



Handheld Homogenizer

LMHH-A101

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1. Introduction

Handheld Homogenizer LMHH-A101 has speed range of 0 to 22000 rpm. It ensures uniform sample processing. Equipped with an ergonomic handle for comfortable operation. Incorporated with capacity of 0.2 to 1L for water-based samples. Our Homogenizer is ideal for food, chemical, and medicine sample preparation.

2. Features

- Lightweight and portable
- Easy to clean design
- Display Speed
- Stable operation

3. Specifications

Model No.	LMHH-A101
Idle Speed Range	0 to 22000 rpm
Load Speed Range	0 to 17000 rpm
Capacity (Water)	0.2 to 1L
Working Head	Ø28mm or Ø36mm
Display	Digital Speed Display
Working Mode	Controlled Operation
Power Consumption	510W
Power Supply	AC 220V, 50Hz
Dimension	250 × 350 × 600 mm

4. Applications

Handheld Homogenizer LMHH-A101 is mainly employed in fields of food, chemical, and medicine. It is widely applied in preparing cosmetics, creams, lotions, shampoos, mayonnaise, and ketchup.

5. Installation

5.1 Basic Structure

This series of mixers is composed of a running state controller, a drive motor and a dispersing and homogenizing working head, etc.

- 1) The operating state controller adopts a touch-type stepless speed regulator, which digitally displays the operating speed status of the equipment in the experiment, which is convenient for speed adjustment and correct data.
- 2) The drive motor adopts a series-excited micro motor with large output power and compact structure, and the design is safe and reliable.
- 3) All parts of the dispersive homogeneous working head contacting the material are made of high-quality stainless steel, which has good corrosion resistance.
- 4) The dispersive and homogeneous working head is connected with the drive motor by a coupling, which is easy to disassemble and assemble, flexible and reliable in connection.

5.2 Device Installation

- 1) Place the base plate of the machine on the platform, take two longer uprights and connect them with threads to form a whole, and then use a flexible reporting handle to fix the whole upright in the screw holes of the base plate, then take the support fixing frame and turn the handle Fix it on the column so that it is between the other notch of the support fixing frame.
- 2) Take a shorter cross bar, connect it to the screw hole of the motor base, and lock the cross column tightly, and then put the cross column into the support fixing frame to fix the host on the column. This machine can be adjusted according to the needs of the experiment, the host can be adjusted front, back, up, and down on the supporting fixed frame.
- 3) To ensure the safe operation of the machine, firmly fix each key connection point and check it frequently to prevent loosening. Before inputting the power to debug the equipment, read the "use and maintenance" instructions carefully before proceeding.

6. Operations

6.1 Motor part

- 1) This machine adopts a single-phase three-wire system. The required power socket is a 220V, 10A three-hole socket. The socket must have a good grounding. Strict attention must not be paid to the wrong grounding wire. (It is strictly forbidden to lead the grounding wire to the telephone line, water pipe, gas pipe, and lightning rod wires.)
- 2) Before inputting power to the machine, please carefully check whether the power switch (1) is in the [OFF] state to avoid. The human host starts suddenly, causing personal injury to the operator and damage to the experimental equipment and experimental materials.
- 3) After the machine is powered on, turn on the [ON] power switch, the number displays red [000]. Touch the button in the initial state, the running speed will gradually increase, and the display number will gradually increase; touch the button again, and the running speed will gradually decrease, and the display number will gradually slow down. However, before the experiment, the motor operation test should be carried out. Do not install the dispersive homogenizing head during the test.
- 4) When the machine is running, the actual speed is 100 times the displayed speed. For example, the speed displayed on the display [040], the actual speed should be 4000 rpm. During the experiment, because the physical properties of the experimental materials in high-speed operation are constantly changing, so its running speed display will also continue to fluctuate.
- 5) The working method of this machine is intermittent, and continuous operation is prohibited. To maintain the safety performance of the motor and prolong the service life of the equipment, it must be shut down for 3 minutes after running for 5 minutes.
- 6) After the machine is finished working, touch the button on the digital display [000] initial state, turn off the power switch, cut off the power, pull out the plug, and clean the dispersed and homogeneous working head in time for the next use

6.2 Homogenize the working head part

- 1) The dispersing and homogenizing working head of this machine is strictly prohibited from running away from the liquid medium, to avoid damage to the mechanical parts without liquid medium protection when running at high speed, which may cause mechanical failure.
- 2) For the working head configured with this machine, a suitable working head should be selected for the experiment according to the quantity of experimental materials.

6.3 Work head disassembly steps

- 1) When installing, protect the working head with your hands, press the fixed circle of the coupling diagram with the fingers of the other hand, align the transmission pin with the transmission groove (3) on the motor and insert, and then rotate the working head to make the upper part of the coupling Align the positioning groove with the anti-rotation pin on the motor, and then loosen the coupling fixing ring with your fingers, the fixing unit will automatically reset, and the working head is installed.
- 2) When disassembling, protect the working head with your hands, press down the coupling fixing ring to make it in place, the working head can be removed with a slight downward pressure, but not too strong, so that the head of the working head hits the base plate, causing deformation and damage.

7. Maintenance

- 1) The machine should be stopped after being used for a time or for a long time. If it is used again, it should be maintained and inspected. Especially in terms of electrical safety performance, a megohmmeter can be used to detect the insulation voltage.
- 2) The brush on the motor of this machine is a vulnerable part, and the user should check it frequently. Cut off the power supply during the check. Take out the plug, unscrew the brush cap/cover, and pull out the brush. If the brush is shorter than 6mm, it should be replaced in time.
- 3) The newly replaced brush should use the original specification brush, and should move freely in the brush tube (frame) to prevent it from getting stuck in the tube and causing the spark to be too large or the motor not to run.
- 4) When the machine is in use, if the motor does not run, you should first check whether the power socket has power and whether the connector is. If the brush is loose, whether the brush is in good contact, it still cannot operate normally after troubleshooting the above faults.

Causes:

- 1) The machine should be placed in a dry, clean and dry place to keep the whole machine tidy and protected from moisture.
- 2) The operating environment temperature generally does not exceed 40 °C. Strictly prevent all kinds of foreign objects from splashing into the motor.
- 3) When the motor is used in an area prone to humidity, use a leakage protection device to ensure the personal safety of the operator
- 4) The machine is used in a strong corrosive environment. To prevent mechanical and electrical performance damage, please pay attention to taking the necessary protective measures.
- 5) This machine is forbidden to be used in an environment with flammable and explosive objects.
- 6) This machine is used in a grid with severe voltage fluctuations, which will cause the speed to run out of control. It is recommended to use a voltage stabilizing device.
- 7) This machine is forbidden to run continuously at high speed. It should work for 3 minutes, stop for 5 minutes, and use it intermittently

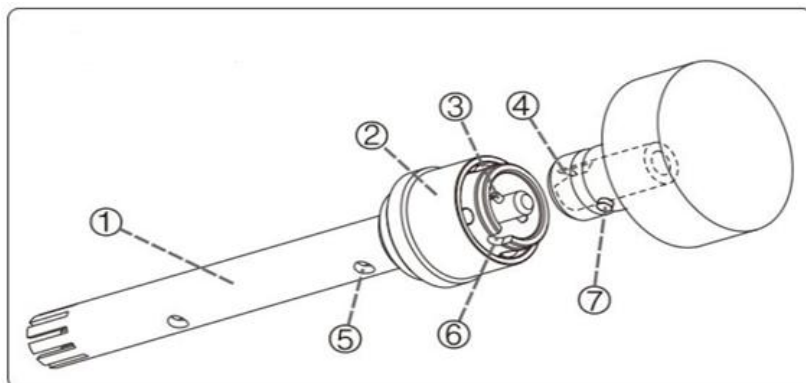


Figure-1

8. Accessories

Optional Accessories

LMHH-A101-W1: 36mm Working Head



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