

BEILOCKERY Portable 8-in-1 Resistance Furnace

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USER MANUAL

Model: Portable 8-in-1 Resistance Furnace (ASIN: B0G184LHPV)

1. Introduction

Thank you for choosing the BEILOCKERY Portable 8-in-1 Resistance Furnace. This high-temperature muffle furnace is designed for precision heating applications in jewelry, dental, and craft industries, offering rapid heating, precise temperature control, and a deep vacuum environment. This manual provides essential information for safe and efficient operation, setup, maintenance, and troubleshooting. Please read it thoroughly before using the furnace.

2. Safety Instructions

WARNING: Failure to follow these safety instructions may result in injury, fire, or damage to the equipment.

- **Electrical Safety:** Ensure the furnace is connected to a grounded AC110V power supply. Do not operate with wet hands or in damp conditions. Disconnect power before any maintenance or cleaning.
- **High Temperature Hazard:** The furnace operates at temperatures up to 1100°C. Always use appropriate heat-resistant gloves and protective eyewear when handling materials near or inside the furnace. Allow the furnace to cool completely before opening the chamber or performing maintenance.
- **Flammable Materials:** Keep all flammable materials away from the system perimeter. Never place combustible items within the furnace chamber's radiation range.
- **Ventilation:** Operate the furnace in a well-ventilated area to dissipate heat and any fumes produced during the heating process.
- **Stable Placement:** Install the furnace on a stable, heat-resistant surface with a minimum of 25cm clearance from walls and other objects to ensure proper airflow and prevent heat transfer. Avoid direct sunlight exposure.
- **Automatic Door Closing Detection:** The furnace will not initiate heating until the furnace door is confirmed to be tightly closed. Ensure the safety door latch is engaged before operation.
- **Overheating Protection:** The integrated cooling fan and heat emission holes effectively dissipate excess heat. Do not obstruct these vents.
- **Temperature Precautions:** If the ambient temperature is below 15°C (e.g., after transport), allow the unit to sit at room temperature for at least 30 minutes before startup.

3. Product Overview

The BEILOCKERY Portable 8-in-1 Resistance Furnace is a compact yet powerful unit designed for various high-temperature applications. It features an intelligent touch control panel, rapid heating capabilities, and a built-in vacuum pump for precise material processing.

Product Size



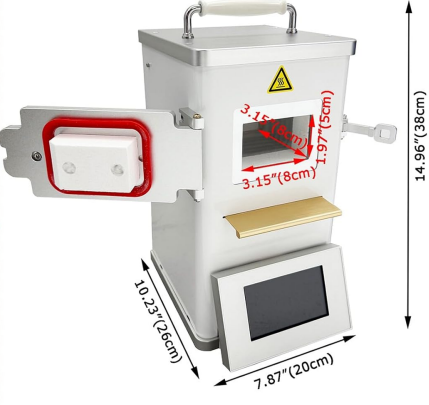
Rapid Heating



Precise Temperature Control



Sturdy and Durable



Product Dimensions: This image illustrates the overall size of the furnace, including its width, depth, and height, along with the internal chamber dimensions. The unit measures approximately 7.87 inches (20cm) in depth, 10.23 inches (26cm) in width, and 14.96 inches (38cm) in height. The internal chamber is 3.1 inches (8cm) wide, 3.1 inches (8cm) deep, and 1.97 inches (5cm) high.

Product Parameters

Voltage: AC110V
Power: Max. 850W
Current: 8A
Heating Rate: Max. 100°C/min
Max. Temperature: 1100°C
Holding Time at Max. Temp.: Up to 2h 46min
Vacuum Level Setting Range: 0-80%
Ambient temperature: 2°C to 40°C
Relative humidity: 80% at 31°C



Chamber Dimensions (W*D*H): 3.1*3.1*1.9\" (8\"8\"5cm)
Package size: 14.1\"*11.4\"*18.9\" (36cm*29cm*48cm)
Net weight / Gross weight: 24.2lbs(11kg) / 28.6lbs(13kg)
Material: Outer shell made of iron and aluminum alloy with spray paint coating

Product Parameters: This image details the key technical specifications of the furnace, including Voltage (AC110V), Max. Power (850W), Current (8A), Max. Heating Rate (100°C/min), Max. Temperature (1100°C), Holding Time at Max. Temp (Up to 2h 46min), and Vacuum Level Setting Range (0-80%). It also lists ambient operating conditions and material

composition.

Portable Handle

Easy to pick up
Convenient to move

Heat-resistant material

Stable high temperature
Good thermal conductivity
Powerful firepower
Fast heating effect

Furnace Door

Double layer insulation
design with sealing strip,
effectively reducing heat loss

Control Panel

Equipped with a color touch screen,
supporting 99 programmable custom
configuration files and built-in programs

Product Details



Product Details: This image highlights several important components: the *Portable Handle* for easy movement, the *Heat-resistant material* of the furnace chamber for stable high temperatures and fast heating, the *Furnace Door* with double-layer insulation and a sealing strip to reduce heat loss, and the *Control Panel*, which is a color touch screen supporting 99 programmable custom configurations.

Safety Door Latch

The equipment will not heat up before the furnace door is closed, and the safety door latch increases operator safety

Heat Emission Hole

The heat emission holes can effectively dissipate excess heat generated during operation, prevent overheating, and protect the machine



Safety Door Latch: This close-up shows the safety door latch mechanism. The equipment is designed not to heat up until the furnace door is securely closed and the latch is engaged, enhancing operator safety.

Operating Instructions

Installation Requirements for high-temperature muffle furnace:

1. Placement Requirements:

Install in a dry indoor environment with minimum 25cm clearance from walls.
Avoid direct sunlight exposure.

2. Temperature Precautions:

If ambient temperature is below 15°C (e.g., after transport),
allow 30 minutes at room temperature before startup.

3. Heat Resistance Precautions:

Ensure the mounting surface has adequate heat resistance.

Note: While heat radiation and thermal effects are within safe limits,
prolonged use may cause slight discoloration on furniture surfaces/veneers.

4. Safety Measures:

Keep flammable materials away from the system perimeter.

Never place combustible items within the furnace chamber's radiation range.



Heat Emission Holes: Located on the rear and sides of the unit, these holes are crucial for dissipating excess heat generated during operation. They prevent overheating and protect the internal components of the machine.



Included Accessories: The package includes the Dental Portable Ceramics Furnace unit, an accessory kit (which typically contains a power cable, instruction manual, and small tools), and a user manual.



Top View: This image provides a top-down perspective of the furnace, showcasing the integrated handle for portability and the overall compact design.



Rear View: The rear view displays the power input socket (AC 110V), the main power switch, and additional heat emission vents, emphasizing the reliable grounding for safety.

4. Specifications

Parameter	Value
Voltage	AC110V
Max. Power	850W
Current	8A

Max. Heating Rate	100°C/min
Max. Temperature	1100°C
Holding Time at Max. Temp.	Up to 2h 46min
Vacuum Level Setting Range	0-80% (up to -90kPa)
Chamber Dimensions (W*D*H)	3.1" x 3.1" x 1.9" (8cm x 8cm x 5cm)
Ambient Temperature	2°C to 40°C
Relative Humidity	80% at 31°C
Material (Outer Shell)	Iron and aluminum alloy with spray paint coating
Product Dimensions (L x W x H)	7.87 x 10.23 x 14.96 inches
Item Weight	28.7 lbs (13 kg)

5. Setup

Proper setup is crucial for the safe and efficient operation of your furnace.

1. **Placement Requirements:**

- Install the furnace in a dry indoor environment.
- Ensure a minimum of 25cm (approximately 10 inches) clearance from walls and other objects on all sides to allow for adequate heat dissipation.
- Avoid direct sunlight exposure, as this can affect temperature readings and component lifespan.
- Place the furnace on a stable, level, and heat-resistant surface.

2. **Temperature Precautions:**

- If the ambient temperature is below 15°C (e.g., after transport or storage in a cold environment), allow the furnace to acclimate at room temperature for at least 30 minutes before startup. This prevents condensation and potential damage to electronic components.

3. **Heat Resistance Precautions:**

- Ensure the mounting surface has adequate heat resistance. While heat radiation and thermal effects are within safe limits, prolonged use may cause slight discoloration on furniture surfaces or veneers if not properly protected.

4. **Power Connection:**

- Connect the provided power cable to the furnace's power input socket (AC 110V) located at the rear.
- Plug the other end into a grounded AC110V electrical outlet.
- Ensure the main power switch on the rear of the unit is in the OFF position before connecting to power.

6. Operating Instructions

Follow these steps for operating your BEILOCKERY Resistance Furnace:

1. **Power On:**

- Ensure the furnace is properly set up and all safety precautions are observed.
- Flip the main power switch on the rear of the unit to the ON position. The intelligent touch screen control panel will illuminate.

2. Program Selection and Setting:

- The control panel features an intuitive interface. Use the touch screen to navigate through the menus.
- You can select between *single-curve mode* or *double-curve mode*. The double-curve mode is specifically designed for a complete crystallization process for glass ceramics.
- Set your desired temperature, holding time, heating rate (up to 100°C/min), and vacuum level (0-80%). The furnace supports 99 programmable custom configuration files.
- The ultra-precise temperature control system maintains actual temperature fluctuation within $\pm 1^{\circ}\text{C}$.

3. Loading Materials:

- Carefully open the furnace door using the handle.
- Place your materials inside the chamber. Ensure they are suitable for high-temperature processing and do not exceed the chamber dimensions (3.1"x3.1"x1.9").
- Close the furnace door securely and ensure the safety door latch is engaged. The furnace will not start heating if the door is not properly closed.

4. Starting the Process:

- Once the program is set and the door is closed, press the START button on the control panel.
- The furnace will begin its rapid heating cycle. The built-in vacuum pump will activate if a vacuum level is set, creating an environment up to -90kPa (80%) for fine sintering.

5. Monitoring and Completion:

- Monitor the process via the control panel.
- Upon completion of the program, the furnace will signal the end of the cycle.
- Allow the furnace to cool down sufficiently before attempting to open the door and retrieve materials. Use heat-resistant gloves.

7. Maintenance

Regular maintenance ensures the longevity and optimal performance of your furnace.

• Cleaning:

- Always ensure the furnace is powered off and completely cooled before cleaning.
- Wipe the exterior with a soft, dry cloth. Do not use abrasive cleaners or solvents.
- Carefully clean the interior chamber to remove any residue or debris. Use a soft brush or vacuum cleaner for loose particles. Avoid scratching the internal surfaces.

• Heat Emission Holes:

- Periodically check the heat emission holes on the rear and sides for any dust or obstructions. Clean them gently to ensure proper airflow and prevent overheating.

• Door Seal:

- Inspect the furnace door seal for any signs of wear or damage. A compromised seal can lead to heat loss and affect vacuum integrity. Replace if necessary.

• Vacuum Pump:

- While the vacuum pump is built-in, ensure its intake/exhaust ports are clear. Refer to specific pump maintenance guidelines if available in a separate document.

8. Troubleshooting

This section addresses common issues you might encounter.

- **Furnace Not Heating:**

- Check if the power cable is securely plugged into both the furnace and a working AC110V outlet.
- Ensure the main power switch on the rear is ON.
- Verify that the furnace door is completely closed and the safety door latch is engaged. The furnace will not start heating if the door is open or not latched.
- Check the control panel for any error messages or indicators.

- **Vacuum Not Reaching Desired Level:**

- Ensure the furnace door is tightly sealed and latched.
- Check the door seal for any damage or debris that might prevent a proper seal.
- Verify that the vacuum pump settings are correctly configured on the control panel.

- **Inaccurate Temperature Readings:**

- Ensure the furnace is not exposed to direct sunlight or strong drafts that could affect internal temperature sensors.
- If the issue persists, contact customer support.

- **Control Panel Unresponsive:**

- Try restarting the furnace by turning the main power switch OFF, waiting 30 seconds, and then turning it back ON.
- If the problem continues, contact customer support.

9. Warranty and Support

For warranty information, technical support, or service inquiries, please contact BEILOCKERY customer service through your purchase platform or the official BEILOCKERY website. Please have your product model number (Portable 8-in-1 Resistance Furnace) and ASIN (B0G184LHPV) ready when contacting support.

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