### **SPECIFICATIONS**

Range: -99 to 199.9 °C

Resolution: 0.1°

Sensor: Pt 100 (Platinum)

Sampling Rate: 2 times/second

### **OPERATION**

1. Attach the temperature probe to the meter.

(The probe and meter connectors are keyed, do not insert the connector incorrectly and force it.)

- 2. Slide the ON/OFF switch to ON to turn the meter on.
- Insert the probe into the material to be measured and read the display.

Do not expose the display to temperatures below -10 °C or above 45 °C as this may damage the display.

The probe and cable may be exposed to temperatures as low as -100 °C; however, the probe cable may become brittle after prolonged exposure to temperatures below -50 °C. Bending a brittle cable may result in damage to the cable. When exposed to temperatures below -50 °C, wait for the cable to reach ambient temperature before bending.

4. Slide the ON/OFF switch to OFF to turn the meter off. To conserve battery life, always turn the meter off when not in use.

## PROBE HOLDER The probe holder allows the probe to be held in position while attached to PINCH beakers, stainless steel cylinders, vats, etc.. Pinch the ends of the holder and place the probe through the *outer hole* in the top portion of the holder and then through the *outer hole* on the bottom of the holder. When the ends of the holder are released, the holder will expand to grab the probe securely. Use the clip to attach the holder to the side wall of a container. To remove the holder, pinch the ends of the holder and remove the probe.

## **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 "LO BAT" appearing on the display are all indications that the battery must be replaced. Remove the battery cover by sliding it in the direction of the "open" arrows. Remove the exhausted battery and replace with a new 9 volt alkaline battery. Replace the battery cover.

## WARRANTY, SERVICE, OR RECALIBRATION

For warranty, service, or recalibration, contact:

#### CONTROL COMPANY

12554 Old Galveston Rd. Suite B230 Webster, TX 77598 Ph. 281 482-1714 • Fax 281 482-9448 E-mail sales@control3.com • www.traceable.com

Control Company is ISO 9001:2008 Quality-Certified by DNV and ISO/IEC 17025:2005 accredited as a Calibration Laboratory by A2LA.

ACCESSORIES
Cat. No. 4138
Easy-Use Accessory Adaptor
Allows the unit to be run off AC power for continuous use.

TRACEABLE®
-100° C
PLATINUM
FREEZER
THERMOMETER
INSTRUCTIONS

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# Calibration complies with ISO/IEC 17025, ANSI/NCSL 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

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<u>Description</u>	Serial Number	<u>Due Date</u>	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	Υ	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 text 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 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, Quality 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