

08-2G Homothermal Magnetic Stirrer

The magnetic stirrer is the enhanced 08-2 Homothermal magnetic stirrer with micro-controller. It uses touch digital setting instead of traditional knob to set the stirring speed, heating temperature and timing etc. Meantime, it keeps the benefits of brushless motor, stable speed, accurate temperature control and easy-to-use.

I. Main performance data:

Power supply: AC220V±10% 50HZ	Max timing: 250 mins
Max speed: 1500r/min	Timing accuracy: 1 min
Speed ratio: 10:1	Motor torque: 20mN·m
Max capacity: 5000ml	Liquid temperature range: Ambient to 150°C (<= 1000ml)
Size: 245×150×125 (mm)	Liquid temperature tolerance: ±1°C

II. Temperature control:

Temperatures of the heating plate and liquid are automatically controlled in this stirrer to account for variable application conditions, such as flat-ness of the container, contact surface with the heating plate, materials of container (glass or stainless steel), the stirring volume and the set temperature. All the above factors will have effects on the accuracy. As a result, the temperature difference factor was defined from 1 - 250 depending on the user.

III. Application Method:

1. Lay the stirrer horizontal and power on. Connect the temperature sensor to the two posts behind the machine, and place the beaker containing liquor onto the heating plate with a stir. Insert the sensor into the liquor. Plug the power cable until the speed indicator lights and the set speed displays.
2. Setting of speed: Press the setting button to make the figures flash. Use the up/down buttons to set the desired speed. When the speed is higher than 999, the decimal indicator lights, indicating the figure should be multiplied by 10.
3. Timing: Press the setting button until the timing indicator lights. Use the up/down buttons to set the desired time. **Set the time to zero when no timing is required.**
4. Setting of temperature: Press the setting button until the temperature indicator lights. Use down/up buttons to set the desired temperature.
5. Temperature difference setting: Press the setting button until the temperature difference indicator lights. Use down/up button to set the desired difference. The difference is related to the highest temperature of the heating plate. **Highest temperature of the heating plate= Set temperature of the liquid + temperature difference +(Set temperature of the liquid - measured temperature of the liquid)×2.** During heating by stirring, press the setting button until the temperature difference indicator lights. The heating plate temperature appears on the digital display. The temperature difference should be set depending on the stirring volume, set temperature of the liquid and contact surface with the heating plate etc.
6. Press the setting button twice until the speed indicator lights. Then the set speed displays.
7. Press the stirring button once until the stirring indicator lights. The stirrer will run at acceleration rate to the set speed.
8. Press the heating button until the heating indicator lights. The red warm-up indicator is on to show the heating plate is heated up.
9. Heating is only allowed during stirring. Press the heating button again when the heating indicator is on to stop heating. Press again to stop the stirring.
10. Display current conditions: Press the setting button until speed, time and temperature indicators light. Then the current speed, remaining time and liquid temperature difference will appear (set temperature displays when the heating indicator turns off). Press the setting button until the temperature difference indicator lights during heating to show the surface temperature of the heating plate.
11. When the stirring ceases, press the stirring button again to put the stirrer into operation under the previous set data.
12. During operation, press up or down button to adjust the speed. The adjusted speed is only displayed when pressing down. Original set speed will appear after releasing the button. The stirring speed adjusted during operation will not be saved. The stirrer will still run at the original set speed next time.

13. Only stirring speed can be adjusted during operation. If other data require adjustment, the stirring button should be closed. Press the setting button to set the desired data when the respective indicator lights.
14. The system will alarm when the stirrer reaches the set time.
15. Due to low electricity consumption when the stirrer stops running, so it is unnecessary to unplug the power cable for a short time.

IV. Notes:

1. Power socket should be well grounded.
2. Liquor in the beaker should not be too full to avoid overflow during stirring.
3. Power cable and thermometer sensor lead should be kept away from the hot heating plate.
4. The power cable should be unplugged for a long storage period.

V. Accessories:

one power cable, one line rod, two stirrers, one temperature sensor (PT100)