



4E's USA

A FOUR E'S SCIENTIFIC
COMPANY

Tissue Flotation Bath

TFB200101



Thank you for your purchase.

Please read the entire instruction manual carefully before use.

Support Information

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Support



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Please read the operating instructions in full before starting up and follow the safety instructions.
The appearance and specifications of the equipment are subject to change without notice.

1. Important Information

Before using the product, please read this instruction manual carefully and keep it for future reference. Please contact customer service with any questions at www.4Es-USA.com or email SUPPORT@4Es-USA.com.

Symbols and Icons

For safe operation, study the following symbols and icons. Misunderstanding of the symbols may result in injury or damage to the device.



[Mandatory]



[Prohibited]



[Notice]

May cause injury or property damage.



[Caution: Hot surface]

Surface can become hot during use.



[Mandatory]

- Connect the device to the power supply using the supplied electrical cord. Make sure that the operating voltage of the device is the same as the power supply voltage.
- Only use a grounded power socket. Make sure that the plug is firmly connected to the power socket.
- If the power cord is damaged, please contact Four E's USA for a replacement.
- Place the device on a stable, level surface. Avoid exposing the unit to high-temperatures and high humidity.



[Prohibited]

- Do not plug or unplug the power cord or press any button on the control panel when hands are wet.
- Do not use the device in an environment with electromagnetic interference.
- Do not modify, disassemble, or repair this equipment without permission from the manufacturer.
- Do not wipe the instrument with solvents such as acetone and xylene. Only use a mild soap for cleaning.

2. Product Introduction

Precision temperature-controlled water bath eliminates wrinkles and distortion during preparation of paraffin embedded tissue sections. This device is optimal for tissue placement with a bright white LED to illuminate the basin, slide drying area, and intuitive LCD touch screen operation.

Product features:

- High-definition touch screen and user-friendly interface for intuitive operation.
- Microprocessor controlled device with precise temperature performance that can keep the temperature accuracy within 1°C.
- Advanced safety over-temperature protection that shuts off the device when the temperature is over 70°C.
- A nonvolatile memory retains the last temperature set point after power off/on.

- Timer and alarm reminder.
- Programable auto on/off function eliminates waited warm-up time.
- Flotation dish with lid.
- Fan-less design to reduce ambient noise.
- Embedded thermocouple to eliminate bulky temperature sensing devices.

3. Product Overview

Packing List:

- ① 1 Tissue flotation bath (main unit)
- ② 1 Glass dish with lid
- ③ 1 Power cord and 2 fuses
- ④ 1 Instruction for use

4. Working Environment

- (1) Power supply: AC120V \pm 10%, 60Hz \pm 1Hz;
- (2) Suitable ambient temperature: 5°C~30°C;
- (3) Relative humidity: \leq 80%.

5. Technical Parameters

Parameter	Specification
Temperature set-range	0°C~99°C (1°C increment)
Voltage	AC120V \pm 10%, 60Hz \pm 1Hz
Power	200W
Dimensions(LxWxH)	327 x 340 x 166mm 210 x 168 x 55mm(glass dish)

6. Instructions

6.1 Unpacking Inspection

Step 1: Check the contents of the package according to the "packing list".

Step 2: Take out the main unit and place it on a stable, level surface.

Step 3: Check whether the actual working environment is consistent with the "working environment" required in the manual.

Step 4: Plug in and turn on the device and check whether the LCD display and operation panel are working properly.

Step 5: Turn on the heating and observe whether the flotation bath is heating.

Step 6: Turn on the basin light to see if it is working properly.

Step 7: Refer to the daily operation section and complete tissue slide smothering routine to confirm whether the device is working properly.

6.2 Daily use operation

Step 1: Fill 2/3 of the glass dish with water.

Step 2: Turn on the device, the LCD screen is on, and the device enters the standby state.

Step 3: Set the temperature and timer and then touch the "Heater" button to start heating.

Step 4: When the temperature reaches the set temperature, the water bath is ready for use.

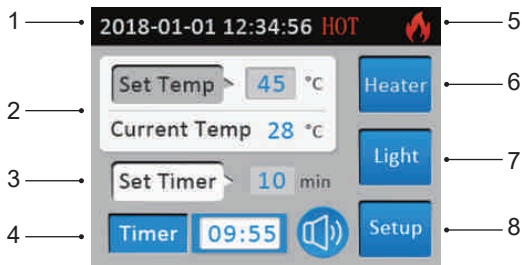
Step 5: Touch the "Heater" button again to turn off the heating

after use.

Step 6: Clean the surface of the unit when operation finishes.

7. Control Panel & Setup

7.1. Control Panel



1. **Date/Time** - Touch Date/Time area to set the date and time. Enter date in the format of “YYYY-MM-DD” and enter time in the format of “HH-MM-SS”.
2. **Set Temperature** – Touch Set Temp and key in the desired temperature, then hit enter
 - a. Current water temperature displayed.
3. **Set Timer** – Touch Set Timer and key in the desired time, then hit enter.
4. **Start Timer** - Touch Timer button to start timer. Alarm will sound when time is up. Touch the speaker icon to turn off the timer alarm.
5. **Flame icon** - Indicates that the device is heating.
6. **Heater button** - Touch to start or stop the heater
7. **Light button** - Touch to turn on/off the basin light.
8. **Setup** - Touch to set auto-off, screen brightness, basin light brightness or restore defaults.

NOTE: The “HOT” icon flashes when the surface temperature is above 50°C. Do not touch the surface when the “HOT” icon is flashing.

7.2 Setup

Auto-On/Off

- (1) Touch “Setup” on the main interface to enter the “Setup” interfaces.
- (2) On “Setup” interface 1, user can set the auto-on/off time from Monday to Thursday, and Touch Next Page for “Setup” interface 2, user can set from Friday to Sunday. The time format is a 24 hour clock in HH:MM. 99:99 means no auto-on/off set
- (3) ON - Touch first block, set HH, then touch enter. Touch second block to set MM, then touch enter. Repeat for OFF and Each Day.

The screenshot shows a grey background with four blue horizontal bars, one for each day from Monday to Thursday. Each bar contains the day name in red, followed by 'ON' and two white input boxes for HH and MM, a comma, 'OFF', and two more white input boxes for HH and MM. At the bottom right, there are two blue buttons labeled 'Next Page' and 'Exit'.

“Setup” Interface1



“Setup” Interface 2

Screen brightness

- (1) Touch “Setup” on the main interface to enter the “Setup” interfaces.
- (2) Touch “Next page” to go to the “Setup” Interface 2, touch “Screen” to set the screen brightness percentage.

Basin Illumination Brightness

- (1) Touch “Setup” on the main interface to enter the “Setup” interfaces.
- (2) Touch “Next page” to go to the “Setup” Interface 2, touch “Light” to set the basin brightness percentage.

Restore factory defaults

- (1) Touch “Setup” on the main interface to enter the “Setup” interfaces.
- (2) Touch “Next page” to enter “Setup” interface 2, and touch “Restore defaults” and confirm setting on the pop-up confirm window.



“Confirm to restore factory defaults” Interface

8. Cleaning & Maintenance

- Please note that only water and detergent or soap can be used to clean the machine.
- Do not wipe the instrument with solvents such as acetone and xylene.
- Do not clean the inside of the device with cleaning products.
- Wipe the surface of the machine with a clean dry cloth after cleaning.

9. Warranty

Please contact the manufacturer or distributor for service or for more information about the device. The device has a one-year warranty from the date of sale, provided that the user complies with this manual and operating procedures.

Warranty Information

Please use the QR Code to enter the Warranty Registration form on the Four E's USA Website or visit <https://www.4es-usa.com/pages/product-registration>

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