Before using this product, please read this manual carefully to learn about the available features to obtain the best results of this equipment.

**Warning:** To prevent fire or shock hazard, do not expose this unit to rain or moisture. Unless labeled otherwise, this equipment should be used with AC 110V, 60Hz in the USA or Canada.

220V, 50Hz available as Model No. **XH-1003-220**

**Caution:** No user-serviceable parts inside. Refer servicing to qualified service personnel.
1.1 Table of Contents

Section

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2.1 Safety

Before using the Lighted Tissue Floating Bath, please read this instruction manual carefully. Incorrect or inappropriate use may result in equipment damage or personal injury!

This Lighted Tissue Floating Bath is designed for floating paraffin sections along with assisting in placing the paraffin section on a slide and helping the section dry. The sole purpose of this Tissue Floating Bath is for histology use along with research, instruction, and experiments in the universities and technical secondary schools. The Tissue Floating Bath is not recommended for any other uses than the ones described in this manual.

When the Lighted Tissue Floating Bath is running (unit is heating), Please keep an area of about 12 inches around the Tissue Floating Bath clear while operating it.

To avoid injury to personnel; do not use the following materials in the Tissue Floating Bath:

- Flammable and explosive materials
- Strong chemical materials
- Toxic or radioactive materials
### 3.1 Contents

<table>
<thead>
<tr>
<th>Number</th>
<th>Name</th>
<th>Qty</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Lighted Tissue Floating Bath</td>
<td>1set</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Glass Dish</td>
<td>1pc</td>
<td>Replacement Part # XH-1003D2</td>
</tr>
<tr>
<td>3</td>
<td>AC Power Cord</td>
<td>1pc</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Fuse</td>
<td>1pc</td>
<td>10 AMP</td>
</tr>
<tr>
<td>5</td>
<td>Operating manual</td>
<td>1pc</td>
<td></td>
</tr>
</tbody>
</table>

Upon receipt, please examine the package, if there's anything wrong, please kindly contact your dealer promptly.

### 3.2 Specifications

<table>
<thead>
<tr>
<th>Function/ Parameter</th>
<th>Technical Data</th>
</tr>
</thead>
</table>
| Environment of use        | • Clean, dry and flat surface  
                            | • Stable work surface  
                            | • Altitude: ≤2000m  
                            | • Relative humidity:≤80%                                                       |
| Temperature Range         | • Room temperature to 75°C±2°C                                                  |
| Applicable Voltage        | • AC110V 60HZ                                                                   |
| Precision                 | • ±1°C                                                                         |
| Power                     | • 450 Watt                                                                     |
| Default Setting           | • 65°C                                                                         |
| Dimensions (machine)      | • 14 x 16 x 3 in. (35 x 40 x 8 cm.)                                            |
| Net Weight                | • 17 lbs.                                                                      |
| Dimensions (package)      | • 18 x 17 x 10 in. (45 x 44 x 25 cm.)                                          |
| Gross Weight              | • 23 lbs.                                                                      |
4.1 Notes of operation

● Never leave unit unattended

● Do not turn on heater without water in glass tray. (This can damage the probe and equipment)

● Initial heating can fluctuate

● User may add as much water as needed to their comfort level (avoid overfilling or risk of overflow).

● Frequently stirring water can help keep temperatures consistent throughout water bath.

● Use only with accessories provided or parts designed specifically for use with this model.

● **HAZARD** - Having water near or in contact with power supply may cause electrical shock
5.1 Control Panel

TEMP : Actual Temperature  
SET TEMP : Desired Temperature/Time display in minutes  
LED: light-emitting diode On/Off  
RUN: Unit is operating  
HEAT: Unit is heating  
ALARM : Malfunction/overheat  
SET: Set Time/temperature  
▲▼ : increase/decrease speed /time  
ON/OFF: Power on/off

5.2 Setup

1. Open box and remove Lighted Tissue Floating Bath from packaging.  
2. Place Tissue Floating Bath onto flat surface. (Look for visible damage to unit & glass tray. Contact dealer if any damage is detected)  
3. Flip metal thermostat sensor up, (out of the way) and insert glass tray into the middle of machine.  
4. Place thermostat sensor back down into glass tray. (If not done bath will not heat)  
5. Plug AC Power cord from back of unit into power supply.
6.1 Operations

Temperature adjustment
1. Prior to use fill with water at least halfway full – use care to avoid overflowing (Note: type of water – tap, distilled, purified, etc. is optional based on user requirements)
2. Flip on power switch in back of unit, click “ON/OFF” button and Temperature/Set temperature indicator light (see section 4.2) will illuminate indicating the unit is heating/powered up. Push the “SET” button once (unit will read “Sp”). Use the “▲” or “▼” to adjust temperature to desired setting.

Time adjustment
1. Once unit is set to desired temperature, push the “SET” button again (unit will read “St”). Use the “▲” or “▼” to adjust time to desired setting. Push the “SET” button again and allow ample time for the Lighted Tissue Floating Bath to warm up. (run light will be solid and heat light will begin to flash every several seconds) Temperature range is from room temperature to 70°C. Use a laboratory thermometer (not included) to determine actual water temperature based on dial setting and increase or decrease as desired.
2. Once the Tissue Floating Bath reaches your predetermined set temperature the heat indicator light will turn off indicating that the heater is off and unit is holding temperature.

Making Sure Your Floating Section Is Flat
1. Swipe a slide underneath the floating paraffin section to pick up the section on the slide. After drying the bottom of the slide place your slide on the outer edge of the Tissue Floating Bath. This will help the paraffin section to dry, flatten out and stick firmly to slide. A slide warmer might be needed for large quantities of slides or extended drying time.
2. Between floating paraffin sections you can use a lint-free disposable towel to wipe across the water to remove any leftover floating paraffin.
3. Add additional water as needed by pouring slowly into basin; allow several minutes for temperature to adjust and/or increase temperature control setting as needed.
7.1 Trouble Shooting

The recalibrating method of XH-1003 heating problems

- **The problem refers to:**
  1. Taking too long to heat up
  2. Not heating up to set temperature

- **Solution:**
  Modify the internal temperature controller and raise the power of heater

- **See following steps:**
  1. Hold “SET” for five seconds to enter into parameter setting status:

    ![Image 1](image1.png)
    Press this button for 5 sec.

  2. Press “SET” again until the screen \( \mathcal{E} \) shows, then press “▲”button to set the value at 18. This value unlocks the password. The modification can be processed then:

    ![Image 2](image2.png)

    Parameter item input - 18, (to unlock the password)
3. Press “SET”, until the screen shows “I”, then write down this value shown in “set” without adjusting:

![Image of temperature display](image1.png)

(the value shown is just an example)

4. Re-press the “SET” button until the screen shows, then adjust using “△ or ▼” arrows. Set the value to one half of previous value “I”:

![Image of temperature display](image2.png)

Adjust this parameter (should be the half value of previous step I’s value)

5. Continue pressing “SET” until the screen shows “Rr”, then adjust using “△ or ▼” to set the parameter value at “100”:

![Image of temperature display](image3.png)

Set this value at “100”

6. Parameter value set is done; hold “SET” for five seconds to exit the parameter setting status. Then proceed to heating work.
Upon receipt of your new tissue bath
we recommend you record the following information for future reference:

Date purchased/received:____________________________________

Dealer: ___________________________________________________

Dealer’s phone number: _____________________________________

Serial number (if applicable): ________________________________

Warranty

The manufacturer warrants this instrument to be free from defects in material and workmanship under normal use for 1 year from the date of purchase. It does not cover damage resulting from abuse or misuse, repairs or alterations performed by unauthorized repair technicians, or damage occurring in transit. If you have questions concerning this product or warranty, contact the dealer from whom it was purchased. For warranty service, product should be well packed to avoid damage in transit, preferably in original box and packing. Include your complete return address and telephone number as well as a description of the difficulty, date and place of purchase, and ship to the address below. If under warranty it will be repaired or replaced at no charge and returned. If misuse, alterations, accident or abnormal conditions of operation caused failure, an estimate for repairs will be provided for your approval prior to work being performed.