

### PRODUCTION DEPARTMENT

## STANDARD OPERATING PROCEDURE

**Title:** Cleaning, Calibration and Operation of Dry block Incubator

SOP No.:		<b>Department:</b>	Microbiology
SOF No.:		<b>Effective Date:</b>	
Revision No.:	00	<b>Revision Date:</b>	
Supersede Revision No.:	Nil	Page No.:	1 of 4

#### 1.0 OBJECTIVE:

To lay down procedure for cleaning, calibration and operation of Dry block incubator.

### 2.0 SCOPE:

This SOP is applicable for Dry block incubator, Make - Equichem, Model - Duo block in microbiology laboratory.

### 3.0 RESPONSIBILITY:

Prepared by - Executive Microbiology

Checked by - Assistant Manager Microbiology / QC

Approved by - Head QA, QC

#### 4.0 PROCEDURE

### 4.1 Switching the machine ON

- 4.1.1 Switch on the main power supply.
- 4.1.2 Switch on the machine by pressing its power button, provided at the backside of machine.
- 4.1.3 The digital display of controller will display the last set temperature at SV and actual temperature (Display temperature) at PV.

### **4.2** Setting the Temperature

- 4.2.1 Gently press <SHIFT> key and notice the unit digit (right most) of set value blinking.
- 4.2.2 Increase or decrease the value of digit by pressing <UP> or <DOWN> key.
- 4.2.3 Press the <SHIFT> key again to shift to Ten digit of set value .Now as be increase or decrease by using <UP> or <DOWN > key respectively.
- 4.2.4 Same method is applicable to adjust Hundred Digit.
- 4.2.5 Once setting is completed press<SET> key for acceptance of that value by controller.
- 4.2.6 The new set value will now be reflected on the SV display, immediately.

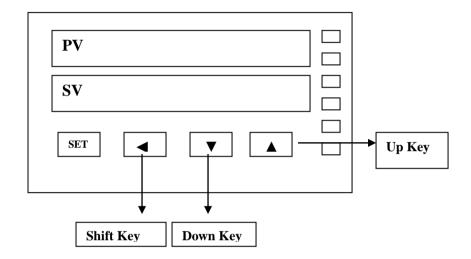


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## 4.3 Setting the Timer

- 4.3.1 Press <SHIFT> key and notice unit digit, right most of set value blinking.
- 4.3.2 By pressing <UP> or <DOWN> key, increase or decrease the value of that digit.
- 4.3.3 Press the <SHIFT> key again to shift to tens digit of set value .As above the value of that digit can be increase or decrease by using <UP> or <DOWN> key respectively.
- 4.3.4 Same method is applicable to adjust hundred digits.
- 4.3.5 Once setting is complete press <SET> key for acceptance of that value by controller.
- 4.3.6 The new set value will now be reflected on the SV display, immediately.

#### 4.4 Cleaning

- 4.4.1 Clean the Equipment and Blocks with a damp soft cloth. Occasionally, blocks can be cleaned with mild detergent solution with soft brush.
- 4.4.2 Completely dry the block before using it back into equipment.

### 4.5 Calibration

- 4.5.1 Switch on the machine, adjust its temperature to 37°C and let it stabilize for at least 45 min.
- 4.5.2 After the machine is stabilized i.e. temperature is constant on the display, place four 10 x 75 mm test tubes, having 200µl water at four corners of the heating block and one tube in the center of the block.
- 4.5.3 Place calibrated thermometers in each of the test tube and allows the temperature to stabilize.



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- 4.5.4 After the temperature is stabilized not down the readings.
- 4.5.5 Acceptance criteria for temperature is of  $\pm$  1° C with that of set temperature.

## 4.6 Frequency

Frequency for calibration of heating block is once in a month.

## 5.0 SAFETY & PRECAUTIONS:

Make sure to remove electrical connections before any maintenance or cleaning procedure.

## 6.0 REVISION HISTORY:

Revision No.	Reason for Revision	Superseded from & date	
00	First Issue		

## **7.0 REFERENCES:**

Not applicable.

#### **8.0 ABBREVIATIONS:**

SOP : Standard Operating Procedure

mm : Millimeter

μl : Micro liter

° C : Degree Centigrade

### 9.0 ANNEXURES:

Annexure - I : Calibration record of dry block incubator



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## **ANNEXURE - I**

## CALIBRATION RECORD OF DRY BLOCK INCUBATOR

Dry	block Incubator ID -		<b>Set Temperature -</b>	
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S.No.	Date	Thermometer ID	Test Tube No.	Display Temperature	Observed Temperature	Done by	Checked by	Remark
1								
2								
3								
4								
5								
1								
2								
3								
4								
5								
1								
2								
3								
4								
5								

<sup>\*</sup>Acceptance criteria: The Temperature of thermometer should be  $\pm 1^{\circ}$ C with that of set temperature