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Engineering Note

Topic: USB-LS-450 Temperature Recalibration

Product Affected: USB-LS-450

Date Issued: 2/14/2003

Description

Periodically, the temperature sensor in the USB-LS-450 may require calibration. The user can accomplish this by exposing the temperature probe to two known temperatures.

Recalibration Procedure

► Procedure

To recalibrate the temperature sensor, do the following:

- 1. Connect the USB2000, USB-LS450 and temperature probe together and plug the USB cable into the PC.
- 2. Start the USB Programmer Utility (downloadable from http://www.oceanoptics.com/Technical/softwaredownloads.asp).
- 3. Click **USB-LS450** on the left side of the window, and then press **Calibrate**. The **Calibrate USB-LS450** window appears.



USB-LS-450 Temperature Recalibration Engineering Note

	Calibrate USB-L\$450	Low Value
Temperature — Selection	Calibrate Using Low Value 0.000000 CE Store C Resistance High Value 100.000000 CE Store	Store Buttons
Get —	Get Temperature	nigri value
Temperature Button	Slope 9.7060000e-007 Intercept 2.6328711e+002 LS-450 Testing Ilight On Ilight Pulsed D/A Value 32000 Set D/A	
	UK Cancel	

- 4. Ensure **Temperature** is selected in the **Calibrate Using** box.
- 5. Expose the probe to the lowest of the two calibration temperatures and enter this temperate in the **Low Value** box. Press the corresponding **Store** button.
- 6. Expose the probe to the highest of the two calibration temperatures and enter this temperate in the **High Value** box. Press the corresponding **Store** button.
- 7. When prompted, answer yes if you want to save the calibration results.
- 8. To verify the calibration, reopen the **Calibrate USB-LS450** window and click the **Get Temperature** button. The resulting temperature displays just below the button.