



MesaLabs

Mesa Laboratories, Inc.

Biological Indicator Division

Omaha Manufacturing Facility

8607 Park Drive, Omaha, NE 68127 USA

(402) 593-0781

Bozeman Manufacturing Facility

10 Evergreen Drive, Bozeman, MT 59715 USA

(406) 585-9535

EMAIL: Blcustomerservice@mesalabs.com

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Model 1501



MesaLabs

1501 Incubator for Ampoule Biological Indicators



Model 1501

OPERATION MANUAL

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Introduction

The Mesa 1501 Incubator is designed for single temperature incubation of Mesa's ampoule biological indicators (MagnaAmp and 1ml ProSpore Ampoule).

Please read the instructions carefully.

Warranty

Mesa Labs warrants that if a product manufactured by Mesa Labs and sold within the continental United States or Canada proves to be defective in material or construction, Mesa Labs will provide you, without charge, for a period of 90 days, the labor, and a period of one year, the parts, necessary to remedy any such defect. Outside the continental United States and Canada, the warranty period shall commence either six months following the date the product is sold by Mesa Labs or on the date it is purchased by the original retail consumer, whichever date occurs first.

All warranty inspections and repairs must be performed by and parts obtained from an authorized Mesa Labs' dealer or Mesa Labs.

Mesa Labs' sole obligation, with respect to its product, shall be to repair or replace the product. Under no circumstances shall it be liable for incidental or consequential damage.

THE WARRANTY STATED HEREIN IS THE SOLE WARRANTY APPLICABLE TO MESA LABORATORIES, INC., PRODUCTS. MESA LABS EXPRESSLY DISCLAIMS ANY AND ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR USE.

If this equipment is not used in a manner specified by Mesa Labs, the protection provided by the equipment may be impaired.

Ordering Procedure

Please refer to the specification label on the underside of the incubator for the complete model and serial number of your incubator when requesting service, replacement parts, or in any correspondence concerning this unit.

All parts listed herein may be ordered from the Mesa Labs dealer from whom you purchased this unit. When service or replacement parts are needed we ask that you check first with your dealer.

Prior to returning any materials to Mesa Labs, please contact our Customer Service Department for a “Return Goods Authorization” number (RGA). Material returned without a RGA number will be refused.

Safety Information

The 1501 incubator has been designed with function, reliability, and safety in mind. It is the user’s responsibility to install it in conformance with local electrical codes. For safe operation, please pay attention to the alert boxes throughout the manual.

Caution



Cautions alert you to potential equipment damage and hazards.

Note



Notes alert you to pertinent facts and conditions.

Specifications

Incubator

Catalog Number	1501	
Overall Dimensions	Width	3.5 in / 9 cm
	Height	2.0 in / 5.8 cm
	Depth	4.0 in / 10.2 cm
	Weight	0.89 lb / 0.4 kg
Well Dimensions	Number	14
	Diameter	.375 in / .94 cm
	Depth	1 in / 2.54 cm
Thermometer Well Dimensions	Number	1
	Diameter	.28 in / 0.71 cm
	Depth	1 in / 2.54 cm
Electrical Ratings	Volts	12VAC
	Watts	12.0
	Amps	1000 mA
	Frequency	50 - 60 Hz
	Phase	1
Operating Range	Temperature	57°C
Environmental Conditions	Ambient Temperature	17°C - 27°C
	Relative Humidity	20% - 80% Non-condensing

Power Pack

Catalog Number	P3-1000
Rated Input Voltage	100 V – 240 V AC
Input Voltage Range	90 V – 264 V AC
Rated Frequency	50 – 60 Hz
Rated Input Current	600 mA RMS max.
Output Voltage	12 VDC at 1.5A
Output Minimum Current	0A
Safety Approvals	UL/cUL, CE, GS
RoHS Compliant	Yes
Storage Temperature	-10°C ~ + 70°C
Storage Humidity	10 ~ 90%
Operating Temperature	0°C ~ + 40°C
Operating Relative Humidity	20 ~ 80%

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Parts

Replacement Parts

Description	Quantity Required	Part Number
Power Pack	1	P3-1000
Thermometer	1	IDT

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Maintenance & Servicing

Maintenance

1. Unplug the incubator before performing any maintenance.



Do not immerse the unit.

DO NOT IMMERSE THE UNIT IN ANY LIQUID

2. To clean the unit, wipe with a cloth dampened with isopropyl alcohol.
3. To clean the wells, use a cotton swab dampened with isopropyl alcohol.

Service and Repair

This unit is pre-calibrated by the manufacturer and is not field serviceable. Contact Mesa Labs if service is required.

Installation

1. Remove incubator from packaging.
2. Remove thermometer from casing.
3. Unpack the power supply. The power supply includes four interchangeable blades (plugs). Select the appropriate blades for your region and attach the blades to the power supply.
4. Insert small connector from power pack into the receptical in the back of incubator.
5. Plug power pack unit into wall.
6. Place thermometer into the small hole in the center of the third row.
7. Press the O/I toggle switch located on the back of unit to turn incubator on. Red light should illuminate. Once red light turns to green, incubator has reached the selected incubation temperature.

Use Only as Directed

- Indoor use only.
- Temperature 5°C to 37°C.
- Maximum relative humidity 80% for temperatures up to 31°C decreasing linearly to 50% relative humidity at 37°C.
- Main power supply voltage fluctuations not to exceed $\pm 10\%$ of the nominal voltage.
- Installation class II service.
- Pollution-Degree 2 environments.
- Altitude less than 2000m.

Operation

Upon start-up, let incubator run until red light has changed to green (~ 20 - 45 minutes) - this indicates that it has reached the temperature setpoint of 57°C.

1. Remove the biological indicator (BI) from the sterilizer and allow to cool for at least ten minutes.
2. Place the BI into the incubator and incubate according to the product's Instructions for Use.
3. Examine the BI at regular intervals for a color change from purple to yellow (i.e. 8, 12, 18, and 24 hours).

Growth is indicated by a color change of the BI media from purple to yellow.

Interpretation

Mesa's BI culture medium has a pH indicator added to it which appears purple. If the medium remains purple following proper incubation, this indicates adequate sterilization. If the process was not effective, the spores will grow and turn the medium yellow. Note: If any units show signs of a visual color change prior to use, they should not be used and should be disposed of properly.

Act on a positive test (a color change to yellow) as soon as the color change is noted. Color change to yellow is to be interpreted as "inadequate sterilization". Always retest the sterilizer with several biological indicators throughout the test load.

Interpretation (continued)



Caution:
Dispose of biological indicators in accordance with your facility's policies. You may wish to autoclave any positive indicators at 121°C for no less than 30 minutes.

To test a **positive growth control**, place an **unprocessed** biological indicator into the incubator. Examine the positive indicator at regular intervals such as 18 and 24 hours. A yellow color is expected as evidence of bacterial growth. Record the results. Remove all positive indicators as the yellow color is noticed, and dispose of properly. If the positive control does not grow, do not use the units from this box and contact your dealer.

A positive control that does not turn yellow is a serious problem. Fortunately, the causes are few: a grossly malfunctioning incubator, inadvertent sterilization of the control vial, inadvertent sterilization of the box of indicators, or improper storage. If the control is negative because of one of the latter two causes, do not use any of the other biological indicators in the same box. Dispose of the contents of the box by autoclaving at 121°C for no less than 30 minutes after confirmation of test.