

# LGB006

## Vortex mixer



### Safety rules

- ☆ For safety, please read the operation manual carefully before starting operation!
- ☆ Parts subject to heat, humidity and biological changes will cause functional degradation and even loss of safety leading to accidents!

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## Foreword

This manual is copyrighted by Our companyl, and no one may reprint or distribute any of the contents of this manual, including pictures and audiovisual materials.

The equipment operator can copy some chapters of this operation manual, but only for internal use, for example, to guide the user.

How to handle emergencies. The contents of these chapters are clearly marked in the manual table of contents.

Our companyl is not responsible or liable for any damage to the instrument caused by the user's failure to declare the "environment for the use of the instrument" in accordance with the manual.

Our companyl Corporation reserves the right to modify the contents of the operating manual at any time without proper notice.

## Instrument use environment



To ensure the continued safety of the machine, the following factors may damage the instrument:

- Chemical effects;
- Environmental impacts, including natural ultraviolet radiation;
- Corrosion and wear of protective cover parts and other safety parts.
- \* Indoor use;
- \* Altitude:  $\leq 2000\text{m}$ ;
- \* The applicable ambient temperature range of the instrument is  $+5\text{ }^{\circ}\text{C} \sim +40\text{ }^{\circ}\text{C}$ ;
- \* The applicable relative temperature range of the instrument is  $\leq 80\%$ ;
- \* ***Applicable scope of instrument working power supply product model and its main technical parameters;***
- \* Adequate ventilation must be installed indoors;
- \* There are no vibrations or air currents that affect performance;
- \* There is no conductive dust explosive gas and corrosive gas in the surrounding air;

## safety warning

- \* For the first time using this machine, please read this manual carefully!
- \* The mixer may only be operated by trained and authorized personnel;
- \* The maintenance of the equipment can only be completed by Our companyl or its authorized agents;
- \* The following materials are strictly prohibited in the instrument:
  - Flammable and explosive materials;
  - Strongly chemically active materials;
  - Toxic or radioactive substances, or pathogenic microorganisms, etc.
- \* Only qualified maintenance personnel should use appropriate tools to perform repair

operations on the mixer system.

- \* If the operator encounters a situation not mentioned in this manual, please contact Our company or an authorized agent of Our company to inquire about the correct treatment method.
- \* Try to use the accessories provided by Our company, if the user wants to use other accessories, Our company will not be responsible for the adverse consequences. But users can apply to Our company to verify whether the accessories meet the requirements of Our company.
- \* The mixer must be inspected and maintained at regular intervals.

## Safety warning sign description



**Note: Please read the instruction manual carefully before using the instrument!**



**Note: Danger of high voltage! Danger of electric shock!**



## Meaning of safety instructions

In order to avoid harm to the surrounding people or damage to surrounding objects and the environment, you must follow all safety instructions in this user manual.

Except for accident prevention, environmental protection, and recognized professional rules on safety and occupation, including the laws and regulations of the country where the user is located and the installation of this instrument, they must be carefully followed.

## Consequences of neglecting safe operating procedures

Any action that ignores safe operating procedures, laws and regulations and various rules will lead to harm to people, objects and the environment.



## Safety Precautions

- \* Never plug or unplug the power plug or toggle the power button when the liquid is in your hands!

- \* Never plug or unplug the power plug while the instrument is live!
- \* It is strictly forbidden to maintain and scrub the instrument while the power is on!
- \* It is strictly forbidden to carry out shaking operation when the sample capacity exceeds 70% of the test tube capacity.

The container must be covered!

- \* It is strictly forbidden to install the instrument on the uneven, shaking and shaking work surface!
- \* When installing the gasket or fixture, make sure that it is in place to prevent the gasket and fixture from flying out during work!
- \* Do not oscillate more than the maximum load of the instrument!

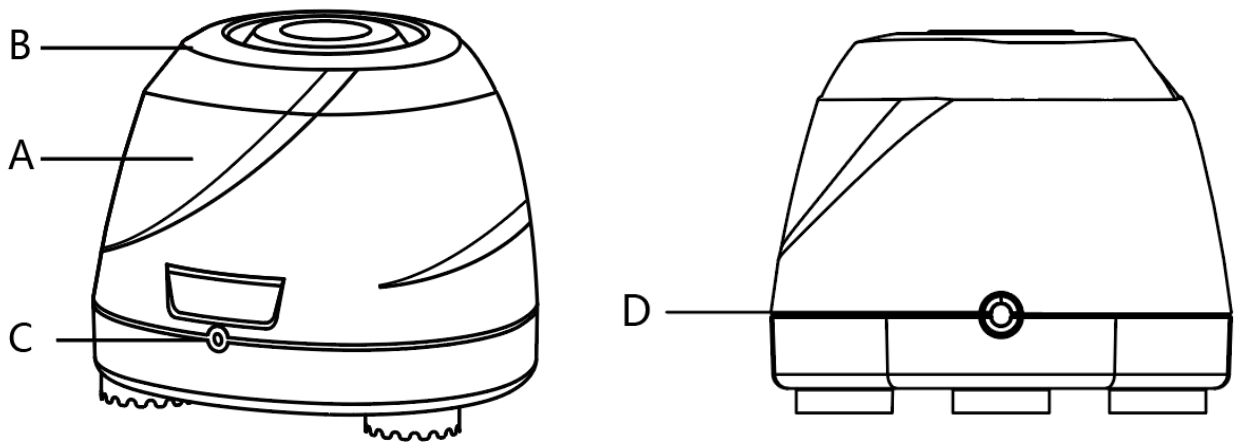
## I. Product Brief:

Our company's vortex mixer adopts international advanced design concepts and manufacturing technologies, and has the advantages of smooth and beautiful appearance, compact and firm structure, high versatility, simple operation and other advantages. The device is very suitable for the necessary conventional instruments for fixing, shaking and mixing various reagents, solutions and chemicals.

## 2. Product model and its main technical parameters

<b>Product number</b>	<b>LGB006</b>
<b>Input power</b>	DC12V-1A
<b>Output power [w]</b>	10W
<b>Motor / drive method</b>	DC12v permanent magnet motor / direct drive
<b>Control method</b>	photoelectric sensor
<b>Maximum load</b>	0.6Kg
<b>Speed range [r / min.]</b>	4000rpm±5%
<b>Oscillation mode</b>	circumference
<b>Circumference diameter [mm]</b>	4.5
<b>Weight [Kg]</b>	0.9
<b>Size: length × width × height [mm]</b>	95×95×80mm
<b>Noise at maximum speed</b>	≤40dB (A)

### 3. Mixer appearance function introduction



- A. Main housing B. Silicone oscillating disc C. Power indicator  
d. DC12V power jack

#### **B. Above is LGB006 mixer (exterior schematic)**

### 4. Operating instructions



**Note: Before using the instrument, please make sure that the instrument is not damaged during transportation!**

- \* Whether the appearance of the instrument is brand new and intact!
- \* Whether the oscillation output fixing plate is firmly fixed on the host without looseness!
- \* Whether the adjustment knob is fixed vertically on the operation panel and whether it is tilted!

1. 4.1 [Operation of mixer]
- 2.
3. 1. Switch on the power.
- 4.
5. 2. The power indicator is on.
- 6.
7. Start by pressing the tube down into the center of the gasket.

## 5. Maintenance items

Do not attempt to clean the device with the power cord plugged in or the power switch on. If the equipment or parts are contaminated by pathogenic, toxic or radioactive substances, appropriate decontamination is the responsibility of the user, as stated in the "Laboratory Biosafety Manual", etc. When there are other requirements for cleaning and decontamination mentioned in this chapter, please contact our company to check if they may damage the equipment. If you plan to return equipment or parts to our company or require maintenance, you must ensure that the equipment or parts are clean and not harmful to human body!

Do not use organic solvent, because it can break down the motor bearing lubricating grease; In the cleaning process, do not put liquids, especially organic solvents, into contact with the motor spindle and bearing inside the ball!

5.1 Do not use sharp objects to collide with gaskets, in the handling and disassembly to prevent knock, to prevent scratches or trauma caused by the fixture and the host machine in use crack.

5.2 When cleaning gaskets, please wet sponge or cotton cloth with neutral detergent, and then wash off the detergent with distilled water. Do not spray or spray the rotor with water, as the liquid may be left in place and cause corrosion. Allow to dry upside down after cleaning.

5.3 Carefully wipe the surface of the instrument with a soft cloth stained with neutral detergent, and then clean the detergent with a wet cloth.

5.4 If the instrument has major problems, such as the power supply can not operate under normal conditions, the machine has burning smell inside, the fixture is broken, the instrument shakes violently during operation, etc., please contact the manufacturer or the dealer authorized by the manufacturer in time, and do not repair without the guidance of professional maintenance personnel!

## 6. Troubleshooting

The following table lists the instrument's failure phenomenon and related failure causes and processing methods, you can remove them according to the prompts; if the user can't rule out the failure after the attempt or the failure phenomenon is not in the following list, the user should contact production immediately Maintenance personnel of the unit.



After an abnormality occurs, the power should be turned off, the plug should be unplugged, and the fault should be restarted.

**Table 1: Symptoms, causes and solutions**

<b>The fault phenomenon</b>	<b>Fault causes and troubleshooting methods</b>
Instrument not in operation	<ol style="list-style-type: none"> <li>1. Check whether the power socket and connection are in good condition and whether the power socket has power.</li> <li>2. If not, contact the manufacturer's maintenance personnel.</li> </ol>
The instrument suddenly stopped	<ol style="list-style-type: none"> <li>1. Whether the power connection is good.</li> <li>2, whether the instrument has a burning smell, if yes, please immediately unplug the power supply, contact the manufacturer's maintenance personnel.</li> <li>3. The voltage range may be too large. Check whether the supply voltage meets the requirements of DC12V/1A.</li> </ol>
Indicator light off	<ol style="list-style-type: none"> <li>1. If the power supply is not connected, check the power distribution.</li> <li>2. Check whether the breath light is on normally. If not, please contact the manufacturer.</li> <li>3. If not, contact the manufacturer's maintenance personnel.</li> </ol>
Beyond the fault content	By the manufacturer professionals to solve!

## 7. Warranty (repair) basis

The warranty period (warranty period) starts from the user's receipt of the product. During the warranty period (warranty period), if the product fails, the production unit or a sales company authorized by the production unit maintenance personnel is responsible for on-site repairs, if necessary, replacement Parts are due to their own quality, not caused by improper use, they can be replaced free of charge, otherwise you have to pay. The shell is not covered by the warranty!

### Warranty (repair) basis

- The user operates according to the requirements of this instruction manual;
- The implementation of installation, commissioning, moving the location, adding accessories, maintenance, etc. is performed by the production unit or a sales company authorized by the production unit or a special person responsible;
- The usual maintenance is performed regularly according to the methods specified in this instruction manual;
- If the above requirements are not met, that is, damage caused by improper use by the user, the production unit or a sales company authorized by the production unit is responsible for repairs, but it is not free of charge.

Our companyl company guarantees that within 18 months after the sale of the machine, any problems that are related to the quality of the machine (except for damage caused by improper use by the user), the unit is responsible for the warranty. If the warranty period is exceeded, maintenance will be charged.

## 8.Packing list

<b>Serial number</b>	<b>name</b>	<b>Quantity</b>	<b>Remark</b>
1	The host	1	
2	Certificate of conformity	1	
3	Quality Assurance page	1	
4	Operation instruction	1	
5	DC12V/1A power adapter	1	



**When unpacking, please check it in time.If there is any discrepancy, please contact the production unit or a sales company authorized by the production unit in time!**

# Maintenance records

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