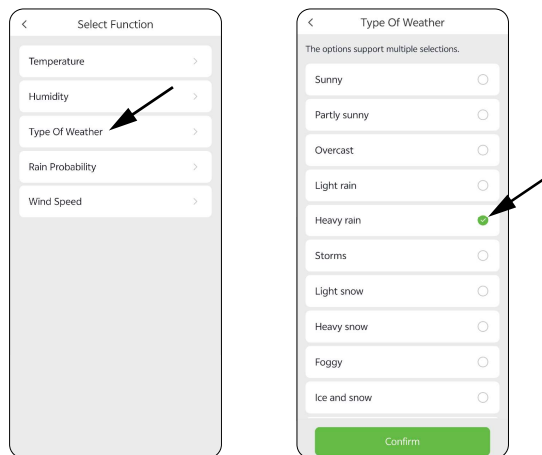
- **Steps to Set Smart Scene**

1. **Create Smart Scene:** Go to the "Smart" page, tap "Create Smart Scene" or the "+" icon on the top right corner to add an automation task.
2. **Add Condition:** Set the conditions that the device needs to perform when the conditions are met.
3. **Add Task:** Set the tasks for the device to perform when the set conditions are met.
4. **Effective Period:** Customize the time for the device to perform the smart schedule.
5. **Execution Frequency:** Set the frequency for the device to run the smart schedule cyclically daily.
6. **Save the Smart Scene Schedule:** Click "Confirm" and enter the name for the schedule and then click "Confirm" to save the setting for the smart scene. The device will automatically execute the smart schedule according to what you set. You can check the smart scenes you set on the "Smart" page.



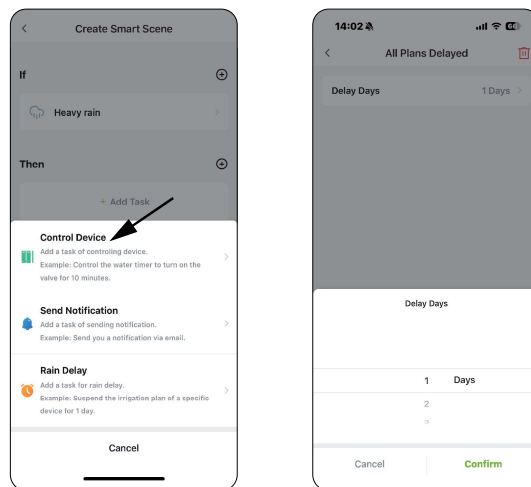
- **How to set automatic rain delay ?**

1. Tap "**Smart**" at the bottom of the APP home screen.
2. Tap "**Create Smart Scene**" or the "+" icon on the top right corner to add an automation task.
3. Tap "**Add Condition**", then select "**Weather**"; locate the city, select "**Type Of Weather**" and then select "**Heavy rain**"; tap "**Confirm**" to continue.



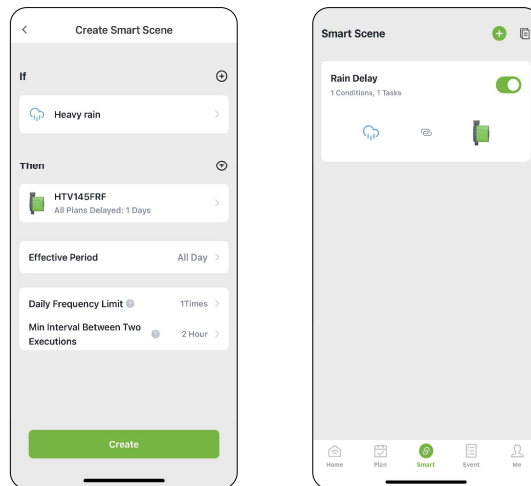
Note: Please accurately locate the city where your home is located. The APP will automatically obtain weather forecast data based on the city you locate. When the weather forecast turns to heavy rain, the conditions for execution will be triggered.

4. Tap **"Add Task"**, select **"Control Device"** to set up a task about the device operation.
5. Select **"HTV145FRF"**.
6. Tap **"All Plans Delayed"** to select the delay days and tap **"Confirm"**.



Note: For the task performed by the device, select **"Control Device"**.

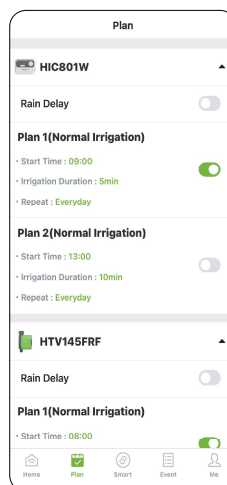
7. Check your execution conditions and tasks.
8. Tap **"Create"** to save your settings.



For example: The picture on the left shows that when the weather is heavy rain, the valve of the HTV145FRF will be automatically closed, and the watering will be delayed for one day.

4.9 Plan Overview & Setting

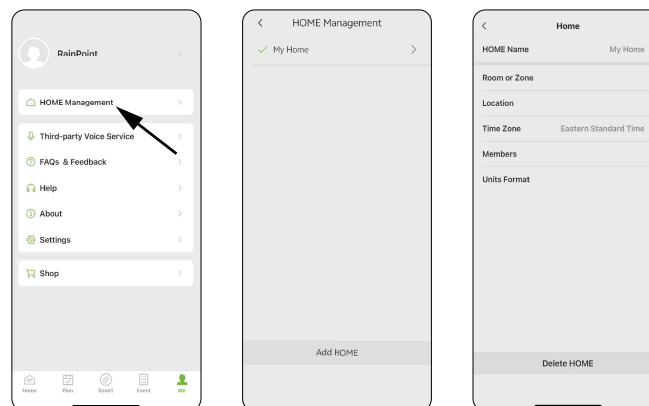
In the **Plan** screen, you can check the plan you set of all your connected devices and adjust each plan here conveniently.



4.10 Home Management

RainPoint supports adding family members and sharing your home device to achieve co-manage the home irrigation system with your family.

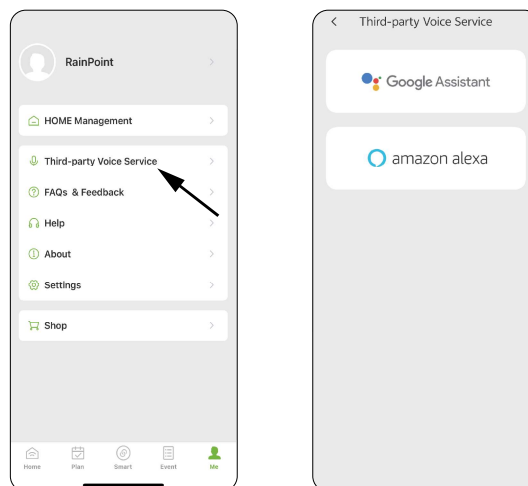
1. Tap **Me** at the bottom of the APP home screen.
2. Select **HOME Management**. You can set the current home or create a new home.
3. Set your **HOME Name, Room or Zone, Location, Time Zone, Members and Units Format**.



4.11 Google Assistant/Alexa Voice Control

- How to get third-party control / voice control?

If you have a **Google Assistant** or **Amazon Alexa**, please tap "**Third-party Voice Service**" in "**Me**" page, and then tap "**Google Assistant**" or "**Amazon Alexa**" to check the operation guide to connect your Smart water timer to the voice control device. After successfully connecting, you can control the Smart water timer by voice.





Setup Video

Please scan the QR code to check the video of how to connect your water timer to the voice control device.

NOTE: The Smart water timer can only perform simple voice commands, such as "turn on" or "turn off" and the commands should be **English only**. If you have any questions or suggestions about this feature, please feel free to contact us.

5. The Meaning of the LED Light of the Timer

1. **Short press the button:** Open/close the valve, the white light flashes once.
2. **Power on the timer:** Red and white lights turn on simultaneously for 1 second, the red LED blinks rapidly (on for 0.2 seconds, off for 0.2 seconds in a cycle).
3. **Network connection indication:** The red LED blinks rapidly (on for 0.2 seconds, off for 0.2 seconds in a cycle). **Successful pairing:** white light stays on for 2 seconds. **Failed pairing:** red light stays on for 2 seconds.
4. **Long press the button to restart and enter pairing mode:** The red indicator light stays on for 2 seconds, then both white and red LEDs illuminate for 1 second, followed by rapid blinking of the red LED to indicate entry into pairing mode.
5. **Normal irrigation mode:** The white light flashes once every 4 seconds.
6. **Cycle & Soak mode:** The white light flashes twice every 4 seconds.
7. **Misting irrigation mode:** When the valve is open, the white light flashes twice every 4 seconds, when the valve is closed (soaking), the white LED flashes once every 10 seconds.
8. **Low battery indication:** When in a low battery state, the red LED flashes once every 3 seconds, on for 0.1 seconds.

6. Troubleshooting

Problem	Possible Factors	Solution may help
Unable to open the valve.	• Low battery. • Debris in the inlet. • Unstable network or response delay.	• Replace with new batteries. • Regularly clean the debris in the filter to avoid interference with use. • Wait a moment and try opening the valve again.
Flow meter is inaccurate.	• Data is inaccurate due to an angled installation. • Low or unstable water pressure from the faucet.	• The water timer should be installed vertically to the ground, it is recommended not to install it at any angle to avoid affecting the water volume recording. • The normal error value for water counting is $\pm 5\%$.
Timer cannot connect.	• WiFi network is unstable. • Too far from the hub. • Timer is not in pairing mode.	• Please check whether the WiFi network environment is functioning properly. • When connecting to the irrigation timer, stay close to the hub and router. • Re-pair the timer: press and hold the timer button until the red light flashes quickly, indicating pairing (or remove the device from the homepage and reconnect).
Not executing as scheduled.	• Impurities in the water have entered the filter. • Rain delay has been set. • In low power mode, the timer enters low power protection mode and does not execute the schedule.	• Impurities in the inlet need to be regularly cleared to prevent them from clogging and interfering with the irrigation program. • Check if the rain delay has been set. • Replace with new batteries.

7. FCC Statement

FCC ID: 2AWDBHTV145FRF

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference.
2. This device must accept any interference received, including interference that may cause undesired operation.

FCC Warning: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

Note: This equipment 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. This equipment generates, uses, and can radiate radio frequency energy, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Note: The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to operate the equipment.

8. Warranty Policy

RainPoint provides a 1-year warranty against manufacturing defects in materials and workmanship from the date of purchase. During the warranty period, we'll replace free of charge the product found to be defective under reasonable use and service as determined solely by RainPoint. To extend and activate your warranty, please email us with your order ID at support@rainpointonline.com and we'll respond within 24 hours.

9. Customer Support



If you find it difficult to set up and want to watch the setting tutorial video, please subscribe to our channel RainPoint on YouTube.

Or scan the QR code to visit the RainPoint channel on YouTube quickly.

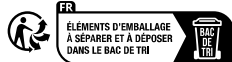
If the app and the user manual don't have what you're looking for, and need some help about Rainpoint, please contact us by
LOT NO.: XXXXXX (on the timer)



Made in China



Not included





Need Help ?

Scan the QR code for more help



or

Email: support@rainpointonline.com

Tel: +1 (213) 594-7686

