

TISSUE EMBEDDING CENTER EC 500



User manual
Version 10 – 16/09/2022

Especialidades Médicas Myr, S.L. would like to thank you for the purchase of this equipment and for your confidence in choosing our company.

We are committed to offer you the best and most reliable service.

Don't hesitate to contact your local dealer for any question related to this Tissue Embedding Center.

Your Especialidades Médicas Myr, S.L. team

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Introduction

The Tissue Embedding Center EC 350 actually consists of three instruments or consoles that enable the procedure for the embedding of tissues to be performed easily and comfortably:

- EC 500-1: Cryo Console
- EC 500-2: Dispensing console
- EC 500-3: Thermal console

It is also possible to purchase the Consoles separately. The Cryo Console can also work as stand-alone unit.

Intended Use

The EC 500 Embedding Center is a device for paraffin embedding of human tissue specimens previously infiltrated in paraffin and used for medical histological diagnosis by a pathologist.

The EC 500 Embedding Center is exclusively intended for use in In Vitro diagnostic procedures and fulfils the corresponding in-force regulations.



Any other use not described above is considered improper use!

The Tissue Embedding Center EC 500 is designed for professional use only.

It must only be operated by trained and qualified laboratory personnel. The users of the device must previously read the User Manual carefully and must be familiar with all aspects of operation and safety precautions before starting out to operate the instrument.

Warranty

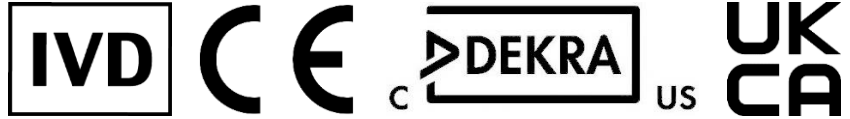
The MYR product is warranted against defects in material and workmanship for a period of 1 year. Parts which prove to be defective during the warranty period will be repaired or replaced free of charge. No other warranty is expressed or implied. Unauthorized modification or repair by third party persons will void the warranty. The warranty will expire in case of improper or wrong use of the instrument and in case the warning and precautionary messages are not observed. Especialidades Médicas MYR, S.L. is not liable for any occurring damage.

Once the guarantee period has expired, a maintenance contract should be signed to ensure the unit is kept in optimum operating condition. For more information on maintenance contracts, please contact your local distributor.

Certification

Especialidades Médicas MYR, S.L. certifies that this instrument has been tested and checked carefully. Its technical data was verified before shipment to be in accordance with the published specifications.

The instrument complies with applicable international safety regulations.



Safety

The installation and normal use of the Tissue Embedding Center EC 500 is simple and safe if you observe the instructions given in this manual.

Should the equipment be used for unauthorised purposes or uses not specified by the manufacturer, safety may be impaired.

Input and output circuits are isolated from the main power supply.

However, those situations which could be constitute a risk for laboratory personnel or equipment, are distinguished in this manual with the following symbols and warning messages



DANGER

This sign, symbolizing DANGER, means that injury to persons as well as material damage to the unit may occur if these instructions are not observed.

For your own safety, observe these instructions carefully



CAUTION

This sign, symbolizing CAUTION, means that material damage may occur if these instructions are not observed.

For a long service life of the unit, observe these instructions carefully.



INFORMATION

This INFORMATION sign draws the user's attention to important details and additional information about the device, and should therefore especially be taken into account.

Apart from the instructions given in this manual, the personnel involved in operating the Tissue Embedding Center should know and observe the general guidelines and rules for safety and hygiene applicable to the workplace where the unit is installed.



The symbol shown here indicates areas where the temperature may exceed 60°C



The symbol shown here indicates areas where the temperature may reach -15° C.



Everyone involved in operating and programming the Tissue Embedding Center should read these instructions carefully and fully understand them before using the unit.



BIOHAZARD

Warning of biological danger.



RADIOACTIVITY

Warning of radioactive danger.

Safety precautions

The operator's safety is affected, when the instrument is not operated in accordance with this instruction manual.

Please observe the following general precautions during operation of this instrument. Failure to comply with these precautions violates safety standards and the intended use of the instrument. Especialidades Médicas MYR, S.L. is not liable for misuse of the instruments and failure to comply with basic safety requirements.

Risks

Instrument grounding



To avoid injury from electrical current, the instrument must be connected with the protective earth. The instrument is equipped with a three wire ground plug. The power outlet must be connected to the protective earth and must meet the International Electrotechnical Commission (IEC) regulations.

Mains voltage



Never remove instrument housing during operation. Component replacements as well as adjustments must only be made by trained service personnel. Only use original spare parts for replacement work. Unplug the unit before removing or opening the covers.

Danger in explosive environment



The instrument must not be operated in the presence of flammable gases. Moreover, the instrument must not be exposed to conditions whereby dangerous gas concentrations can occur.

Hazard of radio-active radiation



When working with radioactive specimens observe all applicable radiation safety procedures. When working with radioactive contaminated material, appropriate safety and disinfecting measures must be carried out. According to the rules and regulations concerning the handling of radioactive contaminated material of the respective laboratory, safety clothing (e.g. particle mask, gloves, protective shoe covers) must be worn. Radioactive contaminated waste must be disposed of according to the respective regulations.



All containers in instrument are only suitable for paraffin and not for any other inflammable material.



The Cryo Console's frozen parts can cause hand injuries. The machine must only be used by well-trained laboratory staff. We recommend the use of protective gloves.

Burn hazard



Surfaces marked with this symbol, or indicated in this manual, can reach temperatures of more than 60°C. Take care not to get burned.

Hazard of infection



Specimens used during the intended operation of the instrument might potentially be infectious. For this reason, it is recommended to observe the general laboratory regulations concerning protection against danger of infection.

Information on decontamination media, their use, dilution and effective range of application can be read in the Laboratory Biosafety Manual:1984 of the World Health Organization.

When working with infectious specimens observe all applicable safety procedures. When working with infectious material, appropriate safety and disinfection measures must be carried out. According to the rules and regulations concerning the handling of infectious material of the respective laboratory, safety clothing (e.g. particle mask, gloves, protective shoe covers) must be worn. Infectious waste must be disposed of according to the respective regulations.

Hazard of malfunction



To avoid the hazard of malfunction of an instrument, it must only be operated in a controlled electromagnetic environment. This means that transmitters such as mobile phones must not be operated in their close vicinity.

In case of malfunctions and/or service work, please turn off the instrument and contact your local dealer.

Documentation



This instruction manual will be supplied together with each instrument. Additional copies can be ordered by indicating the serial number of the instrument.

This manual has been written in the Spanish language and it has been translated into English and French. The Spanish version shall prevail. Especialidades Médicas Myr, S.L. shall not be liable for the consequences of mistakes, omissions or other defects in the translation of this manual.

Subject to amendment and improvement without notice.

Technical data

Dispensing Console				
Size in mm		Width 345, Depth 641, Height 405		
Electrical connections	Voltage (± 10%)	100-120V/50-60 Hz	220-240V/50-60Hz	
	Power consumption	5.2 A	2.5 A	
	With Thermal console	8.6 A	4.3 A	
Adjustable temperature range	Paraffin reservoir	from 40 °C to 70 °C		
	Hot zone			
	Front and Rear chambers (Thermal chambers)			
	Auxiliary heated forceps	from 60 °C to 75 °C		
Paraffin storage capacity		5 L		
Weight		20.5 kg		
Primary circuits		100 – 120 V, 2 x T10AH 220 – 240 V, 2 x T6,3AH		
Acoustic intensity		< 45 dB(A) measured at a distance of 1 m from the machine		
Thermal console				
Size in mm		Width 340, Depth 623, Height 395		
Front chamber capacity (269x510x88 mm)		2 removable troughs with capacity for 2 baskets (200 cassettes) or 3 baskets without trough (300 cassettes).		
Rear chamber capacity (275x170x180 mm)		> 300 moulds		
Weight		16 kg		
Cryo Console				
Size in mm		Width 335, Depth 623, Height 395		
Electrical connections	Voltage (± 10%)	100-V/ 50-60 Hz	110-120 V/ 50-60 Hz	220-240V/ 50-60Hz
	Power consumption	3.3 A	3.6 A	2.28 A
Adjustable temperature range		from 0°C to -12°C		
Size of the cold plate		375 x 307 mm		
Weight		24.5 kg		
Recommended environmental operating conditions	Maximum humidity	80% (non-condensing)		
	Temperature range	15°C to 26°C		
Primary circuits		100 – 120 V, 2 x T10AH 220 – 240 V, 2 x T6,3AH		
Acoustic intensity		< 45 dB(A) measured at a distance of 1 m from the machine		
Dispensing console and Cryo Console				
Transportation & storage conditions:		From -20°C to +50°C		
Operating conditions:		From +5°C to +40°C (at a max. rel. humidity of 60%) Altitude up to 2000 m M.S.L. For indoor use only.		
Pollution degree:		2		
Overvoltage category:		II		
Floor loading requirements:		150 kg/m ²		

Conditions for the transportation of the instrument

Repair or maintenance work are normally carried out at the site of installation. If this is not possible for some special reasons, the instrument can be returned to MYR. The contact address can be found at the end of this instruction manual.

To guarantee trouble-free function of the instrument after transportation, please note the below-mentioned measures for the transportation preparation.

In addition, the conditions for storage and transportation as mentioned under "Technical Data" must be observed during the entire transportation.

Biohazard



Please also note the precautionary measures described in our safety precautions concerning biological hazards!

Measures for closing down

Turn off the instrument and unplug the unit.

In case that the thermal console or a cryo console is connected, please loosen the connecting cable.

Empty the paraffin tank or wait for solidifying.

Transportation of the instrument



For transportation outside closed buildings use the original packing. If the original packing is no longer available, please contact your local MYR representation.

Reception and installation of the unit

Before removing the Consoles from their shipping packages, carefully inspect the cardboard for any damage which may have occurred during transport. Should you detect any sign of damage, do not open the package and immediately report the situation to the transport agency.

After removing each Console from its package, inspect it carefully for damage. Should any be noted, immediately notify the distributor from whom the unit was purchased.

Remove cardboard, foamed parts and accessories used for shipment. Please keep the original packing as well as the foamed parts for possible return shipments. Place recyclable materials in appropriate containers.

Place the instruments on a stable level surface with ventilation space both behind and above the unit to ensure adequate air circulation. The gap between the machine and the wall should be at least 10 cm.

Place the consoles next to each other, with the dispensing console in the middle.

The Cryo Console may be installed on either the left or the right hand side, whichever is preferred.

Connection

The figure "**Connection of the consoles**" on next page shows the connections which must be performed on every Console



CAUTION

Before turning on the instrument for the first time, please check if the power requirements indicated on the type label correspond to the power supply voltage being used! See page 22 Maintenance.




DANGER

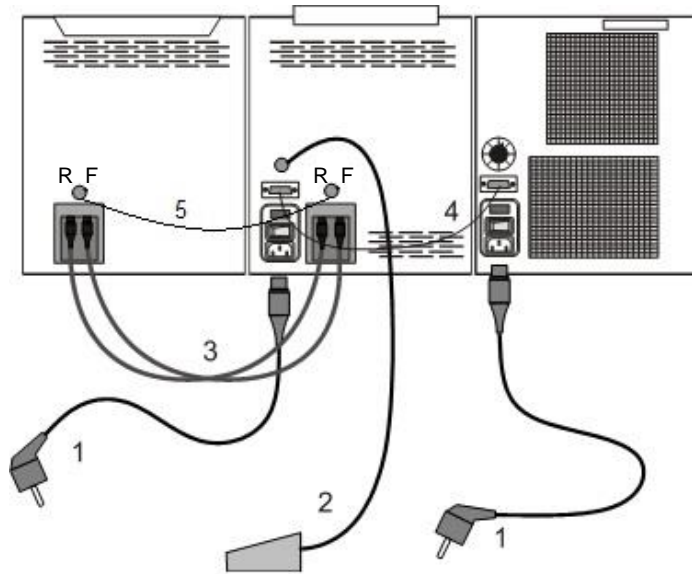
Be sure that the mains socket into which you plug the equipment is provided with a protective earth connection.

Connection of the consoles

1. Mains cable with earth connection
2. Pedal cable
3. Thermal console powering cables. (R - R, F - F)

 Connecting the cables in wrong position may cause Thermal protectors activation.

4. Cable for connection to the cryo console
5. Thermal console sensors connection cable.



Connect the mains cable to the corresponding socket of each console.

If necessary, the dispensing console should be connected to the thermal console with the cables supplied, as indicated on the sticker at the back. If the thermal console has been installed, enable it by selecting the THERMAL CONSOLE * ENABLED option on the keypad (see operating parameter selection on p. 16).

To be able to control the Cryo Console from the dispensing console, connect them together with the connection cable.

Also connect the pedal cable and the forceps (if ordered as an optional extra) to the dispensing console.

Use the threads on the plugs to prevent the connectors from coming loose.

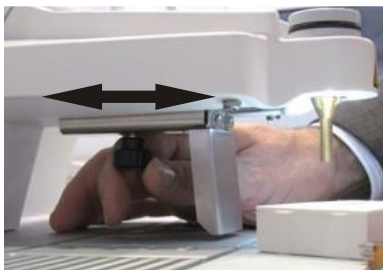
Components of the Tissue Embedding Center

1. Storage for hot paraffin
2. Rear chamber
3. Front chamber
4. Dispensing nozzle
5. Touch plate
6. Keypad and display
7. Cryo Console
8. Waste trays
9. Connector for auxiliary heated forceps
10. Cold zone
11. Forceps holder



Brief description of operation


To fill a mould with paraffin, simply place it under the dispensing nozzle and slightly push the touch plate or press the pedal (if installed as an optional extra).



Note that the position of the touch plate can easily be adjusted by loosening the fastening knob and moving the plate to the most appropriate position for the size of the moulds to be filled.



Make this adjustment carefully as the nearby areas can reach temperatures of over 60°C.

To turn on the spotlight in the nozzle area, press  on the keypad.



Paraffin flow rate can be regulated by adjusting the knob located on the nozzle. For maximum flow rate, turn the knob so that the largest circle is located at the top (as shown in the figure).

Turn the knob anti-clockwise to decrease flow rate. To close the flow of paraffin through the dispensing nozzle, turn the knob so that the smallest circle is positioned at the top.

To program the operation of the dispensing, cryo and thermal consoles, see from page 17.



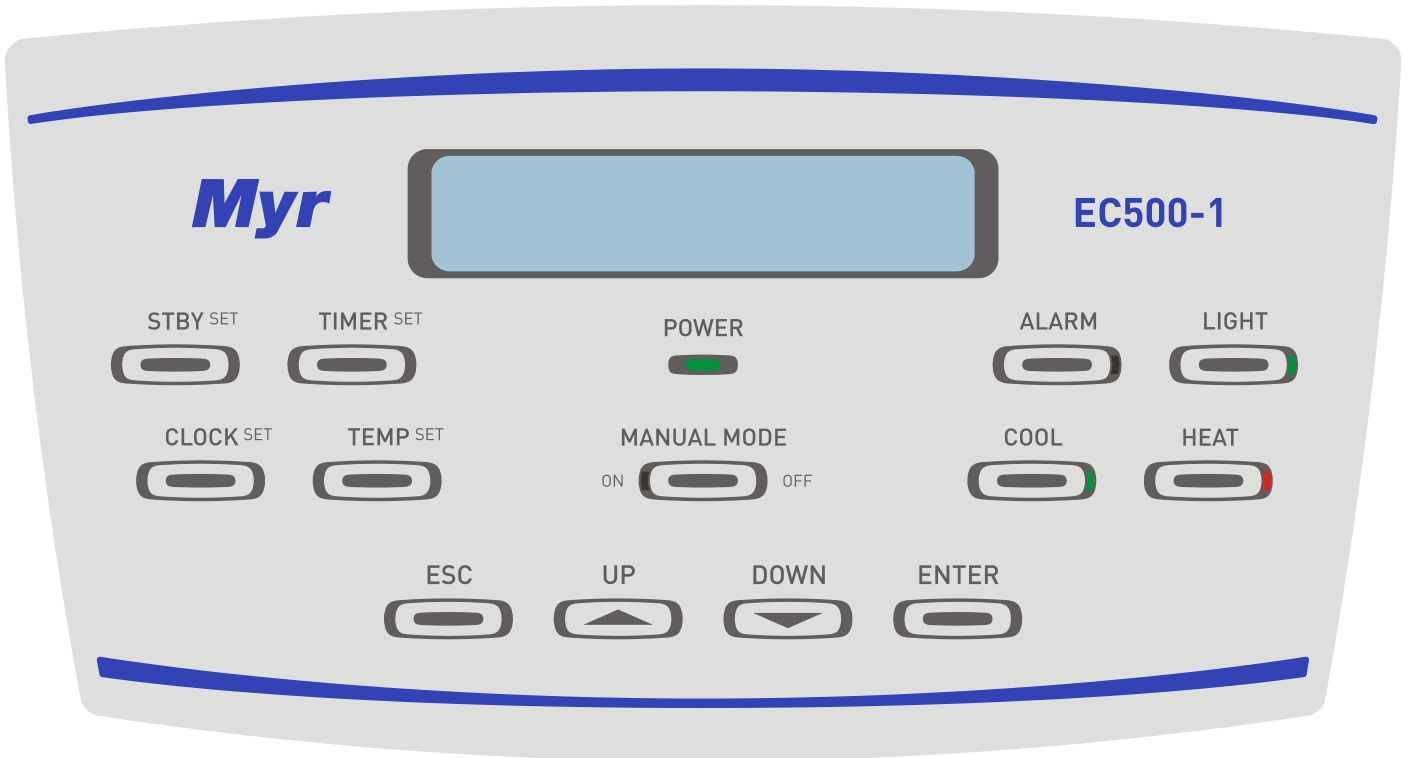
Only MYR heated forceps can be connected.

Maximum consumption: 6W









Start-up and programming

Keyboard description

This soft-touch keypad is used to control and program the embedding center:



Actions of the keys

-  STBY SET Enables programming date intervals when the unit will not start automatically (e.g. public holidays, vacations, etc.).
-  TIMER SET Sets the time when the unit will be turned on and off.
-  TEMP SET Sets the temperature for each of the areas to be heated.
-  CLOCK SET Sets the date and local time of where the unit is installed.
-  MANUAL MODE For manual control over starting and stopping the unit without using the timers for automatically starting and stopping the unit. When the unit is in manual mode, the pilot incorporated in the key will be lit
-  LIGHT Turns the light illuminating the dispensing nozzle on or off. The pilot indicates that the light is on
-  HEAT Starts and stops the heating process.
 - Red pilot light: heating in progress
 - Green pilot light: at operating temperature
-  COOL Starts and stops the Cryo Console.

- Green pilot light: the Cryo Console has reached the pre-set temperature
- Red pilot light: the Cryo Console is stopped
- Intermittent green pilot: the Cryo Console is in the start-up phase
- Intermittent red pilot: the Cryo Console is disconnected from the power supply or not connected to the Dispensing Console



This key is used to acknowledge alarms or display the most recent alarm conditions that have occurred. The red pilot indicates that an alarm has been activated.



When the unit is in operation (display lit), these keys successively display the current temperatures of each area. When the unit is in programming mode, these keys are used to set (increase or decrease) the values for the temperatures, times, dates, etc.



Press this key to cancel any programming situation.



This key is used to validate or accept the option selected using the arrow keys. Once the option is validated the program automatically passes to the next option.

Preparation

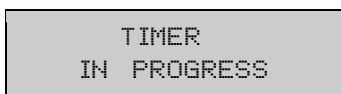


The Dispensing Console and Cryo Console are independently connected to the power supply. However, if connected together, both units are controlled and programmed from the Dispensing Console. For this reason it is important that the cable connecting both units be correctly installed.

After connecting both units to the power supply, and making sure that the connection cable is correctly installed, **turn on firstly the Cryo Console and then the Dispensing Console.**

The **POWER** pilot light on the keyboard and beside the display screen indicates that the unit is under power.

Under normal operating conditions the screen may display different messages depending on the status of the unit and the selected interface language:

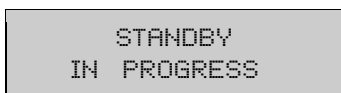


Waiting for start-up.

This display appears on the screen if the unit is programmed to start and stop within a time range which does not include the time now, or if the timer is set to 00:00.

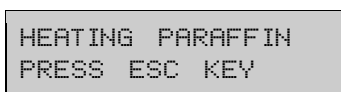


In this case, the console must be started manually by pressing the **MANUAL MODE ON/OFF** key (see page 20, programming start and stop).



Programmed pause.

This display appears on the screen if the unit is programmed to remain on standby between certain dates, including the current date (see page 21).

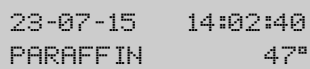


Heating mode. The paraffin storage reservoir or another point that requires heating has not yet reached the programmed temperature.



Press **ESC** key.

Tissue Embedding Center EC 500



23-07-15 14:02:40
PARAFFIN 47°

The display appears illuminated. The equipment is in operation with the settings as programmed (see page 18, "Programming").



Pressing either the **UP** or **DOWN** keys successively displays the temperatures of the: **PARAFFIN - AREA - VALVE – F. CHAMBER. – R. CHAMBER. - PIPE – AUX. FORCEPS - CRYO CONSOLE**



Pressing both UP and DOWN keys at the same changes the contrast of the display.

Selecting operating parameters

Before beginning to program the unit you will probably want to select the interface language, the units for temperatures and other variables.

Turn off the Dispensing Console using the switch on the rear panel and then turn it on again.

While the presentation screen is displayed, press the **MANUAL MODE**, **UP** and **DOWN** keys one after another.

The following will appear on the display:

S.A.T
MANUFACTURER

This message indicates that the unit is in the special programming mode for Technical Service.

After about 5 seconds the following message will appear::

SELECT LANGUAGE
ENGLISH

Use the **UP** or **DOWN** arrow keys to select the desired interface language. Once selected, press the **ENTER** key to confirm.

The following screen is displayed:

TEMPER. SELECTION
* CELSIUS

Use the **UP** or **DOWN** keys to select the temperature units as **CELSIUS** or **FAHRENHEIT** and confirm the choice by pressing **ENTER**.

DATE FORMAT
* EUROPEAN FORMAT

Use the **UP** and **DOWN** keys to select the date format:

- European Format: DD-MM (Day - Month)
- American Format: MM-DD (Month - Day)

Confirm by pressing **ENTER**

AUX. FORCEPS
* ENABLED

Use the **UP** and **DOWN** arrow keys to select **ENABLED** if the optional auxiliary tweezers are installed or **DISABLED** if they are not. Confirm by pressing **ENTER**.

CONT. RESERVOIR HEAT
* ENABLED

Using the **UP** and **DOWN** keys, select **ENABLED** to keep the following in continuous operation:

- the heating system of the paraffin tank
- the heating system of the pipe to the dispenser
- the contact detector to dispense the paraffin

This option allows paraffin to be dispensed at any time. Note that the heating and forceps areas and the cold plate will not be in operation.

Select **DISABLED** if the dispenser is not required to be continuously available. Confirm by pressing **ENTER**.

THERMAL CONSOLE
* DISABLED

Using the **UP** and **DOWN** keys, select **ENABLED** if the thermal console is installed or **DISABLED** if it is not. Confirm by pressing **ENTER**.

Programming

The Tissue Embedding Center EC 500 combines vast programming possibilities with simple handling.

It is possible to program:

- The real date and time (internal clock/calendar)
- The temperature of each zone
- The scheduled time for automatic start-up¹ and shut down of the unit.
- That the unit **does not start** on certain dates (e.g. vacations, etc.)

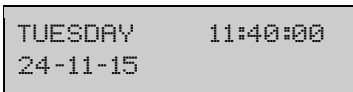
Programming the date and time



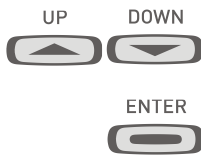
Should the display be greyed out press the **MANUAL MODE** key and wait for five seconds.



Press the **SET CLOCK** key and the following display will appear (example)² :



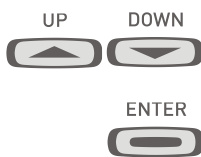
The day of the week (in this example, Tuesday) flashes.



Change the day using **UP** or **DOWN** key as required and confirm the selection by pressing **ENTER**.

The first digit of the date then begins flashing

Remember that the date format may be **DAY-MONTH-YEAR** if the European date format has been programmed, or **MONTH-DAY-YEAR**, if the American date format has been programmed (refer to page 16).



Change the date using the **UP** or **DOWN** key as required and confirm the selection by pressing **ENTER**

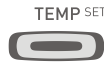
And so on successively to edit all the values for the date and time.

¹ When programming the start-up time the unit automatically calculates when it should connect the heaters so that the temperatures of the paraffin and other areas are correct for the Tissue Embedding Center EC 350 to be used at that time.

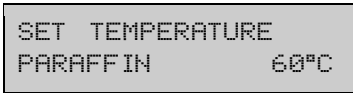
² The interface language will depend on that selected (refer to page 16)

Programming temperatures

Should the display be greyed out press the **MANUAL MODE** key and wait for five seconds.



Press the **SET TEMP** key and the following display will appear:



Note that the temperature units (Celsius / Fahrenheit), will depend on those set in the section on language and units (refer to page 17)



Use the **UP** or **DOWN** keys to change the value, if necessary, and confirm the selection by pressing **ENTER**.

It is then possible to successively change the temperature values for other zones of the Tissue Embedding Center EC 500 in the order shown below. Please note that for safety reasons some values are internally limited by the unit. This is why it is not possible to select temperature values that exceed certain limits.

Repeat the same procedure for each of the other zones.



The recommended values for each of the zones (factory default values) are:

Paraffin	61 °C	142 °F
Area	60 °C	140 °F
Valve	62 °C	144 °F
Front chamber	62 °C	144 °F
Rear chamber	62 °C	144 °F
Conduit ³	62 °C	144 °F
Cryo Console	-10 °C	14 °F
Aux. Heated Forceps	62 °C	144 °F



If Cryo Console works as stand alone unit, temperature will be adjusted through a potentiometer located at the back of the instrument.

In list below are showed temperatures of Cryo Console depending on position of potentiometer knob:

Knob position	Temperature in °C (±1°C)
0	0
1	0
2	-1,2
3	-2,7
4	-4,0
5	-5,4
6	-6,8
7	-8,2
8	-9,6
9	-11,4
10	-12,0

³ This is the tube that transports the paraffin from the storage reservoir to the solenoid valve

Programming automatic start-up and shut-down

The Modular Embedding Center EC 500 offers different program options for the unit operating times:

- The same times from **MONDAY** to **FRIDAY**
- Different operating times (or stopped) on **SATURDAYS** and **SUNDAYS**
- Individual programs for each day of the week



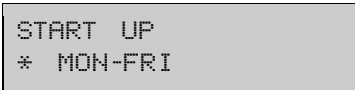
It is important to remember that the unit will be ready for operation at the programmed time as it will have already automatically connected the heaters, so that the different areas are at the required temperature.



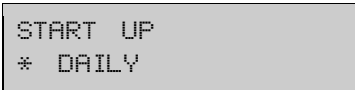
Should the display be grayed out press the **MANUAL MODE** key and wait for five seconds.



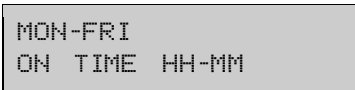
Press the **SET TIMER** key and the following display will appear. Example:



Use the **UP** or **DOWN** keys to select the operating time programmed for all work days (Monday to Friday)



or if necessary, it is possible to individually program each day of the week. Confirm the selection by pressing **ENTER**

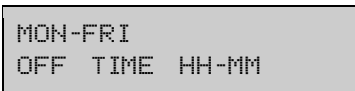


The upper left corner of the display shows the appropriate reference (**MONDAY** to **FRIDAY** or each day of the week).



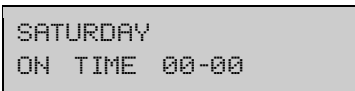
Use the **UP** or **DOWN** keys to change the value for start-up or operation of the unit if necessary, and confirm the selection by pressing **ENTER** to move to the next value.

Once the start time has been set the screen will display the options for the unit shut-down time:



Proceed in the same way to set time when the unit should be automatically shut-down.

Once these values have been set the option for **SATURDAY** and **SUNDAY** will be displayed:



In the event that the unit is not to be used over the weekend, enter the values 00:00 for **START** and 00:00 for **STOP** if the unit is set on the European time format (24h).

Repeat the same operation for **SUNDAY**.

If the selected time format is the American (12h - AM/PM), the time value 00:00 does not exist therefore please enter any time value that should be the same for **BEGINNING** and **END**. Repeat the same operation for **SUNDAY**.

If the **DAILY** option has been selected it will be necessary to set the **START** and **STOP** time for each day of the week.



The default values for the **TIMER** (factory-set values) are::

- MON-FRI ON TIME: 08:00 / ON TIME: 15:00
- SATURDAY ON TIME: 00:00 / ON TIME: 00:00
- SUNDAY ON TIME: 00:00 / ON TIME: 00:00

Programming pauses

The Tissue Embedding Center EC 350 can be programmed so that it will **NOT START** automatically between certain dates. This option is ideal for saving energy when the unit is not in use (e.g. on Public Holidays or during vacations).



Should the display be greyed out press the **MANUAL MODE** key and wait for five seconds.

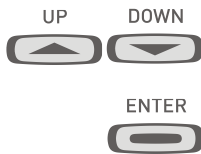


Press the **SET STBY** key and the following display will appear (example):

```

SET  STANDBY  ON  TIME
 00-00      DD-MM
  
```

Use the **UP**, **DOWN** and **ENTER** keys to set the day and month (or the month and day if the American format has been selected) **ON WHICH the unit is NOT TO START** automatically, that is, the beginning of the pause. Confirm the settings by pressing **ENTER** for each value.



Use the **UP**, **DOWN** and **ENTER** keys to set the **END** of the pause, that is, the day and month **AFTER** which the unit **WILL COME INTO OPERATION AGAIN** with the programmed operating times.

If the unit is not to have any programmed pause in operation enter 00-00 as the values for **START** and **STOP**.



The default values for the pause are:

- PAUSE START: 00-00 / END: 00-00
(pause not programmed)

Maintenance

Annual routine maintenance

To secure optimum performance of the instrument, it is recommended that a **routine maintenance** be performed by a trained service technician **once a year**.

Exchange of fuses – voltage version



The instrument fuses are placed on the rear side of the instrument. To replace the fuses, turn off the mains switch of the instrument and unplug the unit.

Unlock the fuse cap on the upper side by using a pointed tool (1) and fold it down (2).



Pull off the red fuse insert and check or replace the fuses. In case of replacing fuses, please **verify the value and characteristics corresponding to the name plate**. When inserting the fuses into the fuse holder, please note the correct positioning of the lateral holding clips.

Place the fuse insert in a way that the local voltage version can be read and shows upwards.

Again fold the fuse cap upwards and press it. Now the valid voltage version can be seen in the small window.

Please note that the voltage corresponds with the voltage being used at your place.

Insert the mains cable and turn on the instrument

Cleaning

By its nature, the Tissue Embedding Center EC 500 requires careful cleaning **EACH DAY AFTER USE**.



Do not use solvents, neither aggressive detergents nor sharp or pointed objects to clean the unit. Use the scrapper delivered together with instrument. Citric based detergents and/or hot soapy water are also adequate for cleaning the unit.



The work area has drainage channels that guide any surplus paraffin to the waste collection trays. Before the paraffin collection trays can be emptied, any excess paraffin on the work area must be removed in order to prevent any paraffin from penetrating into the instrument. To clean the drainage channels and outlet holes it is very advisable to use a cotton swab.

Empty both paraffin collection trays regularly. Emptying frequency may vary depending on use but at least **ONCE A DAY**. If the paraffin collection trays are not emptied following instructions above, excess paraffin will flow into the instruments and may damage the instrument.



Cleaning any paraffin that may be deposited in the waste collection trays is much easier if a simple piece of paper is placed so that it covers the whole bottom of each tray. Paper should be removed carefully when required, but at least **ONCE A DAY**.

Before the removable paraffin trays located right and left of the dispensing nozzle, rest of liquid paraffin should be with great care to avoid that paraffin can and penetrate in the instrument inner parts through the sliding cover slots.

Troubleshooting

The following list of possible problems and checks should help you find the cause of the most common difficulties that may arise during normal operation.

The POWER pilot light does not come on

Check:

- the electrical connections to the power supply.
- the position of the switch on the rear panel
- the condition of the two fuses located above the switch

No paraffin is dispensed

Check:

- that the temperatures of the paraffin, delivery tube and valve have been set to adequate values (page 19)
- that the nozzle flow rate is adjusted correctly (page 11)

Alternatively operate the pedal and/or the touch-plate to see which of the two systems is failing.

Some of the zones do not heat

Check that the temperatures are programmed correctly.

The cold area does not cool

Contact the Maintenance Service Center

In any case, if the unit still fails to operate after completing these checks, immediately contact the Maintenance Service Center

Alarm messages

Should any technical failure that could damage the unit occur during operation of the Dispensing Console or the Cryo Console, the screen will display one of the following messages:



ERROR
SECURITY

Indicates that the system has stopped automatically because of excess temperature.



ERROR
SENSOR ERROR

Indicates that one of the temperature probes controlling the heating process is faulty.

In any case, turn the unit off using the switch located on the rear panel of the console or disconnect it from the power supply and immediately notify the Maintenance Service Center.

In case of malfunctions and/or service work, please turn off the instrument and contact your local dealer.

Disposal of the instrument after final shutdown



After the final shutdown of the instrument, we recommend to contact a local recycling company for the disposal according to the national applicable regulations.

Technical Service

Contact your distributor

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