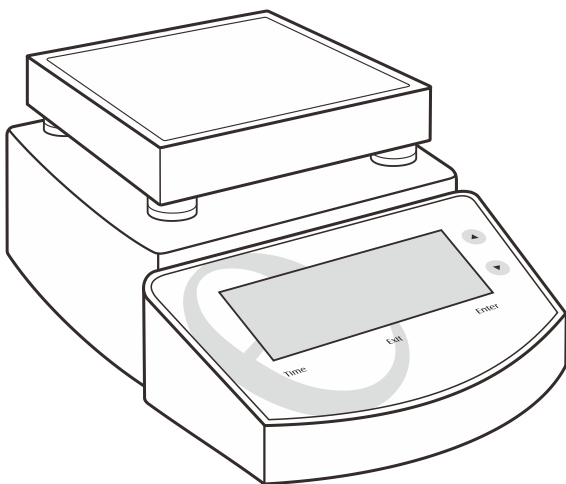


MS200/300/400 Magnetic Stirrer
Instruction Manual



Introduction

Thank you for selecting the MS series magnetic stirrer. This manual provides a step-by-step guide to help you operate this device, please carefully read the following instructions before use.

Environmental Conditions

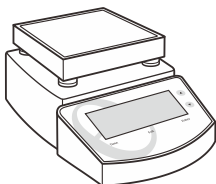
Before unpacking, ensure that current environmental conditions meet the following requirements.

- Relative humidity is less than 80%.
- Ambient temperature is greater than 0°C/32°F and less than 40°C/104°F.
- Well ventilated and no corrosive gas exists.

Packing List

The following list describes all components of the stirrer. If any items are missing or damaged, contact the supplier immediately.

1



- Magnetic stirrer and stir bar

2



3



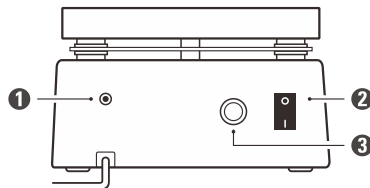
- Temperature probe (for models MS300 and 400 only)

Overview

Keypad

Key	Function
Time	Set the stirring time
°C	Set the heating temperature
Enter	Confirm the setting
Exit	Exit the setting, heating or timed stirring mode
▲	Increase value or stirring speed
▼	Decrease value or stirring speed

Connector



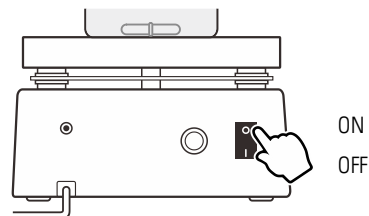
1	Socket for temperature probe (3.5 mm jack)
2	Power switch
3	Fuse

Safety Notes

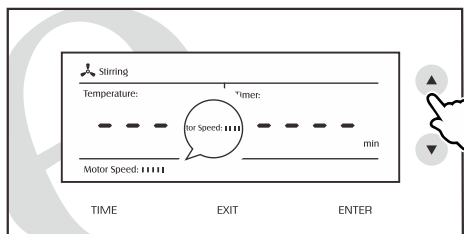
- Before connecting the power supply, make sure that the local mains power voltage matches the stirrer requirements, the power outlet has been properly grounded.
- The power cable must be kept away from the hot plate.
- Do not use a metal container.
- Do not heat or stir volatile or flammable liquids.

Stirring

- 1.1 Place stir bar into the container and fill the liquids to be stirred.
- 1.2 Place container in the center of the top plate.
- 1.3 Press the power switch to **ON** position.



- 1.4 Press the ▲ or ▼ key to set the stirring speed, the stir bar will begin running after 3 seconds.



- 1.5 When desired stirring is complete, press the power switch to **OFF** position. Remove container from the top plate.

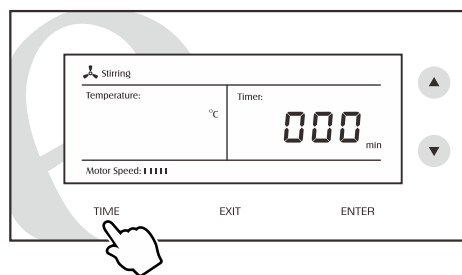


- For the liquids of high viscosity, we recommend that setting a slower stirring speed.
- If the stir bar is not running smoothly, move container slightly, the stir bar should be in the center of the container.

Stirring Time

The MS series magnetic stirrer is installed with a built-in timer for controlling the stirring time.

- 2.1 Press the **Time** key, the display shows 000 min.
- 2.2 Press the **▲** or **▼** key to set desired stirring time.
- 2.3 Press the **Enter** key, the timer begins countdown automatically until it gets to zero, the stirrer will stop running.

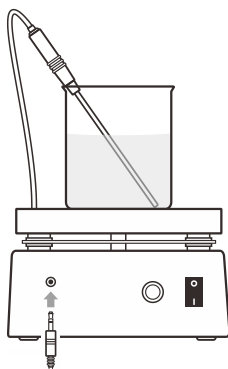


To exit the setting without saving changes, press the **Exit**.

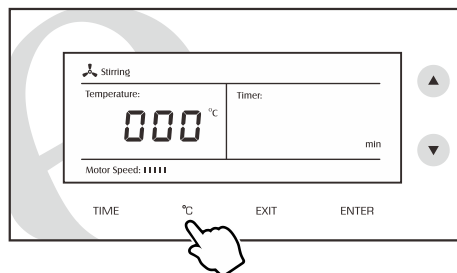
Heating

This section is applicable to models MS300 and 400 only.

- 3.1 Connect the temperature probe to the jack socket on the rear panel of stirrer.
- 3.2 Place the temperature probe into the liquid.



- 3.3 Press the **°C** key, the display shows 000 °C.



- 3.4 Press the **▲** or **▼** key to set desired temperature.
- 3.5 Press the **Enter** key to begin heating.

Note:

- The hotplate will not heat if temperature probe is not attached.
- While heating a liquid the temperature probe must be immersed, otherwise the hotplate will heat continuously and will go into a fault condition.
- During the heating, the Heating icon will successively show as follows:



- When the liquid reached the setting temperature, the Heating icon will continuously flash.



- Press the **Exit** key, the hotplate will stop working immediately.

Temperature Calibration

During the heating, if the temperature reading displayed differs from that of an accurate thermometer, please follow the steps below to calibrate the stirrer.

- 4.1 Turn off the stirrer.
- 4.2 Press and hold the **▲** and **▼** keys for 3 seconds, then turn on the stirrer.
- 4.3 Press the **▲** or **▼** key to modify the temperature value.
- 4.4 Press the **Enter** key to save.

Troubleshooting

Issue	Cause and Corrective Action
Stir bar is not running	The screw under the top plate is loose
Hotplate is not heating	Temperature probe is not connected to stirrer or the heater has damaged

Optional Accessories

Order Code	Description
TP-100P	Temperature probe, stainless steel body
STB-S	Stir bar, PTFE material, 30(L)×7(Dia.)mm

Specifications

Model	MS200	MS300	MS400
Stirring Volume	0 to 2000 ml		
Stirring Speed	0 to 1250 rpm		
Heater	----	380 W	450 W
Hotplate Temperature	----	300°C	400°C
Timer Range	0 to 999 minutes		
Top Plate Size	135(L)×135(W) mm (5.3×5.3")		
Top Plate Material	Stainless steel		
Display	Segmented LCD, 95×35 mm (3.74×1.37")		
Power Requirements	AC 220V/50Hz		
Dimensions	230(L)×180(W)×120(H) mm (9×7×4.7")		
Weight	2.2 kg (4.8 lb)		

Disposal

This stirrer is required to comply with the European Union's Waste Electrical and Electronic Equipment (WEEE) Directive 2002/96/EC and may not be disposed of in domestic waste. Please dispose of this product in accordance with local regulations at the collecting point specified for electrical and electronic equipment.



Warranty

The warranty period for stirrer is 1 year from the date of shipment. Above warranty does not cover temperature probe. Out of warranty products will be repaired on a charged basis. The warranty on your stirrer shall not apply to defects resulting from:

- Improper or inadequate maintenance by customer.
- Unauthorized modification or misuse.
- Operation outside of the environment specifications of the products.

For more information, please contact the supplier.



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