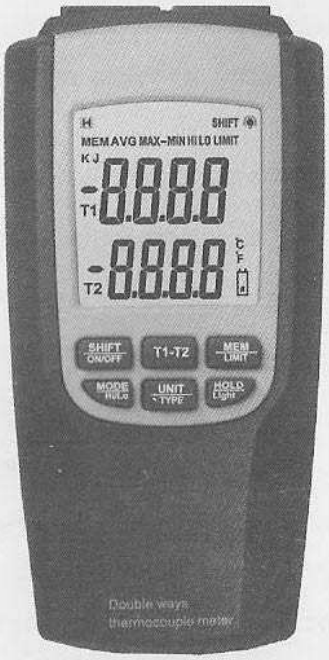
DOUBLE WAYS THERMOCOUPLE METER



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Users Manual

■.Introduction

Thank you for purchasing the double ways thermocouple meter from us. 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 type K or J sensor.

1.1 Precautions safety measures

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

1.1.1 During use

1.Temperature jacks: standard small thermocouple jacks, the center spacing is 7.9mm（between the two prongs）.

2. When the battery voltage is under proper operation requirement, the symbol will show on the LCD and the battery need to be replaced with new.

3. To keep the instrument clean, wipe the case with a dry

cloth and detergent, do not use abrasives or solvents.

1.1.2 Maintaining the product

- Do not measure at a high temperature, high humidity places.
- When not using the instrument for a long time, please remove the battery and avoid storing in high temperature and high humidity.

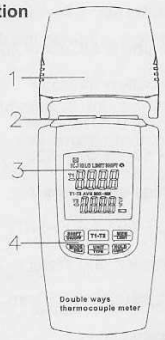
■. Features

1. Display: 4 digits LCD Display
2. Resolution: 0.1℃/0.1℉（below 1000℃）
   1℃/1℉（above 1000℃）
3. Range:
   K-type: -200℃ ~ 1300℃(-328℉ ~2372℉)
   J-type: -200℃ ~ 1200℃(-328℉ ~ 2192℉)
4. Accuracy:
   (-200 ~ -100℃) ±(0.2%reading+1℃)
   (-100 ~ 1300℃) ±(0.1% reading +0.7℃)
   (-328 ~ -148℉) ±(0.2% reading +2℉)

   (-148 ~ 2372℉) ±(0.1% reading +1.4℉)
5. Sample rate: 1 time /sec
6. Auto power off: about 20 minutes
7. Low battery indicator
8. Operating environment:
   0℃ ~ 50 ℃(32℉~122℉)，0 ~ 80%RH
9. Storage environment:
   -20℃ ~ 60℃(-4℉~140℉)，0 ~ 80%RH
10. Dimension and Weight:
    121(L)x60(W)x30(H)mm, about 180g
11. Accessories:
    DC1.5V (AAA) x 3pcs
    K-type thermocouple wire x 2pcs
    String x 1pcs
    Plastic box x 1pcs
    Users manual x 1pcs

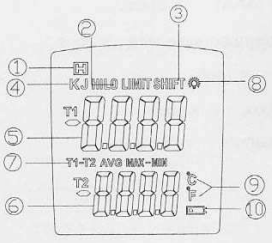
■. Names of parts

- **Instrument Familiarization**



1. sensor cover
2. temperature input jack
3. LCD display
4. function key

- **LCD Display**



The meaning of the symbols represented by the following:

1. Indicating it is now in the data-holding state
2. Indication to the high or low temperature setting
3. Indication to the second function key
4. Type of thermocouple
5. Display zone
6. Display zone
7. T1-T2/Average/ Maximum / minimize
8. Indication to back light
9. Temperature units
10. Indication to low voltage of the batteries

■. Operation Instruction

*NOTE: After abrupt ambient temperature changes, allow instrument temperature to stabilize for 20 minutes before using for measurement.

1. Put the instrument with enough battery power in the hand, press the SHIFT/ON/OFF key to turn the power on and

enter into the measuring mode.

2. If the instrument is connected to the thermocouple, it will display the thermocouple temperature of the port T1 or T2. otherwise, it will display OL.

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

4. Press the HOLD/Light key >2sec. to turn the back light on or off.

5. press the SHIFT/ON/OFF key >2sec. to turn the power OFF.

If you still need more operations, please see the description of function keys.

■. Function keys

1. SHIFT/ON/OFF key

ON/OFF power ON/OFF key: Press the key to turn the power ON and press the key once more >2sec. to turn the power OFF.

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

The function of key:

SHIFT disenable: **MEM**、**MODE**、**UNIT**

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

2. T1-T2 key

Press the key to enforce T1-T2 function and the T1-T2 icon will display on the LCD.

3. MEM/LIMIT key

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

In the mode of MEM, press the key **T1-T2** or **UNIT** to view the recorded data up and down, and press the key **MODE** or **HOLD** to select T1 or T2.

When it is full of five data, OU icon will display on the LCD. If need to store more data, you should clear all data which have been stored before (in normal mode, press the **MEM** key >2 sec., then a CLER icon will display on the LCD).

LIMIT To enforce Hi/Lo alarm function.

When **SHIFT** is enabled, press the **LIMIT** key to turn the Hi/Lo alarm ON or OFF.

4. HOLD/Light key

Press the key, a H icon will display on the LCD and the readout held in. Press the key once more to cancel the hold function.

Press the key >2sec. the back light will be turned on, and the ☼ icon will display on the LCD. Press the key once more >2sec. the light will be turned off, and the

icon will disappeared.

5. UNIT/TYPE key

UNIT The temperature unit selection

Press the key to select alternate the two temperature units of ℃ and ℉

TYPE Select thermocouple type function

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

6. MODE/Hi/Lo key

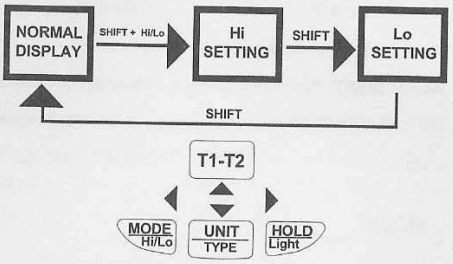
MODE The maximum/minimum readout alternate.

Hi/Lo The alarm Hi/Lo temperature setting

When the main display temperature is higher than Hi temperature setting or lower than Lo temperature setting, the alarm will continue send out.

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 move position.
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

When the meter is powered on, it is under auto power off

mode. The meter will power itself off after 20 minutes if no key operation.

Cancelled auto power off function: press **HOLD** key when power on until the LCD display all icons and the buzzer send out a long alarm.

■.Maintenance

1. CLEANING INSTRUCTIONS

The meter may be wiped down with a wet sponge or cloth using a mild water based detergent or anti-bacterial soap and rinsed under a gentle stream of cold water.

NOTE:

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

2. BATTERY REPLACEMENT

Use the following procedure:

When the battery voltage drop below proper operation range the  symbol will appear on the LCD

display and the battery need to be replaced.

- ¥ Press the battery cover and towards arrowhead direction to open the battery cover.
- ¥ Replace the battery with three new 1.5V batteries (AAA).
- ¥ Replace the battery cover.