

## BAOSHISHAN XLD-T100S

# BAOSHISHAN XLD-T100S Magnetic Stirrer Hot Plate Instruction Manual

Model: XLD-T100S

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## 1. PRODUCT OVERVIEW

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The BAOSHISHAN XLD-T100S Magnetic Stirrer Hot Plate is designed for laboratory applications requiring precise temperature control and efficient stirring. It features a ceramic-coated aluminum alloy top plate, a digital display for settings, and integrated safety features.

# ADVANCED HOT PLATE STIRRERS



 **2000** RPM

 **300** °C

 **99** H



Figure 1: BAOSHISHAN Magnetic Stirrer Hot Plate with thermal probe and beaker setup.

## Key Features:

- **Advanced Control:** Temperature ranges up to 300 °C, stirring speeds up to 2000 rpm, and time settings up to 99 hours.
- **User-Friendly Interface:** Micro-processor controlled with an easy-to-read LCD displaying temperature, speed, and time settings.
- **High Capacity:** 6.6 x 6.6 inch plate size, capable of stirring up to 6 liters of aqueous solution.
- **Durable Surface:** Ceramic-coated aluminum alloy top plate offers excellent uniformity, corrosion resistance, and easy cleaning.
- **Enhanced Safety:** Equipped with hot top warning and an automatic over-temperature safety shutdown.

## 2. SAFETY PRECAUTIONS

Read all instructions before operating the device. Failure to follow safety guidelines may result in injury or damage to the

equipment.

- Always operate the hot plate on a stable, level, and heat-resistant surface.
- Ensure proper ventilation to prevent heat buildup.
- Do not touch the hot plate surface during or immediately after operation, as it can remain hot even after the heating function is turned off. A hot top warning indicator is provided.
- Use appropriate personal protective equipment (PPE) such as heat-resistant gloves and eye protection.
- Avoid spilling liquids onto the control panel or electrical components.
- Do not immerse the unit in water or other liquids.
- Ensure the power cord is securely connected and not damaged.
- Only use the provided stirring bars, thermal probe, and support stand.
- Do not operate the unit if it shows any signs of damage.
- Disconnect the power supply before cleaning or maintenance.
- Keep out of reach of children and unauthorized personnel.
- The unit is designed for laboratory use with aqueous solutions. Do not use with flammable or corrosive materials without proper safety protocols and containment.
- The automatic shutdown feature activates if the temperature exceeds 320°C (608°F).

# LEADING SAFETY FEATURES

Automatic shutdown when the temperature is exceeding 320 degree C(608F).



Figure 2: Safety features include a heating indicator and automatic shutdown at 320°C (608°F).

## 3. PACKAGE CONTENTS AND COMPONENTS

Verify that all components are present and undamaged upon unpacking.

- BAOSHISHAN Magnetic Stirrer Hot Plate Unit
- Stirring Bars (various sizes)
- Stir Bar Retriever
- Thermal Probe
- Support Stand (flexible)
- Power Cord
- Instruction Manual

# PACKAGE LIST



Figure 3: Included components: hot plate, universal stand, temperature probe, power cord, stir bars, and stir bar retriever.

# 6L CAPACITY MAX

with a stir bar retriever



Figure 4: The hot plate is designed for up to 6L capacity and includes a stir bar retriever.

## 4. SETUP INSTRUCTIONS

1. **Placement:** Place the magnetic stirrer hot plate on a stable, flat, and heat-resistant surface in a well-ventilated area.
2. **Power Connection:** Connect the power cord to the unit and then to a grounded 110V AC power outlet.
3. **Support Stand Assembly (Optional):** If using the thermal probe or requiring external support, assemble the flexible support stand.

# ADJUSTABLE PROBE

## Connection


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- ① Adjust the height and distance to suit your application
- ② Insert the temperature probe for monitoring

Figure 5: The adjustable probe can be positioned to suit your application.

4. **Thermal Probe Connection (Optional):** Insert the thermal probe into the designated port on the unit. Position the probe within the liquid to be heated/stirred for accurate temperature monitoring.
5. **Vessel Placement:** Place your beaker or flask containing the liquid and a stirring bar onto the center of the ceramic-coated plate.

### Setup Video:

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Video 1: Demonstrates how to set up the BAOSHISHAN magnetic stirrer hot plate, including placing the beaker and stir bar.

## 5. OPERATING INSTRUCTIONS

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The control panel features an LCD display and intuitive buttons for setting parameters.

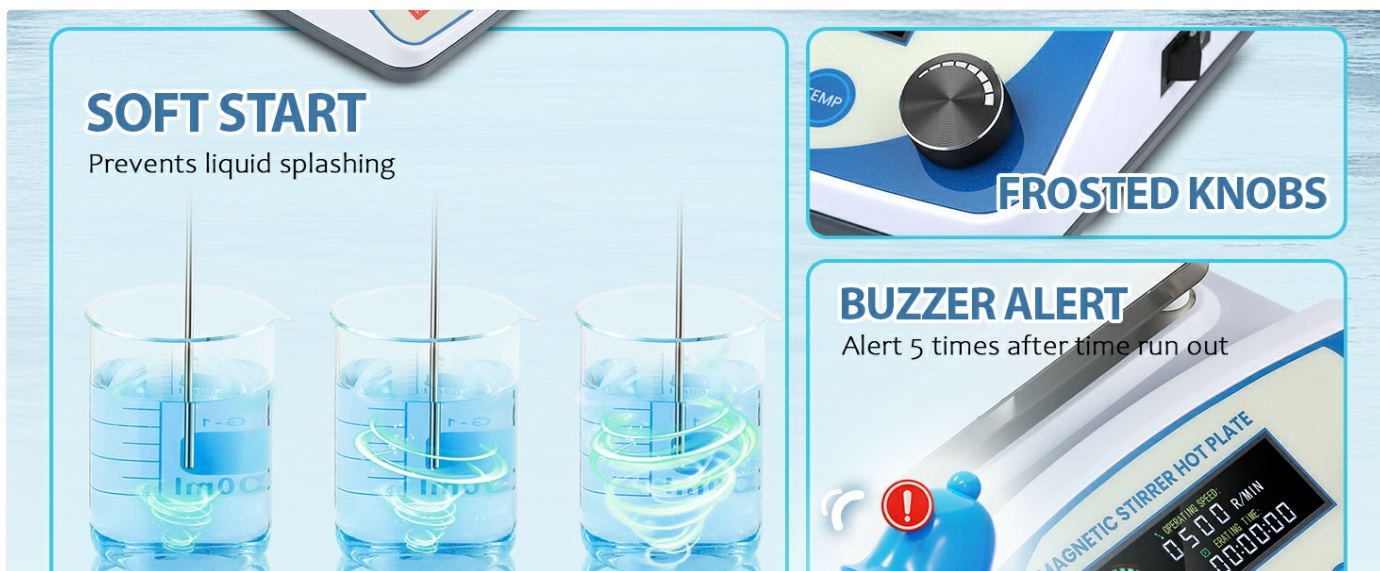


Figure 6: Control panel with soft start, frosted knobs, and buzzer alert features.

1. **Power On:** Flip the main power switch located on the side or rear of the unit. The LCD display will illuminate.
2. **Setting Stirring Speed:**
  - Press the **SPEED** button.
  - Rotate the control knob to adjust the desired stirring speed (R/min).
  - Press the **SPEED** button again to confirm or wait a few seconds for the setting to apply.
  - The unit features a "Soft Start" function to prevent liquid splashing.
3. **Setting Temperature:**
  - Press the **TEMP** button.
  - Rotate the control knob to adjust the desired target temperature (°C or °F).
  - Press the **TEMP** button again to confirm or wait a few seconds for the setting to apply.
  - The heating indicator (red wavy lines) will illuminate when heating is active.
4. **Setting Timer:**
  - Press the **TIME** button.
  - Rotate the control knob to set the desired operating time (HH:MM:SS).
  - Press the **TIME** button again to confirm or wait a few seconds for the setting to apply.
  - A buzzer alert will sound 5 times when the set time runs out.
5. **Starting/Stopping Operation:**
  - After setting all parameters, press the control knob to start the stirring and/or heating process.
  - Press the control knob again to stop the operation.
6. **Program Function (Memory):**
  - To save current settings for future use, press and hold the **PROGRAM** button for 3 seconds. The settings will be stored.
  - To recall saved settings, briefly press the **PROGRAM** button.



Figure 7: The program function allows saving and recalling settings. The heating indicator reminds users of a hot surface.

## Operation Video:

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Video 2: Demonstrates the program key operation, including setting speed, temperature, and time, and saving/recalling settings.

## 6. MAINTENANCE

Regular maintenance ensures optimal performance and extends the lifespan of your hot plate stirrer.

### • Cleaning:

- Always disconnect the power cord before cleaning.
- Allow the hot plate to cool completely.
- Wipe the ceramic-coated plate and exterior surfaces with a soft, damp cloth and a mild detergent.
- Do not use abrasive cleaners or solvents that could damage the surface or controls.
- Ensure no liquid enters the internal components.

### • Storage:

- Store the unit in a clean, dry place away from direct sunlight and extreme temperatures.
- Keep stirring bars, thermal probe, and support stand organized to prevent loss or damage.

### • Inspection:

- Periodically inspect the power cord for any signs of damage (fraying, cuts).
- Check the stirring bars and thermal probe for wear or damage. Replace if necessary.

## 7. TROUBLESHOOTING GUIDE

This section addresses common issues you might encounter. For problems not listed here, contact customer support.

Problem	Possible Cause	Solution
Unit does not power on.	No power supply; power cord loose or damaged; main power switch off.	Check power connection and outlet. Ensure main power switch is ON. Inspect power cord for damage.

Problem	Possible Cause	Solution
Stirring function not working.	Stirring speed set to 0; stir bar not present or improperly placed; vessel too large or liquid too viscous.	Increase stirring speed. Ensure stir bar is in the vessel and centered. Use appropriate stir bar size for vessel. Reduce liquid viscosity if possible.
Heating function not working or inconsistent.	Temperature set to 0; thermal probe not connected or improperly placed; over-temperature safety activated.	Increase target temperature. Ensure thermal probe is correctly inserted and submerged. Allow unit to cool if over-temperature warning is active.
Temperature reading is inaccurate.	Thermal probe not properly submerged or faulty.	Ensure thermal probe tip is fully immersed in the liquid. Check probe connection. If issue persists, probe may need replacement.
Loud noise during stirring.	Stir bar not centered or hitting vessel walls; foreign object on plate.	Reposition the vessel and stir bar. Ensure the plate is clean.

## 8. TECHNICAL SPECIFICATIONS

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Parameter	Value
Model Number	XLD-T100S
Brand	BAOSHISHAN
Plate Dimensions	6.6 x 6.6 inches (16.7 x 16.7 cm)
Stirring Capacity	Up to 6 Liters (aqueous solution)
Stirring Speed Range	Up to 2000 R/min
Temperature Range	Ambient to 300 °C (572 °F)
Timer Setting	Up to 99 Hours
Voltage	110 Volts
Product Dimensions (D x W x H)	11"D x 7"W x 4.2"H
Material	Acrylonitrile Butadiene Styrene (ABS) body, Ceramic-coated aluminum alloy plate
Safety Features	Hot top warning, Over-temperature safety shutdown (320°C/608°F)
Included Components	Stirring bars, stir bar retriever, thermal probe, support stand, flexible stand, power cord

## 9. WARRANTY AND SUPPORT

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For warranty information, technical support, or service inquiries, please contact BAOSHISHAN customer service. Refer to your purchase documentation for specific warranty terms and conditions.

**Manufacturer:** BAOSHISHAN

**Contact Information:** Please refer to the contact details provided with your product packaging or visit the official BAOSHISHAN website.



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