

Equipment Operation Procedure

| Document I | Number: SASoM/EQUIP/066.v2 | |
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| Title: | Use and maintenance of the Grant PCH2 Heat Block | |
| Version: | v2 | |
| Author: | Paul Reynolds | |

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|-----------------|------------|-------------------------|
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| SOP History | | |
| Number | Date | Reason for Change |
| v1 | 26/09/2013 | Ori <mark>gi</mark> nal |
| v2 | 26/09/2018 | Update |
| | | |

1.0 Purpose -

The purpose of this SOP is to outline the principles of the routine use of the Grant PCH2 Heat Block in Laboratory 248 at the St Andrews School of Medicine (SASoM).

2.0 Scope -

This SOP applies to routine use and maintenance of the Grant PCH2 Heat Block within the SASoM.

3.0 Responsibilities

It is the responsibility of all users of the Grant PCH2 Heat Block within the SASoM to comply with this SOP.



4.0 Procedure –

Always wear gloves when handling tubes and putting them into the machine.

The machine has a range from -10° C to 100° C and the block can accommodate up to 20 x 1.5mL eppendorf tubes.

Both temperature and time can be programmed using the digital display.

Always turn off the machine after use.





- 2. Switch ON the power switch located on the rear panel of the PCH-2.
- 3. The backlit display on the PCH-2 shows the following: Previously set time and temperature. Operation mode indicator, current time and temperature.
- 4. Temperature setting, use the T(°C) up/down keys () to set the necessary temperature, (When the key is pressed down for 1 second or more, the temperature display changes quickly). Temperature increment is 0.1 °C.

Note that it is possible to change the set temperature in real time, i.e. it is not necessary to stop heating/cooling process to make these changes.

- 6. The PCH-2 starts heating/cooling and the corresponding operation mode is indicated on the display (H heating, C cooling) (. Current temperature is displayed in the second line of the display (.).



Equipment Operation Procedure

- To stop the heating/cooling process press T(°C) RUN/STOP key once again. It may take a few moments before the process stops and the operation mode indicator shows S - stopped.
- 8. When the necessary temperature is reached, open the PCH2 block lid, place tubes into the sockets and close the lid. Use standard tubes, since the block sockets are made precisely in compliance with their size and shape.
- 9. The PCH-2 is equipped with an independent reaction timer. This alerts time-up with an audible alert; it does not control the heating/cooling process.
- 10. Use the TIME up/down keys () to set the necessary time, shown in the first line of the display (). (When the key is pressed down for 1 second or more, the time display changes quickly). Time increment is 1 minute.

Note that it is possible to change the set time in real time, i.e. it is not necessary to stop the timer to make these changes.

11.Press TIME RUN/STOP key () once, to start the timer. When the set time is reached the timer will stop and a buzzer will sound.

ATTENTION!: The timer does not switch off the heating/cooling.

- 12.If necessary, the timer can be stopped before the set time is reached by pressing TIME RUN/STOP key.
- 13. When TIME RUN/STOP key is pressed again, the timer starts counting up the time from zero.
- 14. Once the heating/cooling process has finished, turn OFF the PCH-2 with power switch located on the rear panel.

Cleaning

The cases can be cleaned with a damp cloth after disconnection. Do not use solvents.

5.0 Personal protection -

Tissue culture room lab coat must be worn at all times when in 248K.

6.0 Training –

All users have to be trained before using the Instrument by a designated person.

7.0 Related documents –

- 8.1 Equipment manual
- 8.2 Risk assessments RA/GEN/008



8.0 Approval and sign off –

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