



**Powered by tuya**

**LED Wi-Fi Smart Thermostat Radiator Valve**

Supports 4 standard modes and up to 6 programs, for 7 days a week.

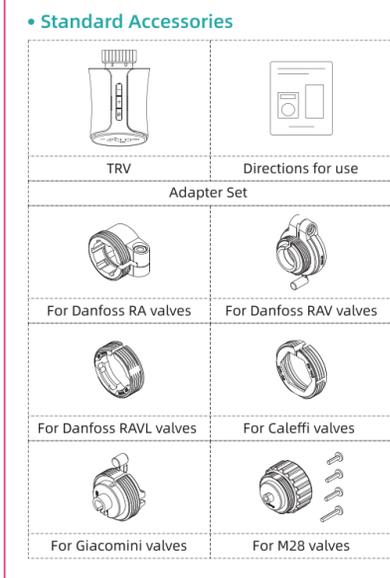
**• Safety Instructions**  
This product is for controlling water heating systems only. Avoid high temperatures and humidity for the battery. If you notice unusual issues like overheating, leaks, or strange smells, stop using it immediately and contact a professional. Do not disassemble or attempt repairs yourself.

Our products comply with the following regulations:  
 CE conformity (RED, LVD, EMC).  
 RoHS conformity.

**• Access the online Instructions**

Scan the QR code to get product manuals, videos and more information.

**Important Note:** This product must use LR6 alkaline batteries. It is recommended to choose new, high-quality batteries and regularly check the battery level to ensure it meets temperature control needs. When the TRV or app shows a low battery, please replace the batteries as soon as possible.



**• Technical Specifications**

Power	3 x 1.5 V Alkaline AA batteries
Standby current	6 µA Min
Operating temperature	0 ~ 50 °C, for indoor use only
Storage temperature	-20 ~ 70 °C
Wi-Fi	802.11b/g/n (2.4GHz)
Wi-Fi range	200m+ in the open field
Temperature sensor	NTC,B=3380,R25=10KΩ±1%
Protection level	IP20
Surface temperature	90 °C Max (at the radiator)
Connection	M30 x 1.5 mm
Linear travel	6 mm
Compatibility	Compatible with most radiators available on the market.
Dimensions(W x H x D)	59.7 mm x 95.3 mm x 59.7 mm
Weight	145 g

**• Device overview**

**• Indicator Light**

LED Light	Meaning
	Usually the room temperature is displayed when "set" is turned on, the target temperature is displayed.
	1. If there is no connection to the mains, it is turned off. 2. When connecting to the network, it will flash. 3. Once the network connection is successfully established, it will light up.
	Heating
	Programming mode
	Custom mode
	Comfort mode (Default: 20 °C)
	ECO mode (Default: 15 °C)
	Anti-Frost mode (Default: 5 °C)
	OFF mode (OFF)
	Vacation mode
	Boost mode
	Window opening detection
	Child lock function
	Valve Calibration Failed
	If the battery charge drops below 20%, the indicator light stays on, and you should replace the battery right away.

**• Radiator Thermostat Installation Guide**

**Step 1: Install/Replace Batteries**

**Installation steps:**

- Press the battery compartment lock and lift the cover upwards to remove the battery cover.
- Insert 3 new LR6 AA batteries into the battery compartment and press it down.
- After installing the battery, the device displays "RS". Press the "Set Button" briefly to adjust the screen to the appropriate direction.
- Reattach the battery compartment cover and latch it into place.

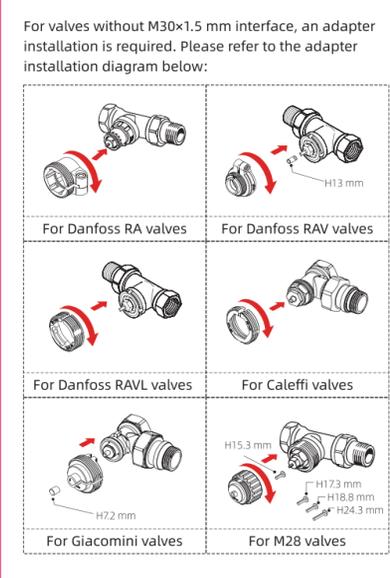
**Step 2: Install Adapter**

First, check if your valve interface is M30 x 1.5 mm.

- If your valve interface is M30 x 1.5 mm, you can directly install the product on the valve.
- If your valve interface is not M30 x 1.5 mm, you need to mount the adapter on the valve.

**Installation steps:**

- Check your valve's connector type.
- Choose the correct adapter.
- Firmly screw the adapter onto the valve and make sure it's properly secured for correct operation.



**Step 3: Install Thermostat**

1. Please wait for the "RS" animation to complete. When you see the "RS" animation loading, it indicates that the device is initializing.
2. After the "RS" loading animation ends, use the valve nut to attach the device to the radiator. Once the device is attached to the radiator, press the "Mode Button" quickly, and the screen will display "R0R0", which indicates that the device is adjusting to the valve.
4. When the device adaptation is successful, the screen will display the current ambient temperature.

**Attention:** Please be aware that it is essential to install the valve, otherwise, the device's screen will display the symbol "⚠".

**If you encounter an "⚠", please follow these steps**

1. First, check the following items:
  - Is the installation location correct?
  - Is the connection secure?
  - Is the valve body compatible?
2. Calibration Method Selection:
  - Method 1 (Manual):
    - Remove and reinstall the battery to restart the device (key step).
    - Refer to "Step 3" to perform the operation again.
  - Method 2 (App):
    - Complete the network setup in "Device Connection" before continuing.
    - Follow the instructions on the App.
3. Once the operation is complete, the status of the "⚠" symbol will be cleared.



**Step 2: Add Device**

**Attention:** The gateway must be added before adding TRV.

**Enter Network Configuration Mode**

1. In custom mode, press and hold the "Minus Button" until the screen displays "OFF".
2. Press and hold the "Mode Button" for a minimum of 3 seconds. When "OFF" begins circular animation on the display, the device has successfully entered network configuration mode.

**Add Device via app**

**Attention:** Please turn on your phone's Bluetooth and Wi-Fi in advance. And make sure that the smartphone operating system allows the Smart Life app to access the Bluetooth.

• Open the app's "Home" interface, click on "+" in the upper right corner and select "Add Device".

• The system will automatically search and find the device, then click "Add".

• Select 2.4 GHz Wi-Fi and enter the password, click "Next".

• Wait for a while for the device to be successfully added, then click "Done" to complete the installation.

**• Main Function**

**1. Temperature Setting**

Press the "Plus Button" or "Minus Button" to adjust the temperature per level in 0.5 increments.

**2. Temperature Control Mode**

Short press the "Mode Button" to switch between four standard modes and programming mode "⊙".

**Four Standard Modes**

- \* **Comfort Mode (Default: 20 °C)**  
This mode ensures ideal indoor temperature. When enabled, the heating system adjusts to the pre-set comfort temperature, constantly maintaining it to keep your home cozy and warm.
- ⊙ **ECO Mode (Default: 15 °C)**  
ECO mode is an energy-saving feature that maintains the temperature slightly below comfort level to prevent excessive heating and energy waste, ensuring basic indoor comfort and significant energy savings.
- \* **Anti-frost Mode (Default: 5 °C)**  
This mode prevents pipe freezing by maintaining a safe temperature of 5°C when activated, ideal for extended absences or colder climates.

⊙ **OFF Mode**

- If heating is not required in the room, switch the device to OFF mode to close the valve.
- How to set OFF mode:
  - Method 1: press the "Minus Button" until "OFF" appears on the display.
  - Method 2: Short press the "Mode Button" to switch between modes.

**Frost Protection Function:** If frost protection has been activated in the software settings, the device will automatically enable frost protection function even in OFF mode to prevent the valve system from freezing.

**Operating Logic:** The valve opens automatically when room temperature falls below 5 °C and closes when temperature rises above 7 °C.

⊙ **Programming Mode**

- If the screen says "⊙" the device is in programming mode.
- Configure temperature and schedules via the dedicated mobile app with smart programming. Set up to 6 programs daily with 4 mode options (Comfort mode, ECO mode, Frost Protection mode, and Custom mode).
- Manual changes will be made until the next when the schedule changes. After that, the set heating schedule is reactivated. (The "⊙" symbol will flash on the screen.)

**When the device is in any of the four standard modes, Short press the "Plus Button" or "Minus Button" will activate custom mode "⊙".**

⊙ **Custom Mode**

- When "⊙" is displayed on the screen, the device is in custom mode.
- The temperature is controlled according to the valve set using the button. It remains activated until the next manual change.

**Attention:** Before initial network configuration, the device has limited functionality. Programming, Vacation, and Boost Modes are temporarily disabled and will be available once network setup is completed.

⊙ **Vacation Mode**

- This mode is used when you are in the vacation. You can specify the duration, and the device will switch to antifreeze mode for to activate this period. After of the duration, the device automatically switches to the previous mode.
- You can choose this mode only in the app. When activated, "⊙" and "⊙" is appear on the screen.

**Attention:**

- Vacation Mode temperature follows Anti-freeze Mode temperature.
- To exit Vacation Mode manually, press and hold the "Mode Button" for 3 seconds to return to the previous mode.

**Boost Mode**

- In vacation or Programming mode, activate boost mode by setting a duration. The device will switch to boost mode and then return to the previous setting.
- Boost mode is automatically disabled when the device is turned off.
- You can only choose this mode on app. When it is activated, "BOOST" is displayed on the screen.

⊙ **Activating Switch-On Mode & Heating Pause**

- Press the "Plus Button" until "ON" displays. This action will fully open the valve.
  - Winter Operation: If the external hot water supply is turned on and hot water is present in the pipes, setting the device to "On-Mode" will forcefully open the valve to heat the indoor space.
  - Summer Operation: If the external hot water supply is turned off and there is no hot water in the pipes, setting the device to "On-Mode" will not heat the indoor space. This setting allows the internal spring of the valve to retract, which helps extend its lifespan.

3. **Screen Display Rotation**

Tap the "Set Button" on the device to change the screen orientation.

4. **Child Lock Function**

- The operation of the device can be locked to prevent settings from being changed unintentionally.
- To activate/deactivate childlock, press and hold Mode key "⊙" for 3 seconds and "⊙" will be displayed/disappear on the screen.

5. **Detection of Window Opening**

- If the room temperature drops over 1.5°C in 5 minutes while heating, the device activates window detection and stops heating.
- Activate the window function to close the valve for 30 minutes, with status shown on the screen.

**Attention:** The detection can be cancelled by:

1. Setting the temperature or changing the mode in the app or on the device.
2. The detected temperature rises by more than 1.5°C within 4.5 minutes.
3. No action, the detection will automatically stop after 30 minutes.

6. **Anti-Limescale Protection**

- The device turns on automatically every Monday at 12:00 p.m. for maintenance to prevent the device's valve calcification.
- During this time, "CAL" on the screen.

7. **Restoring Factory Settings**

- Press and hold the Mode key "⊙" and insert the batteries at the same time until "FRC" is displayed on the screen and blinking for 3 seconds.
- The factory settings of the device will be restored and the device will be restart.

**Attention:** If you restore the factory settings, all previous settings will be lost.

8. **Power Failure Memory Function**

The device maintains the current working mode and resumes the previous mode when it is turned back on after a power failure.

9. **System Mode (For App Use Only)**

The system modes determine how the device controls and regulates the heating process.

**ON-OFF Mode**

In this mode, the valve operates in a fully open (100%) or fully closed (0%) manner. When heating is activated, the valve opens completely; when heating is turned off, the valve closes completely. Throughout this process, the valve position remains fixed and does not make any adjustments.

**PID Mode**

In this mode, the valve continuously adjusts its opening percentage. This gradual adjustment helps align the actual heating temperature with the desired target temperature, maintaining a comfortable room temperature with minimal fluctuations.

**Attention:**

1. PID mode typically consumes more energy than ON-OFF mode. Please select the system mode that best suits your needs.
2. Frequent switching between system modes may negatively impact device performance; therefore, it is recommended to operate it with caution.

10. **Switching Hysteresis (For App Use Only)**

**Range: 0.5-5°C**

**Attention:** The switching hysteresis setting can only be adjusted in ON-OFF mode.

The switching hysteresis function reduces frequent switching by allowing downward deviation. For example, with a target temperature set to 25°C and a hysteresis of 0.5°C, the device will activate heating at 24.5°C and deactivate at 25°C.

11. **Calibration (For App Use Only)**

The temperature calibration function allows users to adjust the device's temperature measurements to ensure accurate readings.

How to Calibrate:

1. In the app, navigate to Settings > Temperature > Calibration.
2. Adjust the device's temperature readings as needed to meet your requirements.
3. Save the settings to complete the calibration process.

**• Error code**

Troubleshooting and maintenance

Code	Problem	Solution
F0	Temperature Sensor Error	Contact the customer service staff
F1	Valve Response Delay	Check the installation and heating valve
F2	Excessive Valve Travel	Check the fastening of TRV
F3	Insufficient Valve Travel	Check the heating valve
F4	Battery Depleted	Replace batteries immediately
F5/⚠	Valve Calibration Failed	Check whether the valve is installed
F6	The batteries are of poor quality and not enough to power the motor	Replace batteries immediately

**• Voice Control**

The following represents a partial list of available voice commands:

Amazon Alexa: Alexa,	Google Home: OK Google,
Turn on SCENE_NAME.	Turn on SCENE_NAME.
Set the DEVICE_NAME to auto.	Set the DEVICE_NAME to auto.
Set the DEVICE_NAME to off.	What mode is the DEVICE_NAME set to.
What is the temperature of DEVICE_NAME.	What percentage charge does my DEVICE_NAME have.
What is the target temperature of the DEVICE_NAME.	
Set the DEVICE_NAME to 26 degree.	Set the DEVICE_NAME to 26 degree.
Drop the DEVICE_NAME by 1 degree.	Drop the DEVICE_NAME by 1 degree.
Decrease DEVICE_NAME temperature.	Raise the DEVICE_NAME by 1 degree.
Raise the DEVICE_NAME by 1 degree.	Increase DEVICE_NAME temperature.
Increase DEVICE_NAME temperature.	What is battery on the DEVICE_NAME.

**Attention:** "SCENE\_NAME" is the scene name and "DEVICE\_NAME" is the default device name - both can be customized. Please ensure the temperature units are consistent between the device and smart speaker.