INSTALLATION AND USER MANUAL

Reliance Valves Battery Wireless Programmable Thermostat

Contents

Specification

Power source: 1.5V LR6*AA
Temperature setting range: 5~35ºC
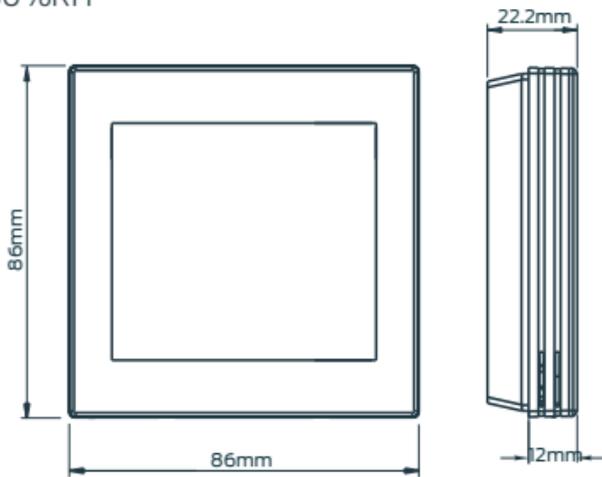Display accuracy: 0.1ºC
Setting accuracy: 0.5ºC
Storage temperature: -10~60ºC, 0~90%RH
Ambient temperature: 0~50ºC, 0~80%RH
Wireless frequency: Lora 868MHz

Note:

For connecting to the internet
you must use the Reliance Valves
Gateway - GWAY100001.

22.2mm

86mm

86mm

12mm

Important safety information

Read all of the information in this manual before installing this thermostat.

Always turn off the power at the main power source by unscrewing the fuse, or switching the circuit breaker to the off position before installing, removing, cleaning, or servicing this thermostat.

Only a professional contractor should install this thermostat.

All wiring must conform to local and national building and electrical codes and regulations.

If the system is not operating properly, check the wiring and replace the fuse if necessary.

Use this thermostat only as described in this manual.

Thermostat display

a   ⏻ ON/OFF/Boost

b   🕐 Time setting

c   ≡ Menu button

d   ⌄ Lower temperature setting

e   ⌃ Raise temperature setting

f   Reset

a   b   c   d   e

f

needle
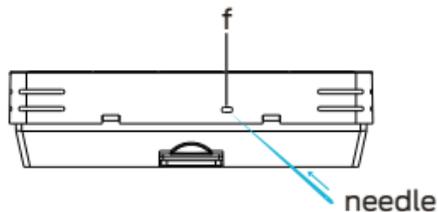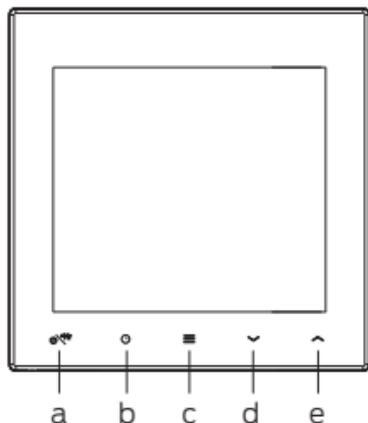
Thermostat display

1   If the icon 📶 is not shown then WiFi is not connected
    If the signal is lost after connection the icon will flash
2   Weeks icon
3   Mode: Room mode, floor mode, dual temperature mode
4   Room temperature/time display
5   Manual mode
6   Programming mode
7   Zone number – If flashing then the connection to the wiring centre has been lost
8   Key lock
9   Boiler on/off
10 Frost protection
11 Holiday mode
12 Settings menu
13 AM/PM
14 Sleep mode
15 Away mode
16 Back home mode
17 Wake up
18 Temperature setting/Boost display
19 Low power alarm

ON/OFF function

Press '☼❄' to turn the thermostat ON. Press and hold '☼❄' again to turn the thermostat OFF.

Key lock function

In the main display interface, press and hold '⌄' '⌃' at the same time to activate or cancel the key lock. When activated, no keys can be used. The thermostat will display '🔒'.

Boost function

Press '☼❄' to switch the setting temperature or boost control. When the display shows '✚0', press '⌄' '⌃' to select boost. The length of time the heating will be boosted is displayed. When the time elapses the screen returns to the temperature display.
Press '☼❄' to cancel and go back to the temperature display setting.

Holiday mode

With the power on, press '≡' to switch between manual mode, programming mode and holiday mode. After selected holiday mode '🧳' will display and will run at 16ºC. Press '≡' to cancel holiday mode. Boost function can be used during holiday period.

Open window function

If the room temperature drops 6ºC in 4 minutes, the open window function will activate and display '[ ]', then turn down all heating. When the room temperature increases by 2ºC the thermostat will return to normal operation. Press any button to cancel the open window function while it is active.

Anti-seize function

If the thermostat has not been activated for over 1 week then to prevent the valve and pump from seizing, the thermostat will run the system for 5 minutes.

Frost protection

In frost protection mode, when the temperature drops below what has been selected, the thermostat will start the heating until the temperature has been raised by 3ºC.

Intelligent function

The intelligent function adjusts the starting time for home heating according to the temperature measured within the building. It preheats your rooms to the temperature according to your schedule.

Time setting

Press and hold '⏱' for 4 seconds, press '⏱' to select year, month, day, time scale, time, press '∨' '∧' to adjust setting, press '⏱' to confirm.
If there are no actions for 10 seconds, the thermostat will return to temperature display mode.
Press '⏱' to check time, year, month, day.

Setting the date and time on initial start up

Plug in the power supply. Press '∨' or '∧' to set year, press '⏱' to set month, day, time scale, time, press '∨' '∧' to adjust the setting.

Year	Month	Day	12h/24h optional	Time

Programme setting

Programme settings: 4/6 period programming optional
(factory default: 6 period).
When the thermostat is on, press and hold '≡' to enter the programming
mode. Press ' ⌄ ' or ' ⌃ ' to select the programming week (5+2, 5+1+1 or 7
individual day optional).
Press '≡' to enter time setting mode. Press ' ⌄ ' or ' ⌃ ' to select time, press '≡'
to enter temperature setting mode, Press ' ⌄ ' or ' ⌃ ' to select temperature.
Press '≡' to save and exit. If no buttons are pushed for 10 seconds, the
thermostat will exit the programme setting automatically.

Default programming (6 period programming)

☼		⌂⤴		⌂⤵		⌂⤴		⌂⤴		☾	
Wake up		Away		Back home		Away		Back home		Sleep	
6:00	20ºC	8:00	16ºC	11:00	20ºC	14:00	16ºC	18:00	20ºC	22:00	16ºC

(4 period programming)

☼		⌂⤴		⌂⤴		☾	
Wake up		Away		Back home		Sleep	
6:00	20ºC	8:00	16ºC	18:00	20ºC	22:00	16ºC

In programming state, press and hold ' ⌄ '' ⌃ ' at the same time to restore
factory settings, display '*dEF*'

Operation mode

Programming mode (The factory default is programmable)
The thermostat will run according to the pre-set schedule. The screen will show '🕐'

Manual mode
From programming operation mode, press '≡' to enter the manual mode, the screen will display '✋'. Press '∧' or '∨' to immediately adjust the temperature and save automatically.

Temporary hold mode
The thermostat will keep the room at the temporary set temperature, and will resume the programme operation mode when you enter the next programme. In programming operation mode, press '∧' or '∨' to enter the temporary hold mode, the screen display '✋ 🕐'. Press '∧' or '∨' to immediately adjust the temperature and save automatically.

Alarm instructions

| Err. display	Err. condition	Result
Er 1	Internal sensor short circuit	Thermostat shut down all heating output
Er2	Internal sensor open circuit	Thermostat shut down all heating output
Er3	External sensor short circuit	Thermostat shut down all heating output
Er4	External sensor open circuit	Thermostat shut down all heating output

Pairing

Connecting the thermostat and wiring centre

1. With the thermostat power off, press and hold the on/off button for 4 seconds to enter pairing mode (display should show "*rFI*").

2. Press the on/off button again to send a signal to the wiring centre (display should show "▬ ▬")

3. On the Wiring Centre, press and hold the pairing button for 3 seconds to enter pairing mode

4. Use the Wiring Centre pairing button to select the desired zone, indicated by the LED

5. Leave the wiring centre for 3 seconds. The LED should flash to indicate it is pairing to the thermostat

6. Once paired, the wiring centre LED will move to the next available zone. Press and hold the pairing button once again to exit the pairing mode

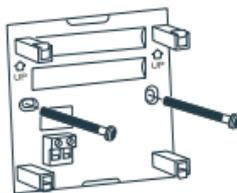7. The thermostat is now connected to the chosen zone

Light on
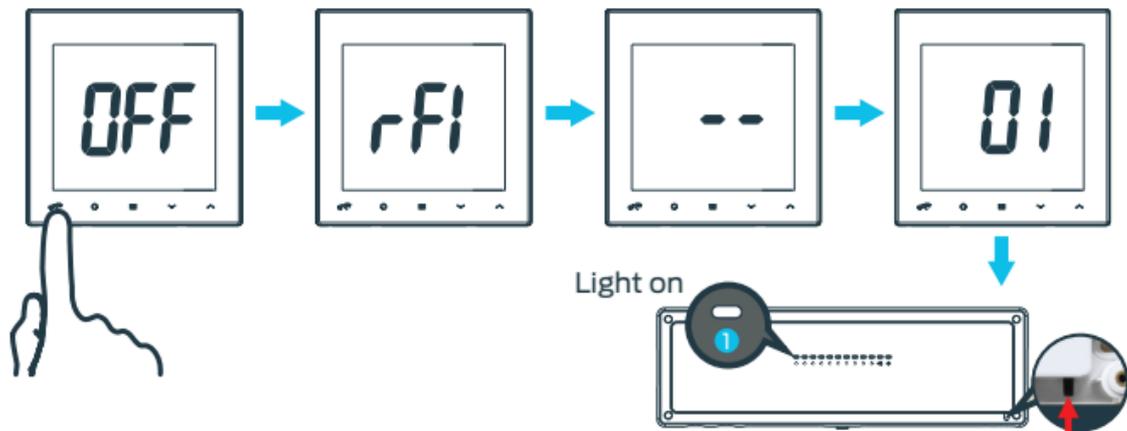
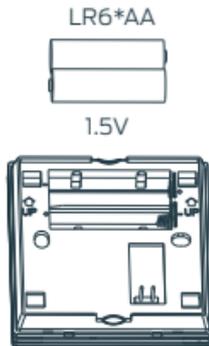When thermostat is in pairing status, press and hold button 3 seconds, ① light is on.

Installation

LR6*AA

1.5V
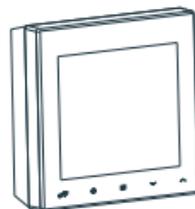
❶
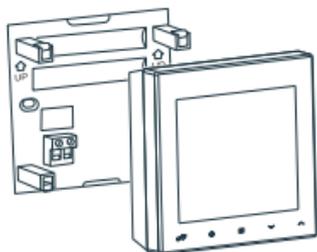
Separate the front and back parts of the thermostat

❷

Attach the backplate to the wall with suitable fixings

❸

Insert the batteries

❹

Clip the front part to the backplate

Configuration menu

With the thermostat turned off, press and hold '≡' to enter the configuration menu. Press '≡' to select different parameters. Press ' ∧ ' ' ∨ ' to adjust parameters. Press and hold ' ≡ ' for 3 seconds, display 'dEF', indicates all the configuration settings have reverted to factory default setting. The thermostat will return to 'OFF' mode if no buttons are pushed within 10 seconds.

Item	Press button	Displayed (factory default)	Press ∨ or ∧ to select	Description
1	≡	CL (0.0℃)	-6ºC ~ +6ºC	Temperature correction value
2	≡	AH (35℃)	20ºC ~ 50ºC	Select maximum setting temperature
3	≡	AL (5.0℃)	5ºC ~ 20ºC	Select minimum setting temperature
4	≡	db (0.5℃)	0.2ºC ~ 5ºC	When the temperature is < room temperature -setting value, the heating will stop. When the temperature is < room temperature + setting value, the heating will start.

Configuration menu

Item	Press button	Displayed (factory default)	Press ˅ or ˄ to select	Descriptions
5	≡	Pr (On)	ON/OFF	Program option ON/OFF
6	≡	SE (6)	4 / 6	Select Programming period in one day 6-6 time zones; 4-4 time zones
7	≡	ES (OFF)	On / OFF	Intelligent function option ON : Turn on intelligent function OFF : Turn off intelligent function
8	≡	OP (OFF)	On / OFF	Open window function option ON/OFF
9	≡	AF (On)	On / OFF	Frost protection option ON/OFF
10	≡	PP ($100^{\circ C}$)	5ºC~17ºC	Frost protection temperature setting

Configuration menu

Item	Press button	Displayed (factory default)	Press ∨ or ∧ to select	Descriptions
11	≡	AL (On)	On/OFF	Anti-seize function selection
12	≡	bH (nC)	nC/nO	Select the actuator type NC/NO
13	≡	Sn (100)	100/10	External sensor 100 : NTC100K 10 : NTC10K
14	≡	Ct (Sr)	Sr/SF/rF	External sensor function option Sr : room mode rF : room and floor mode SF : floor mode
15	≡	Pt (27⁰°C)	6-45ºC	Select maximum floor setting temperature limitation
16	Press 'ⓘ ✕ Ht' to confirm and exit			

Gateway specification

Adapter output: 5V⎓1A
Working temperature: -10ºC~55ºC
Working humidity: 10%-90%(no condensation)
Wifi frequency: 2.4G Wi-Fi
Wireless frequency: Lora 868MHz
Dimensions: 60.5 × 60.5 × 16.1mm

Red
Wi-Fi status indicator
Blue
RF status indicator

Switch/Reset key

Power jack
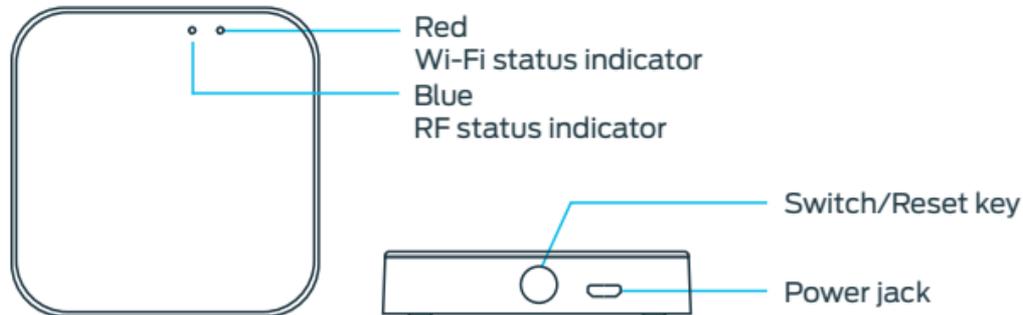
Connecting the App

Download and register
Click App store (click Android application market)
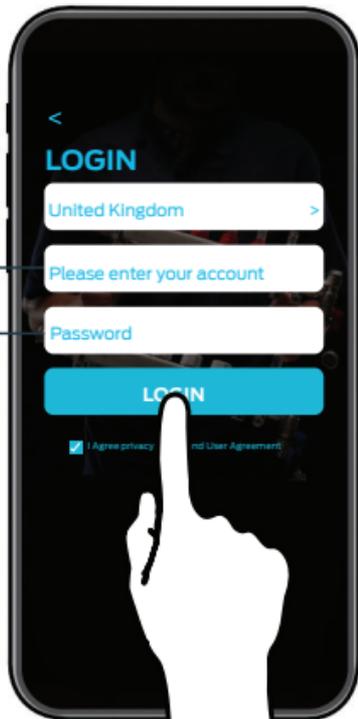Search for 'Reliance Controls' and download
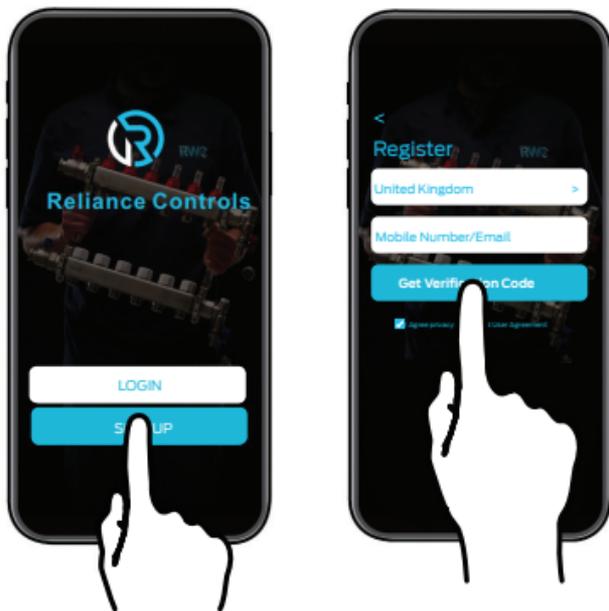
Login

When you finish the registration, log into your email and click on the link to activate your account. Your APP is now ready to use.

Registered mailbox /phone number ●

Insert your password ●

Connecting to the Gateway

Reset key

Tips: First, please turn on the location of your phone.
Press and hold the reset key of gateway until the light turns
red and blinks.

1 Enter the 'HOME' interface of
the app, click the '➕' on the
top right.

2 Click 'Wireless thermostat'.

20.5

Wireless thermoststat

③ Enter your Wi-Fi account and password. Click 'Next'

④ Tick 'Confirm and proceed',then click 'Next' (Follow intruction to reset device)
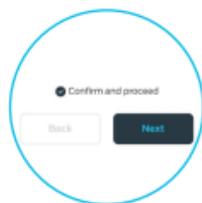
⑤ Adding device...

⑥ Click 'Done', it means the gateway has been added successfully

Done

Tips

Before pairing the gateway, you need to power on the gateway.
When pairing a gateway, the mobile phone and the gateway must connect to the same network.

Add thermostat

Before adding the thermostat, press and hold '⏻ᵗᴴʳ' for 3 seconds, press '˅' '˄' to select 'rF2', then press '⏻ᵗᴴʳ' to enter code match status and it will display '➖ ➖' then then follow these steps to connect the app.

1 Click ' ➕ 'Add subdevice

**2** Adding device...

3 Added successfully
Click 'Done'.
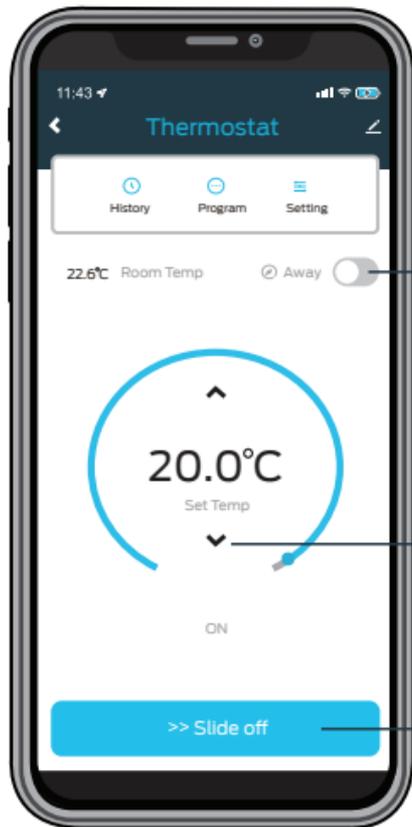
Temporary leaving mode:
If you are away from home temporarily, click the 'Away' button, the temperature will remain at 16ºC, the energy-saving icon '⊘' turns green and is on.
After you arrive at home, click the button again to recover the previous temperature setting.

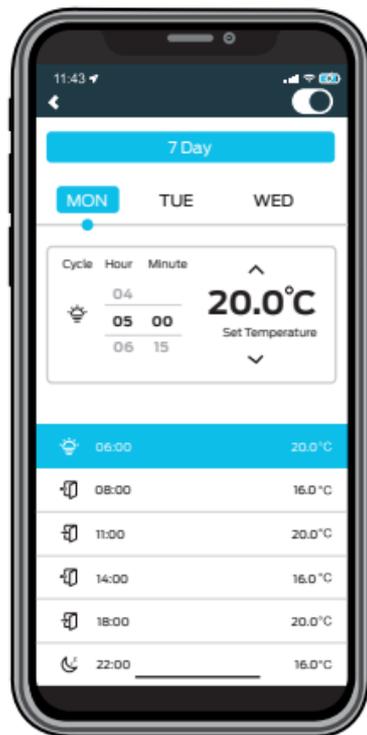Press '∧', '∨' to adjust temperature

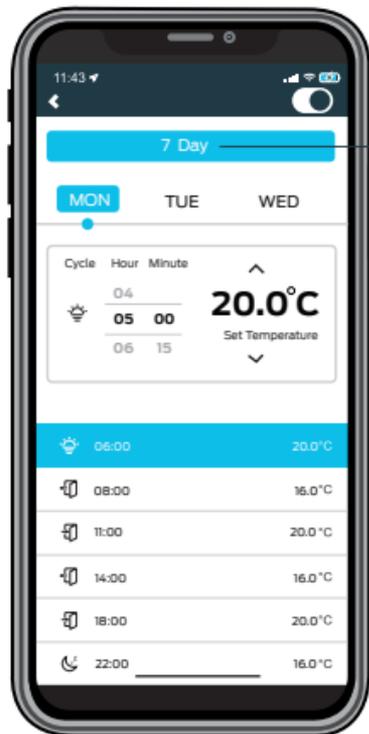Slide to power on/power off

APP Setting-programming
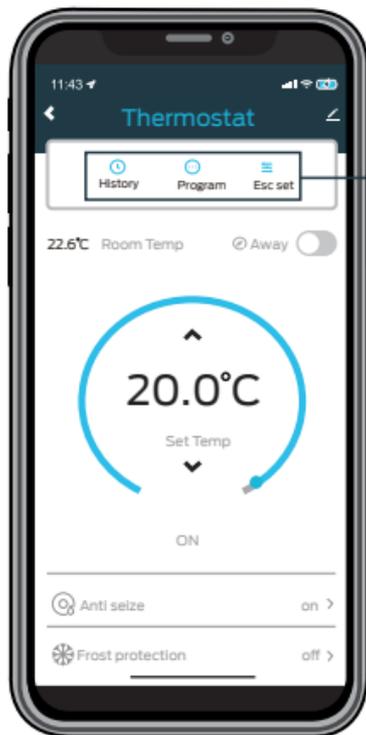
Click the ' ⊙ Program ' to enter the programming mode

Click the ' ⊙ History ' for checking the historical temperature records

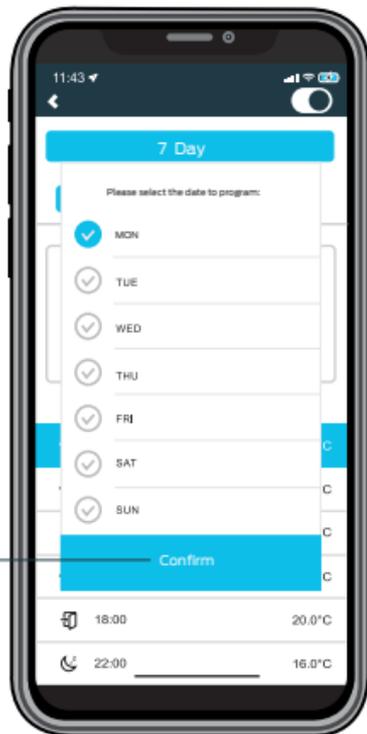Click the ' ☰ Esc set ' for setting specific parameters
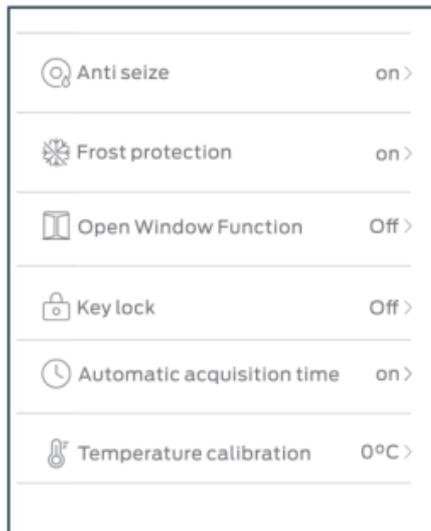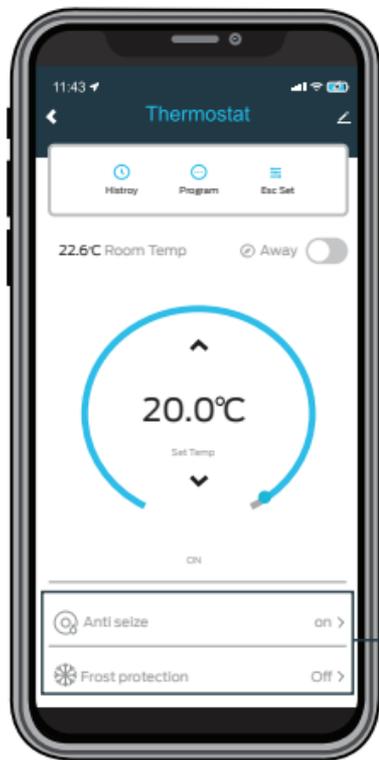
APP Setting-Multi-day Programming

Click '7 Day' to select the date

❶ Click the 'Program' to enter the programming mode

❷ Slide up and down to select the time, press '∧' '∨' to set temperature in different periods of time

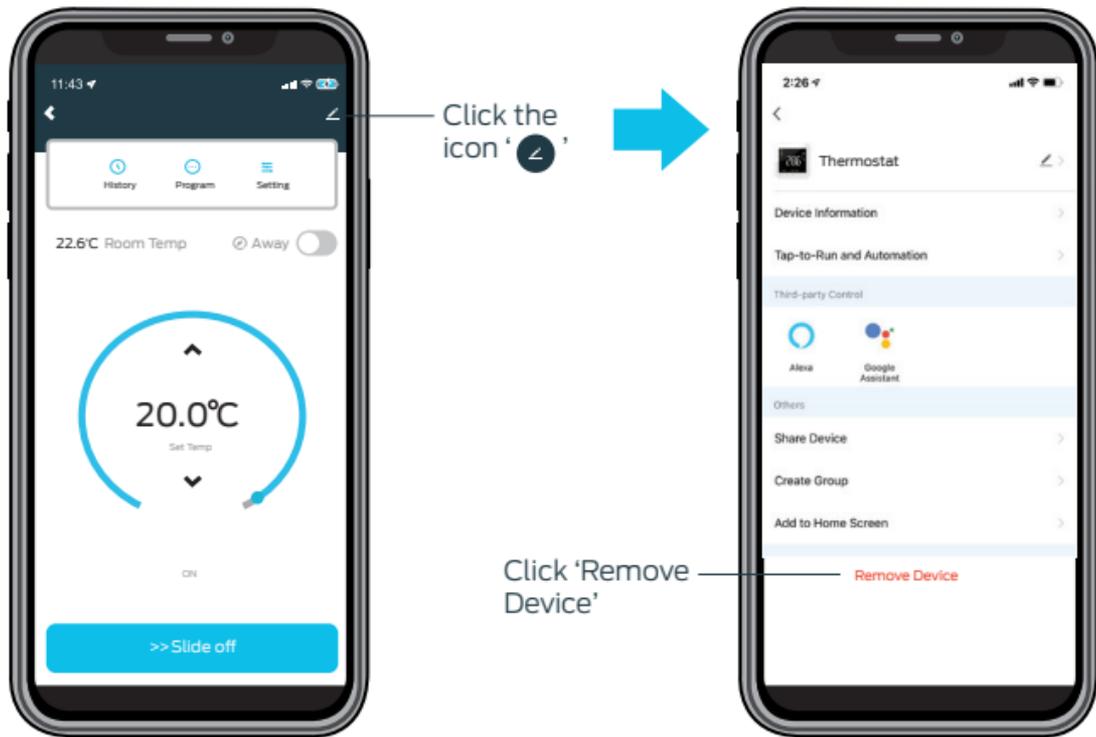❸ Click 'Submit' to confirm

Click 'Confirm' after selecting the date

Optional Parameter Setting

Slide up and down to select different optional parameters

Remove devices

Click the icon ' '

Click 'Remove Device'

Voice command

After waking up the speaker you can say:

Amazon Alexa
* Alexa, turn on bedroom.
* Alexa, turn off bedroom.
* Alexa, raise the bedroom by 1 degree.
* Alexa, drop the bedroom by 1 degree.
* Alexa, set the bedroom to 16 degrees.

Google Assistant
* Ok, Google, turn on bedroom.
* Ok, Google, turn off bedroom.
* Ok, Google, set the bedroom to 16 degrees.

Tips:
Bedroom is the device name. You can name it during the device set up.
The temperature graduations and format must be the same in the speaker and the thermostat.

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