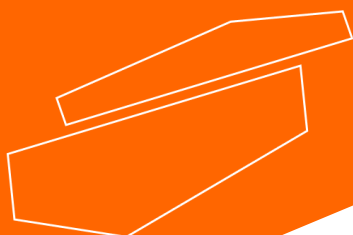




V05 Adjustable Speed Vortex

Please read the User Manual carefully before use, and follow all operating and safety instructions!



user manual

english

User Manual



V05 Adjustable Speed Vortex

Preface

Users should read this manual carefully, follow the instructions and procedures, and beware of all the cautions.

Service

In order to guarantee this equipment Works safely and efficiently, it must have a regular maintenance. In case of any faults, do not try to repair it yourself. If help is needed, you can always contact your dealer or Labbox via **www.labbox.com**

Please provide the customer care representative with the following information:



- Serial number
- Description of problem
- Your contact information

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 supplier.

1. Safety Instructions

	Warning! <ul style="list-style-type: none">• Read the operating instructions carefully before use.• Ensure that only trained staff works with the instrument.
	Protective ground contact! <ul style="list-style-type: none">• Make sure that socket must be grounded (protective ground contact) before use.

- Wear the personal safety items to avoid the risk from
 - Splashing 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 manipulation:
 - Keep medium vessels vertical as much as possible.
 - Mix the medium in the minimum pressure required.
- 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 substances or under water.
- Put the speed control knob to the lowest position. 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.
- 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 center of the mixing head.
- 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.


2. Proper Use

The instrument is designed for mixing liquids in schools, laboratories or factories. This device is not suitable for use in residential areas or other areas that may cause danger to the user or instrument as mentioned in Chapter 1.

3. Inspection

3.1 Receiving 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, please do not plug it into the power line.
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3.2 Listing of Items

The package includes the following items:

Items	Qty
Main unit	1
User Manual	1

Table 1

4. Trial Run

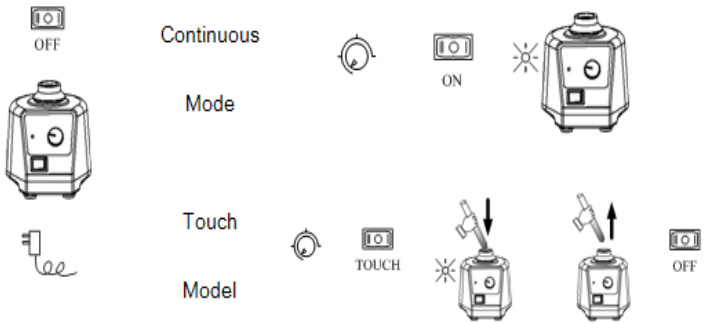


Figure 1



Note:
Ensure that the two-direction switch must be in the middle (off state) before powering on.

If these operations above are normal, the instrument is ready to operate following the “operation” chapter. If these operations are not normal, the instrument may be damaged. Please contact manufacturer/supplier for technical support.

5. Operation

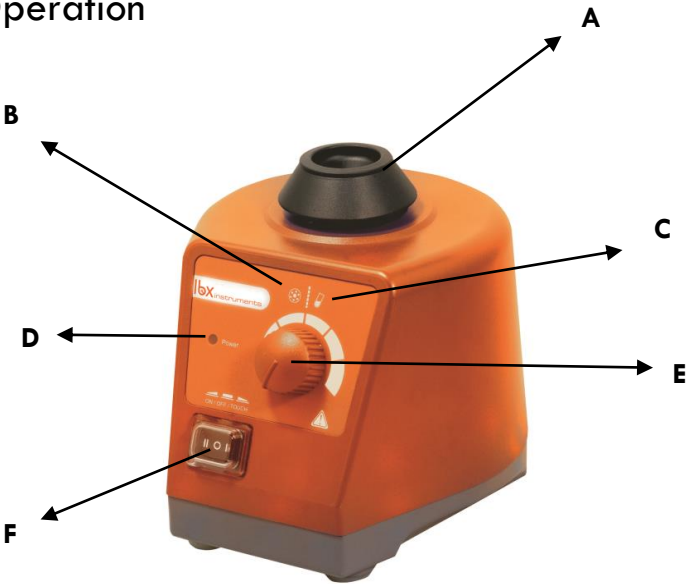


Figure 2

A	Mixing Head
B	Continuous mode indicator (Low speed area)
C	Touch mode indicator (High speed area)
D	Power LED
E	Speed control knob
F	Two direction switch

5.1 Continuous operating



Figure 3

- Place speed control knob at the lowest position. Put the instrument on a stable and safe place and plug in the main power.
- Push the two-direction switch left to ON and power LED is lit.
- Turn the speed control knob to set speed.
- Push the two-direction switch right gently to turn OFF.

5.2 Touch operating

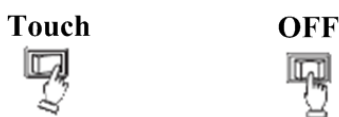


Figure 4

- Place the speed control knob at the lowest position. Put the instrument on a stable and safe place and plug in the main power.
- Push the two-direction switch right to the touch mode.
- Turn the speed control knob to set speed.
- If a test tube is pressed into the mixing head vertically, the instrument will begin to work and the power LED will be lit.
- Push the two-direction switch left gently to OFF.



Note:

- Place vessels as vertical as possible into the center of mixing head for proper mixing.
- Adjust the speed control knob slowly in order to have the instrument works smoothly.
- Don not run continuous operating mode at high speed area.


6. Maintenance and Cleaning

- Proper maintenance can keep instrument working and extend its life time.
- Do not spray the cleanser into the instrument when cleaning.
- Unplug the power line when cleaning.
- Only use cleanser as shown below:

Dyes	Isopropyl alcohol
Construction materials	Water containing tenside / Isopropyl alcohol
Cosmetics	Water containing tenside / Isopropyl alcohol
Foodstuffs	Water containing tenside
Fuels	Water containing tenside

Table 2

- 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.

	<p>Note:</p> <ul style="list-style-type: none"> • 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.
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7. Associated Standards and Regulations

Construction in accordance with the following safety standards:

EN 61010-1

Construction in accordance with the following EMC standards:

EN 61326-1

Associated EU guidelines:

EMC-guidelines: 2004/108/EC











Instrument guidelines: 73/023/EWG

8. Specifications

Items	Specifications
Voltage [VAC]	220-230 / 110-120
Frequency [Hz]	50, 60
Power [W]	60
Shaking movement	orbital
Orbital diameter [mm]	4
Motor type	Shaded-pole motor
Motor rating input [W]	58
Motor rating output [W]	10
Speed range [rpm]	0-2500
Speed display	Scale
Run type	Continuous/touch operation
Dimensions (mm)	127×130×160
Weight [kg]	3.5
Permitted ambient temperature[°C]	5-40
Permitted relative humidity	80%
Protection class acc. to DIN 60529	IP21

9. Accessories

Please get in touch with our company to order the following accessories available for these devices:

	Cat. No	Descriptions
	VORX-A03-001	Standard top, for <Ø30mm tubes and small vessels
	VORX-A06-001	Tube holding rod, used with tube adapters
	VORX-A04-001	Universal top, 100mm plate
	MIXS-A41-001	Tube adapter, for 48 holes test tubes, Ø6mm, used with VORX-A04-001 / VORX-A06-001
	MIXS-A51-001	Tube adapter, for 18 holes test tubes, Ø10mm, used with VORX-A04-001 / VORX-A06-001
	MIXS-A61-001	Tube adapter, for 12 holes test tubes, Ø12mm, used with VORX-A04-001 / VORX-A06-001
	MIXS-A71-001	Tube adapter, for 8 holes test tubes, Ø16mm, used with VORX-A04-001 / VORX-A06-001
	MIXS-A81-001	Tube adapter, for 8 holes test tubes, Ø20mm, used with VORX-A04-001 / VORX-A06-001
	VORX-A05-001	Platform pad, for <Ø99mm tubes and small vessels
	VORX-A07-001	Rubber Vacuum suction foot, 1pc

NOTE:

Tube adapters (used with VORX-A04-001) are only suitable to continuous operation mode.

Changing attachment:

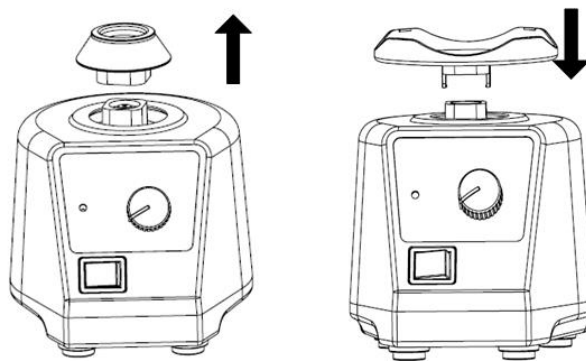


Figure 5

10. Applications

Attachments	V05 series (0-2500rpm)	
	Touch mode (High speed area)	Continuous mode (Low speed area)
VORX-A03-001	Y	Y
VORX-A06-001 + VORX-A41-001	Y	
VORX-A06-001 + VORX-A51-001	Y	
VORX-A06-001 + VORX-A61-001	Y	
VORX-A06-001 + VORX-A71-001	Y	
VORX-A06-001 + VORX-A81-001	Y	
VORX-A04-001 + VORX-A05-001	Y	
VORX-A04-001 + VORX-A41-001		Y
VORX-A04-001 + VORX-A51-001		Y
VORX-A04-001 + VORX-A61-001		Y
VORX-A04-001 + VORX-A71-001		Y
VORX-A04-001 + VORX-A81-001		Y

Nota importante para los aparatos electrónicos vendidos en España

Instrucciones sobre la protección del medio ambiente y la eliminación de aparatos electrónicos:



Los aparatos eléctricos y electrónicos marcados con este símbolo no pueden ser eliminados en forma de residuos urbanos.

De conformidad con la Directiva 2012/19/UE, los usuarios de la Unión Europea de aparatos eléctricos y electrónicos, tienen la posibilidad de devolver sus RAEE para su eliminación al distribuidor o fabricante del equipo después de la compra de uno nuevo. La eliminación ilegal de aparatos eléctricos y electrónicos es castigada con multa administrativa.

Remarque importante pour les appareils électroniques vendus en France

Informations sur la protection du milieu environnemental et élimination des déchets électroniques :



Les appareils électriques et électroniques portant ce symbole ne peuvent pas être jetés dans les décharges.

En réponse à la réglementation, Labbox remplit ses obligations relatives à la fin de vie des équipements électriques de laboratoire qu'il met sur le marché en finançant la filière de recyclage de ecosystem dédiée aux DEEE Pro qui les reprend gratuitement (plus d'informations sur www.ecosystem.eco).

L'élimination illégale d'appareils électriques et électroniques est punie d'amende administrative.

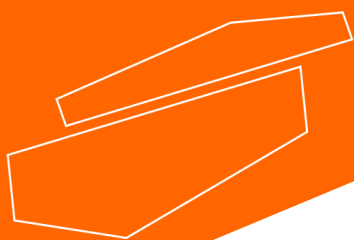
Nota importante per le apparecchiature elettroniche vendute in Italia

Istruzioni sulla protezione ambientale e sullo smaltimento dei dispositivi elettronici:



Le apparecchiature elettriche ed elettroniche contrassegnate con questo simbolo non possono essere smaltite come rifiuti urbani.

In conformità con la Direttiva 2012/19 / UE, gli utenti dell'Unione Europea di apparecchiature elettriche ed elettroniche hanno la possibilità di restituire i propri RAEE per lo smaltimento al distributore o al produttore di apparecchiature dopo averne acquistato uno nuovo. La rimozione illegale di apparecchiature elettriche ed elettroniche è punibile con una sanzione amministrativa.



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