Operation manual of ck-005 thermostat

This product adopts the latest single chip microcomputer control technology, which has high reliability and strong anti-interference. It is suitable for water heating and electric heating systems. According to the preset temperature, the temperature controller will automatically start and stop the controlled object, such as valve execution, heating cable, heating floor, electric heater, etc.

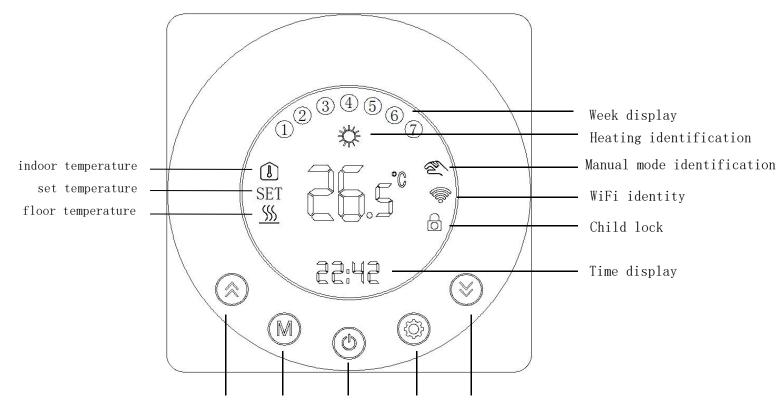
• Features and functions:

- 1. After connecting with the home WiFi router, you can set the thermostat working mode (remote control) at the mobile terminal through app;
- 2. The working mode of the temperature controller can be set through the touch screen:
- 3. Time display and temperature display;
- 4. Automatic temperature adjustment function in the room;
- 5. Multiple time modes: 5 + 2 / 6 + 1 / 7 days, 6 stages per day and corresponding set temperature, saving worry and energy
- 6. You can freely select manual mode or automatic mode.
- 7. Keyboard locking function to prevent abuse by children.

Technical parameters:

- 1. Working voltage: ac110-240v, 50 / 60 Hz 2.16A 3.: NTCB = 338010 K@25: 0-40 maximum switching current: internal sensor °C, sensor measurement range °C
- 4. External sensor: NTCB = $338010 \text{K@}25^{\circ}\text{C}$ length = 3M, measurement range: 0-99 °C, setting range: 5-90 °C (default setting: over temperature protection 55 °C)
- 5. Equipped with a 3M external sensor cable.

• Product illustration:



- Up key mode key power key set key Down key
- Switch on / off: Gently press the on key to turn on or off the power supply of the thermostat. The shutdown is to display the indoor temperature. Long press the on key will completely turn off, and the display screen will not display.
- Alarm mode: When the floor temperature is higher than the temperature limit, stop heating, and the default is 55 degrees.
- Heating function: When the indoor temperature is 1 degree lower than the set temperature, start heating (0.5-4c). The user can customize the system menu and stop heating when it is higher than the set temperature.
- Child lock: Long press the down key to lock. After locking, all keys fail. Long press the down key to unlock and return to normal.
- Description of temperature control mode and temperature display: The temperature control mode can be set in the system menu, and 00 is the internal control mode; 01 is external control mode; 02 is double temperature and double control; Normally, the indoor temperature symbol is on for a long time to display the indoor temperature; When setting, the setting symbol is on for a long time, and the display temperature jumps and flashes; Long press the up key to display the floor temperature symbol for 10 seconds and display the external sensor temperature.
- Manual / automatic mode: TapThe mode key switches the manual / automatic mode.
 A palm is displayed in the manual mode, but not in the automatic mode. The automatic mode system will carry out different temperature control at

- different times according to the preset, which is both comfortable and energy-saving. See the following time period programming for details.
- Time period programming: Period programming provides control rules for different temperatures in automatic mode. It can be set at one time and can be saved in the system all the time. Three periods and six periods of temperature can be set (double weekend 5 + 2 / single weekend 6 + 1 / 7 days). The system defaults to double weekend 5 + 2, and the cycle is one week and repeated. When the next period starts, the previous period ends. In the power on state, long press the mode M key to enter the setting, as follows:

pattern	Time /	P1	P2	Р3	P4	P5	P6
	temperature						
Monday to Friday	start time	6:00	8:00	11:30	12:30	17:00	22:00
	setting	22℃	15℃	22 ℃	15℃	22℃	15 ℃
	temperature						
Saturday to Sunday	start time	6:00	8:00	11:30	12:30	17:00	22:00
	setting	22℃	15℃	22℃	15℃	22°	15 ℃
	temperature						

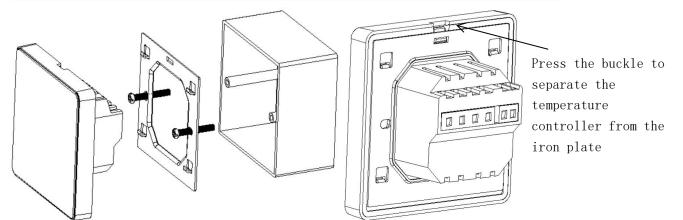
• System menu settings: The system menu is used to set some important parameters during system operation. Do not operate indiscriminately. Generally, it is not necessary to enter the setting after the first installation and commissioning. The entry method is to enter by long pressing the setting key in the shutdown state. After setting, you can long press the setting key or exit automatically after 10 seconds of no operation. Details are as follows:

Display	Current display	Range	explain	Default
number	value definition			value
01	Working day	5+2/6+1/7	5=5: 2/6=6: 1/7=7	5+2
	selection			
02	Built in probe	0.5-4.0° C	Return difference of built-in	1°C
	return difference		temperature sensor	
03	Return	0.5-5.0° C	Return difference of external	3°C
	difference of		temperature sensor	
	external probe			
04	Floor	25-80° C	The temperature limit value of the	55° C
	temperature		external sensor. This function is	
	limit		only effective in dual temperature	
			and dual control mode	
05	Backlight switch	ON/OFF	On = high light low light / off = high	ON
			light no light	
06	Low temperature	ON/OFF	Low temperature protection,	OFF
	protection		suitable for water heating system	
07	Key sound	ON/OFF	On = key has sound / off key has no	ON
			sound	

08	Temperature	-5To + 5 ° C	Adjust to the correct room	0° C
	correction value		temperature	
09	Temperature	00: built in, 01:	00: only enable the built-in	00
	control mode	external, 02:	temperature sensor;01: only	
		dual	enable external sensor for	
		temperature	temperature measurement;02:	
		and dual	temperature measurement with	
		control	built-in sensor and temperature	
			limit with external sensor	

• Installation method of temperature controller:

- 1. Insert a screwdriver into the buckle in the groove at the top of the thermostat, and then press the buckle down to separate the thermostat from the iron plate.
- 2. Fix the iron plate in the wall box with two screws.
- 3. Connect wires and temperature sensing wires in strict accordance with the wiring diagram on the back.
- 4. Align the thermostat with the fastening position on the iron plate and press it down gently. A "click" sound indicates that the thermostat has been installed.
- 5. If the thermostat needs to be removed, insert a screwdriver into the groove buckle on the top of the thermostat, gently press the buckle forward and take out the thermostat upward.



• be careful:

- 1. Please read the instructions carefully before use
- 2. Please strictly follow the wiring diagram on the power box on the back of the product.
- 3. The thermostat can only be used for the purpose specified by the company. Unauthorized modification and use of parts not sold or

recommended by the company may lead to failure or even failure of the system.

- 4. Avoid using the thermostat in the atmosphere containing carbon dioxide, hydrogen sulfide or other corrosive gases, otherwise the relay will be electrocuted and fail.
- 5. Do not barbecue the sensor probe with a lighter.
- 6. Do not apply voltage and current higher than the maximum rated value on the relay output contact.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- -- Reorient or relocate the receiving antenna.
- -- Increase the separation between the equipment and receiver.
- -- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- -- Consult the dealer or an experienced radio/TV technician for help.

Warning: changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment

Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment.

This equipment should be installed and operated with minimum distance 20cm between the radiator and your body.