

IN SCIENCE TOGETHER

153-010 – Vortex Mixer



SPECIFICATION
USER GUIDE

INTERNATIONAL SCIENTIFIC GROUP





Table of Contents

| | |
|------------------------------------|-------|
| Introduction | 1 |
| Service | 1 |
| Warranty | 1 |
| Safety Instructions | 1 - 2 |
| Inspection | 2 |
| Operation | 3 |
| - Continuous Operating | 3 |
| - Touch Operating | 3 |
| Maintenance & Cleaning | 4 |
| Associated Standards & Regulations | 4 |
| Technical data | 5 |



Introduction

Thank you for choosing the ISG Vortex mixer! Users should read this manual carefully, follow the instructions and procedures, and be aware of all the cautions.

Service

When help needed, you can always contact the service department of manufacturer for technical support in the following ways:

International Scientific Group
Karoo Close
Bexwell Business Park
Bexwell
Norfolk
PE38 9GA

T: +44 (0)1366 385777 @: sales@international-scientific.com

Warranty

This instrument is warranted to be free from defects in materials and workmanship under normal use and service, for a period of 24 months from the date of invoice. The warranty is extended only to the original purchaser. It shall not apply to any product or parts which have been damaged on account of improper installation, improper connections, misuse, accident or abnormal conditions of operation.

For claims under the warranty please contact your local dealer. You may also send the instrument direct to our works, enclosing the invoice copy and by giving reasons for the claim.

Safety Instructions

- Read the operating instructions carefully before use.
- Ensure only trained staff uses the instrument.
- Make sure the socket is grounded before use.
- Wear the personal safety items to avoid the risk from of liquids.
- Mechanical vibration may lead to glass breakage.
- Trapping parts of the body, hair or pieces of clothing in the moving parts.
- During manual operation:
 - Keep medium vessels vertical as much as possible.
 - Mix the medium in the minimum pressure required.
- Use attachment supplied when mixing a mass of different medium
- Set up the instrument in a spacious area on a stable, clean, non-slip, dry and fireproof surface.
- Do not operate the instrument in explosive atmospheres, with hazardous
- Put the speed control knob to the lowest position and gradually increase the speed.
- Reduce the speed if:
 - The medium splashes out of the vessel because of too high speed.
 - The instrument is not running smoothly or moves on the stage.





Safety Instructions (cont.)

- Safe operation is only guaranteed with the accessories described in the “Accessories” chapter.
- Accessories must be securely attached to the instrument and cannot come off by themselves.
- Check the instrument and accessories before each use. Do not use damaged components.
- Place a vessel at the centre of the mixing head and spread out others uniformly.
- A sharp edged vessel can wear-out the mixing head.
- Always disconnect the plug before fitting accessories.
- The instrument may heat up when in use.
- The operating voltage required on the label and voltage supply network must match.
- Protect the instrument and accessories from bumps and impacts.
- The instrument may only be opened by qualified and trained technician.

Inspection

Unpack the equipment carefully and check for any damages which may have arisen during transport. Please contact manufacturer/supplier for technical support.

Note: If there is any apparent damage to the system, do not plug it into the mains power.

Please retain all packing materials should you need to return the unit. Additional shipping charges will be assessed if packing is unavailable for the system warranty service.



Operation



Continuous Operation

- Ensure the speed control knob at the lowest position
- Put the instrument on a stable and safe place and plug in to the mains power
- Push the two-direction switch left to ON and Power and Continuous Mode LEDs will illuminate
- Turn the speed control knob to set speed
- Hold the tube on the top of the mixing head for the required time
- To turn off, set the speed to the lowest and switch the power switch to OFF

Touch Operation

- Ensure the speed control knob at the lowest position
- Put the instrument on a stable and safe place and plug in to the mains power
- Push the two-direction switch right to ON and Power and Touch Mode LEDs will illuminate
- Turn the speed control knob to set speed
- Press the sample tube on the top of the mixing head and the mixing head will begin to spin
- Remove the sample to tube to stop
- To turn off, set the speed to the lowest and switch the power switch to OFF



Maintenance & Cleaning

- Suitable maintenance will keep the instrument in working order and extend its life time
- Do not spray cleaning liquids into the instrument when cleaning.
- Unplug the power line when cleaning
- Only use cleanser as shown below:
 - Dyes Isopropyl alcohol
 - Construction materials Water containing detergent/isopropyl alcohol
 - Cosmetics Water containing detergent/isopropyl alcohol
 - Foodstuffs Water containing detergent
 - Fuels Water containing detergent
- For materials which are not listed, please request information from manufacturer/supplier.
- Before using other method for cleaning or decontamination, the user must ascertain with the manufacturer/supplier whether this method will not harm the instrument.
- Wear the proper protective gloves during cleaning of the instrument.

Note:

- Electrical instruments may not be placed in the cleansing agent.
- The instrument is a sophisticated electronic product, please avoid severe shaking during use and transportation.
- The instrument must be cleaned and put it into the initial packaging carton before sending for service, avoid contamination.
- Switch OFF the instrument and put it in a dry, clean, stable place at room temperature in long-term disuse

Standards & Regulations

EN 61010-1

EN 61326-1

EMC-guidelines: 89/336/EWG

Instrument guidelines: 73/023/EWG

**Technical Data**

| | |
|------------------------------------|----------------------------|
| Voltage: | 220-230v |
| Frequency: | 50, 60 Hz |
| Power: | 60W |
| Shaking Movement: | Orbital |
| Orbital Diameter: | 4mm |
| Motor Type: | Shaded-pole motor |
| Motor Rating Input: | 58W |
| Motor Rating Output: | 10W |
| Speed Range: | 0-2500 rpm |
| Speed Display: | Scale |
| Run Type: | Continuous/touch operation |
| Dimension: | 127×130×160mm |
| Weight: | 3.5kg |
| Permitted Ambient Temperature: | 5-40°C |
| Permitted Relative Humidity: | 80% |
| Protection Class Acc. To DIN 60529 | P21 |

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