

Borosil HLS 200

Borosil HLS 200 Digital Magnetic Stirrer with Timer User Manual

Model: HLS 200

1. INTRODUCTION

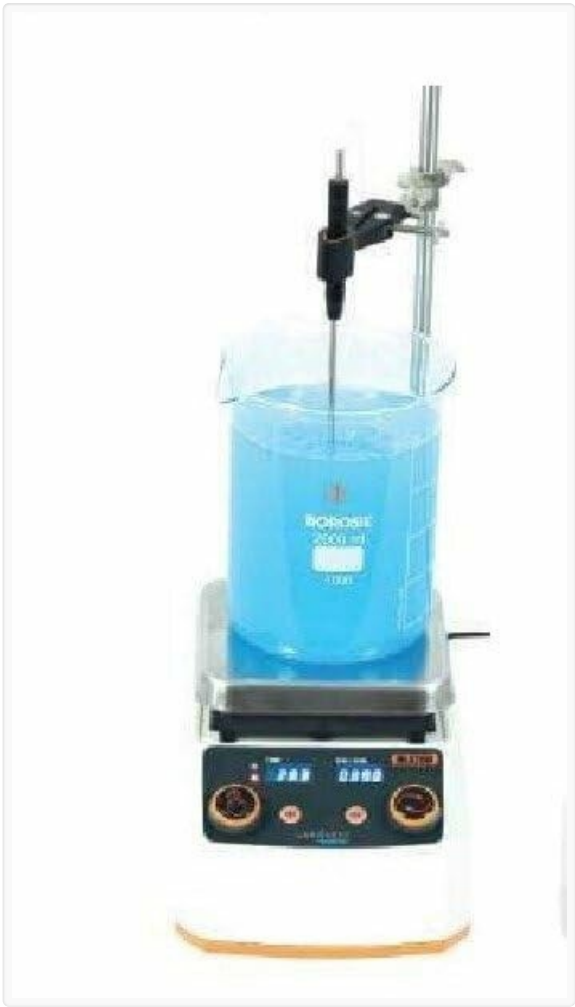
This manual provides essential information for the safe and effective operation of the Borosil HLS 200 Digital Magnetic Stirrer with Timer. This device is designed for laboratory applications requiring precise heating and stirring of liquids up to 2 liters. Please read this manual thoroughly before initial use and retain it for future reference.

2. SAFETY INSTRUCTIONS

- Always operate the device on a stable, level, and heat-resistant surface.
- Ensure the power supply matches the specifications listed on the device label.
- Do not touch the hot plate surface during or immediately after operation, as it can reach temperatures up to 300°C. Use appropriate personal protective equipment (PPE), such as heat-resistant gloves.
- Avoid spilling liquids onto the control panel or into the internal components of the stirrer. In case of spillage, disconnect power immediately and clean carefully.
- Do not operate the device in environments with explosive or flammable gases.
- Ensure proper ventilation when heating volatile substances.
- Only use stir bars and beakers suitable for magnetic stirring and heating applications.
- Disconnect the power cord before cleaning or servicing the unit.
- Keep the device out of reach of unauthorized personnel and children.

3. PRODUCT OVERVIEW

The Borosil HLS 200 is a digital hot plate magnetic stirrer designed for efficient and controlled laboratory processes. It features a stainless steel top plate for heating and a magnetic stirring mechanism for homogeneous mixing. The integrated digital display and timer allow for precise control over temperature and stirring speed.



This image shows the Borosil HLS 200 Digital Magnetic Stirrer unit. A glass beaker filled with a blue liquid is placed on the hot plate. A temperature probe or stirring rod is immersed in the liquid, held by a clamp on a support stand. The control panel with digital displays and knobs is visible at the front of the unit.

Key Features:

- Digital display for precise temperature and speed control.
- Integrated timer function for controlled operation.
- Smooth start and quick stop stirring for accurate results.
- Heating plate capable of reaching up to 300°C.
- Suitable for stirring liquid volumes up to 2 liters.

4. SPECIFICATIONS

Feature	Specification
Brand	Borosil
Model	HLS 200
Capacity	Up to 2 Liters
Heating Plate Material	Stainless Steel
Max. Heating Plate Temperature	300°C

Feature	Specification
Display Type	Digital
Special Features	Timer, Smooth Start/Quick Stop Stirring
Dimensions (L x W x H)	28 x 19 x 14 cm
Weight	6 kg
Country of Origin	India

5. SETUP

- Unpacking:** Carefully remove the stirrer from its packaging. Inspect for any damage incurred during transit.
- Placement:** Place the stirrer on a stable, level, and heat-resistant workbench, ensuring adequate clearance for ventilation.
- Power Connection:** Connect the power cord to the stirrer and then to a grounded electrical outlet. Ensure the power supply matches the unit's requirements.
- Accessories:** If using a support stand for temperature probes or other accessories, securely attach it to the designated mounting point on the stirrer.

6. OPERATING INSTRUCTIONS

6.1. Basic Stirring Operation

- Place a suitable beaker containing the liquid and a stir bar on the center of the hot plate.
- Turn on the main power switch.
- Adjust the stirring speed knob to the desired RPM. The digital display will show the current speed. The stirrer features a smooth start to prevent splashing.
- To stop stirring, turn the speed knob to its minimum setting or turn off the main power. The stirrer will perform a quick stop.

6.2. Heating Operation

- Ensure the beaker is heat-resistant and contains the liquid to be heated.
- Turn on the main power switch.
- Adjust the temperature control knob to set the desired hot plate temperature. The digital display will show the set temperature and the actual temperature of the hot plate.
- Allow time for the hot plate to reach the set temperature.
- To stop heating, turn the temperature knob to its minimum setting or turn off the main power. Allow the hot plate to cool down completely before touching.

6.3. Using the Timer Function

- The timer function allows for controlled operation duration. Consult the specific timer controls on the unit's front panel.
- Typically, a dedicated timer button or knob will allow you to set the desired operating time in minutes or hours.

3. Once the set time elapses, the stirring and/or heating function will automatically cease.

7. MAINTENANCE

- **Cleaning:** Disconnect the power cord before cleaning. Wipe the exterior surfaces and hot plate with a damp cloth and mild detergent. Do not use abrasive cleaners or solvents. Ensure no liquid enters the internal components.
- **Inspection:** Regularly inspect the power cord for any signs of damage. Check the hot plate for scratches or corrosion.
- **Storage:** When not in use, store the stirrer in a clean, dry environment, away from direct sunlight and extreme temperatures.

8. TROUBLESHOOTING

- **Device does not power on:** Check if the power cord is securely connected to both the stirrer and the electrical outlet. Verify the outlet is functional.
- **Stirring not working:** Ensure a stir bar is present in the liquid and the stirring speed is set above zero. Check if the beaker is properly centered on the hot plate.
- **Heating not working:** Verify the temperature setting is above the ambient temperature. Allow sufficient time for the hot plate to heat up.
- **Inaccurate temperature reading:** Ensure any external temperature probe (if used) is correctly inserted and calibrated.
- If issues persist after basic troubleshooting, contact customer support. Do not attempt to repair the device yourself.

9. WARRANTY AND SUPPORT

For warranty information, technical support, or service inquiries, please refer to the warranty card included with your product or visit the official Borosil website. Keep your purchase receipt as proof of purchase for warranty claims.

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question