



ThermoWorks

Splash-Proof Super-Fast ThermoMapen Calibration Procedure

This procedure describes the method of trimming the Splash-Proof ThermoMapen at a single temperature point (32°F/0°C) by using a properly made ice bath. The ThermoMapen should rarely need adjustment and should only be performed if absolutely necessary.

Materials Required:

A coin to open the ThermoMapen battery compartment (USA nickel works best)
Large kitchen cup (preferably 1 quart/1 liter size)
Crushed ice (enough to fill cup)
Paper clip

Determining if Your ThermoMapen Requires Adjustment:

1. Make a proper ice bath by following these steps:

- Fill a large cup with crushed ice.
- Add just enough water into the cup to fill in the gaps in ice so no ice floats off the bottom of the cup. Too much water will cause errors.
- Stir gently and wait approximately 1 minute.

2. Set the ThermoMapen display to read temperature in tenths (example: 32.1°F) of a degree.

If the display is set to read temperature in whole degrees (example: 32°F), change to tenths by following these steps:

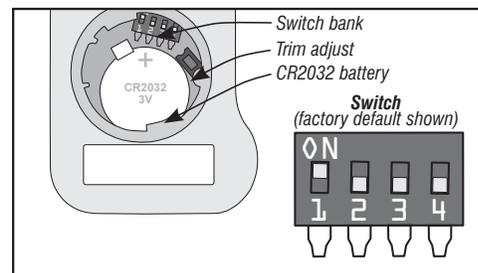
- Turn the ThermoMapen off by folding the probe away and locking it into the probe retaining slot.
- Using a coin with the appropriate thickness open the battery compartment.
- Locate the switch bank directly above the batteries numbered 1 through 4.
- Move switch 2 to the ON position by pushing the white switch forward and away from the number 2 using the tip of an opened paper clip.
- Replace the battery compartment and open the probe to confirm that the display now reads in tenths of a degree (example 32.1°F).

3. Test the ThermoMapen display using the ice bath following these steps:

- Turn the ThermoMapen on by opening the rotating probe.
- Insert the tip of the metal probe into the ice bath about 2 inches (50mm) maximum.
- Stir gently so the tip does not rest on any ice. While stirring observe the displayed reading after about 15 seconds.
- Once the display is stable and no longer changes, write down the reading. You'll need this if the ThermoMapen requires adjustment.

4. Determine if an adjustment is necessary.

- If the reading from the ice bath test is within acceptable limits: 31.2°F and 32.8°F (-0.6°C and +0.4°C); then no adjustment is necessary.
- If the reading is outside of acceptable limits proceed to making the trim adjustment.





ThermoWorks

Splash-Proof Super-Fast ThermoMapen Calibration Procedure

(continued)

Making the ThermoMapen Trim Adjustment:

After determining that your ThermoMapen requires adjustment by following the above procedure, follow these steps to trim the ThermoMapen:

1. Turn the ThermoMapen off by folding the probe away and locking it into the probe retaining slot.
2. Calculate the trim adjustment value by subtracting the reading written down in Step 3 of "Determining if Your ThermoMapen Requires Adjustment" from 32.0°F (or 0.0°C).

Example:

- a. Reading from my ThermoMapen = 32.9°F
 - b. Adjustment Value: $32.0^{\circ}\text{F} - 32.9^{\circ}\text{F} = -0.9^{\circ}\text{F}$
3. Using a coin with the appropriate thickness open the battery compartment.
 4. Move switch 4 to the ON position by pushing the white switch forward and away from the number 4 using the tip of an opened paper clip.
 5. Turn the ThermoMapen on by opening the rotating probe.
The display should read: "t r i m" and then display "t 0.0".
 6. Press the trim adjust button located to the right of the switch bank until the target trim adjustment value is shown. Note the trim adjustment value range is from -3.6 to +3.6°F (-2.0 to +2.0°C).
 7. While the target trim adjustment value is displayed move switch 4 on the switch bank in the battery compartment back to the OFF position by pushing the white switch back down toward the number 4. This will store the trim adjustment.
 8. The display should return to normal.
 9. Retest in the ice bath to confirm that the new reading is within the acceptable limits: between 31.2°F and 32.8°F (-0.6°C and +0.4°C). If the reading is still outside of the acceptable limits, redo the trim adjustment by following steps 1 thru 7.

