# TISSUE EMBEDDING CENTER

## RD-98

**Thank you for using our products. Please read this instruction carefully before using.**

**Please collect carefully after reading it for future reference. The picture is for reference only.**

**Contents**

**1.Important Information ……..……1**

**2. Product Introduction……...……2**

**3. Product Overview ……..……2**

**4. Working environment ……3**

**5. Technical Parameters…….……....…3**

**6. Special feature ……. 3**

**7.Control panel,main page and parameter settings …… 4**

**7.1 Display the main page….……...…….……4**

**7.2Parameter setting page.……...…….……5**

**7.3Various parameter settings..……...…….……5**

**8.Instructions….....……...…..……6**

**9.Cleaning and maintenance ……..… 8**

**10. Warranty and after-sales service guarantee……...……8**

## Warranty Card

### Related Information

| | |
|---|---|
| Name： | Telephone： |
| Address： | |
| Model Number： | |
| Dealer： | Purchase time： |

### Maintenance records

| |
|---|
| Maintenance time： |
| Maintenance content： |
| Processing details： |
| Maintenance organization： |
| Repairman's signature： Telephone： |

From the date of sale, if the user abides by this manual and the usage rules,if a failure occurs within one year, the manufacturer will implement a warranty or free replacement, repair outside the warranty period will charge a cost fee.

*This page is the basic certificate of maintenance, please fill it out carefully and keep it properly.

## 1. Important Information

Before using the product, please read this instruction manual carefully and keep it for future reference.

**The meaning of the icons in the text**

In order to ensure the safety of use, this manual applies a variety of representation methods. Misuse of the safety warning may result in accidents.

**Represents the content of [mandatory]**

**Content that means [prohibited]**

**Notice:** Matters that may cause minor injuries or property damage.

**Must do this**

· Insert the plug into the special socket of the device. Before turning on the power, make sure that the operating voltage of the device is the same as the power supply voltage.

· The product can only use a power socket with a ground wire. Make sure that the plug is firmly inserted into the power socket.

· If the power cord is damaged, in order to avoid danger, it must be replaced by the manufacturer or its maintenance department or similar professional personnel.

· Place the device on a stable, level surface. Do not put it in high temperature and humidity environment.

·**Don't do this**

· Do not plug or unplug the power plug with wet hands or press any button on the control panel.

· Do not use the device in an environment with electromagnetic interference.

· Do not modify, disassemble or repair this equipment without permission from the manufacturer.

· Do not wipe the instrument with volatile solvents such as acetone and xylene.

## 2.Product Introduction

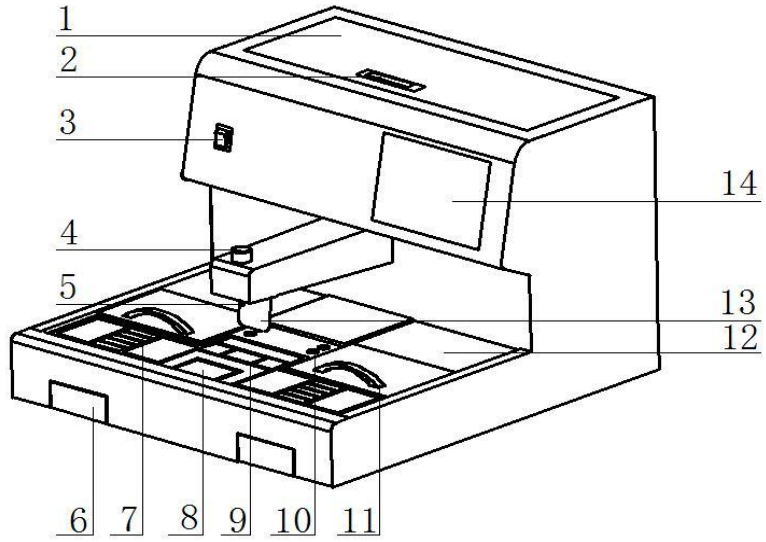
This product is an indispensable equipment for pathological tissue slicing work, mainly used in large, medium and small hospitals, medical

Universities, research institutes, animal husbandry, for tissue biopsy, pathology, forensic identification, etc.

This product is a pathological tissue embedding machine developed by our company with innovative technology. It adopts human nature

The operation panel is designed with advanced structure and novel shape. It is an ideal instrument for modern pathological sectioning.

## 3. Product Overview




1、Wax box 2. Hidden handle
2. Power switch 4. Flow adjustment knob 5. Wax nozzle
6.Residual wax recovery drawer 7. Wax repair panel
8.Refrigeration station 9. Hot stage panel
10.Forceps store 11.SS handle
12.preservation box
13.Wax opening panel
14. Display and touching Screen of embedding machine

**List of main parts:**

Organize the embedding machine (hot stage), power cord, tools, packing list, product instruction manual.

**4. Working environment**

(1) Power supply: AC220V±10%, 50Hz±1Hz;

(2) Suitable environment temperature: 5℃～45℃;

(3) Relative humidity: ≤80%.

**5. Technical Parameters**

| | | | |
|---|---|---|---|
| **Product size ：** | 560mm*620mm*410mm/L*D*H | | |
| **Power：** | AC220V±10%，50Hz±1Hz； 1200VA | | |
| **Capacity of wax box：** | 265mm*145mm*145mm/L*D*H，capacity 5500mL | | |
| **weight：** | 35Kg | **Temp of paraffin chamber:** | 0℃～75℃ |
| **Wax tube temperature setting：** | 0℃～75℃ | **Hot plate temperature setting:** | 0℃～75℃ |
| **Thermal chamber temp setting (left)：** | 0℃～75℃ | **Thermal chamber temp setting (right)：** | 0℃～75℃ |
| **Cryo module temp setting：** | Different temp can be set according to customer needs. | | |

**6. Brief description of main features**

(1) Multi-point independent heating: wax box, wax tube, heating stage, wax repair, preheating box (left), preheating box (right);

(2) The intelligent control system accurately controls the temperature, the temperature rises quickly and smoothly, and the error is small;

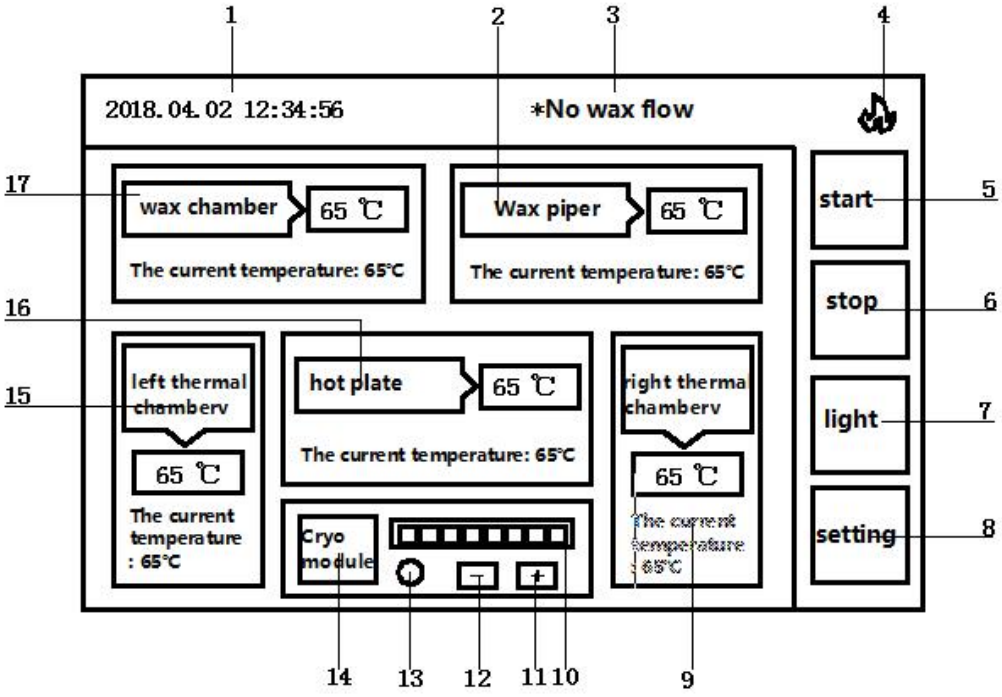
(3) The heating part is heated by "cast aluminum hot plate", which has long life, high thermal efficiency and fast heating;

(4) There are two waxing methods, namely the button and the pedal, the operation is simpler and free;

(5) More functions: timing start and stop, low pressure lighting, temperature control protection, wax repair, small refrigeration station and other functions.

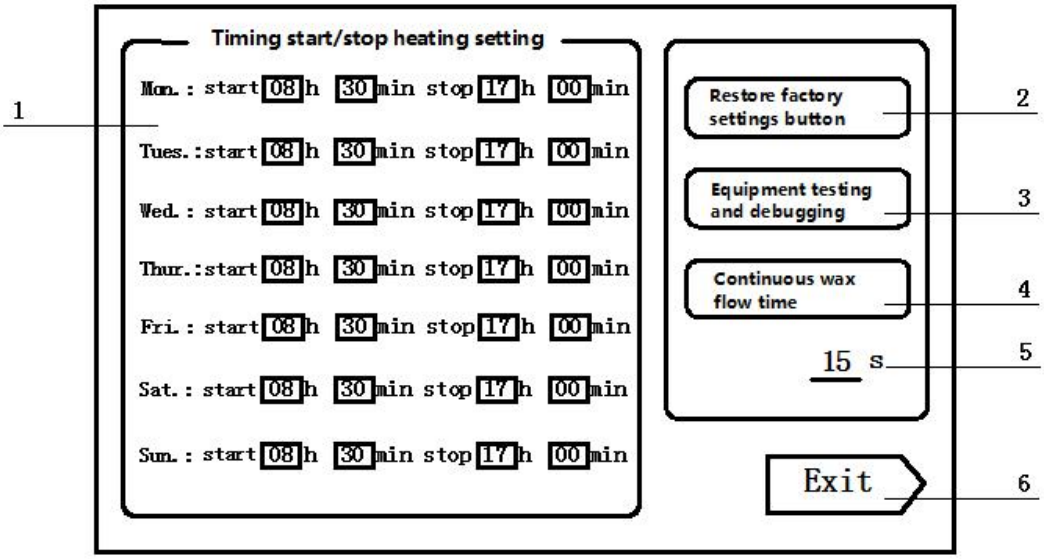
## 7. Display page and parameter settings

7.1 Display the main page:




1. The current date and time
2. The temperature setting and display of the wax outlet pipe
3. A reminder of whether the wax is produced
4. Heating status prompt
5. Start heating button
6. Stop heating button
7. Illumination switch key
8. Parameter setting key
9. Right preheating box temperature setting and display
10. Cooling capacity display of small cold station
11. Cooling capacity increase key
12. Cooling capacity decrease key
13. Small cold table status prompt
14. Small cold table switch key
15. Left preheating box temperature setting and display
16. Hot stage temperature setting and display
17. Wax box temperature setting and display

7.2 Parameter setting page:




1. Timing start/stop heating setting
2. 2. Restore factory settings button
3. Equipment testing and debugging
4. Continuous wax flow time setting
5. Continuous wax flow time display
6. Exit the parameter setting page

7.3 Various parameter settings:

**Current date and time settings**

(1) Click the date and time area on the main page, and the time setting window will pop up;

(2) After entering the current time, click the "OK" button to complete the time setting.

**Timing start heating setting:**

(1) Click the "Parameter Setting" button on the main page to enter the parameter setting page;

(2) Click on the number position in front of "Hour" after the start, and the numeric keyboard will pop up, enter a value from 0 to 23 (outside this value range, the timing start function is turned off); click on the number position in front of "Min" after the start , Pop up the numeric keyboard, enter a value from 0-59 (outside this value range, the timing start function is turned off);

**Timing stop heating setting:**

(1) Click the "Parameter Setting" button on the main page to enter the parameter setting page;

(2) Click the number position in front of "Hour" after stop, and the numeric keyboard

will pop up, input the value from 0-23 (outside this value range, the timing stop function will be turned off); click the number position in front of "Min" after stop , Pop up the numeric keyboard, enter a value from 0-59 (outside this value range, the timing stop function is turned off);

**Wax storage box temperature setting:**
click the "wax storage box setting" button on the main page, a numeric keyboard will pop up, enter the setting value, and click the "confirm" button to complete the temperature setting.

**Temperature setting of the wax output tube:**
Click the "Wax output tube setting" button on the main page, and the numeric keyboard will pop up, enter the setting value, and click the "OK" button to complete the temperature setting.
Left preheating box temperature setting: Click the "Left preheating box setting" button on the main page, a numeric keyboard will pop up, enter the setting value, and click the "OK" button to complete the temperature setting.
Hot stage temperature setting: Click the "Hot stage setting" button on the main page, a numeric keyboard will pop up, enter the setting value, and click the "OK" button to complete the temperature setting.

**Right thermal chamber temperature setting:**
Click the "right thermal chamber setting" button on the main page, a numeric keyboard will pop up, enter the setting value, and click the "OK" button to complete the temperature setting.

**Setting of Cryo module:**
Click the "-" "+" button on the main page to adjust the temp of Cryo module.

**8. Operating Instructions**
Need to do this after opening the box
Step 1: Check the contents of the box according to the "packing list";
Step 2: Take out the equipment and place it on a stable, level surface;
Step 3: Check whether the actual use conditions are consistent with the "working environment" required in the manual;
Step 4: Turn on the power and check whether the LCD screen is working properly;
Step 5: Set each parameter once to test the touch function and familiarize yourself with the parameter setting operation;
Step 6: Click the "Illumination" button to observe whether the illumination lamp works normally;
Step 7: Click the "Start" button and wait a few minutes to check whether each heating point has started heating;
Step 8: Put in paraffin, "start" heating, wait for the paraffin in the wax box to melt, and the screen displays "wax allowed", flip the wax switch or foot switch to ensure

normal wax flow.

**Daily operation**

Step 1: Power on the device, turn on the power switch, the LCD screen lights up, and the device enters the standby state;
Step 2: Click the "Start" button to turn on the heating, or if the automatic start function is set, you can wait for the set time to automatically start heating;
Step 3: Wait for the paraffin wax in the wax box to melt, and the screen will show "allow wax out" prompt, then proceed Embedding work;
Step 4: Take the embedding mold, tissue processor, and embedding cassette, put them on the hot plate under the wax nozzle, and dial activate the wax switch or foot switch to complete the embedding;
Step 5: After finishing all the tissue embedding, click the "stop" button to stop heating, or if set With the automatic stop function, you can wait for the set time to automatically stop heating;
Step 6: Turn off the power switch and clean the equipment.

**9.Cleaning and maintenance**

Note: When cleaning the machine, a mild commercial detergent or soap can be used to clean the dirt.
Do not wipe the instrument with volatile solvents such as acetone and xylene. When cleaning, do not put cleaning liquid into the equipment internal. After cleaning, wipe the surface of the machine with a soft cloth.

**10.Warranty and after-sales service guarantee**

If you need service or detailed information, or have any questions, please contact the manufacturer or distributor.This machine fails within one year from the date of sale, provided that the user abides by this manual and operating procedures,The manufacturer will implement warranty or free replacement, and provide lifetime maintenance.

# Operation Manual

## Tissue Cold Plate

## Model No.:RD-98

**Thank you for using our products. Please read this instruction carefully before using.**
**Please collect carefully after reading it for future reference. The picture is for reference only.**

## 1. Important Information

Before using the product, please read this instruction manual carefully and keep it for future reference.

**The meaning of the icons in the text**

In order to ensure the safety of use, this manual applies a variety of representation methods. Misuse of the safety warning may result in accidents.

**Represents the content of [mandatory]**

**Content that means [prohibited]**

**Notice:** Matters that may cause minor injuries or property damage.

**Must do this**

· Insert the plug into the special socket of the device. Before turning on the power, make sure that the operating voltage of the device is the same as the power supply voltage.

· The product can only use a power socket with a ground wire. Make sure that the plug is firmly inserted into the power socket.

· If the power cord is damaged, in order to avoid danger, it must be replaced by the manufacturer or its maintenance department or similar professional personnel.

· Place the device on a stable, level surface. Do not put it in high temperature and humidity environment.

·**Don't do this**

· Do not plug or unplug the power plug with wet hands or press any button on the control panel.

· Do not use the device in an environment with electromagnetic interference.

· Do not modify, disassemble or repair this equipment without permission from the manufacturer.

## 2.Product Introduction

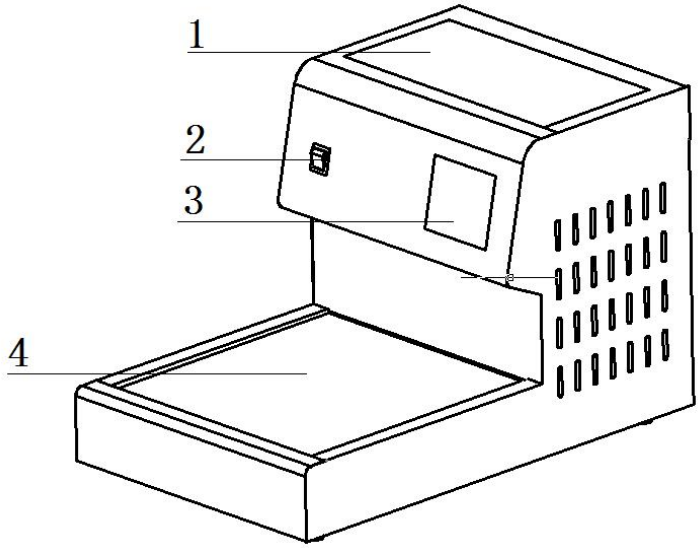
This product is an indispensable equipment for pathological tissue slicing work, mainly used in large, medium and small hospitals, medical

Universities, research institutes, animal husbandry, for tissue biopsy, pathology, forensic identification, etc.

This product is a pathological tissue embedding machine developed by our company with innovative technology. It adopts human nature

The operation panel is designed with advanced structure and novel shape. It is an ideal instrument for modern pathological sectioning.

**3.Product Overview**




1. Anti-slip storage mat
2. Power switch
3. Touch screen
4. Cooling table

**List of main parts:**
Organize the embedding machine (hot stage), power cord, tools, packing list, product instruction manual.

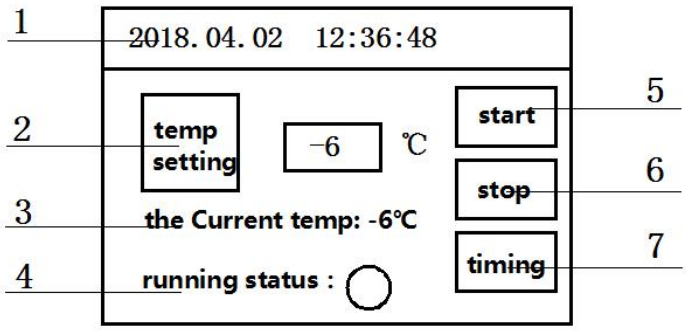
**4. Working environment**
(1) Power supply: AC220V±10%, 50Hz±1Hz;
(2) Suitable environment temperature: 5℃～45℃;
(3) Relative humidity: ≤80%.

**5. Technical Parameters**

| | |
|---|---|
| **Product size：** | 380mm*620mm*410mm；/L*D*H |
| **Power：** | AC220V±10%，50Hz±1Hz； 1200VA； |
| **Plate size：** | 335mm*320mm//L*D can hold about 70pcs cassette； |
| **Temp range：** | Lowest can reach to -30℃； |

**6 . Brief description of main features**
(1) The intelligent control system accurately controls the temperature, heating up quickly and smoothly, and has small errors;
(2) The color touch screen display is clear and easy to operate.
(3) Timing start and stop function, set start and stop time arbitrarily.

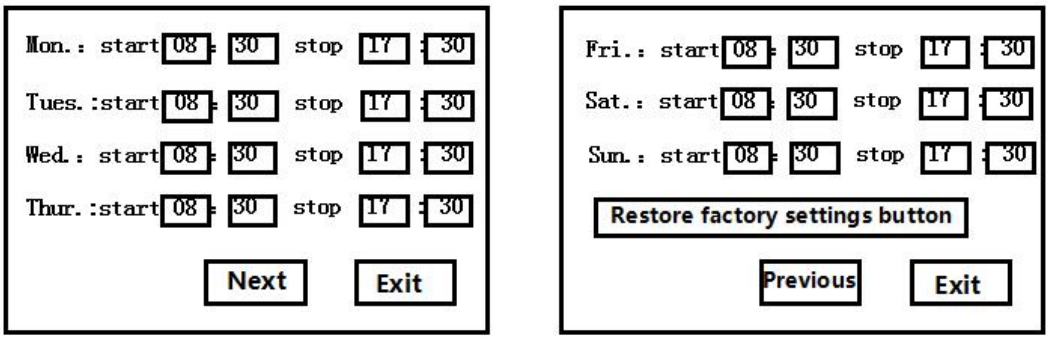
**7. Display page and parameter settings**
7.1 Display the main page:




1. Current date and time
2. Cold table temperature setting and display

3. Current cold table temperature display
4. Cold table running status
5. Start refrigeration key
6. Stop refrigeration key

7.2 Timing setting page:




7.3 Various parameter settings:

**Current date and time settings:**
(1) Click the date and time area on the main page, and the time setting window will pop up;
(2) After entering the current time, click the "OK" button to complete the time setting.

**Cooling temperature setting:**
Click the "temperature setting" button on the main page, a numeric keyboard will pop up, enter the setting value, and click the "confirm" button to complete the temperature setting.

**Timer start cooling setting:**
(1) Click the "Timing" button on the main page to enter the timing setting page;
(2) Click the number position behind the start, a numeric keyboard pops up, enter the corresponding time, complete the timing start refrigeration setting.

**Timer stop cooling setting:**
(1) Click the "Timing" button on the main page to enter the timing setting page;
(2) Click on the number position behind the stop, a numeric keyboard will pop up, enter the corresponding time, and complete the timing
Stop the cooling setting.

**8. Operating Instructions**
Need to do this after opening the box
Step 1: Check the contents of the box according to the "packing list";
Step 2: Take out the equipment and place it on a stable, level surface;

Step 3: Check whether the actual use conditions are consistent with the "working environment" required in the manual;
Step 4: Turn on the power and check whether the LCD screen is working properly;
Step 5: Set each parameter once to test the touch function and familiarize yourself with the parameter setting operation;
Step 6: Click the "Start" button, wait a few minutes, and check whether the cold table has started to cool

**Daily operation**
Step 1: Power on the device, turn on the power switch, the LCD screen lights up, and the device enters the standby state;
Step 2: Click the "Start" button, after the 300-second countdown, turn on the refrigeration, or if the automatic start function is set, you can wait for the set time to automatically start the refrigeration;
Step 3: Place the embedded tissue on a cold table and quickly cool the tissue wax block.
Step 4: After finishing all the tissue embedding, click the "Stop" button to stop the refrigeration, or if the automatic stop function is set, you can wait for the set time to automatically stop the refrigeration;
Step 5: Turn off the power switch and clean the equipment.

## 9. Cleaning and maintenance
Note: When cleaning the equipment, you can use mild commercial detergent or soap to clean the dirt. Do not wipe the instrument with volatile solvents such as acetone and xylene. When cleaning, do not put the cleaning liquid into the equipment. After cleaning, wipe the surface of the machine with a soft cloth.