



TEC 2500 (Version : AMOSTEC2500OP20231109)

Water bath-Slide drier

Operation Manual

Foreword

Thank you for purchasing our TEC 2500 Water Bath-Slide Drier. This operation manual introduces product functions, application methods and matters that need attention for safety. Please read in detail before operation to understand its performance and make full use of its functions. If you have any inquiries, please contact us, we are committed to delivering exceptional service whenever you need it.

After reading, please keep this manual properly for later reference.

Contents

1. SAFETY INSTRUCTION.....	1
1.1 Safety Matters.....	1
1.2 Conditions of installation.....	1
1.3 Delivery Inspection.....	1
2. PERFORMANCE FEATURES & RANGE OF APPLICATION.....	1
3. MAIN STRUCTURE.....	2
4. TECHNICAL PARAMETERS	3
5. OPERATION GUIDE.....	3
5.1 Keypad Description & Function.....	3
5.2 Instructions.....	4
6. CLEANING &	
MAINTENANCE.....	5
7. TROUBLE SHOOTING.....	6
8. COMPONENT LAYOUT IN PCB CIRCUIT BOARD.....	7
9. Schematic Diagram of Electric Equipment.....	7
10. Wiring Diagram	8



Safety Instruction

1.1 Safety Matters

- Please read these brief guidelines. Failure to adhere to these instructions may disrupt the equipment's regular operation, lead to equipment damage, or pose safety risks.



Please use 220VAC \pm 10% at 50HZ or 110v \pm 10%, 60Hz AC.



Input power supply must be of good earth connection.



Keep away from any flammable or explosive materials.



Unauthorized equipment access risks high-voltage shock.



Only professional maintenance personnel may perform equipment repairs.



Use fuses with correct capacity.



Ensure the power socket and circuit can withstand at least twice the rated current.



Keep away from potential sources of interference.



Caution: Hot.

- **Electrical Protection Ratings: I class, B type**
- **Shell protection grade: IP53**
- **Baleful liquid Leak-in proof degree: Normal (enclosed equipment without liquid leak-in proof)**
- **Working system: Continuous running**

1.2 Conditions of installation

- Provide at least 20cm of space around the equipment for proper heat dissipation.
- No water drop, steam, dust (including oily and airborne).
- No erosive, flammable and explosive gas and liquid.
- Stable and free from vibration.
- No interference from other electromagnetic signals.
- Operate within ambient temperature of 5°C-40°C and relative humidity under 90%.

1.3 Delivery Inspection

The product undergoes rigorous quality inspection before leaving the factory. However, negligence or severe impact during delivery may result in damage or partial loss, please check the followings:

1. Upon unpacking, please inspect the contents, including the equipment, operation manual, packing list, and spare parts.
2. Check the nameplate to verify that it corresponds to your order.
3. Ensure that there is no damage or loss during the delivery process.

2. Performance Features & Range of Application

The TEC 2500 Pathologic Microtome Section Rinsing & Drying Apparatus is characterized by its integral design, attractive appearance, compact structure, digital temperature control, and stable performance. The program control system enhances operational ease and reliability. This apparatus is versatile and can be widely utilized in hospitals, scientific research institutions, and universities.

3. Main structure

Oven



Bath tank

Warmer

Display panel



4. Technical Parameters

- Temperature range

Bath tank: room temperature ~ 90°C, the most favorable temperature is in 45°C

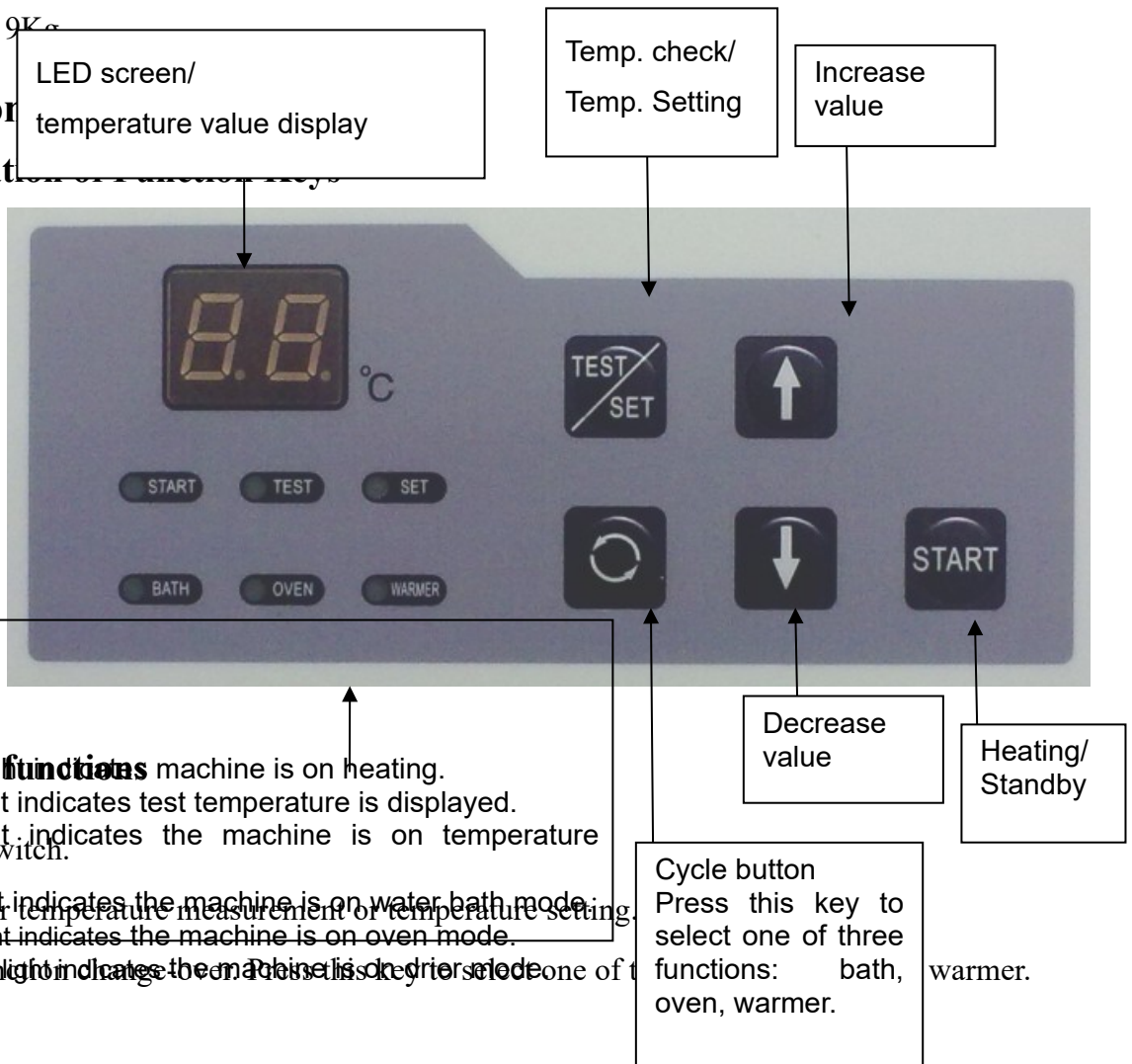
Oven: room temperature ~ 90°C, the most favorable temperature is in 70°C

Warmer: room temperature ~ 90°C, the most favorable temperature is in 70°C

- input voltage: 220v±10% at 50Hz or 110v±10% at 60Hz
- Fuse: 220V/5A or 110V/8A
- rated power: 600W
- outside dimensions(mm): 550×340×140
- weight: 9kg

5. Operation

5.1 Explanation



Key and functions

- **START**: this light indicates the machine is on heating.
- **TEST**: this light indicates test temperature is displayed.
- **SET**: this light indicates the machine is on temperature setting mode.
- **START**: heating switch.
- **BATH**: this light indicates the machine is on water bath mode.
- **Test/Set**: Key for temperature measurement or temperature setting.
- **OVEN**: this light indicates the machine is on oven mode.
- **WARMER**: this light indicates the machine is on warmer mode.
- **START**: this light indicates the machine is on dryer mode.

Cycle button
Press this key to select one of three functions: bath, oven, warmer.



Press this key to increase the temperature.



Press this key to decrease the temperature.

• Indicator lamp and function

°C This LED screen indicates the temperature.

Start: When this lamp is illuminated, it indicates the equipment is in heating state.

Test: When this lamp is illuminated, the value shown on °C is the measured temperature.

set: When this lamp is illuminated, the value shown on °C is the set temperature.

At the moment, it is also possible to set the temperature again.

Bath: When this lamp is illuminated, it indicates the equipment is operating the Bath function.




Oven: When this lamp is illuminated, it indicates the equipment is operating the Oven function.




Warmer: When this lamp is illuminated, it indicates the equipment is operating the Warmer function.

5.2 Instructions

1. Remove the bath tank and fill it with the appropriate amount of water (ensuring the water level is between one third and two thirds of the tank depth). Afterward, reinsert the tank. Avoid tampering with the digital sensor under the tank to prevent interference with temperature control.

2. Connect the equipment to power supply and turn on the switch at the rear of the equipment.

3. Press the key  till the indicator lamp **Bath** lights. Then press **Test/set** until the **set** lamp lights. Now press to set the required temperature in the bath tank using  and .

4. Press the key  till the **Oven** lamp lights. Then press **Test/set** until the **set** lamp lights. Now press to set the required temperature in the oven using  and .



5. Repeat the above process to set the temperature for the warmer.

6. After setting the temperature in the bath tank, oven and warmer, press **Start** till the **start** lamp lights. At the moment, heating begins. When the set temperature is reached, press **Start** again to stop heating and the set temperature is kept constant.

Note: Normally, heating should commence half an hour prior to operation.

◆ How to check the temperature to see if it reaches the set value

After the equipment has been heated for a period, press **Test/set** key to verify the temperature in the bath tank, oven, or warmer using the following steps:

To verify if the temperature in the bath tank has reached the set value, press the key  till the lamp **Bath** lights. Then, press the key **Test/set** till the indicator **Test** lights. The value shown by  °C is the current temperature in the bath tank. The current temperature in the oven and warmer can also be checked in the same way.

After using the equipment, press the **start** key till the indicator lamp goes out, then turn off the power switch at the rear of the equipment.

6 . Cleaning & Maintenance

- Before operation, carefully read the product operation manual and follow its instructions.
- Keep equipment clean. Clean the residuals and dirt after completing tasks.
- Do not use sharp or hard objects that may damage the worktable.
- Installation of fuse as Fig. 4.

Insert fuse (1) into installation part (2) and then place the entire installation part (2) into the socket (3).

- Ensure power is unplugged before replacing the fuse. Fuse specifications: 5A (110V), 8A (220V).

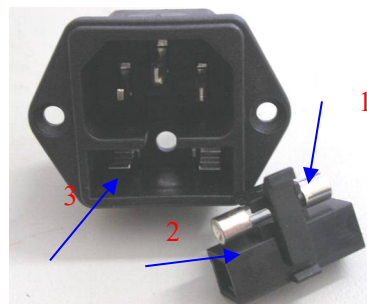


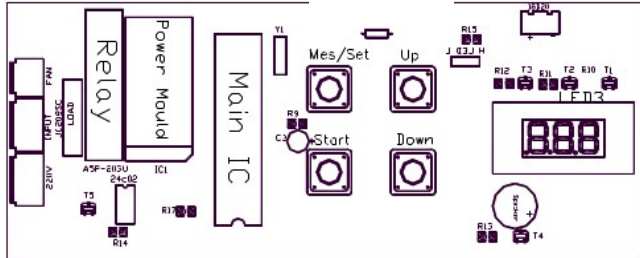
Fig. 4.

7. Trouble Shooting

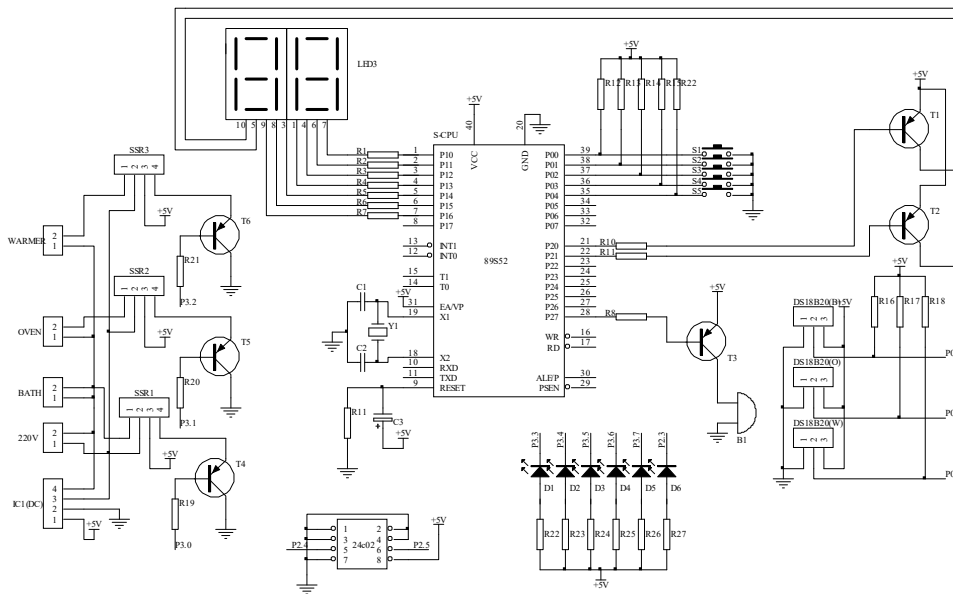
Symptom		Cause	Judgment	Solution	
Display on the operation panel does not work		Poor connection of power supply	Connection again	Correct it	
		Power switch at the rear wasn't turned on	Turn on	Turn on	
		Fuse blow	Take out the fuse to check its internal resistance using a multimeter, if the value is infinite, the fuse is broken	Replace the fuse	
Temperature in the bath tank is not accurate		Uncleaned substance at the bottom	Clean the bottom part	Clean the bottom and put tank back to its position	
Buzzer sounds	LCD Shows E1	Sensor in bath tank is damaged	Connect a new sensor to terminal to start machine, if everything functions correctly, the previous sensor is faulty	Replace a new sensor	
	LCD Shows E2	Sensor in oven is damaged			
	LCD Shows E3	Sensor in warmer is damaged			
	LCD Shows E4	Bath tank is overheated (relay in bath tank is damaged)	Check the relay		Replace a new relay
	LCD Shows E5	Oven is overheated (relay in drying oven is damaged)			
	LCD Shows E6	Warmer is overheated (relay in baking trough is damaged)			
No heating		Heating film damaged	Check the heating film, it may break due to overheating	Replace a new heating film	

If other troubles arise or if the above-mentioned problems cannot be resolved, please contact us.

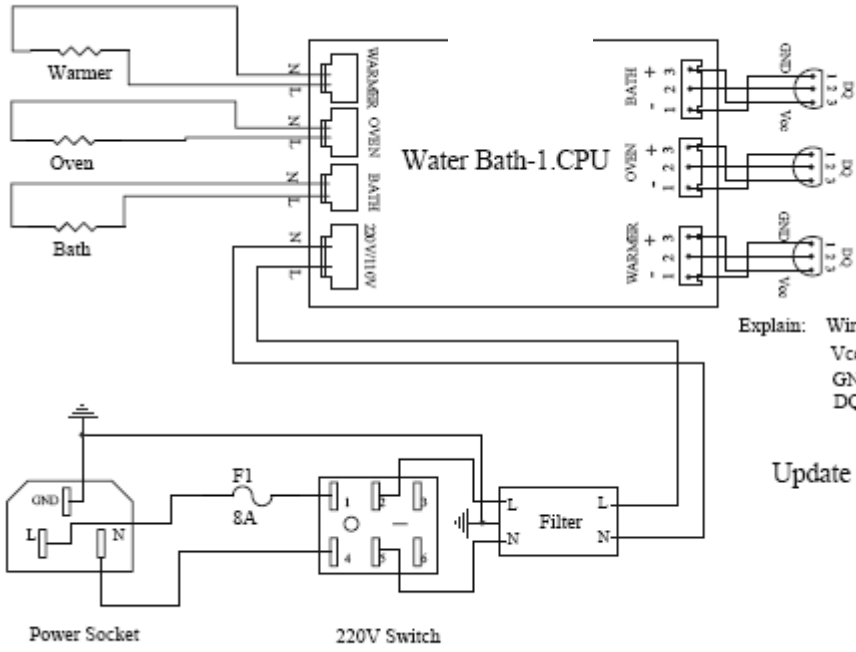
8. Component Layout in Pcb Circuit Board



9. Schematic Diagram of Electric Equipment



10. Wiring Diagram



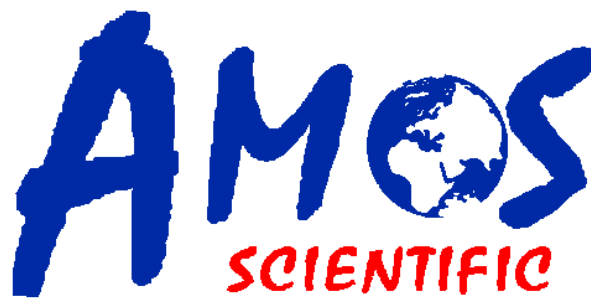
Explain: Wiring color of Sensor
 Vcc---brown
 GND---blue
 DQ---black

Update 2008.7.24

Standard Accessories List

No	Accessory Name	Qty	Notes
1	Water bath-slide drier	1 unit	
2	Power Cord	1pc	
3	Fuse	2pcs	
4	Operation Manual	1pc	

Published by:



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