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Find the *Sper Scientific 800007* at our website: *Click HERE*

Type K/J Thermometers

800004 & 800007

SPER SCIENTIFIC

Environmental Measurement Instruments

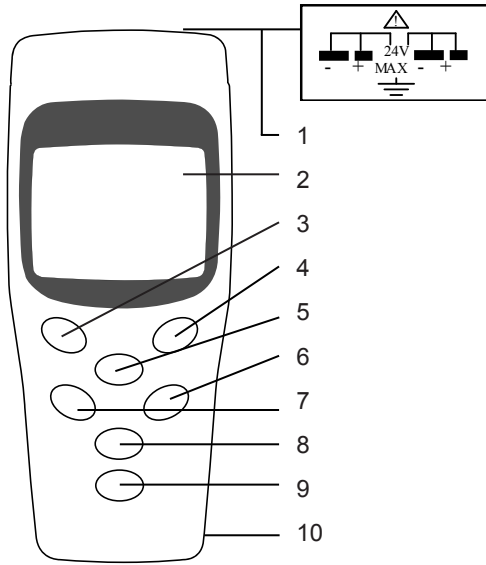
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INTRODUCTION

Mini sized and light weight, this unit provides extremely accurate and reliable temperature measurement with all the versatility and range of type K & J thermometers. Features relative, min/max/ave temperature, hold, auto power off, and touch tone buttons. Model 800007 will read and display results from two probes simultaneously and track the difference between them (T1-T2). Comes with a 9V battery and beaded wire probe (2 probes for 800007). CE rated.

PANEL DESCRIPTION



1. Probe Input (top of unit)
2. Display
3. °C/°F
4. Min/Max
5. Type K/J
6. REL (relative) / adj
7. HOLD / Auto Off
8. Power
9. T1-T2 (difference 800007 only)
10. Battery Compartment (back of unit)

MEASUREMENT PROCEDURES

Measurement Mode

1. Press the **POWER** button.
2. Press the **°C/°F** button to select the temperature scale. “°C” or “°F” will appear on the LCD.
3. Press the **TYPE** button to select your sensor type. “K” or “J” will appear on the LCD.
4. To select sensor type for T2 (model 800007 only), press and hold the **T1-T2** button and T2 will appear on the primary display (the upper half of the LCD). Press the **TYPE** button to select “K” or “J” sensors.
5. The thermometer will automatically save your sensor choice when the meter is turned off, and will return to the saved type when the meter is turned back on.
6. Insert the probe plug(s) into the **PROBE INPUT** socket. Be sure to match the plug’s polarity to the input’s polarity (- +).
7. Temperature reading(s) will appear on the LCD. For 800007, the T1 reading appears on the primary display and T2 reading on the lower display.

MEASUREMENT PROCEDURES

Note…
To obtain the most accurate reading, the probe plug must be the same temperature as the socket.

Hold Mode

1. Press the **HOLD** button during measurement to freeze the displayed temperature. “HOLD” and the temperature are shown.
2. Press the **HOLD** button again to exit this mode.

Note...

When the Hold function is enabled, all function keys are disabled except for the POWER button.

Maximum/Minimum Mode

The thermometer must be in the Max/Min Mode to display max, min or average values. These values are not updated during temperature readings taken in the standard Measurement Mode.

Note…

The POWER, C/F, TYPE, REL and T1-T2 buttons will not operate in Max/Min Mode.

MEASUREMENT PROCEDURES

1. The max value is updated only when exceeded.
2. With the meter on, press the **MAX/MIN** button once. “MAX” and the maximum (peak) temperature appear on the LCD.
3. The min value is updated only when a lower temperature is recorded.
4. Press the **MAX/MIN** button again. “MIN” and the minimum temperature appear on the LCD.
5. Press the **MAX/MIN** button again. “AVG” and the average temperature appear on the LCD.
6. The max/min/ave temperatures are held in memory until the meter is turned off.
7. To exit this mode, press and hold the **MAX/MIN** button for at least 2 seconds. The current temperature appears on the LCD.

Note…
The primary display shows current channel readings of min/max/ave. The lower display shows current channel readings of actual temperature. For model 800007, to view another channel reading of min/max/ave, press and hold the **T1-T2** button to switch from T1 to T2 and vice versa.

MEASUREMENT PROCEDURES

Relative Measurement

1. Press the **REL** button during measurement to store the current temperature into memory. “REL” and “0.0°” appear on the LCD.
2. As subsequent temperatures are measured, the difference (higher/lower) appear on the LCD.
3. Press the **REL** button again to exit.

EXAMPLE: A temperature reading of 75.0°F was stored in memory by pressing the REL button. Next, the probe was placed in a 55.0°F environment. “REL” and “-20.0°F” appear on the LCD.

Note…
The upper half of the LCD displays current channel readings of REL. The lower half displays current channel readings of actual temperature. For model 800007, to view another channel reading of REL, press and hold the **T1-T2** button to switch from T1 to T2 and vice versa.

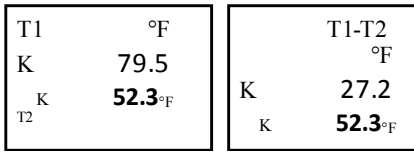
MEASUREMENT PROCEDURES

T1-T2 Δ Mode (800007 Only)

Using two probes, model 800007 will display the Δ (difference) between the T1 and T2 temperatures. The MAX/MIN and REL buttons will not operate in Δ Mode.

1. With the meter on, press the **T1-T2** button once.

In the following example, the T1 value is 79.5°F, the T2 value is 52.3°F, and the difference is 27.2°F. Or, T1 (79.5) - T2 (52.3) = 27.2°F.



2. Press **T1-T2** to disable the Δ function.

Note…
The primary display shows T1-T2 temperature. The lower display shows current channel readings of actual temperature. To view another channel reading of actual temperature on the lower display, press and hold the **T1-T2** button to switch from T1 to T2 and vice versa.

OFFSET ADJUSTMENTS

You can adjust the offset to compensate for meter and probe error.

1. Press and hold **REL** to enter offset setup mode.
2. Press **TYPE** or **POWER** to increase or decrease the offset value, respectively. The maximum adjustment is ±5°C or ±9°F.
3. Press **MAX/MIN** to save and leave offset mode.
4. For 800007 only: To adjust the offset on another channel, press **T1-T2** and repeat steps 2-3.

Note...

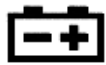
The thermometer will save the offset value when the meter is turned off, and will default to the saved value when the meter is turned back on.

AUTO POWER OFF

1. The thermometer will automatically turn off after 15 minutes of inactivity.
2. Press and hold the **HOLD** button to disable or enable the auto power off function.

BATTERY REPLACEMENT

1. When the low battery icon is displayed, turn **off** the meter and remove the probe(s).



2. Slide **BATTERY COMPARTMENT** cover down to install a fresh 9V battery.
3. Replace the cover. Battery life is approximately 200 hours.

SPECIFICATIONS

Accuracy	±(0.05% of reading + 0.7°C or 1.4°F) when inside the range of 23± 5°C, < 80%RH OR 0.01% of reading + 0.03°C per each °C outside the specified range of 23± 5°C or 73± 9°F
Type K	-200 ~ 1370°C (-328 ~ 2498°F)
Type J	-200 ~ 1050°C (-328 ~ 1922°F)
Resolution	0.1
Weight	6 oz (170g)
Dimension	5¼ x 2 ¼ x 1¼” 130 (L) x 56 (W) x 38 (H) mm
Operating Environment	5°C to 40°C (41°F to 104°F), RH <80%
Storage Environment	10°C to 60°C (14°F to 140°F), RH <70%
Overload Indicator	“OL” indicates either over range (positive temp.) or no probe(s) attached. “-OL” indicates below range (negative temp.)

OPTIONAL ACCESSORIES

800060~97 Type K / J Thermocouple Probes
840090 Water Resistant Instrument Pouch
850000 Rubber Boot

WARRANTY

Sper Scientific warrants this product against defects in materials and workmanship for **five (5) years** from the date of purchase, and agrees to repair or replace any defective unit without charge. If your model has since been discontinued, an equivalent Sper Scientific product will be substituted if available. This warranty does not cover damage resulting from accident, misuse, or abuse of the product. To obtain warranty service, ship the unit postage prepaid to:

SPER SCIENTIFIC LTD
8281 E. Evans Rd., Suite #103
Scottsdale, AZ 85260
(480) 948-4448

Be sure to include a description of the problem and your return address. Register your product online at www.sperscientific.com, or return your warranty card within 10 days.

09/09/13

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