

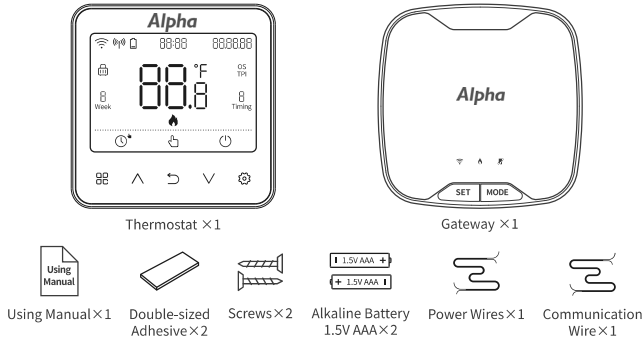
Alpha Touch Wi-Fi Programmable Thermostat Instruction Manual

(Ink screen display, super power saving)

Before installing or servicing the thermostat, please read the manual and operate based on the instructions.

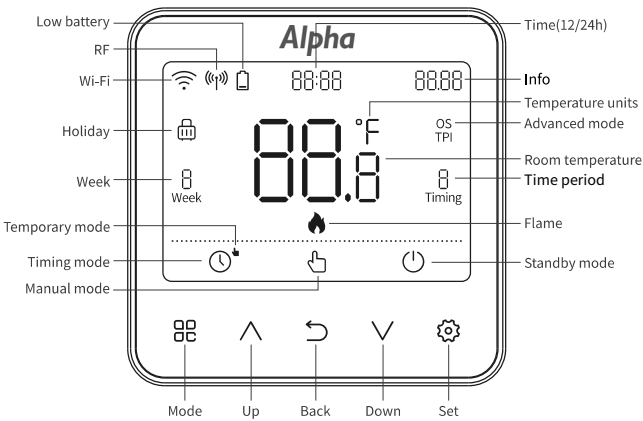
Thank you for purchasing! Before you start, please note that the thermostat must be fitted by a competent person and he will comply with the guidance, standards and regulations applicable to the location where the product is installed. Failure to comply with the following requirements could lead to property damage, injury or other loss, and we won't take any responsibility, except otherwise required by law.

1. Package Contents



2. Interface

2.1 Thermostat

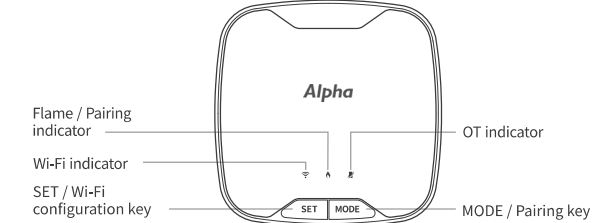


Push button (single function)	Function
Mode	1) When the screen is in the main interface, click to switch the working mode cyclically: automatic (temporary) – manual-off-hot water (summer, applicable OT model) 2) In the setup screen, click to return to the previous operating mode.
Up	1) Increase setpoint; 2) Adjust to left or previous operation.
Back	Turn On/Off maximum power heating function; Press the button to heat at maximum power for 1, 2 or 3 hours.
Down	1) Decrease setpoint; 2) Adjust to right or next operation.
Setting/Confirmation	1) Push to confirm or switch to the next operation when setting parameters. 2) Long press 3 seconds to enter holiday mode.
Push button (combined function)	Function
Press and together for 10 seconds	Enter menu setting.
Press and together for 10 seconds	Lock the screen; Press and together another 10 seconds to unlock.

Icon	Indicating
Wi-Fi Communication This model does not support Wi-Fi	Display: Wi-Fi connected; Flashing: Wi-Fi connected; Disappear: Wi-Fi disconnected or offline
RF Communication	Display: The thermostat is connected to the receiver successfully. Flashing: The thermostat is connecting to the receiver. Disappear: The thermostat is failed to connect to the receiver or there is no network.
Low battery	Display the low battery.
Time	1) When the screen is in the main screen, it displays the current time; 2) Display in timing mode or working; Display end time on holiday mode.
Info	1) Display information like E83 (OT communication is abnormal); 2) LOCK/UNLOCK.
Vacation	The vacation mode is activating.
Week	Display the weekday 1-7(Monday-Sunday).
Temperature	1) Display the current temperature or setpoint; 2) Display the option of menu.
OS Control TPI Control	OS Display: The thermostat adopts the optimal start/stop control mode. TPI Display: The thermostat adopts the proportional integral control mode.
Programming period (6 periods per day)	In the timing mode, the current week displayed as the three-dimensional icon indicates. Display the programming period as the three-dimensional icon indicates when set programming.

Flame	The Thermostat is working and boiler starts heating.
Timing mode	The icon indicates that the mode is running.
Temporary mode	When the timing mode is running in a certain period, manually change the target temperature, the icon is displayed in the current period, and the setting of the original mode is returned in the next period. The pinkie icon is not displayed.
Manual mode	The icon indicates that the mode is running.
Standby mode (Frost protection function)	The thermostat automatically enters the antifreeze mode, and the antifreeze temperature is set to 5 °C by default, similar to standby mode.

2.2 Gateway



Icon	Indicator	Description
	Red	Fast blinking: It has entered the pairing state. Slow blinking: It's not connected to the Internet. Constant on: Network connection normal.
	Green	Fast blinking for several times: There is wireless or wire communication. Fast blinking: Pairing. Slow blinking: It's not connected to Wi-Fi router. Constant OFF: It's connected to Wi-Fi router. Boiler stops heating. Constant ON: It's connected to Wi-Fi router. Boiler starts heating.
	Blue	Constant ON: Boiler is OT type boiler. Constant OFF: Boiler is switch type boiler. No OT communication or OT communication has problem.
	SET key	Long press for 5 seconds: The red light fast blinks and starts to connect network. The red light is constant on after the network is connected successfully. If the Wi-Fi router fails to connect to the Internet, the red light and green light will blink slowly.
	MODE key	Long press for 5 seconds: The green light will blink fast and starts to pair. After the pairing is successful, the red light and green light will blink fast and then exit automatically. To unpair the thermostat: Long press for 5 seconds, and press the SET key once after the green light blinks quickly.

3. Installation

3.1 Installation Location

1) Thermostat

- Mounting wall within the heating area;
- About 1.5m above the floor;
- Keep away from windows and doors;
- Do not install in bookshelves and closets;
- Keep away from heat sources (radiators, fireplaces, television sets, and be sure to avoid direct sunlight);
- Make sure wireless signals could be received; (Stable communication with the receiver)

Reminding
Any temperature control devices are not allowed in the room where the thermostat is installed. If a temperature control valve is installed on the radiator, please make sure the valve is open.

Before installation, please confirm whether the thermostat and receiver are paired (paired before factory, re-pair if abnormal), and check the radio signal, the red or green light of the receiver will flash irregularly when there is no signal.

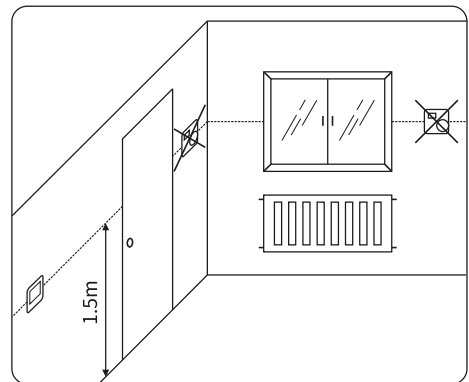
2) Gateway

- Installed near the boiler;
- Make sure wireless signals could be received;

Reminding

Since the thermostat use radio waves to communicate with the receiver, which means that metal objects, such as steel walls, metal filing cabinets, kitchen appliances, mirrors and so on will affect greatly wireless signal receiving.

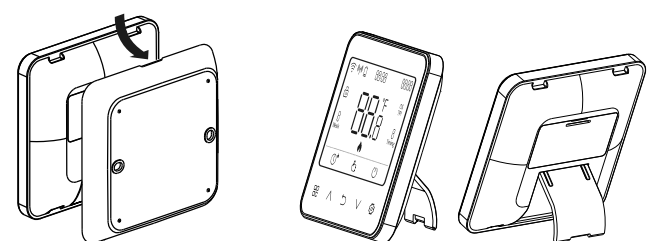
Usually, in an empty environment, the wireless communication distance of the thermostat is up to 100 meters, 30 meters in a building, but the actual distance will be affected by the above-mentioned RF obstacle.



Installation Location

3.2 Thermostat Installation Steps

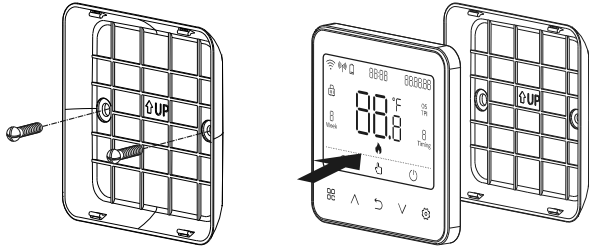
3.2.1 Plate placement



1) Remove wall mounting plate; Put a battery on the thermostat.

2) Place on a table top in a heated area.

3.2.2 Wall Installation

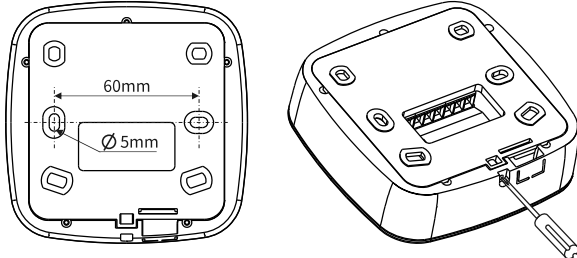


1) Fasten the backboard to the wall with screws.

2) Insert the thermostat into the backplane.

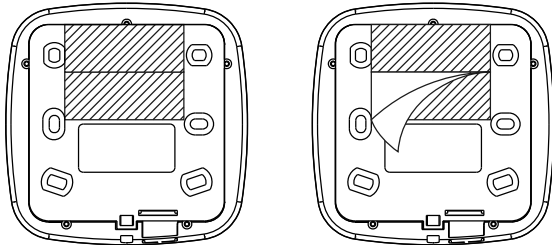
3.3 Gateway Installation Steps

There are two installation methods, screw and double-sided adhesive installation, you can choose the appropriate method as you like. Please refer to 3.4 wire the Gateway.



Method 1: Screw installation

Remove the gateway back plate with a Phillips head screwdriver, then fix the back plate to the mounting box.



Method 2: Double-sided adhesive installation

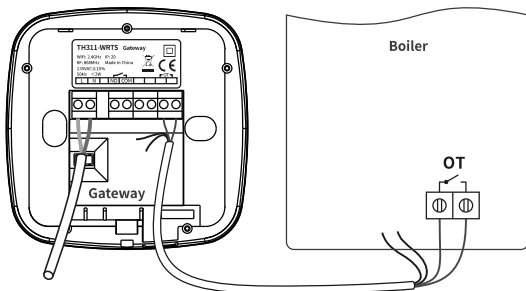
Tear off the double-sided adhesive protection film and attach the gateway to the mounting surface.

Note Please don't place the gateway inside the boiler to avoid the wireless signal interference by the metal shell.

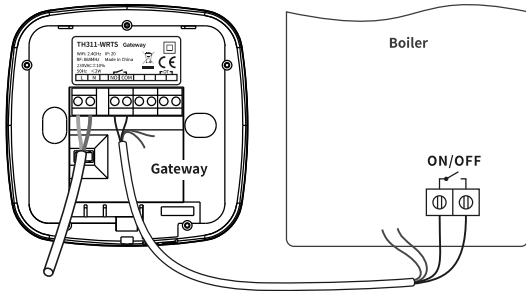
3.4 Connecting the gateway and boiler

1. Cut off the power supply of the boiler.
2. Open the shell of the boiler controller and find the OT or On/Off terminal on the main controller board. (Read the user manual of the boiler for details).
3. Choose OT or On/Off function, then find the right wire according to the label. The red wire is for OT, the black is for On/Off.
4. Connect the two wires to the boiler terminal according to OT and On/Off function in any order; Separate another group of wire and the wire must be away from internal components of boilers. Last, install the shell of boiler.

OT Boiler Wiring Diagram



ON/OFF Boiler Wiring Diagram



- Note** Electrostatic discharge may damage electronic components. It is suggested to dissipate static electricity by a grounded object before working.
- Note** The installation of the boiler must be done by professionals only.
- Note** For OT function on comparable Alpha models, connect to the Alpha BUS terminals and the parameter is default to the climatic BUS mode.

4 Operation

4.1 Thermostat and gateway pairing



1) Long press the indicator light for more than 5 seconds after the gateway is powered on, and loose after the green light flashes;

2) Long press the key for more than 5 seconds in the main menu, loose after the display, then pair automatically;

3) After successful pairing, the thermostat screen will appear and the value will be set, then automatically return to the main interface. The upper left corner of the main interface shows the icon.

4.2 Time Setting

- 1) Press and for 3s to enter the menu setting.
- 2) Choose option P01, press to enter time setting; Set the sequence as: Year-Month-Day-Hour-Minute.
- 3) Press / button to adjust the value, Press button to confirm the setpoint and set the next value.
- 4) Press button to return the main interface and save the set value.

4.3 Working Mode

In the main interface, press button to switch the working mode in a cycle, as the order: timer - manual - standby.

- 1) Timer mode: Set for 7 days, 6-period temperature per day. The mode is suitable for users with regular work and rest;
- 2) Temporary mode in timer mode: Change the temperature of the current period temporarily, temperature will revert to the original setting in the next period.
- 3) Manual mode: Always control the boiler as the target temperature. The mode is suitable for users who need constant temperature for a long time;
- 4) Standby mode: Automatically run the anti-freeze function, the target temperature is defaulted 5°C. The mode is to prevent the pipeline from freezing and suitable for season when no heating is needed.

4.4 Target Temperature Set

In the main interface, press / button to adjust the target temperature, the adjustment range between 5~35°C, press to confirm and return to the main interface; Or it will return to the main interface automatically after 6 seconds.

Timer mode: Adjusting the temperature to temporary value, temperature will revert to the original setting in the next period.

Manual mode: Temperature could be set according to the new target value.

Standby mode: The target temperature is not adjustable.

4.5 Time temperature programming in timing mode

Time-temperature programming allows you to set 6 different periods in a day and set a separate target temperature for each period to achieve different heating requirements.

7 days programming: You can set different temperature during different period for each day in a week.

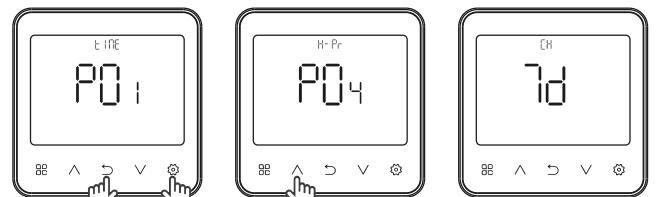
5+2 days programming: You can set same temperature during same period from Monday to Friday on weekdays, and different temperature during different period from Saturday to Sunday.

1 day(24hours)programming: You can set the period and temperature for one day, and then the rest days adapt this programming.

The default time temperature programming is 5+2 days, parameters is following:

Period	MO	TU	WE	TH	FR	SA	SU
P1			06:30				08:00
			21°C				21°C
P2			08:00				10:00
			10°C				10°C
P3			12:00				12:00
			10°C				10°C
P4			14:00				14:00
			10°C				10°C
P5			17:30				17:30
			21°C				21°C
P6			22:00				23:00
			10°C				10°C

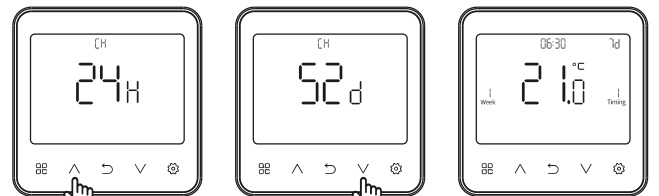
Programming setup guide:



1) Press and for 3s to enter the menu setting.

2) Press to P04, press to enter programming setting.

3) 7 days programming is displayed by default. Press to enter.



4) Press to 24 hour mode, press to enter.

5) Press to 5/2 days mode, press to enter.

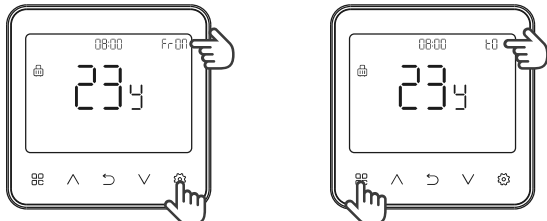
6) The order is from P1~P6, set start time and target temperature on Monday, and then set for Tuesday, and so on.

Button functions during programming:

Press 3s to switch the week;
Hold down and click to switch the time period;
Press / to adjust the time or temperature value;
Press to confirm and enter the next operation;
Press button to return to the previous step.



4.6 Vacation function



Press 3s to enter the vacation setting.

Press to switch between Fr On and t0.

The icon Fr On indicates to set the start time, the icon t0 indicates to set the end time; The order is "Year-Month-Day-Hour". Press ^/v button to adjust the value, press button to confirm the value and set the next item; It will automatically enter the page of setting the end time after start time is set.

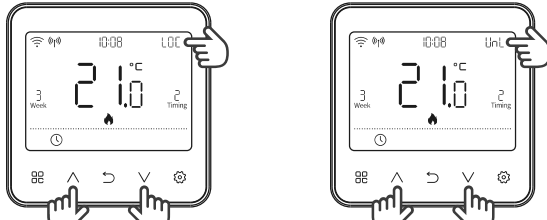
Note

- 1) When the vacation function is running, the target temperature is 5°C by default.
- 2) When adjusting the start date, the start date > end date, then the end date equal to the start date
- 3) When adjusting the end date, the start date > end date, then the start date equal to the end date.
- 4) Only the vacation button is active in the vacation mode, press button to cancel the vacation function.
- 5) The thermostat will be switched to timer mode after the vacation function ends.

4.7 Daylight Saving Time

- 1) Press ^ and 3s to enter the menu setting.
 - 2) Choose P10 (d5t), press button to enter setting.
- Press ^ or v to choose, if you want to enable daylight saving time, select ON (default is ON).

4.8 Key lock function



Press ^ and v together for 10s, all keys are inactive;

Press ^ and v together for 10s twice to unlock.

4.9 Domestic Hot Water (DHW) (Need OT boiler)

- 1) Press ^ and 3s to enter the menu setting.
- 2) Choose option P14 (dh OP), this menu item can control the bathroom water switch. Default is ON.
- 3) Choose option P11 (dh L), this menu can control the temperature of DHW. Default is 40°C, the step is 0.5°C.

4.9 Thermostat menu setting

In the main interface, press ^ and 3s at the same time to enter the menu setting; Press ^ or v to switching menu function between P01~P15.

No.	Name	Function	Range	Default Value
P01	ti NE	Time Set	—	—
P02	COUP	Pair with receiver	P01-P08	P01
P03	SP An	Choose from non/OS/TPI	—	Nor
P04	H-Pr	Heating programming settings (timing)	7D / 5+2D / 24H	7D
P05	HI LO	Set the minimum and maximum temperature	Maximum tem: 10 ~ 35°C, Minimum tem: 5 ~ 30°C	Max: 35°C Min: 5°C
P06	HO n	Set temperature hysteresis	0.0 ~ 2.0	Hon=0.4 Hoff=0
P08	CAL	Temperature calibration	-7.0 ~ 7.0	Real-time temp.
P09	Fr	Anti-freezing and temperature setting	ON: Allowed, OFF: Not allowed; ON Adjustable Range 5 ~ 15°C	5°C
P10	d5t	Daylight Saving Time	ON / OFF	ON
P11	r5t	System reset	NO: Not Reset, YES: Reset	NO
P12	dh U	Set the temperature of domestic hot water (Need OT boiler)	Same as boiler	—
P13	Info	Find boiler information (Need OT boiler)	Same as boiler	—
P14	dh OP	Domestic hot water temperature switch (Need OT boiler)	ON: Allowed, OFF: Not allowed	—
P15	PL	Other parameters/ Set OT parameters (Need OT boiler)	Enter password: 8	—
—	EXIT	Exit	—	—

4.10 PL menu setting (Need OT boiler)

No.	Parameter	Range	Default Value
T-1 HHCH	HHCH maximum heating water temperature	45-85°C	85°C
T-2 LLCH	LLCH minimum heating water temperature	10-HHCH	45°C
T-3 CLU	CLU environment curve effect value	0.2/0.4/0.6/0.8/1.0/1.2/1.5/2.0/2.5/3.0	1.2
T-4 INFL	INFL temperature probe influence coefficient	0-20	10
T-5 HHBO	HHBO Reading (ID57) values	ID49Max >=ID57>=ID49min	85°C
EXIT	EXIT		

4.11 Boiler information

No.	Parameter	Description
1	Target temperature of heating water	tSet + Temperature value (Stopping heating displays—)
2	leaving water temperature of heating water	tFLO + Temperature value ID_25
3	Return water temperature of heating water	trEt + Temperature value ID_28
4	Domestic hot water temperature	tdH + Temperature value ID_26; DHOP=ON is visible
5	Flue gas temperature	tFLU + Temperature value ID_33
6	Outdoor temperature	tEst + Temperature value ID_27
7	Percentage adjusting	ModU ID_17
8	Water flow	FLOR + L/min ID_19; DHOP=ON is visible
9	Burning time	Hour + Hours ID_120
10	Water pressure	PRES ID_18

5. Gateway connection network

5.1 Installation App

"Alpha touch" App can be downloaded from the "Google App Store" and "Apple App Store".



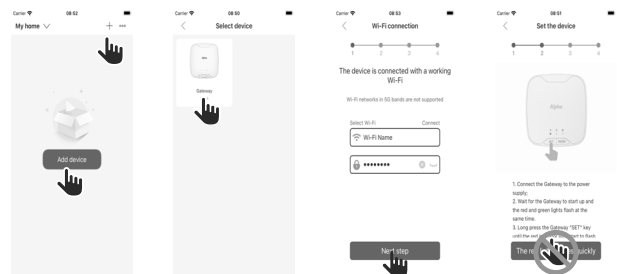
5.2 Login account

Open the App and follow the instructions to log in / register your account.

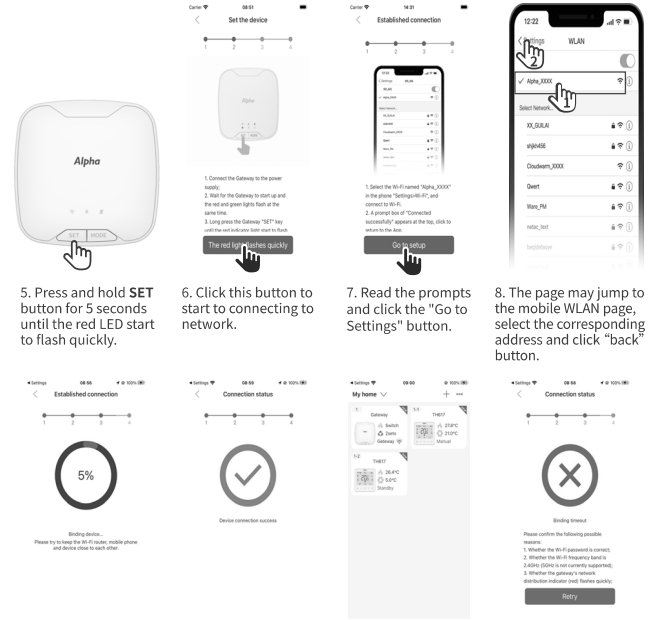


5.3 Add the gateway

Please make sure that the mobile has already installed APP. You need to register an account when you firstly login, and need to make the mobile phone connected to Wi-Fi (2.4GHz).



1. After login, APP will automatically go to main menu, and click + to enter into device-adding interface.
2. Click the gateway that you want to add to the list.
3. Enter the account and password to connect to Wi-Fi, and click "NEXT".
4. When this button is appeared, please don't be hush to go to next steps, please connect the gateway to network firstly.



5. Press and hold SET button for 5 seconds until the red LED start to flash quickly.
6. Click this button to start to connecting to network.
7. Read the prompts and start the "Go to Settings" button.
8. The page may jump to the mobile WLAN page, select the corresponding address and click "back" button.

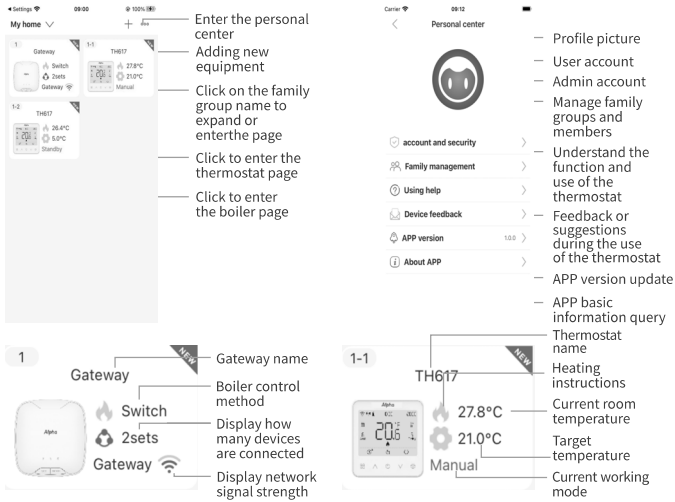
Troubleshooting for failing to connect to Wi-Fi

1. The connected Wi-Fi is in the 5GHz frequency band, and the gateway can only connect to the 2.4GHz frequency band; Wi-Fi needs to be divided into 5GHz and 2.4GHz frequency bands.
2. Are there maximum limit on the number of devices connected to Wi-Fi? If yes, the limit needs to be lifted.
3. Does Wi-Fi have IP address filtering settings? If yes, it needs to be lifted;
4. Is the distance between the gateway and the Wi-Fi router long? Is it more than 10 meters? Is there a wall in the middle?
5. Is the APP the latest version? Click "About" in the APP menu option to check the version;
6. Try to restart the Wi-Fi and thermostat, and then re-connect to the network;
7. Take more mobile phones to try. Try by iPhone firstly and then switch to Android mobile, or Try by Android mobile and then switch to iPhone;
8. If the above reasons have been excluded, Try to take another mobile phone, and open hotspot, and Let the thermostat and mobile phone APP to connect to this hotspot. If it can be connected, it means that there is still something wrong with the Wi-Fi settings.

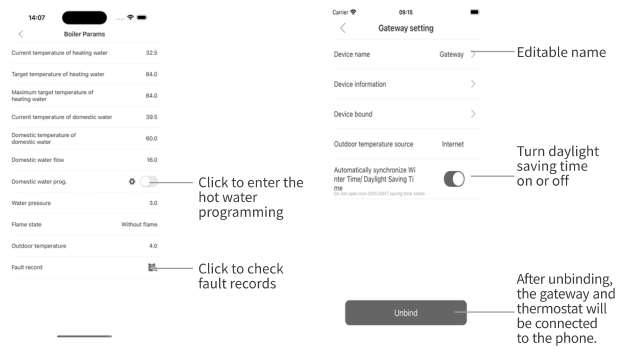
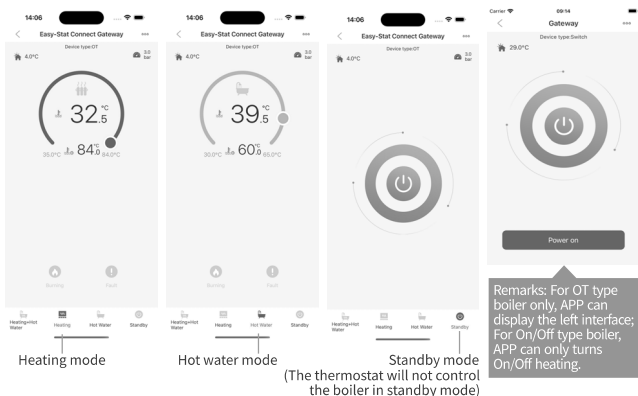
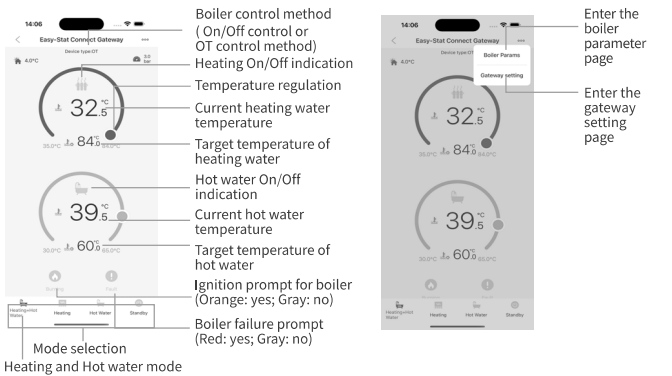
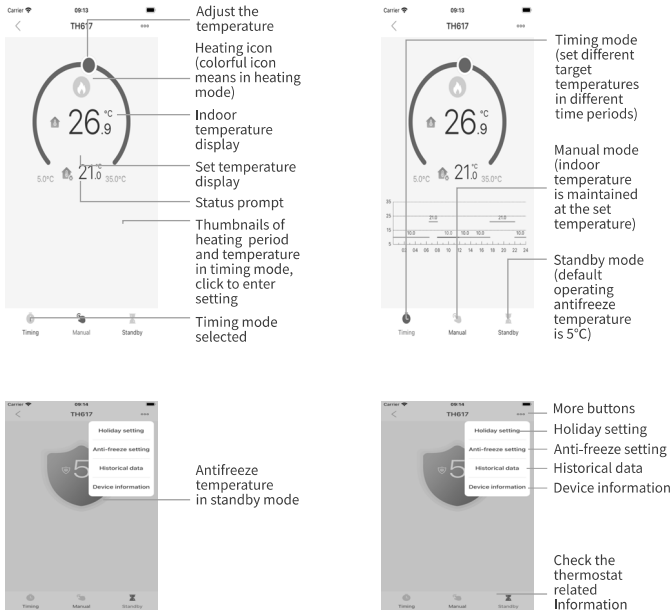
If the connection failed, read the instructions below.

5. APP use guide

5.1 APP main interface



5.2 The main interface of the thermostat



6. Troubleshooting

The thermostat and APP will indicate when there is an error occurring. Please refer to the followings to find reasons and relevant measures. If it is reminded that the error can not be fixed, contact your seller or the specified service provider.

Fault code	Fault description	Possible causes	Exclusion method
E82	Wireless communication fault between thermostat and gateway	1) Thermostat fails to receive a response from the gateway after 10 minutes, which indicates a communication error. 2) RF hardware failure.	1) There are devices at a same or similar frequency nearby, affecting the normal operation of the thermostat and the gateway. 2) Signal interference caused by metal, steel walls and others between the thermostat and the gateway. 3) Long distance between the thermostat and the gateway. 4) If it is still not resolved, please contact customer service.

7. Technical Data

7.1 Thermostat

Set temp range	5~35°C
Accuracy	±1.5°C
Display temp range	5~99°C
Ambient temp	0~55°C
Ambient humidity	5~95% RH(Non-condensing)
Storage temp	-5~55°C
Sensor	NTC
Control protocol	OT or On/Off
RF frequency	868.0~868.7MHz (Open transmission distance 100m)
RF transmitting power	≤25mW
Power supply	2×1.5V AAA; Alkaline battery
Rated power	<50μW
Size	86×86×16.6(mm); With mounting plate thickness 20mm
Housing material	ABS; PMMA
IP	IP 20
Display	EPD
Buttons	Touch keys

7.2 Gateway

Ambient temp.	0~45°C
Ambient humidity	5~95% RH(Non condensing)
Storage temp.	-5~55°C
Control protocol	Opentherm® or On/Off
Wi-Fi frequency range	2.4~2.5GHz
Wi-Fi transmitting power	25mW (72.2Mbps) ; 100mW (802.11b Mode)
RF frequency	868.0~868.7MHz (100m in open air)
RF transmitting power	≤25mW
Power supply	230VAC ±10%, 50Hz
Power consumption	<2W
Relay load	0.5A, 125VAC; 2A, 30VDC
Size	110×110×31.5(mm)
Housing material	PC
Protection class	IP 20
Display	LED lamp
Buttons	Mechanical buttons

Tips The company has the right to change the contents of this manual without notifying the user. This behavior will not affect the user.