



**APT 290** (Version: AMOSAPT290OP20130402)

# **Paraffin Trimmer**

## **Operation Manual**

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# **Foreword**

**Thank you for purchasing our Paraffin Trimmer. Presented in this 《Operation Manual》 are the functions and operation method of the Trimmer and the matters needing attention concerning safety. Please carefully read this manual before use so that you can understand its performance better and make full use of the functions. If you have any questions, contact us and we will provide satisfactory service for you at any time.**


**Please keep this Operation Manual appropriately for later consultation.**

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## 1. Safety Matters

- Please read these explicit rules. Act in violation of them can affect normal operation of the equipment, cause damage to the equipment or result in danger.

 Use 220VAC  $\pm$  10% at 50HZ



The input power supply must have good earthing



The equipment should be installed far away from flammable and explosive objects



Don't open the equipment without authorization to prevent high voltage shock



Only professional maintenance worker are allowed to repair this product



Use fuses with correct capacity



Ensure that the power socket and circuit are able to bear at least two times of its rated current.



Equipment should be installed far away from any interference source

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**

### ● Installation environment

- (1) More than 20cm of space around the equipment for heat dissipation.
- (2) Free of water-drop ,steam, dust(including oily dust and flying dust)
- (3) Free of corrosive, flammable and explosive gas and liquid
- (4) Firm and without vibration
- (5) Free of electromagnetic interference
- (6) Ambient temperature and relative humidity at -10°C—+50°C and less than 90%,respectively

### ● Delivery inspection

Although the product has already been inspected on quality before leaving the factory, the following inspection is necessary at delivery because it may be damaged and accessories get missing caused by careless handling during transportation.

- (1) Open the packing boxes and check the contents to make sure that there is the product, operation manual, certificate, packing list and accessories.
- (2) Check the nameplate to make sure that the product is the one you ordered.

Make sure that the product and accessories do not get damaged or missing during transportation.

## 2. Application

The Trimmer is made of sheet aluminum and has the advantages of artistic appearance, contactless temperature control, stable performance, program control system and easy and reliable operation. It is mainly used to remove excess paraffin from the outside of tissue cassette after embedding so that it can slice up favoringly .

## 3. Technical Parameters

Dimension of table top: 150×220mm

Working temperature: from ambient to 90℃

Temperature control accuracy: ±1℃

Nominal supply voltage: 220V±10% at 50Hz

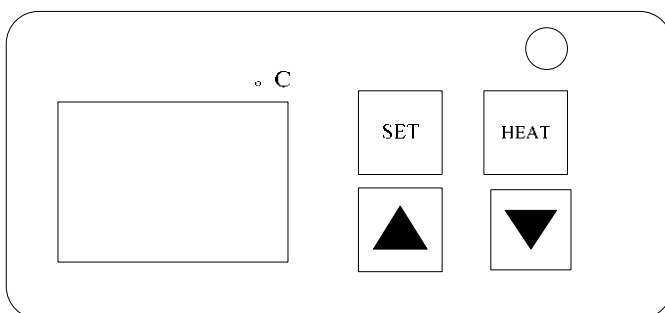
Power : 240W (power of heater: 190W)

Dimensions(W×D×H): 220×160×175mm

Weight: 2.5kg

## 4. Operation Guide

### ●Explanation of keys



**SET**---Used for setting temperature. Press this button, the indicator lamp will be light up, and the setting temperature value display on the LED. Adjust the temperature by **▲** and **▼** , and press **SET** to exit the setting status. Or the system will test and exit the setting status automatically if **SET** not pressed to exit.

**HEAT**----Press this key to select HEAT ON or HEAT OFF, the machine is on the heating mode if the red indicator lamp lights up. And machine is heating off if the lamp lights off.

The buzzer sounds is single that indicate the operation is effective.

▲ ----Press the key to increase the temperature value, short press the button as 1 degree to plus, long press the button to plus as 0.1 at beginning to 1 after a period time and then keep quickly as 1 plus.

▼ ----Press the key to decrease the temperature value ,short press the button as 1 degree to decrease, long press the button to decrease as 0.1 at beginning to 1 after a period time and then keep quickly as 1 decrease.

### ● Operation

- 1) Before operation, check whether every part of the machine is in normal condition.
- 2) Connect the machine to power on and turn on the power switch at the back cover. Right now the buzzer sounds and the LED display the ambient temperature, which means the machine is in normal working state.
- 3) Now you can operate the machine according to the explanation of keys mentioned above.

### ● Explanation of alarm signal

If the buzzer sounds continuously, that means the machine has malfunction :

E01 After power on and heating, the temperature doesn't change, the possible reason is the digital sensor measurement failure or heating film, solid state relay is damaged or disconnected.

E02 the temperature that the digital sensor measures is over 100 degree, the solid state relay or sensor meet problem.

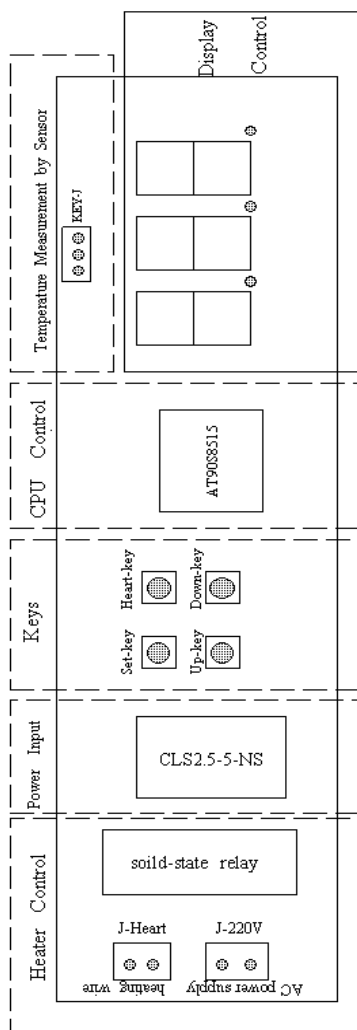
E03 the temperature that the digital sensor measures is under -10 degree, please preclude the ambient temperature reason firstly. If the ambient temperature within the requirement, the possible reason is that the digital sensor is damaged, no signal input, please replace the new sensor.

**Attention:** the power supply is AC 220V, the initialized temperature is 65°C

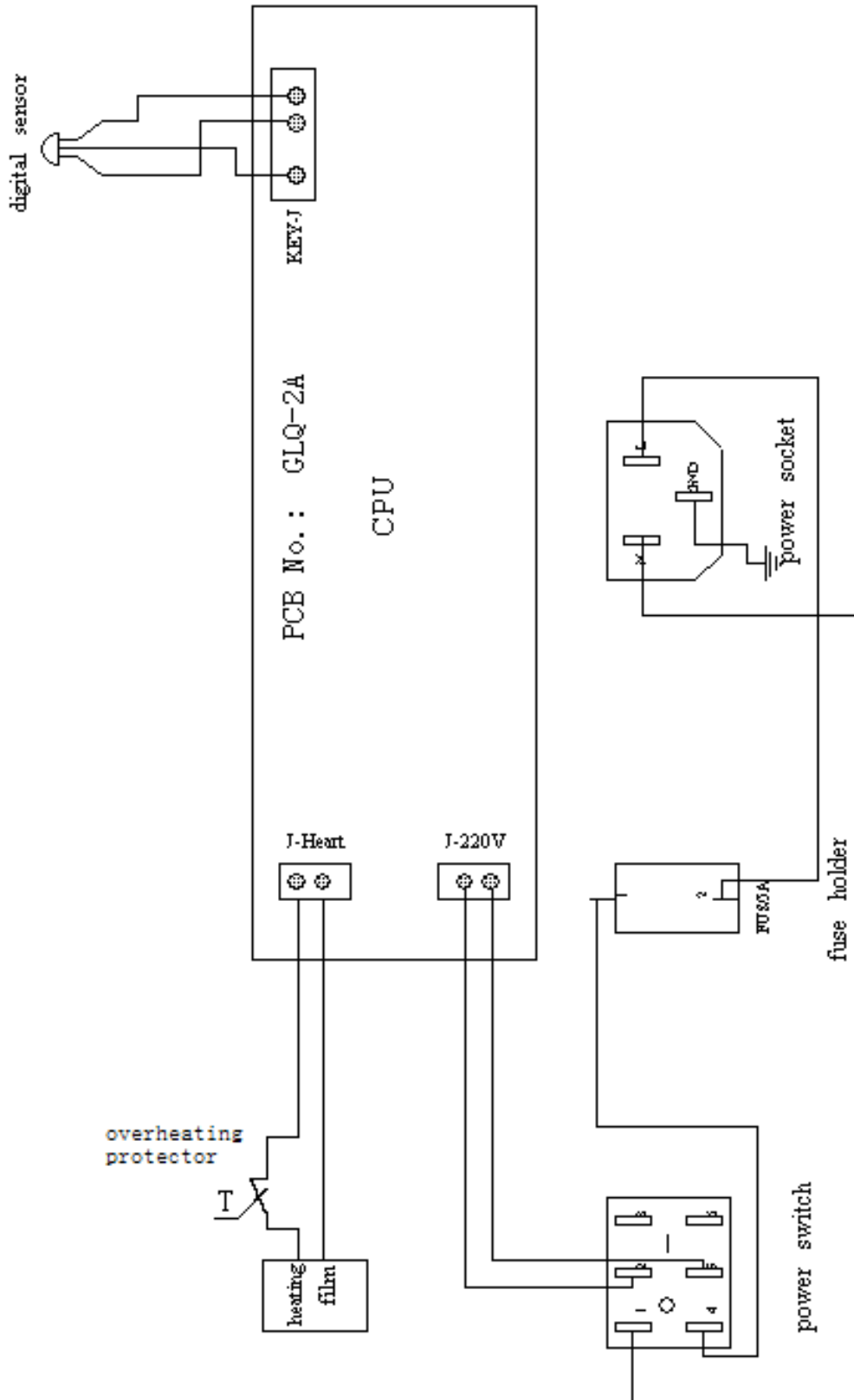
## 5. Maintenance Manual

- Prior to operation, please earnestly read this Operation Manual and carry out by this Manual.
- Keep the instrument clean. Please clean up the remaining substance and dirt after work finished.
- It is forbidden to use sharp hard object to harm the worktable.

## 6. Layout of Components



**7. Wire Diagram of Electric Equipment**





## Standard Accessories List

No	Part Name	Qty	Note
1	Paraffin trimmer	1 unit	
2	Power Cord	1PC	
3	Fuse	2 PCS	
4	Operation Manual	1PC	

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