

Temp Minder™ Calibration





What is calibration?

Calibration is a documented procedure in which a comparison of measurement between one device of known values is made with another device of unknown values. When the unknown value is adjusted to match the known device the device is said to be calibrated.



Temp Minder Display

Temp Minder Probe

Temp Minder Repeater



Temp Minder Calibration

What is NIST?

The National Institute of Standards and Technology (NIST), known between 1901 and 1988 as the national Bureau of Standards (NBS), is a measurement standards laboratory which is a non-regulatory agency of the United States Department of Commerce. As part of its mission, NIST supplies industry, academia, government and other users with over 1,300 Standard Reference Materials (SRMs). These artifacts are certified and used as calibration standards for measuring equipment and procedures, quality control benchmarks for industrial processes, and experimental control samples.

What is NIST traceability?

The term traceability is used to refer to an unbroken chain of comparisons relating an instrument's measurements to a known standard. Calibration to a traceable standard can be used to determine an instrument's bias, precision, and accuracy.

Calibration Certification:

When a calibration is performed with a documented calibrated meter and the calibration of the system is documented on a log sheet and the system is said to be traceable to NIST standards.

Temp Minder Calibration

The Temp Minder system consists of both the transmitters and receivers. The calibration is performed at the receiver display unit. For practical reasons the temperature transmitters are calibrated in place. The following is a procedure that can be followed to insure that the Temp Minder system is calibrated and traceable to NIST.

How to calibrate a Temp Minder System to insure NIST Traceability

1 – Obtain a Calibrated Temperature Meter

A hand held meter that is calibrated and traceable to NIST must be obtained. An Omega PT100 RTD Handheld Thermometer can be purchased from Omega.com. This meter comes pre calibrated and traceable to NIST. Each year the instrument must be sent back to the factory for calibration.

2 – Place Temp Minder in Calibration Mode

A – Press “Menu” on the control display keypad.

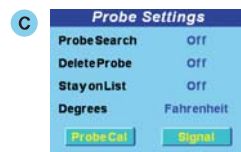
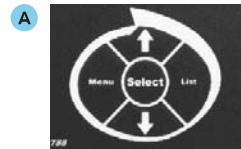
B – By touching the screen select option 2 – Probe Settings

C – The display will show the Probe Settings screen. Touch the tab labeled “Probe Cal”

D – Verify the Probe Cal Screen is displayed. The calibration is accomplished with the calibrated meter and the Temp Minder.

3 – Perform the measurement

Place the tip of the hand held meter probe into the air slot of the first Temperature transmitter. Wait approximately 2 to 5 min for the probe and the temp sensor to stabilize.



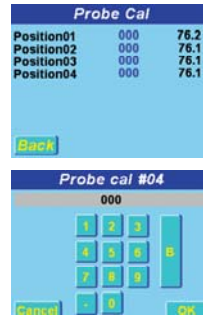
Probe Cal	
Position01	000 76.2
Position02	000 76.1
Position03	000 76.1
Position04	000 76.1

4 – Adjust the Temp Minder

A – Touch the three digit number located next to the probe that is being calibrated.

B – Using the numeric touchpad that appears on the display, adjust the offset number to the desired level. Calibration number can range from -20 to +20. Every two numbers is equal to approximately 1 degree Fahrenheit.

C – Press ok and verify the temperature displayed matches the calibrated meter.



Integrated Control

Temp Minder Certificate of Calibration

Technician Name _____

Date of Calibration _____

Laboratory Standard Model # **ATH688 255670**
 Calibration Standard Serial # **111430002**
 Calibration Standard Date of Calibration **2/6/2012**

Temp Probe Location/Serial#	Calibration Standard Reading	Temp Minder Display Reading	Offset Value

5 – Log probe data for the probe

After the Temp Minder display has been adjusted, fill in the Temp Minder Log sheet with your name and date of calibration and the following calibration data.

- 1 – Probe Location name (should match name on Temp Minder display)
- 2 – Calibrated Meter reading
- 3 – The final Temp Minder display reading
- 4 – The offset adjustment entered for that probe
- 6 – Repeat steps for all probes
- A - Repeat steps 3 through 5 for all probes.
- 7 – Completing Calibration
- A – Press the “List key to place the display in the operating mode
- B – Sign the bottom of the calibration sheet and file for future reference.

Temp Minder Certificate of Calibration

Technician Name _____

Calibration Standard Model # _____

Date of Calibration _____

Calibration Standard Serial # _____

Calibration Standard Date of Calibration _____

Temp Probe Location/Serial #	Calibration Standard Reading	Temp Minder Display Reading	Offset Value

I certify the above listed probes were calibrated with applicable Integrated Control Corporation calibration procedures and have been calibrated using standards traceable to the National Institute of Standards and Technology (NIST/USA).



Connect With Us



 [instagram.com/goicc](https://www.instagram.com/goicc)

 twitter.com/goicc

 www.goicc.com

 1.877.ICC.8788