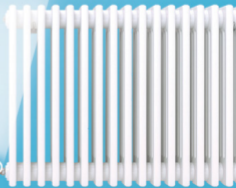




SMART
TRV

**& INSTALLATION
& USER MANUAL**



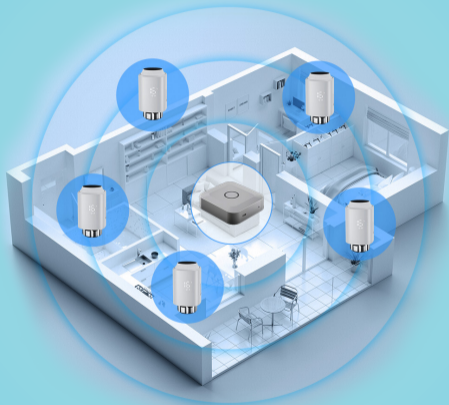
System Overview



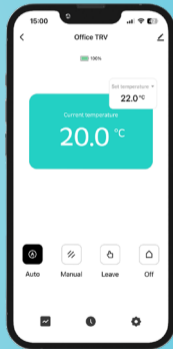
Your Smart TRV requires 2 AA batteries to function.



Your Multi-Functional Gateway comes with a USB cable to power the unit.



Unlock your device's full capabilities by using the SmartLife app today.



Contents

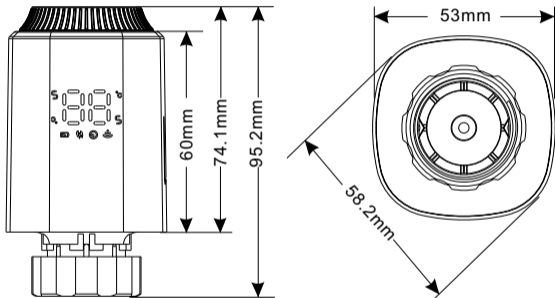
Overview	1
Installation	5
Gateway Pairing	7
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App Configuration	15
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Technical Data

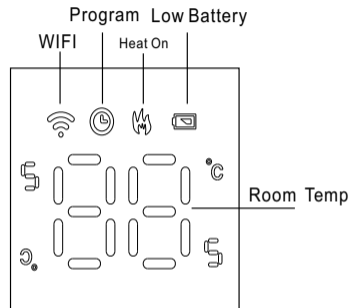
Component	Quantity
TRV	1
RA Adapter	1
RAV Adapter	1
Caleffi Adapter	1
Giacomini Adapter	1

Power Supply	20XLR60/AA (Alkaline)
Connection	M30 x 1.5mm
Display	LED
Max Stroke	5mm
Valve Adaption	Automatic
Battery Life	1 year
Communication	2.4GHz Zigbee
Operation Temperature	0°C - 50°C
Storage Temperature	-10°C - 60°C
Display Accuracy	0.5°C
Protection Class	IP20
Dimensions	53 x 53 x 95mm

Dimensions



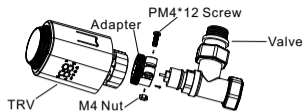
Icon Overview



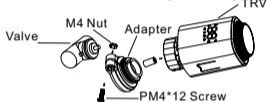
Device Factory Settings:

Period 1		Period 2		Period 3		Period 4	
06:00	22°C	08:00	16°C	18:00	22°C	22:00	16°C

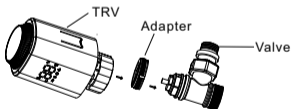
Danfoss Valve Installation(RA Adapter)



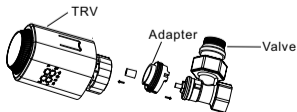
Danfoss Valve Installation(RAV Adapter)



Caleffi Valve Installation



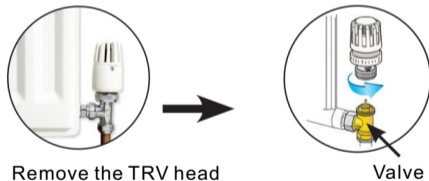
Giacomini Valve Installation



Installation

Before you begin installation, please refer to the TRV adapter diagrams and identify the correct adapter for your radiator valve.

Once you have identified the correct adapter, please take care whilst installing the parts to the TRV.



Remove the TRV head

Valve

If you have a TRV previously installed, please carefully rotate the attaching valve and disconnect the old unit.

Installation

1. Remove the exterior casing by pushing the battery logo and sliding the panel backwards.
2. Insert 2 AA batteries whilst ensuring correct orientation.
3. Slide the exterior casing back on.
4. Connect your TRV to your radiator by screwing it onto the valve.
5. The LED display will now flash. This means that your TRV is adapting to your radiator.
6. Once the LED has stopped flashing, the adaptation process has concluded.

Your unit is now ready for use.

7. Please power ON your wireless gateway, using the provided USB cable.
8. Please follow the wireless gateway instructions to setup your device. (Page 10)
9. You can now connect your TRV to your gateway. (Page 12)

Wireless Gateway



A wireless gateway is required to access your TRV's in-app functionality. This is essential to fully enhance your smart experience.

Utilising Zigbee protocol in order to connect all of your device's under one centralised hub. Allowing you to make adjustments from anywhere at any time.


This unit is easy to install. Simply plug it in using the USB cable provided and follow the subsequent connection process.

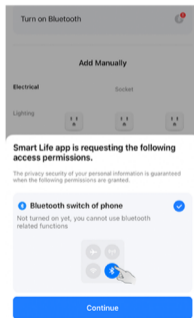
Wireless Gateway PAIRING IN-APP



Once installed, please proceed by registering your very own account. Please follow the on-screen instructions to complete the process. If you already have a registered account, please continue to the next step. You may use the email password retrieval system if you have forgotten your password.

Wireless Gateway PAIRING IN-APP

1. Power ON your wireless gateway.
2. Turn your devices' Bluetooth ON.
3. Long press  until the the blue light is stable and the red light is flashing.
4. The app will now automatically find your device.



5. If the app was unable to find your device, please manually select "Wireless Gateway (Zigbee)" from the menu.

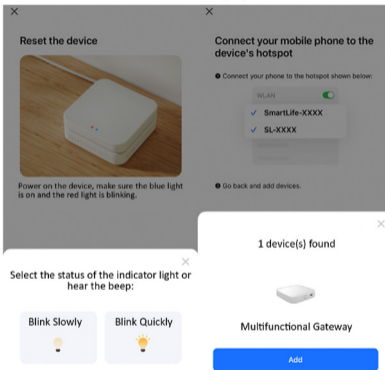
Wireless Gateway PAIRING IN-APP

Follow the on-screen instructions to setup your device.

Reset the device



Power on the device, make sure the blue light is on and the red light is blinking.



Reset the device

Connect your mobile phone to the device's hotspot

- Connect your phone to the hotspot shown below:

WLAN

- SmartLife-XXXX
- SL-XXXX

Go back and add devices.

1 device(s) found

Multifunctional Gateway

Add

Select the status of the indicator light or hear the beep:

Blink Slowly

Blink Quickly

Confirm the indicator is blinking

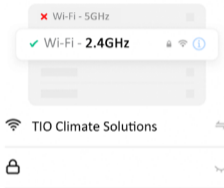
Reset Device Step by Step

The key benefit of pairing to the SmartLife app through the gateway, is that your settings will be stored within the cloud and in the event of a power outage your desired setting will remain in place.

Wireless Gateway PAIRING IN-APP

Select 2.4 GHz Wi-Fi Network and enter password.

If your Wi-Fi is 5GHz, please set it to be 2.4GHz
[Common router setting method](#)



Wi-Fi - 5GHz

Wi-Fi - 2.4GHz

TIO Climate Solutions

You will now be asked to connect your device to the desired Wi-Fi band.

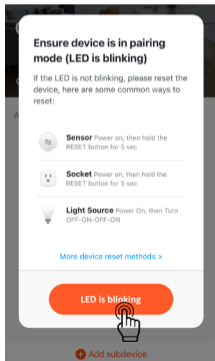
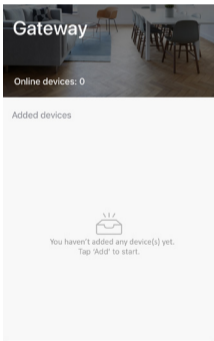
Please note that after this step, you may be asked to complete a firmware update.

Please proceed in doing so, as your gateway will need to be fully updated to access all current features.

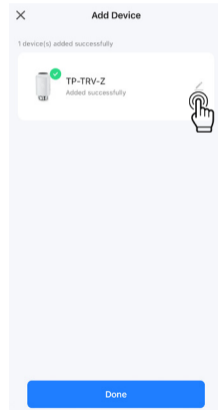
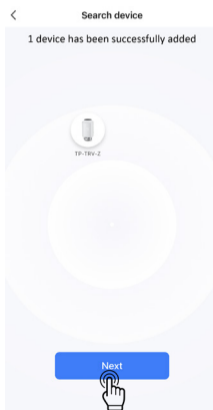


Connecting Your TRV

1. Please begin by making sure that your mobile device has its Bluetooth switched ON.
2. Next, turn your TRV off and press and hold the dial over 7 seconds until "--" appears.
3. When on your Gateway menu, please select "Add subdevice".
4. Then select "LED is blinking".



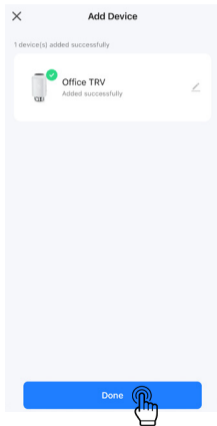
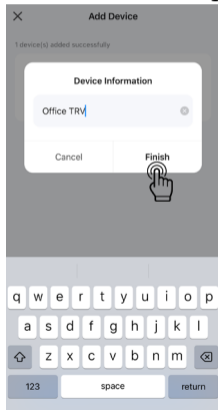
5. The app will find your device(s) and will showcase them on screen.
6. Press "Next" if you are happy with your connected device(s).
7. You will then be able to change the name(s) of your device(s) by pressing ↵.



7. Once you have named your device(s) press “Finish”, to go back to the device menu screen.

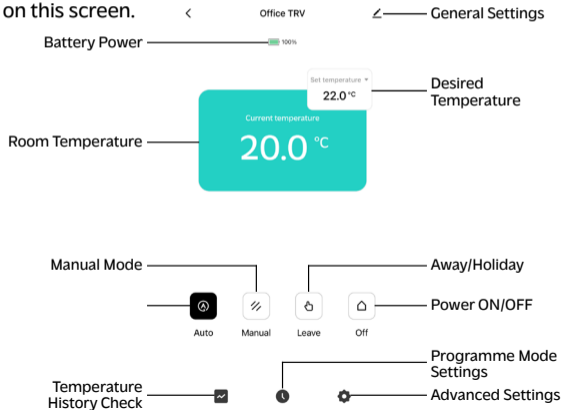
8. Press “Done” to finalise and complete the connection phase.

Please note that you will be able to change your device(s) name on the configuration menu later.



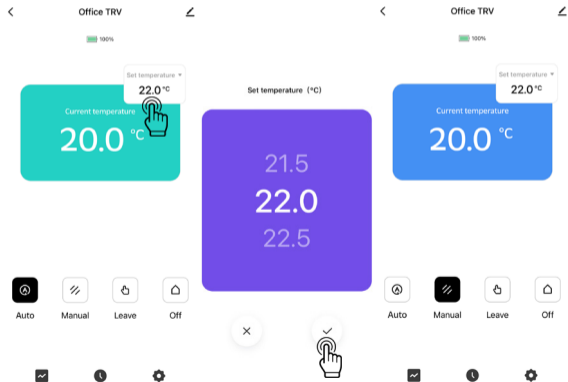
App Configuration

Please take a moment to familiarise yourself with the configuration menu. You will be able to utilise your device’s full capabilities through these settings. You will be able to check your device’s battery status and rename your device on this screen.




Manual Mode

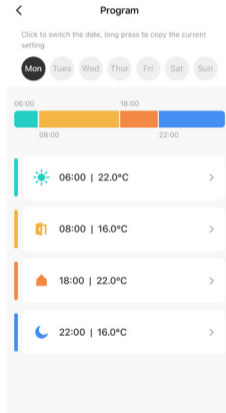
You can quickly alter your thermostats heating request by tapping the “Set temperature” icon and scrolling through the temperature range. Once you have selected your desired temperature, press ✓ to confirm your setting. You can also do this manually on your TRV by rotating the dial.




Programming Mode (Auto)

You can pre-program your TRV's behaviour across 4 periods for each day of the week.

1. Firstly, select  to enter the programming settings.
2. You will now be able to customise each setting accordingly.



Settings

Select  on the configuration menu to access these settings.

Child Lock: You can lock your TRV if you wish. This can also be achieved manually, by pressing and holding down the dial button for 7+ seconds. The screen will display “CL”.

<	Setting
Child lock	<input type="checkbox"/>
Window check	<input checked="" type="checkbox"/>
Leave temp	16.0°C >
Factory data reset	>
Frost protection	<input checked="" type="checkbox"/>
Boost Heating	0min >
Switch Scale	<input type="checkbox"/>
Temperature correction	0.0°C >
Valve State	Open
Display direction	back >

Window Check: This setting utilises the TRV's sensors to detect rapid temperature drop. In this event, the TRV will turn OFF to prevent energy loss.

Leave Temp: This refers to the temperature setting set for when you leave your house.

Frost Protection: When room temperature is below 5°C, the valve will open until room temperature reaches 8°C. This can only be altered in-app.

Settings

Boost Heating: When enabled, your radiator will heat up at a quicker rate for a set duration of time. Your TRV will also display the count down.

Switch Scale: This is an anti-fouling function which protects the valve from getting stuck.

<	Setting
Child lock	<input type="checkbox"/>
Window check	<input checked="" type="checkbox"/>
Leave temp	16.0°C >
Factory data reset	>
Frost protection	<input checked="" type="checkbox"/>
Boost Heating	0min >
Switch Scale	<input type="checkbox"/>
Temperature correction	0.0°C >
Valve State	Open
Display direction	back >

Temperature Correction: This sets a buffer temperature range, allowing you to calibrate your TRV.

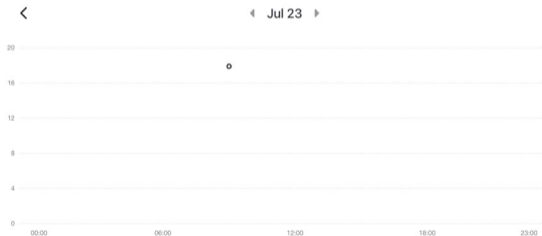
Display Direction: You can change the display orientation of your TRV.

Anit-~~Calcification~~ (Descaling) Protection: Your TRV will automatically run for a period of time every week to prevent calcification of the valve.


Temperature History Graph

Your TRV records your temperature data to help you fulfill your temperature requirements in the most economical manner. In order to access this, please select at the bottom of the configuration menu screen.

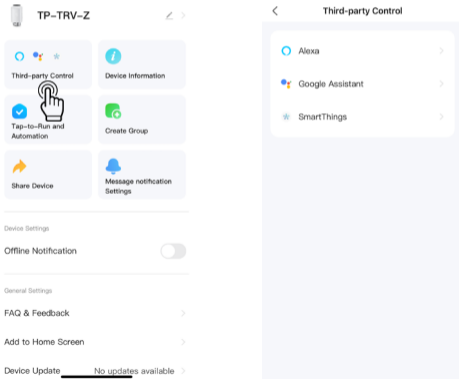
Please use this feature to maximise your TRV's efficiency.



Voice Control

1. Select  to access your device's social settings.
2. Please select the "Third-party Control" tab.

You can now select between your device's compatible voice control providers.



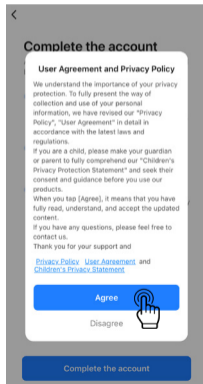
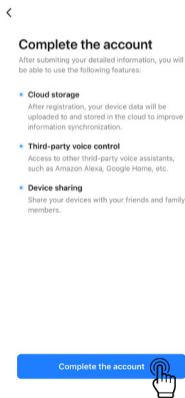
3. Once you select your service, please read the on-screen prompts and select "Complete the account" in order to progress.

4. You will now receive an on-screen pop-up containing the user agreement and privacy policy. Please read these carefully and select Agree once you are ready to proceed.

5. You will now need to sign in or create an account to complete the setup.

6. Please continue with the on-screen prompts to finalise and connect your account.

Please note that the compatibility and connection between the SmartLife app and third-party voice control platforms is facilitated via SmartLife and not Tio Climate Solution Ltd.





www.tioclimatesolutions.co.uk

