

## Temperature Calibration for Hybex with EZ-Zone Controller

Required part: SciGene Cat. #1051-52-0 — Digital thermometer with cable

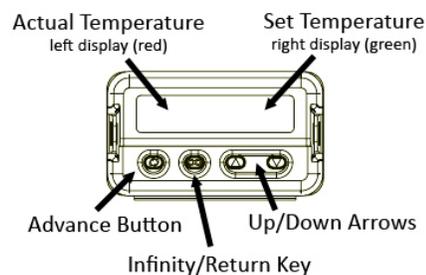


Re-calibrating the Hybex temperature controller is recommended **only if** the display varies by more than one degree (1°C) to a connected NIST-certified digital thermometer (SciGene cat. #1051-52-0).

### Definitions:

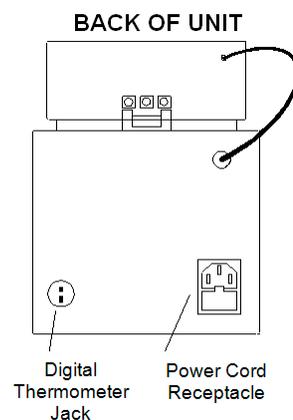
**Actual temperature:** temperature shown on the Hybex display indicating current conditions (left display/red)

**Set temperature:** temperature programmed into the Hybex controller by the user (right display/green)



To adjust the controller to achieve accurate temperatures:

- 1) Insert a block into the Hybex incubator, turn ON the instrument and set the controller to 65°C. Allow 15 minutes for temperature to stabilize.
- 2) Using the cable provided with the digital thermometer, plug one end into the blue receptacle found on the back panel of the Hybex incubator and the other end into the digital thermometer.
- 3) Turn on the thermometer. Allow 1 minute for thermometer to stabilize. The actual temperature of the block will be displayed.
- 4) Calculate the difference between the temperature shown on the controller and on 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.
- 5) On the controller, press the up and down arrows simultaneously for 3 seconds. The left display shows "A1" and the right display shows "open".
- 6) Press the Advance Button (green circle) 3 times until the right display shows "i.CA". The left display will show the offset value between the controller and thermometer when the unit was last calibrated.
- 7) Use the up or down arrow to adjust the offset value to the temperature difference calculated in Step 4. For example, if the controller shows a temperature 1.5°C lower than the thermometer, adjust the offset by adding 1.5 to the value shown.
- 8) Press the Infinity Key (∞) twice to exit calibration and return to the operation display. Verify that the temperature on the thermometer matches the display. Your incubator is now calibrated to provide accurate temperatures between 35 and 99°C.



For assistance, please contact: techserv@scigene.com (408) 733-7337, option 6.