Digital Submersible Brewing Heater

Instruction Manual - Models LH100W and LH200W

Read before use

Designed for controlled heating in compatible home brewing fermenters where the full heater assembly can remain submerged during operation.

Do not operate unless the glass tube, controller/display section and minimum liquid level area are fully below the liquid level.

Available models
LH100W - 100W Gold
LH200W - 200W Red

LED display

Digital temperature display with red and green indicator lights.

Adjustable bung

Silicone bung helps position the heater through a suitable fermenter lid opening.

Submersible use

IP68-rated design. The full heater assembly must be submerged while operating.

Feature	Specification
Voltage	220-240V AC, 50/60Hz
Temperature range	18-34°C (64-94°F), supplier accuracy specification ±0.5°C
Protection	Dry-burn protection and power-off-from-water protection
Indicators	Red = heating, Green = set temperature reached, Red/Green flashing = error

This manual is for brewing and fermenter use. It is not a kettle, cooking appliance or drinking-water boiler.

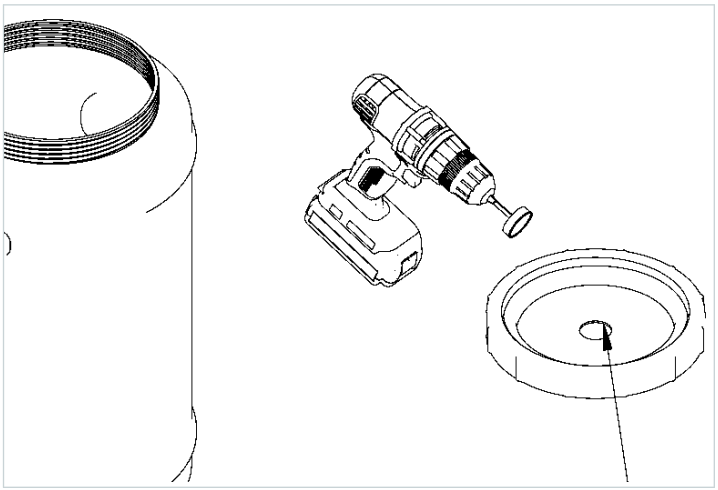
1. Safety warnings

- Fully submerge before use. The entire heater assembly, including the display/controller section, must remain below the liquid level while operating.
- Keep plug and socket dry. Never immerse the mains plug, socket, power board or extension lead in water, wort or sanitiser.
- Inspect before each use. Do not use if the glass tube, cord, plug, bung or controller appears cracked, damaged or loose.
- Unplug before handling. Always unplug and allow at least 15 minutes to cool before removing, cleaning or adjusting it.
- Use correct power. Use only with a suitable 220-240V AC outlet. Do not modify the plug or cord.
- No user-serviceable parts. Do not open or repair the heater. Stop use if repeated error codes occur.

2. Prepare the fermenter lid

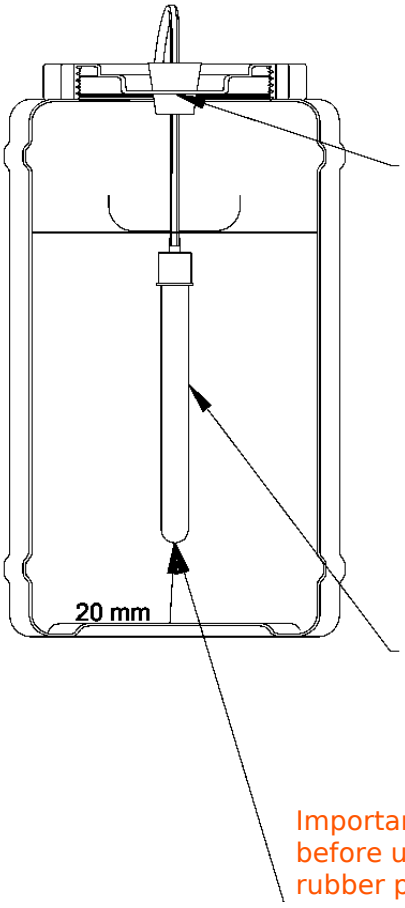
The supplied silicone bung is designed for an opening of approximately 35 mm. Fermenter lid hole sizes can vary. Check your fermenter before drilling. If your fermenter already has a suitable centre hole, drilling may not be required.

- Mark the centre of the fermenter lid and drill a small pilot hole.
- Use a 35 mm hole saw to drill the bung hole if needed.
- Remove plastic burrs and shavings so the hole is clean and smooth.
- If an airtight seal is required, apply food-grade silicone sealant around the top of the bung after positioning.



3. Install and position the heater

Adjust the bung position to suit your fermenter. The heater must hang freely and must not rest on the fermenter floor, sediment, trub or hop debris. The full heater assembly must remain below the liquid level during operation.



Positioning checks

- Maintain approximately 20 mm clearance between the heater and the fermenter floor.
- Keep the heater clear of vessel walls, fittings, sediment, trub and hop debris.
- Check liquid level periodically during long fermentations.
- If used horizontally, keep the entire heater below the liquid level.

Before inserting into wort

- Wash the heater with warm water and suitable brewery cleaner.
- Rinse thoroughly with clean water.
- Sanitise all surfaces that will contact the wort.
- Do not immerse the mains plug in water or sanitiser.

Important: Remove the rubber protector from the heater before use. Do not place the heater into wort while the rubber protector is fitted.

4. Set temperature and operate

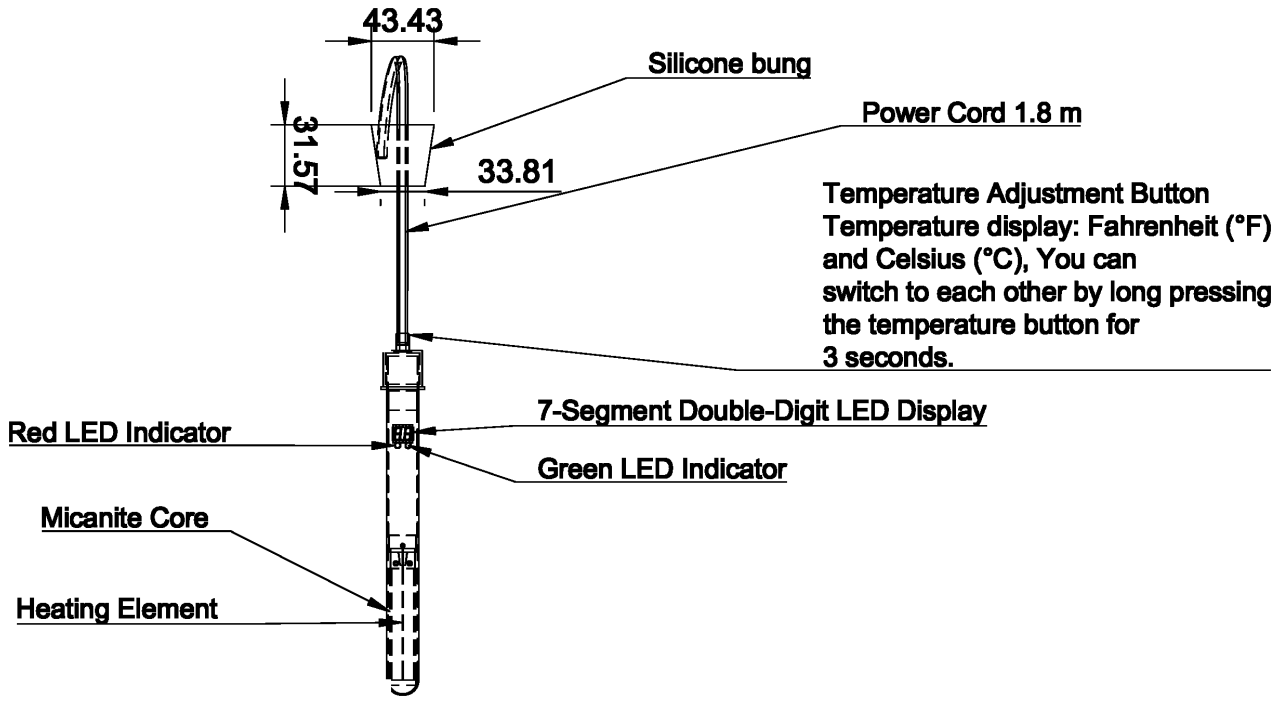
- Adjust the desired temperature before placing the heater into the wort. The heater will only operate once fully submerged.
- Install the heater in the fermenter and confirm it is fully submerged before heating.
- Press the top button to increase the set temperature by 1°C each press. After a few seconds, the display returns to current liquid temperature.
- Long press the temperature button for about 3 seconds to switch between Celsius and Fahrenheit.
- Red light indicates heating. Green light indicates the set temperature has been reached.
- If the display shows ER and both lights flash, install the heater fully submerged and restore liquid circulation.
- For best results, test the heater with water for 24 hours in the same position before using it in wort, then compare with a calibrated thermometer.

Calibration Test Run
Before using the heater in wort, test it in water for 24 hours.

1. Fill the fermenter with water to the normal operating level.
2. Install the heater in the same position it will be used during fermentation.
3. Ensure the entire heater assembly is fully submerged.
4. Set the heater to your target temperature, for example 20°C.
5. Fit the lid and allow the system to run for 24 hours.
6. Check the water temperature using a separate calibrated thermometer.
7. If the temperature is different, allow for normal thermometer variation and adjust the heater setting if required.

Do not open, modify, or attempt to internally calibrate the heater.

5. Parts diagram and specifications



Model	Power	Approx. heater size	Recommended fermenter size*
LH100W	100W	33 mm diameter x 262 mm length	15-45 L
LH200W	200W	33 mm diameter x 296 mm length	50-75 L

*Fermenter size is a guide only. Ambient temperature, insulation, vessel shape and target temperature affect performance.

6. Cleaning and storage

- Unplug and allow the heater to cool for at least 15 minutes before removing it.
- Wipe and rinse the glass tube after use. Do not scrape the glass with metal tools.
- Remove limescale or residue gently using a suitable brewery cleaner, then rinse thoroughly.
- Dry the cord and plug area before storage. Store in the retail box or protective sleeve to avoid glass damage.

7. Troubleshooting

Display / issue	Likely cause	Action
ER + red/green flashing	Heater is out of liquid or not fully submerged.	Install fully submerged and ensure liquid can circulate around the heater.
EE + red/green flashing	Liquid temperature is over 36°C.	Unplug and allow to cool. Check set temperature and liquid volume.
E1 / E2	Top sensor fault.	Stop using the heater and contact support.
E3 / E4	Bottom sensor fault.	Stop using the heater and contact support.
H1	Internal over-temperature fault.	Stop using the heater, unplug it and contact support.

Support: contact@fermiglow.au