Vortex Mixer
User Manual

S0200
S0200-230V-EU
S0200-230V-UK
S0200-230V-CH
About This Manual

This manual is designed to assist you in the optimal usage of your Labnet Vortex Mixer. The manual is available in English, French, German, Italian, Portuguese, and Spanish on our website at www.labnetinternational.com/document-center
Introduction
The Labnet Vortex Mixer is a general purpose laboratory vortexer. Mixing speed is adjustable up to 3,400rpm. A three position switch allows the mixer to be operated continuously or by “touch” activation. The shaking mechanism is specially designed to offer enhanced stability under various loads. The metal baseplate and rubber feet provide additional stability and prevent the unit from "walking" across the bench, even at maximum speed.

Read this manual thoroughly before attempting to operate the Vortex Mixer. All persons operating this piece of equipment should review the Safety Precautions section of this manual.

Specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speed Range</td>
<td>3400rpm (60 Hz)</td>
</tr>
<tr>
<td></td>
<td>2850rpm (50 Hz)</td>
</tr>
<tr>
<td>Operating Modes</td>
<td>Touch or Continuous</td>
</tr>
<tr>
<td>Ambient Operating Range</td>
<td>+4ºC to 65ºC</td>
</tr>
<tr>
<td>Dimensions (w x d x h)</td>
<td>14 x 16 x 12 cm</td>
</tr>
<tr>
<td>Weight</td>
<td>2.2 kg</td>
</tr>
<tr>
<td>Electrical</td>
<td>120V, 60Hz, 0.6A</td>
</tr>
<tr>
<td></td>
<td>230V, 50Hz, 0.3A</td>
</tr>
</tbody>
</table>

Unpacking the Vortex Mixer
Upon receipt of the Vortex Mixer, examine the exterior carton for damages. In the event of shipping damage, a claim must be filed with the transportation carrier within 10 days of receipt. Save all packaging for inspection by the carrier.

Carefully unpack the unit and check for completeness. Included in the carton should be the following:
- Vortex mixer with cup head
- Line cord
- Instruction manual

If any of these items are missing, contact Labnet’s Customer Service Department immediately. Save the original packaging until the unit has been shown to be operating properly.

Verify that the unit is rated for the proper voltage by checking electrical / serial no. label on the back.

Installation
Locate the mixer on a level, stable surface near a grounded electrical outlet. The surface should be clean and free of dust to ensure that the feet grip the surface firmly. Allow sufficient clearance on all sides of the unit for proper ventilation.

With the power switch in the OFF position, plug the power cord into a grounded receptacle.

Operating the Vortex Mixer
All operating controls are located on the front panel. The power switch, located on the left side of the panel, has three positions - TOUCH, OFF and ON. When set to the TOUCH position, the mixer is activated by depressing the mixing head. When pressure
is released from the mixing head, operation will stop. When set to the ON position, the mixer will operate continuously until the switch is moved to either the OFF or TOUCH position.

The speed control, located on the right side of the panel, is continuously adjustable. Oscillating speed increases at a non-uniform rate to a maximum of 3,400rpm as the knob is turned clockwise. Before turning on the mixer, set the speed control to the minimum.

To begin operation, move the power switch to either the TOUCH or ON position and turn the speed control to the desired setting. If the power switch is in the ON position, the shaking head will begin moving immediately. If the power switch is in the TOUCH position, operation will begin when an object is placed on the shaking head and slight pressure is applied to depress the head. Shaking will cease when the object is removed and pressure released.

Safety Precautions
The following precautions should be taken when operating or working near the Vortex Mixer:

- **CAUTION; A PINCH POINT EXISTS BETWEEN CUP HEAD AND ENCLOSURE.**
- Never operate the unit without a shaking head securely attached.
- Always wear shatterproof eye protection.
- Do not use or mix solvents and flammables on or near the mixer.
- Shake hazardous samples in appropriate containment vessels.
- Repair should be performed only by qualified individuals.
- Protection impairment may result if used in a manner not specified by the manufacturer.

Optional Accessories
Instruction for using accessories:

1 – Turn power off and rotate speed knob to minimum
2 – Hold the unit down and lift the mixing head
3 – Apply the desired optional accessory and load it in a balanced manner
4 – Turn on the unit
5 – Slowly rotate the speed knob clockwise until the desired mixing level is achieved

**Important: If the unit starts to walk, reduce speed accordingly**

Optional shaking heads are as follows:

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>S0200-21</td>
<td>Microtube head, foam, for 80 tubes</td>
</tr>
<tr>
<td>S0200-22</td>
<td>Microplate head, foam, for 1 microplate or 64 x 0.2mL tubes</td>
</tr>
<tr>
<td>S0200-23</td>
<td>10-13mm and 15mL tube head, for 16 tubes</td>
</tr>
<tr>
<td>S0200-24</td>
<td>50mL tube head, for 6 tubes</td>
</tr>
<tr>
<td>S0200-25</td>
<td>Head for 12 x 1.5ml tubes, held horizontally</td>
</tr>
<tr>
<td>S0200-26</td>
<td>Head for 4 x 15 ml tubes, held horizontally</td>
</tr>
<tr>
<td>S0200-27</td>
<td>Head for 2 x 50 ml tubes, held horizontally</td>
</tr>
</tbody>
</table>

Contact your Labnet dealer for information about ordering additional heads.
Care and Maintenance

Warning: Disconnect the vortexer from power source before attempting any cleaning or maintenance procedures.
After each use, wipe down the mixer with a soft cloth. Do not immerse the unit or pour liquids over it as electrical shock may occur. Clean up any spills immediately taking the proper precautions. If required, the shaking head may be removed. First, disconnect the vortexer from the power source and then remove the combo-cup head by holding the housing securely while pulling up on the head. The head may then be cleaned with a mild detergent. Be sure the head is thoroughly dry before replacing it on the unit.

The motor and shaking mechanism in the Vortex Mixer require no routine maintenance or lubrication.

Appendix

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

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Electrical Warning" /></td>
<td>The electrical warning indicates the presence of a potential hazard which could result in electrical shock.</td>
</tr>
<tr>
<td><img src="image" alt="CAUTION" /></td>
<td><strong>CAUTION</strong> This symbol 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.</td>
</tr>
<tr>
<td><img src="image" alt="Protective Earth" /></td>
<td>This symbol identifies a Protective Earth (PE) terminal, which is provided for connection of the supply system’s protective earth (green or green/yellow) conductor.</td>
</tr>
</tbody>
</table>
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), Labnet Vortex Mixer 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 the following link: www.corning.com/weee
LIMITED WARRANTY

Labnet International Inc. warrants that this product will be free from defects in material and workmanship for a period of one (1) year from date of purchase. This warranty is valid only if the product is used for its intended purpose and within the guidelines specified in the supplied instruction manual.

Should this product require service, contact Labnet’s Service department at 732-417-0700 to receive 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. Labnet International Inc. will not be responsible for damage incurred by improper packaging. Labnet may elect for onsite service for larger equipment.

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.

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