

## Heidolph 1202Y49EA

# Heidolph MR Plug and Play HEI-Tec Package Hotplate Stirrer Instruction Manual

Model: 1202Y49EA

## 1. INTRODUCTION

This manual provides essential instructions for the safe and efficient operation, setup, and maintenance of your Heidolph MR Plug and Play HEI-Tec Package Hotplate Stirrer. Please read this manual thoroughly before operating the device to ensure proper use and to prevent damage or injury. Keep this manual accessible for future reference.

## 2. SAFETY INSTRUCTIONS

Always observe the following safety precautions to prevent personal injury and damage to the equipment.

- **Electrical Safety:** Ensure the power supply matches the device's requirements (115V). Do not operate with damaged power cords. Disconnect power before cleaning or servicing.
- **Hot Surfaces:** The hotplate surface can reach high temperatures (up to 300°C). Always use appropriate personal protective equipment (PPE) such as heat-resistant gloves. Allow the hotplate to cool completely before touching or cleaning. A warning indicator will illuminate when the hotplate is hot.
- **Chemical Handling:** Exercise caution when working with chemicals. Ensure proper ventilation and use appropriate safety measures.
- **Stability:** Place the unit on a stable, level surface to prevent tipping. Secure glassware and accessories properly.
- **Overheating Protection:** The unit features an independent safety circuit that switches off heating if the hotplate temperature exceeds 25°C over the set temperature.

## 3. PRODUCT OVERVIEW AND COMPONENTS

The Heidolph MR Plug and Play HEI-Tec Package includes a hotplate stirrer, a PT1000 temperature sensor, a support rod, and a clamp. This unit is designed for precise heating and stirring applications in laboratory environments.



Figure 1: Heidolph MR Hei-Tec Hotplate Stirrer package contents, including the main unit, power cord, instruction manual, PT1000 temperature sensor, support rod, and clamp.



Figure 2: Front view of the Heidolph MR Hei-Tec Hotplate Stirrer, showing the ceramic hotplate and control panel.



Figure 3: Side view of the Heidolph MR Hei-Tec Hotplate Stirrer, illustrating the power input and sensor connection ports. A '3-year warranty' sticker is visible.

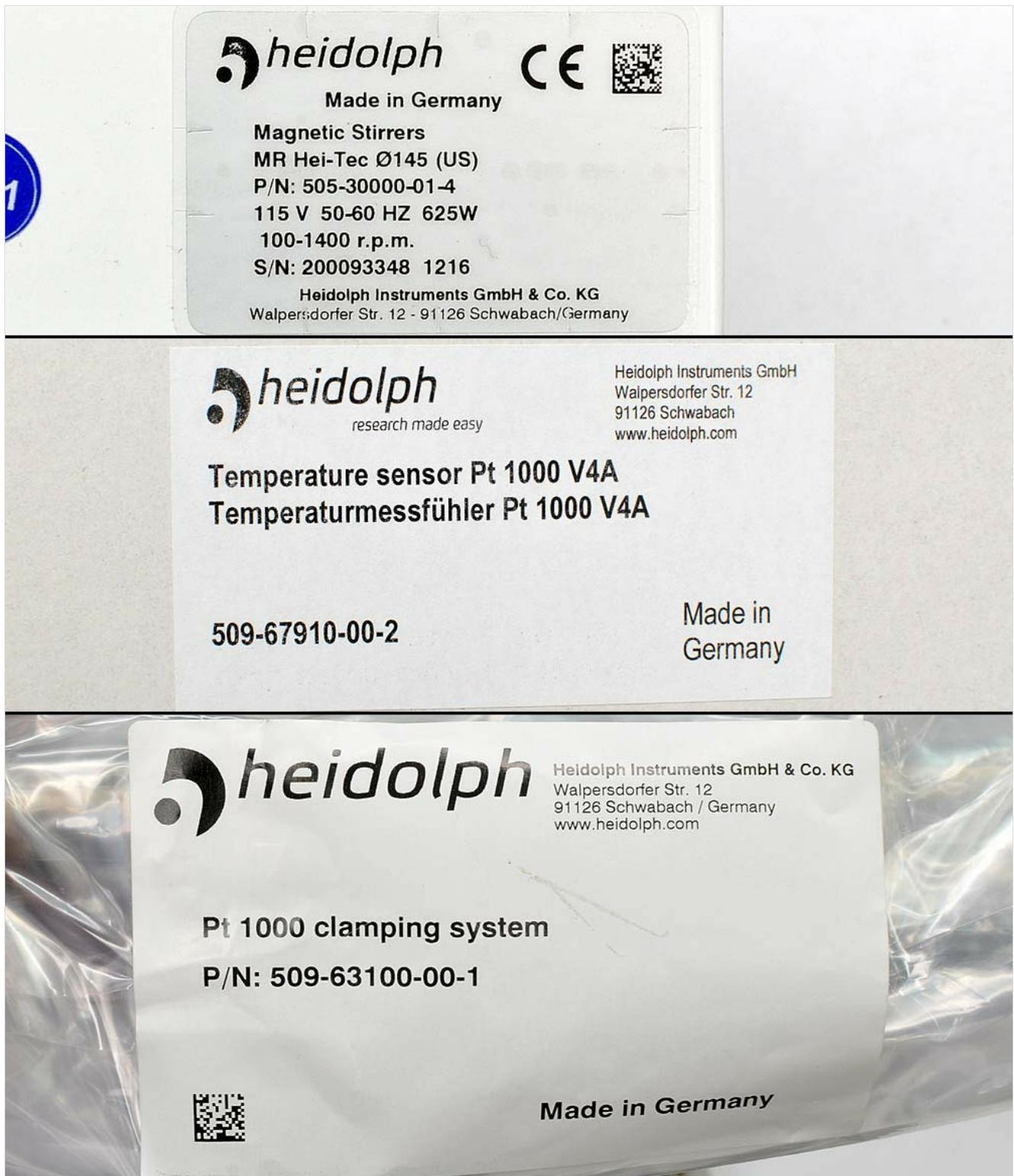


Figure 4: Product labels for the Heidolph MR Hei-Tec Magnetic Stirrer, PT1000 temperature sensor, and PT1000 clamping system, indicating model numbers and manufacturing details.

## 4. SETUP

### 4.1 Unpacking

Carefully remove all components from the packaging. Inspect for any signs of damage during transit. Retain packaging for potential future transport or storage.



Figure 5: Packaged accessories for the Heidolph MR Hei-Tec Hotplate Stirrer, including the PT1000 temperature sensor and power cord, within the product box.

## 4.2 Placement

Place the hotplate stirrer on a stable, level, and heat-resistant surface. Ensure adequate clearance around the unit for ventilation and safe operation.

## 4.3 Connecting Power

Connect the provided power cord to the power inlet on the rear of the unit and then to a grounded 115V AC power outlet.

## 4.4 Attaching Accessories

1. **Support Rod:** Screw the support rod into the threaded opening on the rear of the unit.
2. **Clamp:** Attach the clamp to the support rod. This clamp can be used to secure the PT1000 temperature sensor or other glassware.
3. **PT1000 Temperature Sensor:** If precise temperature control of the medium is required, insert the PT1000 sensor into the medium and connect its cable to the designated sensor port on the rear of the unit.

## 5. OPERATING INSTRUCTIONS

The control panel features a digital display and intuitive controls for setting stirring speed and temperature.



Figure 6: Close-up of the Heidolph MR Hei-Tec Hotplate Stirrer control panel, showing the digital display for RPM and temperature, and control buttons for stirring and heating.

### 5.1 Power On/Off

Locate the main power switch, typically on the side or rear of the unit, and switch it to the 'ON' position. The digital display will illuminate.

### 5.2 Setting Stirring Speed

1. Press the stirring activation button (often indicated by a circular arrow icon). An illuminated button indicates that stirring is activated.
2. Use the control knob to set the desired stirring speed. The digital display shows the RPM, adjustable from 100 to 1,400 rpm with an accuracy of 2%.
3. To stop stirring, press the stirring activation button again.

## 5.3 Setting Heating Temperature

1. Press the heating activation button (often indicated by a wavy lines icon). An illuminated button indicates that heating is activated.
2. Use the control knob to set the desired hotplate temperature, up to 300°C. The digital display shows the set temperature.
3. A separate on/off switch for heating prevents unintentional heat-up. If heating is switched on, the on/off button is illuminated for visual control.
4. **Safety Feature:** An independent safety circuit will automatically switch off heating if the hotplate temperature exceeds 25°C over the set temperature, protecting your sample and equipment.

## 5.4 Using the PT1000 Temperature Sensor

For precise temperature control of the medium, connect the optional PT1000 temperature sensor. When connected, the unit will control the temperature based on the sensor's reading within the medium, providing more accurate and reproducible results and overshoot protection.

# 6. MAINTENANCE

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## 6.1 Cleaning

Always disconnect the unit from the power supply before cleaning. Allow the hotplate to cool completely. Clean the exterior surfaces with a damp cloth and a mild detergent. Do not use abrasive cleaners or solvents. Avoid getting liquids into the internal components.

## 6.2 Storage

When not in use, store the unit in a dry, dust-free environment. If storing for extended periods, it is recommended to use the original packaging.

## 6.3 Inspection

Periodically inspect the power cord for any signs of damage. Check the hotplate surface for cracks or excessive wear. Ensure all connections are secure.

# 7. TROUBLESHOOTING

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Refer to the following table for common issues and their solutions.

Problem	Possible Cause	Solution
Unit does not power on.	No power supply; power cord damaged; main switch off.	Check power connection and outlet; inspect power cord; ensure main switch is ON.
Hotplate not heating.	Heating function not activated; temperature set too low; safety circuit activated.	Activate heating button; increase set temperature; check for error codes or indicators.
Stirring not working.	Stirring function not activated; stirring speed set to zero; stirring bar not present or stuck.	Activate stirring button; increase stirring speed; ensure a suitable stirring bar is in the vessel and free to move.

Problem	Possible Cause	Solution
Inaccurate temperature reading.	PT1000 sensor not connected or faulty; sensor not properly immersed.	Ensure PT1000 sensor is correctly connected and fully immersed in the medium.

If problems persist after attempting these solutions, please contact Heidolph customer support.

## 8. SPECIFICATIONS

- **Model Number:** 1202Y49EA
- **Brand:** Heidolph
- **Power Supply:** 115V, 50-60 Hz
- **Stirring Speed Range:** 100 to 1,400 rpm (accuracy of 2%)
- **Temperature Range:** Up to 300°C
- **Safety Circuit:** Automatic shut-off if hotplate temperature exceeds 25°C over set temperature.
- **Weight:** Approximately 2.2 Pounds
- **Included Accessories:** PT1000 Temperature Sensor, Support Rod, Clamp

## 9. WARRANTY AND SUPPORT

The Heidolph MR Plug and Play HEI-Tec Package Hotplate Stirrer is covered by a **3-year warranty** from the date of purchase. This warranty covers defects in materials and workmanship under normal use.

For technical support, warranty claims, or service inquiries, please contact your authorized Heidolph distributor or visit the official Heidolph website for contact information.

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### Related Documents - 1202Y49EA

	<p><a href="#">Heidolph Hei-TORQUE Overhead Stirrers: Powerful Stirring and Precision</a></p> <p>This comprehensive manual details the features and operation of Heidolph Hei-TORQUE overhead stirrers, including the Hei-TORQUE Value and Hei-TORQUE Precision models. It covers setup, operation, safety instructions, maintenance, and troubleshooting for these advanced laboratory instruments.</p>
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