



# TEC 2800

(Version: AMOSTEC2800CCOP20240407)

## Cryo Console Operation Manual

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# **Foreword**

**Thank you for purchasing our TEC2800 Cryo Console. This Operation Manual provides information on the functions and operation methods supporting the Embedding Center, as well as safety precautions. Please read this manual carefully before use to better understand its performance and make full use of its functions. If you have any questions, feel free to contact us for assistance at any time, we will provide you with satisfactory service at any time.**

**Please keep this Operation Manual appropriately for future reference.**

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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 pose safety hazards.



- Use 220VAC $\pm$ 10% at 50HZ or 110VAC $\pm$ 10% at 60HZ.



- The input power supply must have good earthing.



- The equipment should be installed away from flammables and explosives.



- Don't open the equipment unauthorized to avoid the risk of high voltage shock.



- Only professional maintenance personnel are allowed to repair this product.



- Use fuses with correct capacity.



- Ensure sockets and lines have double the equipment's current capacity.



- 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

- More than 20cm of space around the equipment for heat dissipation.
- Keep away from water droplets, steam, dust, oily dust, and floating dust.
- Avoid corrosive, flammable, and explosive gases or liquids.
- Install on a sturdy, vibration-free countertop.
- Avoid electromagnetic interference.
- Operating environment temperature should be between 5° C and +40° C, with relative humidity below 90% RH.

## ● Delivery Inspection

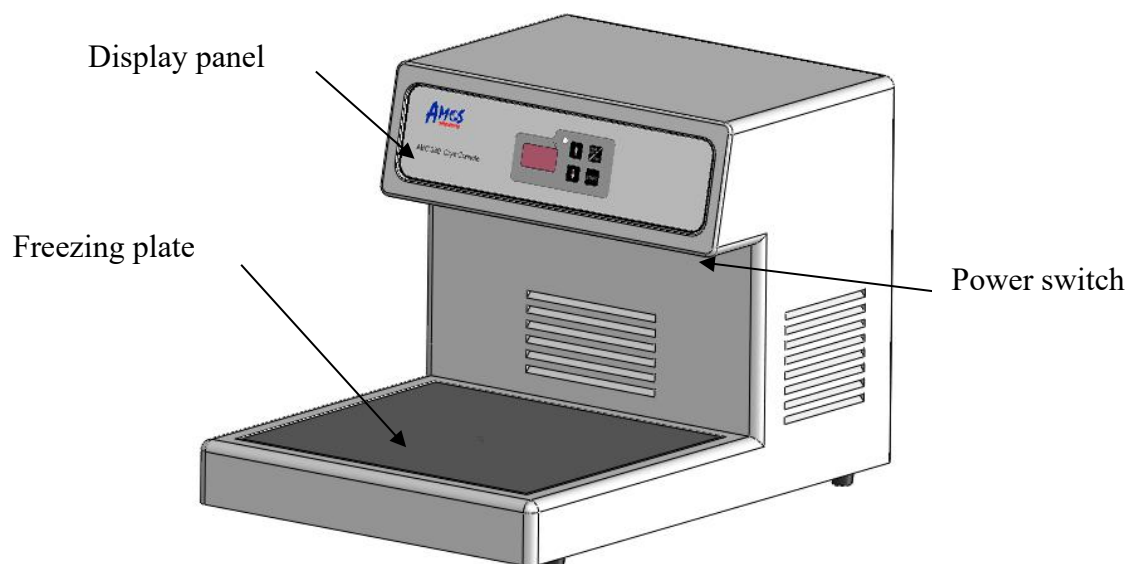
Before leaving the factory, all products undergo rigorous quality control inspections. However, during transportation, damage or partial loss of products may occur due to human handling negligence or severe impacts. Therefore:

- Please check the contents while unpacking, it should include the equipment, an operation manual, the packing list and accessories.
- Please check the nameplate to make sure it is your order.
- Check to make sure no damage or loss has occurred during delivery.

## 2. Characteristics & Application

TEC2800 cryo console is a support unit for TEC2800 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:

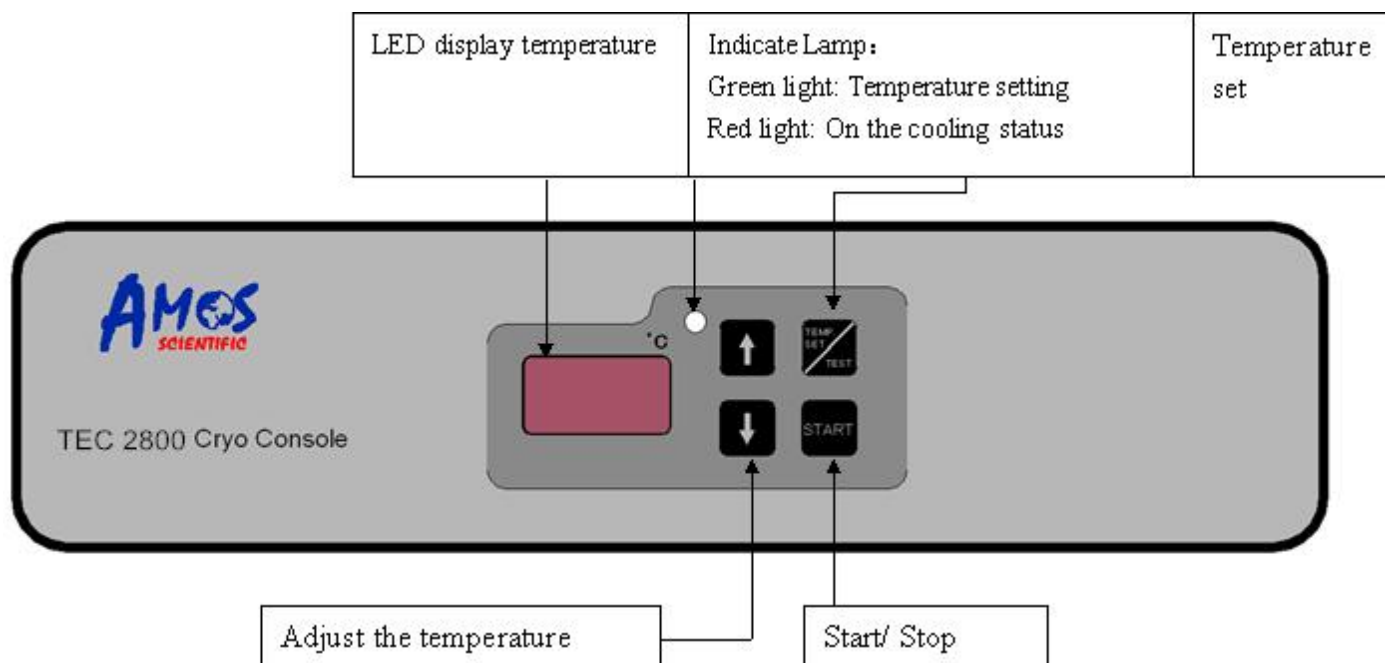
Width: 390mm

Depth: 560mm

Height: 390mm

Weight: about 24Kg

## 5. Operation



**Please switch on the cryo console ten minutes before embedding.**

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

B. Press key **TEMP.SET** (the green light will illuminate), the screen will display the set temperature.

C. Use keys **▲** and **▼** to adjust the temperature.

\* An alarm will be triggered if the temperature exceeds the set value, displaying "OF" for temperatures above 15°C and "-OF" for temperatures below -15°C. Press **TEMP.SET** to adjust the set temperature.

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

E. Press key **START** key to initiate cooling. The temperature will reach the set value after a while.

To stop operation, press **START** again to stop cooling, and then switch off the power supply.

**Note:** Note: The temperature range available for the Cryo Console is from +15°C to -15°C.


**Attention:**

- Do not turn on the machine within five minutes after shutting it down (It's best to wait for the cooling stage temperature to return close to room temperature before restarting. This ensures better cooling efficiency).
- Ensure there is sufficient space provided at the rear of the cooling stage for heat dissipation (At least maintain a distance of 20cm from the rear wall).
- Promptly wipe off any melted ice water on the cooling stage.

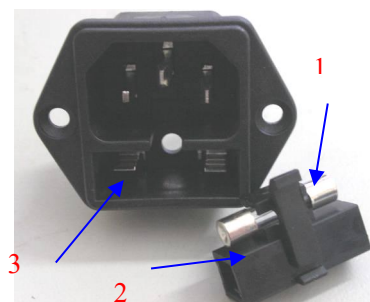
## 6. Trouble Shooting

Type	Problem	Possible causes	Evaluation methods	Corrective action
No display	LED screen not displaying temperature	Fuse blown	Remove fuse and test resistance with multimeter. Infinite resistance indicates blown fuse	Replace fuse
		Power not plugged in properly	Check if power plug is inserted into external power supply, or if plug is loose	Replug power
		Power switch circuit interrupted	Check if power switch circuit is interrupted	Replace power switch
		Switching power supply no output	Test if switching power supply has output	Replace switching power supply
Not Cooling	Doesn't cool down after starting for some time	Fan malfunction	Check if the fan is rotating	Replace the fan
		Compressor overtemperature protection Please stop the machine and press the START button after 5 minutes to restart		
		Refrigerant loss	Please contact a refrigeration professional for repair	Please contact a refrigeration professional for repair
Alarm	No display upon startup and alarm sounding	Faulty sensor	Replace the sensor with a new one and check if it operates normally. If normal, the sensor is faulty.	Replace the sensor
If there are problems that cannot be resolved, please contact the manufacturer.				

## 7. Cleaning & Maintenance

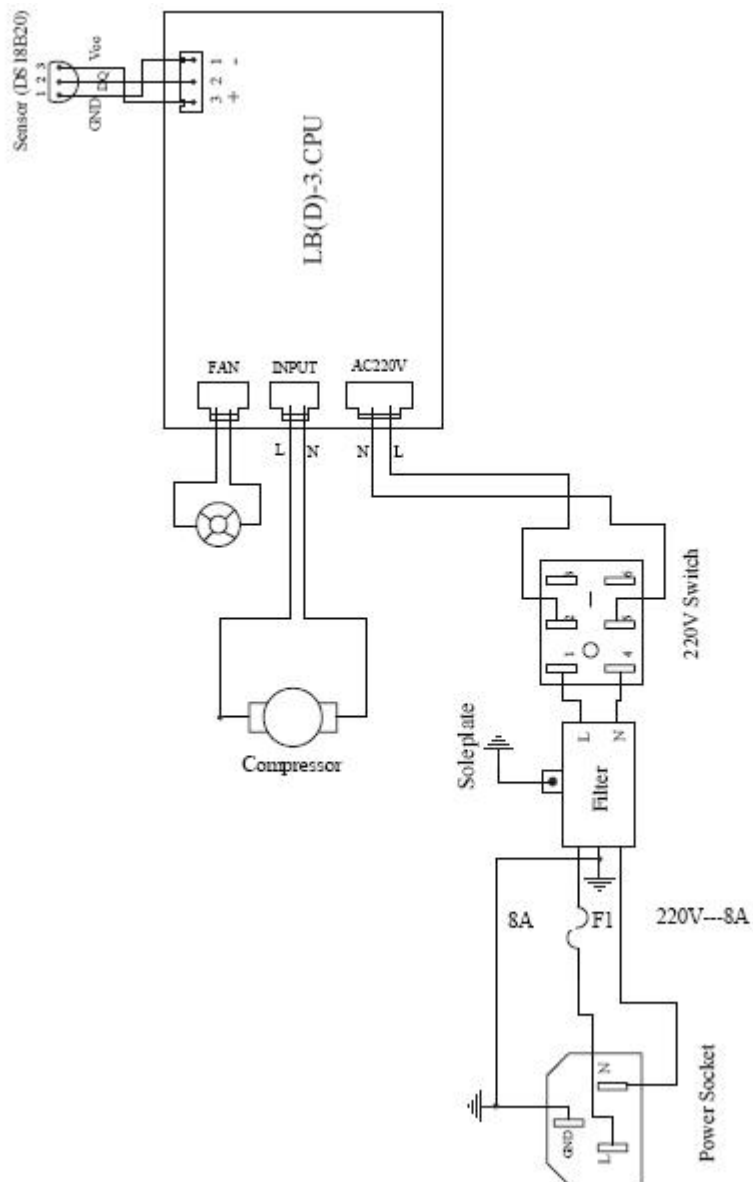
- Please carefully read the specifications when operating the machine according to the operation requirements.
- Keep the instrument clean, and after hours, please remove surface dirt and melted ice water from the freeze plate.
- Do not use sharp or hard objects that may damage the freeze plate.
- Insert the fuse (1) into the fuse socket (2) as shown in Fig. 10 and insert the entire assembly into the larger socket (3).
- Before replacing the fuse, make sure to turn off the power switch and disconnect the power supply.

Specification of fuse: 3A (220V, 5A (110V))

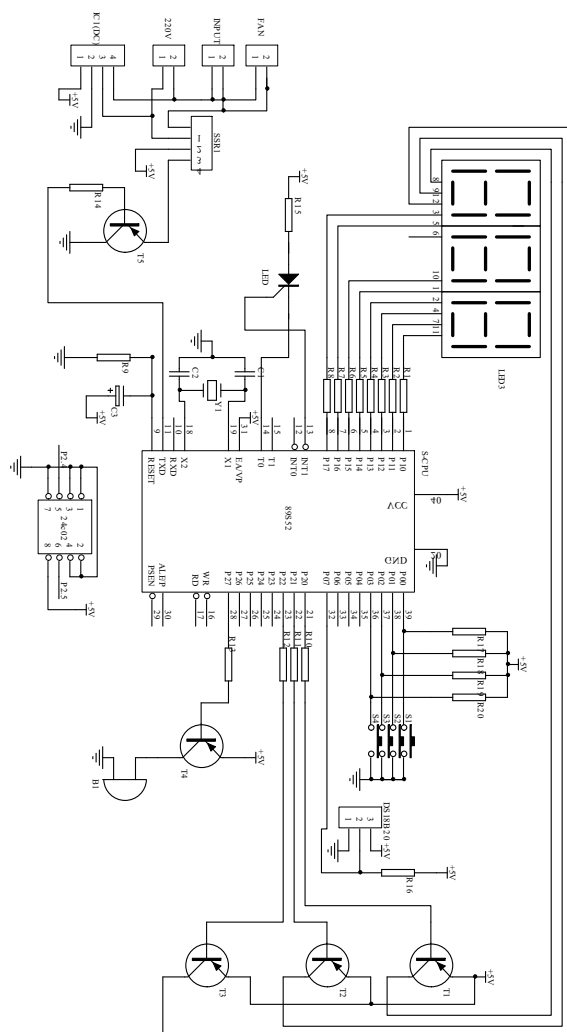




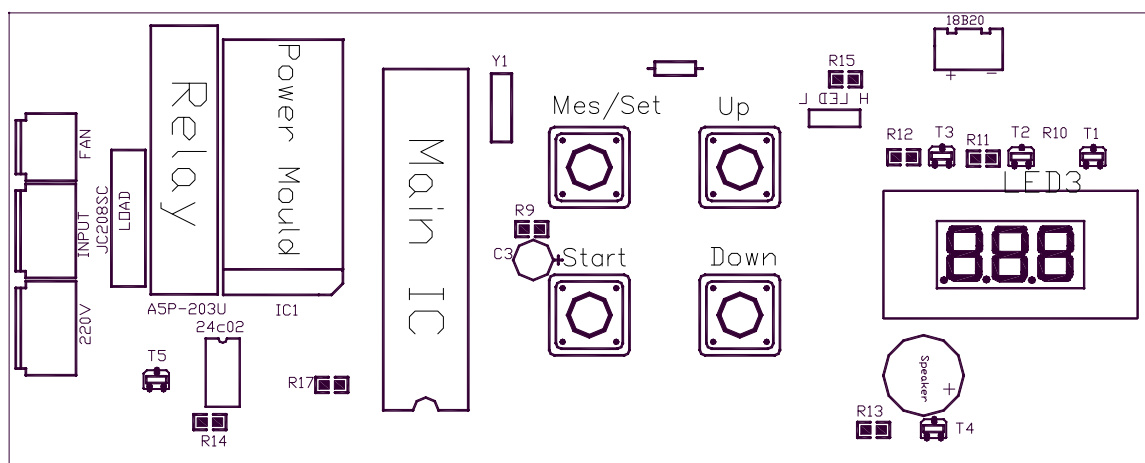
## 8. Wiring Diagram of Electrical Appliance



## 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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