

**ATP200**

**CAROUSEL TISSUE PROCESSOR**

**Operation Manual**

**AMOS SCIENTIFIC PTY.LTD. ABN37 159 778 140**

**[www.amos-scientific.com](http://www.amos-scientific.com)**

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Congratulations!

This product is the result of many years of research and development so that you have a product with excellent quality.

We are glad for your appreciation of AMOS that throughout the years has been gradually dedicating itself to deliver trustworthy products and which care for the expectations of our Customers.



**It is indispensable to read this manual before switching on any product operation.**



**NOTE: Every procedure performed by the automatic tissue processor must be accompanied by a qualified operator. AMOS is not responsible for damage to the processed material caused by not monitoring or no observation to the comments of this manual.**

**1-) Product description:**

CAROUSEL TISSUE PROCESSOR – MODEL ATP200 was developed for use in Pathological Anatomy Laboratory. It is indispensable for the automatic preparation of histological tissue sample, teeth, bones and other materials.

The product provides:

- Procedure Manual
- Warranty certified
- Power cable
- Spare fuse
- 03 stainless steel baskets with capacity for 85 cassettes each
- 10 beakers (glassware) for chemical reagents and 01 spare
- 02 paraffin mugs
- 01 no-break
- 500 cassettes

**2-) Techniques specifications of the product:**

- **Voltage:** 100–240 V/50-60 Hz (Optional - without selector switch. The voltage choice must be made in the act of the purchase).
- **Input Maximum Current:** 127 V = 2,97A e 220 V = 1,80 A
- **Potency** 415 W
- **Fuse:** 20 mm, normal, corrente 10A (127 V e 220 V).

- **Thermal Protector:** Disarm to high temperature when it reaches 212 °F (100 °C). General shutdown of the equipment. Automatic rearm below 203 °F (95 °C).
- **Operation Mode:** Continuous
- **Protection Against Incoming Water Harmful:** IPX0
- **Capacity:** 2 liter of reagent or paraffin in each Becker and up to 85 cassettes for basket.
- **Temperature control:** Environment temperature up to 90 ° C with a range of up to + - 2 ° C through Digital Thermostat.
- **Hat diameter:** 810 mm
- **External diameter:** 810 mm
- **Base depth:** 650 mm
- **Base width:** 460 mm
- **Equipment total height:** 70 mm
- **Net weight:** 68 kg
- **Gross weight:** 110 kg
- **Packing External Dimensions:** 910 mm X 910 mm x 970 mm
- **Product in agreement with IEC 61010, Class I**
- **Product in agreement with IEC 61010-2010 and 98/37 Regulations.**

### 3-) Product parts:



### 4-) Product use instructions:

Read the instructions for using the equipment in the best possible way for greater durability of the equipment. Pay attention to the precautions that need to be taken while handling the equipment.

Read the Warranty Terms.

NOTE: This product does not require any technical intervention for their installation. Just follow the instructions below:

1. Before connecting the product to power source, make sure if the network voltage is the same of product.
2. Clean this product as determined by this manual.
3. Connect no-break into the power outlet. It is a bivolt no-break and it can be powered on in 110 V or 220 V.
4. Connect the equipment to one of the no-break outputs.

5. Turn on the back key on the equipment.



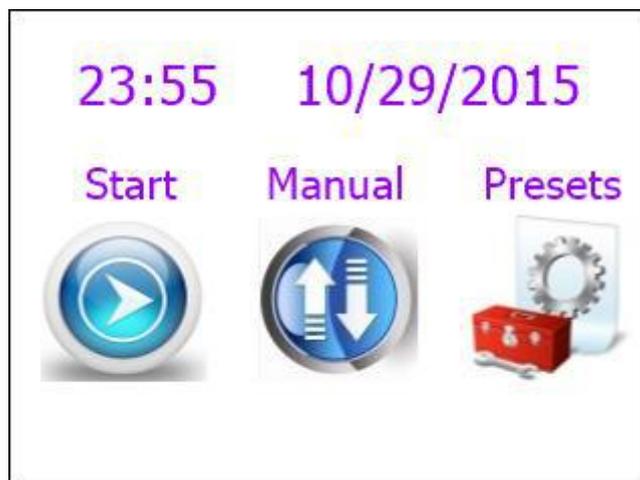
- 1- In the front panel display, the following message will appear.



- 1- TO SET THE CLOCK AND CALENDAR:

\*If the date and time aren't correct according to current date, follow the following step.

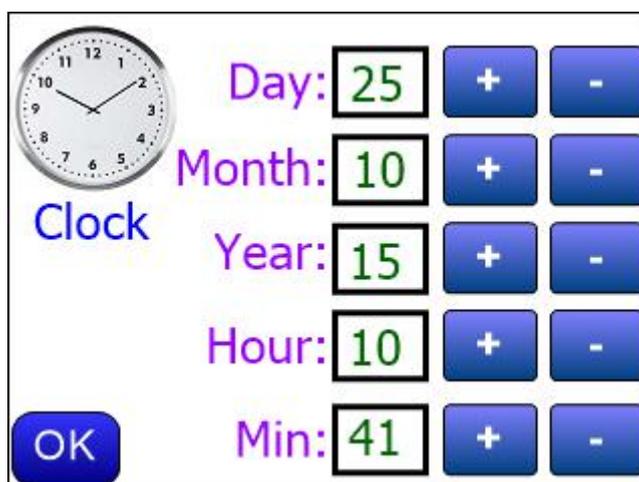
In the Start Screen, press the [Presets] key



In the Screen below, select [Data/Hora]



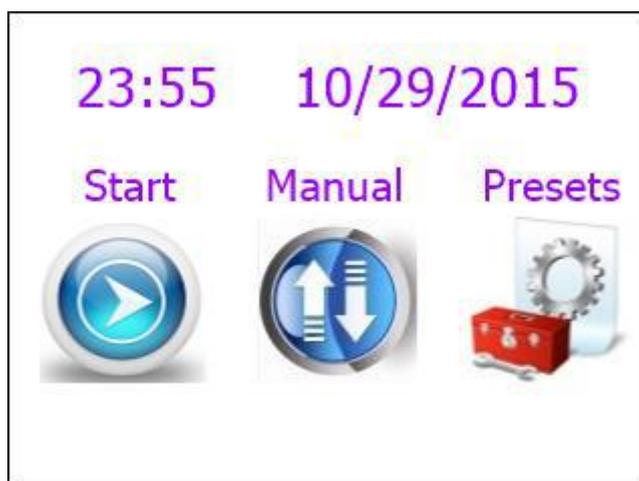
In the Screen below, click on [+] or [-] and set the Day, Month, Year, Hour and Minute



Click on the BACK ARROW to come back and then this screen appears



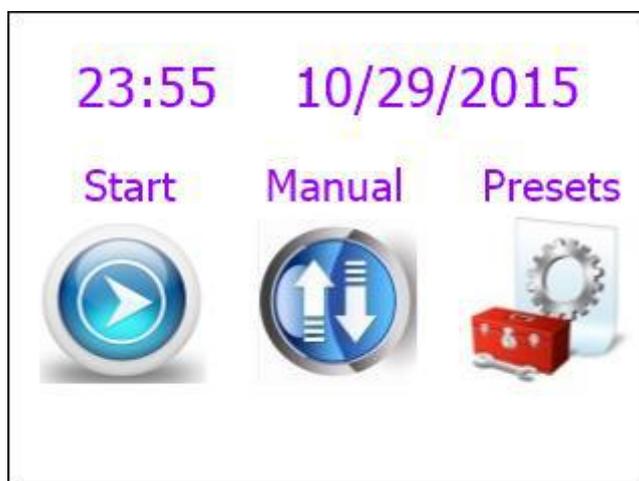
Click on the BACK ARROW to come back and then this screen appears



2- PARAFFIN WORK TEMPERATURES PROGRAMMING:

\*Calibrate the Temperature of Paraffin Mugs in agreement with the Paraffin Temperature to be used and in agreement with the environmental temperature, so that Paraffin turns into fluid and without "butterfat" on the surface.

In Start Screen, press the [Presets] key



In the Screen below please enter the factory password 1234 and press [Enter] key

Senha:

1	2	3
4	5	6
7	8	9
ESC	0	Enter

In the Screen below select [Prt Gerais]

Clock	Prt Pgm4	
Prt Ger.	Prt Pgm5	
Prt Pgm1	Prt Pgm6	
Prt Pgm2	Prt Pgm7	
OK	Prt Pgm3	Prt Pgm8

In the Screen below select [+] or [-] and setting the Desired Temperature of T1 and T2 Mugs.

Presets Common

Mug Temp. 1:

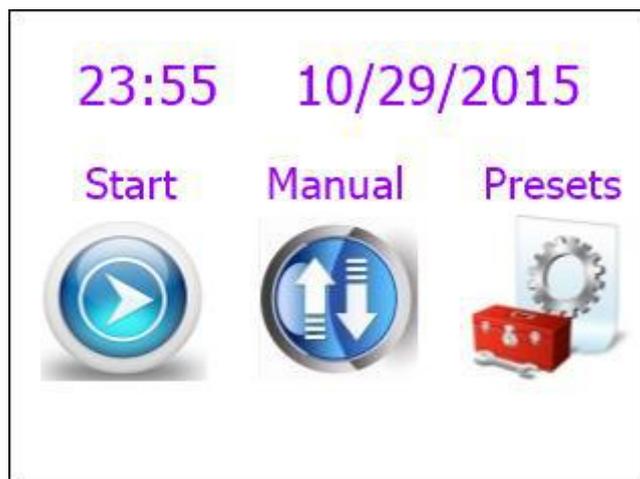
Mug Temp. 2:

OK

Click on the BACK ARROW to come back and then this screen appears



Click on the BACK ARROW to come back and then this screen appears

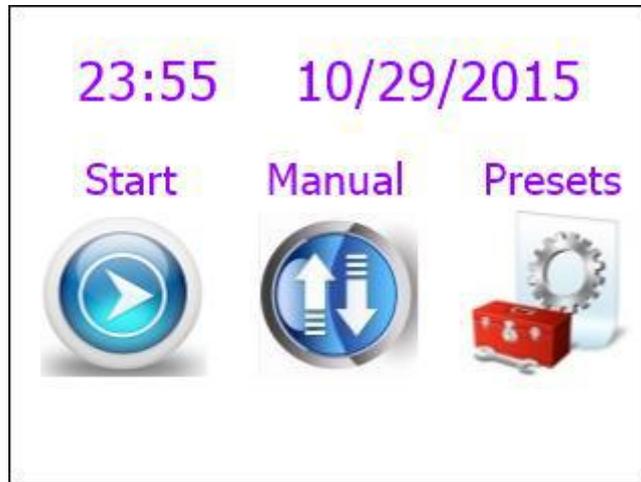


3- TO EFFECT A WORK PROGRAMMING:

The equipment is delivered from the factory with the following programmings:

- \*Program 1: 60-minute bath changes
- \*Program 2: 30-minute bath changes
- \*Program 3: 15-minute bath changes
- \*Program 3: 1-minute bath changes

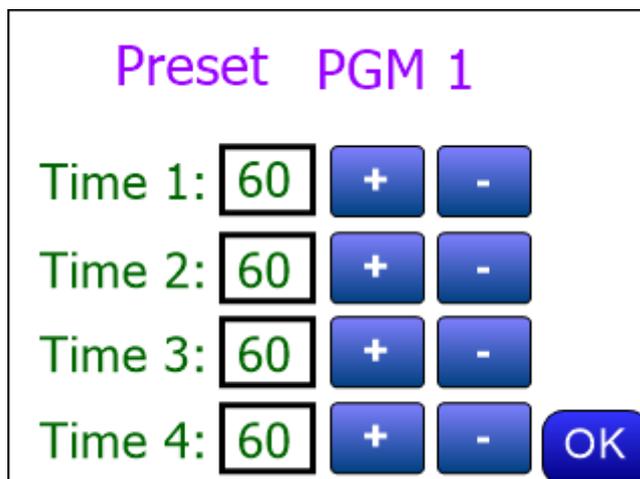
In Start Screen, press the [Presets] key



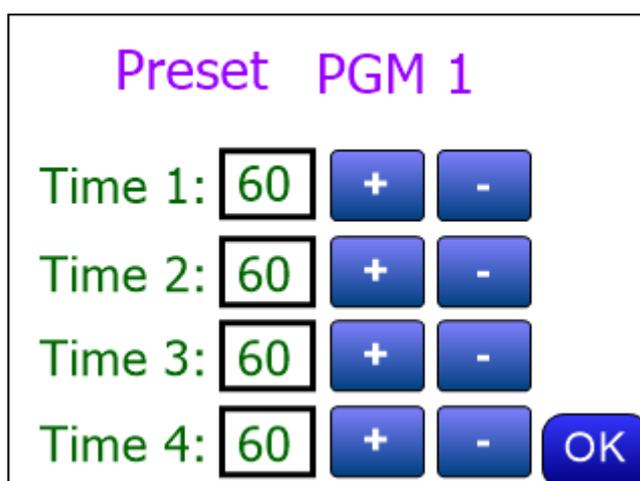
In the Screen below select [Prt Pgm 1] or any other that you want to modify or make a new Programming



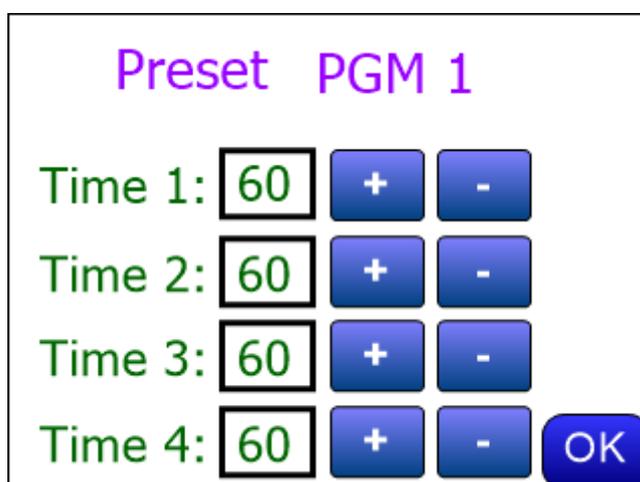
In the Screen below press [+] or [-] and set the Time of each Immersion that will be in accordance to the used reagents.



Press the Arrow and go to the screen below



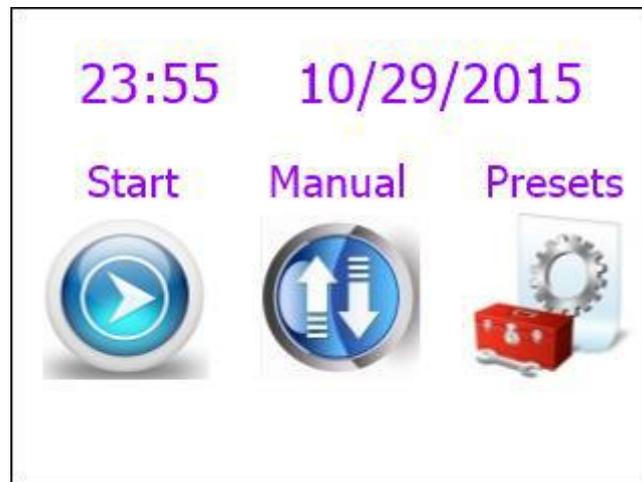
Press the Arrow and go to the screen below



Press the Arrow and go to the screen below



Click on the BACK ARROW to come back as the following screen appears



4- HOW TO LOAD THE BASKETS:

In the Start Screen, press the [Manual] key

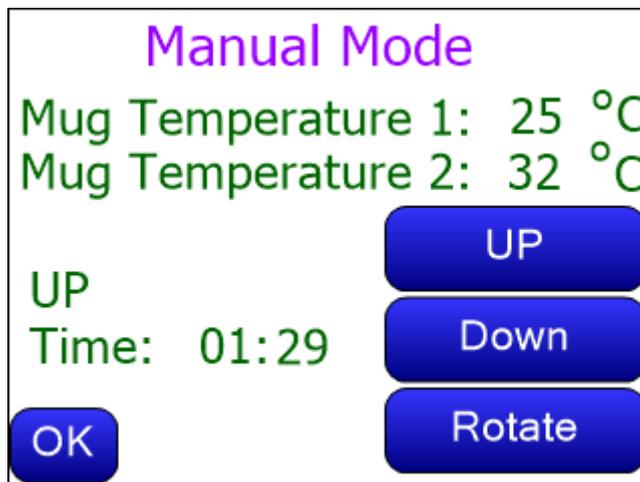


In the Screen below press [Sobe], [Desce] or [Gira], according to the desired movement.

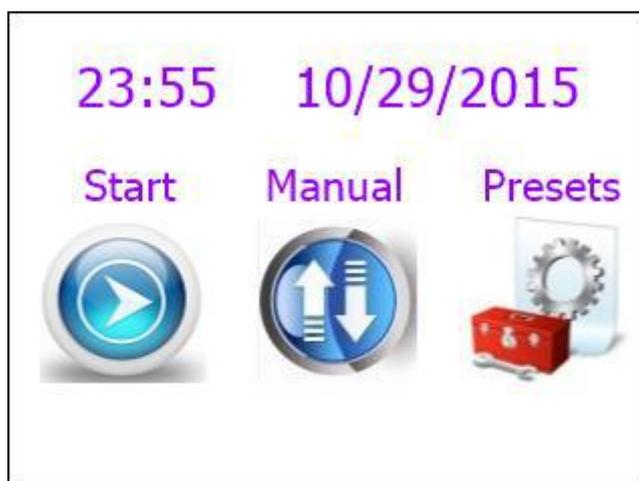
[Sobe]: This option will raise the Cover ("Hat") to charge the basket for Processing

[Desce]: This option will descend the Cover ("Hat") to dip the basket and if needed, to start the Processing

[Gira]: This option will turn the Cover ("Hat") until the basket gets to the Desired Place

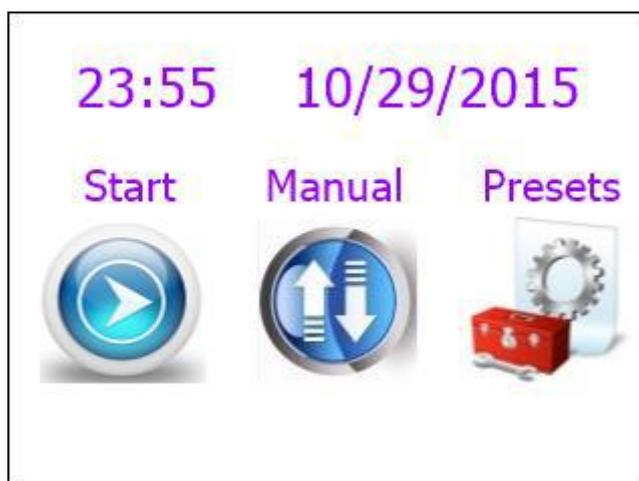


Click on the BACK ARROW to come back and then this screen appears



5- HOW TO START AN IMMEDIATE PROGRAMMING:

In the Start Screen, press the [Presets] key



In the Screen below select the Program that will be used

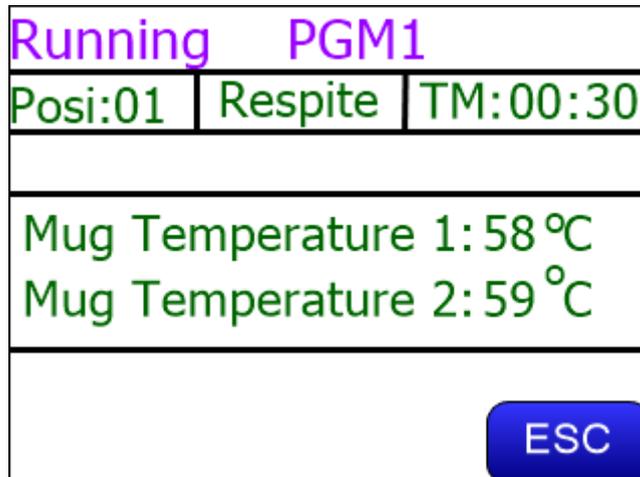


In the Screen below select if you want to start the Program immediately or with delay



Immediate start

Click on [INÍCIO IMEDIATO] (immediate start) and the Selected Program will be started and the screen below appears



Starting with delay

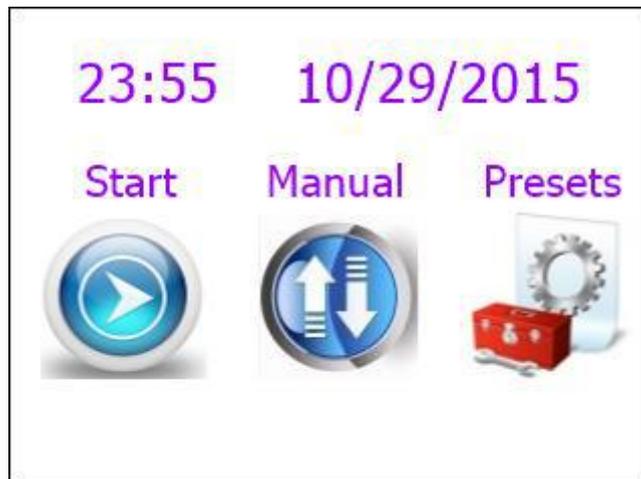
Touch [INÍCIO RETARDO] (start with delay) as the screen below is shown. Select the day, month, hour and minute that you want the Selected Program to start.



Click on [OK] Screen and the Screen below will appear indicating which the selected Program is and when it will start

6- HOW TO RESET THE MANUFACTURES PARAMETERS

In the Start Screen, press the [Presets] key



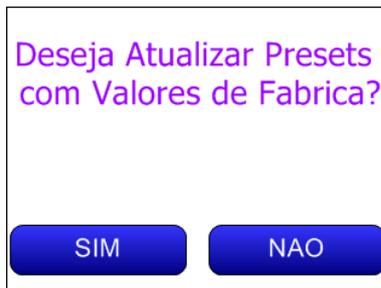
In the Screen below type the password 99 and then press the [Enter] key



Senha: [Redacted]

1	2	3
4	5	6
7	8	9
ESC	0	Enter

In the Screen below choose between yes [SIM] or no [NÃO]



Deseja Atualizar Presets com Valores de Fabrica?

SIM NAO

If you chose yes, the next Screen will appear



Preset Atualizados com Valores de Fabrica

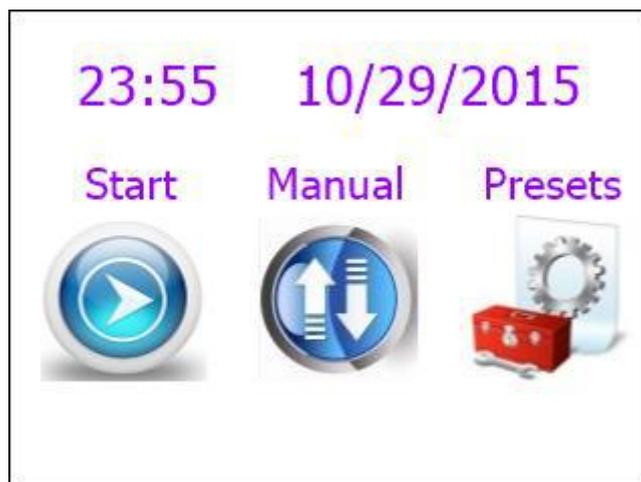
SIM NAO

Verified through [SIM] key, the screen below will appear



7- HOW TO CANCEL A CYCLE IN PROGRESS

In the Start Screen, press the [Inicia Ciclo] key



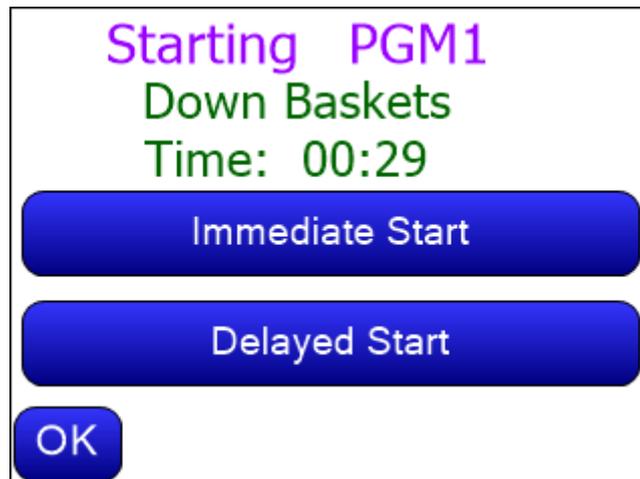
In the Screen below select the Program that will be used



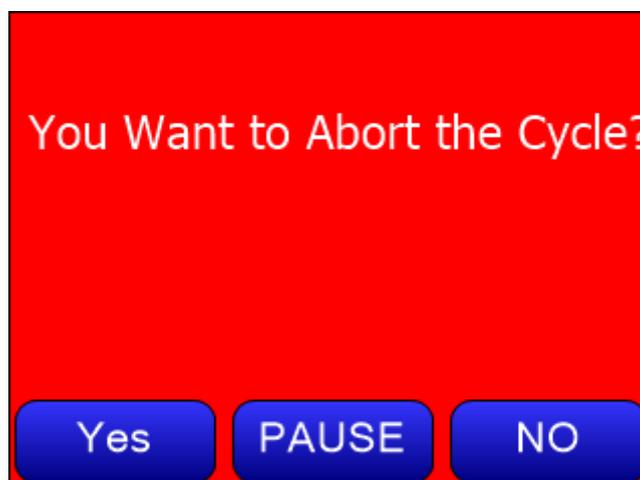
In the Screen below select if you want to start the Program immediately or with delay



In the Screen below will appear the following Screen



If you choose to cancel the Cycle, press [ESC] and the following Screen will appear



Confirm by pressing [SIM] and the Cycle will be canceled, or press [NÃO] and the cycle will continue.

### **5-) Cleaning:**

Product surfaces are easy to clean.

To clean the product you need to unplug it from the power and wait for the inner container cool. For cleaning product and paraffin removal that is deposited on the surface, use a soft cloth soaked in kerosene.

After cleaning with kerosene, you can apply with soft, moist cloth, and a neutral detergent.



**Solvent as Xylene and its derivatives does not have to be used for cleaning the equipment. This will cause irrecoverable damages to the Product!**

### **6-) Cautions and Warnings:**

Read the product handling instructions carefully and instruct with the technical details before use.

- Make sure that the product and the laboratory electric current match, and then connect the product in the power outlet.
- The product tank can get very hot during the process so, beware of burning.
- Change the paraffin always when it is necessary.

**The product was designed for using exclusively to process the material!**

**Risk of fire!**

**Flammable fuels or substances should not be handled close to the product!**

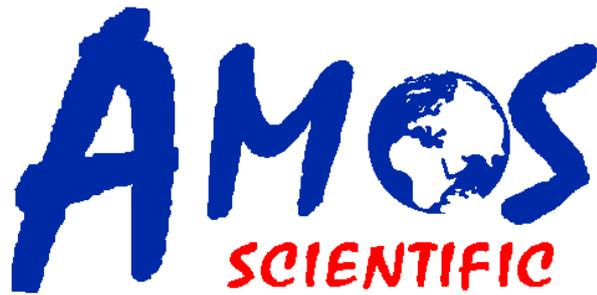
- The Product cannot be used without Paraffin in the Mugs.
- The Paraffin Mugs need to be connected with each other, and in the correct positions.
- For any repair or maintenance, call the Authorized Service Center.

### **7-) Maintenance and troubleshooting:**

- Every 15 days ascend the equipment hat with the panel manual system using the function [1] [SOBE], drip 3 lube oil drops that came with the Equipment in the felt washer of the central pipe of ascent, and return the hat to the initial position selecting the function [3] [DESCE].
- For any repair or maintenance, the product must be turned off and unplugged from the power outlet.
- In the chart below there are some problems which may occur and their causes and solutions.
- If the problem does not fit in these descriptions, please contact immediately our Service Center and see more details at the end of the manual.

Problem	Cause	Solution
<p>Nothing happens when the key power is on (ON).</p>	<p>Is the input power cable connected correctly to the power outlet?</p>	<p>Check if the input power cable is connected to the power outlet and to the equipment.</p>
	<p>Check if the power ON/OFF key is on (ON)</p>	<p>Put the key at ON position. Check for power into the outlet.</p>
	<p>Fuse</p>	<p>Remove the fuse from the fuse holder and check if it is not broken or with the filament interrupted. If it is necessary, replace it for similar.</p>
	<p>The paraffin either heats or does not, but does not melt</p>	<p>The wire of mug is broken or with poor contact.</p> <p>Sensor with malfunction</p> <p>Paraffin mug resistor with malfunction</p> <p>Call the Authorized Service Center.</p>
	<p>Error in the movement engine</p>	<p>Burns the Fuse of up/down motor or the Spinning Motor</p> <p>Contact our Service Center.</p>
	<p>Power failure during the Program Execution</p>	<p>If the power is reestablished the Program will continue starting from where it was, with a 3-hour delay, which is enough for the Paraffin to melt and stabilize.</p>

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