SPECIFICATIONS

Operating Range: -22 to 122.0 °F
                    -30 to 50.0 °C

Measurement Range*: -22 to 185.0 °F
                    -30 to 85.0 °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: ±1° C
                    ±0.4° C at tested points*
                    (*Ultra™ version)

## ULTRA™ THERMOMETER ACCURACY

Ultra™ thermometers are tested at selected test points to be within tighter than normal tolerances to assist in providing improved accuracy. Other points will not necessarily fall within the same accuracy as those found at the selected test points, but will be within an accuracy of ±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 water-proof. Do not attempt to remove the thermometer from the bottle.
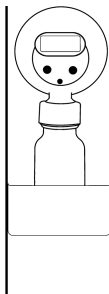
Velcro® and double sided foam tape are supplied and may be used to mount the thermometer or the base side to any surface. In a refrigerator application, this prevents the thermometer from taking up valuable shelf space.

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 equilibrioum, 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 over-tighten 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 RECALIBRATION
For warranty, service or recalibration, contact:

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Control Company is ISO 9001 Quality-Certified by DNV and ISO 17025 accredited as a Calibration Laboratory by A2LA.

TRACEABLE® DIGITAL-BOTTLE™ THERMOMETER INSTRUCTIONS