

For other languages, please scan the following QR code

- Bitte scannen Sie den QR-Code, um das deutsche Handbuch, das Installationsvideo und die Funktionseinführung zu erhalten
- Escanee el código QR para obtener el manual en español, el video de instalación y la introducción de la función
- Veuillez scanner le code QR pour obtenir le manuel en français, la vidéo d'installation et l'introduction des fonctions
- Отсканируйте QR-код, чтобы получить руководство на русском языке, видео по установке и описание функций
- Scansionare il codice QR per ottenere il manuale in italiano, il video di installazione e la guida alle funzionalità. Video di installazione e funzionalità
- Leia o código QR para obter o manual em português, o video de instalação e a introdução das funções
- Zeskanuj kod QR, aby uzyskać instrukcje, filmy instalacyjne i funkcje

من فضلك قم بلمس رمز الاستجابة السريعة (QR-code) للحصول على دليل المستخدم باللغة العربية وفيديو التثبيت ووصف الوظائف



请扫描二维码获取中文的说明书、安装视频及功能介绍

## Welcome

Thank you for your purchase. MOES always made high-quality products with our high-end technology, high-quality craftsmanship, safe and reliable materials. The new radiator thermostat will bring you a more comfortable smart life.

Please read this installation/ programming manual for installing and operating. Please also make sure someone qualified to install the radiator. Comply with all local regulations.

## FEATURES

1. LED display, no window, wider perspective
2. Colorful display
3. Graceful arc waist shape
4. Rubber stretch paint, feel like baby skin
5. Night Halo colors your home
6. Low power consumption, battery can last 1 year for normal use and standby for 2 years.
7. Low battery tip
8. Diagram of temperature curve added in APP
9. Vary colors are available like white, Black, gray etc.

## IN THE BOX YOU WILL FIND

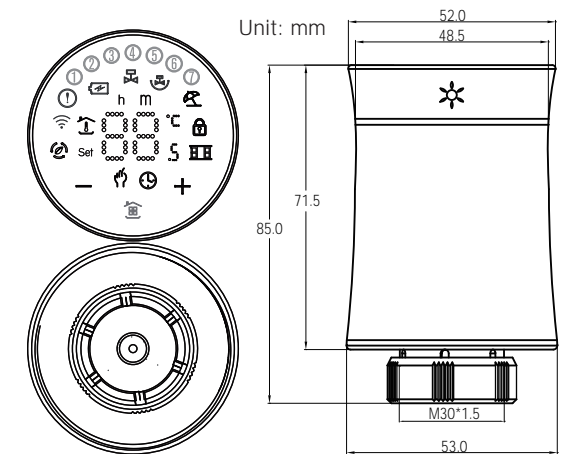
Raditor Thermostat	1pc
User Guide	1pc
RA Adapter	1pc
RAV Adapter	1pc
RAVL Adapter	1pc
Comap Adapter	1pc
T+A Herz Adapter	1set
Herz Adapter	1pc

Special note: The Zigbee version of the temperature control valve should be used with a Zigbee gateway compatible with "MOES". The package does not include the battery and gateway.

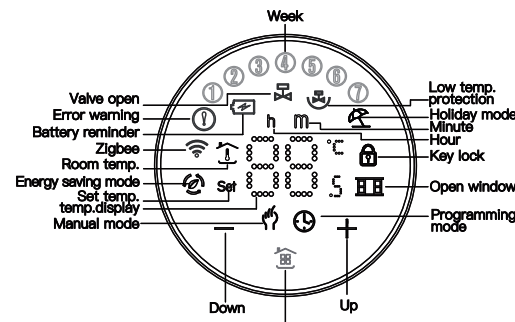
## APPLICATION



## DIMENSION



## HOME SCREEN QUICK REFERENCE



## TECHNICAL DATA

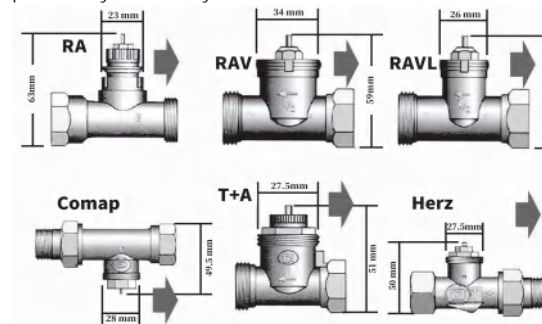
Power Supply: 3 V, 2xAA Batteries, Packaging not have battery.  
 Maximum stroke: 4.5mm  
 Accuracy: ± 0.5°C  
 Set Temp. Range: 5-45 °C  
 Display temp. Range: 0-70°C  
 Ambient Temp.: 0 ~ 45 °C  
 Ambient Humidity: 5 ~ 95 % RH (Non Condensing)  
 Storage Temp.: -5- 45 °C  
 Timing Error: < 1%  
 Protection Class: IP 20  
 Buttons: Capacitive Touch Buttons  
 Frequency Band: 2.405-2.480GHz  
 Maximum Radio Transmit Power: <+10dBm

## Before installing

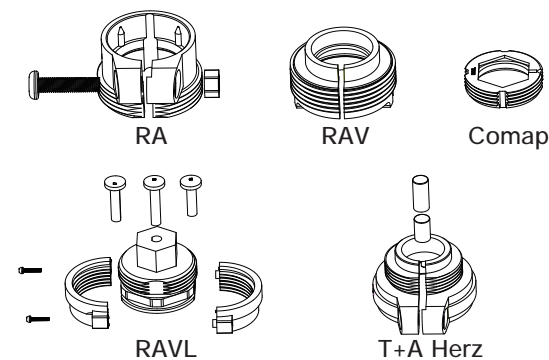
To avoid damages to the product during installation, please read the manual carefully before installing TRV.

## INSTALLATION

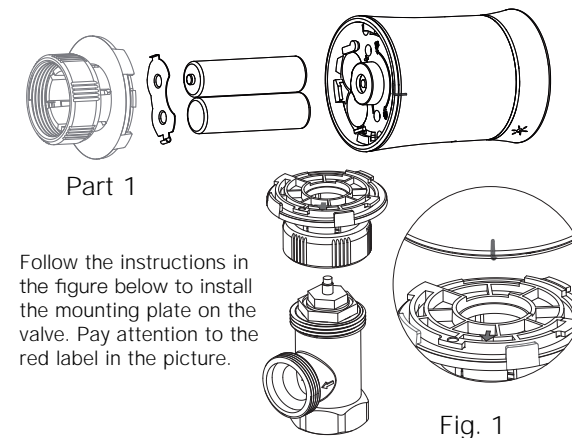
**Step 1: Select the adapter.** TRV is usually connected with M30\*1.5mm valve. If you have different valves, please determine your valve type according to the picture below, and choose the correct adapter from the package. If you do not find the valve that matches your use in the picture below, please buy it carefully.



**Step 2: Install the adapter.** Install the adapter on your valve as the picture below. If you don't need an adapter, please ignore this step.



**Step 3: Install the thermostat mounting plate.** Remove the mounting plate of the thermostat (Part 1 in the picture below) counterclockwise.



Follow the instructions in the figure below to install the mounting plate on the valve. Pay attention to the red label in the picture.

## Step 4: Install battery

Follow the picture below to install the battery in the correct direction. After the battery is installed correctly, the thermostat will be turned on. At this time, click the (only once), the thermostat will display and flash "F1", when the "F1" stops flashing, the thermostat motor will all shrink to facilitate the connection of the thermostat and the mounting plate.

**Step 5:** Connect the thermostat and the mounting board. When "F1" stops flashing, find the "mark point" of the thermostat, shown Fig. 1. Turn clockwise to complete the connection between the thermostat and the mounting plate. After clicking the (only once), the thermostat will display "F2". When "F2" disappears, while the screen remains on, turn the thermostat clockwise to adjust the screen to your liking direction.

Installation finished.

## OPERATION

**1. Power:** 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, it will enter the self-check program, and all icons will be displayed firstly. Press , the screen flashes "F1", indicating that the temperature control valve is shrinking; when "F1" stops flashing, press again, the screen displays "F2", indicates that the temperature control valve is measuring.; when the screen displays the room temperature, it indicates that the temperature control valve has completed the stroke measurement, and you can start using the temperature control valve normally.

### 2. Mode selection

Press to switch between manual, programming, vacation modes.

**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);

**Programming mode** - In this mode, the device executes a preset week programming temperature time and temperature;

**Holiday mode** - In this mode, for example, the vacation mode is set for 10 days and the temperature is set to 15 degrees Celsius. After 10 days, the device will automatically switch to programming mode;

**Temporary manual mode** - In this mode, icon will flash. At this time, the device executes the manually set temperature and returns to the weekly programming mode in the next time period.

### 3. Set the temperature

Press "+" / "-" key to adjust the temperature

### 4. Set the clock

Press and hold for 3 seconds, the screen will display "h" and numbers, indicating that the hour is being set, set the hour by press "+" / "-" keys; press again, the screen will display "m", indicating that the minute is being set, press "+" / "-" keys to set the minutes; press again, the screen will display "number", indicating that the day of the week is being set, and the day of the week can be set by "+" / "-" ;press again, the screen will flash "number, h, m", indicating that the number of days in the vacation mode is set, which can be set by the "+" and "-" keys;

### 5. Lock your Radiator

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

### 6. Low voltage reminder

When the voltage is lower than 1.8V, the screen will display .

### 7. Boost heating

Press and hold "+" for 3 seconds, the device will enter the boost heating mode, and the will flash. The countdown will be displayed in the APP.

### 8. Adjusting/Setting the Programmable Schedules

#### Method one;

Manually set a week of programming settings, specific operations are as follows:

#### Method Two;

Use APP for one week of programming settings, please refer to the second page "Programming your Radiator"

#### Manual editing;

Press and hold for 3 seconds. When you see the flashing numbers on the screen, press 4 times to skip the clock setting. When the screen displays "①②③④⑤" (means Monday to Friday), flashing numbers and "h", you can set the hour with "+" and "-"; press again, flashing numbers and "m", you can use "+" "-" Set the minutes; press again, the screen displays "Set", and the temperature can be set by "+" "-". This completes the setting of the programmed temperature for one week in the morning from Monday to Friday.

By analogy, refer to the one-week programming temperature default table to complete one-week programming settings.

### 8. Programming setting

Time display	MON.-FRI. (①②③④⑤ shows on screen)		SAT. (⑥ shows on screen)		SUN. (⑦ shows on screen)	
	TIME	TEMP.	TIME	TEMP.	TIME	TEMP.
Period 1	6:00-11:30	20	6:00-12:00	24	6:00-12:30	19
Period 2	11:30-13:30	21	12:00-14:30	23	12:30-14:30	20
Period 3	13:30-17:30	22	14:30-17:30	22	14:30-18:30	21
Period 4	17:30-6:00	23	17:30-6:00	21	18:30-6:00	20

### 9. Setting the Functions and Options

Press and hold the "-" and 3 seconds together, entering into the advanced option settings. The screen displays "A1" (function), after 2 seconds, the number (settings and options) will display, and the options can be set by the "+" / "-" key.

Code	Function	Setting and options	Default
A1	Temperature compensation	-9°C - 9°C	-2
A2	Open window detection (After the valve is opened, the room temperature is 5≤N°C, every 5 minutes, check whether the room temperature is lower than the previous detection by ≥3°C)	00: close 01: open	00
A3	When A2 is set to "01", the device detects whether the room temperature has dropped by N°C compared with the previous time	N: 5-25°C	5
A4	When A2 is set to "01", close the valve time	5-60min	15
A5	Min. temp.	5-15°C	5
A6	Max. temp.	15-35°C	35
A7	Forced heating countdown	100-900s	300 (screen display 30s)
A8	Detection valve head opening	Open: ON Closed: OF	Can only show
A9	Dead zone temp.	0.5-5°C	1
AA	Energy saving mode	00: close 01: open	00
AB	Energy saving mode temperature	5-35°C	20
AC	Low temp. protection	0-10°C	5
AD	Standby screen brightness	0-9	00
AE	Factory reset	00: do not reset 01: reset	00
AF	version number		U1

Moes application is much more compatible than Tuya smart / smart life application. It also provides a new customized service for controlling scenes through Siri, widgets and scene recommendation.  
(Note: Tuya smart / Smart Life app is still working, but moes app is highly recommended)

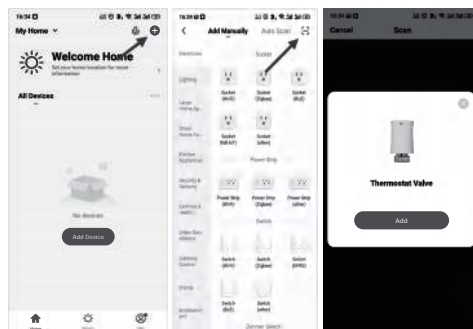
## ② Registration or Log in.



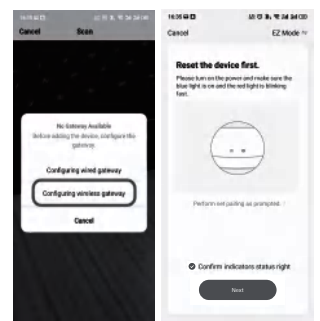
- Download "MOES" Application.
- Enter the Register/Login interface; tap "Register" to create an account by entering your phone number to get verification code and "Set password". Choose "Log in" if you already have a MOES account.

## Step 2 Connect the temperature control valve

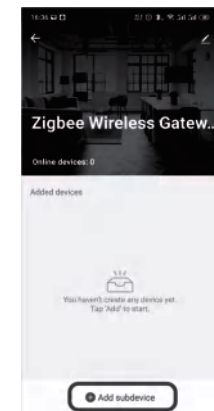
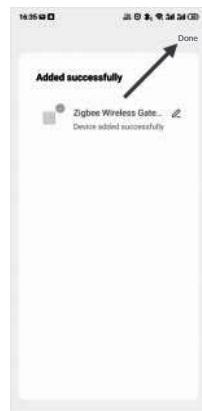
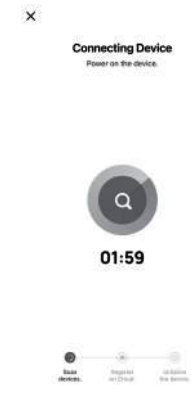
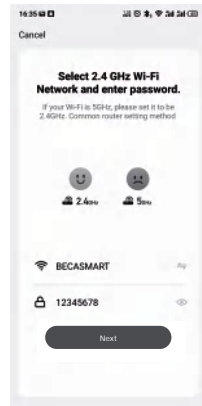
Check the tutorial below to complete the connection and setup.



Scan QR code.



Note: MOES zigbee wireless gateway is used by default. If you use a wired gateway, please check your gateway connection tutorial.



Long press "-" for 3s, as shown in the figure below (Fig. 3), the "Zigbee" icon will flash on the screen(Fig. 4).

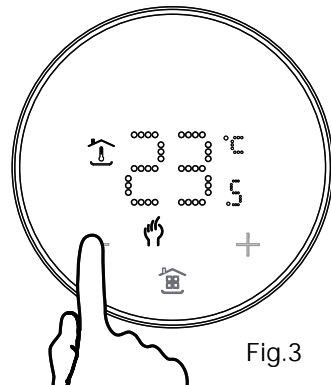


Fig.3

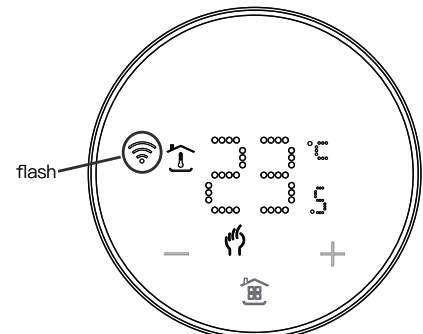
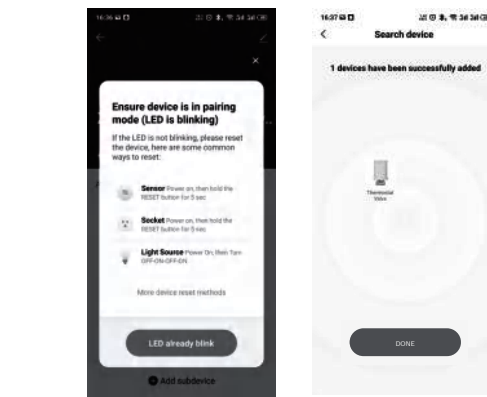
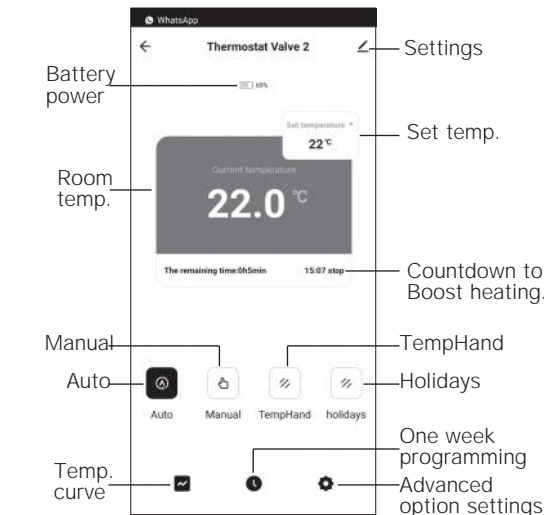


Fig.4

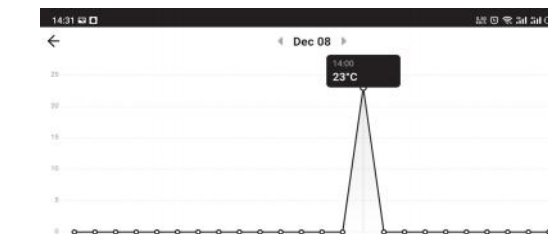


## APP interface description



## Temperature graph.

According to the temperature graph, you can understand the temperature change in the past time.



## Declaration of conformity

Hereby,WENZHOU NOVA NEW ENERGY CO.,LTD declares that the radio equipment type ZTRV-BY-100 is in compliance with Directive 2014/53/EU, 2014/30/EU, 2011/65/EU. The full text of the EU declaration of conformity is available at the following internet address:  
<https://www.moestech.com/blogs/news/ztrv-by-100>

## SERVICE

Thank you for your trust and support to our products, we will provide you with a two-year worry-free after-sales service (freight is not included), please do not alter this warranty service card, to safeguard your legitimate rights and interests. If you need service or have any questions, please consult the distributor or contact us.

Product quality problems occur within 24 months from the date of receipt, please prepare the product and the packaging, applying for after-sales maintenance in the site or store where you purchase; If the product is damaged due to personal reasons, a certain amount of maintenance fee shall be charged for repair.

We have the right to refuse to provide warranty service if:  
1. Products with damaged appearance, missing LOGO or beyond the service term  
2. Products that are disassembled, injured, privately repaired, modified or have missing parts  
3. The circuit is burned or the data cable or power interface is damaged  
4. Products damaged by foreign matter intrusion (including but not limited to various forms of fluid, sand, dust, soot, etc.)

## RECYCLING INFORMATION

All products marked with the symbol for separate collection of waste electrical and electronic equipment (WEEE Directive 2012/19 / EU) must be disposed of separately from unsorted municipal waste. To protect your health and the environment, this equipment must be disposed of at designated collection points for electrical and electronic equipment designated by the government or local authorities. Correct disposal and recycling will help prevent potential negative

consequences for the environment and human health. To find out where these collection points are and how they work, contact the installer or your local authority.

## WARRANTY CARD

### Product Information

Product Name \_\_\_\_\_  
Product Type \_\_\_\_\_  
Purchase Date \_\_\_\_\_  
Warranty Period \_\_\_\_\_  
Dealer Information \_\_\_\_\_  
Customer's Name \_\_\_\_\_  
Customer Phone \_\_\_\_\_  
Customer Address \_\_\_\_\_

### Maintenance Records

Failure date	Cause Of Issue	Fault Content	Principal

Thank you for your support and purchase at we Moes,we are always here for your complete satisfaction,just feel free to share your great shopping experience with us.



If you have any other need,please do not hesitate to contact us first,we will try to meet your demand.

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E-CrossStu-GmbH  
Mainzer Landstr. 69 ,60329 Frankfurt am Main  
Email: E-crossstu@web.de  
Tel: +4969332967674  
Made in China

EVATOST CONSULTING LTD  
Address: Suite 11, First Floor, Moy Road Business Centre, Taffs Well, Cardiff, Wales, CF15 7QR  
Tel: +442921680945  
Email: contact@evatmaster.com

WENZHOU NOVA NEW ENERGY CO.,LTD  
Address: Power Science and Technology Innovation Center, NO.238, Wei 11 Road, Yueqing Economic Development Zone, Yueqing, Zhejiang, China  
Tel: +86-577-57186815  
Email: service@moeshouse.com