

LUPETEC[®]

TECNOLOGIA APLICADA



DIGITAL HOT PLATE

MODEL PA 2012



PROCEEDING MANUAL

Lupe Indústria Tecnológica de Equipamentos para Laboratório LTDA – ME

BRAZILIAN INDUSTRY – NATIONAL PRODUCT

WebSite: www.lupetec.ind.br

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Congratulations!

You have just acquired a Product with Total Brazilian National Technology.

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 the Brazilian National Industry 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.

1-) Product description:

DIGITAL HOT PLATE - MODEL PA 2012 was developed for use in Pathological Anatomy Laboratory. Suitable especially for heating metal molds, plastic cassettes and microscope slides. Enable to use simultaneous the warmed tweezers holder.

The product provides:

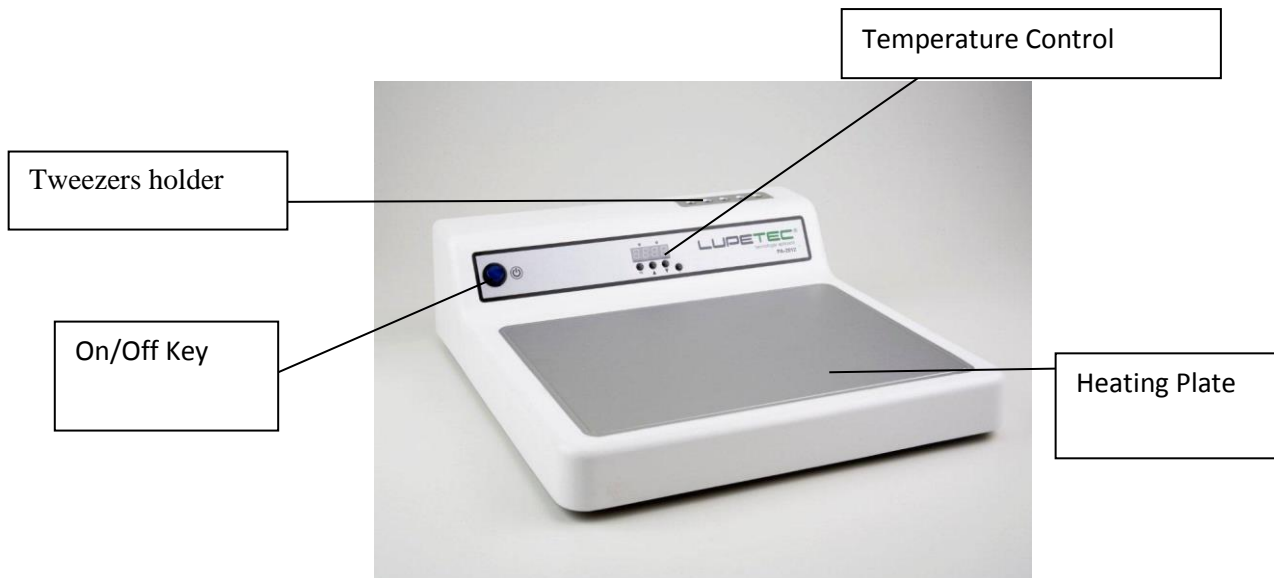
- Procedure Manual
- Warranty certified
- Power cable
- Spare fuse

2-) Techniques specifications of the product:

- **Voltage:** 127 V or 220 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 = 3,5 A and 220 V = 1,5 A
- **Potency:** 350 W
- **Fuse:** 20 mm, normal, 5A current (127 V and 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:** up to 80 Metallic Base Molds or 50 Microscope Slides.
- **Temperature control:** Environment temperature up to 90 ° C with a range of up to + - 2 ° C through Digital Thermostat.
- **Work surface width:** 372 mm
- **Work surface depth:** 272 mm
- **Equipment width:** 410 mm

- **Equipment total height:** 110 mm
- **Equipment depth:** 430 mm
- **Net weight:** 8,7 kg
- **Gross weight:** 10,0 kg
- **Packing External Dimensions:** 500 mm X 500 mm x 200 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:

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 the power cable through the back connector.



4. Connect the equipment with the On/Off Switch from the Front Panel. When driving On the switch, a luminous indication shows that the product is powered and ready to operate.



5. On the front panel there are four keys, three keys for Product temperature adjust. The F key is used only for factory maintenance. (Accidentally touching it does not cause any damage to product usage).



6. When the product is turned on the work surface temperature appears on the screen.



Activate the PR key and the message SP will appear on the screen:



Activate the PR key again and the temperature to be set to work appears flashing on the screen.



Activate the ▲ key to increase the work surface temperature value.

Activate the ▼ key to decrease the work surface temperature value.



Click again on [PR] button and hold it for 5 seconds to confirm the set value. Then the SP message and then the internal current temperature from tank appear on the screen.

During the heating process, especially when the product is turned on, the indicated temperature on the front panel may exceed the job-selected value. This does not affect the product operation and in a few minutes the temperature stabilizes and is expected to remain stable due to the specified value. After about an hour check if the set temperature value corresponds the Front Panel's one.

6. The indicated temperature on the front panel is the current temperature work surface.
7. When work routine is over you can turn off the product by pressing the on/off switch from the front panel so that the indicator light turns off. We recommend keeping the product turned off if not used daily or for long periods. Do not forget to clean and dry the tank after use.

Temperature control adjustments from the warmed tweezers holder:

Place a thermometer on the tweezers holder container to measure and adjust the temperature.

Turn the thermostat knob clockwise to increase the temperature and counterclockwise to decrease the temperature. After this procedure the thermostat will maintain the set temperature.



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 work surface can get very hot during the process so, beware of burning.

The product was designed for using exclusively with water or paraffin!

Risk of fire!

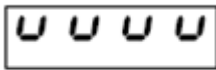
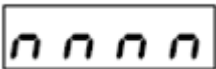
Flammable fuels or substances should not be handled close to the product!

- The equipment should not be used without water in the tank. Damage risks and loss of warranty.
- For any repair or maintenance, the Authorized Service Center must be called.

7-) Maintenance and possible problems and resolutions:

- For any repair or maintenance, the product must be turned off and unplugged from the power outlet.
- See below some problems that can occur and their causes and solutions.
- If the problem does not fit in these descriptions, please contact immediately our Service Center
- See more details in the end of the manual.

Problem	Cause	Solution
Nothing happens when set the key in power (ON).	Is the input power cable connected correctly in the power outlet?	To check if the input power cable is connected in the power outlet and in the equipment.
	Check if the power ON/OFF key is on (ON)	Put the key at ON position. Check for power into the outlet.
	Fuse	Remove the fuse of the fuse holder and check if it is not broken or with the interrupted filament. If it is necessary, replace it for similar.

Problem	Cause	Solution
The water in the tank does not heat.	<p>Check the previous steps.</p> <p>Check the controller temperature selection.</p> <p>The heating resistor is damaged.</p>	<p>Same the steps above.</p> <p>Adjust the temperature.</p> <p>To call the Authorized Service Center.</p>
	Open sensor	To call the Authorized Service Center.
	Sensor with short circuit	
The tweezers holder does not heat.	Burned resistance	To call the Authorized Service Center.

8-) WARRANTY:

- Warranty terms are attached to this manual.

9-) SYMBOLS:



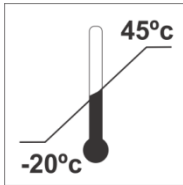
Sensível ao calor
No heat



Frágil
Fragile
Handle with care



MANTER DISTANTE DA CHUVA
Keep away from rain



Guardar em temperatura:

Recommended storage temperature:
- 20° C to 45° C



Empilhamento máximo:

Stacking up recommended:
6 boxes.



HOT PLATE PA 2012

Voltage: 127 V 220V

Power: 350W

Frequency: 50/60HZ

Serial No.: XXXXX

Date of manufacture: XXXXXX

Expiration: Indefinite

Miguel João Street, 720 - Jd. Bandeirantes

São Carlos - SP - Phone: +55 (16)

33611125



Voltage: 127 V 220 V

Power: 350 W

Frequency: 50/60HZ

CLASSE 1 EQUIPMENT

Tech. Manager: Luiz Ricardo Martins

CREA-SP: 5060262236

Date of
manufacture:

Número de Série:

Operation:
Continuous

IPX0





Lupe Indústria Tecnológica de Produtos para Laboratório LTDA - ME

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For more information and clarifications please contact our Technical Department +55-11- 2082-3178

Technical Manager: Luiz Ricardo Martins – CREA SP 5060262236

This product is not considered a medical product by The Brazilian Health Surveillance Agency (Anvisa).

Non-perishable product.

Estimated useful life of 5 years.

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