



STANDARD OPERATING PROCEDURE

Department: Microbiology	SOP No.:
Title: Procedure for Operation and Calibration of Colony Counter	Effective Date:
Supersedes: Nil	Review Date:
Issue Date:	Page No.:

1.0 OBJECTIVE:

To lay down a Procedure for Operation and Calibration of Colony Counter.

2.0 SCOPE:

This SOP is applicable for Operation and Calibration of Colony Counter in Microbiology Department.

Make : Multitech

Instrument ID :

Make : Lapiz

Instrument ID :

3.0 RESPONSIBILITY:

Officer / Executive - Microbiology

4.0 ACCOUNTABILITY:

Head – QC

5.0 ABBREVIATIONS:

ID No. Identification Number
Ltd. Limited
No. Number
QA Quality Assurance
ML Microbiology Laboratory
Pvt. Private
Sr. No. Serial Number
SOP Standard Operating Procedure

6.0 PROCEDURE:

6.1 OPERATION PROCEDURE:

6.1.1 Connect the power cord to mains and switch “ON” the mains.

6.1.2 Connect the marker to input socket on right side of the instrument and fix the rod (wherever applicable), tight it and fix the lens on it.

6.1.3 Switch “ON” the Power Button. The internal light will be flashed “ON” and the digital screen will show “0” or “0000” figures.

6.1.4 Place the plate with colonies to be counted on the graphed scale.

6.1.5 Open the lid of the marker and start counting by pressing the marker on petriplate, illuminated from beneath, with a large magnifying lens.



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- 6.1.6 Mark each and every colony with pressing the tip of the marker.
- 6.1.7 The number of colonies will automatically get displayed on the screen. Record the number of colonies in report and remove the plates from platform.
- 6.1.8 Press the “**RESET**” button & display will show “**0**” or “**0000**” and above procedure repeat for next petriplate observation.
- 6.1.9 After completion of observation switch off the colony counter and clean the colony counter with lint free duster previously wetted with 0.22 μ filtered 70 % IPA.
- 6.1.10 Record the Colony Counter operation details in Annexure-II, Titled “**Operation Log Book of Colony Counter**”.

6.2 CALIBRATION OF COLONY COUNTER:

- 6.2.1 Ensure that the Magnifying Lens is fixed on its appropriate place.
- 6.2.2 Switch “**ON**” the main switch of Instrument, the Screen will glow & Digital Screen will show “**0**” or “**0000**”.
- 6.2.3 Place an empty Petri plate on the Illuminating Surface, adjust the Magnifying Glass to view the clear Petri plate.
- 6.2.4 Press the tip of the marker on plate 50 times, then check the number displayed on screen, it should be “**50**” or “**0050**”.
- 6.2.5 Press the “**RESET**” button, the Digital Display will show “**0**” or “**0000**”.
- 6.2.6 Repeat the same procedure by pressing the marker pen 100 times, 150 times, 200 times, 250 times. Record the observations in **Annexure-I**, Titled “**Calibration Report of Colony Counter**”.
- 6.2.7 Calibration of Colony Counter is valid if the number displayed on the screen is equal to the number of time the marker pressed.
- 6.2.8 Switch “**OFF**” the colony counter after calibration and clean the colony counter with lint free duster previously wetted with 0.22 μ filtered 70% IPA.
- 6.2.9 Record the Colony Counter operation details in Annexure-II, Titled “**Operation Log Book of Colony Counter**”.
- 6.2.10 **Frequency:** Once in a 3 Months (± 7 days).

7.0 ANNEXURES:

ANNEXURE No.	TITLE OF ANNEXURE	FORMAT No.
Annexure – I	Calibration Report of Colony Counter	
Annexure – II	Operation log book of Colony Counter	



PHARMA DEVILS
MICROBIOLOGY DEPARTMENT

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ENCLOSURES: SOP Training Record.

8.0 DISTRIBUTION:

- Controlled Copy No. 01 Quality Assurance
- Controlled Copy No. 02 Microbiology
- Master Copy Quality Assurance

9.0 REFERENCES:

Instruction Manual

10.0 REVISION HISTORY:

CHANGE HISTORY LOG

Revision No.	Change Control No.	Details of Changes	Reason for Change	Effective Date	Updated By



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ANNEXURE – I
CALIBRATION REPORT OF COLONY COUNTER

Calibration Date		Instrument ID	
Calibration Due on		Make	Multitech / Lapiz
Frequency	Once in Three Months (± 7 days)		

OBSERVATION TABLE:

S.No.	Marker Pressed	Number Displayed on Screen
1.	50 times	
2.	100 times	
3.	150 times	
4.	200 times	
5.	250 times	

Remarks: The Calibration of Colony Counter Complies / Doesn't Comply.

Done By:

Date:

Checked By:

Date:

