

### Important safety information Warning

- ◆ Always turn off power before installing, remove, cleaning controller.
- ◆ Read all of the information in this manual before installing the controller.
- ◆ Notice of the supply power voltage of the controller: 220 VAC±10%  
Do not confuse them and do not install the controller over the voltages range.

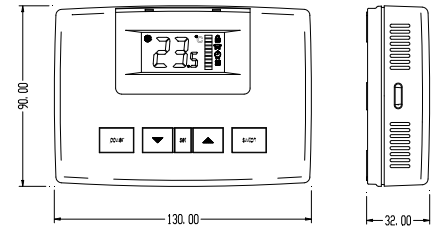


Fig.1 base board

### Mounting and Wiring Diagram

- ◆ Find the two ears which are on both sides of the controller, press them to take off the main part from the base part.
- ◆ Mount the base part on the wall firstly: Mark the place of controller on the wall, 1.2-1.3 meter above the floor. Do not corner, near diffuser, in direct sunlight, or near any heat or See Fig 1. There are two dimensions available.
- ◆ Connect wires to terminal strip. See the wiring diagrams connections correct and secure.
- ◆ Finally install the main part on the base part.

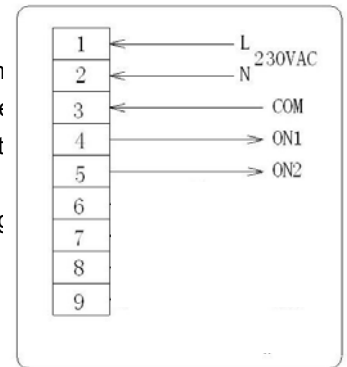
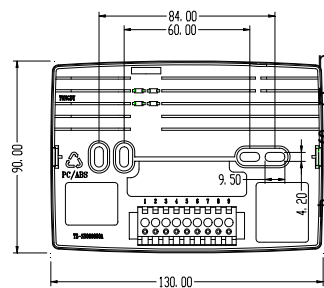
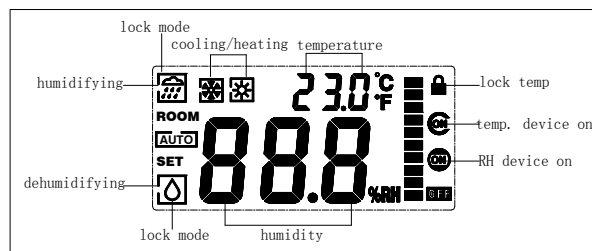
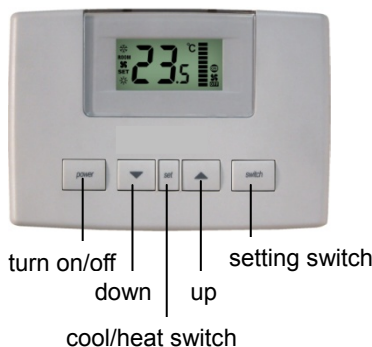


Fig.2

### Buttons and LCD Display



### Operation

1. Press the **power** button for 2 seconds to turn on the controller. The measurement humidity displays on the below line of LCD and the measurement temperature displays on the upper line of LCD. Also **ROOM** symbol displays on the left.
2. **switch** button: Use to select humidity or temperature setting. Press **switch** to select which value can be set now (humidity or temperature). When selecting, relevant number is blinking and you may set the value with pressing ▼ or ▲ button.
3. Setting humidity: Measurement range and setting range of humidity is 0~100%RH/0~100%RH. Press ▼ or ▲ button for humidity setting and each press will change 0.1%RH. Continuously press ▼ or ▲ button to adjust the value quickly. When adjusting, the symbol of humidity number will blink, which means that the setting is not confirmed. After blinking for 6 seconds, the setting is confirmed and then it returns to display measured humidity. ☹ appearing on LCD indicates humidifier/dehumidifier on working. ☺ disappearing indicates humidifier/dehumidifier stops working.
4. Setting temperature: Measurement range and setting range of temperature is 0°C~60°C (32.0~140°F)/5~35°C (41.0~95.0°F). Press ▼ or ▲ button for temperature setting and each press will change 0.1°C (0.1°F). Continuously press ▼ or ▲ button to adjust the value quickly. When adjusting, the number of temperature blinks, which means that the setting is not confirmed. After blinking for 6 seconds, the setting is confirmed and then it returns to display measured temperature. ☹ appearing on right of the LCD indicates cooling/heating device on working. ☺ disappearing indicates a cooling/heating device stops working.
5. **set** button : Use to select cooling or heating mode for temperature control . In cooling, ❄ symbol appears on the top left

of LCD. In heating, ❄ symbol appears on the top left of LCD. Press **set** button for 6 seconds until ❄ or ❄ appearing. It indicates that the cooling/heating mode is locked. Now the working mode can not be changed.

6. Lock the set point: Press ▼ and ▲ at the same time for about 6 seconds until the symbol 🔒 appearing on the top right of LCD, which indicates that the set points of humidity and temperature are locked, after that, it's impossible to adjust humidity or temperature by ▼ and ▲ button.
7. Unlock set point : press ▼ and ▲ at the same time for about 7 seconds under the locking mode until the symbol 🔒 disappearing.

#### Advanced Setup (V.A031)

Please use the below parameter setup carefully. Don't change any default setting before you read and understand all parameters.

Cut off power and press the ears on both sides to take off the main part from the base part. Then you will find a set of four DIP switches DIP1~DIP4 on the top left of the circuit board.

- DIP1: ON—parameters setting      OFF—normal use      (leave factory: OFF)
- DIP2: ON—Fahrenheit for temperature display  
OFF—Celsius for temperature display      (leave factory: OFF)
- DIP3: ON—Dehumidify mode;      OFF—humidify mode      (leave factory: OFF)
- DIP4: Ineffective for model F2000P-TH-K01

Put the DIP1 to ON (up is ON, down is OFF) and put the main part to the base part, then you can set up the following parameters. Press **switch** button to select parameter and set up its value by press ▼ or ▲.

**Warning:** must cut off power before open the controller.

| LCD | Parameter   | Range of setup   | Default     |
|-----|---|--|-------------|
| -1  | RS485 communication address<br>(Ineffective for model F2000P-TH-K02)  | 1~255  | <u>1</u>    |
| -2  | RS485 communication rate<br>(Ineffective for model F2000P-TH-K021)  | 1-4800, 2-9600, 3-14400, 4-19200, 5-38400  | <u>4</u>    |
| -3  | RS485 communication odd/even calibration and stop bit<br>(Ineffective for model F2000P-TH-K02)  | 1- none 1 stop bit<br>2- none 2 stop bits<br>3- odd calibration 1 stop bit<br>4- even calibration 1 stop bit | <u>1</u>    |
| -4  | Temperature modification  | ±3°C/±6°F  | <u>0°C</u>  |
| -5  | Humidity modification   | ±5%RH  | <u>0%RH</u> |
| -6  | Maximum limit of temperature setting  | 0~60°C/32~140°F  | 35°C        |
| -7  | Minimum limit of temperature setting  | 0~60°C/32~140°F  | 5°C         |
| -8  | Differential humidity to control the replay action<br>For example, when it is set 2 and humidity set point is 40%RH, in humidify mode, the relay1 will be on when measurement humidity< setting; if measurement humidity> (40+2)%RH, the relay1 will be off. Dehumidifier working is in reverse mode.         | 0~5%RH   | <u>2</u>    |
| -9  | Differential temperature to control the relay action<br>For example, when it is set 1 and the setting temperature is 25°C, in heating mode, the relay2 will be on when measurement temperature< setting; if measurement temperature>(25+1) °C, the relay2 will be off. In cooling mode it is in reverse mode. | 0.0~3°C/0.0~6.0°F  | <u>1</u>    |
| -10 | The state when the controller electrify again after power broken  | 0- Turn off after electrify<br>1- Turn on after electrify<br>2- Keep the same state before power broken      | <u>2</u>    |

**Reset:** in the state of parameter setup (DIP1=ON), cover the main part and turn it on. Press **switch** for about 25 seconds until the controller turns off. The all parameters reset to default. After finish parameter setup, you must cut off the power open the main part again, put the DIP1 to OFF, then the controller can work again.