

# **Orbital Rotator**

OPERATION MANUAL Model# L-RT30 / L-RT30C



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UNICO Orbital Rotator is a digitally controlled compact, durable, variable speed orbital mixer and is designed for demanding laboratory work. Designed to accommodate a wide variety of printed or glass well slides, culture plates, flasks and small test tube racks, as well as RPR an VDRL slides or 96 well micro-titer (immunoassay) plates.

## **FEATURES**

- 10.5" x 10.5" mixing plate with removable rubber pad
- Variable speed 25-250rpm
- Digital speed display
- Orbital stroke is 20mm
- Digital timer for time setting up to 99 hours and 59 minutes
- Small flask securing spring included
- Molded heavy impact resistant plastic housing
- L-RT30C Includes a Humidity Cover

## **CONSTRUCTION**

The Orbital Rotator housing is made of strong plastic. The rubber mounts to provide quiet running and dampen vibration. The rubber pad can be easily cleaned and disinfected. A metal spring is provided to secure samples during rotation

#### **ACCESSORIES**

Each Orbital Rotator unit comes equipped with a securing spring. Model L-RT30C comes with a Humidity Cover.

# **OPERATIONS**

- 1. Connect the power supply to an electrical outlet.
- 2. Place the specimen on the platform. Secure with the spring if necessary.
- 3. Press Power. LED display will show current settings. If changes are not required press Start button.
- 4. Set time: Press the Timer key. The Minutes display will flash. Use up/down arrow keys to set the desired minutes. Press Left arrow key. The Hours display will flash. Use up/down arrows to set the hours. Press Timer key again to set the time.
- 5. Set speed: Press Speed button the display will flash. Use up/down arrow keys to adjust the speed. Press Speed again to set the value.
- 6. Press Start to begin rotation.
- 7. Rotator can be used in Continues mode. Press Time Mode to switch. LCD will show cont. The rotator will runt until the stop button is pressed.

#### **SAFETY**

Your Orbital Rotator is a carefully designed and built instrument. When operated properly, it presents no safety hazards, however, please take note of these safety precautions.

#### LOAD BALANCE

# Always make sure that the load is balanced before operating the instrument.

It is very important that equal loads are placed opposite each other on the plate or that large samples are placed in the center of the mixing plate. Also, when mixing a single specimen of any size, place it in the middle to maintain balance. Without the proper balance, damage could occur.

#### **MAINTENANCE**

This Orbital Rotator is designed to be relatively maintenance free. A surface cleaner such as Simple Green can be used to clean the outside of the instrument. Care should be used to make sure that cleaning fluids do not enter inside on the wires. The rubber pad and cover can be disinfected with a mild solution of bleach or other disinfecting liquid and allowed to dry. Do not drench or immerse this orbital mixer in any liquid! Be sure to disconnect the power before attempting to clean.

## **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 specimen 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. Always use protective eyewear when operating.

#### LATEX ALLERGY

Please be aware that this instrument contains natural rubber latex products (i.e. Platform pad and rubber feet). Anyone with a latex allergy should exercise caution when using this orbital mixer and wear non-latex gloves when handling this instrument.

#### **SERVICE**

If you feel that your Orbital Rotator needs factory service, please call us and speak to a customer service representative to determine the nature of the problem. Simple problems may be resolvable over the telephone by calling 1-800-588-9776. If the instrument needs to be returned to UNICO, a 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 L-RT30 BY AN UNAUTORIZED PARTY WILL VOID THE WARRANTY.

#### TROUBLESHOOTING GUIDE

Caution: Always disconnect the power cord before troubleshooting.

Trouble	Cause	Remedy
Instrument inoperative	Power cord not connected to outlet.	Plug in the power cord.
	Dead power output.	Change to different output.
	Fuse blown.	Change a new fuse.
	Defective electronic component.	Contact your distributor for repair.
Platform doesn't rotate	Power switch is at "O" position.	Switch on the power at "1" position.
	Start/Stop key is not pressed.	Press the Start/Stop key.
	The connection of platform and the motor is incorrect.	Contact your distributor for repair.
	PC board is broken.	Contact your distributor for repair.
Platform keeps rotating when time is up	PC board is broken.	Contact your distributor for repair.
Power switch can not light up	The power switch is broken.	Contact your distributor for repair.
Speed is abnormal	PC board is broken.	Contact your distributor for repair.
No signal on LED DISPLAY	PC board is broken.	Contact your distributor for repair.

#### **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 that 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, 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.