
SAS816WHB-0-DF Thermostat for radiant heating

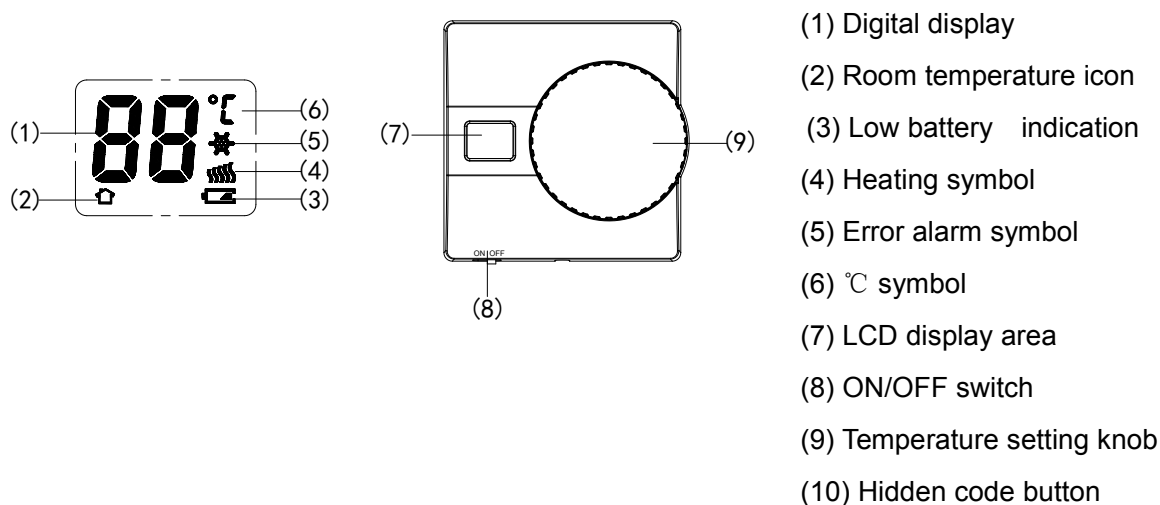
Wireless transmitter

SAS816WHB-0-DF is a wireless non-programmable thermostat designed for hot water radiant heating systems and electric heating cable system. Wireless control the manifold actuator on/off to adjust the temperature .

SPECIFICATION

Power source	2AA Batteries
Wireless signal frequency.....	868MHZ (FSK)
Wireless signal effective range	100m
Accuracy.....	±1°C
Room temperature setting range.....	5°C~30°C
Ambient temperature -Operation	0°C~+50°C
Ambient temperature –transport	-10°C~60°C
Dimension	86×86×32mm (wall mount or 86 box)

KEYBOARD, DISPLAY AND SWITCH DESCRIPTION



IMPORTANT SAFETY INFORMATION:

- Always turn off power at the main power source by unscrewing fuse or switching circuit breaker to the off position before installing, removing, cleaning, or servicing this thermostat.
- Read all of the information in this manual before installing this thermostat.
- Only a professional contractor should install this thermostat.
- All wiring must conform to local and national building and electrical codes and ordinances.
- This thermostat has a removable fuse to protect the system from damage. If system is not operating properly, check wiring and replace fuse if necessary.
- Use this thermostat only as described in this manual.

MOUNTING AND WIRING DIAGRAM

1. Remove assembly screws from the base of thermostat. Gently pull the upper housing straight off the base. Forcing or prying on the thermostat will cause damage to the unit. See figure 1-2.
2. Install two fresh "AA" alkaline batteries in battery compartment. Be sure to match positive (+) ends of batteries with positive (+) battery terminals in the battery compartment. See figure 3.
3. Push power base into wall.
4. Using mounting screws mount the power base to the wall. Place a level against bottom of base, adjust until level, and then tighten screws. (Leveling is for appearance only and will not affect thermostat operation.)
5. Replace the upper housing on the base and fix the upper housing by removed assembly screw.

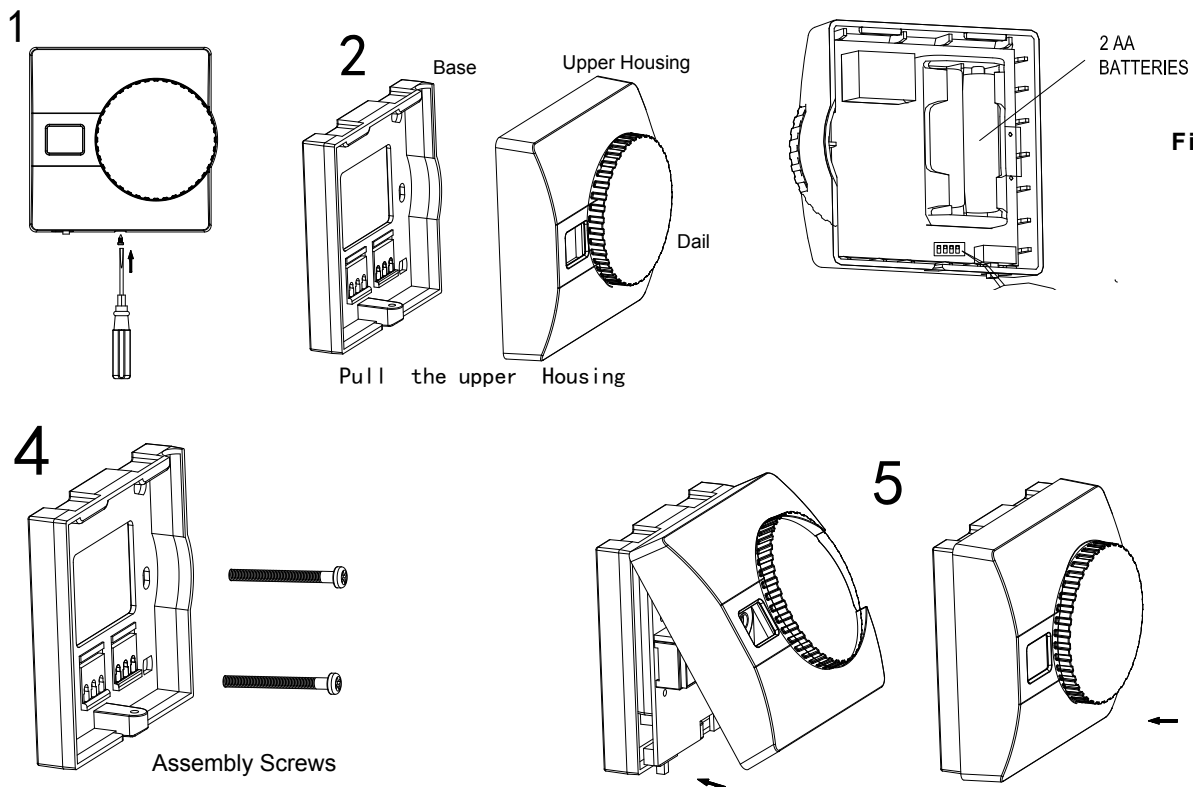
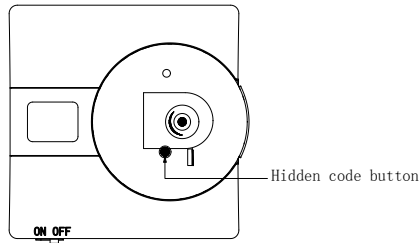


Figure 3

OPERATION

Code match:

When the Receiver is in the code match mode, rotating the setting knob of thermostat until the scale "1" aligns LCD. Then remove the rotary dial, press the hidden button for 3 second to enter the code match mode. If the thermostat and receiver code match successfully, the receiver get back a code value. The value flashes 3 times, disappears later in the LCD. Otherwise it means not done, the thermostat will exit the menu after 20 second and need to recode. See figure 6.





Display

The LCD displays actual room temperature until the setting dial is moved.

Setting the temperature


Switch on the thermostat, turn setting dial to required temperature. The selected temperature will flash in the LCD to signify it is showing the set temperature. Don't rotate the setting knob within 5 seconds, the thermostat will exit the menu and display actual room temperature automatically.

Heating mode

When the switch is set to the "ON Symbol", the thermostat controls at the temperature set by the setting dial. In the heating mode, if the setting temperature - the Ambient temperature ≥ 1 °C, the heating system should start to operate, display will show . If the setting temperature - the Ambient temperature ≤ 1 °C, the heating system should stop operating, Heating symbol  will disappear. When set to the "OFF symbol", the thermostat output is turned off and "OF" is displayed in LCD.



Low battery indication

A battery symbol  will flash in the display when batteries require replacement. Batteries should be replaced within 15 days, after which the thermostat will turn off the load it is controlling. When this happens "OF" will be displayed.

Wireless Control

When power on the thermostat, thermostat has the output for Heating and sent "on" signal to wireless receiver center in every 5 minutes. The light match for the receive -LED C(yellow) flashes, LED B(green) turns on, and sent the order "on" to thermo actuator.

When thermostat stopped the output for Heating and sent "on" signal to wireless receiver center. The light match for the receive - LED C(yellow) flashes, LED B(green) turns off, and sent the order "off" to thermo actuator.

Error Code

E1 flashing in the display: Room sensor short circuit. Thermostat shut down all output

E2 flashing in the display: Room sensor broken. Thermostat shut down all output.

Communication alarm

When the thermostat stops or starts the output, the receiver do not start or not receive some signals that can not return to the thermostat , display will show Er2.