



Manuals.plus /

- › VEVOR /
- › VEVOR Magnetic Stirrer with Heating Plate 85-2 (LKTC-B1-T) Instruction Manual

## VEVOR 85-2 (LKTC-B1-T)

# VEVOR Magnetic Stirrer with Heating Plate

Model: 85-2 (LKTC-B1-T)  
Instruction Manual

## 1. INTRODUCTION

Thank you for choosing the VEVOR Magnetic Stirrer with Heating Plate. This device is designed for efficient liquid stirring and heating in various laboratory, agricultural, and industrial settings. Please read this manual thoroughly before operation to ensure proper use, optimal performance, and safety.



Figure 1.1: VEVOR Magnetic Stirrer with Heating Plate, showing the main unit, stirring plate, digital display, control knob, and support rod assembly with temperature sensor.

## 2. SAFETY INSTRUCTIONS

Always observe the following safety precautions to prevent injury or damage to the equipment:

- Ensure the power supply matches the specifications (110V).
- Do not operate the device in explosive or flammable environments.
- Always use appropriate personal protective equipment (PPE), such as safety glasses and gloves, when handling chemicals or hot liquids.
- Avoid touching the heating plate during and immediately after operation, as it will be hot. Allow sufficient time for cooling.
- Do not immerse the unit in water or other liquids.
- Place the stirrer on a stable, level, and heat-resistant surface.

- Disconnect the power cord before cleaning or maintenance.
- Keep the area around the stirrer clear to ensure proper ventilation.
- The built-in fuse provides voltage overloading protection. If the unit unexpectedly shuts off, check the fuse.

## 3. PRODUCT OVERVIEW

### 3.1 Components

- Main Unit with Heating Plate
- Digital LED Display
- Temperature and Time Setting Buttons
- Speed Adjusting Knob
- Power Switch
- Adjustable Support Rod and Clamp
- Temperature Sensor Probe
- PTFE-Coated Stir Bar
- Non-Skid Foot Pads

### 3.2 Key Features

- **Rapid Heating Hot Plate:** Features a stainless steel heating plate with 200W heating power, capable of reaching a maximum temperature of 212°F/100°C for fast and uniform heating.
- **Stable & Stepless Stirring:** Equipped with a 25W pure copper DC motor, providing stepless speed regulation from 0-2000 rpm. Supports a maximum stirring capacity of 1000 ml (1L).
- **Accurate Digital Display & Control:** A digital LED screen displays precise temperature settings with  $\pm 0.1^{\circ}\text{C}$  accuracy. An alarm light indicates exceeding the set temperature. The adjusting knob allows for precise control of stirring speed.
- **Adjustable & Secure Design:** Includes an adjustable support rod for securing the temperature sensor at the desired height. Features a built-in fuse for voltage overloading protection and non-skid foot pads for stability.

# RAPID HEATING HOT PLATE

Stainless steel plate allows fast and uniform heating



Rust-Proof  
Material



Good Thermal  
Conduction



Max. 212°F/100°C  
Temp



200W Heating  
Power

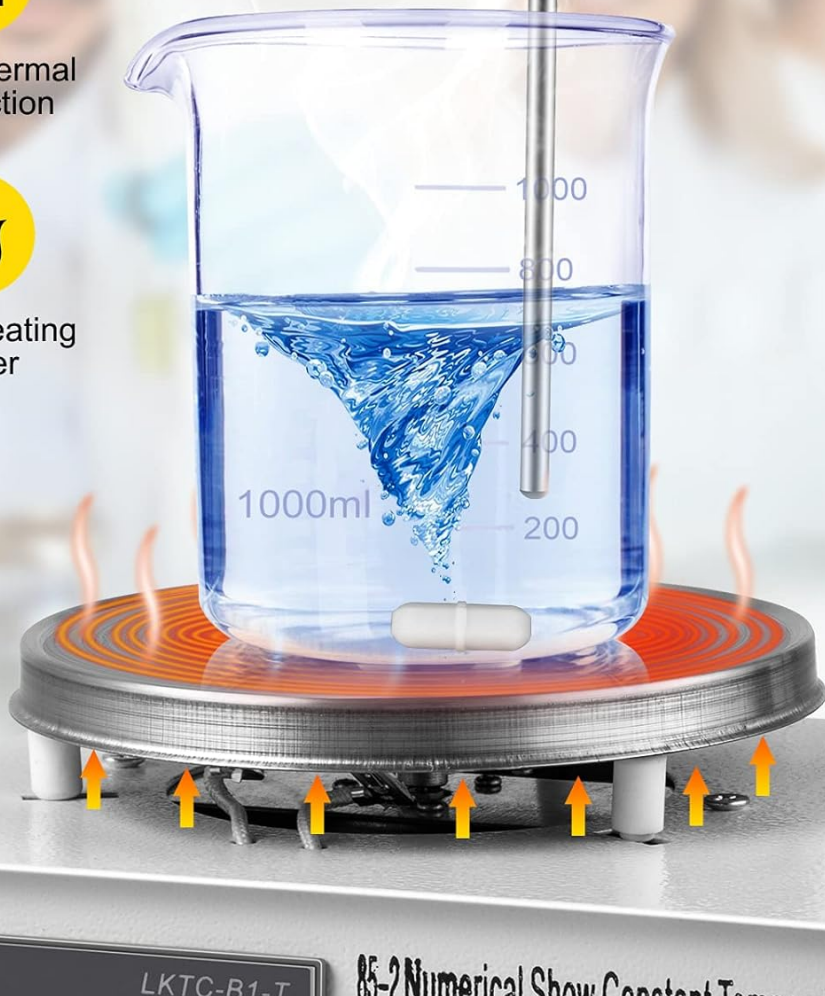


Figure 3.1: Illustration of the rapid heating capability of the stainless steel hot plate, highlighting its 200W heating power and maximum temperature of 212°F/100°C.

# STABLE & STEPLESS STIRRING

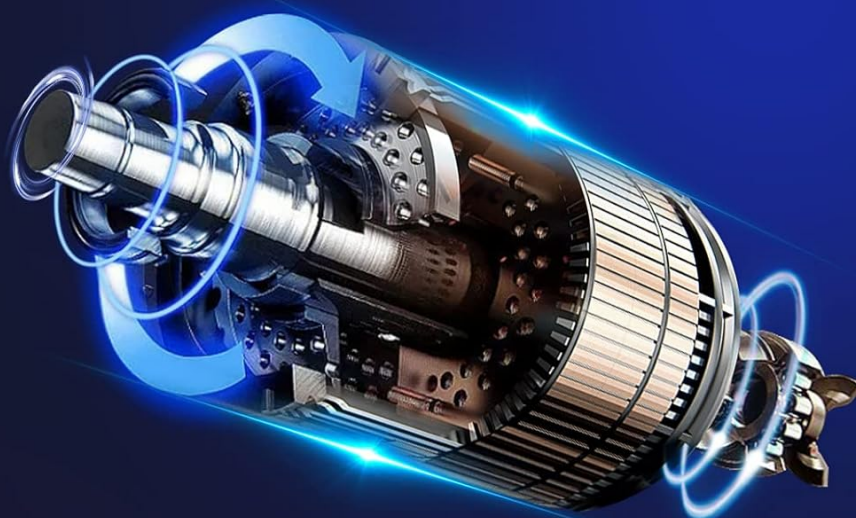
Powerful motor brings 0-2000 rpm stepless speed regulation



Pure Copper  
DC Motor



1L Stirring  
Capacity



PTFE-Coated Stirring Bar

Figure 3.2: Depiction of the powerful pure copper DC motor enabling stable and stepless stirring up to 2000 rpm, with a 1L stirring capacity and a PTFE-coated stir bar.

# ACCURATE DISPLAY & CONTROL

Convenient for temperature reading and speed adjustment



Alarm Light

LED Digital Display



Temp & Time Setting

Adjusting Knob



Precise Speed Control

Figure 3.3: Close-up view of the digital LED display for temperature and time settings, along with the speed adjusting knob for precise control.

# ADJUSTABLE & SECURE DESIGN

Considerate details ensure flexibility, stability & security

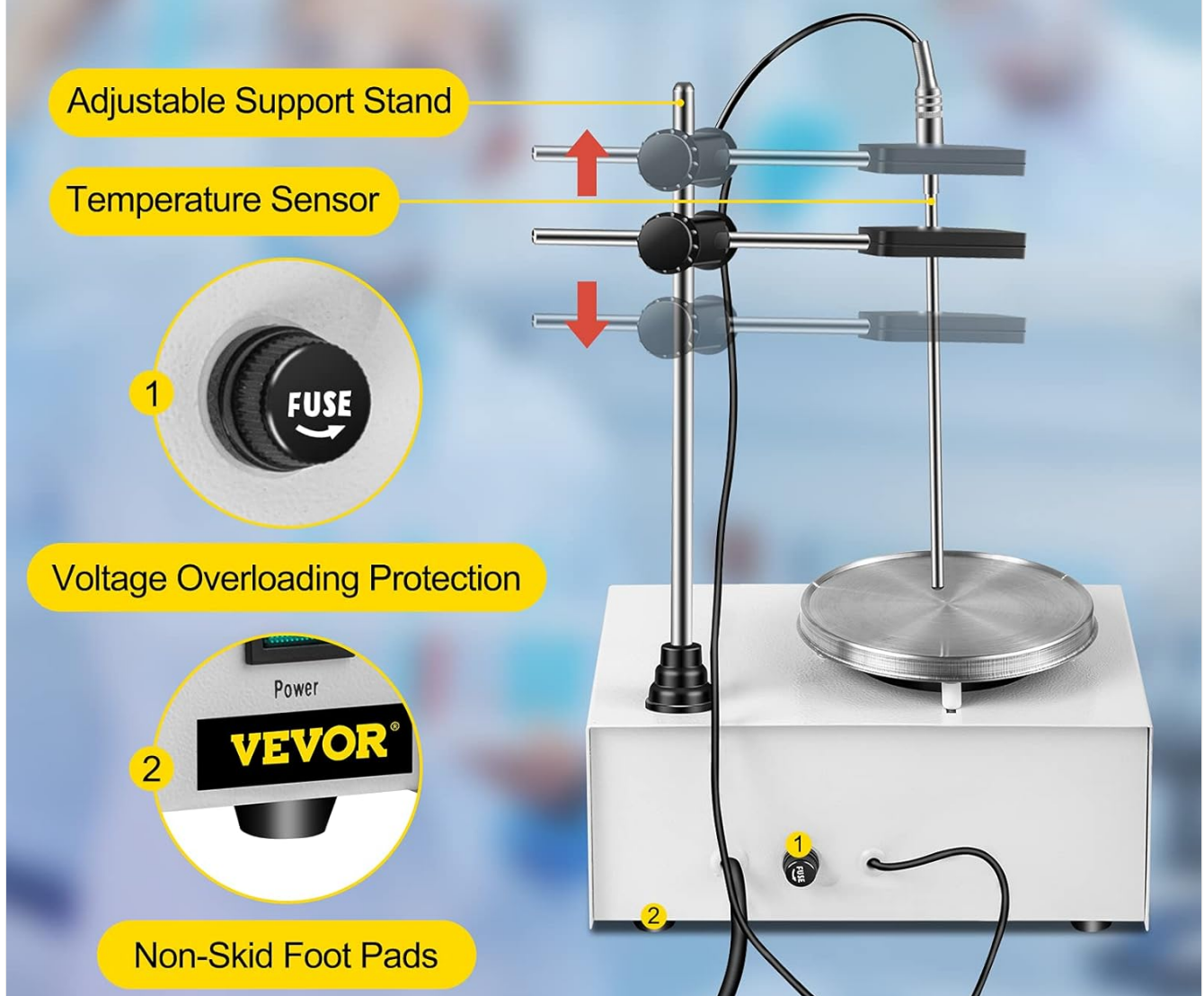


Figure 3.4: Details of the adjustable support stand, temperature sensor, voltage overloading protection (fuse), and non-skid foot pads for enhanced stability and security.

## 4. SETUP

1. **Unpacking:** Carefully remove all components from the packaging. Verify that all parts listed in Section 3.1 are present and undamaged.
2. **Placement:** Place the magnetic stirrer on a flat, stable, and heat-resistant workbench or surface. Ensure there is adequate space around the unit for ventilation.
3. **Assemble Support Rod:** Insert the support rod into the designated hole at the back of the unit and tighten the securing screw. Attach the clamp and temperature sensor to the support rod.
4. **Power Connection:** Ensure the power switch is in the 'OFF' position. Connect the power cord to the unit and then plug it into a grounded 110V AC power outlet.
5. **Initial Check:** Before adding any liquid, briefly turn on the power to ensure the display lights up and the stirring mechanism responds to the speed knob. Then turn off the unit.

## 5. OPERATING INSTRUCTIONS

1. **Prepare Sample:** Place your beaker or flask containing the liquid to be stirred and heated onto the center of the heating plate. Drop the PTFE-coated stir bar into the liquid.
2. **Position Temperature Sensor:** If temperature control is required, position the temperature sensor probe into the liquid without touching the stir bar or the bottom of the container. Secure it with the clamp on the support rod.
3. **Power On:** Flip the power switch to the 'ON' position. The digital display will illuminate.
4. **Set Temperature:** Use the 'SET' button and the up/down arrows on the digital display panel to set the desired heating temperature. The display will show the set temperature. The unit will begin heating to reach this set point. An alarm light will activate if the temperature exceeds the set value.
5. **Adjust Stirring Speed:** Rotate the 'Speed Adjust' knob clockwise to increase the stirring speed and counter-clockwise to decrease it. Start with a low speed and gradually increase it to achieve the desired mixing action without splashing. The stirring speed can be adjusted from 0 to 2000 rpm.
6. **Monitoring:** Continuously monitor the process, especially when heating, to ensure safe operation and desired results.
7. **Power Off:** Once the process is complete, turn the 'Speed Adjust' knob to its minimum setting (0 rpm) and then flip the power switch to the 'OFF' position. Allow the heating plate to cool down before handling.

## 6. MAINTENANCE

- **Cleaning:** After each use, especially if spills occur, clean the heating plate and the main unit with a soft, damp cloth. Do not use abrasive cleaners or solvents. Ensure the unit is unplugged and cool before cleaning.
- **Stir Bar Care:** Clean the PTFE-coated stir bar with appropriate laboratory cleaning agents. Store it safely to prevent damage.
- **Storage:** When not in use, store the magnetic stirrer in a clean, dry, and dust-free environment, away from direct sunlight and extreme temperatures.
- **Inspection:** Periodically inspect the power cord for any signs of damage. Check the support rod and clamps for secure fastening.

## 7. TROUBLESHOOTING

Problem	Possible Cause	Solution
Unit does not power on.	No power supply; Power cord loose; Blown fuse.	Check power outlet; Ensure power cord is securely plugged in; Check and replace fuse if necessary.
Stirring not working or weak.	Stir bar not present or too large/small; Speed knob set too low; Viscosity of liquid too high.	Ensure stir bar is in liquid; Increase speed gradually; Use appropriate stir bar size for container/liquid; Consider diluting highly viscous liquids if possible.
Heating not working.	Temperature set too low; Heating element malfunction.	Increase set temperature; If problem persists, contact customer support.
Temperature display inaccurate.	Temperature sensor not properly immersed or damaged.	Ensure sensor is correctly positioned in liquid; Inspect sensor for damage.
Excessive noise or vibration.	Unstable surface; Stir bar off-center or damaged.	Place unit on a stable, level surface; Reposition or replace stir bar.

If the problem persists after attempting the above solutions, please contact VEVOR customer support for assistance.

## 8. SPECIFICATIONS

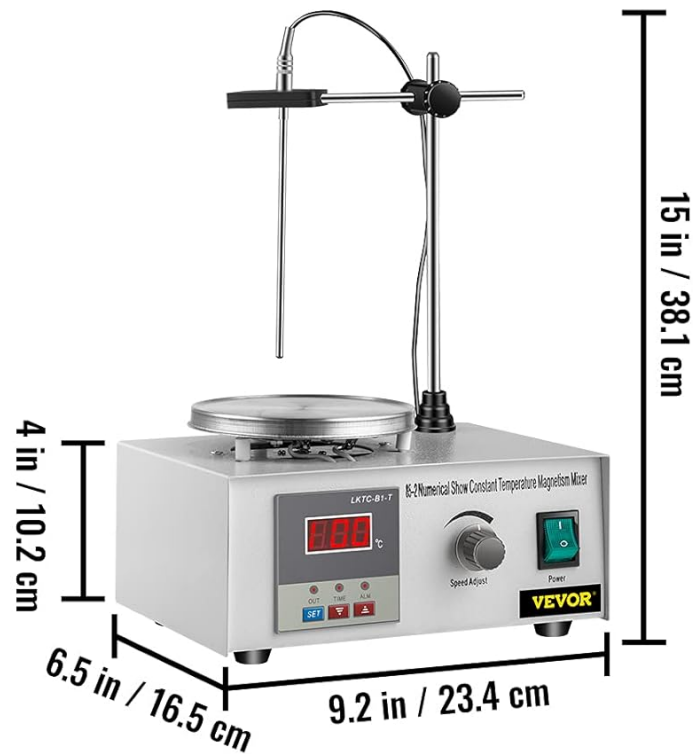
Parameter	Value
Model	85-2 (LKTC-B1-T)
Motor Power	25W
Heating Power	200W
Max. Stirring Speed	2000 rpm (stepless)
Max. Stirring Capacity	1000 ml (1L)
Max. Temperature	212°F/100°C
Temperature Display Accuracy	±0.1°C
Voltage	110V
Product Weight	4.83 lbs (2.2 kg)
Package Dimensions	11.22 x 8.66 x 8.46 inches

# PRODUCT SPECIFICATIONS:

# VEVOR®

Product Weight: 4.4 lbs / 2 kg

Product Size: 9.2 in x 6.5 in x 15 in / 23.4 cm x 16.5 cm x 38.1 cm



Motor Power:	25W
Heating Power:	200W
Max. Stirring Capacity:	1 qt./1000 ml
Max. Stirring Speed:	2000 rpm
Max. Temperature:	212°F/100°C

Figure 8.1: Diagram illustrating the physical dimensions and key specifications of the magnetic stirrer.

## 9. WARRANTY AND SUPPORT

VEVOR products are designed for durability and performance. For warranty information or technical support, please refer to the warranty card included with your product or visit the official VEVOR website. When contacting support, please have your product model number (85-2 / LKTC-B1-T) and purchase details ready.

**VEVOR Official Website:** [www.vevor.com](http://www.vevor.com)