

Corning® LSE™ Low Speed Orbital Shaker

CORNING

Instruction Manual

Catalog Numbers:

6780

6781

6782



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1.0 General Specifications

Electrical Requirements	
120V model	120V ± 10%, 50/60Hz, 0.3A
230V model	230V ± 10%, 50/60Hz, 0.15A
Fuse	2 x 1A
Speed	3 to 60 rpm
Shaker Orbit	0.75 in. (1.9 cm)
Timer	20 to 120 minutes in 10 minute step, HOLD function
Maximum Load	5 kg
Dimensions	11.6 x 13.4 x 6.3 in. (29.5 x 34 x 16 cm)
Platform Dimensions	11.6 x 11.6 in. (29.5 x 29.5 cm) useable area
Weight	14.5 lbs. (6.6 kg)
Operating Conditions	4°C to 65°C, up to 85% RH, non-condensing
Warranty	2 years
Platform Size	11.8 x 11.8 in. (30 x 30 cm)

This device is intended for use in a basic electromagnetic environment (Basic, class B), and it is in compliance with IEC 61326-1. Supply cord can be exchanged only with cord 3 x 1.0 mm² or for USA/Canada 3 x 18 AWG.

The Corning® LSE™ Low Speed Orbital Shaker is designed to be safe when operated under the following conditions:

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

2.0 Safety Precautions



Do not use the shaker near water. Ensure that water does not get on the device, particularly during cleaning.

- ▶ If the unit is used in a manner not specified in this manual, then the unit may become unsafe to operate and may void the warranty.
- ▶ This product must be connected to a grounded power outlet for safe functioning.
- ▶ Use only the power cord supplied with the product.
- ▶ The equipment will not restart if the main power source is interrupted.
- ▶ The equipment will restart in cases of mechanical interruption.
- ▶ Do not expose the shaker to aggressive vapors (e.g., organic solvents).
- ▶ Do not insert any 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.



Do not shake flammable or explosive samples.



The electrical warning symbol indicates the presence of a potential hazard which could result in electrical shock.



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

3.0 Installation of the Orbital Shaker

3.1 Unpacking

Before starting the installation, carefully examine the shaker for possible damage or missing parts.

- ▶ Open the box and carefully remove the padding. Check that the shaker has not been visibly damaged during transportation. Keep the packing material until you ensure that the shaker works properly.
- ▶ Carefully lift the device out of the box.
- ▶ Be sure that the following information is included on the serial label located on the back of the unit: serial number, catalog number, electrical rating.
- ▶ Check that the power cord plug has a pin configuration that matches a wall socket according to the local standard.

Should any kind of damage have occurred during transportation, contact the carrier immediately. The carrier is responsible for shipping damage.

3.2 Selecting the Location

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

Select a location that is dry and not subject to drafts or moving air from heating or air conditioning vents or air blown by other equipment. Plug the unit into a properly grounded outlet.

3.3 Attaching the Power Cord

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



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

4.0 Operating Instructions

4.1 Controls



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

4.2 Basic Operation

- ▶ Switch on POWER.
- ▶ Set SPEED knob on desired value.
- ▶ Set TIME knob on desired value or on HOLD – continuous function (yellow light next to HOLD will illuminate).
- ▶ Press START/STOP button to start shaking.
- ▶ Press START/STOP button to stop shaking (HOLD position). Device automatically stops after the set time passes. **NOTE:** Pressing the START/STOP button during operation will reset the timer.

5.0 Troubleshooting Guide

Be sure to disconnect the shaker from the main power source immediately in case of any signs of malfunction and contact Corning Customer Service at 800.492.1110 or 978.442.2200.

Problem	Solution
Power switch does not light up	Check the power connection. Check the fuses. Contact Corning Customer Service.
Shaker does not start	Check the power connection. Check the fuses. Contact Corning Customer Service.

6.0 Maintenance and Cleaning

- ▶ No routine maintenance or lubrication is required.
- ▶ It is recommended that the shaker be kept clean to ensure a long, trouble-free operation.

The outside housing of the platform shaker may be cleaned with a soft, damp cloth when needed. Do not use any aggressive or abrasive cleaners (acetone, nitro, polish, etc.), as they may permanently damage the shaker finish.



Before cleaning the shaker, always unplug the power cord from the wall socket. Make sure the shaker is switched off before installing an additional platform.

7.0 Limited Warranty

Corning Incorporated (Corning) warrants that this product will be free from defects in material and workmanship for a period of two (2) years 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's Customer Service at 800.492.1110. Outside the United States, call +1.978.442.2200 or contact your local Corning sales office.

Corning Customer Service 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.

Model No. _____ Serial No. _____

Date Purchased _____ Supplier _____

8.0 Equipment Disposal



According to Directive 2012/19/EU of the European Parliament and Council of 4th July 2012 on waste and electronic equipment (WEEE) as amended, the Corning® LSE™ Low Speed Orbital Shaker 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.

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.

Corning's products are not specifically designed and tested for diagnostic testing. Many Corning products, though not specific for diagnostic testing, can be used in the workflow and preparation of the test at the customers discretion. Customers may use these products to support their claims. We cannot make any claims or statements that our products are approved for diagnostic testing either directly or indirectly. The customer is responsible for any testing, validation, and/or regulatory submissions that may be required to support the safety and efficacy of their intended application.

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