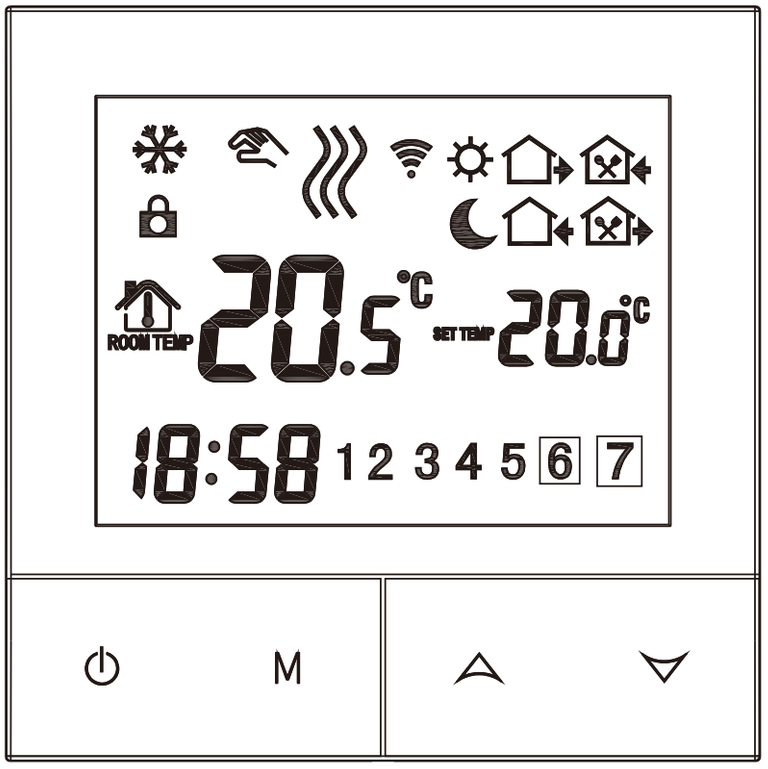
TDS72 SERIES THERMOSTAT USER GUIDE



This thermostat is suitable for water heating,electric heating or boiler.

Product Summary

The digital heating liquid crystal temperature controller adopts the advanced microcomputer control chip.And detects the temperature through a high-precision sensor inside the thermostat. And in real time, compared with the temperature set by the user, the load (electric heating device or valve) is automatically turned on and off to achieve the purpose of maintaining the indoor constant temperature.

Main Functions and Characteristics

1.Large screen display and press key design
2.Power-off memory function
3.Real-time data save function
4.5+2 or 6+1or 7days six periods program schedule
5.Anti-freezing function
6.3 sensor modes can be setting
7.Child lock function
8.Adapts to 86x86mm square mounting box or 60mm European round box.

Product Packaging

Model	TDS72-EP	TDS72-WP	TDS72-WPB
Thermostat	√	√	√
User Manual	√	√	√
Screw *2	√	√	√
External sensor	√		

Model Spec

Model	Current Loading	Week Program	Controlled Objects
TDS72-EP	16A	✓	For electric heating appliances
TDS72-WP	3A	✓	For water heating appliances
TDS72-WPB	3A	✓	For boilers connected via dry contact

Technical Parameter:

Power Supply	200 ~ 240V 50-60Hz
Current Load	⩽3A（water heating/ boiler) ⩽16A(electric heating)
Power Consumption	<0.3W
Sensing Element	NTC
Set Temp. Range	5-60℃
Temperature hysteresis	±1℃(Defaults adjustable 0.5-3℃)
Floor Set Temp. Range	5-60℃
Dimension	86x86x15mm

Button Functions

⏻ Power button:power on/off

M:Mode button: Switch between Manual Mode and Auto Mode
Long press to set the time and week

△ Upper button:temperature plus,plus parameters

▽ Lower button:temperature minus,minus parameters

Display and Function Description

manual mode,manual control

heating

the 1st period,get up in the morning.

the 2nd period,go out in the morning.

the 3rd period,go home at noon.

the 4th period,go out at noon.

the 5th period,go home at night.

the 6th period,sleep at night.

User Notes

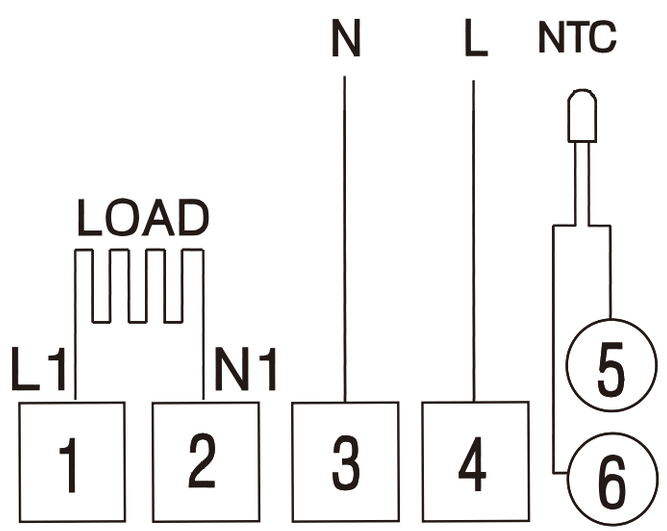
1.Please read this manual carefully. Improper operation may damage the product or cause dangerous conditions.

2.The installation personnel must be well-trained and experienced service technicians.

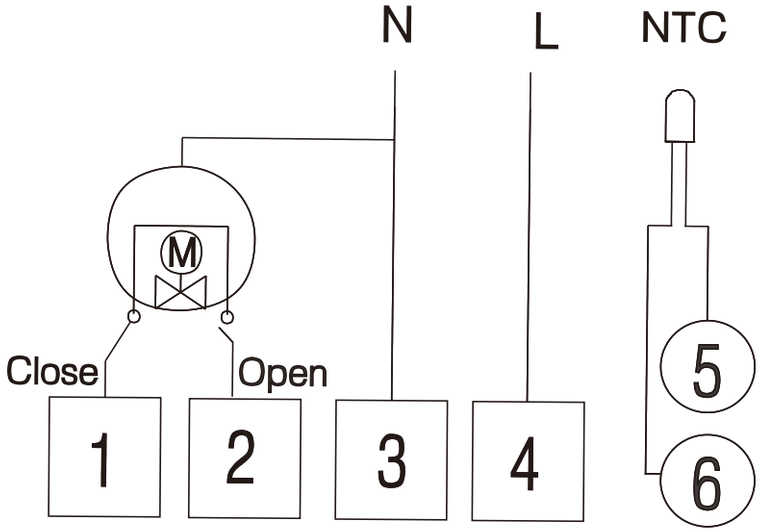
3.After installation, please read this manual carefully and operate the product according to the instructions.

Caution: Risk of electric shock

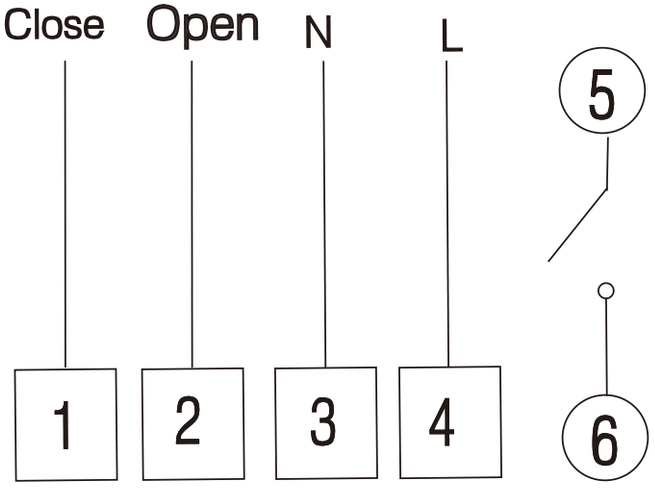
Wiring Diagram



TDS72-EP



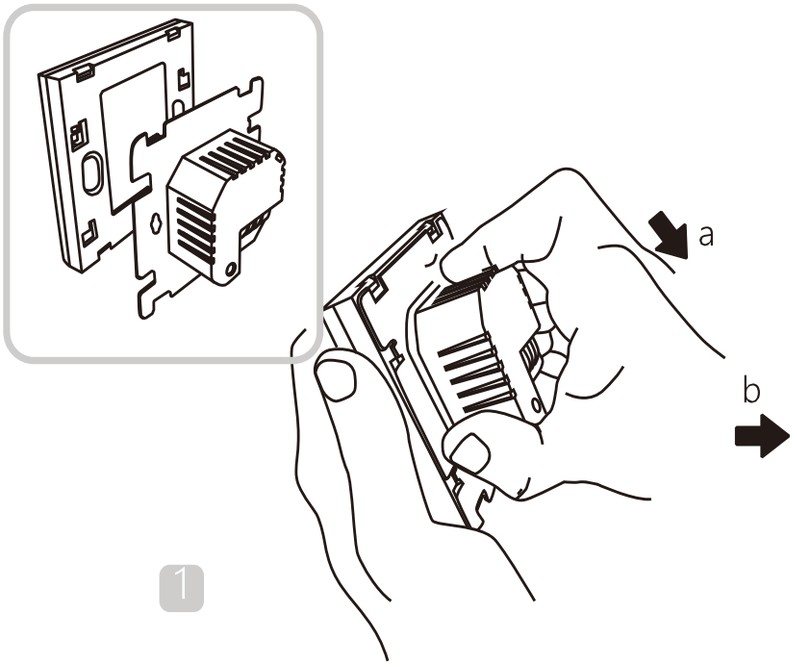
TDS72-WP

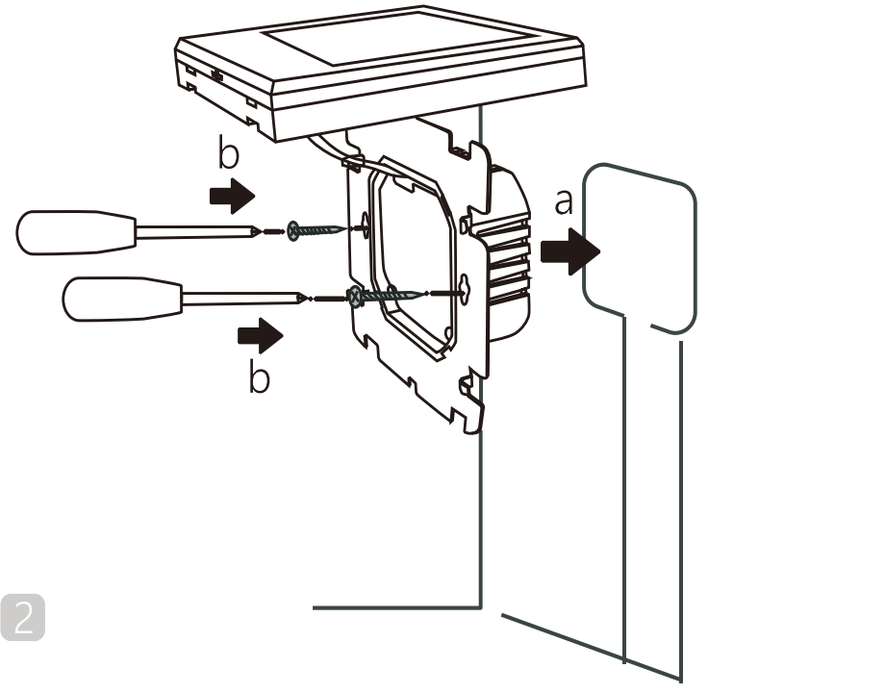


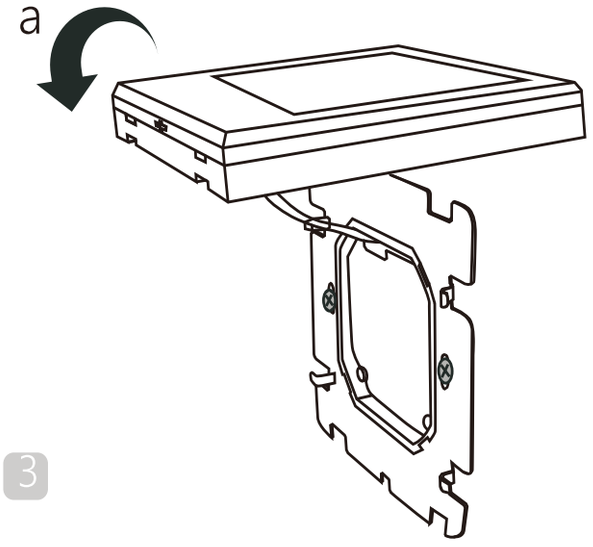
TDS72-WPB

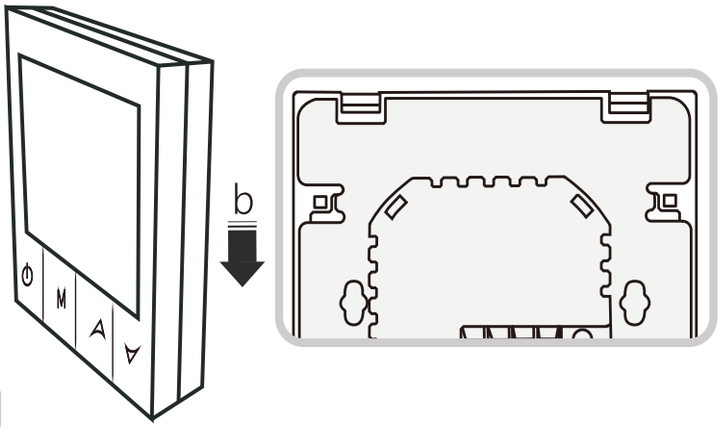
Installation Instruction

This product is suitable for standard **86*86mm** wall box and **60 mm** european round box









1.Open the main control board, use a 3.5mm wide vertebral slope to reach the depth of 4mm in the card slot, and lift it up slightly to open the hook.

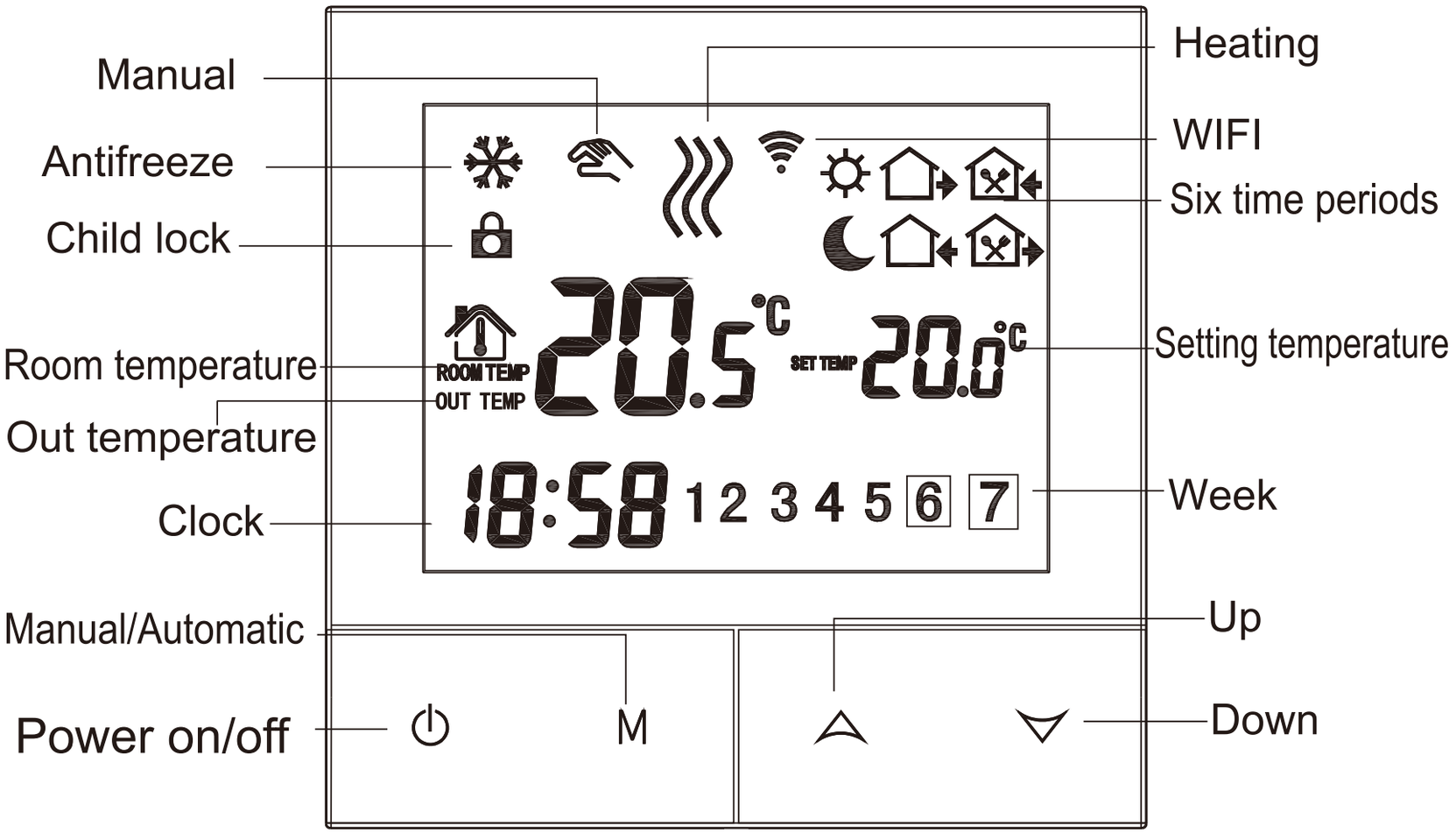
2.Remove the back cover and power supply, wire it correctly according to the wiring diagram, and fix the back cover to the cassette with M4 screws

3.Connect the lower cover cable to the upper cover board

4.Hang the upper two hooks at a 30-degree angle.Press the two corners below the thermostat slightly to lock the upper casing and the installation is complete.

Notice: Please strictly follow the wiring diagram and do not let the water, mud and other debris enter the thermostat,otherwise thethermostat will be damaged!

Description of display & icon



Operation Instruction

1.Power on/off

Press ⏻ to turn on/off the thermostat.

2.Set Temperature

Press △▽ to set the temperature

3.Set the Clock

press **M** key 5 seconds to set hour, Press △ or ▽ for adjusting
Then press **M** key to set the minute and the week in turn.

4.Switch modes

Press **M** key to switch between **Manual** and **Auto** mode.
Manual mode:means non-programmable mode.
display on the screen, it is in Manual mode.
Press △▽ to set the temperature.

5.Set the Child Lock

Simultaneously press and hold the **M** key and △ to add child lock.
will displayon the screen.

Simultaneously press and hold the **M** key and △ again to cancel child lock.

6.Set the Auto Mode(programming Mode)

In **power off** state,Press ⏻ and **M** at the same time
LOOP and 12345 will display

Press △▽ to select the control way:
5(working day)+2(rest day) or 6(working day)+1(rest day)
or 7(working day)programming settings.

12345 display in the position of week means 5+2
123456 display in the position of week means 6+1
1234567 display in the position of week means 7

Press **M** to enter the temperature adjustment.
Press △▽ to set the temperature
Press **M** to enter the time adjustment.
Press △▽ to set the hour. and press **M** to set the minute

The first time period has been set.
Press **M** to enter the next time period setting

If you set the thermostat to Auto Mode,then the thermostat will run at the temperature and time you programmed

If the thermostat is manually adjusted during any period of operation in Auto Mode, the thermostat will enter Manual Mode and will appear on the screen.

Period		Period Icon	Defaulted Time	Defaulted Temp.
Week	1		6:00	20℃
	2		8:00	15℃
	3		11:30	15℃
	4		12:30	15℃
	5		17:00	22℃
	6		22:00	15℃
Weekend	1		8:00	22℃
	2		23:00	15℃

Remark:

1.The defaulted temperature of period3 and period4 is the same as period2. Please change it according to the request.

2.Do not set the last time point of each day beyond 23:59

3.When setting temperature is 00,This period is power off

7.Advanced Setting

In the state of Power-Off,long press and hold ▽.then press⏻ into advanced setting.

Press **M** to enter the next option,press △▽ to adjust,and press ⏻ to save and exit.

Display Code	Function	Setting And Options	Factory Defaults	EP	WP	WPB
SEN	Sensor mode	00:Internal sensor 01:External sensor 02.Both internal sensor and external sensor	00	√	√	×
OSV	Set temp.range for floor sensor	5-99℃	42℃	√	√	×
DIF	Precision for floor temp.	1-9℃	2℃	√	√	×
SVH	Maximum value of Set temp.	5-99℃	35℃	√	√	√
SVL	Minimum value of the Set temp.	5-99℃	5℃	√	√	√
ADJ	Temp. calibration	-9.5-9.5℃	0℃	√	√	√
FRE	Frost-protection	00:turn off 01:turn on	00	√	√	√

PON	Power Memory	00 : Turn off 01 : Turn on	00	√	√	√
DFI	Temperature hysteresis	0.5-3℃	1℃	√	√	√
Opt	Linkage terminal output direction	00:Set temp > Room temp relay output 01:Set temp < Room temp relay output	00	×	×	√
FAC	Factory settings	08:Just display 00:Factory reset	08	√	√	√
	After adjusting the value to 00, press M to cut back to the main page, that is to complete the reset					

Remark:

Sensor error: Please select the correct sensor mode.
If no external sensor is connected, do not set it to 01 or 02, otherwise **Err** will appear on the screen.And the thermostat will stop heating till the problem is solved.

TDS72-WPB does not have external sensor functions for SEN/OSV/DIF.

Check floor temp.: When using both internal and external sensors.In power on state,press and hold **M**,then press ⏻ to check the floor temp.

Antifreeze function: When the thermostat is in the off state,if the room temperature is below 5°C, then the heating equipment will be turned on. When the room temperature rises to 7°C,the thermostat will automatically switch off the output.

Opt: Only TDS72 WPB has Opt function

Special note:

installing cable please choose: plumbing 1.5-2.5mm2 hard wire.

WIFI connection

Preparation before Wi-Fi connection

APP download

For iOS system: Login in App Store,search “Tuya Smart” APP You can download it on your iphone.

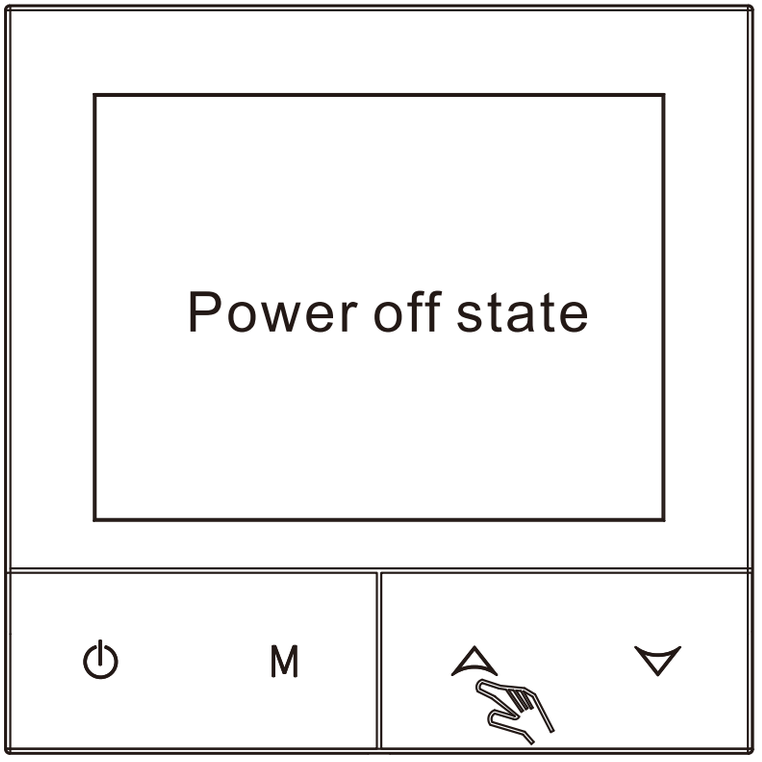
For Andriod system: Login in Google Play,search “Tuya Smart” APP .You can download it on your iphone.

Or scan below code to download:

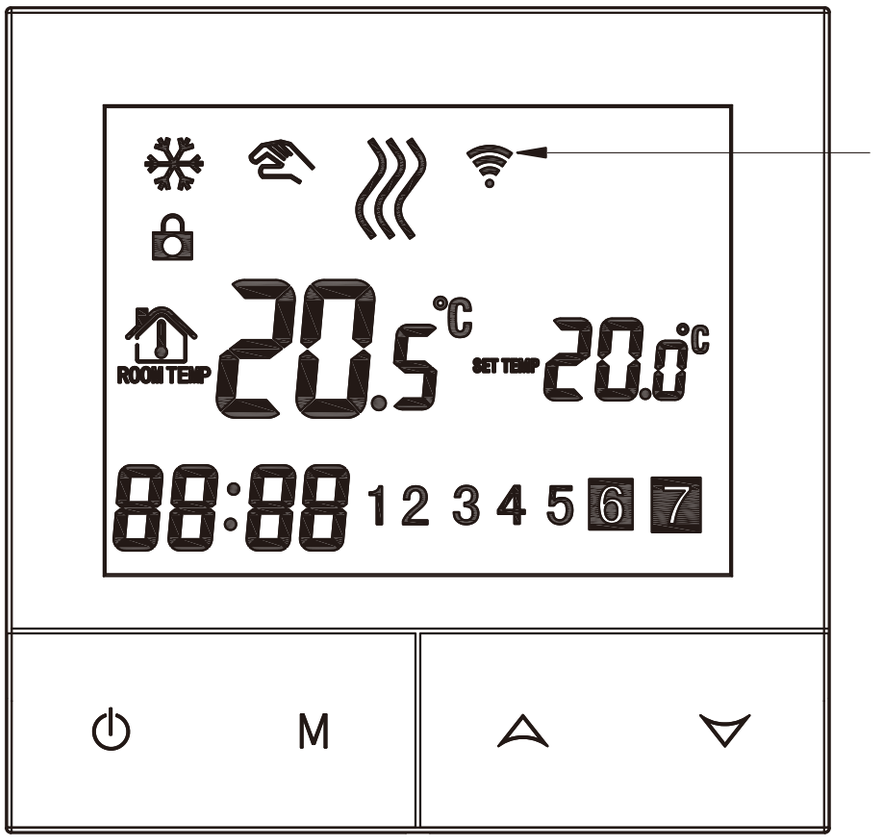
1.Turn on your mobile phone‘s Bluetooth and Wi-Fi

Note: a.Please make sure your mobile phone is connected to **2.4Ghz Wi-Fi**.
b.**2.4Ghz Wi-Fi names** and **passwords** consist of numbers and letters **only**,and do not contain symbols or special characters.

2.Activate the thermostat WiFi module:



When the thermostat is power off,press and hold the △ button for 10 seconds

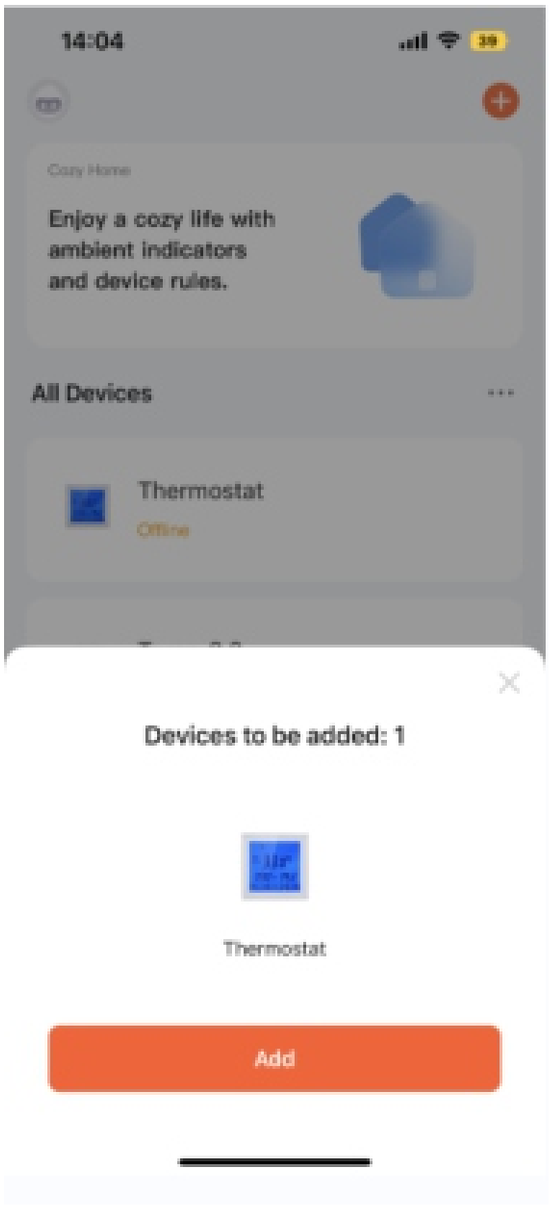


The Wi-Fi icon will flash on the thermostat screen,Indicates that the thermostat is waiting to be configured

3.Add Device

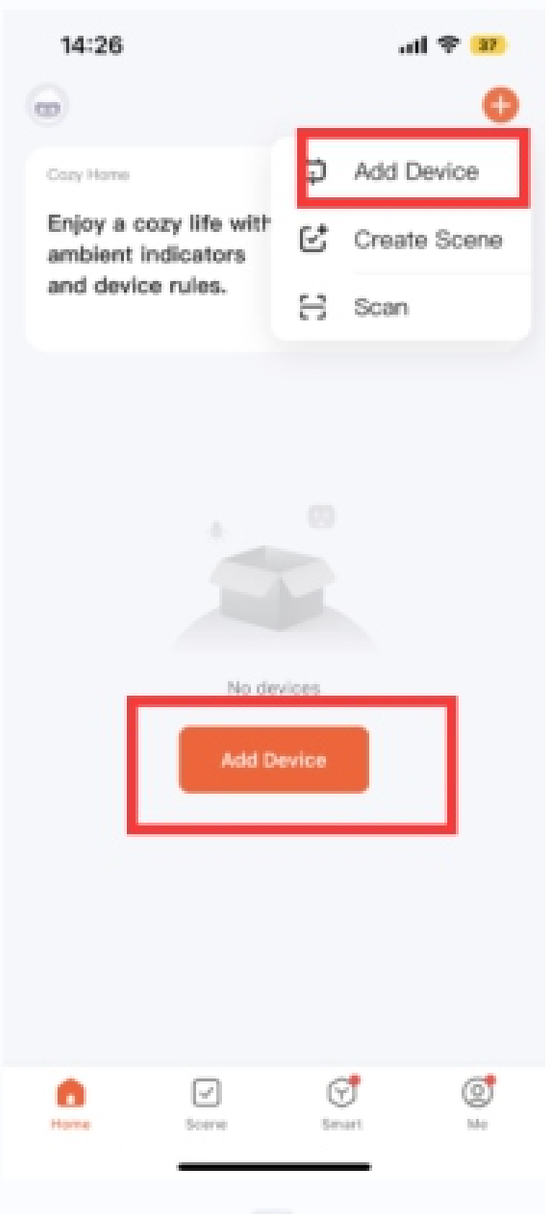
There are 3 ways to add a device

Method 1. Enter the Tuya APP. The main page automatically pops up "Device to be added" (as picture 1) and click "Add".

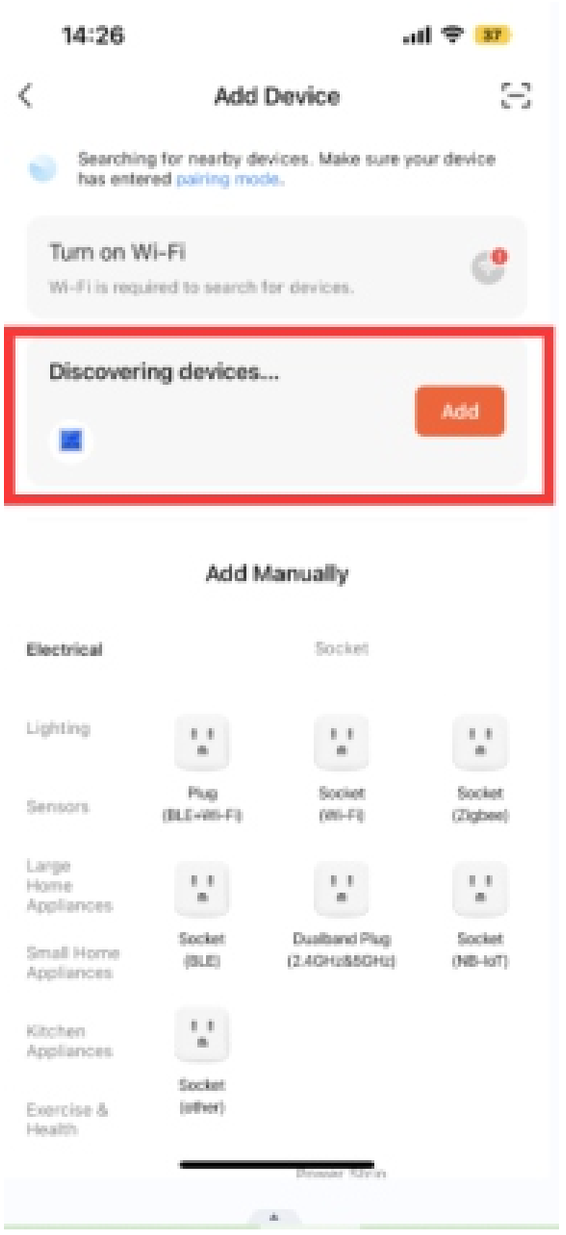


Picture 1

Method 2: Enter the Tuya APP,Click "Add Device" or "+" (as picture 2) on the upper right corner of the APP homepage, and enter the "Add Device" interface.It will prompt: find the deviceto be added (as picture 3) and follow the prompts.

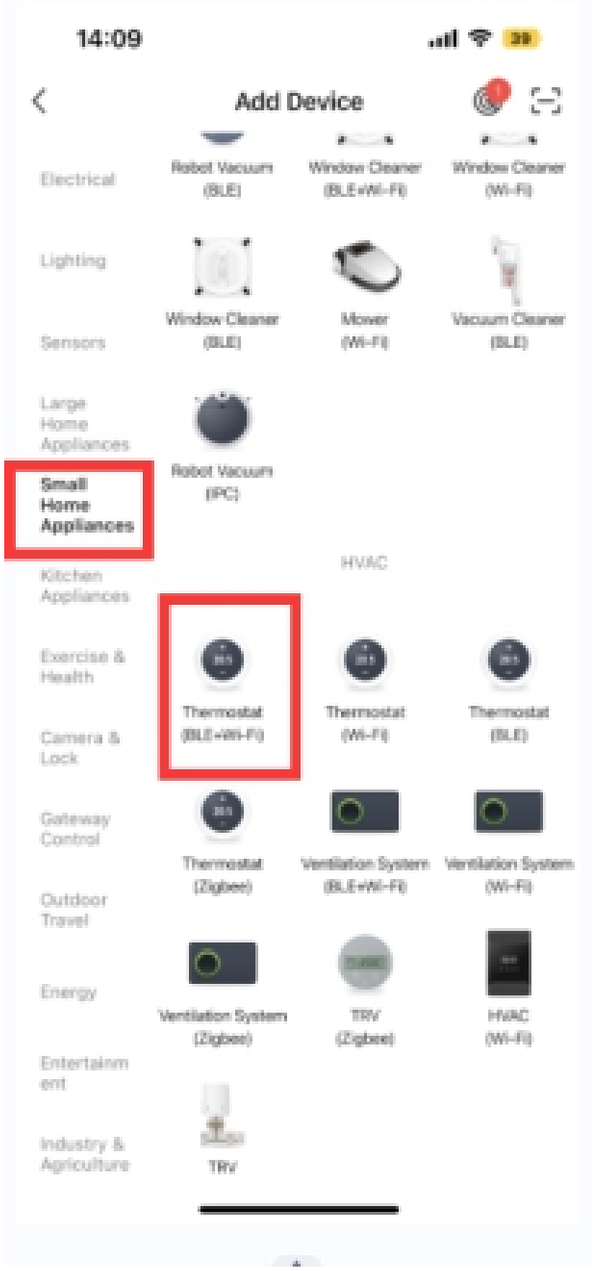


picture 2

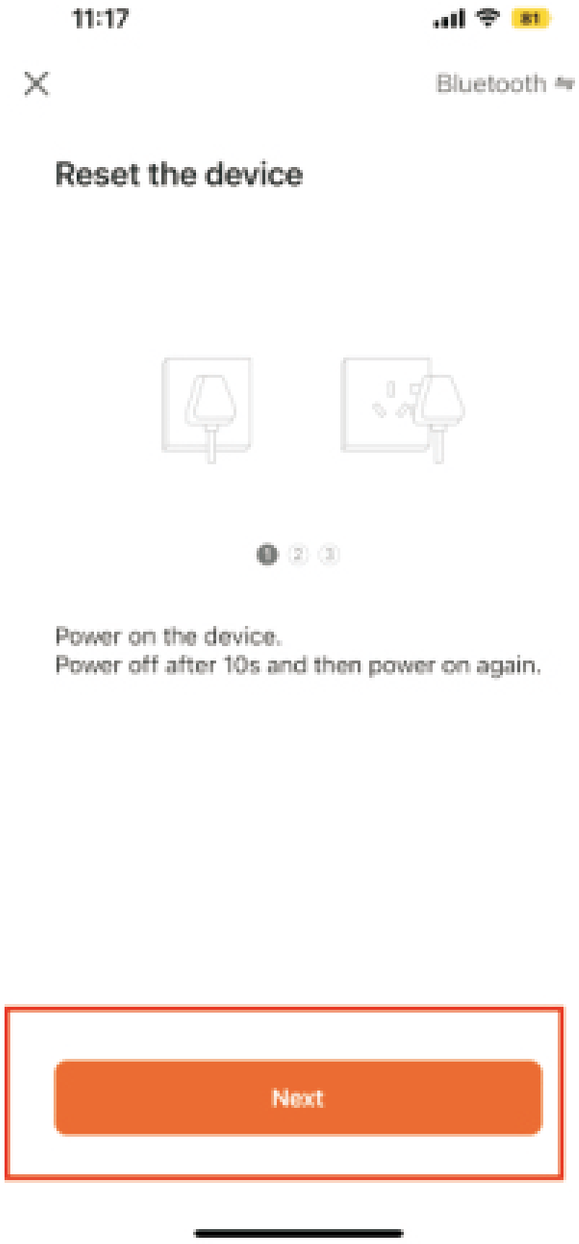


picture 3

Method 3:Enter the Tuya APP,Click"+"on the upper right corner of the APP homepage,Find the Thermostat (BLE + Wi-Fi)in “Small Home Appliance”(as picture 4)
As picture 5 ignore the content of the page and tap Next.

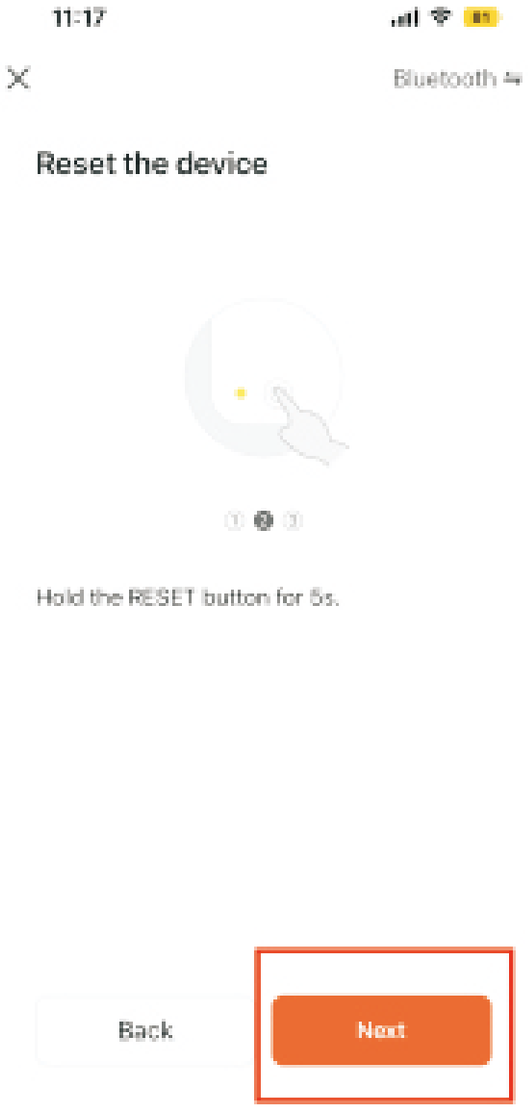


picture 4



picture 5

As picture 6 Ignore the content of the page and click **Next**
As picture 7 tick confirm the indicator is blimking click **Next**



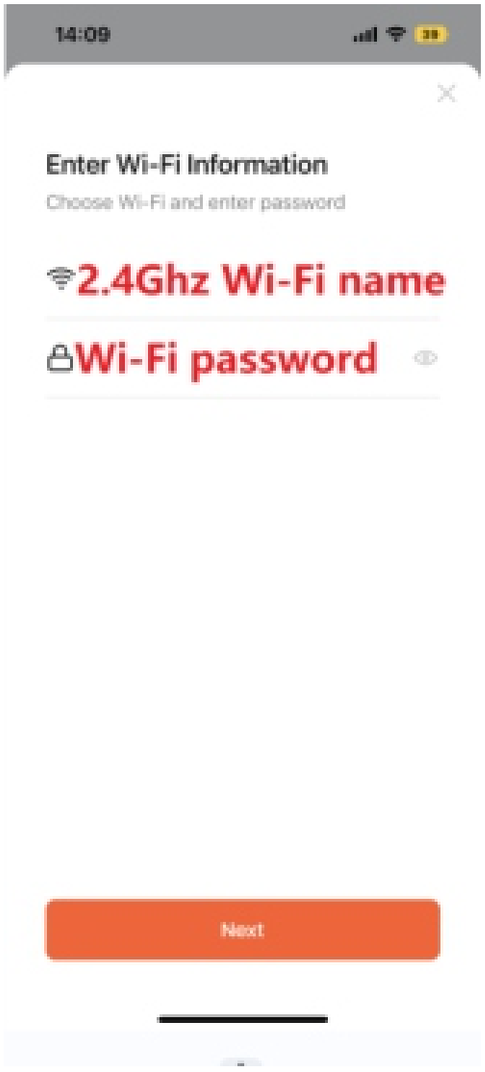
picture 6

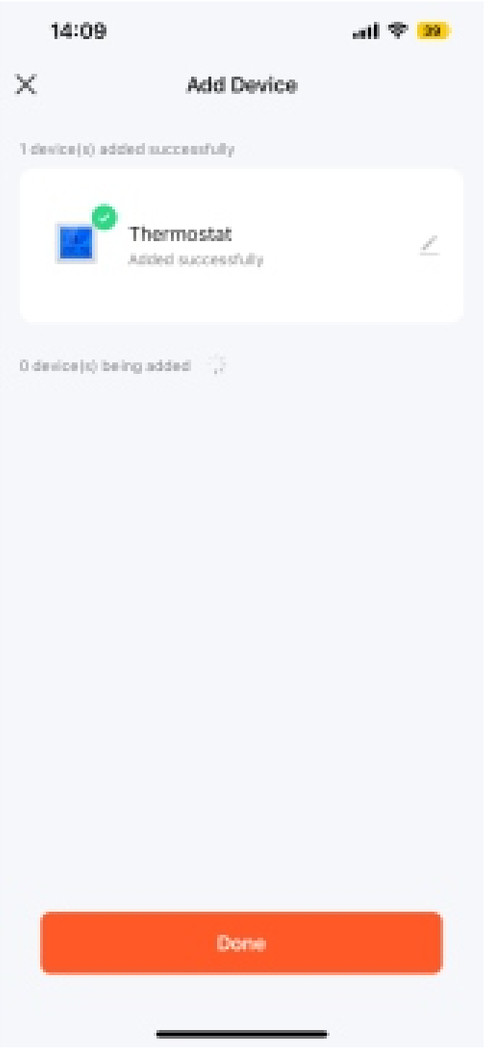
picture 7

4.Enter Wi-Fi information

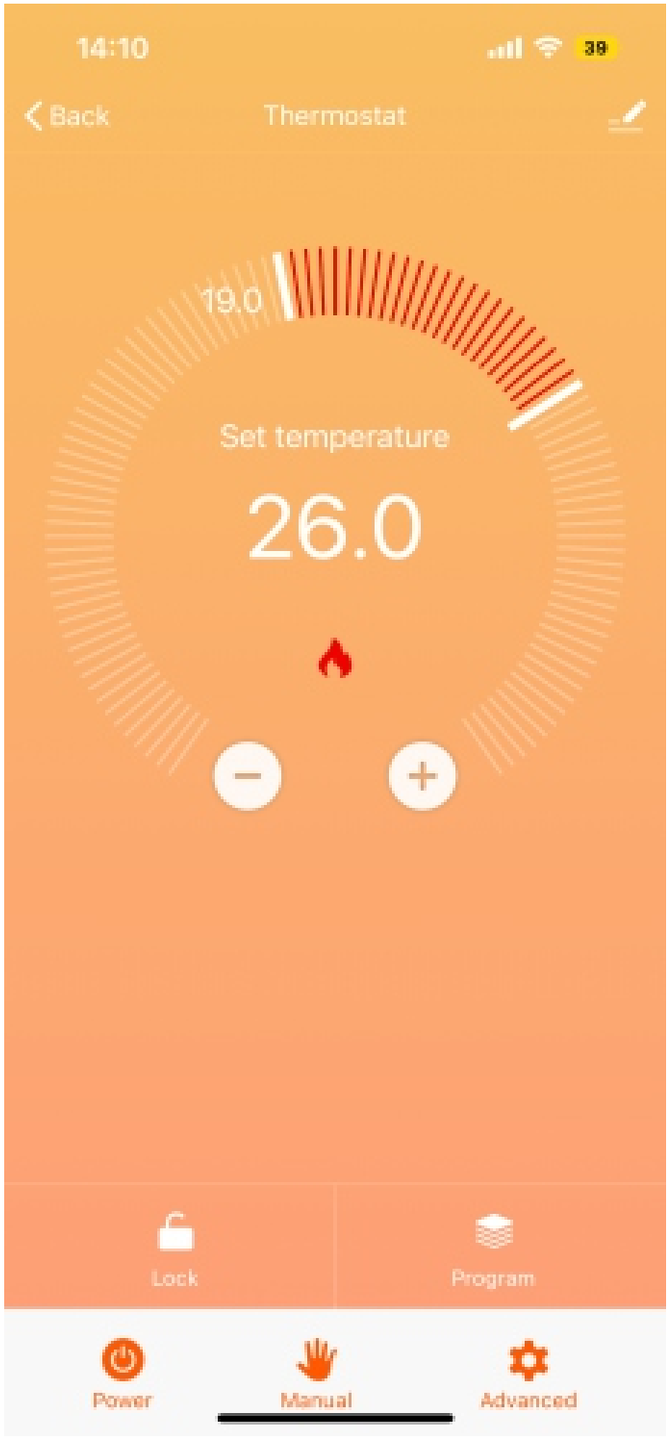
Enter the name and password of the **2.4Ghz Wi-Fi**(please make sure that the Wi-Fi name and password contain only numbers and letters and not special symbols)

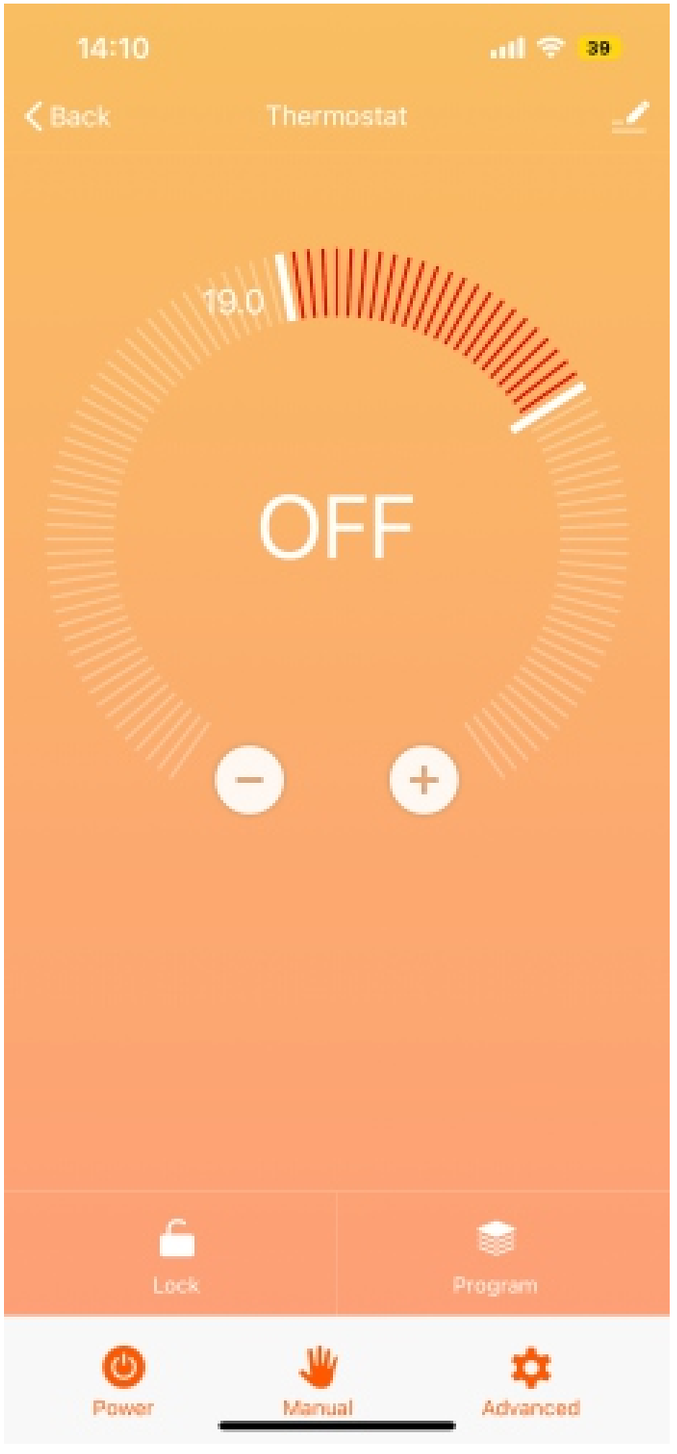
Follow the prompts to the next step,you can see the device is being added,and after a few seconds,you will see that the device is added successfully (the length oftime will depend on the strength of the wifi signal).

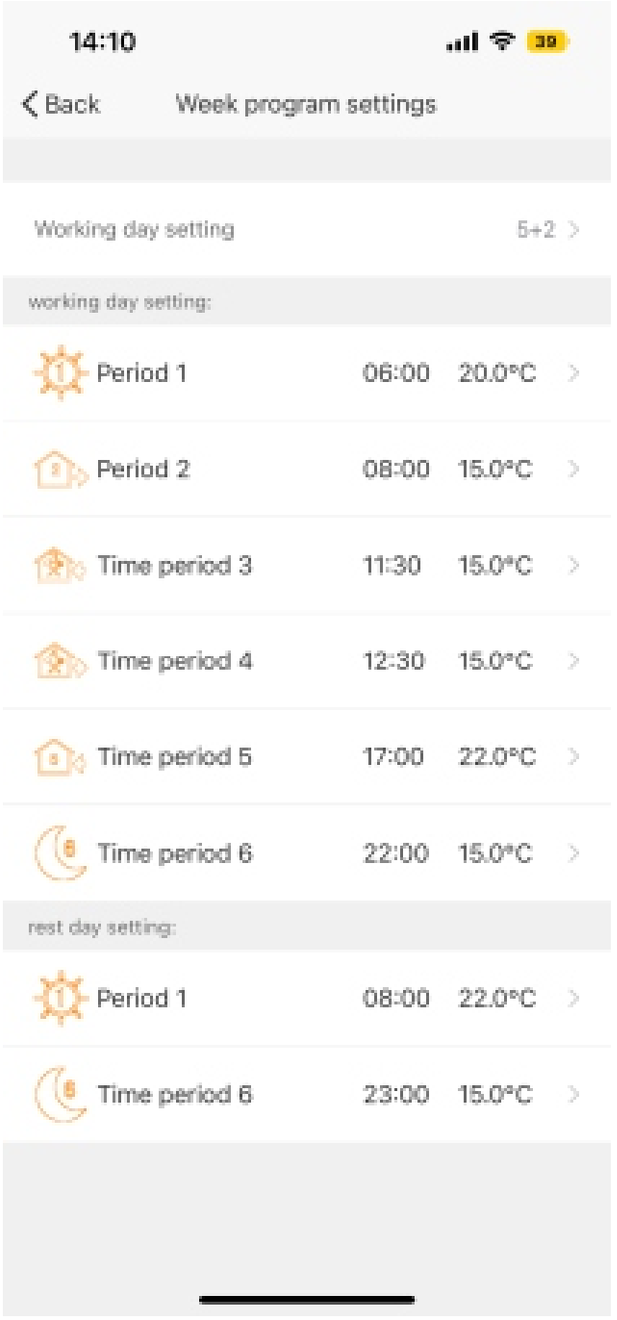


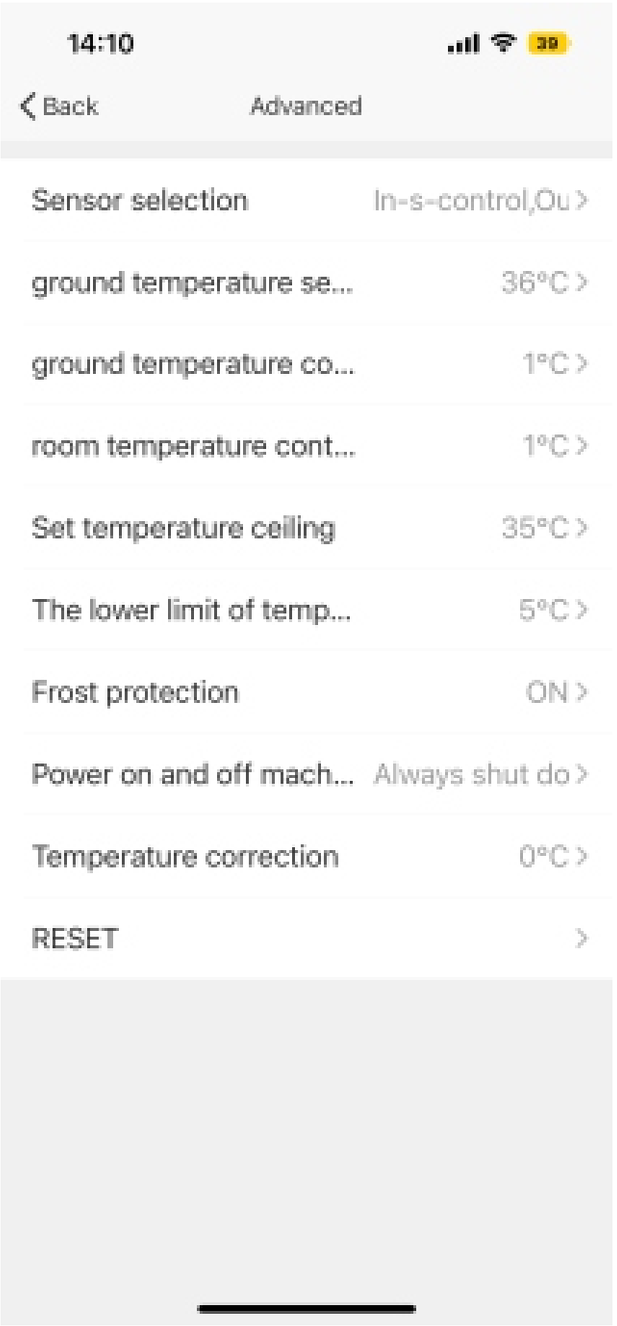


5.Display of temperature controller APP interface









If you encounter any problems during the use of the product, please feel free to contact us through the purchase platform, we will try our best to help you.