

User Manual

Tanner 450 Water Bath



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2. Features

1. Stable digital screen, indicator light to show working state, easy to operate.
2. The controller/microprocessor from American Corporation makes bath easy to control and meets different customer's needs.
3. Four bright LED lights located at glass bowl are a new feature which provides perfect specimen visibility.
4. Unit offers new heating components with prompt heating efficiency and longer lifetime, superior thermal conduction performance, homogeneous heating, energy savings, reliable quality and also features a PID controller heating method
5. An integrated heating block from American DALLAS Corporation ensures immediate, uniform and controlled heating.
6. Real time display of all settings including temperatures and working state
7. Memory function and recovery function.

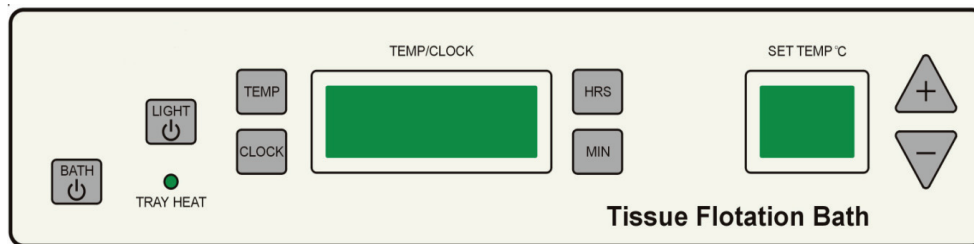
3. Specifications

1. Temperature setting range: 0 - 85°C
2. Temperature tolerance: + 1°C
3. Working voltage: AC110V 60HZ
4. Power: 400 VA
5. Fuse: F6A L 250AC
6. Dimensions for glass bowl: 350mm × 220mm × 45mm
7. Overall dimensions: 410mm × 510mm × 150mm
8. Weight: 9.5 kg

4. Structure Drawing



5. Keypad Functions




- | | | | |
|---------------------------|--|----------------------------|-------------------------------|
| 1. ON/OFF | 2. Light | 3. Heating indicator | 4. Current time key |
| 5. Regulator for minute | 6. Temperature decrease | 7. Temperature increase | 8. Setting temperature screen |
| 9. Regulator key for hour | 10. Actual temperature/ Current time screen | 11. Actual temperature key | |

6. Box Opening and Installation

- Please check to see if outer package is damaged seriously. If it is damaged seriously, do not open and immediately contact transportation/freight company.
- Unpack the wooden carton and remove all components and the Instruction manual.
- Carefully move the instrument including the enclosure. If the instrument needs to be transported again, we suggest using the original packaging materials.
- Remove the unit and place it on a stable platform within the lab.
- **⚠ DO NOT PUT THE INSTRUMENT NEAR ANY EXPLOSIVE OR FLAMMABLE MATERIALS.**
- The instrument should be installed in a place that has a grounding socket, so that the power supply line can safely be connected to the socket.

7. Starting up Machine

- The instrument should only use the power supply line supplied with the instrument to connect with the socket, and the line must be connected with a grounding type socket.
 - Before you connect the main electrical source, please check whether the power switch is in the “0” position “0” means off.
-  When you connect the power, please insert one end into the instrument’s power plug first, then insert another end into the power plug in the Lab.
- Turn on the main switch of the instrument. The indicator light of switch will turn on and digital screen will show figures

8. Operation

- Pour appropriate water into the glass bath and put the Magnetic on/off switch into the glass bath. Connect the waterbath to power, and then turn on the machine. If the indicator for power switch is on, that means the machine has power.
 - Left digital screen shows current actual temperature and right digital screen shows setting temperature when unit turns on.
1. **BATH:** Press this key and the TRAY HEAT indicator comes on. The unit should then begin to heat. Press button again to turn the TRAY HEAT indicator off. The unit will then stop heating.

When the Magnetic on/off switch is removed from the water, TRAY HEAT indicator should go off, and the unit should stop heating. TRAY HEAT indicator will be off if the actual temperature reaches the setting temperature.
 2. **LIGHT:** Press this key, four LED lights will come on.
 3. **TRAY HEAT:** If the machine is heating, this light remains on. Otherwise, it is off.
 4. **CLOCK:** Press this key to check current time. Then press HRS to set hours from 0 to 24, press MIN to set minutes from 0 to 59.
 5. **MIN:** Press this key to set minutes from 0 to 59.
 6. **Minus Key: (-)** Press this key to decrease the setting temperature.
 7. **Plus Key: (+)** Press this key to increase the setting temperature.
 8. **SET TEMP:** Displays the setting temperature.
 9. **HRS:** Press this key to set hour from 0 to 24.
 10. **TEMP/CLOCK:** Show actual temperature and current time.
 11. **TEMP:** Press this key to check the actual temperature.

9. General Guidelines

- After receiving the unit, please open the package to examine the outer appearance, check the components, and read the instructions carefully before starting and operating the machine.
- In order to ensure the security of people and the equipment, a three-line power source is needed, make sure that the grounding works well. Non-grounding power is prohibited with this machine.
- The equipment must be away from the flammable chemicals and high heat areas.
- Do not allow any hard materials to touch the LCD screen as it can crack and not function.
- When the instrument is heating, do not touch any heated area with your hand.
- Please turn off the main switch and pull out the power socket first before changing any fuse. The model and the specifications of the changed fuse must remain the same.
- Xylene and acetone and other organic solvents should not be used to clean the surface of the equipment.
- When cleaning the equipment, turn off the main power first and remove the power socket.
- The equipment requires daily cleaning.
- If equipment is to remain unused for a long time, pull out the power socket and install the dust proof cover during such periods of disuse.

10. Troubleshooting

- In the conditions that the customer should comply with the rules of this user guide, we will provide a one-year warranty time period. One year later, we will supply continuing Maintenance Service for a fee.

10.1 Troubleshooting

| Troubleshooting | Possible Causes | Solution |
|---|--|--|
| No response when trying to turn on | Power line is not connected | Connect power line, turn on again |
| No response when trying to turn on | Switch isn't turned on | Press the switch and ensure that indicator light is on |
| No response when trying to turn on | Fuse is not connected well or may be burnt | Check if fuse is good or not, and replace if necessary |
| TRAY HEAT indicator is off when works | Magnetic on/off switch may be dislocated | Adjust the position of Magnetic on/off switch |
| TRAY HEAT indicator is on but does not heat | Heater is damaged | Contact Technical Support |
| TRAY HEAT indicator is on but does not heat | Temperature sensor is not detecting | Contact Technical Support |
| TRAY HEAT indicator is on but does not heat | Temperature sensor may be damaged | Contact Technical Support |

10.2 Cleaning

Before you clean the equipment, please turn off the power switch and pull out the power socket first

- Only the home use cleaning substances may be used for cleaning the instrument. Tanner wax repellent is recommended
- Acetone and benzene will damage the paint on the surface of the instrument
- Leakage of any cleaning liquid is not allowed into the instrument
- Use damp fabric to clean the equipment (not a very wet fabric)
- Equipment should be cleaned daily

11. Transportation and Storage

- **Storage:** This instrument should be stored in clean and ventilated room in which humidity is less than 80%.
- **Transportation:** Handle with care, avoid getting wet, and keep in upright position.