

# Thermostatic Water Baths

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**Cat. No. BT2302 1 x 2L Water Bath**

**Cat. No. BT2303 2 x 2L Water Bath**

**Cat. No. BT2304 3 x 2L Water Baths**

**Cat. No. BT2305 1 x 5L Water Baths**

Thanks for choosing one of BT Lab Systems' Thermostatic Water baths. This operation manual describes the function and operation of the instrument. In order to use the instrument properly, please read this manual carefully.

### **IMPORTANT SAFETY INFORMATION**

The operation, maintenance and repair of the instrument should comply with the basic guidelines and warning below. Ignoring these instructions will affect the life of the Instrument and safety precautions.

- This product is an indoor Instrument which conforms to Standard B style- I type- GB9706.1.
- These units are designed for laboratory use by persons knowledgeable in safe laboratory practices.
- The operator should never open or repair the instrument. Opening or repairing the instrument will void the guarantee and can cause accidents.
- The power plug should safeguard against an electric shock. Make sure the power supply voltage matches the voltage that the instrument needs.
- The instrument should be used in an area with low temperature, little dust, no water, no direct sunshine or hard light and with good air circulation. Do not use where there is corrosive gas or a strong magnetic field. Keep far away from central heating and other hot sources.
- The temperature of the Instrument can be very high during the normal operation. There is a possibility of burns. Wear protective clothing and gloves.
- The water baths must only be used when the water level is between  $\frac{1}{2}$  and  $\frac{3}{4}$  full.
- Power off when not in use. If the instrument will not be used for a long period, unplug, and cover with a piece of cloth to protect it from dust.
- In case of the following, unplug the instrument at once and contact BT Lab Systems.
  - The instrument comes into contact with liquid
  - The instrument gets soaked or burned
  - The instrument emits an abnormal sound or smell
  - The instrument is dropped or the outer shell damaged
  - The instrument functions abnormally.

### **MAINTENANCE**

The instrument and the accessories should be cleaned with a cloth dampened by alcohol. If there are smudges on the instrument, clean it with a dry cloth.

## INTRODUCTION

BT Lab Systems Thermostatic Water Baths are temperature-controlled thermostatic baths for heating reagents in a laboratory environment.

## KEY FEATURES

- Small size to conserve bench space
- Punch formed stainless steel inner liner for anti-corrosion and no leakage
- Microprocessor controlled for high precision temperature control
- Built in water level sensor
- Digital display

## NORMAL OPERATING CONDITIONS

- Ambient Temperature: 5-35°C
- Relative Humidity: ≤70%
- Power: AC220V/AC110V,50/60Hz

## TECHNICAL SPECIFICATIONS

Type	BT2302	BT2303	BT2304	BT2305
Temp. range	Ambient+5°C to 100°C			
Temp. accuracy	0.3°C			
Temp. fluctuation	0.5°C			
Temp. Uniformity @37°C	0.5°C			
Number of baths & volume	1 x 2L	2 x 2L	3 x 2L	1 x 5L
Internal bath dimensions (mm)	135 x 150 x 143			325 x 150 x 176
Outer Dimension (mm)	198 x 290 x 255	363 x 290 x 255	510 x 290 x 255	360 x 284 x 265
Net Weight (kg)	2.3	5.1	6.7	5.1



BT2302



BT2303



BT2304



BT2305



Insulation cover

Operation panel

Switch



Power Connector

Water valve

## KEYBOARD AND DISPLAY PANEL



Select the section in which the program needs to run. You can choose to set the temperature and time.



Temperature and time setting keys, press these keys to set the temperature and time by increasing (+) or decreasing (-)



Start and stop the program

## OPERATION

### *Time and temperature settings*

1. Add clean water to each of the baths. The water level must exceed the heating tube.  
**NOTE:** Do not press the temperature control switch before adding water. To avoid burning the heater tube, the heating tube will not work if the water level is too low.
2. Press the power switch on the bottom of the corresponding bath. The display shows numbers "888.8" one after the other, accompanied by the "buzz" sound, the instrument enters the initialization interface.

### Set the temperature:

1. Press the "SET" button to select setting the temperature. Press the "+" or "-" key to increase or decrease the value of the set temperature, and increase or decrease in small numbers, ones digits, ten digits and hundreds digits in sequence.

### Setting time:

1. Press the "SET" key to select time setting. Use the + and – key to adjust the time setting.  
**NOTE:** *When the time is set to 00:00 the water bath will be on continuously.*
2. After the temperature and time are set, press the start/stop key to start and the temperature starts to rise as the instrument starts heating. At this time, the temperature display window shows the current temperature value. During the temperature increase process, the heating indicator light changes from gray to bright and starts blinking. When the temperature in the water tank reaches the set temperature, the indicator light remains light on unchanged and the control enters a constant temperature state.
3. Stop the heating process by pressing the start/stop key
4. When the instrument reaches the set time period, the alarm “di di di” three times, the time display window shows “OVER”.

### WARRANTY

The instrument is warranted against defects in materials and workmanship for 1 year. If any defects occur in the instrument or accessories during this warranty period, BT Lab Systems will repair or replace the defective parts at its discretion without charge.

For any inquiry or request for repair service, contact your local BT Lab Systems office. Inform BT Lab Systems of the model and serial number of your instrument.

### TECHNICAL SUPPORT

BT Lab Systems offers technical support for all of its products. If you have any questions about the product's use or, operation, please contact BT Lab Systems at the following:

E-Mail: [info@BTLabSystems.com](mailto:info@BTLabSystems.com)