Wall-hung Boiler Thermostat User Manual

Many thanks for your selection of our products and services, and also for your trust and support to us

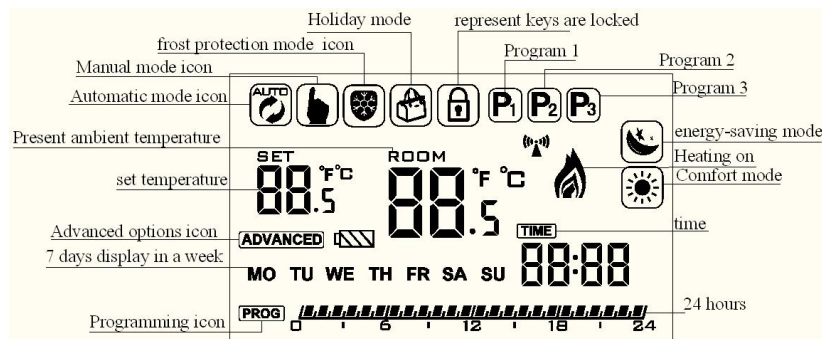**HY04BW**   **HY06BW**

Product Specifications

- Power: two AA* 1.5V alkaline batteries
- Display accuracy:0.5℃ or 1°F
- Probe sensor:NTC(10k)1%
- Contact capacity:
  5A/30VDC(HF relay)
  2A/30VDC(NEC relay);
- Working environment temperature:
  0~50°C/32~122°F

- Range of temperature adjustment:
  5~35°C/41~95°F
- Range of temperature display:0~40°C/32~99°F
- Output: Switch relay
- Insulating condition: Normal environment
- Running program: Set per 1 week as a cycle
- Installation: Wall mounted or on battery seat
- Size(mm)：140*91*27 and 86*86*29

Function Description:

Thermostat HY04BW,HY06BW supplies single heating contact output or single cooling output contact,to get room temperature via sensor and compare with thermostat setting temperature,achieve close and open of output contact,switching temperature difference is 0.5℃
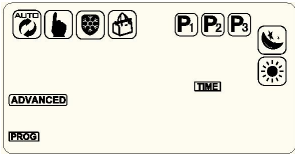
Display And Button

Holiday mode
represent keys are locked
frost protection mode icon
Program 1
Manual mode icon
Program 2
Automatic mode icon
Program 3
Present ambient temperature
energy-saving mode
Heating on
set temperature
Comfort mode
Advanced options icon
7 days display in a week
time
Programming icon
24 hours

Operation Key

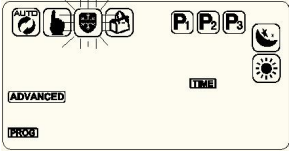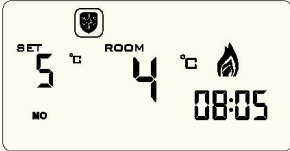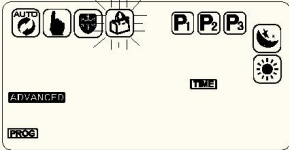| NO.	symbols	represent
A	Rotary Press Button	Increasing key,clockwise rotation
B	Rotary Press Button	1.Under turn on state,short press rotary key,switch automatic mode and manual mode 2.Under turn on state,press rotary key for 3 seconds then move your finger to enter into setting screen 3.Match with other keys,confirm key
B	Rotary Press Button	Decreasing key,anticlockwise rotation
C	⏻	Power on/off key and children lock key(long press power key for 3 seconds then move finger,lock or unlock children lock)
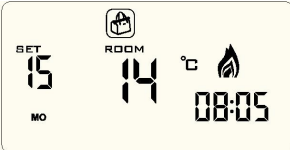
Main Setting Screen

Mode	Explain	Printscreen
Automatic Mode	Short press rotary button,display AUTO icon,it will work as automatic mode,show main screen as right picture.	Main Screen As Below
Manual Mode	Short press rotary button,display icon,show main screen as right picture.The setting default temperature of main screen shows 23℃,	
Temporary manual mode	under automatic mode and unlock state,rotary button to adjust temperature,it will enter into temporary manual	

mode,you can set required temperature.If you want to return to automatic mode or manual mode,enter into setting screen to reset it.It work to next interval,then will return to automatic mode automatically,such as it works as temporary mode at 8 o'clock,adjust temperature to 23℃,when it works to 9 o'clock,it will return to automatic mode automatically.

Long press rotary ENTERY key for 3 seconds,enter into setting screen,choose the icon you need to set,rotates the rotary press button to choose the icon you need to set,then press enter key enter into setting,skip the icon that need not set directory.
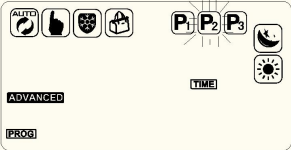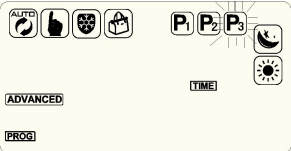
| Mode	Explain	Printscreen
Frost Protection Mode	After enter into setting screen,rotates rotary press button to choose frost protection mode icon,press rotary button to work at frost protection mode,main screen display as right picture. Frost protection mode,default setting temperature is 5℃. If you want to quit frost protection mode,please long press rotary key to back to setting screen,rotate rotary press button to choose another setting icon required to quit this mode.	
Holiday Mode	Rotates rotary press button to choose holiday mode,you can see icon flashing,press rotary button to enter into holiday mode,see right picture,setting temperature flashing,you can rotate rotary press button to set temperature,such as 15℃.Default temperature is 15℃,then after press rotary button to set holiday days,rotates rotary	

press button to adjust days(countdown from holiday starting,back to work at automatic mode after holiday ends),then press rotary button to confirm and exit mode setting,back to main screen as right picture.

Children Lock	Long press power on/off key for 3 seconds then move your finger,when lock icon display on screen,rotary press button can't be used,if it need unlock,press power on/off key for 3 seconds again then move your finger,lock icon disappears,rotary press button can be used again.	

Programmable Mode Setting

HY04BW,HY06BW wall-hung boiler thermostat can set (comfortable mode) and (energy- saving mode) two kinds of different temperature;it offers P1、P2、P3 three kinds of program to choose

Mode Setting

Rotate rotary press button to choose P1 programmable mode,press rotary button for one time.	
Rote rotary press button to choose one program of P1、P2、P3,press rotary button to confirm the program you choose,press it again exit and back to last screen;it automatically exit setting after 5 seconds and back to display main screen.	

P1:work in manual program:7 days one week,24 hours,different time different temperature,it can be set as comfortable mode or energy-saving mode,low temperature rhombus is energy-saving rhombus,the small black rhombus do not display,high temperature rhombus is comfortable rhombus,the small black rhombus display.(programmable mode refer to manual program mode.

P2:7 days one week,from 22:00-6:00,temperature is energy-saving mode temperature,from 6：00-22：00,temperature is 21℃ comfortable mode temperature,time and temperature is default,they can't be modified.

P3:from 22:00-6:00,temperature is 17℃energy-saving mode temperature,from 6：00-8：00,temperature is 21℃comfortable mode temperature, from 8：00-16：00,temperature is 17℃ energy-saving mode temperature, from 16：00-20：00,temperature is 21℃ comfortable mode temperature.time and temperature is default,they

can't be modified. From Monday to Friday is working day.
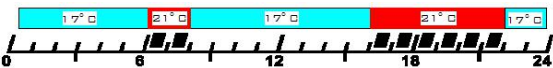
Weekend:from 22:00-6:00,temperature is 17℃energy-saving mode temperature,from 6：00-22：00,temperature is 21℃comfortable mode temperature,time and temperature is default,they can't be modified.

Energy-saving Mode Temperature Setting

Rotate rotary press button to choose🌙 energy-saving mode,press rotary button to enter into energy-saving mode temperature setting,you can rotate rotary press button to set temperature,such as 15℃,default is 17℃.press rotary button again to confirm and back to last screen;it automatically exit setting after 5 seconds and back to display main screen.
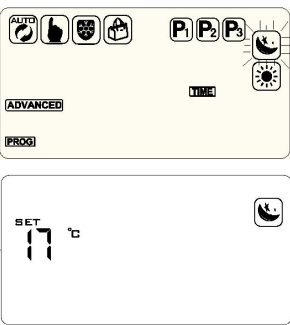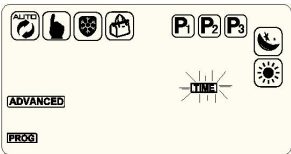

Comfortable Mode Temperature Setting

Rotate rotary press button to choose☀ comfortable mode,press rotary button to enter into comfortable mode temperature setting,you can rotate rotary press button to set temperature,such as 21℃,default is 21℃.press rotary button again to confirm and back to last screen;it automatically exit setting after 5 seconds and back to display main screen.

Timer Setting

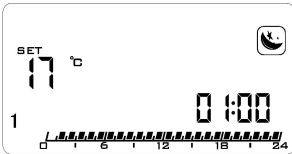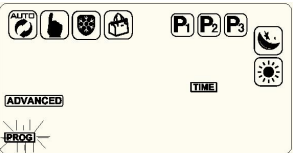| At setting screen,rotate rotary press button to choose TIME,press rotary button. 	Minute flashing,you can rotate rotary press button to adjust value,press rotary press button to confirm.
Hour flashing,you can rotate rotary press button to adjust value,press rotary	Week Flashing,you can rotate

button to confirm.

| rotary press button to choose week day,press rotary button to confirm and back to last setting screen;it exits setting automatically,back to display screen.

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|---|

Manual Program

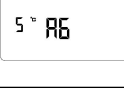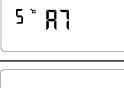Enter into setting screen,choose PROG ,press rotary button to enter into manual program.
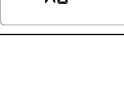
From 0-23,the choosing rhombus flashing,rotate rotary press button to choose comfortable mode or energy-saving mode,then press rotary button to confirm,jump to next rhombus,by this analogy,following is the setting of from Monday to Friday;
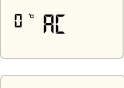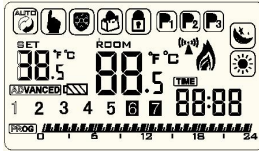
Notes:set as comfortable mode☀or energy-saving mode🌙low temperature rhombus is energy-saving rhombus,the small black rhombus do not display,high temperature rhombus is comfortable rhombus,the small black rhombus display.
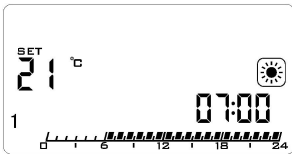
Advanced Options

No.	Symbol	Setting Item	Parameter Setting Function	Factory Default
2ᵗₛ A1	A1	Measuring temperature calibration	-9-+9℃	0.5℃accuracy calibration
1ᵗ A2	A2	External sensor limit temperature control hystersis	1-5℃：(SET±0.5℃—SET±2.5℃),default is 2℃(SET±1℃)	2℃
0 A3	A3	Children lock setting	0:half lock 1:full lock	0

Л1 Я4	A4	Programmable and non-programmable option	n0:programmable n1:non-programmable	n0:programmable
45° Я5	A5	External sensor high temperature limit value	35℃-50℃	45℃
5° Я6	A6	External sensor low temperature limit value(frost protection)	5℃-10℃	5℃
5° Я7	A7	Setting temperature lowest limit value	1-10℃	5℃
35° Я8	A8	Setting temperature highest limit value	30-50℃	35℃
0 Я9	A9	Descaling function	0:descaling function close; 1:descaling function open Descaling function:when valve is continuously closed over 100 hours，it will be opened for 3 minutes automatically.	0:descaling function close
0° ЯC 1° ЯC	AC	Temperature unit switch: °C Or °F	Celsius degree or Fahrenheit degree 0=°C 1=°F	0=°C
ЯE	AE	Restore to factory default setting	Display A o, press wind rotary button whole show	

Cautions On Installation And Use

1. To prevent the thermostat display from a high fluctuation, special treatment has been made to the program. Therefore, it is

   normal that the thermostat cannot immediately display the sudden change of temperature.

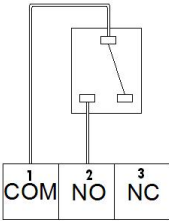2. The thermostat installed on 1.5m above the ground.

3. For the thermostat installed,please take care not to install it to the wall corner, door / window side or behind the door or in such

   unheated area as exterior wall. Avoid hot / cold air duct, radiator, flue or thermal pipe.

4. If you have any problem for the installed ,please contact our company Hysen, we will make a demonstration for you

5. Only the professional technicians are permitted to open the transmitting and receiving box of the thermostat for installation. When install the power supply, make sure that the power cable is well insulated.

6. The thermostat is unrepairable product. The user shall not open the internal circuit board.

7. Before installing the thermostat, make sure that the system is disconnected. The maximum voltage of the system shall meet the requirements specified in the Instruction Manual (Max. AC Voltage: 250V).
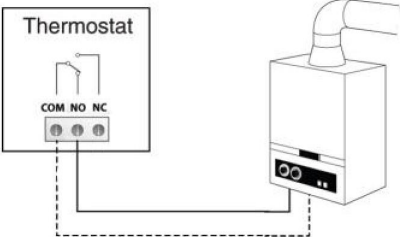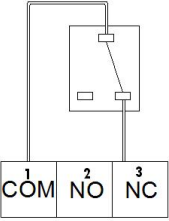
Wiring Illustration

Wiring Terminals

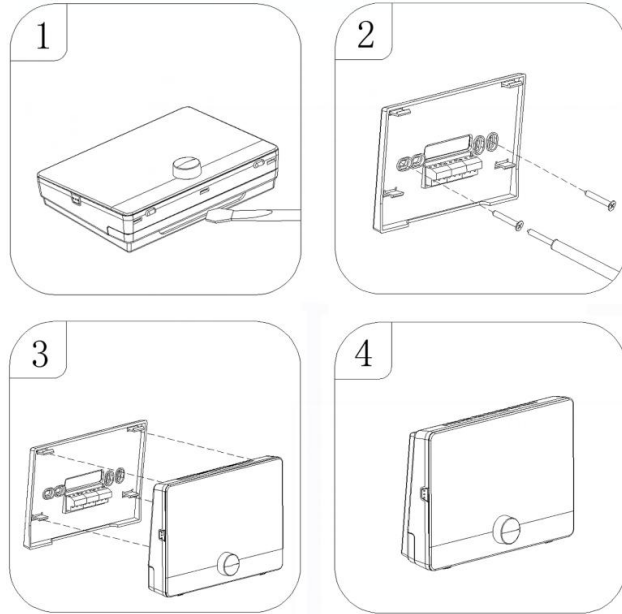| Wiring Terminal	Remarks
1	**COM (Public terminal of relay)**
2	**NO (Normally-Open point)**
3	**NC (Normally-Closed point)**

Connection For Heating Unit   Connection For Cooling Unit

Warranty：
We offer the warranty of 12 months, from the sales day. The products of our company can have lifetime warranty ,if it is not the quality problems, or beyond the warranty period, we will charge for the after-sale service.

Installation

HY04BW Installation:

1

2

3

4

HY06BW Installation:

1

2

3

4