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HEATING MAGNETIC STIRRER

OPERATION MANUAL

(PLEASE READ THE INSTRUCTION CAREFULLY
BEFORE YOU USE THE MACHINE)



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1. Product Overview

The Stonylab Hotplate Magnetic Stirrer is available in two types: one with a mica sheet-heated stainless steel plate and another with a heating tube-heated die-cast aluminum plate. It is suitable for liquids with moderate viscosity or solid-liquid mixtures and is mainly applied in chemical synthesis, analytical chemistry, and life sciences.



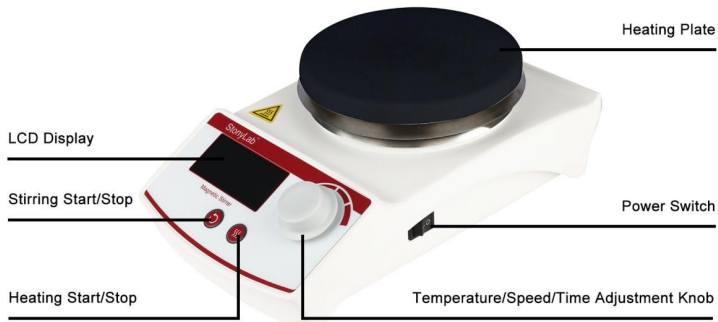
SL003021
Mica sheet-heated stainless steel plate



SL003022
Heating tube-heated die-cast aluminum plate

2. Product Features

- LCD display for real-time monitoring of heating, stirring, and timing parameters.
- LCD screen with backlight design for easy parameter setting and monitoring. Brushless motor drive with a wide speed range and extended service life.
- Timer function for convenient control of stirring and heating duration. Operation lock function to prevent accidental changes to the running state.
- Dual heating control circuits ensure stable temperature even if one circuit fails.
- Independent heating control with button illumination when heating is active for easy operation.
- Die-cast aluminum sealed insulation housing prevents liquids and gases from entering the instrument and protects internal circuitry from corrosion.
- Ceramic coating provides strong corrosion resistance and allows easy cleaning of solvents, oils, or other contaminants spilled on the work surface.

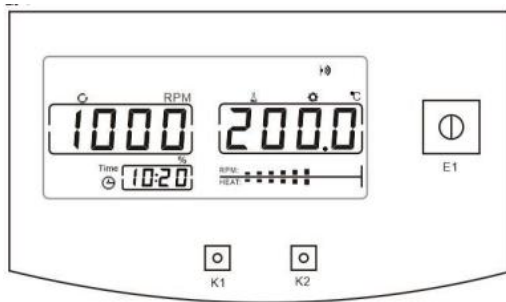


LCD Magnetic Stirrer with Heating Function

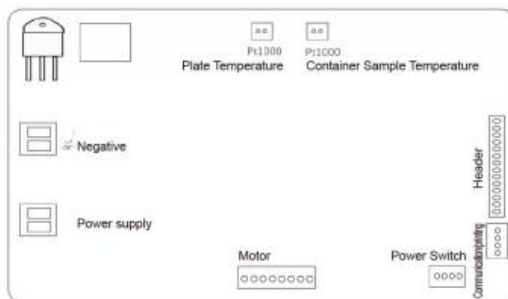
3. Operating Instructions

3.1 Main Technical Parameters

- Timer Function: Time setting range: 0-99 hours 59 minutes
- Temperature Setting Range: 205D: RT+5-350.0°C; 208D: RT+5-400.0°C
- Speed Setting Range: 100-2000 RPM
- Temperature Display Accuracy: 0.5% F.S
- Sensor: Pt1000
- Instrument Power: <550 W / 900 W
- Power Supply: AC 220 V, 50/60 Hz
- Working Environment: 0-50°C, <85% RH, non-condensin



- (K1) Stirring Start/Stop Button (with operation indicator light)
- (K2) Heating Start/Stop Button (with operation indicator light)
- Rotate or Press Knob E1 to set temperature, stirring speed, and timer.



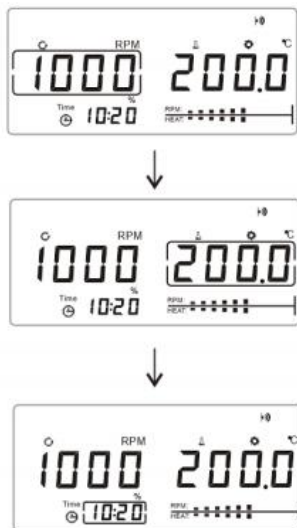
3.2 Function Introduction

When the cup temperature sensor is disconnected or faulty, the controller automatically switches to controlling the heating plate temperature. When the cup temperature sensor is correctly connected, the controller regulates the cup temperature, while the plate temperature sensor serves as a protective function.

If the temperature display shows “— — — —”, it indicates that the temperature sensor is open-circuited or the input signal exceeds the upper measurement range.

If the temperature display shows “— — — —”, it indicates that the temperature sensor signal is below the lower measurement range.

If the K2 button indicator flashes, it means the heating plate temperature exceeds 50°C, reminding the operator not to touch the heating plate surface.

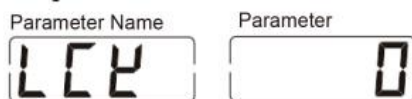


When powered on, the display shows the normal interface.

- Rotate or press the encoder: the Speed area cursor will flash.
- Rotate the encoder to adjust the speed to the target value, then press the encoder to confirm. The cursor will automatically move to the Temperature area and start flashing.
- Rotate the encoder to set the desired temperature, then press the encoder to confirm. The cursor will automatically move to the Time area and start flashing.
- Set the desired time by rotating the encoder, then press to confirm. The cursor will disappear, indicating the settings are complete.
- Press the Speed Start/Stop button to start or stop stirring.
- Press the Heating Start/Stop button to start

Parameter Setting:

When not in the setting mode, press and hold the E1 button for about 3 seconds, then release it. The controller will display the LCK setting menu as shown in the figure:



Rotate E1 to the desired value and press E1 to confirm, entering the corresponding menu.

Once inside the menu, briefly press E1 to exit the setting.

4. Technical Parameter

Model	Hotplate Magnetic Stirrer	
Part No.	SL003021	SL003022
Voltage (V)	110/220	110/220
Frequency (Hz)	60/50	60/50
Timer Range	0-99h 59min	0-99h 59min
Motor Type	Brushless DC Motor	Brushless DC Motor
Display Mode	LCD	LCD
Total Power (W)	600	900
Motor Output Power (W)	15	15
Heating Output Power (W)	550	850
Speed Range (rpm)	100-2000	100-2000
Maximum Stirring Capacity (L)	20	20
Heating Plate Size (mm)	145	145
Working Surface Material	Stainless Steel with Ceramic Coating	Die-Cast Aluminum with Ceramic Coating
Heating Plate Method	Mica Sheet	Heating Tube
Temperature Control Range (°C)	RT+5~350	RT+5~400
Temperature Resolution (°C)	0.1	0.1
Over-Temperature Protection (°C)	≤420	≤450
External Temperature Sensor	Pt1000	Pt1000

Sensor Temperature Control Accuracy (°C)	±0.2	±0.2
Temperature Control Accuracy (°C)	±1	±1
Temperature Setting Accuracy (°C)	±0.1	±0.1
Standard Stir Bar (mm)	C 8x25 (1) + C 8x45 (1) + 7x20 (1)	
Stir Bar Applicable Size (mm)	20-80	20-80
Ambient Temperature (°C)	5-40	5-40
Ambient Relative Humidity (%)	80	80
Dimensions (mm)	165 x 280 x 105	165 x 280 x 105
Packaging Dimensions (mm)	425 x 390 x 200	425 x 390 x 200
Net Weight (kg)	4	4
Gross Weight (kg)	5	5

5. Warranty

Warranty is effective from the date of purchase and is non-transferable.

For more details about the warranty, please refer to the link below:
stonylab.com/pages/warranty

For any inquiries or assistance, feel free to contact us:

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This instruction manual is subject to change without prior notice.