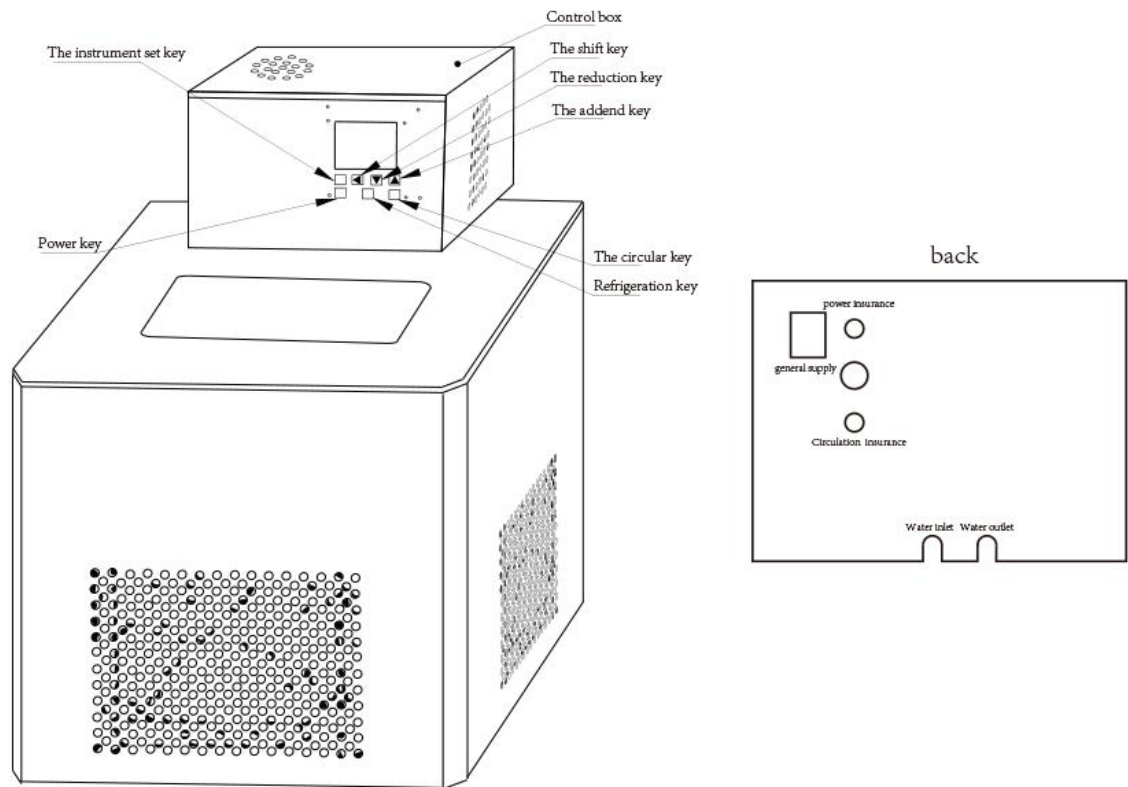


# **low temperature thermostatic bath**

**DC-0506**

**An instruction manual**

## A. Instrument appearance introduction.



## B.Features::

1. Refrigeration system: low noise air-cooled totally enclosed compressor unit is adopted, which has the advantages of fast refrigeration speed and strong temperature stability.
2. Control system: the latest special software, self-made temperature control technology, equipped with high standard PT100 and fully imported electronic components.
3. Circulation system: it is composed of internal and external circulation. During external circulation, the constant temperature liquid in the tank can be introduced outside, the second constant temperature field can be established, and it can also be used as a cold source to lead the cooled liquid in the tank to the experimental container outside the machine for cooling; During internal circulation, the liquid temperature in the tank can be very uniform and stable.
4. Protection system: the refrigeration has overheating and overcurrent protection, and the control system has the functions of over temperature alarm, setting the upper and lower limits of temperature, over temperature alarm temperature, and automatically cutting off the load in case of over temperature.
5. High end large screen LCD control instrument with high resolution of  $0.01\text{ }^{\circ}\text{C}$ , simple function operation and strong temperature stability. P.i.d can automatically search or manually adjust.
6. The accurate temperature correction function can reach  $0.01\text{ }^{\circ}\text{C}$ , and the maximum temperature fluctuation can reach  $\pm 0.02\text{-}0.05\text{ }^{\circ}\text{C}$  (depending on the model).

## C.Technique Parameter:

Model	Temperature range (°C)	Temperature fluctuation (±°C)	Slot opening (mm)	Groove depth (mm)	Power (KW)
DC-0506	-5-100	0.05	180*160	150	0.8

## D.Operating Steps:

1. Connect the circulating pump before startup (if there is no water inlet and outlet, this step can be omitted):

1.1 for the connection of circulating pump during internal circulation, connect the water outlet and water inlet directly with both ends of the hose supplied with the goods.

1.2 for the connection of circulating pump during external circulation, connect the water outlet to the inlet of container / equipment outside the tank with hose, and connect the water inlet to the outlet of container / equipment outside the tank.

2. Add the corresponding liquid medium into the tank. The liquid level of the liquid medium shall not be 20mm lower than the worktable to avoid damage caused by exposed dry burning of the heater.

2.1 When the working temperature is lower than 8 °C , the liquid medium is generally industrial alcohol or antifreeze.

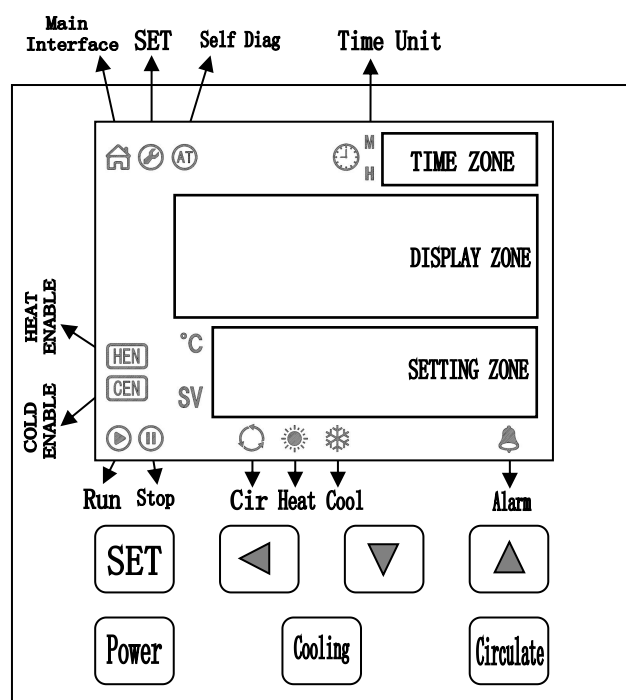
2.2 when the working temperature is 8 °C - 75 °C , the liquid medium is generally purified water.

2.3 when the working temperature is above 75 °C , dimethyl silicone oil with viscosity of 50cs is generally selected as the liquid medium.

3、Plug in the power, turn on the "main power" switch, and then turn on the "power" button on the operation panel. (Note: "main power" switch is on the back of the instrument).

4、Perform the instrument operation as follows:

4.1Display Description:



#### 4.2 description of instrument keys:

Set set function key shift key ▼ decrease key ▲ increase key

#### 4.3 setting of temperature parameters:

Press the setting function key "set" to enter the setting state of the temperature setting value. At this time, the last value of the setting temperature "SV" on the display screen flashes. First press the shift key, then press the plus or minus key to set the working temperature you need, and then press the setting function key "set" once. At this time, the last value of the timed shutdown time (min) "0000" on the upper right corner of the display screen flashes. If it is not necessary to keep the default "0000" regularly, Press the setting function key "set" again to exit the parameter setting and save the parameter setting value. At this time, the display "PV" shows the temperature of the liquid medium in the current tank.

5. After the temperature parameter setting is completed, first open the "cycle" button on the operation panel, and then open the "refrigeration" button (Note: when the working temperature exceeds 40 °C , the compressor automatically enters the protection, and the refrigeration does not start), and then the microcomputer enters the automatic control state.

#### 6、 Description of correction between quantity temperature and actual temperature:

In the normal display state, long press the setting function key "set" for 3 seconds, the password prompt "LC" is displayed in the upper row of the display window, and the password value is displayed in the lower row. At this time, press the plus key "▲" to enter the password "00000 3", then click the setting function key "set" to enter the internal parameter setting state, and then click the setting function key "set" to select the parameters to be modified, Select the indicator in the upper window to display the word "PB1". At this time, it is the temperature correction interface. If the actual temperature is higher than the displayed temperature, press the plus key "▲" to increase, press the minus key "▼" to decrease, and then long press the setting function key "set" for 3 seconds. The parameter values can be automatically saved and exit this state. When the measured value "PV" reaches the working temperature and stabilizes for 15 minutes, the experiment or test can be carried out.

## E. Precautions for use:

1. Liquid medium shall be added into the tank before use, and air opening is strictly prohibited. (Note: the liquid shall not contain acid and alkali).

2. The power supply power shall be greater than the total power of the instrument, and the power supply must have a good "grounding" device. The voltage used shall be subject to the technical parameter table.

3. The instrument shall be placed in a ventilated and dry place, and the back and both sides shall be 300mm away from the obstacles to maintain good heat dissipation.

After use, set all switches to off state, unplug the power plug, open the drain valve, discharge the medium in the tank, and keep the tank dry and tidy.

## F.Packing list

1 main energy	1set
2 cover plate	1piece
3 specification	1piece