

SAS816WHB-0-RF



Operating Instruction

SAS816WHB-0-RF WIRELESS THERMOSTAT

Installation and operation instructions

SAS816WHB-0-RF is a non-programmable wireless thermostat, It is can replaced most common residential thermostat and designed to be used with electric, gas ,water radiant or oil heating control system or cooling system.

Unlike ordinary single unit design thermostat, this unit is a new type of thermostat separating the thermostat function into two units. Receiver SAS2000WHB-Re and Control Centre SAS816WHB-0-Tr. The Receiver serves for wiring connections and heat/cool on/off control. The Control Centre serves as user interface and temperature sensing/control. User can put the control Centre nearby and can read/control the temperature of really the living area while put the Receiver besides the heating or cooling system. The two units are linked by RF.

SPECIFICATION

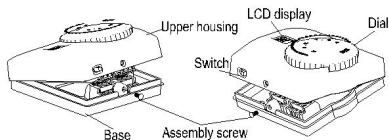
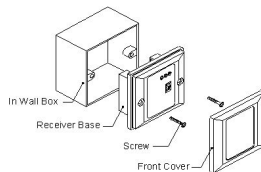
Transmitter Power Supply.....	2AA Batteries
Receiver Power Supply & Relay Load.....	250VAC 16A
Frequency band.....	433 MHZ
Room temperature setting range.....	5°C~30°C (41°F~86°F)
Ambient temperature-operation.....	0°C(32°F)~+50°C(122°F)
Ambient temperature-transport.....	-10°C(14°F)~+60 °C(140°F)
Accuracy.....	±1°C or ±1°F
Dimensions.....	Control Centre 86mm×86mm×32mm Receiver 86mm×86mm×16mm

NOTE:

- 1) When testing, the distance between Transmitter and Receiver should above 150CM .
- 2) If install two or more Receivers, the distance of any two units should above 40CM. To avoid interfered
- 3) Keep the antenna upright for better signal take-over effort.

FEATURE

- LCD display shows room temperature
- Optional economic operation or comfort operation
- Optional temperature display of Celsius or Fahrenheit scale

MOUNTING AND WIRING DIAGRAM**Figure 1****Figure 2**

INSTALL THE CONTROL CENTRE & MOUNTING THE RECEIVER

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. Connect wires beneath terminal screws on the base using appropriate wiring schematic.
See figure 4 & 5.
3. 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. (Note: the product long time not use it, please detach the battery, prevent the battery fluid leakage, damaged products.)
4. Push power base into wall.
5. 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.)
6. Replace the upper housing on the base and fix the upper housing by removed assembly screw

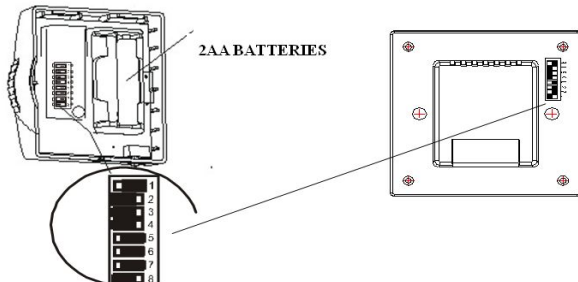
RF ADDRESS CODE SETTING

If there is another user nearby, e.g. in the next house, your receiver may be fault triggered by their transmitter. You may select a different RF address code to prevent this. Receiver can only response to RF coding with the same address code setting as its own address code. If you want to change the RF address to avoid mis-triggered by other user, you should adjust address code of both Receiver and the Control Centre.

1. To adjust address code of Receiver, simply push up one or more of the 8 dip switch levers.
2. To adjust address code of Control Centre, open the housing of the ControlCenter. See install the Control Centre. According to the modified address code of Receiver, adjust the address code of Control Centre to the same address of Receiver by pushing up the 8 dip switch levers.

Caution:

1. Address code of Control Centre must be the same as address code of Receiver.
2. Disconnect AC power and remove batteries prior to adjusting address code.

Address code of Control Centre**Address code of Receiver****Figure 3**

WIRING DIAGRAM

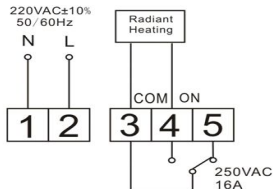


Figure 4

For Water Radiant Heating System, the Unit requires 230VAC application. (As Fig.4)

NOTE: Please remove jumper.

Don't connect terminal 2 & 3 . It will cause short circuit.

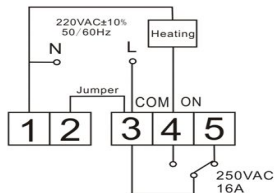
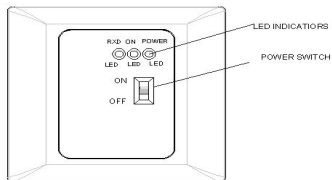


Figure 5

For other Heating System, the Unit requires 230VAC application. (As Fig.5)

SWITCH AND LED DESCRIPTION OF RECEIVER



POWER SWITCH:

When there is no demand to turn on the heating/cooling device, it is recommended to turn the power switch to the off position.

LED INDICATOR:

1. **Red LED** turns on as long as there is power to the unit
2. **Green LED** turns on as long as the heating/cooling device is energized.
3. **Yellow LED** flashes as long as there are any signals received from the Control Centre.

Figure 6

CHECK THERMOSTAT OPERATION

The unit will be controlled via air sensor in the Control Centre and the Control Centre will determine to activate/deactivate heating system by comparing set temperature with room temperature. Turn the dial to adjust Control Centre setting above room temperature, The Control Centre will emit signals to the Receiver asking to turn on the heating/cooling device. Yellow LED on the Receiver flashes means Receiver has received the signals. Green LED turns on means heating/cooling device is energized. Turn the dial to adjust Control Centre setting below room temperature, The Control Centre will emit signals to the Receiver asking to turn off the heating/cooling device. Yellow LED on the Receiver flashes means Receiver has received the signals. Green LED turns off means heating/cooling device is deactivated.

CONFIGURATION DIL SWITCH SETTINGS

Slide the DIL switches to the settings required (see Figure 7)

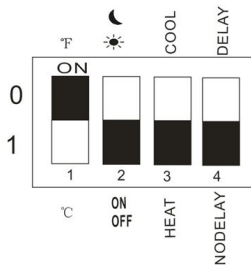
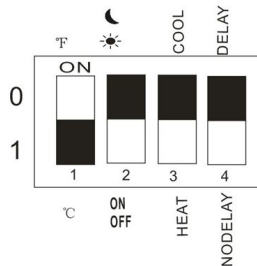
Heating selection**Cooling selection**

Figure 7

Both heating and cooling selection

Select °C and °F readout

Set the switch to °C, temperature in the display will be shown in °C readout.

Set the switch to °F, temperature in the display will be shown in °F readout.



Switch function option

ON/OFF – Switch at the lower side of the thermostat used as ON/OFF switch

Setting the switch at ,  ON thermostat is switched on. Indicating “ON”

Setting the switch at ,  OFF thermostat is switched off. Indicating “OF” .

NSB – Switch at the lower side of the thermostat used as NSB switch, as dial  |  .

Setting the switch at ,  ON thermostat is on comfort mode. Indicating “Sun Symbol” 

Setting the switch at ,  OFF thermostat is on Night set back mode. Indicating “Moon Symbol” 

Compressor delay option for cooling selection

Setting the Dil switch at NO DELAY, compressor delay function is canceled.

Setting the Dil switch at 5 MIN DELAY, compressor will have 5 minutes off-time protection.

USERS INSTRUCTIONS

Display

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

Setting the temperature

Turn setting dial to required temperature. The selected temperature will **flash** in the LCD to signify it is showing the **set temperature**

After a short period the display stops flashing and shows **actual room temperature**.

Thermostat status (heat mode only)

A flame symbol will be lit whenever the thermostat is calling for heat.

Thermostat status (cool mode only)

A snowflake symbol will be lit whenever the thermostat is calling for cooling. If this is seen to flash, the thermostat output is delayed for a short period to prevent compressor damage.

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.



ON | OFF Switch function

The function of the switch at the lower side of the thermostat has 2 options. You can select the option by setting the second dip in the dip group. See DIL switch setting.

NSB setting

This switch is used as  |  switch.

When the switch is set to the “Sun Symbol” , the thermostat controls at the temperature set by the setting dial.

When set to the “Moon symbol” , the thermostat controls at 4°C below the temperature set by the setting dial.

Note: if used to control cooling, thermostat controls 4℃ higher, with switch in Moon position

ON/OFF setting

The switch is used as ON/OFF control

When the switch is set to the “ON” , the thermostat controls at the temperature set by the setting dial.

When set to the “OFF” , the thermostat output is turned off and “OF” is display.

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.

Temperature alarm

If the room temperature is higher than 30℃. **HI** will be displayed. In cooling mode, the heating should start working; In heating mode, the heating should stop working.

If the room temperature is lower than 5℃. **LO** will be displayed. In cooling mode, the heating should stop working; In heating mode, the heating should start working.

CUSTOMER ASSISTANCE

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

