

Calibrating Oven Temperature on the EZ-Zone Controller

Applicable for Model 400, 700, 777 and 1000 Ovens equipped with EZ-Zone
Cat. #1040-60-X, 1070-00-X, 1077-00-X, 1040-70-X

Required part(s): Cat. #1051-52-0— Digital thermometer. Includes cable and NIST certificate.

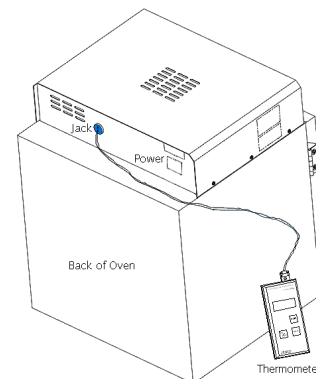
To ensure accurate ($\pm 0.5^{\circ}\text{C}$) oven temperatures, the performance of the controller should be periodically checked by comparing the temperature displayed on the controller to an accurate, NIST-certified (National Institute of Standards and Technology) thermal measurement device. Calibration need only be performed at a single temperature (e.g. 65°C) to achieve accurate oven operating temperatures from ambient +5 to 99°C .



SciGene recommends the calibration method below be used to achieve accurate oven temperatures. No other methods are recommended.

CALIBRATION CHECK

- 1) Turn on the oven, set to 65°C and allow temperature to stabilize (30 min).
- 2) Connect a NIST-certified digital thermometer (SciGene Cat. #1051-52-0) to the blue jack (secondary RTD) at the top back of the oven.
- 3) Verify that the temperature shown on the digital thermometer matches that shown on the controller within $\pm 0.5^{\circ}\text{C}$. If it does not, follow the steps below to adjust the controller.



CALIBRATION PROCEDURE

- 1) Turn on the oven, set to 65°C and allow temperature to stabilize (30 min).
- 2) Connect a NIST-certified digital thermometer (SciGene Cat. #1051-52-0) to the blue jack (secondary RTD) at the top back of the oven.
- 3) Calculate the difference in temperature shown on the controller to the digital thermometer. For example, if the controller displays 65.0°C and the thermometer displays 66.5°C , the difference (offset) is 1.5°C .
- 4) On the controller, press the up and down arrows simultaneously for 3 seconds. The upper display will now read "A1" and the lower display "open".
- 5) Press the green circle button 3 times until the lower display shows "i.CA". The upper display shows the offset value between the controller and digital thermometer when the unit was last calibrated.
- 6) Use the up and down arrows to adjust the offset value to the temperature difference calculated in Step 3. For example, if the controller displays a temperature 1.5°C lower than the thermometer, adjust the offset by *adding 1.5* to the value shown.
- 7) Press the ∞ key twice to return to the operation display. Your oven is now calibrated to provide accurate temperatures between ambient + 5 to 99°C .

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