

SPECIFICATIONS

Operating Range: -4 to 122.0°F
(-20 to 50.0°C)

(Prolonged exposure to temperatures exceeding the operating range may damage the thermometer)

Resolution: 0.1° from 19.9° to 199.9°
1° otherwise

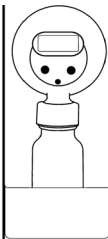
Accuracy: ±0.5°C between
(0 to 50°C) otherwise
±1°C

OPERATION

IMPORTANT: The intended use for this thermometer is to monitor temperatures inside refrigerators and freezers.

1. Press the on/off button to turn the unit on.
2. Press the °f/°c button to select the desired unit of measure (Fahrenheit or Celsius).
3. Place the thermometer into the supplied base and place the thermometer and base in the desired location to be monitored.

The entire unit is completely sealed and waterproof. Do not attempt to remove the thermometer from the bottle.



Hook and loop tape and double sided foam tape are supplied and may be used to mount the thermometer or the base side to any surface. In a refrigerator application, this prevents the thermometer from taking up valuable shelf space.

MINIMUM/MAXIMUM MEMORY

1. To view the minimum temperature reached since turning on the unit, press the max/min button. "MIN" appears on the display to indicate the minimum temperature recorded.
2. Press the max/min button a second time, within 3 seconds, to view the maximum temperature reached since turning on the unit. "MAX" appears on the display to indicate the maximum temperature recorded.

Note: Three seconds after pressing the max/min button, the unit automatically returns to the current temperature reading. ("MIN" and/or "MAX" are no longer displayed.)

3. Turn the unit off to clear the minimum and maximum memories.

USING THE MEMORY TO MONITOR A REFRIGERATOR /FREEZER

Following is an example of how to use the memory to monitor the temperature inside a refrigerator or freezer. This example is provided only as a helpful guide and is not intended to replace existing facility requirements or procedures.

Unit Setup Example

1. Turn the unit on.
2. Select the desired unit of measure.
3. Place the thermometer into the supplied base.
4. Place the thermometer and base inside the refrigerator/freezer.

At this point, allow sufficient time for the bottle thermometer to reach equilibrium with the true current temperature inside the refrigerator/freezer.

5. Once the thermometer has reached equilibrium, clear the minimum and maximum temperature memory. (See the "Minimum/Maximum Memory" section.)

The memory will provide a record of the single lowest and highest temperature achieved. When the temperatures are recorded into the manual-

log, the memory will allow the user to see if the temperature inside the refrigerator/freezer has gone outside of the acceptable range.

MONITORING PROCEDURE EXAMPLE

Keep a notebook or spreadsheet as a manual log.

1. At the same time every day, record the following into the manual log:

- Current Date and Time
- Current Temperature Reading
- Minimum Temperature Reading (MIN)
- Maximum Temperature Reading (MAX)


2. Once the above items have been manually recorded, clear the minimum and maximum temperature memory. (See the “Minimum/Maximum Memory” section.)

By clearing the memory each day, the minimum and maximum temperature memory will provide a record of the minimum and maximum temperature that has been achieved inside the refrigerator/freezer over the past 24 hour monitoring period. The memory will also allow the user to see if the temperature inside the refrigerator went outside of the acceptable range.

ALL OPERATIONAL DIFFICULTIES

If this thermometer does not function properly for any reason, replace the battery with a new high quality battery (see the “Battery Replacement” section). Low battery power can occasionally cause any number of “apparent” operational difficulties. Replacing the battery with a new fresh battery will solve most difficulties.

BATTERY REPLACEMENT

Erratic readings, a faint display, no display, or  appearing on the display are all indications that the battery must be replaced. To replace the battery, remove the three battery cover screws located on the back of the unit. Remove the battery cover. Replace the exhausted battery with a new 1.5-volt, silver oxide, #357 size battery. Make certain the positive (+) side is visible. Replace the battery cover and battery cover screws. Do not overtighten the screws as this may damage the unit.

NOTE: When replacing the battery cover, ensure the screws are tightened securely to maintain the unit’s water-proof seal.

WARRANTY, SERVICE, OR CALIBRATION

For warranty, service, or calibration contact:

TRACEABLE® PRODUCTS

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Traceable® Products are ISO 9001:2018 Quality-Certified by DNV and ISO/IEC 17025:2017 accredited as a Calibration Laboratory by A2LA.

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TRACEABLE® DIGITAL-BOTTLE™ THERMOMETER INSTRUCTIONS



Calibration complies with ISO/IEC 17025, ANSI/NC SL Z540-1, and 9001



Cert. No.: 4040-1209600C

Traceable® Certificate of Calibration for Therm./Clock/Humidity Monitor

Manufactured for and distributed by : Traceable® Products 12554 Galveston Rd B230, Webster, TX 77598

Instrument Identification:

Model: 4040,90080-06

S/N: 210248494

Manufacturer: Control Company

Standards/Equipment:

Description	Serial Number	Due Date	NIST Traceable Reference
Non-Contact Frequency Counter	26.662025	21 Apr 2021	1000453894
Digital Thermometer	221197993	14 Oct 2021	4000-11621504
Chilled Mirror Hygrometer	44654/2H3737	25 Nov 2021	17811

Certificate Information:

Technician: 126

Procedure: CAL-17

Cal Date: 27 Mar 2021

Cal Due Date: 27 Mar 2023

Test Conditions: 57.75%RH 22.6°C 1012mBar

Calibration Data: (New Instrument)

Unit(s)	Nominal	As Found	In Tol	Nominal	As Left	In Tol	Min	Max	±U	TUR
%RH	N.A.	N.A.		41.63	41	Y	37	47	0.74	>4:1
°C	N.A.	N.A.		23.25	22.7	Y	22.2	24.2	0.076	>4:1
sec/24hr	N.A.	N.A.		0.000	0.133	Y	-8.64	8.64	0.041	>4:1

This certificate indicates Traceability to standards provided by (NIST) National Institute of Standards and Technology and/or a National Standards Laboratory.

A Test Uncertainty Ratio of at least 4:1 is maintained unless otherwise stated and is calculated using the expanded measurement uncertainty. Uncertainty evaluation includes the instrument under test and is calculated in accordance with the ISO "Guide to the Expression of Uncertainty in Measurement": (GUM). The uncertainty represents an expanded uncertainty using a coverage factor k=2 to approximate a 95% confidence level. In tolerance conditions are based on test results falling within specified limits with no reduction by the uncertainty of the measurement. The results contained herein relate only to the item calibrated. This certificate shall not be reproduced except in full, without written approval of Control Company.

Nominal=Standard's Reading; As Left=Instrument's Reading; In Tol=In Tolerance; Min/Max=Acceptance Range; ± U=Expanded Measurement Uncertainty; TUR=Test Uncertainty Ratio; Accuracy=±(Max-Min)/2, Min=As Left Nominal(Rounded) - Tolerance; Max= As Left Nominal(Rounded) + Tolerance;

Nicol Rodriguez

Nicol Rodriguez, Quality Manager

Marisa Elms

Marisa Elms, Technical Manager

Note :

Maintaining Accuracy:

In our opinion once calibrated your Therm./Clock/Humidity Monitor should maintain its accuracy. There is no exact way to determine how long calibration will be maintained. Therm./Clock/Humidity Monitor change little, if any at all, but can be affected by aging, temperature, shock, and contamination.

Recalibration:

For factory calibration and re-certification traceable to National Institute of Standards and Technology contact Control Company.

Issue Date : 27 Mar 2021

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Control Company is an ISO/IEC 17025:2017 Calibration Laboratory Accredited by (A2LA) American Association for Laboratory Accreditation, Certificate No. 1750.01.
Control Company is ISO 9001:2015 Quality Certified by DNV GL, Certificate No. CERT-01805-2006-AQ-HOU-ANAB.
International Laboratory Accreditation Cooperation - Multilateral Recognition Arrangement (ILAC-MRA).