

Document I	umber: SASoM/EQUIP/030.v2		
Title:	Use and Maintenance of the IKA-schuttler MTS4 Plate Shaker		
Version:	v2		
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SOP History		
Number	Date	Reason for Change
v1	01/01/2013	Original
V2	01/01/2018	Update
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1.0 Purpose –

The purpose of this SOP is to outline the principles of the routine use and maintenance of the plate shaker in Laboratory 248 at the St Andrews School of Medicine (SASoM).

2.0 Scope -

This SOP applies to routine use and maintenance of the plate shaker within the SASoM.

3.0 Responsibilities -

It is the responsibility of all users of the plate shaker within the SASoM to comply with this SOP.

4.0 Procedure -



- 1 Power switch
- 2 LED display
- 3 Speed control
- 4 Start/Stop button
- 5 Increases time by 10 minutes
- 6 Increases time by 1 minute



The plate shaker is designed for circular horizontal agitation of two or four micro-titer plates. If using one or three plates another plate, whether or not filled, must be used.

The speed control adjusts the speed from 0 to 1100 rpms.

The time can be selected from 1 to 99 minutes.



Place and secure two or four micro- titer plates onto the platform.

Turn on by pressing the power switch (1).

The LED (2), displaying the value 0, will light up and an audio signal is heard.

Continuous operation:

Select the desired speed in revolutions per minute on the turn dial for speed adjustment (3).

The LED display (2) indicates a value of 0.

Press the "Start/Stop" button (4). The drive will start to run at the adjusted speed.

The LED display will show two small zeros.

To stop, press the Start/Stop button (4). The drive will stop and the LED display will show the value 0.

Timed:

Select the time by adjusting the "1" key (6) and the "10" key (5).

The set time will be shown on the LED display.

Timer mode is indicated by the dot on the lower right-hand corner of the LED display.

Press the "Start/Stop" button. The drive will start to run at the set speed and the decimal point will flash, which indicates timer mode.

You can stop the drive while the timer is running at any time by pressing the Start/Stop button.

The LED display will indicate the remaining time in minutes and counts down backwards until it reaches a value of 0. When the set time has expired, the drive will stop and an audio signal will sound three times. The LED display will show a value of 0 and the dot that identifies timer mode will stop flashing.



While in timer mode the time can be adjusted by pressing the 1 key and the 10 key.

Remove plates after shaking.

5.0 Personnel protection -

Howie coat must be worn at all times.

Gloves as specified in the appropriate COSHH RA

6.0 Spillages -

Always clean up any spills immediately after use.

Only you know what you have spilt and are aware of that chemical's hazard.

Mop up spills with paper towels. Wash the site of spillage with water & detergent.

7.0 General maintenance -

Clean surfaces of the apparatus with soft cloth and mild detergent.

8.0 Training -

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

9.0 Related documents –

- 9.1 Equipment manual
- 9.2 Equipment Maintenance Information sheet

9.3 Risk assessments – RA/GEN/028



10.0 Approval and sign off -

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