

PRP PLATELET INCUBATOR USER MANUAL

1. INTRODUCTION

This manual provides important safety information for the PRP Platelet Incubator. It should be kept near the equipment for quick and easy reference. The Incubator has range from ambient +5C to 120C making it useful for a wide range of applications. Probe is provided for monitoring accurate temperature of samples.

2. INTENDED USE

The Platelet Incubator is intended for the application of gel creation from plasma. It heats up the platelet rich plasma, which when cooled, thickens into a gel substance which can be used as an injectable filler.

NOTE: Before using the instrument, please read this user manual carefully. This user manual is intended to assist with the operation and care of the unit only and not its repair. For repair, please contact us at enquiries@hawksley.co.uk

3. BIOFILLER PRP INSTRUCTIONS

The Hawksley PRP Platelet Incubator is intended for the heating of platelet rich plasma. The incubator is to be used in conjunction with the cooling element, which hardens plasma into a useable filler or gel;

1. First, put together the heating components. You will need to use all four plastic guards for the correct height of a 1ml syringe from the T-Lab PRP kit. This is also for safety purposes as to not touch the heating block.



2. Preheat the block to 90 degrees. Precool the cooler by turning it on and placing the metal cup inside.



3. Add syringes to incubator and heat for 8 minutes at 90 degrees. Use lid for quicker heating.







5. The work environment will affect cooling, so check by touching that the syringe is body temperature or below before injecting into the patient.



4. STANDARD ACCESSORIES

Power adaptor, block lifter, plastic guards, product user manual & warranty card.

5. TECHNINCAL SPECIFICATIONS

Temperature Range	Ambient +5 to 120°C
Temperature Uniformity	± 0.5°C
Temperature Stability	± 0.5°C
Set-up Block material	Aluminium alloy
Number of Blocks	1 Nos
Display	Digital
Run Time & Modes	1min to 19Hr 59min
Ambient Temperature	5-40°C
Permissible Relative Humidity	≤80%
IP Rating	IP21
Dimension with Stack Lid	193 x 92 x 145 mm
Power Adapter Detail	Input - 100-240 VAC, 50/60 Hz Output - 24V 4A
Power Consumption	85 W
Altitude	Use upto an altitude of 2000 m above MSL
Pollution Degree	2
Environment	For indoor use only

6. SAFETY PRECAUTIONS

Read all safety & usage information provided in this manual carefully before using the device.

- Never use the instrument in any manner not specified in this manual or by us, this may result in laps of warranty.
- Repairs must only be performed by authorised service technician.
- Only use recommended original spare parts for best result & product safety.
- If liquids are spilled in the blocks, the instrument must be cleaned carefully and properly before being used again.
- Prior to use, tubes/syringes should be visually inspected for material damage.
- Damaged tubes/syringe must not be used as this can result in sample loss and the contamination of the product.
- This product must be used for specified applications only. It must not be operated in a hazardous or flammable environment and must not be used to mix explosive or highly reactive substances.
- Do not place the potential hazardous material within the clearance area/envelope.
- Wear your personal protective equipment in accordance with the hazards category of the medium to be processed. There is risk of liquid splashing.
- Do not move the instrument while it is operating or connected to the main power supply.
- Do not touch the Block surface when temperature of Platelet Incubator is over 50°C, this could result in serious burns or injury. Pay attention to the residual heat after switching off.
- Properly lift the device with both hands while moving or installing. Also, the device should only be moved from its position once it attains the room temperature.
- Do not lean on the equipment. It may damage the equipment or harm the operator.
- Do not fill tubes near the device. Liquid spillage may harm the device.
- In the event of contamination caused by aggressive agents, the device must be cleaned immediately using a natural cleaning liquid. If any damage is seen, contact Hawksley.
- Only process media which will not react dangerously to heating.
- Do not operate the appliance in explosive atmosphere with hazardous substance or under water.

7. INSTALLATION

Gently remove the upper packaging and take out the incubator by holding it from the bottom. When this equipment is used for the first time, ensure that all the packaging accessories are removed from the product.

LOCATION & MOUNTING

Place the device on a flat and levelled surface and ensure that all four feet stand on the surface firmly. Avoid installing on a slippery surface or surface prone to the vibration.





- 1. Ideal ambient temperature is 20°C \pm 5°C; avoid placing the device in direct sunlight.
- 2. Keep area around the device clear by a minimum of 30cm from all sides to guarantee cooling efficiency.
- 3. Keep this away from heat or water to avoid sample temperature issues.
- 4. Do not place the device in such a place that it becomes difficult to operate.
- 5.Lid guards are used with blocks to increase the height of the incubator. Ensure the lid is closed to maintain the temperature uniformity.

8. REMOVING & INSTALLING BLOCKS

REMOVING BLOCKS

Device blocks can be removed/changed by a simple screwing device in to the blocks for lifting/removing/changing the blocks. Below image shows the process to remove the blocks.

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INSTALLING BLOCK

Follow the exact reverse process to insert the blocks back into the incubator. Below image shows the step by step procedure to replace the blocks back in the unit.

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9. USER INTERFACE & DISPLAY



CONTROL PANEL OPERATION

Buttons		Function
	START	Start /stop button for operation start and stop.
	MODE	 Probe / plate mode selection (long press standby condition) Temp / time change (single press)
		(+) and (-) button will increase and decrease the value of TEMPERATURE/TIME and Prog command.

All LED will blink as per status of command.

10. OPERATION SWITCH ON THE DEVICE

After connecting the power cord, switch ON the main power supply. Make sure that tubes are placed properly are placed properly in the wells.

10.1 START / STOP OPERATION

- Single press button to "START" Operation (as per set time, temp & mode).
- At the start of Operation, temperature will increase on display. Press the same button again to "STOP".

10.2 MODE

• When selecting the "MODE" button, you can enable Time and Temperature Mode alternatively. To change value, Press (+) and (-) button.

- You can set the time from 1 min to 19hr: 59min, or infinite "][" mode.
- The TIME value will increase by 1 min by a single press of the (+) button
- After adjusting temp & time, value will be saved after light blinks 5 times, then it will show you the home screen

10. 2.1 HEATING FUNCTION

- You can set the temperature from ambient +5°C to 120°C
- The temperature value will increase by 0.1°C by pressing (+) button once, and decrease by the (-) button. The temperature remains in CELCIUS
- When turning on the unit, display shows the value of the default temperature function. By pressing (+) or (-), the temperature set value increases or decreases accordingly. When the value chosen blinks 5 times, it is saved. After this, you will see "room temperature" on screen.
- For fast increment and decrement of temperature settings, press (+) or (-) button continuously for a longer period. After the desired value is displayed, the value will blink 5 times and then stop. This means the value is saved.

Note: Heating function works only when the set temperature is above room temperature.

10. 2.2 PROBE SELECTION

- By pressing the MODE key for approx. 1.5 seconds, prove mode will be activated.
- Probe LED will flash with activation
- If not in probe mode, the device will automatically work in plate mode. User can change between plate/probe mode by pressing MODE button only when device is in standby.
- In probe mode, NTC probe is to be kept in the block to measure the accurate temperature

10. 2.3

- By pressing MODE, the time LED will flash. This shows the Time Command Activation where time parameters can be changed.
- "19.59" (19hr:59min) value will display on the window when machine is initiated for the first time
- To set time value, press (+) and (-) for increment and decrement of value from 00.01 to 19hr 59min. After your desired value is in the window, the value will blink 5 times then stop, meaning the value is saved.
- The time value will increase by 1 minute with each single press. Time is displayed in (hour.minute) as shown on the display.
- During a run, if the time condition is changed, the timer will reset and count from the beginning. After 19hr:59mins, you can select infinite mode which is shown as "][".

11. CALIBRATION (PROBE MODE)

- Press (MODE) and (+) button together after the set temperature is reached on the unit display
- Set the reference temperature as per the master instrument temperature, the display will blink 5 times and the value is saved

Example: Set value is 100, reference value is 101.2. Then set 101.2 in calibration mode and calibration is done once the value is saved

• In case of reset of calibrated value, press [Mode] and (+) together and change the value of "set temperature".

12. CLEANING & MAINTENENCE

- As the incubator has no mechanical moving part, it requires very little maintenance and cleaning.
- Cleaning should be done with mild detergent and water.
- Unplug the unit from its power source before a cleanup process. In the case
 of any spillage, allow the device to cool before further cleanup or removal of
 blocks.
- The holes of the blocks should be regularly cleaned with a damp cloth to ensure the tubes/syringes are well connected to the wall, allowing good heat conduction.

- Use a slightly damp cloth for the cleaning process.
- Wipe the exterior of the machine with a damp cloth.
- Cover the samples with the device lid over the block, as this cover provides thermal insulation and reduces water condensation

Note: User is solely responsible for decontamination of the unit in case of spillage of hazardous material.

13. TROUBLESHOOTING

Error code	Cause	Effect	Solution
Er 01	Break in safety circuit	Heating off	Switch off device & allow to cool down. Otherwise to carried by authorized service person
Er 02	Heating not progress	Heating off	Switch off device. Otherwise to carried by authorized service person
Er 03	NTC probe sensor failed	Heating off	Switch off device. Only to be carried by authorized service person
Er 04	Probe not in liquid medium	Heating off	Put probe in liquid medium
Er 05	Heater NTC 100k failed	Heating off	Switch off device. Only to be carried by authorized service person

14. WARRANTY STATEMENT

The product has a warranty to be free from defects in material and workmanship for a period of two (2) years from the date of purchase. Your product will be duly repaired upon prompt notification in compliance with the following conditions:

The warranty is valid only if the product is used for its intended purpose and within the guidelines specified in this instruction manual. This warranty does not cover damage caused by accident, neglect, misuse, improper service, natural forces or other causes not arising from defects in original material or workmanship. This warranty does not cover any incidental or consequential damages, commercial loss or any other damages from the use of this product

All items returned for service should be set with postage prepaid in the original packaging or other suitable carton, added to avoid damage

The warranty is valid only if the warranty is registered with the supplier within 30 days from the date of delivery of product.

For your reference, make a note of the serial number, date of purchase and supplier				
here.				
Serial No.	Purchase Date			
Supplier				

15. PRODUCT DISPOSAL

In case the product is to be disposed of, the relevant legal regulations are to be observed, information on the disposal of electrical and electronic devices as stated by the Electronic Community.

The disposal of electrical devices is regulated within the European Community by national regulations based on the EU Directive 2012/19/EU on waste electrical and electronics equipment (WEEE). According to these regulations, any devices supplied after 13.06.05 in the business to business sphere (to which this product is assigned) may no longer be disposed of in municipal or domestic waste. They are marked with the following symbol to indicate this.



As disposal regulations within the EU may vary from country to country, please contact Hawksley if necessary.