Magnetic Stirring Water/Oil Bath Instructions

LVDALAB's magnetic stirring water bath, also known as an oil bath, delivers robust stirring power with stable rotation speeds. It features an aesthetically pleasing design, meticulous craftsmanship, and substantial construction. The inner chamber employs 304 stainless steel, including the heating element. The temperature controller offers high precision, with optional timer functionality available.

Operating Instructions

Place the unit on a stable, dry work surface. Before connecting to power, ensure the vessel is filled with clean water (silicone oil for oil bath models). Never pour samples directly into the vessel; always use a separate container to hold samples. When adding temperature-controlled water or oil, ensure the liquid level is at least several centimetres above the heating element. Maintain adequate liquid level during operation to keep the heating element fully submerged. Exposure of the heating element above the liquid surface may cause damage.

1.Magnetic Stirring Function: Place a white magnetic stir bar into the container. Slowly adjust the speed knob to initiate stirring. Should the stir bar drift towards the vessel's edge during operation, cease stirring immediately. Relocate the stir bar to the centre before gradually resuming speed adjustment.

2. You may then set the temperature or time.

2-1 Non-timed model: Instrument description: PV indicates the current temperature, SV is the temperature you wish to set. SET is the setting key, followed by the shift key, and the minus and plus keys. Press SET once (remember not to hold it down; if held, do not press any other buttons, then press SET again to return). The SV value in the lower row will flash. First, use the shift key to move to the desired digit. For example, to set 80 degrees, shift to the tens place, then press the increase or decrease key to set it to 8. Next, shift to the units place and set the digit to 0. Finally, press SET once to return.

2-2 Timer Model: Instrument and temperature setting procedures are identical to the non-timer model and shall not be repeated.

Setting the time: Press SET once (do not hold down). The display will show the set temperature. Adjust if incorrect, or press SET again to switch to time setting. Time is measured in minutes; for example, setting 90 corresponds to 90 minutes. If time is not required, set to 0000.

This timer function operates as follows: if you set 80°C and 90 minutes, the instrument will begin timing once it first reaches 80°C. Heating will cease after 90 minutes. If no time is set (displayed as 0000), the instrument will heat continuously until manually switched off.

3. Temperature Compensation Function

1. Press and hold the SET key until AL1 appears, then release. Press the SET key once to change the code displayed.

2. Press the SET key repeatedly until the code changes to SC. Adjust the value below: decrease it by the exact number of degrees below the actual temperature, or increase it by the exact number of degrees above the actual temperature.
3. After adjustment, press SET once to save, then press and hold SET to return to the normal interface.

Other:
1. When not in use, endeavour to drain the water. For units without a drain tap, lift the apparatus and empty the water from the rear end, or employ a rubber tube to draw it out using the siphon effect. For units with a drain pipe, open the drain valve to release the water.
Do not pour samples directly into the pot for heating and stirring.

Precautions

1. Always monitor the water level; never allow dry heating. Dry heating with the heating element glowing red may not only damage the apparatus but also potentially cause a fire.
2. Position the water bath in a dry, safe environment on a stable work surface.
3. Ensure circuit boards and similar components are kept at a distance.
4. Refrain from moving the apparatus whilst it is at high temperatures to prevent burns.
5. Ensure adequate ventilation and be mindful of the properties and safe temperature limits of heated samples.
6. Exercise caution with strong acids and alkalis, as these pose risks to personal safety and may corrode the apparatus.