

# Labnet Orbit™ LS Low Speed Orbital Shaker

Instruction Manual

**Catalog Numbers:**

S2030-LS-B

S2030-LS-B-230



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## 1.0 Introduction

Congratulations on purchasing your Labnet Orbit™ LS Low Speed Orbital Shaker. A large shaker orbit and low speed make this orbital shaker useful for staining and destaining gels, washing blots, and general mixing. The shaker is supplied with a 29.5 x 29.5 cm stainless steel flat platform and non-slip rubber mat to keep plates, dishes, and other sample containers in place. Safe for use in temperature-controlled environments, the small profile of this shaker makes it ideal for use in incubators such as the Labnet 311 and 611 series.

## 2.0 Packaging

The Labnet Orbit LS Low Speed Orbital Shaker includes the following components:

- ▶ Labnet Orbit LS Low Speed Orbital Shaker
- ▶ Flat platform (29.5 x 29.5 cm)
- ▶ Instruction Manual

## 3.0 Specifications

Speed	3 to 60 rpm
Shaker orbit	0.75 in. (19 mm)
Timer	20 to 120 min. in 10 min. step, HOLD function
Maximum load	11 lbs. (5 kg)
Dimensions (W x L x H)	11.6 x 13.4 x 6.3 in. (29.5 x 34 x 16 cm)
Platform dimensions (W x L)	11.6 x 11.6 in. (29.5 x 29.5 cm) useable area
Weight	14.6 lbs. (6.6 kg)
<b>Electrical</b>	
120V	120V ±10%, 50/60Hz, 0.3A
230V	230V ±10%, 50/60Hz, 0.15A
Fuse	2 x 1A
Operation conditions	4°C to 65°C, up to 85% RH, non-condensing

This device is intended for use in a basic electromagnetic environment (Basic, class B), and it is in compliance with IEC 61326-1. The power cord can be exchanged only with a cord 3 x 1.0 mm<sup>2</sup> or for USA/Canada 3 x 18 AWG.

The Labnet Orbit LS Low Speed Orbital Shaker is designed to be safe when operated under the following conditions:

- ▶ Indoor use only
- ▶ Altitude up to 2,000 meters
- ▶ Pollution degree 2

## 4.0 Safety Information



**Do not shake flammable or explosive samples.**

- ▶ Do not use the shaker near water sources. Be sure that water doesn't get on the device, especially during the cleaning procedures.
- ▶ Do not expose the shaker to aggressive vapors (e.g., organic solvents).
- ▶ Do not insert objects into the shaker (such as a screwdriver or metal rods).
- ▶ Never operate the shaker without the platform securely attached.
- ▶ Hazardous samples should be shaken only in appropriate containment vessels.

**NOTE:** If the equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.

## 4.1. Symbols and Conventions

The following chart is an illustrated glossary of the symbols that may be used in this manual or on the product.



Indicates the presence of a potential hazard which could result in electrical shock.



**CAUTION:** Refers you to important operating and maintenance (servicing) instructions within the product Instruction Manual. Failure to heed this information may present a risk of damage or injury to persons or equipment.



Identifies a Protective Earth (PE) terminal, which is provided for connection of the supply system's protective earth (green or green/yellow) conductor.



Do not put your fingers between the platform and the housing. Danger of mechanical injury.

## 5.0 Installation

### 5.1. Device Placement

When selecting the right place for the device, please consider the following:

- ▶ Put the device on a smooth, horizontal, and stable surface.
- ▶ Leave enough space beyond the device for normal air circulation (6 in./15 cm minimum).
- ▶ Leave enough space around the device for easy access and maintenance.
- ▶ Avoid locations subject to shocks and vibrations.
- ▶ Avoid locations subject to frequent power fluctuations or power losses. It may affect shaker performance.

**NOTE:** There has to be easy access to the shaker control panel and main plug in case of emergency.

### 5.2. Attaching the Power Cord

First, connect the main power cord to the shaker. Then, connect the plug end of the cord to a grounded wall socket. Avoid lines on which powerful electric motors, refrigerators, and similar devices are connected.



- ▶ Be careful when you plug the cord into a grounded wall socket.
- ▶ Do not touch the plug with wet hands.
- ▶ Do not pull the plug by the cord.

## 6.0 Operating Instructions

### 6.1. Control Panel



- 1. POWER switch:** Turns the shaker ON (power switch illuminates) or OFF.
- 2. SPEED knob:** Sets the shaker speed.
- 3. TIME knob:** Sets the timed operation.
- 4. HOLD yellow signal light:** Illuminates when the shaker is set to HOLD (continuous operation).
- 5. START/STOP button:** START or STOP the shaking operation.
- 6. RUN green signal light:** Illuminates when the shaker is running.

**NOTE:** The speed can be adjusted at any time during shaker operation. The time, however, cannot be changed while the shaker is in motion. To change the Time press the STOP button first, allow the shaker platform to come to a full stop, and set the Time value again. Restart the shaker.

## 7.0 Troubleshooting

Should you have a question about the operation of the Labnet Orbit™ LS Low Speed Orbital Shaker or if service is required, contact Customer Service. Do not send in a unit for service without first calling to obtain a repair authorization number. Should the unit require return for service, it should be properly packaged to avoid damage. Any damage resulting from improper packaging shall be the responsibility of the user.

Problem	Explanation/Solution
Power switch doesn't illuminate when turned on.	<ul style="list-style-type: none"><li>▶ Check the connection to the main power supply.</li><li>▶ Check the fuses.</li><li>▶ Call for the authorized service.</li></ul>
Shaker doesn't start when you press START/STOP button.	<ul style="list-style-type: none"><li>▶ Check the connection to the main power supply.</li><li>▶ Check the fuses.</li><li>▶ Call for authorized service.</li></ul>

## 8.0 Maintenance and Cleaning

- ▶ No routine maintenance or lubrication is required.
- ▶ It is recommended that the shaker is kept clean to ensure long trouble-free operation.
- ▶ The outside housing can be cleaned with a soft, damp cloth when needed. Do not use any aggressive or abrasive cleaners (acetone, nitro, polish etc.). This may permanently damage the shaker finish.



Prior to any cleaning or maintenance of the device, unplug the power cord from the wall socket.

## 9.0 Accessories

Cat. No.	Description	Qty/Pk
S2031-12D	Stacked platforms (29.5 x 29.5 cm)	2
E2110-BBS	Blot box, 9.1 x 6.6 cm, 3-50 mL capacity for mini protein gels	10
E2110-BBL	Blot box, 11.7 x 8.9 cm, 6-10 mL capacity for larger mini protein gels	10

## 10.0 Limited Warranty

Corning Incorporated (Corning) warrants that this product will be free from defects in material and workmanship for a period of one (1) year from date of purchase. CORNING DISCLAIMS ALL OTHER WARRANTIES WHETHER EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE. Corning's sole obligation shall be to repair or replace, at its option, any product or part thereof that proves defective in material or workmanship within the warranty period, provided the purchaser notifies Corning of any such defect. Corning is not liable for any incidental or consequential damages, commercial loss or any other damages from the use of this product.

This warranty is valid only if the product is used for its intended purpose and within the guidelines specified in the supplied instruction manual. This warranty does not cover damage caused by accident, neglect, misuse, improper service, natural forces or other causes not arising from defects in original material or workmanship. This warranty does not cover motor brushes, fuses, light bulbs, batteries or damage to paint or finish. Claims for transit damage should be filed with the transportation carrier.

In the event this product fails within the specified period of time because of a defect in material or workmanship, contact Corning Customer Service at: USA/Canada 1.800.492.1110, outside the U.S. +1.978.442.2200, visit [www.corning.com/lifesciences](http://www.corning.com/lifesciences), or contact your local support office.

Corning's Customer Service team will help arrange local service where available or coordinate a return authorization number and shipping instructions. Products received without proper authorization will be returned. All items returned for service should be sent postage prepaid in the original packaging or other suitable carton, padded to avoid damage. Corning will not be responsible for damage incurred by improper packaging. Corning may elect for onsite service for larger equipment.

Some states do not allow limitation on the length of implied warranties or the exclusion or limitation of incidental or consequential damages. This warranty gives you specific legal rights. You may have other rights which vary from state to state.

No individual may accept for, or on behalf of Corning, any other obligation of liability, or extend the period of this warranty.

For your reference, make a note of the serial and model number, date of purchase, and supplier here.

Serial No. \_\_\_\_\_ Date Purchased \_\_\_\_\_

Model No. \_\_\_\_\_ Supplier \_\_\_\_\_

## 11.0 Equipment Disposal



According to Directive 2012/19/EU of the European Parliament and of the Council of 4 July 2012 on waste electrical and electronic equipment (WEEE), this product is marked with the crossed-out wheeled bin and must not be disposed of with domestic waste.

Consequently, the buyer shall follow the instructions for reuse and recycling of waste electronic and electrical equipment (WEEE) provided with the products and available at [www.corning.com/weee](http://www.corning.com/weee).

To request certificates, please contact us at [www.labnetlink.com](http://www.labnetlink.com).

**Warranty/Disclaimer:** Unless otherwise specified, all products are for research use or general laboratory use only.\* Not intended for use in diagnostic or therapeutic procedures. Not for use in humans. These products are not intended to mitigate the presence of microorganisms on surfaces or in the environment, where such organisms can be deleterious to humans or the environment. Corning Life Sciences makes no claims regarding the performance of these products for clinical or diagnostic applications. \*For a listing of US medical devices, regulatory classifications or specific information on claims, visit [www.corning.com/resources](http://www.corning.com/resources).

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**LATIN AMERICA**

grupolA@corning.com

**Brazil**

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**Mexico**

t (52-81) 8158-8400