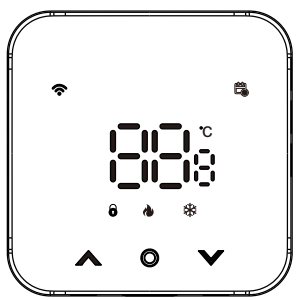
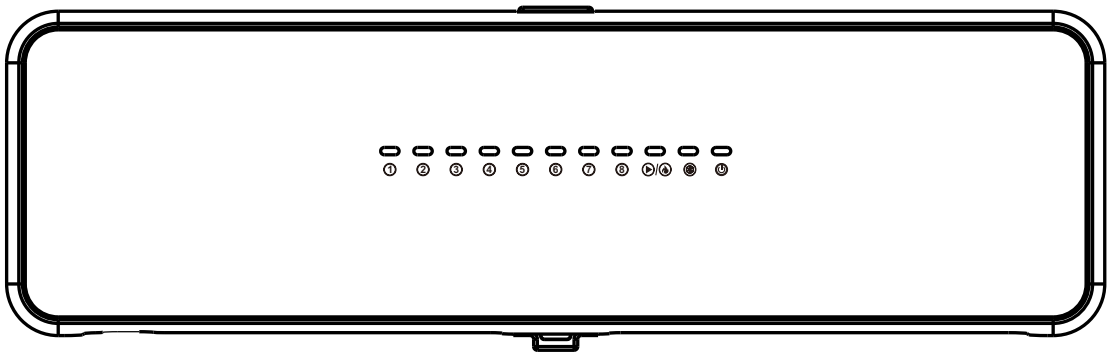
SAS931XWCH-XT-WIFI(TY)
INSTRUCTIONS



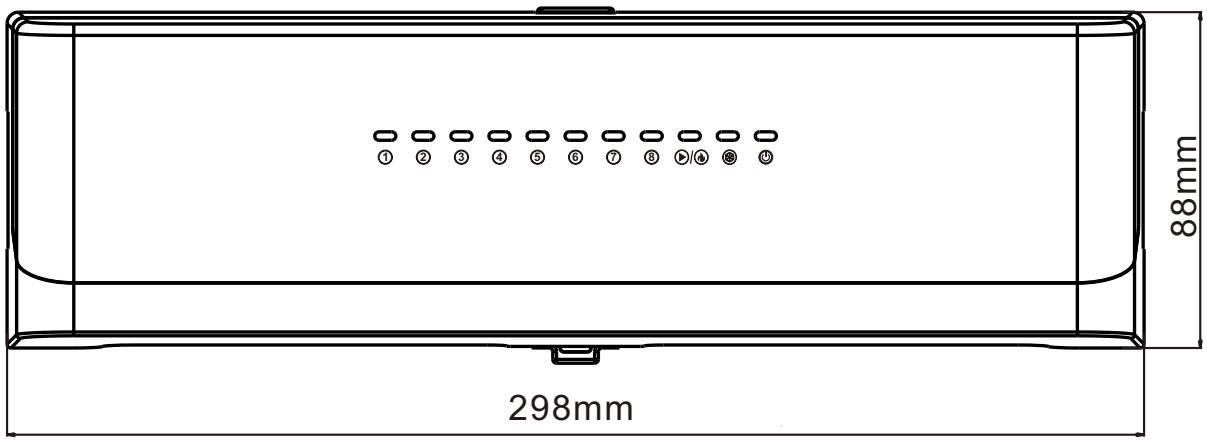


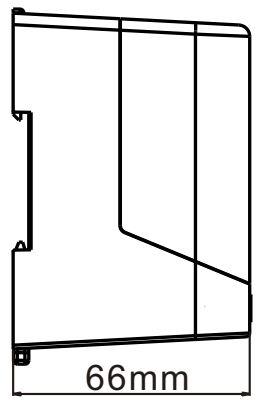
Content

Technical Parameters

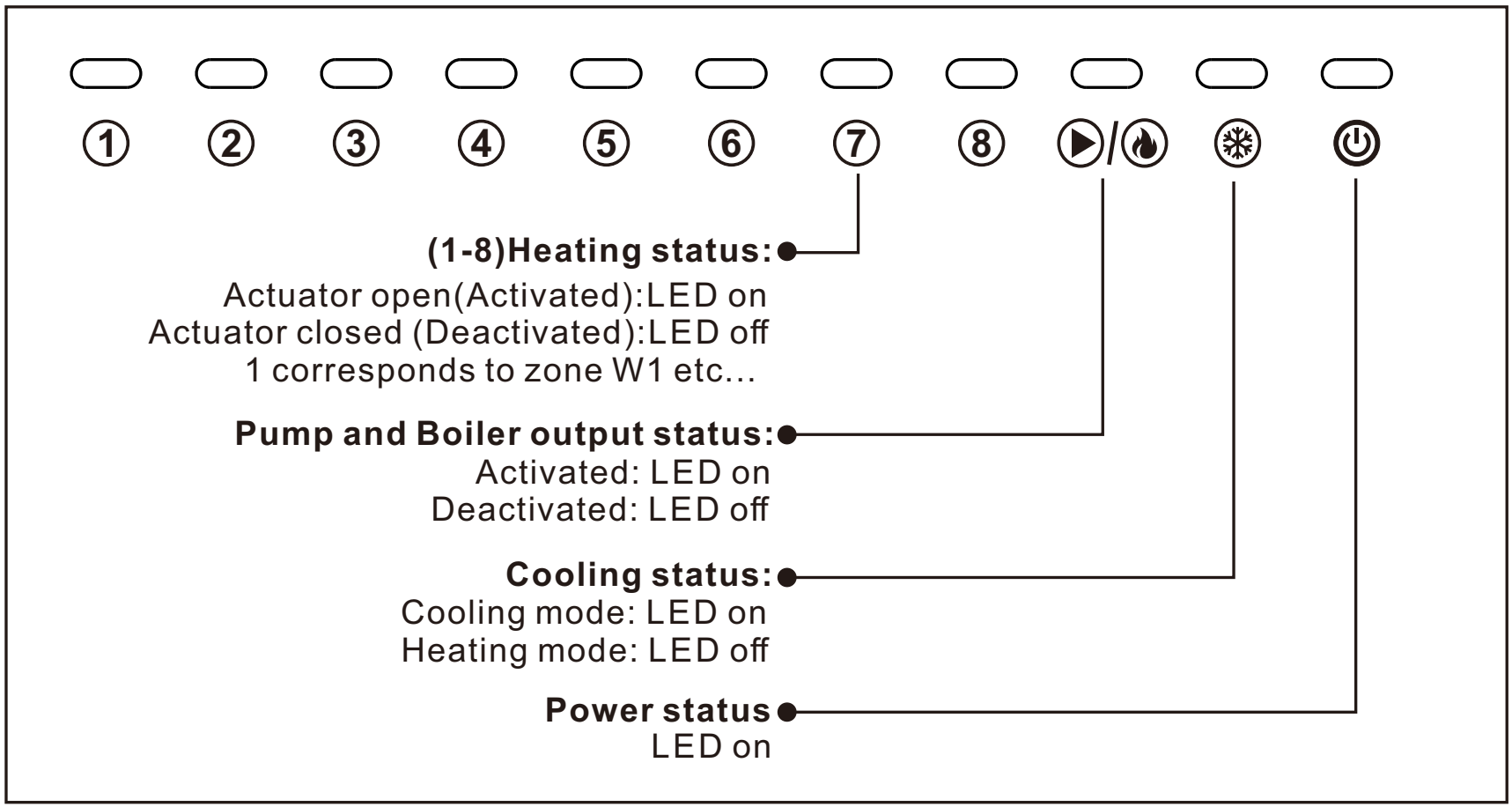
Wiring control centre (SCU211CH-BUS)

Power source: 100-240VAC 50 / 60Hz (maximum current 10A)
Storage environment temperature and humidity: -10 ~ 60°C, 0 ~ 90% RH (non-condensing)
Working environment temperature and humidity: 0 ~ 50 °C, 0 ~ 80% RH (non-condensing)
Color: White
Size: 298 X 88 X 66mm
IP rating: IP40



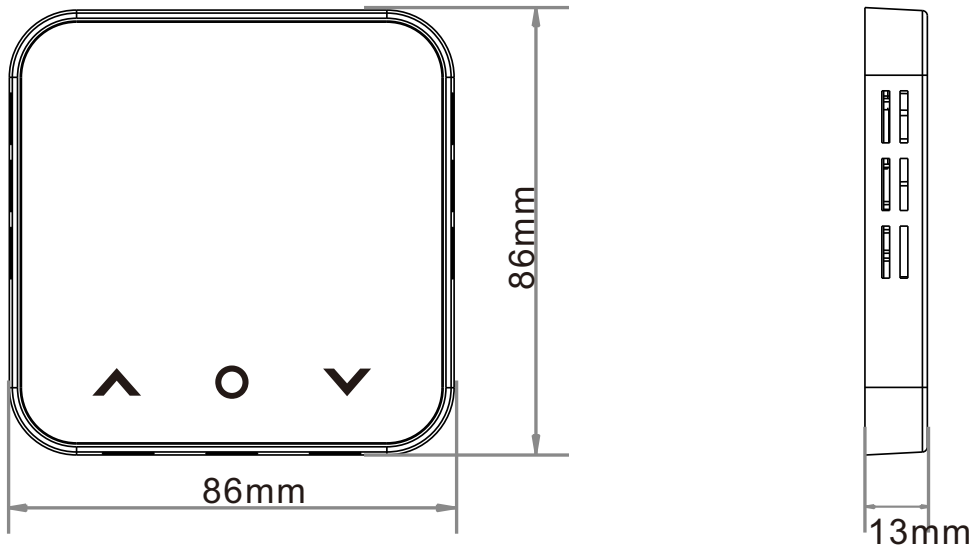


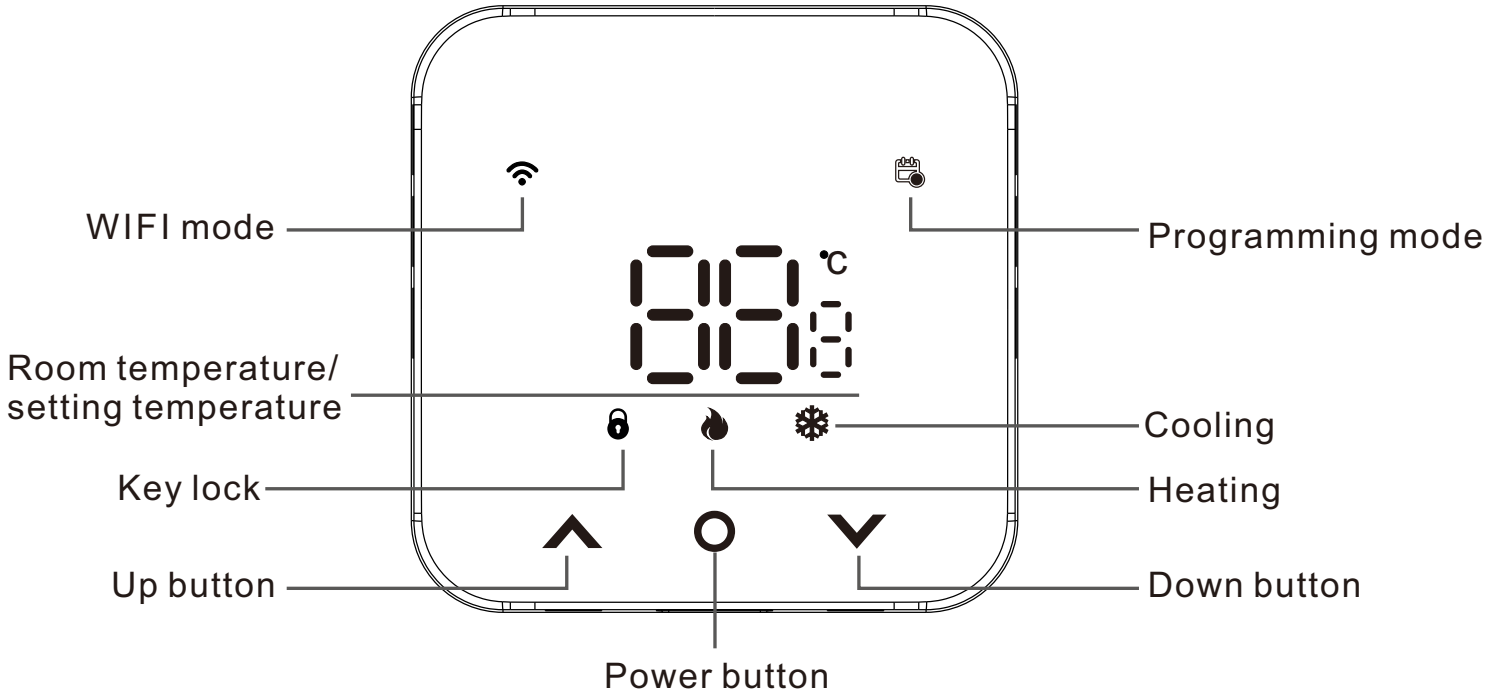
Wiring control centre interface introduction



Master [SAS931XWCH-0-BUS-WIFI(TY)] / Slave [SAS931XWCH-0-BUS-S]

* Power supply and signal input: DC12 ~ 18V carrier non-polarity input
  (power supply wiring control centre, maximum current 100mA)
* Storage environment temperature and humidity: -10 ~ 60°C, 0 ~ 90% RH (non-condensing)
* Working environment temperature and humidity: 0 ~ 50°C, 0 ~ 80% RH (non-condensing)
* Temperature display range: 0 ~ 50°C
* Display accuracy: 0.1°C
* Color: White
* Size: 86x86x13mm
* Protection level: IP21
* WIFI antenna emission frequency(master controller): 2.4GMHz
* WIFI wireless transmission distance(master controller): 60M in the open area





Adjust temperature

In switch off status, short press to switch on thermostat.
In switch on status, long press over 5 seconds to switch off until OFF flash. Press again to confirm. For slave until press and hold for 5 seconds can switch off directly.

In power on mode, long press“ ”and“ ”button over 5 seconds could enter key lock mode, and show lock icon. Press “ ”and“ ”unlock in lock status.

CO/AU/HE

Press and hold O until OFF flash. Press " ^ " and " v " to select cool/heat/Auto mode.
And press O again to confirm.

CO Manual cooling mode HE Manual heating mode AU Auto mode

Manually switch programming mode

Short press" O " button while switching on,switch programming
and non-programming operation mode. Programming icon"  " light on when in programming mode.
Without display mean in non-programming operation mode.

WIFI mode

In switch on mode, long press" ^ "and " O "button over 5 seconds, WIFI icon keep fast flash mean ready for WIFI connect.
Stable WIFI icon: successful WIFI connect

Cooling mode

Blue light: system is cooling output. White light: Cooling mode.
Press" ^ " or " v " button to change temperature

Heating mode

Red light: system is heating output. White light: Heating mode.
Press" ^ " or " v " button to change temperature.

Auto mode

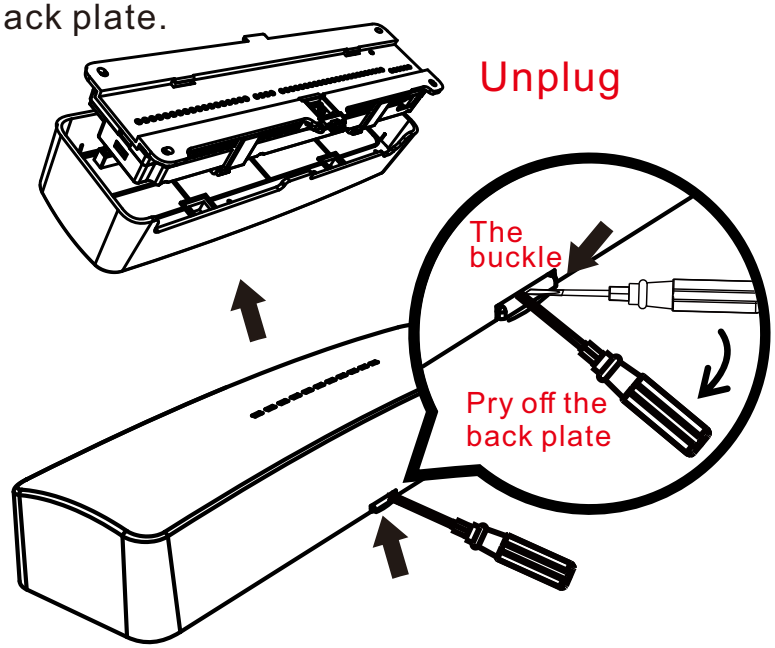
Cool and heat system display simultaneously
Auto heating output red light display;
Auto cooling output blue light display

Product installation and testing

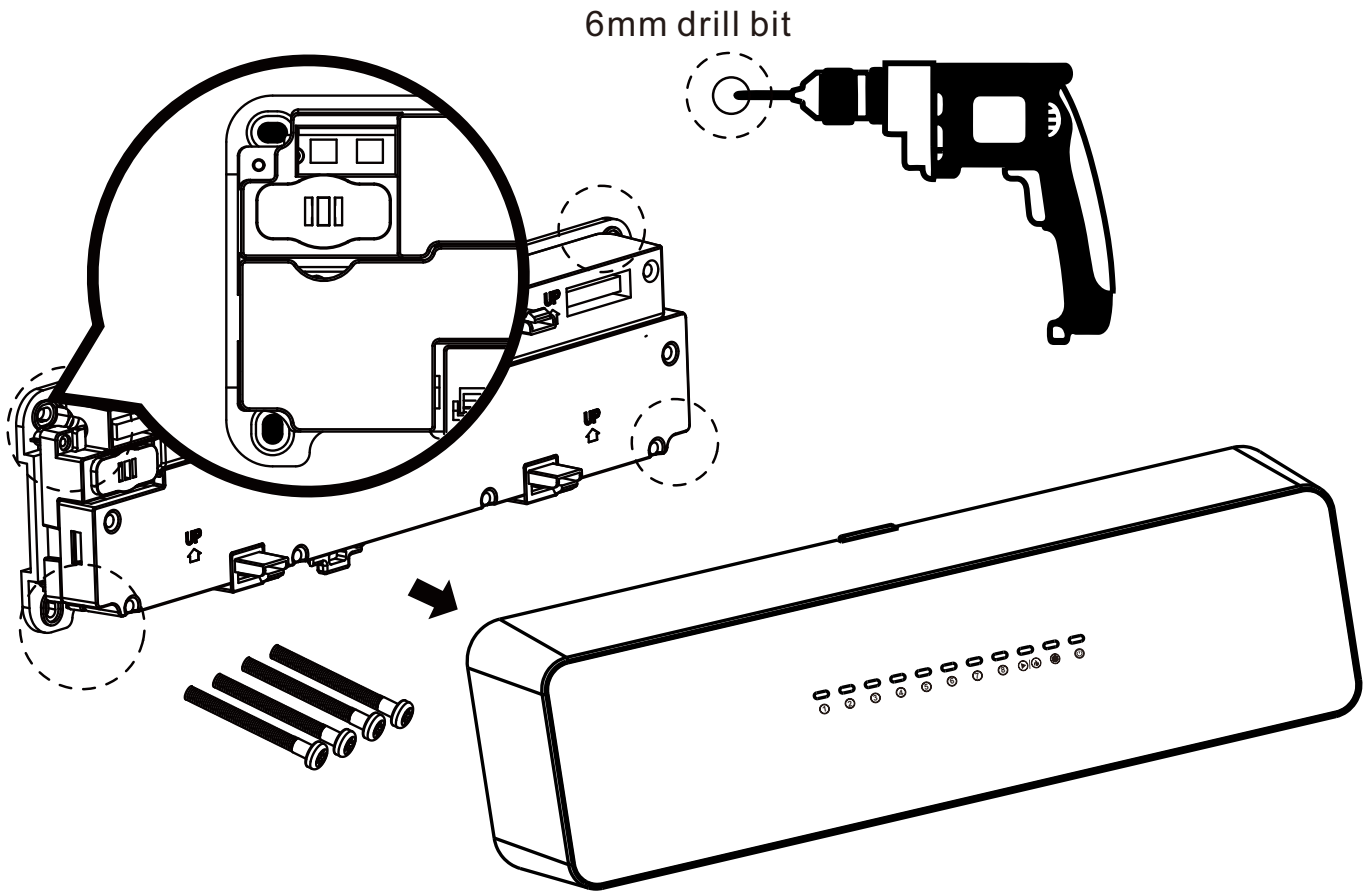
Wiring control centre installation

In order to ensure the quality of network communication, the master thermostat must be installed in the living room, in the same area as the router. Please pay attention to distinguish the master and slave thermostat during the installation.
The master thermostat is packaged with the wiring control centre and named SAS931XWCH-0-BUS-WIFI(TY)

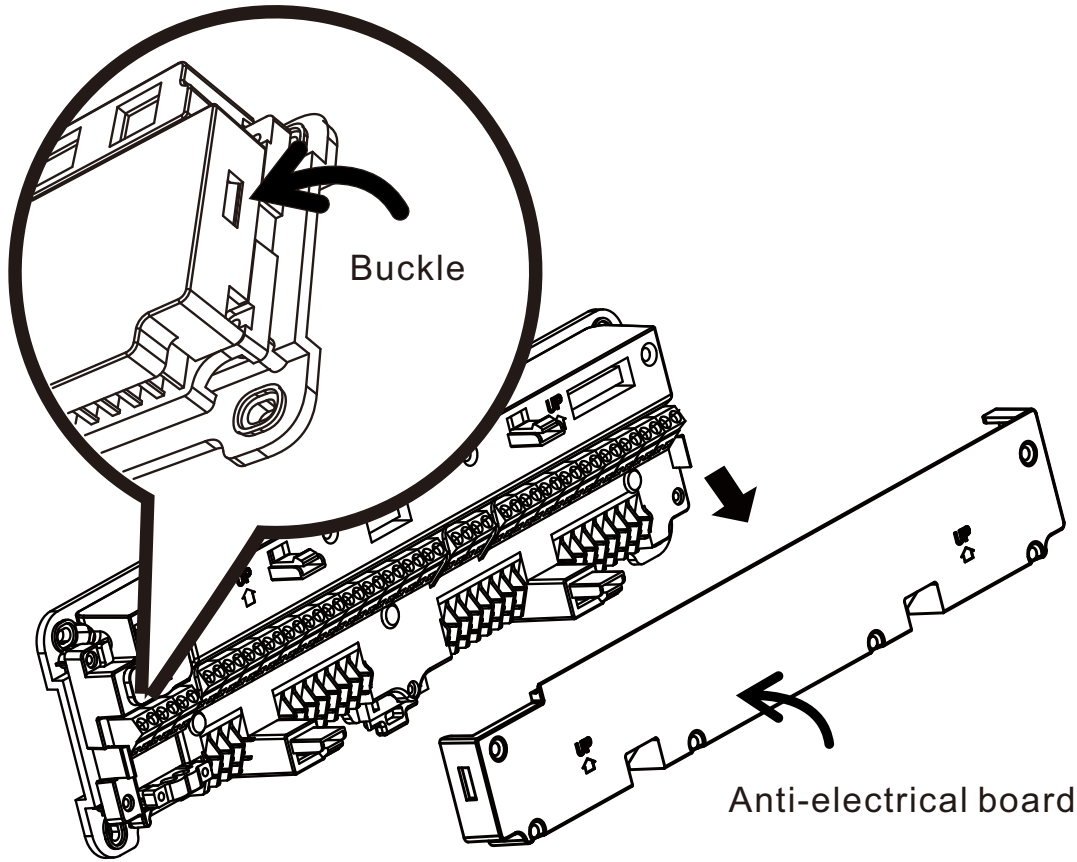
1. There is a slit above the wiring control centre. Use a small flat-blade screwdriver to insert it and pry it out and remove the back plate.



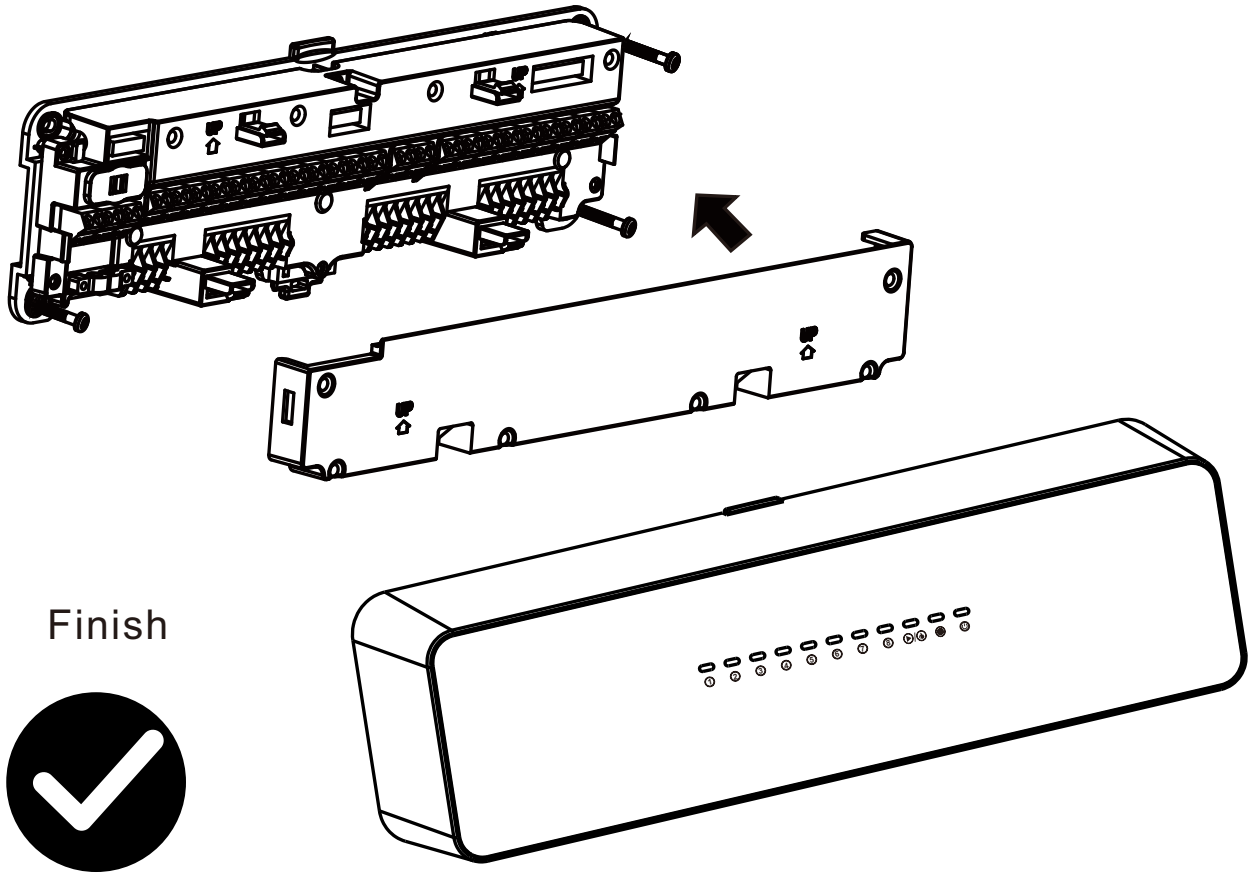
2. Use the back plate to mark the hole position, and then use an impact drill (6mm drill bit) to make the screw holes (if there is a mounting rail, you can ignore it)



3. Press the buckle to remove the anti-electrical board, and then connect the wires referring to wiring port and the marked wiring on the anti-electrical board.



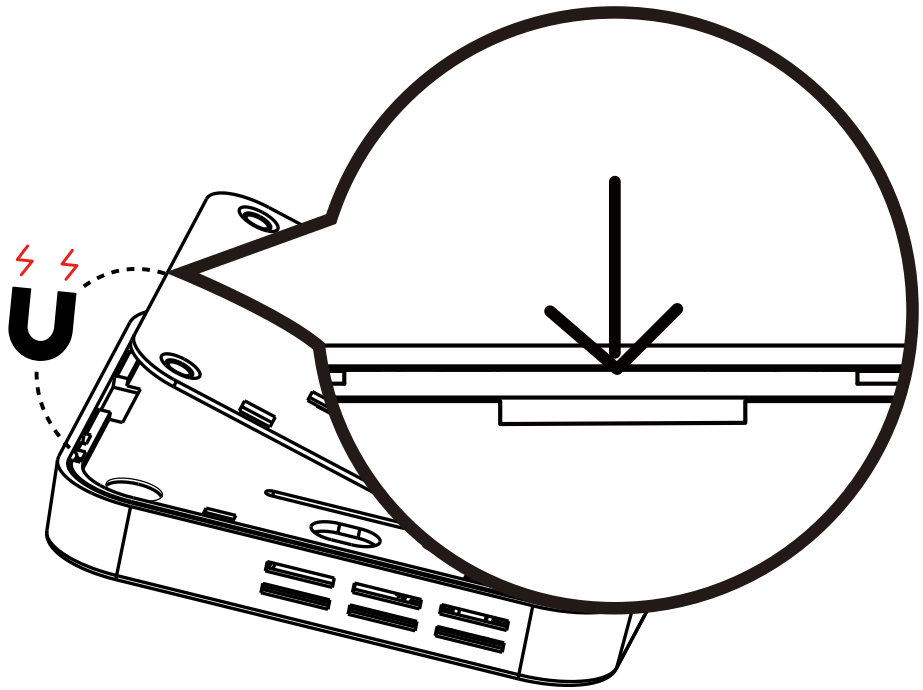
4. After wires connection, fix the back plate with screws (if there is a mounting rail,please snap to it directly) and cover the anti-electricity board and face shell.



Thermostat quick installation

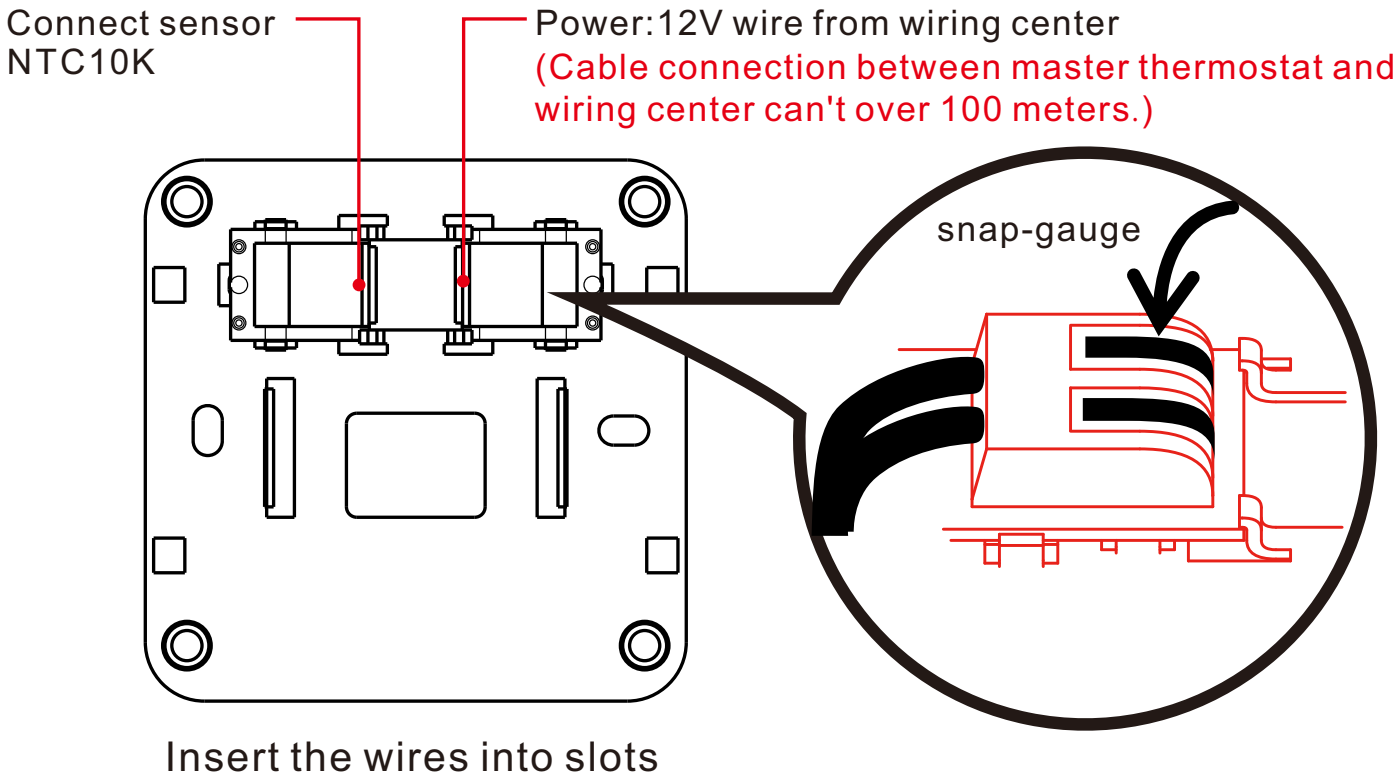
In order to ensure the quality of network communication, the master thermostat must be installed in the living room, in the same area as the router. Please pay attention to distinguish the master and slave thermostats, the master thermostat and wiring control centre are in a package, named SAS931XWCH-0-BUS-WIFI(TY)

1. Pull back plate to open the thermostat (magnet adsorption)

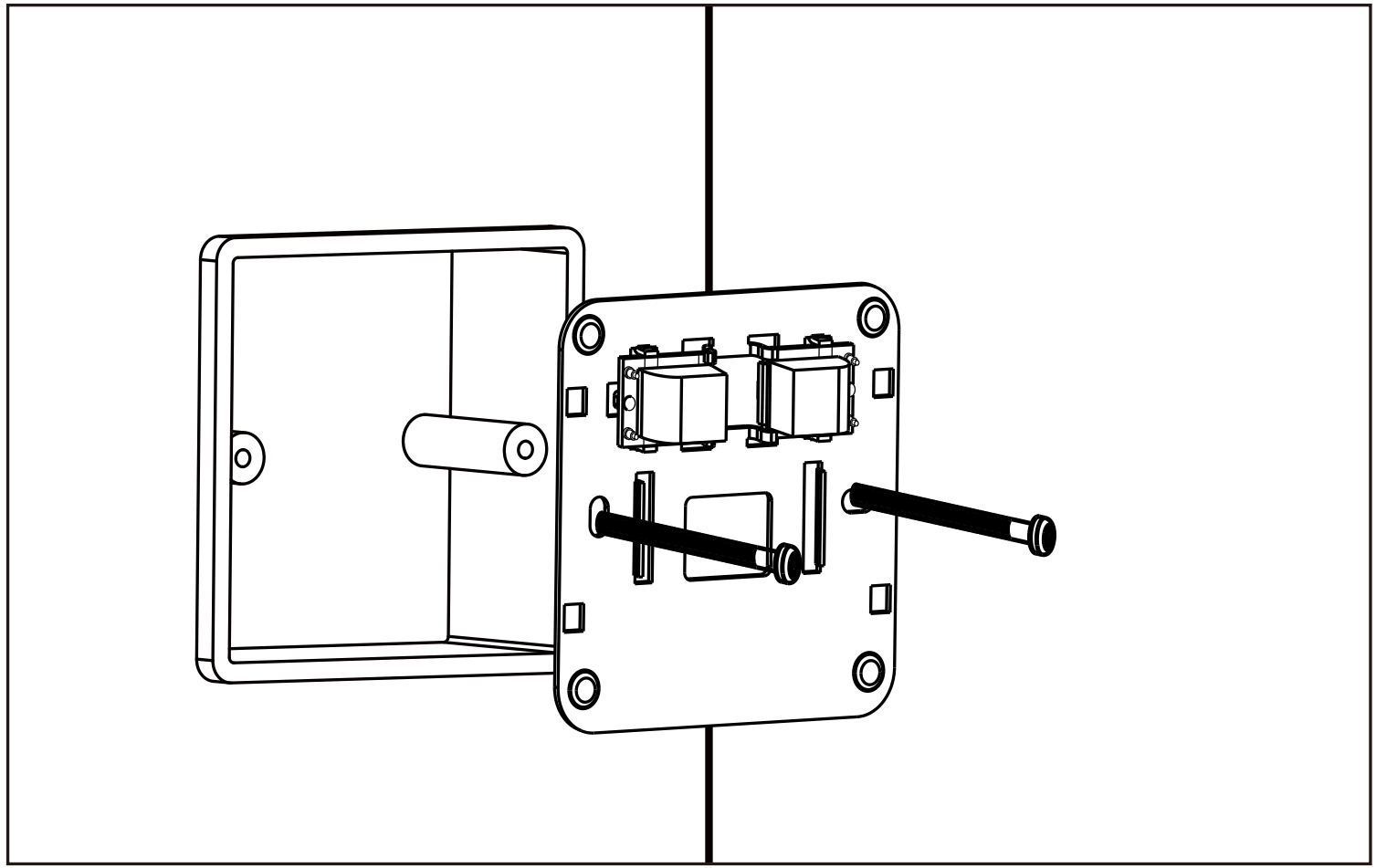


2.Wiring (It is recommended to use 0.75-1.5mm wire)

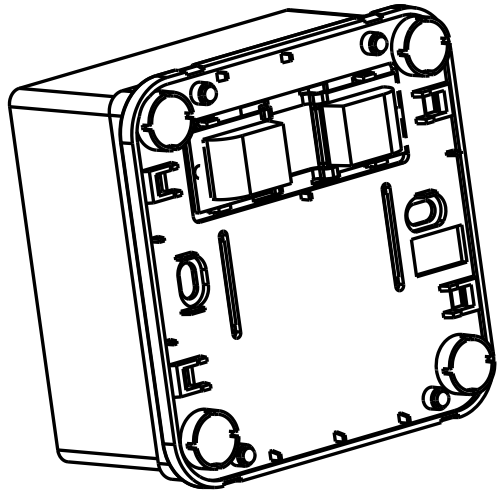
Press the snap-gauge

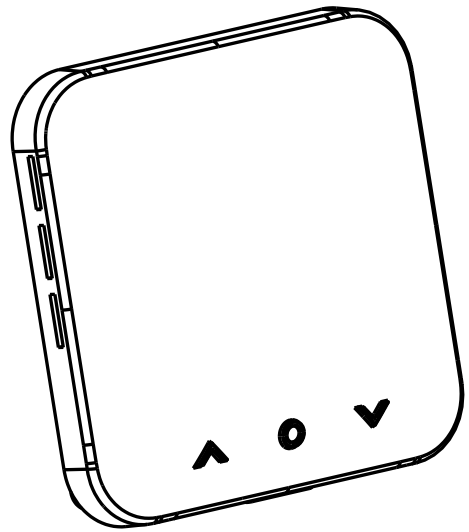


3. Fix the back plate with screws



4.Cover the face shell





Quick test

After wiring control centre energized, please check if the master thermostat was installed correctly in living room, and then check the slave thermostats in other rooms one by one.

1. The screen is off, indicating no power. Please check if the wiring is correct between the thermostat and the wiring control centre.
2. The screen displays "FX" error, indicating that the master and slave thermostats are mixed, find out the thermostat that displays "FX" in other areas, and reverse it to connect W1 in wiring center.
(X represents the numbers 2-8)

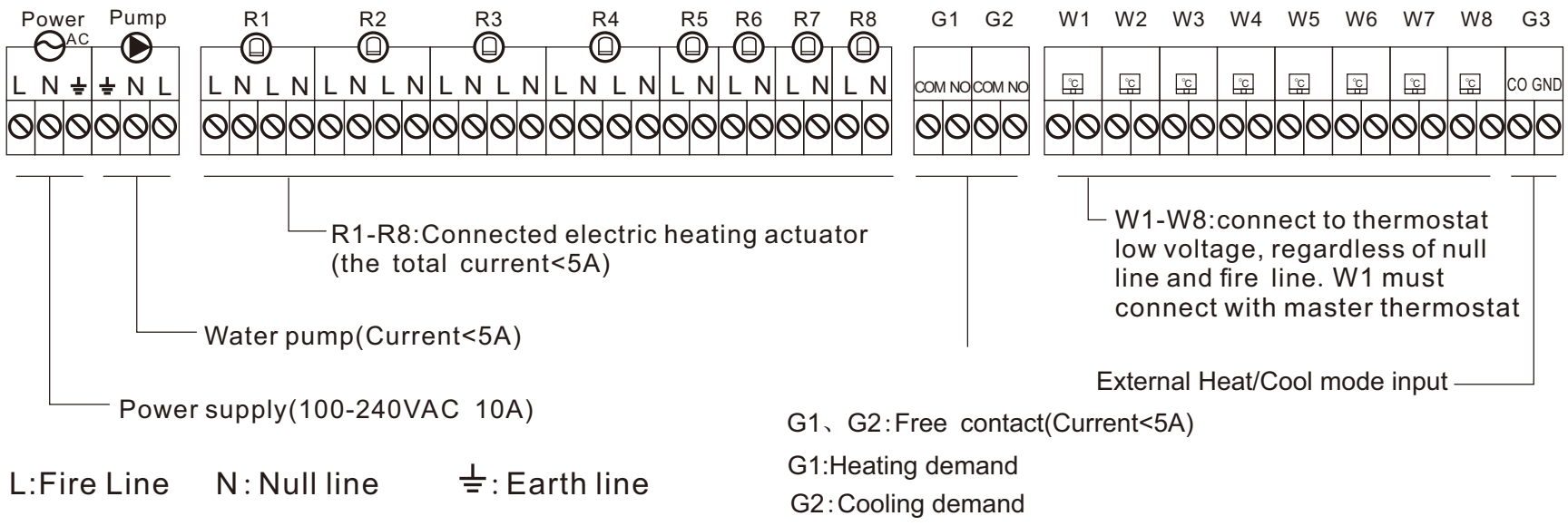
If you find that the corresponding area of the central controller line cannot be matched during installation, you can short press "∧" and "∨" button of the thermostat when switch on status to identify the corresponding line by numbers. For example"02" corresponds to "W2", and so on.

Alarm instructions

Dispaly	Condition
E1	internal sensor broken
E2	External sensor broken
E3	Wiring center and thermostat can't communication
E4	Floor temperature is higher than the limit.

Wiring diagram

Wiring control centre SCU211CH-BUS
Precautions
①W1-W8: Connected to the thermostat, low voltage, regardless of null line and fire line,
W1 must be connected to the master thermostat, W1 corresponds to an area.
② R1-R8: Connected electric heating actuator, R1 corresponds to W1, R2 corresponds to W2, and so on,
R1-R4 can be connected to two electric heating actuators respectively, the total current does not exceed 5A.



Configuration menu setting

Turn thermostat to OFF mode, hold "∧" "∨" button over 3 seconds enter the first parameter setting and display 01, press "∧""∨ " select to different parameter. Short press "O" enter specific item setting.
Short press "O" again to exit. Long press "O" save all setting and back to OFF mode.
In parameter setting page, long press"∧""∨" restore factory setting and " dEF " flash 3 times.

Master controller SAS931XWCH-0-BUS-WIFI(TY) :

Item	Description	Parameter options	Default
01	Temperature calibration	-6°C ~ +6°C	0°C
02	Maximum temperature setting	25~50°C	35°C
03	Minimum temperature setting	5~20°C	15°C
04	Backlight option	1: Always on (backlight keep bright all the time) 2: After 10 seconds, display dim to 50% brightness 3: After 10 seconds, turn off display	2
05	Waterproof scale	On/Off	On
06	Child lock	On/Off	On
07	Sensor selection	S-r/r-F/S-F	S-r
08	Maximum floor temperature	5-50°C	40°C
09	Anti-freezing	On/Off	On
10	Pump delay(0-3 minutes)	3: 3 minutes delay for pump and boiler. 0: No delay for pump and boiler	3
11	Thermostat control mode	0: Switch mode by switching heating/cooling mode on the heat pump 1: Switch mode by switching heating/cooling mode on the master thermostat.	0
12	Auto deadband	2-8°C	3°C
13	Auto mode temperature setting	15-25°C	22°C
14	Heating/cooling ON/OFF deadband	(±0.3)-(±0.5°C)	±0.3°C

Slave controller (SAS931XWCH-0-BUS-S) :

Item	Description	Parameter options	Default
01	Temperature calibration	-6°C ~ +6°C	0°C
02	Maximum temperature setting	25~50°C	35°C
03	Minimum temperature setting	5~20°C	15°C
04	Backlight option	1: Always on (backlight keep bright all the time) 2: After 10 seconds, display dim to 50% brightness 3: After 10 seconds, turn off display	2
05	Waterproof scale	On/Off	On
06	Child lock	On/Off	On
07	Sensor selection	S-r/r-F/S-F	S-r
08	Maximum floor temperature	5-50°C	40°C
09	Anti-freezing	On/Off	On
10	Cooling option	0: Allow cooling 1: Cooling off	0
11	Heating/cooling ON/OFF deadband	(±0.3)-(±0.5°C)	±0.3°C

NTC function selection

S-r: Room temperature
A floor sensor is not present, the unit will be controlled via internal sensor and display as room temperature.

r-F: Dual temperature control
The thermostat will control based on actual room temperature detected by internal sensor and compare the floor temperature limitation set by parameter 7. If floor temperature higher than limitation, it will stop working. If floor sensor is not connected under r-F mode, it will alarm E2.

S-F: Floor temperature control
Thermostat will control via external sensor and display as room temperature.
If you are using Auto mode, we don't suggest set NTC to S-F:Floor temperature control.

Pump/Actuator protection

Pump and actuators are turned on for 5 minutes every week to prevent them from getting stuck.

Water-proof scale

If thermostat didn’t work over a week or longer will let valve clogged as scale. To prevent valve from clogged, thermostat will send open signal to valve run 5 minutes. After finished it will turn to previous mode.

Anti-freezing

Thermostat will heating when temperature is below to 5°C,and turn off heating when temperature reach to 8°C. It only activate in heating mode.

Default programming

(Heating mode)

Wake up		Outdoor		Back home		Outdoor		Back home		Sleep	
6:00	20°C	8:00	16°C	11:00	20°C	14:00	16°C	18:00	20°C	22:00	16°C

(Cooling mode)

Wake up		Outdoor		Back home		Outdoor		Back home		Sleep	
6:00	25°C	8:00	28°C	11:00	25°C	14:00	28°C	18:00	25°C	22:00	28°C

LINK APP

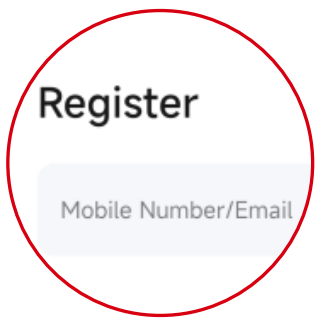
Download:

Click App store or Android application market to download “Tuya Smart ”app.

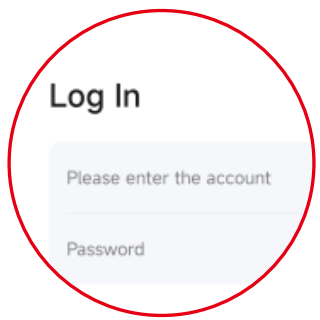
Registration and Login:

Click the “Register” to create account.
Enter your account password to log in

Register



Create accout



Login

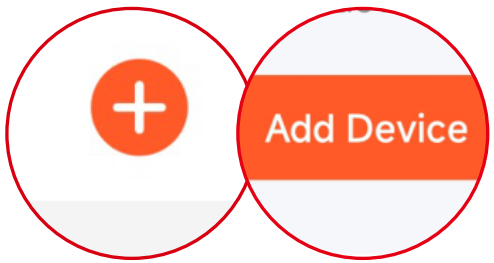
Add thermostats

Tips: Please turn on the location and Bluetooth of your phone at first.

For master thermostat: Please ensure WIFI icon keep fast flash.

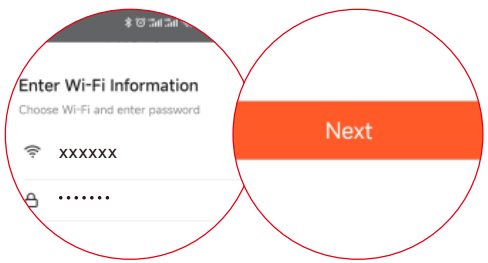
If not, in switch on mode, long press“ ^ ”and “ O ”button over 5 seconds to switch WIFI icon to fast flash.

1. Enter the “HOME” interface of the app, Click the “+” in the upper right corner, then click “ Add Device ”.
   Or click “ Add Device ” directly.



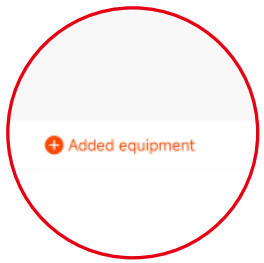
2. Click “ Add ”,

3. Enter your wifi account and password
   Click “ Next ”



4. Wait a few second, Click “ Done ”.

5 Click “Added equipment”

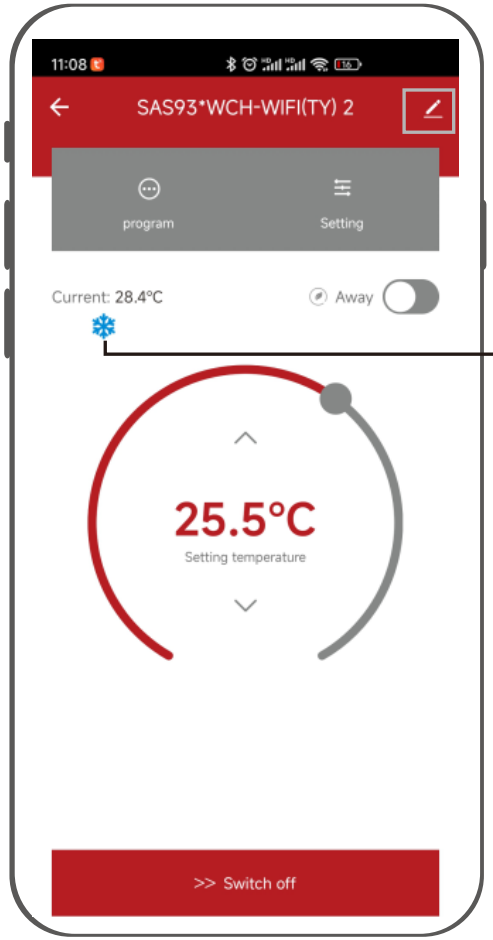


6 Click “Light is in a flash”

7 Search device...
then click “DONE”

8 Click “DONE”.
The devices added successfully.

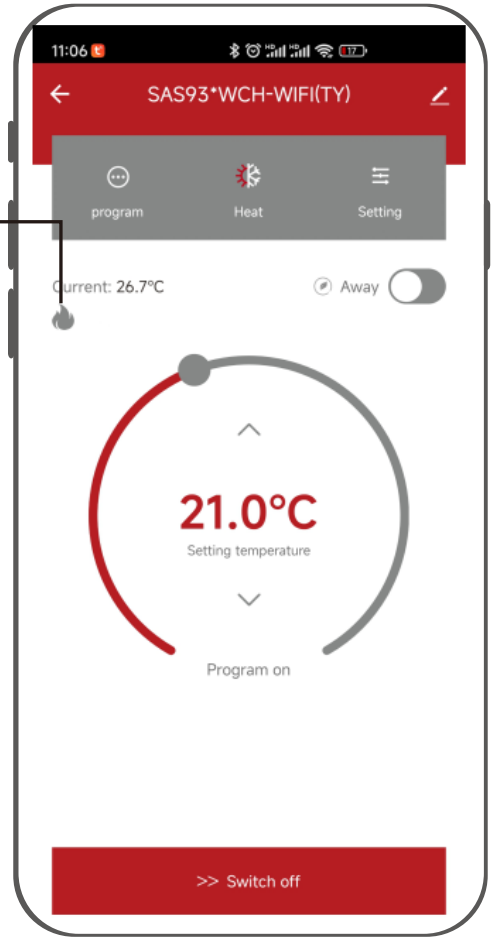
APP display



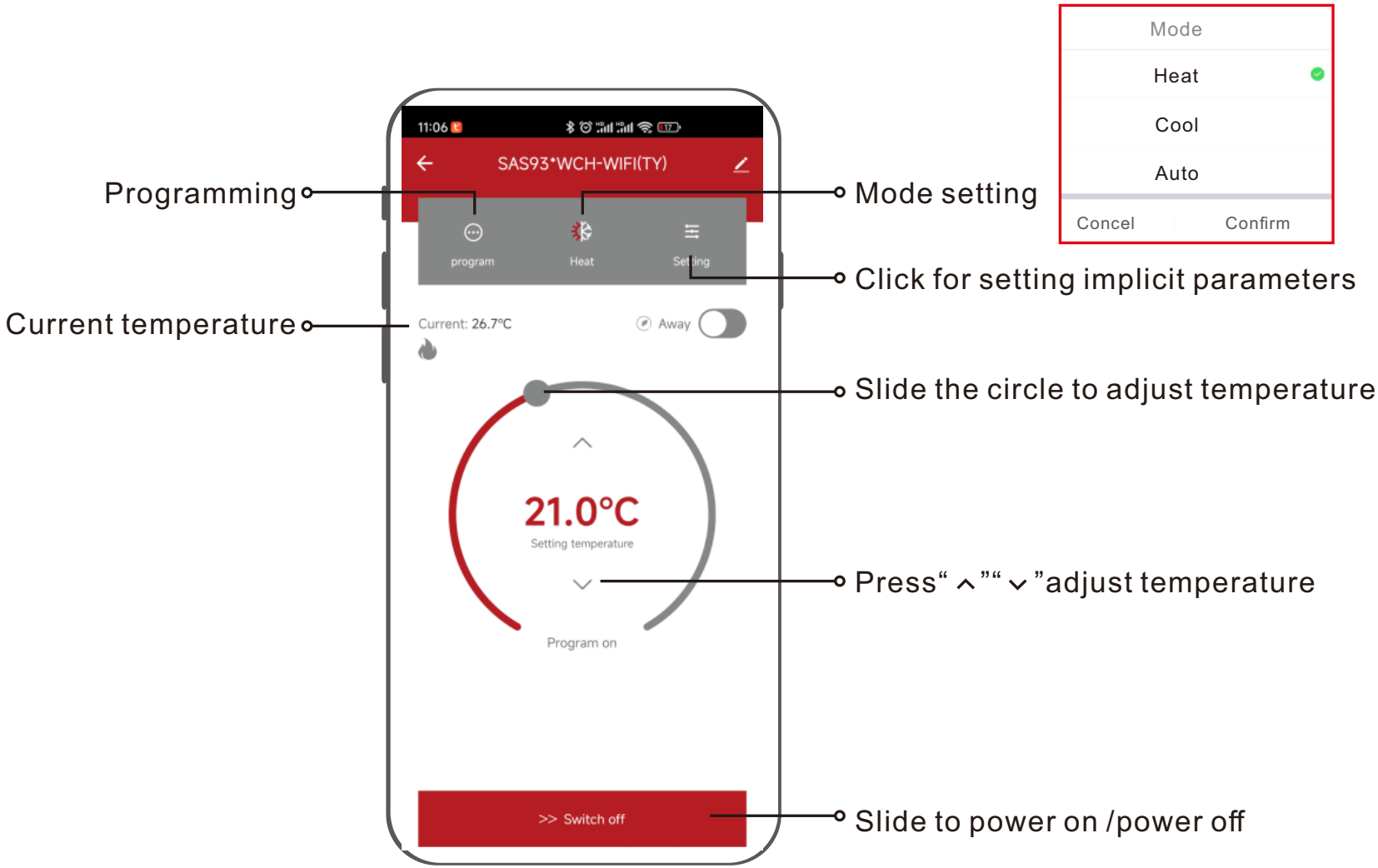
Slave thermostat interface

Grey: In cooling mode
Blue: Cooling up

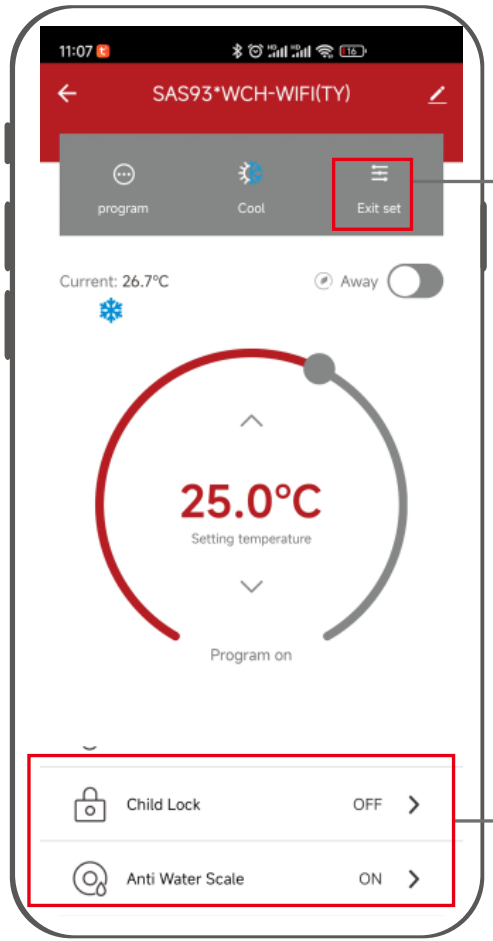
Grey: In heating mode
Red: Heating up



Master thermostat interface

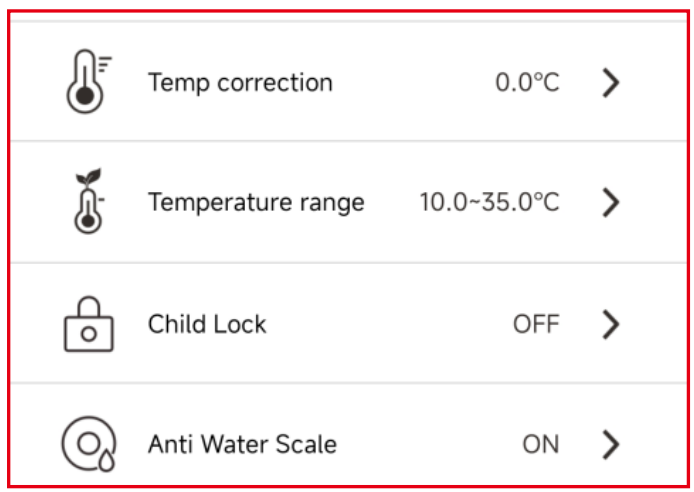

Programming
Current temperature
11:06
SAS93*WCH-WIFI(TY)
program
Heat
Setting
Current: 26.7°C
Away
21.0°C
Setting temperature
Program on
>> Switch off
Mode setting
Click for setting implicit parameters
Slide the circle to adjust temperature
Press“ ^ ”“ v ”adjust temperature
Slide to power on /power off
Mode
Heat
Cool
Auto
Concel
Confirm

Implicit parameters setting

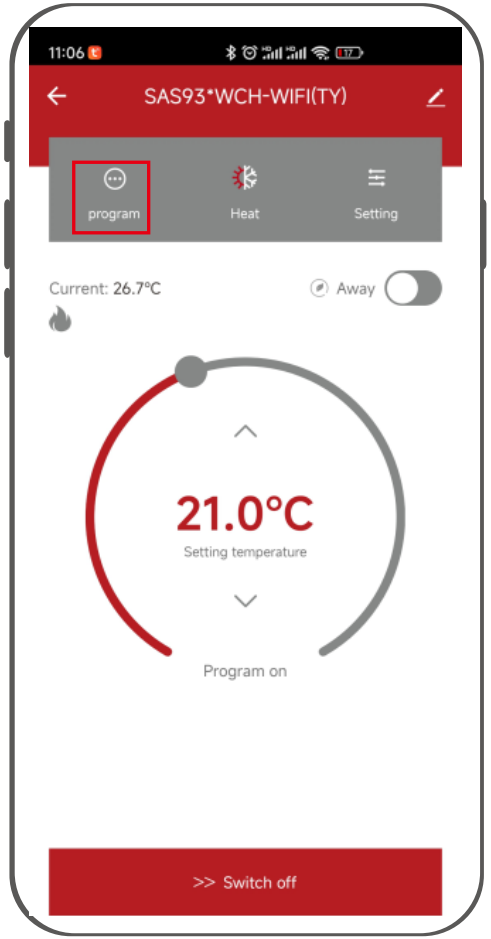


Click to exit setting

Slide up and
down to select
the implicit parameters

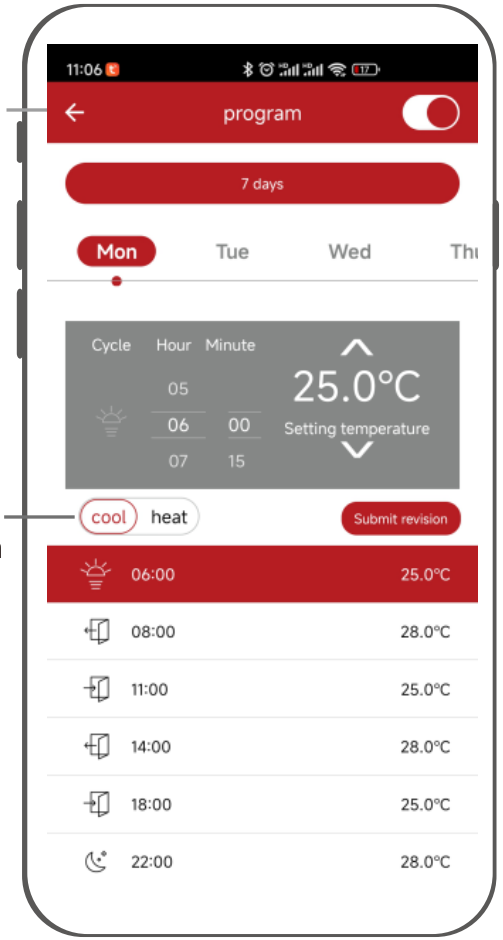


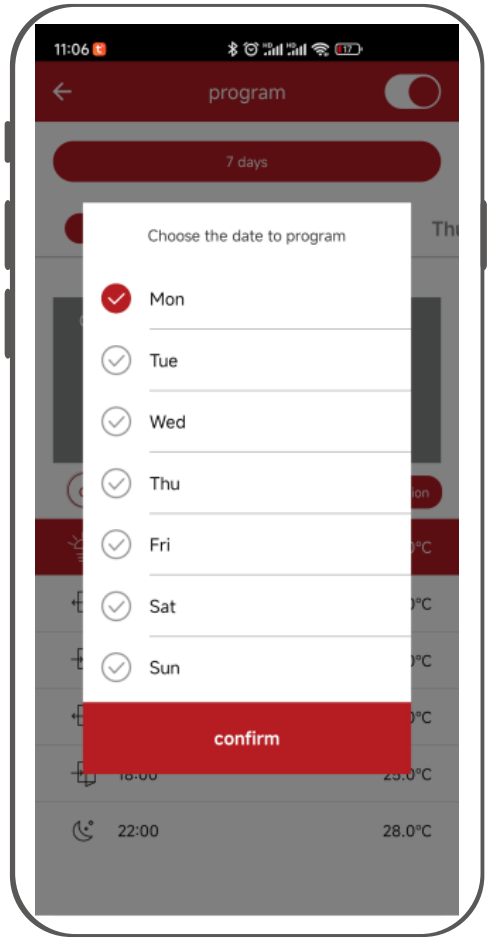
Program-setting



Slide the button " " to close programming.

Select Cooling or heating, then click "Submit revision "
.



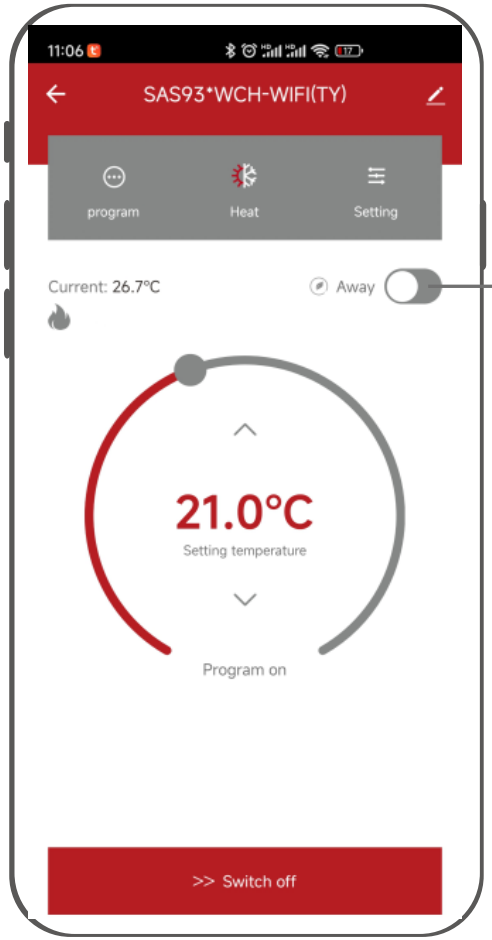


1 Click" program " for programming

2 Click" 7 days" for choosing the date to program

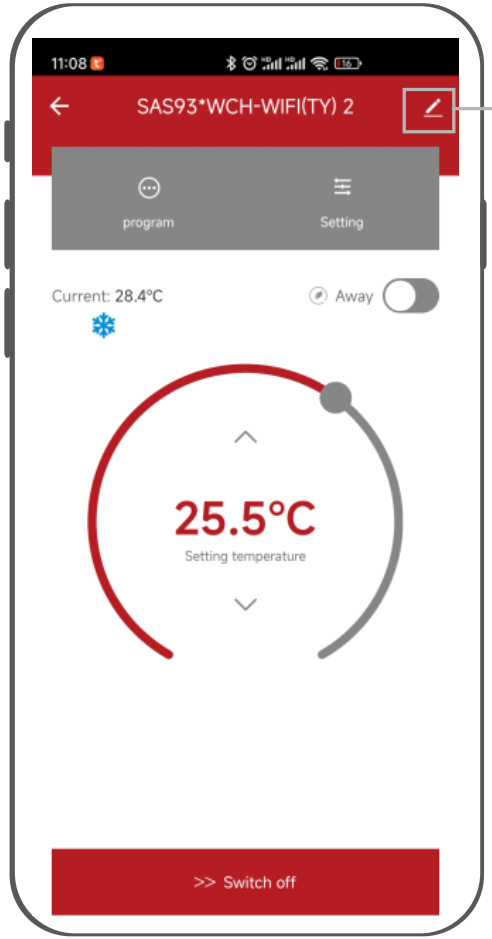
3 Select the date, click" confirm "

Temporary Stay-out Setting

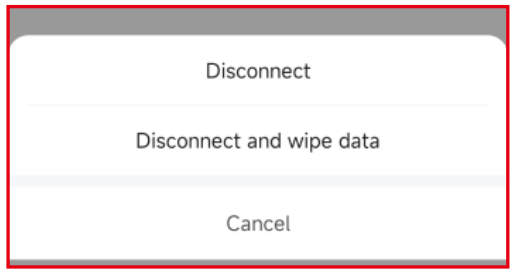


Temporary leaving mode:
If you need to stay out temporarily, click the button to activate energy-saving mode and icon“ ” turn to green. If heating mode temperature remain at 16℃. If cooling mode temperature remain at 28℃. After you arrive home, click the button again to recover the previous temperature setting.

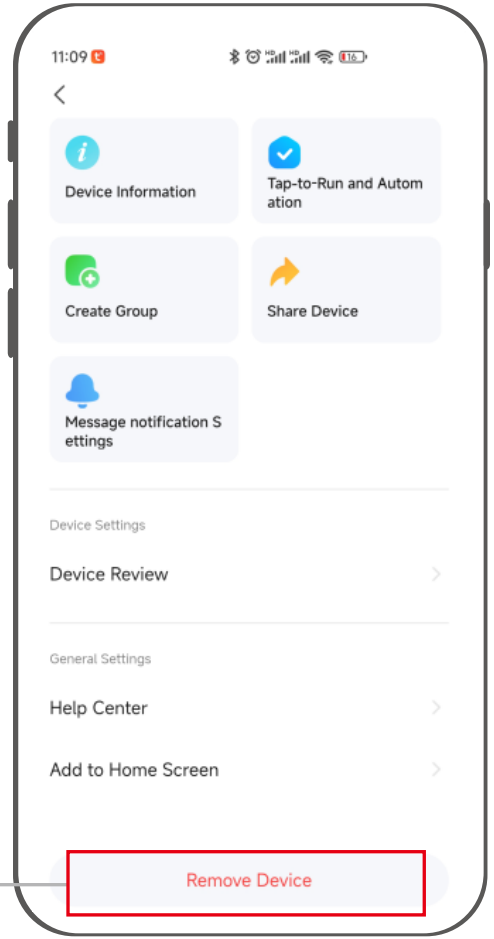
Remove device



Click to enter parameter setting



Click to remove device



Voice command：

After waking up the speaker, you can say:

Amazon Alexa	Google Assistant
* Alexa, open <device name>.	* Ok, google, turn on <device name>.
* Alexa, close <device name>.	* Ok, google, turn off <device name>.
* Alexa, set the <device name> to 16 degrees.	* Ok, google, set the <device name> to 25 degrees.
* Alexa, what is the temperature of <device name>?	

Tips:

* You can name <device name> yourself.
* The temperature unit of thermostat and speaker must be the same.