

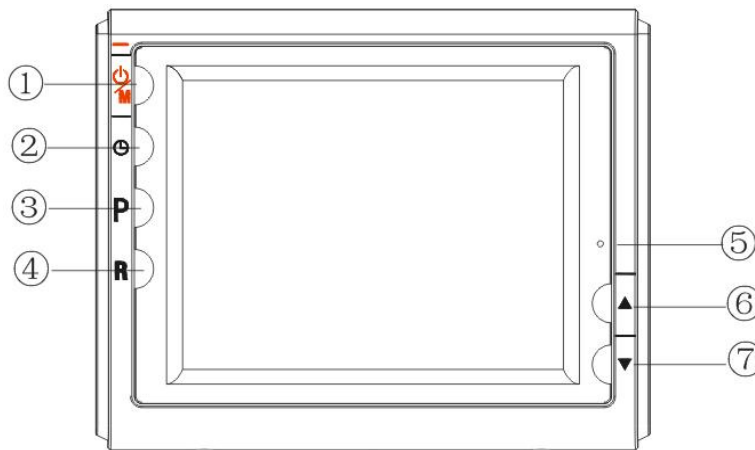
SAS908XWHB-7 Thermostat for Radiant heating

SAS908XWHB-7 is a programmable thermostat designed for water boiler. This thermostat can be used for hot water radiant heating.

SPECIFICATION

Power source2 AA size 1.5V alkaline battery
Room temperature setting range5°C~50°C or 41°F~123°F
Accuracy.....0.5°C or 1°F
Ambient temperature-operation.....0°C~+50°C (32°F~122°F)
Ambient temperature-transport.....-10°C~+60°C (14°F~140°F)
Dimensions..... 115×90×32mm

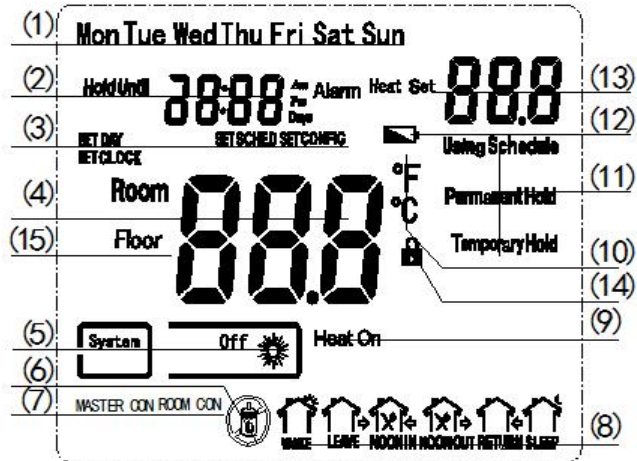
KEYBOARD, DISPLAY AND SWITCH DESCRIPTION



Button and Functional description:

- ① Power on/ anti-freezing /off button;
- ② Time setting button; At starting shortly press ② button enter setting the minute, press add and subtract key, adjust the minute, press ④ button to confirm and exit; then shortly press ② button enter setting the date, press add and subtract key, adjust the week, press ④ button to confirm and exit.
- ③ Program Setting button; at starting up and program running state(programming mode) shortly press button ③ enter the program and set the date, then press button ③ enter programming time, press button ③ enter programming temperature; at starting up and program running state long press button ③ more than 3 seconds enter keeping running mode forever; at shutdown state long press button ③ more than 3 seconds enter implied parameters setting the first item, then press button ③ enter implied parameters setting the next item.
- ④ Confirm/Exit button; At setting state shortly press button ④ is all setting confirmation and exit forever keeping mode, or at temporarily keeping mode shortly press button ④ to exit and return to program running state; at parameter setting (or program setting) ,long press button ④ more than 3 seconds parameter setting(or program setting) , return to factory default setting;
- ⑤ Reset button; the date return to Sunday 0 o'clock, program running mode, all setting is unaltered.
- ⑥ Add button
- ⑦ Shorten button(Lock key: at the same time long press switch 3 seconds lock key, unlock: lock key at the same time long ti key key 3 seconds to unlock)

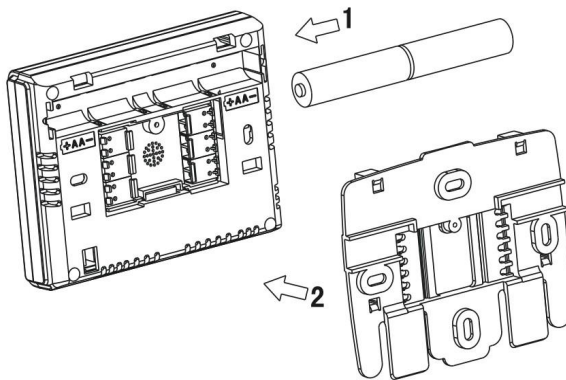
Display instruction:



(1) week shows ; (2)time shows ; (3)setting shows ; (4)room shows ; (5) mode shows ; (6) communication alarm shows ; (7) control mode shows ; (8)program time shows ; (9)starting heating shows ; (10)temperature shows ; (11)operation mode shows ; (12) Low battery indicator shows ; (13) Shows setting temperature ; (14)locking key shows (15) floor temperature shows or alarm shows

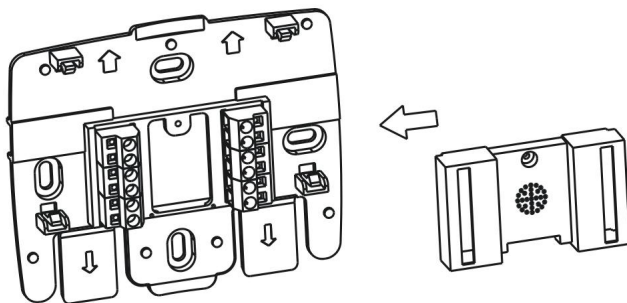
INSTALL THE THERMOSTAT

Install Battery

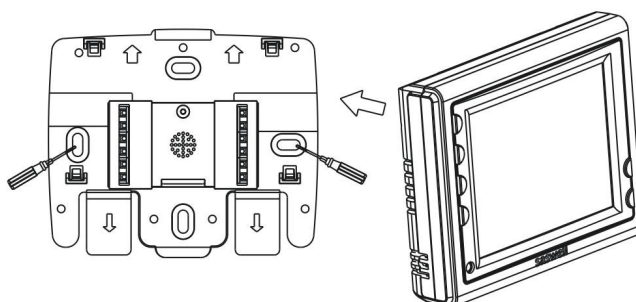


Note: the product long time not use it, please take out the battery, prevent the battery fluid leakage, damaged products.

Install protection cover:



Wall installation:



OPERATION

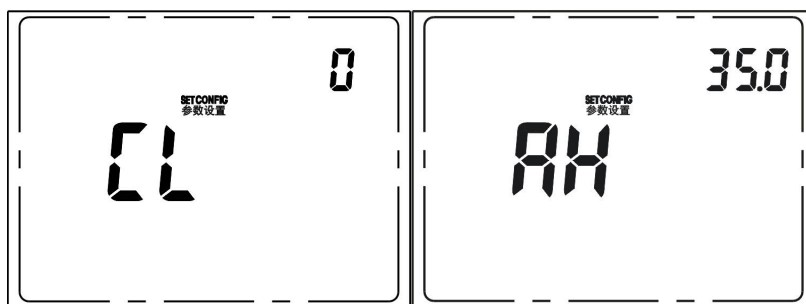
1. Configuration Menu

The configuration menu allows you to set certain thermostat operating characteristics to your system or personal requirements. Shortly press button ① to make sure the thermostat is in anti-freeze mode. Hold button ③ for 3 seconds to enter the configuration menu. The display will show the first item in the configuration menu. Press button ③ to shift to the next menu item. Use ▲、▼ to select. To exit the menu, press button ④ revert to the anti-freeze mode. If no buttons are pressed within 20 second, the thermostat will exit the menu. To revert to factory default setting, in configuration menu, long push button ④ for 3 seconds. Display will show “DEF” blinking 3 times and return to Menu item 1 indicates all the configuration setting has reverted to factory default setting. The configuration menu chart summarizes the configuration options. An explanation of each option as follows:

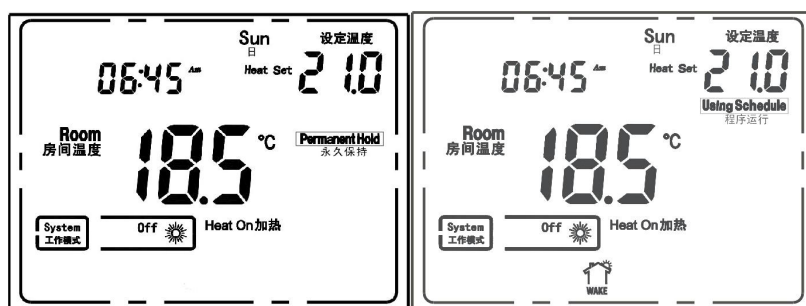
Step	Press buttons	Displayed (factory default)	Press ▲、▼ to select	Descriptions
1	Press P Button	CL(0)	-4 --- +4	Select temperature display adjustment higher or lower
2	Press P Button	RM (350)	20°C (68°F) — 35°C (95°F)	Select maximum room temperature limitation
3	Press P Button	RL (50)	5°C (41°F) — 20°C (68°F)	Select minimum room temperature limitation
4	Press P Button	FL (C)	C/F	Changes the display readout to Centigrade or Fahrenheit as required
5	Press P Button	BL (05)	00/05/15	Backlight mode 00: no backlight 05: backlight maintain 5 sec 15: backlight maintain 15 sec
6	Press P Button	db (05)	05~30	Start heating conditions: when setting temperature < room temperature from the heat, when setting temperature ≥ room temperature reduction db parameters start heating
7	Press P Button	PS1(7)	0/2/3/7	Program option 7: 7 days separately (Refer table 1 and table 2); 3: 5+1+1 (Refer to table 3 and table 4) 2: 5+2 (Refer to table 5 and table 6) 0: Non programmable
8	Press P Button	PS2(6)	4/6	Programming period in one day option 6-6 time zones; 4-4 time zones;
9	Press P Button	OT(24)	12/24	Time scale 24: 24hour system; 12: 12hour system
10	Press P Button	ES(OFF)	On/OFF	Intelligent Recovery Option OFF: Without intelligent function On: Active intelligent function
11	Press P Button	LA(En)	En/Ch	Language Chinese/English. Factory default: English.

2. display for implied parameters:

In standby mode, shortly press button  to start; Shortly hold **P** enter modify the time; Long press  more than 3seconds, enter implied parameters setting; the first item, setting the temperature coefficient: Press  、  change set temperature, short press button **P** enter implied parameters, setting other parameters, when long press button **R** more than 3 seconds, show that DEF flash 3 times, all parameters setting return to factory default setting and return to implied parameters setting the first item, shortly press button **R** exit implied parameters setting and return to OFF mode; In standby mode implied parameters display:

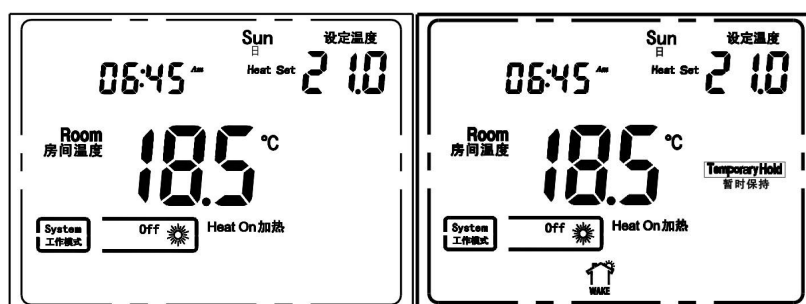


3. In boot mode display:



A) In program running mode, shortly press button  enter off mode; shortly press  enter modify the time; shortly press button **P** enter programming state; Long press button **P** more than 3 seconds enter forever keeping mode; shortly press  、  enter temporarily keeping mode

B) In forever keeping mode, shortly press  enter off mode and exit forever keeping mode; shortly press button  enter modify the time; shortly press button **P** enter programming state and exit forever keeping mode; shortly press button **R** exit forever keeping mode; shortly press  、  modify the setting temperature



C) without programming mode running: shortly press  enter off mode; shortly press button  enter modify the time; shortly press  、  modify the setting temperature.

D) In temporarily keeping mode, shortly press  enter off mode and exit temporarily keeping mode; shortly press button  enter modify the time; shortly press button **P** enter programming state and exit temporarily keeping mode; shortly press button **R** exit temporarily keeping mode; long press button **R** enter forever keeping mode; shortly press button  、  modify the setting temperature.

3.Programming Setting Instruction

Working mode , press P Enter programming status

Table One (7 days 4 Zones Programme) ——Could revised according to your request

Heating Mode	Morning Get up 		Our for work 		Came back 		Sleep 	
Monday Values	6:00	21℃	8:00	16.5℃	18: 00	21℃	22: 00	16.5℃
Tuesday Values	6:00	21℃	8:00	16.5℃	18: 00	21℃	22: 00	16.5℃
Wednesday Values	6:00	21℃	8:00	16.5℃	18: 00	21℃	22: 00	16.5℃
Thursday Values	6:00	21℃	8:00	16.5℃	18: 00	21℃	22: 00	16.5℃
Friday Values	6:00	21℃	8:00	16.5℃	18: 00	21℃	22: 00	16.5℃
Saturday Values	6:00	21℃	8:00	16.5℃	18: 00	21℃	22: 00	16.5℃
Sunday Values	6:00	21℃	8:00	16.5℃	18: 00	21℃	22: 00	16.5℃

Table Two (7 days 6 Zones Programme) ——Could revised according to your request

Heating Mode	Morning Get up 		Our for work 		Lunch 		Noon shift 		Came back 		Sleep 	
Monday Values	6:00	21℃	8:00	16.5℃	12:00	21℃	14:00	16.5℃	18: 00	21℃	22: 00	16.5℃
Tuesday Values	6:00	21℃	8:00	16.5℃	12:00	21℃	14:00	16.5℃	18: 00	21℃	22: 00	16.5℃
Wednesday Values	6:00	21℃	8:00	16.5℃	12:00	21℃	14:00	16.5℃	18: 00	21℃	22: 00	16.5℃
Thursday Values	6:00	21℃	8:00	16.5℃	12:00	21℃	14:00	16.5℃	18: 00	21℃	22: 00	16.5℃

Friday Values	6:00	21°C	8:00	16.5°C	12:00	21°C	14:00	16.5°C	18: 00	21°C	22: 00	16.5°C
Saturday Values	6:00	21°C	8:00	16.5°C	12:00	21°C	14:00	16.5°C	18: 00	21°C	22: 00	16.5°C
Sunday Values	6:00	21°C	8:00	16.5°C	12:00	21°C	14:00	16.5°C	18: 00	21°C	22: 00	16.5°C

Table Three (5+1+1 4 Zones programme) ———Could revized according to your request

Heating Mode	Morning Get up 		Our for work 		Came back 		Sleep 	
Monday Values	6:00	21°C	8:00	16.5°C	18: 00	21°C	22: 00	16.5°C
Tuesday Values	6:00	21°C	8:00	16.5°C	18: 00	21°C	22: 00	16.5°C
Wednesday Values	6:00	21°C	8:00	16.5°C	18: 00	21°C	22: 00	16.5°C
Tuesday Values	6:00	21°C	8:00	16.5°C	18: 00	21°C	22: 00	16.5°C
Friday Values	6:00	21°C	8:00	16.5°C	18: 00	21°C	22: 00	16.5°C

—————Could revized according to your request

Heating Mode	Morning Get up 		Our for work 		Came back 		Sleep 	
Saturday Values	6:00	21°C	8:0 0	16.5°C	18: 00	21°C	22: 00	16.5°C

—————Could revized according to your request

Heating Mode	Morning Get up 		Our for work 		Came back 		Sleep 	
Sunday Values	6:00	21°C	8:00	16.5°C	18: 00	21°C	22: 00	16.5°C

Table Four (5+1+1 6 Zones programme) .—————Could revized according to your request

Heating Mode	MorningGet up 		Our for work 		Lunch 		Noon shift 		Came back 		Sleep 	
Monday Values	6:00	21°C	8:00	16.5°C	12:00	21°C	14:00	16.5°C	18: 00	21°C	22: 00	16.5°C

Tuesday Values	6:00	21°C	8:00	16.5°C	12:00	21°C	14:00	16.5°C	18: 00	21°C	22: 00	16.5°C
Wednesday Values	6:00	21°C	8:00	16.5°C	12:00	21°C	14:00	16.5°C	18: 00	21°C	22: 00	16.5°C
Tuesday Values	6:00	21°C	8:00	16.5°C	12:00	21°C	14:00	16.5°C	18: 00	21°C	22: 00	16.5°C
Friday Values	6:00	21°C	8:00	16.5°C	12:00	21°C	14:00	16.5°C	18: 00	21°C	22: 00	16.5°C

—————Could revized according to your request

Heating Mode	Morning Get up 		Our for work 		Lunch 		Noon shift 		Came back 		Sleep 	
Saturday Values	6:00	21°C	8:00	16.5°C	12:00	21°C	14:00	16.5°C	18: 00	21°C	22: 00	16.5°C

—————Could revized according to your request

Heating Mode	Morning Get up 		Our for work 		Lunch 		Noon shift 		Came back 		Sleep 	
Sunday Values	6:00	21°C	8:00	16.5°C	12:00	21°C	14:00	16.5 °C	18: 00	21°C	22: 00	16.5 °C

Table Five (5+2 4 Zones programme) . ———Could revized according to your request

Heating Mode	Morning Get up 		Our for work 		Came back 		Sleep 	
Monday Values	6:00	21°C	8:00	16.5°C	18: 00	21°C	22: 00	16.5°C
Tuesday Values	6:00	21°C	8:00	16.5°C	18: 00	21°C	22: 00	16.5°C
Wednesday Values	6:00	21°C	8:00	16.5°C	18: 00	21°C	22: 00	16.5°C
Tuesday Values	6:00	21°C	8:00	16.5°C	18: 00	21°C	22: 00	16.5°C
Friday Values	6:00	21°C	8:00	16.5°C	18: 00	21°C	22: 00	16.5°C

————Could revized according to your request

Heating Mode	Morning Get up 		Our for work 		Came back 		Sleep 	
Saturday Values	6:00	21°C	8:00	16.5°C	18: 00	21°C	22: 00	16.5°C
Sunday Values	6:00	21°C	8:00	16.5°C	18: 00	21°C	22: 00	16.5°C

Table Six (5+2 6 Zones programme) .————Could revized according to your request

Heating Mode	Morning Get up 		Our for work 		Lunch 		Noon shift 		Came back 		Sleep 	
Monday Values	6:00	21°C	8:00	16.5°C	12:00	21°C	14:00	16.5°C	18: 00	21°C	22: 00	16.5°C
Tuesday Values	6:00	21°C	8:00	16.5°C	12:00	21°C	14:00	16.5°C	18: 00	21°C	22: 00	16.5°C
Wednesday Values	6:00	21°C	8:00	16.5°C	12:00	21°C	14:00	16.5°C	18: 00	21°C	22: 00	16.5°C
Tuesday Values	6:00	21°C	8:00	16.5°C	12:00	21°C	14:00	16.5°C	18: 00	21°C	22: 00	16.5°C
Friday Values	6:00	21°C	8:00	16.5°C	12:00	21°C	14:00	16.5°C	18: 00	21°C	22: 00	16.5°C

————Could revized according to your request

Heating Mode	Morning Get up 		Our for work 		Lunch 		Noon shift 		Came back 		Sleep 	
Saturday Values	6:00	21°C	8:00	16.5°C	12:00	21°C	14:00	16.5°C	18: 00	21°C	22: 00	16.5°C
Sunday Values	6:00	21°C	8:00	16.5°C	12:00	21°C	14:00	16.5°C	18: 00	21°C	22: 00	16.5°C

3.Intelligent Recovery Option

The thermostat has an intelligent recovery function that brings your room temperature to the set temperature at exactly the pre-set time by turning on the Heating earlier.

Select ON to activate the intelligent recovery function,. In configuration ES mode, the thermostat is start heating 5days in advance.

For example, six in the morning time period by Monday

Heating Mode	Morning Get up 	Our for work 	Lunch 	Noon shift 	Came back 	Sleep 
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Monday	6:00	27°C									22: 00	15. 5°C
Tuesday	6:00	27°C									22: 00	15. 5°C
Wednesday	6:00	27°C									22: 00	15. 5°C
Thursday	6:00	27°C									22: 00	15. 5°C
Friday	6:00	27°C									22: 00	15. 5°C
Saturday	6:00	27°C									22: 00	15. 5°C
Sunday	6:00	27°C									22: 00	15. 5°C

4. Manual Operation

1) Anti-freezing mode

You can press power button ① to activate the anti-freezing mode. The unit only displays OFF、Clock time, Weekday and Room temperature. The default set temperature for anti-freezing mode is 5°C. During anti-freezing mode, if room temperature decrease to 5°C, the unit will activate the heating system till room temperature reach to 9°C. Press power button ① again will terminate the anti-freezing mode and return to normal operation mode.

2) Program operation and temporary hold mode

Short press ③ during the running status, enter the programming surface. you could shift from date setting, time setting, Temp setting by press ③ one by one, Press ④ quit. Thermostat controls the heating system by presetting program. See **Planning your program** section in tables. In normal normal operation, press ▲ or ▼, “temporary hold” is flashing while thermostat is in temporary hold mode. press ▲ or ▼ to change set temperature, The thermostat will override the current programming setting and keep the room temperature at the selected temperature until the next program period begins. Then the thermostat will automatically revert to the program operation. Press ④ quit. If no keys are pressed within 20 seconds, the thermostat will revert to using schedule.

3) Permanent hold temperature setting

When thermostat is in program operation, press hold button to enter the Permanent hold mode. Press +、- to change set temperature. The thermostat will permanent hold the room temperature at the selected setting until you press ④ button to restart the program operation.

4) Vacation Temperature hold

Long press ③ during the running status, enter the vacation model. press ③ again to adjust the days you want to hold (from 1 to 99 days), you can use ▲ or ▼ to adjust the temperature during your holiday. To the end of vacation time, it will automatically return to the program is running. In the vacation mode, Push button ④ to revert to program operation.

5) Reset operation

If the display is abnormal, press the Reset button by using a fine probe such as a straightened paper clip

to gently push the Rest button. This will reset the thermostat.

6) Set current day and time

- Press ② button. The display will only show minutes flashing
- Press and hold either ▲ or ▼ until you reach the correct minutes
- Press ② button once again. The display will show the hour flashing.
- Press and hold either ▲ or ▼ until you reach the correct hour
- Press ② button once again. The display will show the day of the week flashing.
- Press ▲ or ▼ until you reach the correct day of the week

Press button ④ once. The display will show the correct day of the week and the time. If no keys are pressed within 20 seconds, the thermostat will revert to program operation.

7) alarm function and the matters needing attention

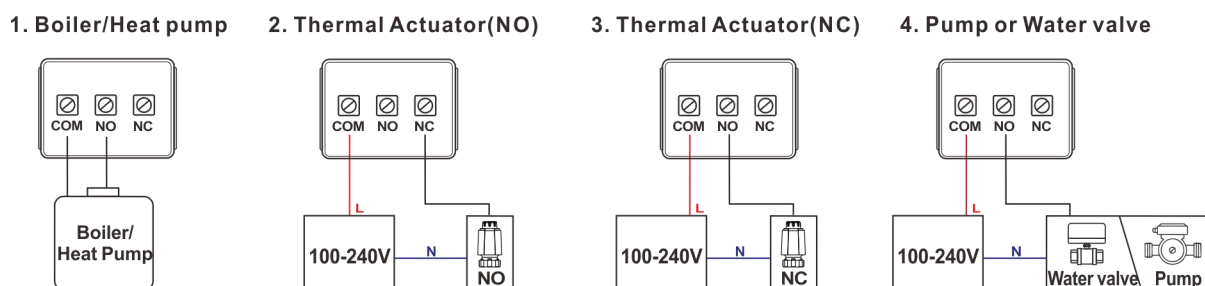
- The battery power low battery warning sign "  " flicker;
- Room temperature (built-in temperature sensor) break or short circuit alarm room ERR display;
- Battery note: products when not in use for a long time, please take off, to prevent battery leakage damage product

CHECK YOUR PROGRAMMING

Follow these steps to check your thermostat programming one final time before beginning thermostat operation.

- Press button ③ to view the 1st weekday heating period time and temperature. Each time you press button ③, the next heating period time and temperature will be displayed in sequence for weekday, then Saturday and Sunday program periods (you may change any time or temperature during this procedure).
- Press button ④ to begin program operation.

Terminal wiring diagram



CUSTOMER ASSISTANCE

After reading this guide, if you have any question about the operation of your thermostat, please contact your installer or service provider.

