EM60
DUAL INPUT
THERMOMETER

Supco®

Users Manual

1

■Introduction

Thank you for purchasing the SUPCO Dual Input thermometer (thermocouple). Please take a few minutes to browse through this user manual before you begin to operate the meter to ensure that you are fully familiarized with how best to operate the meter as accurately and safely as possible.

This meter can match any standard K-type or J-type thermocouple sensor.

1.1 Precautions safety measures

To get the best performance from this meter, please read this user's manual carefully and observe the detailed safety precautions.

1.1.1 Maintaining the product

l Do not measure in high temperature, high humidity locations.

l When not using the instrument for a long time, please remove the battery and avoid storing in high

temperature and high humidity.

■ **Features**

1. Display: 4 digit LCD Display
2. Resolution: 0.1℉/0.1℃（below 1832 ℉）

     1℉/1℃（above 1832 ℉）
3. Range:

   K-type: -328℉ to ~2372℉ (-200℃ to 1300℃)

   J-type: -328℉ to 2192℉ (-200℃ to 1200℃)
4. Accuracy:

   ±(0.2% reading +2℉) for -328 to -148℉

   ±(0.1% reading +1.4℉) for -148 to 2372℉

   ±(0.2%reading+1℃) for -200 to -100℃

   ±(0.1% reading +0.7℃) for -100 to 1300℃
5. Sample rate: 1 time /sec
6. Auto power off: 20 minutes (app.)
7. Low battery indicator
8. Operating environment:

   32℉ to 122℉ (0℃ to 50 ℃); 0 to 80%RH

9. Storage environment:

-4℉ to 140℉ (-20℃ to 60℃); 0 to 80%RH

10. Dimensions:

4.76"(L) x 2.36"(W) x 1.18"(H)

121mm(L) x 60mm(W) x 30mm(H)

11. Weight:

6.35 oz (app.)

180 g (app.)
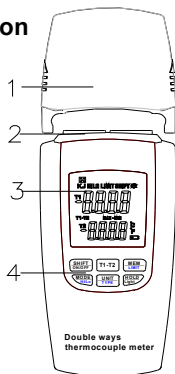
11. Accessories:

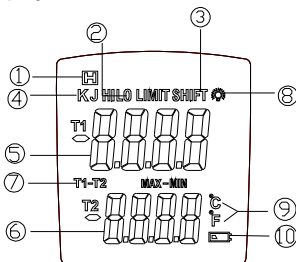K-type thermocouple wire (2)

Lanyard (1)

AAA Batteries (3).

Users manual

■Instrument Description

1. Sensor cover
2. Thermocouple input jacks
3. LCD display
4. Function key

I LCD Display

Symbol Designations：

1. Data Hold Indicator

2. Indicates the high or low temperature setting

3. Indicates the second function key

4. Indicates type of thermocouple

5. Measurement Display area

6. Measurement Display area

7. T1-T2/ Maximum / Minimum Indicator

8. Indicates backlight ON

9. Temperature units

10. Low Battery Indicator

■. Operating Instructions

*NOTE: After abrupt ambient temperature changes, allow instrument temperature to stabilize for 20 minutes for accurate measurements.

1. Press the ON/ OFF key to turn the unit on

2. Plug one or both thermocouples into the inputs at the top of the instrument. If there are no thermocouples

installed the instrument will display OL. Otherwise, the display will show T1 and/ or T2, identifying which thermocouple(s) is (are) installed.

3. Press the function key to change temperature units, select T1-T2/MAX/MIN/HOLD mode and K or J type thermocouple, set Hi/Lo alarm, and store data. (refer to "function keys")

4. Press the $\frac{\textbf{HOLD}}{\textbf{Light}}$ key for more than 2 seconds to turn the back light on or off.

5. Press the $\frac{\textbf{SHIFT}}{\textbf{ON/OFF}}$ key for more than 2 seconds to turn the power OFF.

More operations are described in the Function Key directions below.

■ Function keys

1. $\frac{\textbf{SHIFT}}{\textbf{ON/OFF}}$ key

ON/OFF power ON/OFF key: Press once to turn the power ON.   Press the key for more than 2 seconds to

turn the power OFF.

SHIFT second function key: Press the key to enable the second function of any key, and a **SHIFT** icon will display on the LCD.

The function of key:

SHIFT disable：**MEM**、**MODE**、**UNIT**

SHIFT enable：**LIMIT**、**Hi/Lo**、**TYPE**

2. T1-T2 key

Press the key to enable the T1-T2 function. The T1-T2 icon will display on the LCD.

3. $\frac{MEM}{LIMIT}$ key

MEM function: Press the key to store the present reading of T1 and T2. Up to five groups of data can be stored.

In the MEM mode, press the **T1-T2** or **UNIT keys** to view the recorded data up and down, and press the

MODE or **HOLD keys** to select T1 or T2.

When data is full (5 sets), the OU icon will be displayed.

To clear memory, press the **MEM** key for more than 2 seconds. the CLER icon will be displayed.

Press LIMIT To enable the **Hi/Lo** alarm function.

Press SHIFT then press the **LIMIT** key to turn the Hi/Lo alarm ON or OFF.

4. $\frac{HOLD}{Light}$ key

When pressed, a 🖹 icon will be displayed and the measurement is held. Press the key again to cancel the hold function.

Press the key for more than 2seconds and the back light will be turned on. The ☼ icon will be displayed. Press the key again for more than 2 seconds and the backlight will be turned off. (The icon will disappear.)

5. $\dfrac{\text{UNIT}}{\text{TYPE}}$ key

Press the **UNIT** key to select temperature units in ℉ or ℃

To select thermocouple type:

When **SHIFT** is enabled, press the **TYPE** key to select K-type and J-type thermocouple.

6. $\dfrac{\text{MODE}}{\text{Hi/Lo}}$ key

Press the **MODE key** to alternate between maximum/minimum measurement readout.

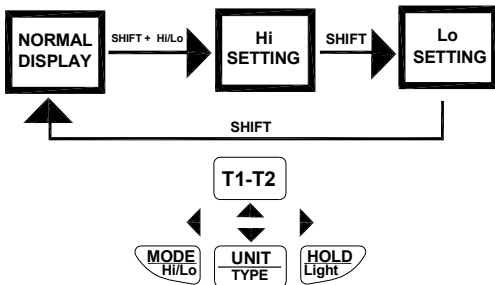**Hi/Lo key:** The alarm Hi/Lo temperature setting

When the temperature is exceeds the Hi temperature setting or goes lower than the Lo temperature setting, the alarm will continue to sound.

Set Hi/Lo Limits: When **SHIFT** is enabled, press the **Hi/Lo** key to enter the Hi/Lo temperature setting:

A. Use **SHIFT** key to select Hi or Lo setting.

B. Use **MODE** or **HOLD** key to change alarm

setting.

C. Use **TI-T2** or **UNIT** key to set temperature.

D. Use **SHIFT** key to complete the setting.

The Hi/Lo temperature setting

TYPE	Hi	Lo
K	1300℃(2372℉)	-200℃(-328℉)
J	1200℃(2192℉)	-200℃(-328℉)

7. AUTO POWER OFF SETTING

The instrument is factory set for Auto Power Off. The meter will power itself off after 20 minutes if no key is pressed.

To cancel auto power off, press the **HOLD** key until the LCD displays all icons and the buzzer sounds continuously.

■. Maintenance

1. CLEANING INSTRUCTIONS

The meter may be wiped down with a wet sponge or cloth using a mild, water based detergent.

NOTE:

This unit is not designed for complete submersion or washing in water.

2. BATTERY REPLACEMENT

Use the following procedure:

When the battery voltage drops below proper operation range the 🔋 symbol will appear on the LCD display and the battery needs to be replaced.

∞ Press the battery cover towards the arrowhead to open the battery cover.

∞ Replace the battery with three new AAA (1.5V)

batteries.

∞ Replace the battery cover.

WARRANTY

Sealed Unit Parts Co., Inc. warrants that it will repair or furnish without charge a similar product to replace any product which, within the specified warranty term after the date of sale by the Wholesaler, is proved to the satisfaction of Sealed Unit Parts Co., Inc. , to have been defective at the time it was sold. Said warranty is in effect only when said item is used in accordance with the instructions and recommendations of Sealed Unit Parts Co., Inc.

This warranty applies only to products which after shipment from the factory, have not been altered, changed, repaired, or treated in any manner whatsoever.

This warranty to repair or replace is the only warranty either expressed, implied or statutory and is the only

warranty being issued herein; Sealed Unit Parts Co., Inc.'s liability in connection with its products is expressly limited to the repair or replacement of defective parts. All other damages and warranties, statutory or otherwise, are being expressly excluded.

No representative of Sealed Unit Parts Co., Inc. has authority to change this warranty in any manner whatsoever. No attempt to repair or promise to repair or improve any part covered by this warranty by any representative of this company shall be effective unless signed by a properly authorized officer of Sealed Unit Parts Co., Inc.