

# **Laboratory Incubator OPERATION MANUAL**

For use with MFR#L-CU 100, L-CU200 and L-CU300



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#### INTRODUCTION

United Products & Instrument, Inc has been providing quality laboratory equipment for the medical practices for many years. The L-CU series incubator is designed to meet the needs in the fast growing medical and health care industries.

## **FEATURES**

- ⇒ Simple keypad input allows easy temperature setting.
- □ Continuous or timer-controlled operation.
- ⇒ LED digital display enables users to monitor the chamber temperature.
- ⇒ Alarms alert users of abnormal conditions if the chamber temperature exceeds the setting temperature by 10°C (default setting can be adjusted).
- ⇒ Max. Temperature 70°C.
- ⇒ Double doors allow sample viewing through the inner clear door.
- ⇒ The shelf positions are adjustable.

## **SPECIFICATIONS**

Capacity: 30Liters (L-CU300); 20Liters (L-CU200); 10Liters (L-CU100)

Convection: Natural convection Working Temperature: Ambient, 5 - 70°C

Shelf 2 included Power (Watts) 300 Watts

# **UNPACKING AND INSTALLATION**

Please examine the shipment upon receiving and retain all packing materials until the unit has been tested. The warranty excludes any damage caused by shipping. Inspect for any possible shipping damage. If you note any damage, please contact your representative. Save the original packaging. If it becomes necessary to return the instrument for service, we ask that it is returned in the original packaging. Unpack the shipping carton carefully and verify that the shipment is complete. It should include the following items:

Incubator 1Shelves and supports 2Operation manual 1

- 1. Take the incubator from the packaging and place it on a dry, sturdy, flat surface.
- 2. Install the shelf supports at the proper height. Place the shelves on the supports.
- 3. Plug the power cord to a proper power outlet.



# **SET THE TEMPERATURE**

- The top row on the display represents the Present Value (PV).
- The bottom row is Set Value (SV) the temperature you set as working temperature.
- Press "UP" or "Down" key to increase or decrease the temperature setting to your desired temperature.
- Press "SET" to confirm. The "SV" will display the new SET temperature.

# **SETTING THE TIMER**

The L-CU series offers two options – continuous operation or timer controlled mode.

- Press Continuous mode button if you are planning to keep the incubator on at all times. No additional action required.
- Press Time mode button to initiate the timer setup. OUT2 indicator will appear on screen, next to the timer icon.
  - 1. Use Up/Down buttons to select Hour (HR) or Minute (MIN). Press SET.
  - 2. Use Up/Down buttons to enter desired time.
  - 3. Press Select button to move to the next setting. You will see the PV and Time
  - 4. Press Select button again to exit the Timer mode.
  - 5. The Timer will begin the count down when the PV reached the SV.
  - 6. To interrupt the timer mode press Continuous mode button.

#### **OPERATION**

- 1. Make sure no objects are on top of the incubator.
- 2. Make sure the surrounding area is clear for good ventilation.
- 3. Plug the incubator into a power source outlet. Make sure the voltage is correct.
- 4. Press "ON/OFF" button so that the power indicator is Green.
- 5. The display will show the status of the incubator. Allow an hour for the temperature to stabilize. The running strip at the bottom of the display indicates the incubator is heating up.
- 6. When the PV is reaching the SV open the incubator door; put your sample in and close the door. Put your sample on the shelves only. Do not place the sample on the bottom of the incubator to prevent damage.

# **CALIBRATION, ALARM AND OTHER SETTINGS**

The incubator is factory calibrated and shipped with default presets. Use the following instructions to make changes to the original setting.

- 1. To enter the programming mode the instrument needs to be in continuous operation mode. Press continuous mode button to cancel timer operation if set.
- 2. Press SET and Down button at the same time. You will see KEYP on display.
- 3. Use UP or DOWN buttons to set value to 0. The key icon on screen will disappear.
- 4. Use select key to scroll through the options. Press SET to make changes using UP/DOWN buttons. The table below lists available options.
- 5. When finish programming select LoC option and set the status to LoC2.

Option	Default	Description
PVoF	0°C	Calibrate PV based on your thermometer reading
AL1H	10°C	Alarm 1 will flash if the PV is higher then SV by set value
AL1L	10°C	Alarm 1 will flash if the PV is lower then SV by set value
EPUN	°C	Changes temperature unit from C to F
AT	OFF	Auto-tuning function
LoC	LoC2	Lock status.
		OFF – no lock
		LoC1 – lock all functions. No changes to the settings allowed
		LoC2 – Only SV and Timer changes are available

### **MAINTENANCE**

This incubator is designed to be relatively maintenance free. A surface cleaner such as Formula 409 can be used to clean the outside of the instrument. The chamber and door can be disinfected with a mild solution of bleach or other disinfecting liquid and allowed to dry. Do not drench or immerse the unit in any liquid! Be sure to disconnect the power before attempting to clean.

There is a circuit breaker on the back of the incubator. The breaker will be activated should there is electric current overflow. To reset the breaker just press the black button.

#### **ELECTRICAL SHOCK HAZARD**

Do not attempt to operate this instrument near water or liquid spill. Unplug the unit before cleaning or repairing. Periodically check the condition of the power cord for cuts or damage. Do not operate with a damaged cord.

# **BIOHAZARD**

If a tube breaks, a biological hazard may exist. Unplug the instrument. Clean using approved laboratory procedures. Always wear the proper protective clothing and gloves. Use a suitable disinfectant and dispose of the sample properly. Refer to the guidelines set forth by OSHA, CLIA, etc.

#### SERVICE

If you feel that your incubator needs factory service, please contact your UNICO representative to determine the nature of the problem. Simple problems may be resolved over the telephone. If the instrument needs to be returned, a manufacturer R.G.A. (return goods authorization) number will be issued. Please reference the R.G.A. number on the paperwork packed with the instrument, and on the outside of the carton REPAIRS OR MODIFICATIONS MADE TO THE INCUBATOR BY AN UNAUTHORIZED PARTY WILL VOID THE WARRANTY.

#### WARRANTY

This instrument is warranted against defects in materials and workmanship for a period of one (1) year from the date of shipment to the customer. This warranty is limited to the repair and replacement of parts, which prove to be defective during the warranty period. This warranty is not valid for parts damaged, lost, or which fail because of accident, fire, theft, acts of nature, negligence, or the use of chemicals, which have a deleterious effect. This warranty is conditioned upon the manufacturer retaining the option of replacing parts up to and including the entire instrument.

Note: This warranty will not extend to any repairs or modifications made to the instrument by some party other than the manufacturer or a party authorized by UNICO. Also, this warranty shall be in effect only upon the notice of the defect to the manufacturer or it's authorized distributor, or dealer, within five (5) days after the occurrence of said defect.

No other warranty of any kind is made expresses or implied. The warranty described above shall be the sole and exclusive remedy available to the purchaser. Correction of defects, in the manner and for the period of time described above, shall constitute complete fulfillment of all liabilities and responsibilities of the manufacturer to the purchaser with respect to the product, and shall constitute full satisfaction of all claims, whether based on contract, negligence, strict liability or otherwise. In no event shall the manufacturer be liable, or in any way responsible for any damages or defects in the product that were caused by repairs or attempted repairs performed by anyone other than the manufacturer's dealer or station, nor shall the manufacturer be liable or in any way responsible for any incidental or consequential economic or property damages. Some states do not allow the exclusion of incidental or consequential damage, so the above exclusion may not apply to you.