

## ZY-9010E Smart Thermostat Manual

◆ **Product information** Thank you for using our company's instrument products. ZY-9010E is a general-purpose single-sensor thermostat with simple operation, accurate temperature control, strong anti-interference ability, and functions such as cooling/heating and high temperature alarm. The cooling/heating delay start time can be selected, which is suitable for various temperature control industries.

### ◆ Main functions

1. Temperature measurement and display
2. Cooling/heating mode control
3. Delay start of cooling/heating
4. High temperature alarm

### ◆ Specifications and dimensions

Front panel size: length 75×width 34 (mm)

Installation hole size: length 70 × width 28 (mm) machine size: length 75 × width 34 × depth 85 (mm)

### ◆ Technical parameters

Temperature measurement and control range: -30~300℃

Resolution: 0.1℃

Temperature measurement accuracy: 0.1℃

Whole machine power consumption: less than 3W

Input power: 110V-220VAC (12VDC or 24VDC optional)

Measurement input: temperature sensor

Output contact capacity: 10A/30A

Look at the label of the thermostat.

Front panel protection level: IP64

### ◆ Indicating indicator status

WORK light is always on, relay output. WORK light Flashing relay delay start. The SET light is always on and it is in the state of viewing/setting parameters.

### ◆ Key description

▲ Key: Short press to set the starting temperature

▼ key: short press to set stop temperature

Set key: long press to set the code

Rst key: Short press to return, long press to turn off, and in shutdown state, short press to turn on.

Long press the ▲▼ button at the same time: restore factory settings

◆ **View the parameter setting value:** Press the ▲ key to display the start temperature,

Press the ▼ key to display the stop temperature

### ◆ Quickly set temperature

1. Start temperature setting: press the ▲ key, the start temperature flashes, and then press the ▲ or ▼ key to set the desired The temperature value, press the Ret key to save and exit or the system will automatically save in 5 seconds. (The setting range is -30℃~300℃, the default is 30℃)

2. Stop temperature setting: press the ▼ key to stop the temperature flashing, and then press the ▲ or ▼ key to set the desired temperature value,

Press Ret to save and exit or the system will automatically save in 5 seconds.

(Setting range -30℃~300℃, default 50℃)

Note: The set start temperature cannot be equal to the set

Stop temperature, otherwise, the thermostat will not output and display "——"

#### ◆ Code parameter setting:

Long press the Set key for 3 seconds to enter the system

Code setting, press ▲ or ▼ key to select to adjust

Code, press the Set key once to enter the corresponding

Code setting status, press ▲ or ▼ to adjust

Parameters that need to be modified, press Rst after adjustment

Press to exit, or automatically save and exit in 5 seconds.

### ◆ Code menu table:

Code	Detailed description	Setting range	Factory settings	unit
P0	Temperature correction	-20~20	0	℃
P1	Delay start	0-30	0	minute
P2	Data lock	OFF/ON	OFF	

### ◆ Code function description

P0 temperature correction function:

When the measured temperature deviates from the standard temperature,

Use this function to compare the measured value of the machine with Standard temperature adjustment is consistent. Temperature after correction = temperature before correction + correction value.

P1 delay start:

After the delay start is set, the power is turned on for the first time,

Load equipment (such as heating film) will not start immediately

Automatic heating, when the set delay needs to be run

It can only be started after a period of time. Keep looping. Set to 0

It is the off delay start.

P2 data lock:

Off Turn off. ON Open, lock data is not

Can be adjusted.

Setting: When the normal temperature is displayed, long press SET —press the up button to find P3—short press SET—

— Short press the up button to display (OFF) off; press the button

Display (on) on

### ◆ Precautions for use:

**1. Strictly distinguish the sensor line, power line and output**

**The relay interface must not be connected incorrectly, and the relay must not be overloaded.**

**2. All wiring changes must be disconnected from the power supply**

**Under the circumstances.**

**3. This machine is forbidden in the water or excessively humid ring**

**It is forbidden to use in high temperature, strong electromagnetic interference, strong**

**Use in corrosive environments.**

**4. The power supply voltage is the same as the voltage marked on the machine**

**To avoid possible interference, it is recommended that the sensor**

**Keep a proper distance between the lead and the power line.**

**5 This product has been strictly inspected before leaving the factory, such as**

**Due to quality problems, our company guarantees for one year and is responsible for**

**Anything is limited to the product itself.**

**Due to self-disassembly or use**

**Damage caused by improper use is not covered by the warranty.**

**◆Fault code table**

error code	Cause of the	action
LLL	Sensor line failure / not inserted	No output
HHH	High temperature	No output
EEE	Below -30℃	No output
---	Set start equals stop	No output