



BeadBath™ Duo 10 Liter Water Bath for Beads or Water

Item: B2410 (B2410-E) Instruction Manual

Benchmark's BeadBath 10L is the first and only micro-processor-controlled heating bath with two individual modes designed to provide accurate temperature control when filled with beads or with water.

I. Product Specifications:

Capacity: 10L

Dimensions (Internal): W x D x H 24.1 x 30 x 15.5 cm (9.5 x 11.8 x 6.1")

Dimensions (External): W x D x H 27.4 x 40.6 x 30.5 cm (10.8 x 16 x 12")

Weight: 9 kg (20 lbs.) **Electrical:** 100-120VAC or 220-240VAC, 50/60Hz, 550W (4.5A/2.5A)

Operating Environment: 10°C to 30°C 70%RH **Warranty:** 2 years

Bead Mode:

Temperature Range: Ambient +5°C to 70°C

Temperature Accuracy: +/-0.2°C (37°C) **Temperature Uniformity:** +/-1.0°C (37°C)

Water Mode:

Temperature Accuracy: +/-0.2°C (37°C) **Temperature Uniformity:** +/-0.2°C (37°C)

Temperature Range: Ambient +5°C to 80°C

II. Product Set-Up:

Place the bath on a clean, level, and stable surface. Make sure that the power switch is in the OFF position. Plug the power cord into the back of the unit, then plug the electrical cord into a properly grounded outlet of the correct voltage (shown on the serial number label). Prior to powering up the instrument, fill the tank (at least 50%) with beads or water. **WARNING:** Before heating, ALWAYS ensure that the water tank is at least 50% full.

III. Product Operation:

Once the tank is filled, turn the power on (power switch is located on the back of the instrument). When the power is on, press the "MODE" key to activate the display.

IMPORTANT: Choose the desired mode. Press the "MODE" key to toggle between "WATER" and "BEAD" modes.

Once the appropriate mode has been chosen, press the "up" or "down" arrow buttons until the desired temperature is reached. **Then Press the WATER/BEAD mode button to set that desired temperature.** The bath will begin to heat to the desired temperature. While heating, the display will flash every few seconds to show the measured temperature until the desired temperature is reached.

When using **BEADS** please allow the unit to equilibrate for 4 to 8 hours.

WARNING: NEVER touch the inner chamber of the bath when in use.

IV. Recalibration:

If adjustment to the temperature calibration is required, this can be accomplished by following the steps below:

- Set the bath to desired calibration temperature and allow the bath to stabilize for 45 minutes.
- Use a calibrated thermocouple to measure the actual temperature of the bath and compare to the display temperature. Make note of any difference.
- If a significant difference is measured, please follow the steps below to calibrate:

1. Power off the unit
2. While the unit is off, press and hold the "MODE" button
3. Turn the unit on while holding the "MODE" button
4. Once the word "off" is shown on the display, release the "MODE" button.

Calibrating Water Mode: Press "Mode" once and "1" is displayed. "1" signifies water mode. If calibrating the water mode, press the up and down keys to adjust the displayed temperature to match the temperature shown on a calibrated thermometer. Press "Mode" to store.

Calibrating Bead Mode: Press "Mode" once again and "2" is displayed. "2" signifies bead mode. If calibrating the bead mode, press the up and down keys to adjust the displayed temperature to match the temperature shown on a calibrated thermometer. Press "Mode" to store. Continue pressing "Mode" until "On" is displayed. Then power off and back on.

Note when calibrating the temperature, the BEAD and WATER modes are independent of one another. A change in calibration to the BEAD mode will not affect the calibration of the WATER mode and vice versa.

V. Care and Maintenance:

No routine maintenance is required other than to keep the unit clean. Cleaning can be done with a damp cloth. Avoid the use of solvents as they may attack the product housing.