



TEC 2800

(Version: AMOSTEC2800CCOP20150318)

Cryo Console
Operation Manual

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Foreword

Thank you for purchasing our TEC2800 Cryo console. Presented in this 《Operation Manual》 are the functions and operation method support for the Embedding Center 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±10% at 50HZ or 110VAC±10% at 60HZ



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.



The equipment should be installed far away from any interference source

- **Electrical Protection Ratings: I class, B type**
- **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 5°C—+40°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 many be damaged and accessories get missing caused by careless handling during transportation.

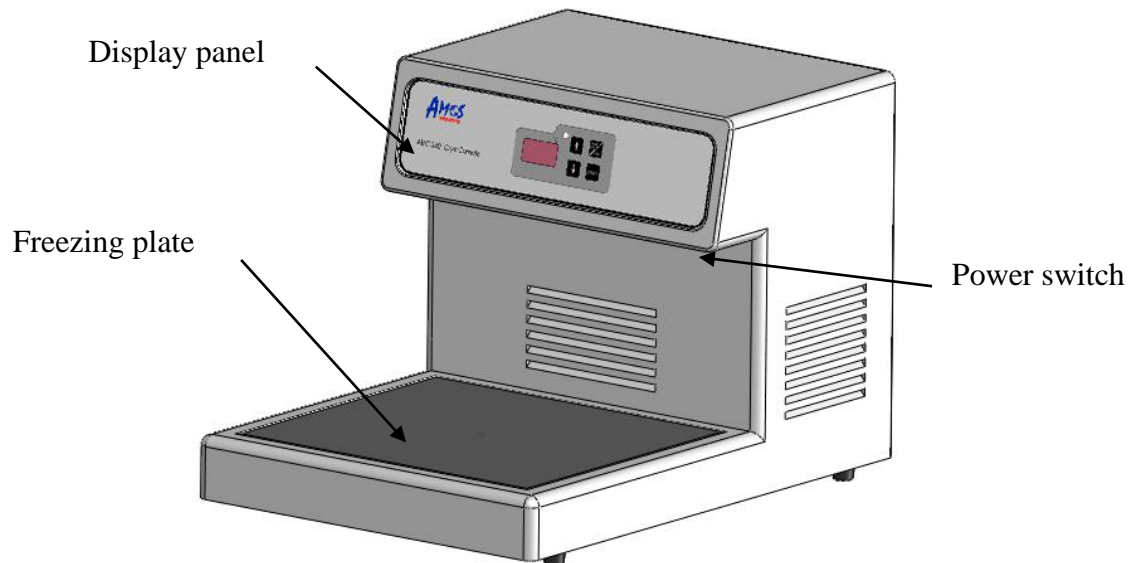
- (1) Open the packing boxes and check the contents to make sure that there is the product, operation manual, certificate, packing list and accessories.
- (2) Check the nameplate to make sure that the product is the one you ordered.

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

2.Characteristics & Application

TEC2800 cryo console is support for Embedding Center.

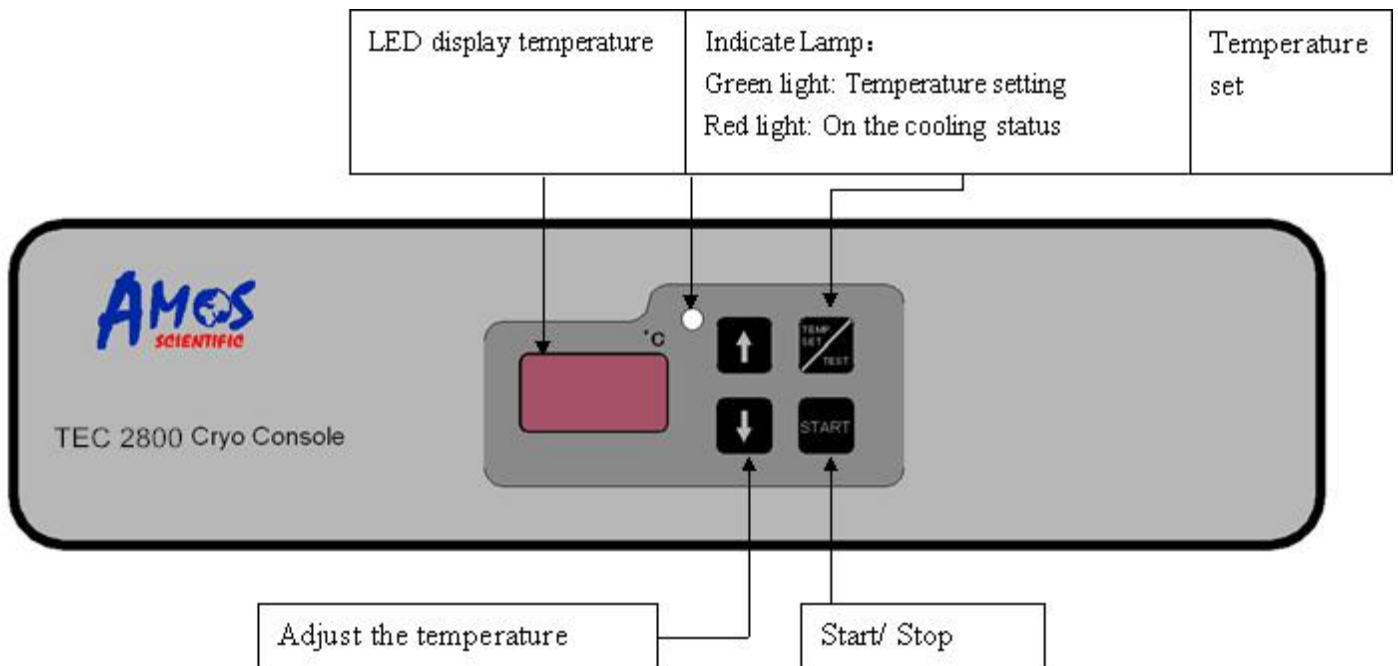
3.Main Structure



4. Technical Parameters

Working temperature: from +15°C to -15°C increments 1°C
Rated Power: 330W
Supply voltage: AC 220V±10% 50Hz or AC 110V±10% 60Hz
Fuse: 220V/8A or 110V/8A
Noise: ≤50db
Dimensions:
Width: 390mm
Depth: 560mm
Height: 390mm
Weight: about 24Kg

5. Operation Explanation



Please switch on the cryo console ten minutes before embedding.

A. Connect the Cryo Console to the power supply and switch on the power supply

B. And then press key **TEMP.SET** (the green light is on), while the screen will display the set temperature.

C. The operator can press key **▲ ▼** to adjust the temperature.

* it will show “OF”or “-OF”to alarm when the temperature exceeds the set temperature. Show “OF” to indicate set temperature on 15°C above, show”-OF” to indicate set temperature on -15°C under.)
Press **TEMP.SET** to adjust the set temperature.

D. Press key **TEMP.SET** again (the red light is on), the screen will display the actual temperature.

E. Press key **START** to refrigerate and the temperature will reach the set temperature after a while.

If you want to stop working, you can stop the machine working by pressing key **START** again to stop cooling and then turning off the power supply.

Note: the set temperature of cryo console is from +15°C to -15°C available actually.



Attention:

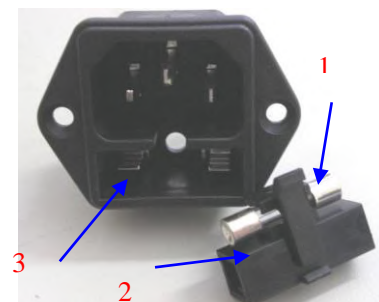
- Don't turn the machine on within five minutes after turning the table off (the effect of refrigeration is much better when turn the machine on after the temperature of the machine comes back to ambient
- Don't leave the paraffin piece on the table for long to prevent cracking
- Enough space should be provided at the rear of the table heat dissipating area for quick heat dissipation. (Enough space 20 cm at least far away from the wall.)
- Water resulted from ice dissolution should be removed timely

6、 Trouble shooting

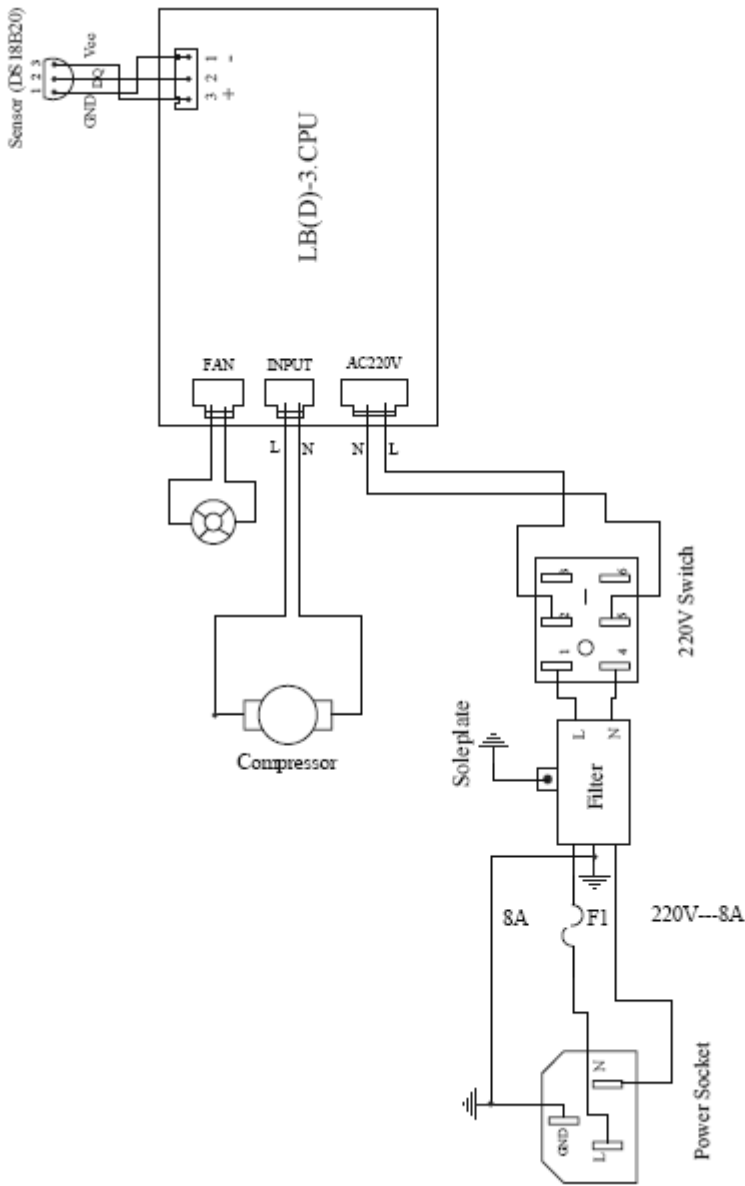
Type	Problem	Possible causes	Judge Method	Corrective action
No display	No display on the panel	Fuse broken	Take out the fuse to check its internal resistance by multimeter, if the value is infinite, the fuse is broken	Replace a new one
		Power cord plug poor	Check the connection is good or not	Plug in again
		Power switch is open circuit	Check the switch is open circuit or not	Replace a new one
		switch power supply no output	Replace the power supply	Replace the power supply
		Fan broken	Check the Fan is working or not	Replace a new one
Don't refrigerate	Don't refrigerate after the machine cooling some time	Compressor is on the protection of overheating, please turn off 5 minutes, and press to START restart.		
		Refrigeration medium empty	Service by qualified person.	Service by qualified person.
Alarm	No any display when machine start and also with Alarm.	sensor is broken	Replace the sensor to check if the work well or not	Replace the sensor
If there are any trouble can not be resolved , please contact with the manufacturer .				

7、 Cleaning & Maintenance

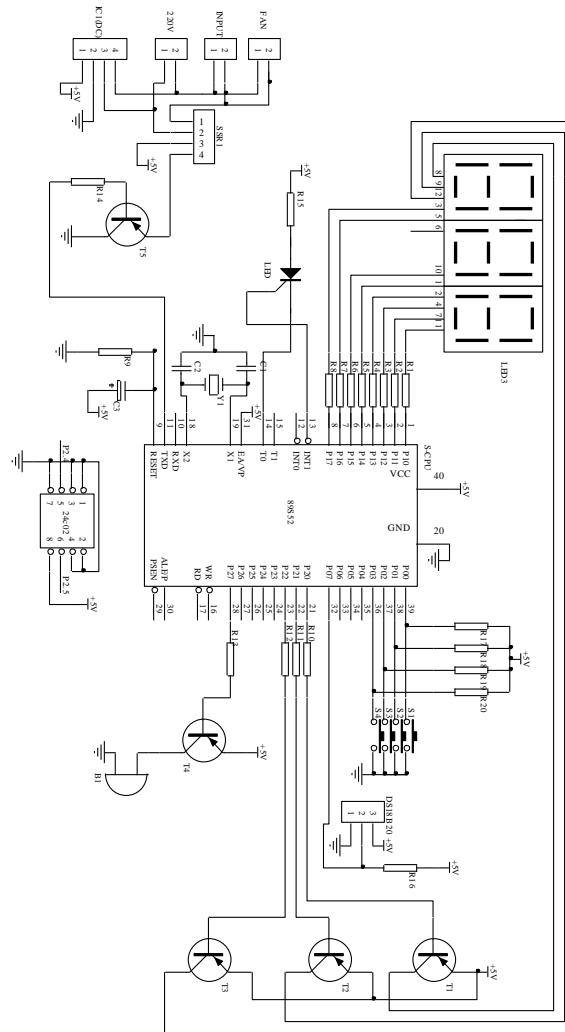
- Please read the specification carefully when running the machine , According to the requirements of the operation.
 - Keep clean of the instrument and After hours please clear surface dirt and mesa ice water.
 - Forbid to using sharp hard object to harm the worktable.
 - Insert the fuse(1) into the fuse socket (2) as it is showed in the Fig 10 and insert the whole fuse socket into the socket (3).
 - Before replacing the fuse must turn off the power switch and disconnect the power.
- Specification of fuse: 3A (220V) , 5A (110V)



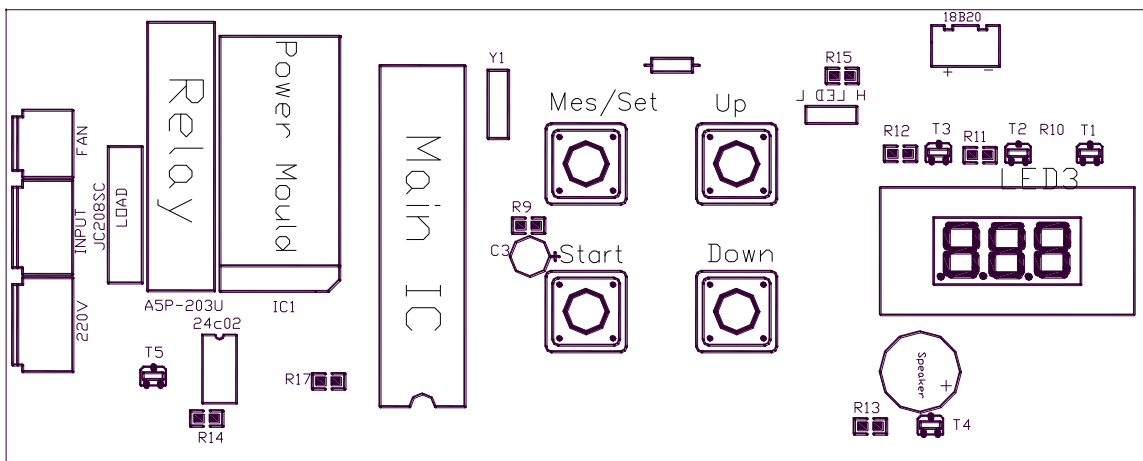
8、 Wiring Diagram of Electrical Appliance



9、 Schematic Diagram of Integrated circuit



10、 Distribution Diagram Of Component



Standard accessories list

No	Accessory Name	Qty	Notes
1	Cryo console	1 set	
2	Power Cord	1pc	
3	Fuse	2pcs	
4	Operation Manual	1pc	

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