Dry Bath

Instruction Manual

Catalogue Numbers

10301001

10302001

10303001

WIX TECHNOLOGY BEIJING CO.,LTD

Content

1. Note 1
2. Introduction 1
3. Specifications 1
4. Using the Dry Bath 2
4.1 Self-check 2
4.1.1 Self-check process 2
4.1.2 Self-check failure 2
4.2 “Prog” and “Step” button functions and using instructions 2
4.2.1 Using the “Prog” 3
4.2.2 Using the “Step” 3
4.3 “Time” button functions and using 3
4.4 “Temp” button functions and using instructions 4
4.5 “Speed” button functions and using instructions 4
4.6 “Horn” button functions and using instructions 5
4.7 “Stop” button functions and using instructions 5
4.8 “Rotation” button functions and using instructions 6
4.9 “StartPause” button functions and using instructions 6
4.10 ►◄▲▼ button functions and using instructions 7
4.11 Heat sink thermal protection 7
4.12 Calibration 7
5. Quality guarantee 8

1. Note

The ambient temperature of the equipment running shall be 10-30℃ and the humidity shall be lower than 70%.

The instrument vent holes should be free.

Please be cautious when touching the heating base of the instrument that the temperature of the heating base can reach above 115 ℃, to avoid scalding.

Make sure that the power socket is well grounded before its using.

Power supply voltage range is between AC 80V-AC 264V, frequency is between 47Hz-63Hz.

The instrument may only be opened by experts.

2. Introduction

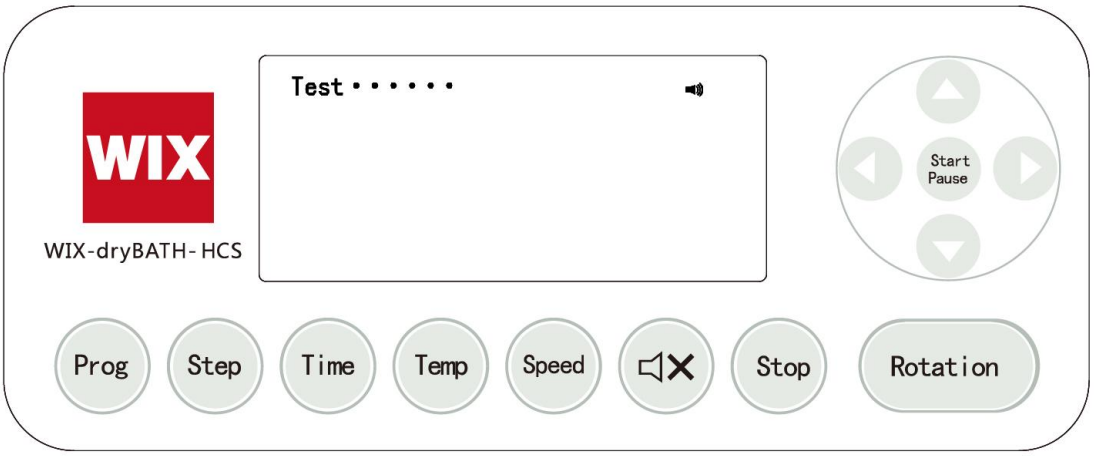
The constant temperature dry bath is a precise temperature control device using semiconductor refrigeration technology perfectly, greatly shortens the time of experimental process, includes heating, cooling, mixing, programming and so forth.

3. Specifications

Model	WIX-dryBATH-HCS	WIX-dryBATH-HC	WIX-dryBATH-HS
Temperature control range	0.1－100℃(ambient temperature lower than 15℃)		
Temperature control accuracy:	±0.1℃		
Display accuracy:	0.1℃		
Heating rate (room temperature to room temperature +50 ℃)	<25min		
Cooling rate (room temperature to room temperature -15 ℃)	<30min		--
Speed adjustment	300-2000RPM	--	300-2000RPM
Speed control accuracy:	±5R	--	±5R
Programs	9		
Program steps	9		
Dimensions （L×W×H）	260x185x170mm		
Net Weight	7.3kg		

4. Using the Dry Bath

4.1 Self-check



4.1.1 Self-check process

After dry bath is powered on, it will perform a power-on self-check.

The first dot behind “Test” flashing, the dry bath is testing whether the rotating of the instrument is normal.

The second dot behind “Test” flashing, the dry bath is testing whether the temperature control of the instrument is normal.

The third dot behind “Test” flashing, the dry bath is testing whether the instrument sample block is installed.

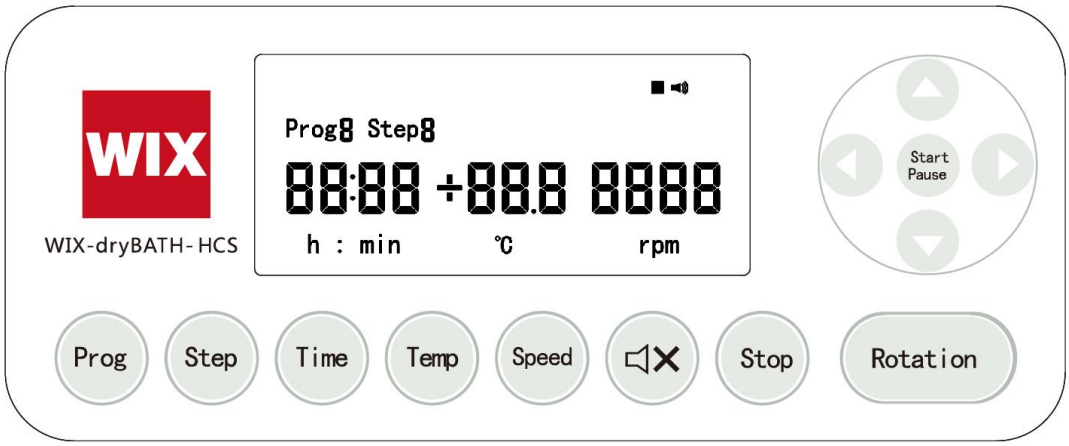
4.1.2 Self-check failure

The rotating faulty, the screen displays ERR1 and stops running.

The temperature control faulty, the screen displays ERR2 and stops running.

Block uninstalled, the screen displays ERR3 and stops running.

4.2 “Prog” and “Step” button functions and using instructions



The “Prog” button is for programming, and the “Step” button is for program step. Generally, the “Prog” button is used together with the“Step”button.

The dry bath is programmable and saving up to 9 programs, each program includes 9 steps, and each step can set with different countdown time, target temperature and target speed.

When the program setting is completed, after pushing the “StartPause” button, the user-defined program is saved.

4.2.1 Using the “Prog”

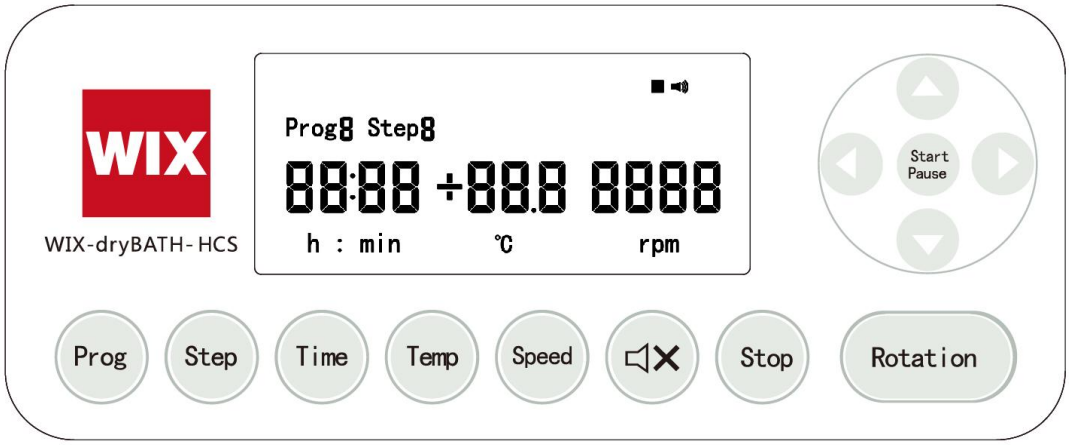
When the dry bath is stopped, push the “Prog” to flash “Prog” and its behind digits on the screen.The behind digits are the program numbers from 1 till 9. Push the ▲ button to increase the program number, push ▼ button to decrease the program number, and the screen will display the countdown, target temperature and target speed under the corresponding program step.

When “Prog” and the behind digits flashing on the screen, push the “Prog” button again, the dry bath will be running without program, “Prog” and program number, “Step” and step number will not be displayed. There is only one step in the programless running, but different target temperatures, target speeds and countdown time can also be modified and stored.

4.2.2 Using the “Step”

When the dry bath is stopped, push “Step”to flash “Step” and its behind digits on the screen.The behind digits are the “Step” numbers, from 1 till 9. Push the ▲ button to increase the number, push ▼ button to decrease the number, and the screen will display the countdown, target temperature and target speed under the corresponding program step.

4.3 “Time” button functions and using



The "Time" button is the button for setting the countdown time for the running of dry bath.

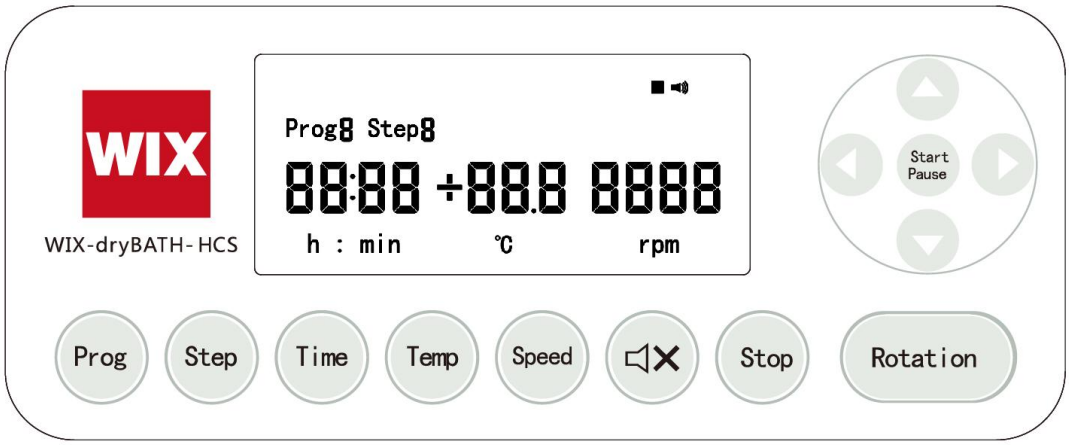
Push the "Time" button when the dry bath is stopped, and the lowest digit of the time on the screen is flashing. Push the ▸ or ◂ to select digit of hour or minute, the selected digit will be flashed, then push ▲ or ▼ to increase or decrease the countdown time.

When the setting time is 99:59, push ▲ that the countdown time of dry bath will be unlimited, shown as _ _:_ _.

When the setting time is 00:01, push ▼ to make the current program step invalid, at which step dry bath stops running, dry bath will

sound 2 beeps every 1 minute and running with the parameters of the last valid step until the dry bath stops running after the "Stop" pushing.

4.4 “Temp” button functions and using instructions

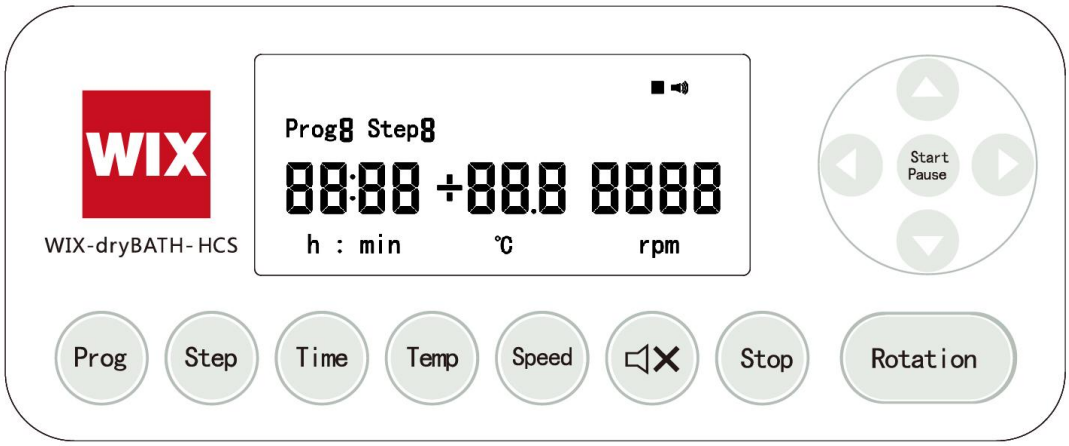


The "Temp" button is used to set the target temperature of the dry bath's running.

When the dry bath is stopped, push the "Temp", and the lowest digit of temperature on the screen is flashing. You can push the ▸ or ◂ to select digit, the selected digit will be flashed, then push ▲ or ▼ to increase or decrease the target temperature.

The target temperature ranges from 0.1℃ to 115℃.

4.5 “Speed” button functions and using instructions

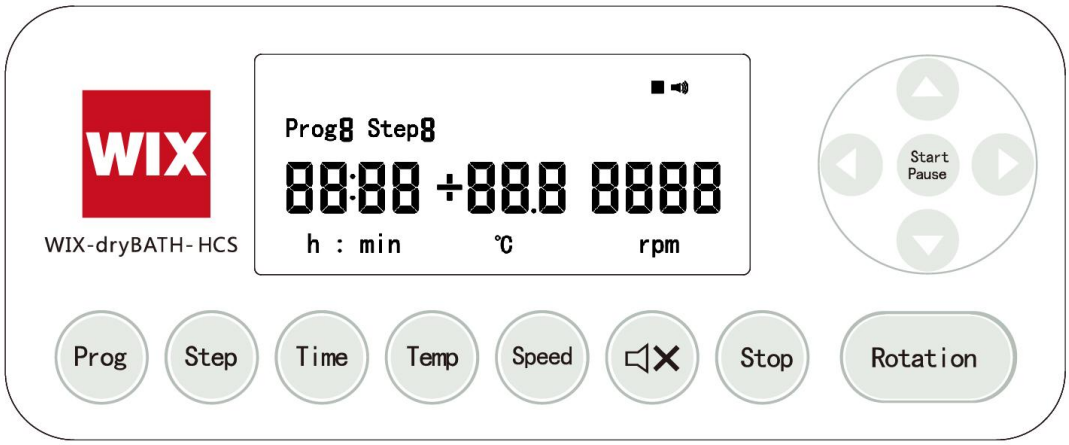


The "Speed" button is used to set the target speed of the dry bath's running.

When the dry bath is stopped, push "Speed", the lowest digit of speed on the screen is flashing. You can push the ▶ or ◀ to select digit, the selected digit will be flashed, then push ▲ or ▼ to increase or decrease the target speed.

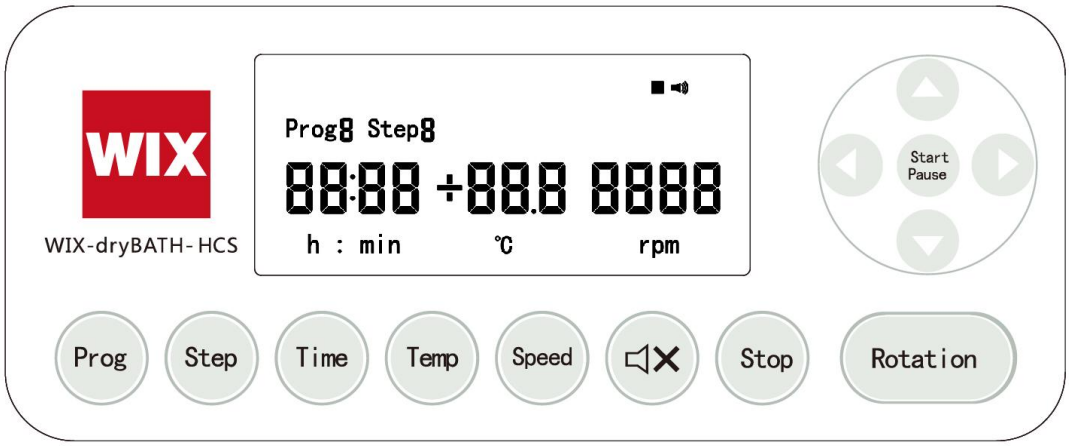
The set range of target speed is 300-2000rpm.

4.6 “Horn” button functions and using instructions



The horn button can turn on or off the prompt tone of the dry bath. When the tone is turned on, a horn icon is displayed in the upper right corner of the screen. When the tone is turned off, a mute icon is displayed in the upper right corner of the screen.

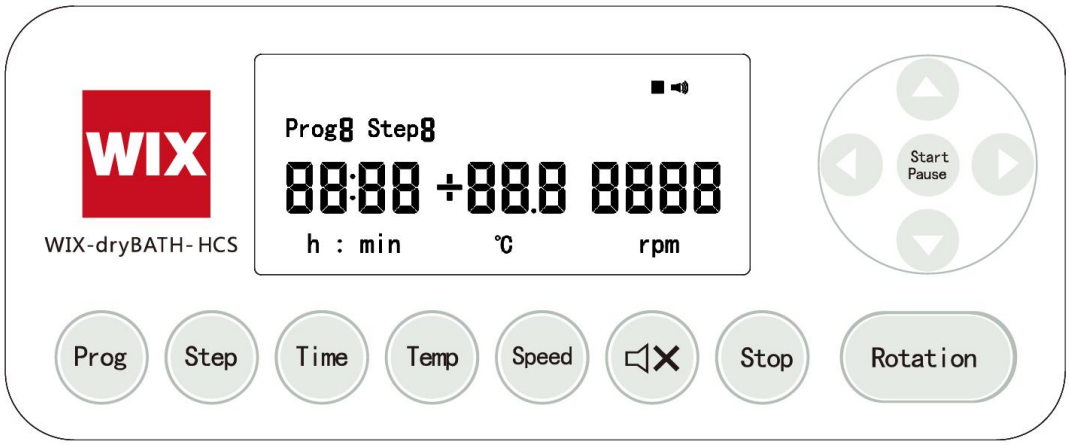
4.7 “Stop” button functions and using instructions



The “Stop button” is used to stop running of the dry bath.

When the dry bath is running, push the “Stop” button to stop running.

4.8 “Rotation” button functions and using instructions

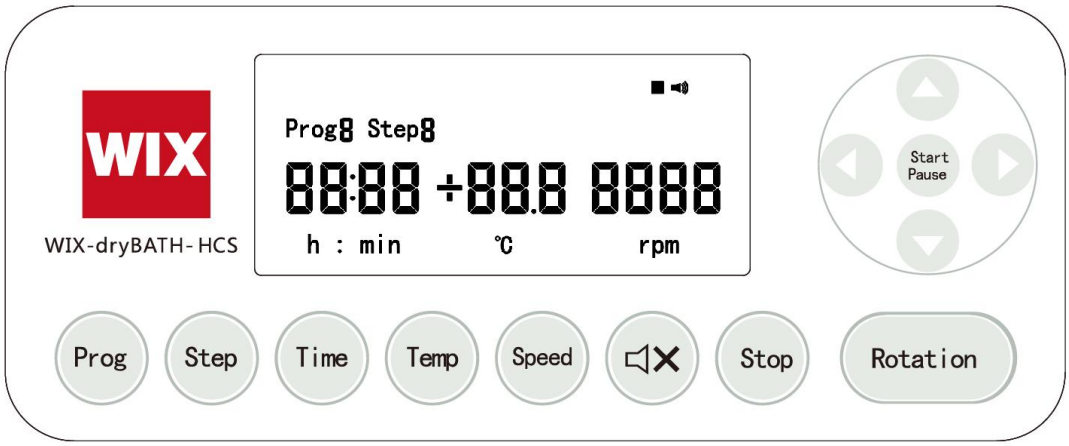


The "Rotation" button is for rotation of block.

When the dry bath is stopped, "Rotation" is for rotating the dry bath temporarily for a short time.

When the dry bath is stopped, long push "Rotation", dry bath will rotate more quicker, screen will display the speed in the mean time. Release the "Rotation" to stop the rotation of dry bath immediately.

4.9 “StartPause” button functions and using instructions



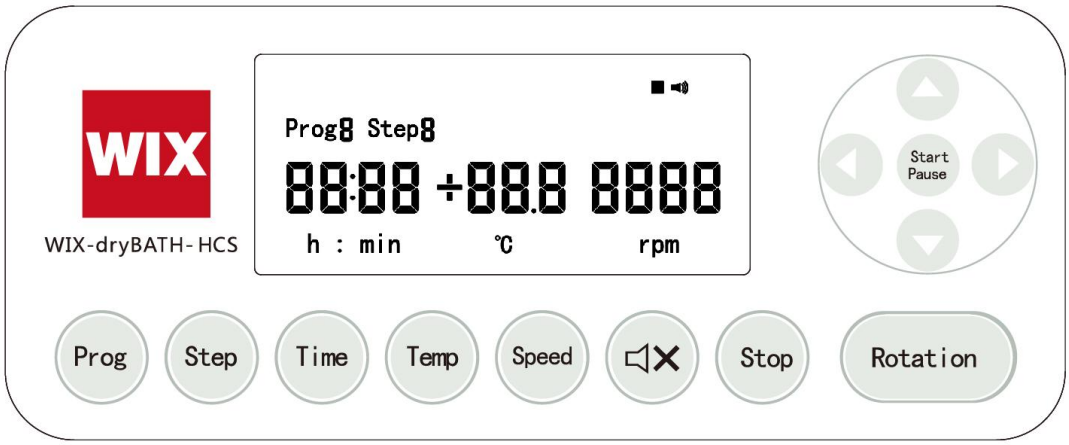
The "StartPause" button is used to start or pause the dry bath.

When the dry bath is stopped, after the parameters set, push "StartPause" to run the dry bath according to the parameters set by the user.

When the dry bath is running, push "StartPause" to pause running of the dry bath.

When running of the dry bath is pause, rotation will stop, but temperature control and countdown will continue.

4.10 ►◄▲▼ button functions and using instructions

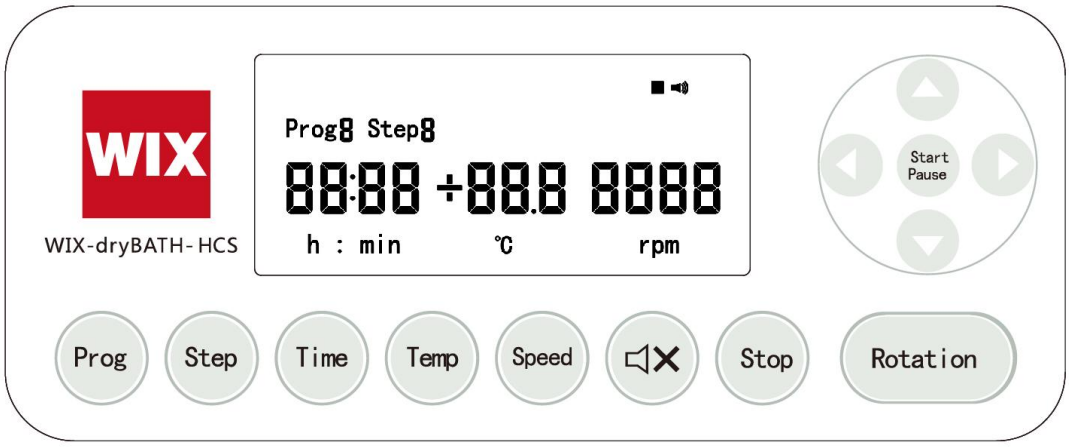


The buttons are mainly used to increase or decrease the value, together with various function keys.

4.11 Heat sink thermal protection

The dry bath detects the heat sink temperature every 1 second. If the heat sink temperature is too high, the dry bath will stop running and an indefinite number of prompt tone will be sounded.

4.12 Calibration



There are three calibration temperature, 10°C, 50°C and 90°C.

4.12.1 Calibration method

When the dry bath is stopped, push ◄ to make dry bath in the state of 10 °C calibration waiting for confirmation, and the screen displays CAL. Then, push "Start" to make dry bath enter the state of temperature calibration, and push "Stop" to quit calibration state.

Push "Start" to calibrate the first temperature, the control temperature reaches 10°C, after 30 min, dry bath dry bath will beep 5 times as well as digit of temperature flashing, prompting the user to input the

measured calibration temperature of the centrifuge tube and then push the "Start" button to complete the first calibration temperature.

The dry bath will automatically calibrate the second temperature 50℃, the control temperature reaches 50℃, after 30 min, dry bath dry bath will beep 5 times as well as digit of temperature flashing, prompting the user to input the measured calibration temperature of the centrifuge tube and then push the "Start" button to complete the second calibration temperature.

The dry bath will automatically calibrate the three temperature 90℃, the control temperature reaches 90℃, after 30 min, dry bath dry bath will beep 5 times as well as digit of temperature flashing, prompting the user to input the measured calibration temperature of the centrifuge tube and then push the "Start" button to complete the third calibration temperature.

At last, the screen displays OC, the calibration is successful completed, if the screen displays ERR, the calibration is failure, re-calibration is required, and finally push the “Stop” button to exit the calibration process.

4.12.2 Method of restoring factory temperature coefficient

When the dry bath is stopped, screen shows dEF, entering the default state of calibration coefficient for confirmation, push "Start" to load the dry bath with the default calibration coefficient, then if the screen displays OC, restoring the factory temperature coefficient is successful, if displays ERR, restoring the factory temperature coefficient is failure, needs to restore factory temperature coefficient.

5. Quality guarantee

(1) The warranty is 1 year since the date of sales.

(2) The warranty excludes the following situations otherwise it is charged.

a. No presentation of warranty card and invoice.

b. The invoice is revised.

c. Improper operation or accident factors.

d. The damage is caused by the user’s repair.

e. Out of the warranty, the instrument is still in usage after repair.

Makes research and development simple

WIX TECHNOLOGY BEIJING CO., LTD
Tel: +86 010-89797600
E-mail: sales@wixscientific.com
Website: http://www.wixscientific.com/
Add: No. 8 Building DLTC Sci-Tech Park,
No.738 Changliu Road Machikou Town,
Changping District Beijing P.R.C.
Postcode: 102202