

# Thermocouple Thermometer

## User Manual



**Part Number: MP780831**

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## 1.Introduction


The meter is a handheld temperature measuring instrument via probe and adopt Thermocouple sensor (Type K, Type J, Type T), the accuracy is high, easy to use.

## 2.Features

- Large LCD Display with Backlight
- User Selectable °C and °F
- MAX/MIN Hold
- Low Battery Indication
- Data Hold
- User Calibration-Offset Adjustment (±5°C)
- Auto Power Off
- Type J, Type K, Type T Single Input

## 3.Specifications

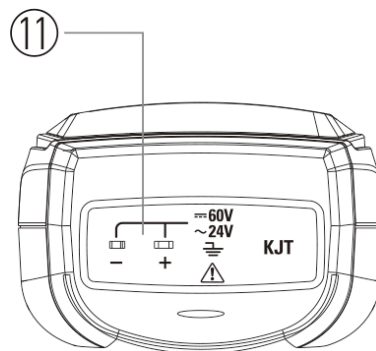
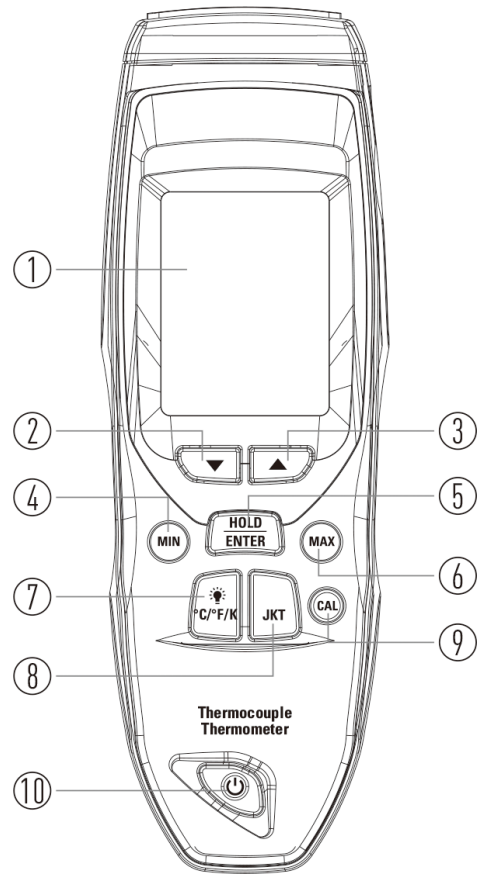
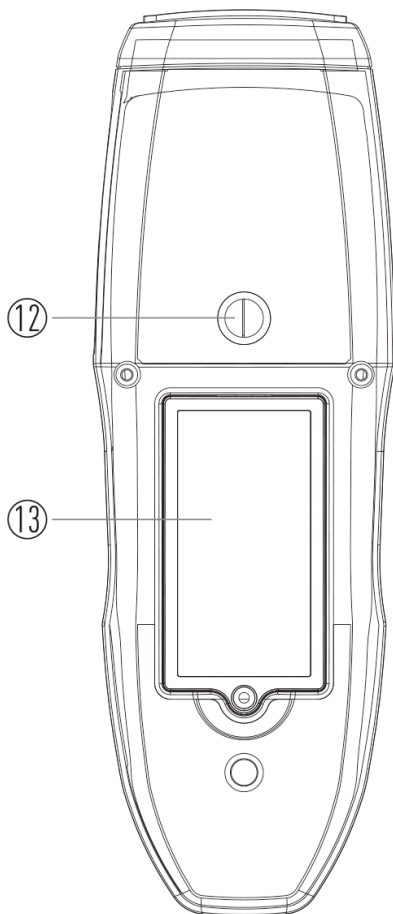
### Temperature Range

Type J	-200 to 1000°C (-328 to 1832°F)
Type K	-250 to 1372°C (-418 to 2502°F)
Type T	-250 to 400°C (-418 to 752°F)
Resolution	0.1°C/°F from -99.9 to 999.9°C (-148 to 1832°F); 1°C/°F Outside Range
Accuracy	±1% of reading+1°C (1.8°F) below -99.9°C (-148°F) ±1% of reading+0.5°C (0.9°F) above -99.9°C (-148°F)
Temperature Coefficient	0.1% of reading +0.3 °C per °C (0.5 °F per °F) ) outside the specified+18 °C to 28°C (+64°F to +82°F )range (Below -100°C (-148 °F); add 0.4% of reading for J-,K-,E-,and N-type;and 0.8% of reading for T-type)
Sampling Rate	Three times per two seconds
Auto Power Off	15 minutes after last operation
Low Battery Indication	
Overrange Indication	"OL"
Power Supply	9V Battery
Unplug or poor contact probe	will be displayed "----"

## 4.Description

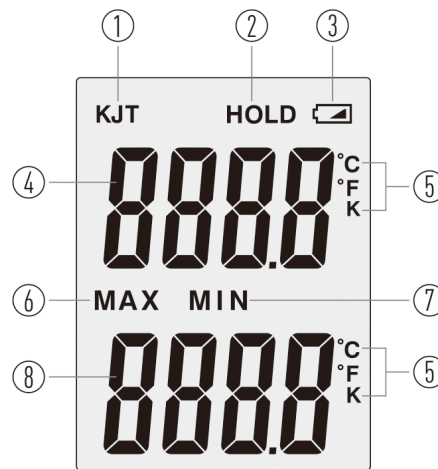
### 4-1.Meter Description

- 1-LCD Display
- 2-Down Button
- 3-Up Button
- 4-MIN Button
- 5-Data Hold/Enter Button
- 6-MAX Button
- 7-Temperature Units (°C/°F/K)/Backlight Button
- 8-Type J, K, T Switch Button
- 9-Calibration Button
- 10-Power Button
- 11-Temperature Probe Port
- 12-Bracket Fixing Fole
- 13-Battery Cover



## 4.2. Symbols Used on LCD Display

- 1-Type J, K, T Icon
- 2-Freeze the Displayed Readings
- 3-Low Battery Indication
- 4-Primary Display
- 5-Temperature Units
- 6-Max Temperature Value Icon
- 7-Min Temperature Value Icon
- 8-The Current MAX or MIN Display Value



## 5. Operating Instructions

### 5-1. Temperature Measurement

- Insert the temperature probe and press the power button, there is no particular order.
- The screen will display the current measured value and the maximum temperature (Do not press any buttons except the **Power** Button).
- When the measured environment temperature changes, take a few minutes to stabilize readings.

**Tips:** After measuring high temperatures, do not touch the probe immediately, to avoid burns.

### 5-2. Button Operation


- Press the **Power** Button for power ON/OFF.
- Press the **Temperature Units (°C/°F/K)/Backlight** Button to switch temperature unit, press the button for 2 seconds to open or close backlight.
- Press the **Type J, K, T Switch** Button to switch J, K, T and change the related temperature probe.
- Press the **MIN** Button the LCD will show "MIN" icon and min measured value.
- Press the **MAX** Button the LCD will show "MAX" icon and max measured value.
- Press the **Data Hold/Enter** Button to freeze current measured temperature value, but MAX and MIN value couldn't be frozen; Press the button again to return to normal measurement station.
- Press the **Calibration** Button for 3s to come into user calibration mode, press the **Up** Button the temperature will add 0.1°C; Press the **Down** Button the temperature will decrease 0.1°C; Press the **Calibration** Button to save it and return to normal measurement mode.

**Note:** That the max value of adding and decreasing will be 5°C, the subsequent measurements will be combined with the calibrated value.



- Simultaneously press the **Down** and **Up** Button, and then recalculate the maximum and minimum values, the maximum and minimum values of the actual measured temperature will be calculated again when you press the buttons at this moment.
- Press the **Power** Button first, and then press the **Data Hold/Enter** Button for 1s, LCD will show APO ON or APO OFF (APO ON means it will be auto power off after 15 mins without any operation, APO OFF means auto power of turn off).

## 6.Replacement Battery

- If the logo " appears on the LCD display, the battery should be replaced promptly.
- Open the battery box and remove the old battery, put a new battery (9 volt battery NEDA 1604 or 6F22 or other similar batteries).
- If the thermometer is not used for a long time, please take out the battery to prevent liquid leakage.

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