

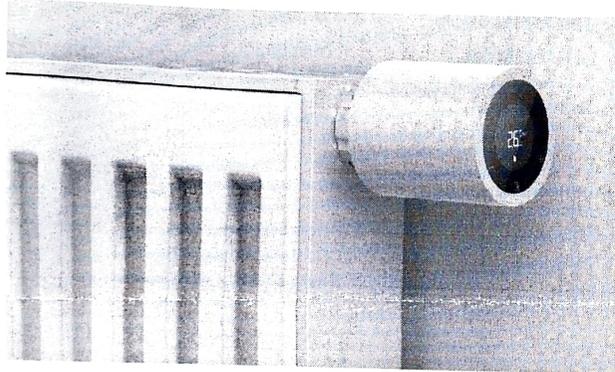
Zigbee Thermostat Radiator Valve



Model: BAB-1413-C

User Guide

PRODUCT DESCRIPTION

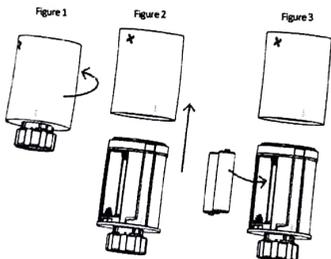


Zigbee Thermostat radiator valve (TRV) is a self-regulating valve fitted to hot water heating system radiator to control the temperature of a room by changing the flow of hot water to the radiator. With the TRV you can conveniently adjust the room temperature between 5~35°C, and save more than 15% of energy. The radiator thermostat fits to all common radiator valves and is easy to mount without having to drain any water or intervene in the heating system. The additional boost function enables the radiator to be heated up quickly for a brief period of time by opening the valve for 5 minutes. There will be a pleasant room temperature right away because of the radiated heat.

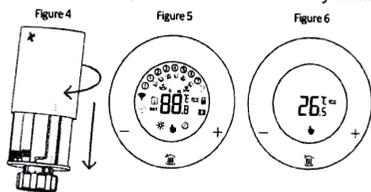
INSTALLATION

Step 1: Power on.

Turn the case counterclockwise (Figure 1), and then pull the case out (Figure 2); Put two 3V batteries into the valve (Figure 3).



Then yellow arrow to yellow arrow, tighten the housing clockwise (Figure 4). After power on, the screen is fully displayed (Figure 5); and the screen displays the current temperature after full display. Touch "+" or "-" to adjust the set temperature. (Figure 6).



WELCOME

First, thank you for your purchase. Please read this manual completely and carefully before starting to use the device. The manual contains important information about the intended use of the device. Especially observe the safety notes. Please also make sure someone qualified to install the radiator comply with all local regulations. Keep the manual for later consultation.

PRODUCT DESCRIPTION

Radiator Thermostat (TRV) × 1 PC
RAVL Adapter × 1 PC
RA Adapter × 1 PC
M28 Adapter × 1 PC

Note: Not include eWelink Zigbee Gateway

User Guider × 1 PC
Caleffi Adapter × 1 PC
Giacomini Adapter × 1 PC
RAV Adapter × 1 PC

TECHNICAL DATA

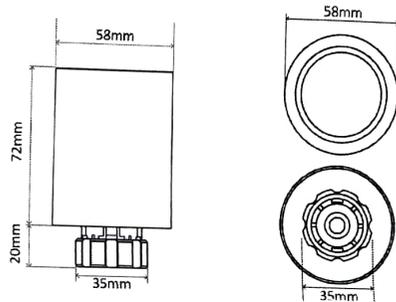
Power Supply: 3V, 2×AA Batteries (packing not have battery)
Ambient Humidity: 5~95%RH (Not Condensing)
Maximum Stroke: 5.5mm
Set Temp. Range: 5~45°C
Ambient Temp.: 0~45°C
Protection Class: IP 20
Button: Touch Button

Accuracy: ±0.5°C
Display Temp. Range: 0~70°C
Storage Temp.: -5~45°C
Timing Error: <1%

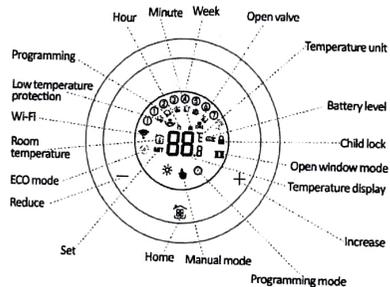
FEATURES

1. Good looking and modern product shape, LCD touch screen.
2. Self-developed unique motor, sound decibel is less than 25dB, maximum stroke is 5.5mm and the stick is thick, 8mm in diameter.
3. Suitable for a variety of valves.
4. Vary colors are available like White, Black.

DIMENSION



HOME SCREEN QUICK REFERENCE

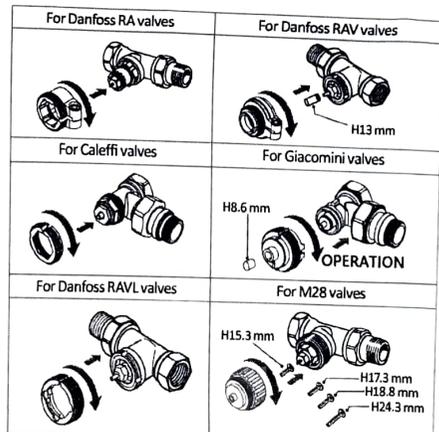


Step 2: Select the adapter.

TRV is usually connected with M30*1.5mm valve. If you have different valves, please determine your valve type according to the picture below, and choose the correct adapter from the package. If you do not find the valve that matches your use in the picture below. Please buy it carefully.

Step 3: Install the adapter.

Install the adapter on your valve as the picture below. If you don't need an adapter, please ignore this step.



OPERATION

1. Power on

After installing the battery, it will automatically turn on. It can't be turned off till the battery is removed. When the TRV is turned on, all icons will be displayed firstly, the motor of the valve will return to its initial position. And then display the temperature of the room. And you can begin to use the TRV normally, touch "+" or "-" to adjust the set temperature.

2. Mode selection

Press "⏏" to switch between manual, programming, and ECO mode.

a. Manual mode

Press "⏏" to select manual mode "🏠". In this mode, the device executes manual temperature setting. When the set temperature is lower than the "minimum temperature", the valve is closed (forced closed).

b. Programming mode

Press "⏏" to go to programming mode "🕒". In this mode, the device executes a preset week programming temperature time and temperature.

c. ECO mode

Press "⏏" to select the ECO mode "🌿". If the ECO mode is displayed, the default temperature is 20°C. When the room temperature is lower than 20°C, the device start valve is opened, and when it is higher than 20°C, the device start valve is closed.

3. Set the temperature

Press "+" or "-" key to adjust the temperature in manual mode.

4. Set the clock

If you hold down the "⏏" key for 3s, the screen will display "h" and a number, indicating that you can set the hour by using the "+" or "-" keys. Press the "⏏" key again. "m" is displayed on the screen, indicating that you can set the minute by pressing the "+" or "-" keys. Press "⏏" again, the screen

will display "number", indicating that you can set the week by using the "+" or "-" keys.

5. Child lock

Press the "+" and "-" keys together for 3s to lock or unlock the keys.

6. Battery

When the battery is fully charged, "100%" is displayed. When the battery is low, "🔋" is displayed.

7. Force heat

Press and hold the "+" key for 3 seconds, release it when the b5 symbol on the screen flashes, the device will enter the forced heating mode, and the "🔥" icon will blink; In this mode for 3 s, until the b5 symbol on the screen flashes, release, exit the forced heating mode.

8. Adjusting/Setting the programmable Schedules

Method 1: Manually set the programming Settings for one week. The specific operations are as follows:

Manual editing: Hold down the "⏏" key for 3s. When you see the blinking digits on the screen, press the "⏏" key four times to skip the clock setting. When the screen shows "10204507" (means Monday to Sunday), flashing digits and "h", can be set by the "+" "-" hours. Press the "⏏" button again, flash the number and "m", you can set the minute by "+" and "-"; Press "⏏" again, the screen displays "Set", you can set the temperature by "+" and "-". This completes the weekly programming temperature setting from Monday to Friday in the morning.

9. Method 2: Use APP to set programming for a week:

After holding down "+" for 5s, the "📶" symbol blinks quickly, indicating that the device has entered the network distribution mode. After connecting the device to the APP, you can perform programming Settings in the APP.

The default setting for the schedule

Time display	From Monday to Sunday						
	①	②	③	④	⑤	⑥	⑦
Period1	06:00-08:00						Temperature 20°C
Period2	08:00-11:30						15°C
Period3	11:30-13:30						15°C
Period4	13:30-17:00						15°C
Period5	17:00-22:00						22°C
Period6	22:00-24:00						15°C

10. Advanced options settings

Long press "-" and "⏏" for 3s at the same time to enter the advanced options settings, the screen displays "A1" (work), 2s later, display the number (Setting and options, by "+" "-" to set the options.)

Item	Function	Set and corresponding value	Default
A1	Temperature compensation	-7C-7C	-1
A2	Window opening detection (valve opened after room. At 5-8°C, every 5 minutes.	00: off 01: on	0
A3	Window opening temperature. When A2 is set to 01, N value in A2	N: 5-25 °C	20
A4	Window opening time. When A2 is set to 01, close the valve	5-60 minutes	15
A5	Forced heating countdown	100-900s	30
A6	Blind zone temperature	0.8°C-5°C	1
A7	ECO Mode	00: off 01: on	0
A8	ECO mode temperature	5-38°C	20
A9	Low temperature protection temperature	0-10°C	5
AA	Display Brightness	00-100	100
AB	Factory data reset	00: not reset 01: reset	0

11. Command priority

Priority Judgment: In manual mode, disable forcibly > force off after starting cryogenic protection > close the window forcibly after it is opened > forced heating.

12. Anti-calcification (descaling)

The protective device operates automatically for a period of time each week to prevent valve calcification.

13. Reset

Press and hold the "-" for 2 seconds. The device displays AC. Device reset.

14. Fault description

🔔 Icon and screen shows E1	The temperature sensor is open or short-circuited.
🔔 Icon and screen shows E2	Temperature control valve cannot detect stroke.
🔋 Icon	The battery voltage is lower than 2V.

CONNECT APP

Step 1: Download your App.

Search for "eWeLink" in the Apple Store or Google Play or scan the QR code above and follow the instructions of the APP to complete the installation.



Step 2: Connect your eWeLink Zigbee gateway.

eWeLink Zigbee gateway is not included in this product, so you need to follow your own Zigbee gateway instructions to connect the Zigbee gateway.

Step 3: Connect the Zigbee Thermostat Valve.

After connecting your eWeLink Zigbee gateway, and click "Add" (Figure 7). Meanwhile, long press the "+" button of the Zigbee Thermostat Valve 3s enter the network distribution mode, when the WiFi icon flashes, it means entering the network distribution mode (Figure 8). App interface (Figure 9-10).

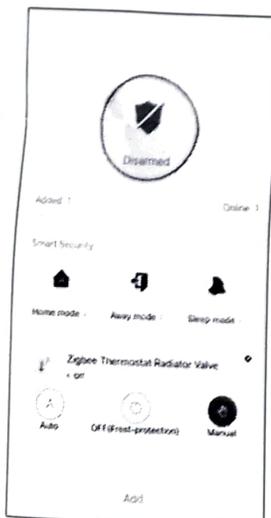


Figure 7

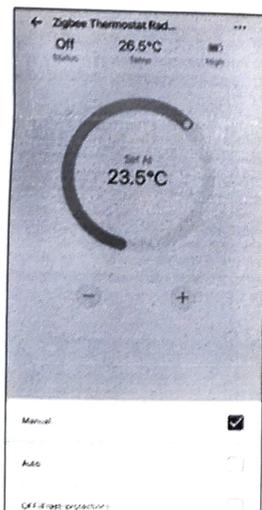


Figure 8

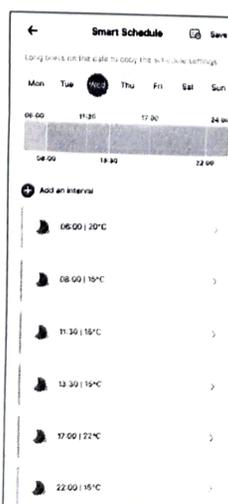


Figure 9

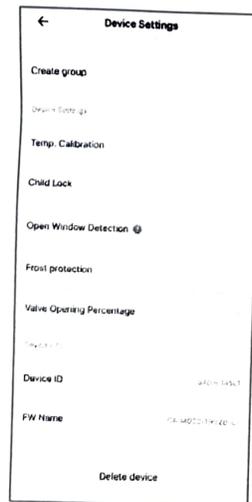


Figure 10