

separate probe, type K

THERMOMETER

Model : PTM-806



Your purchase of this METER marks a step forward for you into the field of precision measurement.

Although this METER is a complex and delicate instrument, its durable structure will allow many years of use if proper operating techniques are developed. Please read the following instructions carefully and always keep this manual within easy reach.

OPERATION MANUAL

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1. FEATURES

- * Both type K temp. measurement, wide range.
- * °C/°F, 0.1 degree.
- * Meter can default the measuring unit to °C or °F.
- * Standard type K input socket, can cooperate the full line optional type K temp. probe.
- * Two type display, normal or reverse, easy for operation.
- * Data hold to freeze the display value.
- * Bright LCD display.
- * Microprocessor circuit ensures high accuracy and provides special functions and features.
- * Operates from DC 1.5V (UM4/AAA) x 4 PCs batteries.
- * Durable, long-lasting components, enclosed in strong, compact ABS-plastic housing.

2. SPECIFICATIONS

2-1 General Specifications

Display	LCD size : 28 mm x 19 mm.
Temp. unit	°C or °F with default.
Circuit	Custom one-chip of microprocessor LSI circuit.
Thermocouple type	Type K.
Temperature Compensation	Automatic temp. compensation for the cold junction.
Linear Compensation	Linear Compensation for the full range.

Probe Input Socket	Standard 2 pin thermocouple socket.
Data Hold	Freeze the display reading.
Over Indication	Show " - - - - - ".
Sampling Time	Approx. 1 second.
Operating Temperature	0 to 50 °C.
Operating Humidity	Less than 80% R.H.
Power Supply	DC 1.5 V battery (UM4/AAA) x 4 PCs,
Power Current	Approx. DC 6.5 mA
Weight	156 g/ 0.34 LB. @ Battery is included.
Dimension	175 x 40 x 40 mm (6.9" x 1.6" x 1.6")
Accessories Included	Instruction manual.....1 PC Type K thermocouple probe, TP-01.....1 PC
Optional Accessory	* Soft carrying case with sash (210 x 80 x 50 mm), Model : CA-52A * Type K thermocouple probe, TP-02A. TP-03, TP-04

2-2 Type K thermocouple probe, TP-01

- * TP-01 Temp. probe is standard accessory.
- * Max. short-tern operating Temperature: 300 °C (572 °F).
- * It is an ultra fast response naked-bead thermocouple suitable for many general purpose application.

2-3 Electrical Specifications for the meter (23± 5 °C)

Resolution	Range	Accuracy
0.1 °C	-50.0 to 1300.0 °C	± (0.4 % + 0.8 °C)
	-50.1 to -100.0 °C	± (0.4 % + 1 °C)
0.1 °F	-58.0 to 2372.0 °F	± (0.4 % + 1.5 °F)
	-58.1 to -148.0 °F	± (0.4 % + 1.8 °F)
<p>* Accuracy value is specified for the meter only.</p> <p>* Type K probe TP-01 is the standard accessory.</p> <p>* Type K probe TP-02A, TP-03. TP-04 are the optional accessories, refer to page 8.</p> <p>* Above specification tests under the environment RF Field Strength less than 3 V/M & frequency less than 30 MHz only.</p>		

2-3 Type K thermocouple probe, TP-01

<p>* TP-01 Temp. probe is standard accessory.</p> <p>* Max. short-term operating Temperature: 300 °C (572 °F).</p> <p>* It is an ultra fast response naked-bead thermocouple suitable for many general purpose application.</p>

3. FRONT PANEL DESCRIPTION

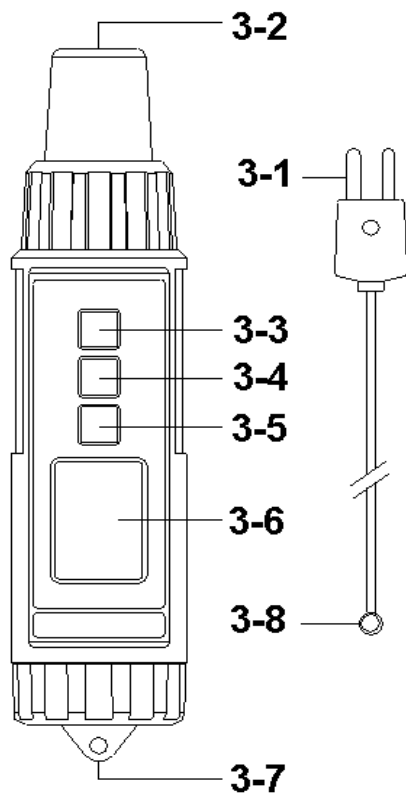


Fig. 1

- 3-1 Temp. Probe Plug
- 3-2 Input Socket
- 3-3 Power Button
- 3-4 Hold Button
- 3-5 Display Reverse Button
- 3-6 LCD Display
- 3-7 Battery Compartment/Cover
- 3-8 TP-01 Temp. Sensing Head

4. MEASURING PROCEDURE

4-1 Temperature measurement

- 1) Turn on the meter by pressing the " Power Button " (3-3, Fig. 1) momentarily.

** Press the " Power Button " (3-3, Fig. 1) momentarily again will turn off the meter.*

- 2) Insert the " Temp. probe plug " (3-1, Fig. 1) into the " Input socket " (3-2, Fig. 1).

The " Display " (3-6, Fig. 1) will show the temperature value that sensing from the probe's head.

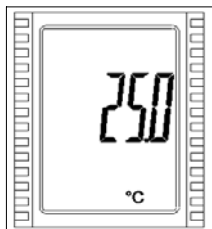
4-2 Data Hold

- 1) During the measurement, press the " Hold Button " (3-4, Fig. 1) momentarily to hold the measured value. The LCD will show a " HOLD " symbol.
- 2) Press the " Hold Button " once again to release the data hold function.

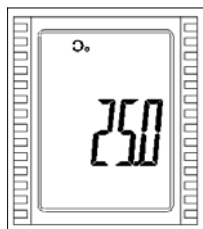
4-3 Display Reverse

During the measurement, press the " Display Reverse Button " (3-5, Fig. 1) once will reverse the display direction for the user convenience.

** Press the " Display reverse button " once again will return to the normal display.*



Normal
display



Reverse
display

4-4 Change the °C, °F unit

- 1) Refer to Fig. 2 , open the " Battery Cover " (3-7, Fig. 1), use the finger (middle finger) to hold the battery cover and let the snap contact the batteries completely.
- 2) Turn on the meter by pressing the " Power Button " (3-3, Fig. 1) momentarily.
Press the " °C, °F Button " (Fig. 2) momentarily will switch the Temp. unit from " °C to °F " or " °F to °C ".
- 3) After the Temp. unit is selected, then release the finger from the battery snap and install the " Battery Cover " (3-7, Fig. 1) again..
Now the Temp. unit is selected and with default.
If power on the meter again, the selected Temp. unit will present.

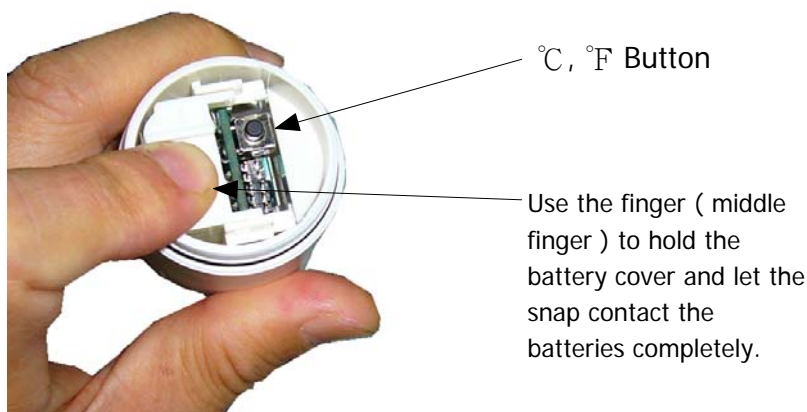



Fig. 2

5. BATTERY REPLACEMENT

- * Replace the batteries when the left corner of the LCD displays the low battery icon " , using 4 fresh 1.5 V (UM4, AAA) batteries.
- * To change the batteries, open (rotate clockwise direction) the " Battery Cover " (3-7, Fig. 1).
- * Make sure the " Battery cover " (3-7, Fig 1) is secured after changing the batteries.

6. OPTIONAL ACCESSORIES

6-1 Soft carrying case



Soft carrying case with sash.

Size : 210 x 80 x 50 mm

Model : CA-52A

6-2 Optional type K temperature probe

Thermocouple Probe (Type K), TP-02A	* Measure Range: -50 °C to 900 °C, -50 °F to 1650 °F. * Dimension: 10cm tube, 3.2mm Dia.
Thermocouple Probe (Type K), TP-03	* Measure Range: -50 °C to 1200 °C, -50 °F to 2200 °F. * Dimension: 10cm tube, 8mm Dia.
Surface Probe (Type K), TP-04	* Measure Range: -50 °C to 400 °C, -50 °F to 752 °F. * Size : Temp. sensing head - 15 mm Dia. Probe length - 120 mm.