

# User Manual XH-W1301

Connect the power supply and equipment to supply to the controller is displayed for the measurement of temperature.

Time you press the SET button, the display temperature flashing, Press + - to set the desired temperature (hold down the + - quickly lift) press SET to confirm the setting is complete return the controller to set the auto-relay-off! The thermostat output 10A relay, meet a variety of high-power load connected to the control circuit, power supply to the thermostat, the display shows the ambient temperature, Lights, digital control and buzzer status

LED: flashes to indicate cooling or heating start-up delay, Always the relay is closed

Digital tube: LL sensor open circuit, please follow the instructions to connect the sensor; HH Forces beyond the measurement range thermostat off the relay; --- high temperature alarm

Buzzer: LL, HH --- digital display, the buzzer beep - beep - beep - beep sound

## **Parameter Function Description**

Long press SET 5 seconds to enter the main menu settings return + - switch P0 ... P8 long press the SET or 10 seconds of no key activity controller automatically recognized

### **P0 refrigeration, heating mode**

Long press SET 5 seconds to display a P0, press SET operating mode, heating mode + - Switch [H] [C cooling mode] and press the SET returns, long press SET or 10 seconds of no key activity controller automatically recognized complete

Cooling mode: When the temperature measurements  $\geq$  temperature set point, cooling relay pull the chiller start; when the temperature measurement value  $\leq$  temperature set point - hysteresis, refrigeration relay is switched off, cooling off

Heating mode: When the temperature measurement value  $\leq$  temperature set point, the heating relay pull the heater starts; when the temperature measurements  $\geq$  temperature set point + hysteresis heating relay is switched off, the heater is turned off

### **P1 hysteresis setting**

Long press SET 5 seconds, P0, + - Switch to P1, press SET to set back to the difference, Press + - to set the hysteresis 0.5-15 finished, press SET to return, long press SET or 10 seconds no key the action controller automatically confirm completion

Cooling mode: When the measured temperature  $\geq$  set value, the relay, cooling starts; when the temperature measurement value  $\leq$  settings - back to the difference, the relay is switched off, the cooling is turned off.

Such as the environment is 30 °C setting is 25 ° C, hysteresis is set to 2 ° C, after power relay is closed refrigeration to start the relay off when cooling to 23 ° C cooler Close, this time due to the cooler has been disconnected the temperature began to rise, when the pick-up to the set value 25 ° C, the relay is closed refrigeration start again, and so forth loop to control the temperature not higher than 25 ° C

Heating mode: When the temperature measurement value  $\leq$  settings, relay, heater start; when the temperature measurement value  $\geq$  set value + hysteresis value, the relay is switched off, the heater is turned off.

Such as the environment of 10 ° C set value of 25 ° C, hysteresis is set to 2 ° C, after power relay is closed heater starts, when heated to 27 ° C, the relay is switched off the heater off, this time due to heater has been disconnected temperature began to drop, the moment down to the set value of 25 ° C relay closes when the heater is started again, and so forth loop control temperature not lower than 25 ° C

### **P2 highest temperature setting limit:**

To avoid the misuse of others led to the set temperature is too high risk, maximum cap on the thermostat, limit the maximum temperature set point temperature control setting range

SET 5 seconds to display P0 + - switch to P2, SET the maximum + - Set the maximum set temperature and the maximum is 110 finished, press SET to return, long press SET or 10seconds keystrokes controller automatically confirm completion

For example: setting can only be set up to 60 ° C To temperature set point higher temperatures expand the scope of, you need to adjust the limit values for the 60 temperature set point.

### **P3 is the lowest temperature setting limit:**

To avoid others to misuse the temperature is too low occurrence of ice block, the thermostat lowest setting upper and lower limits, defining the minimum temperature set point temperature control setting range

SET 5 seconds to display P0 + - Switch to P3, press SET to set the minimum lower limit, Press + - to set the minimum set temperature, the minimum value of -50 finished, press SET to return, long press SET or 10 seconds of no key activity controller automatically confirm completion

For example: 2 temperature set point minimum can only be set to 2 ° C if you want the temperature set point lower temperature range to expand, you need to adjust the settings of the lower limit.

### **P4 temperature correction**

When measuring temperature and standard temperature deviation with special needs or because the user hardware, you can use this feature correction, the corrected temperature = temperature before correction + correction value of the effective range of -7.0 to 7.0

Long press SET 5 seconds to display P0 + - Switch to P4, correction time the SET, positive + - Set the school, finished, press SET to return to long press the SET or 10 seconds of no key activity controller automatically confirm completion

For example, the normal display is 25 degrees; temperature correction display is 0 to 25 degrees; temperature is corrected to 1.5 to 26.5 degrees; temperature correction -1.5 23.5;

### **P5 delayed start time: minutes**

Refrigeration or heater delay of need, on delay functions to protect the life of the equipment

Long press SET 5 seconds, P0 + - switch to P5 time the SET set delay start time in minutes, press the SET + - Set a scale of 0-10, finished, press SET to return long or 10 seconds the keystrokes controller automatically confirm the completion of

The first power cooling mode: If the current temperature  $\geq$  settings, the cooler will not start immediately after refrigeration, you need to run the set delay time start

Heating mode: power is first applied, if this temperature  $\leq$  set value, the heater does not immediately start the heating, the need to run the set delay time after start

Refrigeration or heater adjacent two starts downtime between more than delay the start time settings, refrigeration immediately start;

Shut down for the first time between the start of the refrigeration or heater adjacent two less than the delay start time, the need to run to completion set refrigeration equipment to start the delayed start time setting and start again. The delay time from shutdown instantly.

Such as refrigeration state set a delay of 5 minutes, start-up delay after boot refrigeration, refrigeration When you reach the desired temperature refrigeration stop, then start the timer after 5 minutes, open the next time the cooler completion of the start timing immediately unfinished timing to wait for the end of the timing to work, delay LED blinks

Delay start is set to 0 is equal to the turn off delay function

### **The P6 key tone switch**

Long press SET 5 seconds, P0 + - switch to P6 time the SET is turned on key sound, press the + - Set the on / off, finished, press SET to return, long press SET or 10 seconds of no key activity control automatically confirm completion Buzzer switch points on / off is set to on key action with the key issue drops sound set to off to turn off the buzzer, no voice

### **P7 high temperature alarm**

SET 5 seconds to display P0 + - switch to P7, press SET to display the on / off (set to off to turn off the sub-function) is set to on, press SET to set the temperature of the high temperature alarm point, press the + - setting 0 ~ 110, after the completion of time the SET returns, long press SET or 10 seconds of no key activity controller automatically confirm the completion of the

High temperature alarm setting range is 0-110 or closed off times to reach rapid buzzer beeps high temperature alarm, and forced off the relay

For example, we want to give a liquid or space heating to 40 degrees, set 80 degrees as dangerous temperature in the course of their work force majeure due to external causes the temperature is above 80 degrees the temperature danger, the start temperature alarm relays to disconnect the buzzer shortness alarm, a timely reminder of the staff to take appropriate measures to recoup their losses! Alarm temperature can be set according to actual needs, if you do not want the temperature is set to off, note that when returns to normal temperature automatic discharge temperature alarm thermostat work properly

### **P8 restore the factory settings**

Some man-made causes lead to confusion in the internal settings of the thermostat, to set one by one is very time-consuming, can use this function to restore the factory settings, the specific method

SET 5 seconds to display P0 + - switch to P8, SET is set to on or off and on to restore the factory settings, off no action finished, press SET to return, long press SET or 10 seconds the bell no key controller automatically restore the factory settings parameters in the table below

Code	Description	setting range	Factory setting
P0	Cooling /Heating	C/H	C
P1	Hysteresis setting	0.5-15	2
P2	Highest setting upper limit	110	110
P3	Lowest setting upper limit	-50	-50
P4	Temperature correction	-7-7°C	0
P5	Delay start time	0-10 Minutes	0
P6	Buzzer	ON/OFF	ON

## Connection Diagram

P7	High temperature alarm	0-110°C	OFF
P8	Restore factory settings	ON/OFF	OFF

