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RD0373 ***RTD THERMOMETER***

CE
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CA



Instruction Manual

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1. Introduction

This instrument is a digital thermometer for use with 1 K Ω platinum-type temperature sensor.

Temperature indication follows IEC60751 temperature table for PT-type sensor.

2. Specifications

Display: liquid crystal display

Measurement range: -100 °C ~ 300 °C, -148 °F ~ 572 °F

Resolution: 0.1°C, 0.1°F;

Sensor types:

1 K Ω Platinum resistance temperature sensor.

ALPHA=0.003850

Current consumption: Approx 0.56 mA

Environmental:

- ☐ Operating Temperature and Humidity:
0 °C ~ 50 °C (32 °F ~ 122 °F), 0 ~ 80% RH
- ☐ Storage Temperature and Humidity:
-10 °C to 60 °C (14 °F ~ 140 °F), 0 ~ 80% RH
- ☐ Altitude up to 2000 meters.

Accuracy: at (23 ± 5 °C)

Range	Accuracy
-100 °C ~ 300 °C	± 0.3 °C
-148 °F ~ 572 °F	± 0.6 °F

Note:

*The basic accuracy Specification does not include the error of the probe.
Please refer to the probe accuracy specification for additional details.*

Sample rate: 1 time per second

Water resistance: IP67

Dimension: 120 × 60 × 24.5 mm

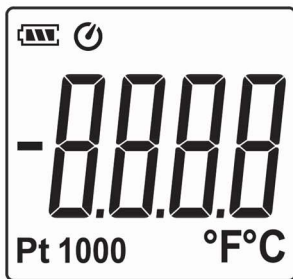
Weight: Approx. 230 g

Battery Type: Lithium coin cell 3V/1AH type CR2477

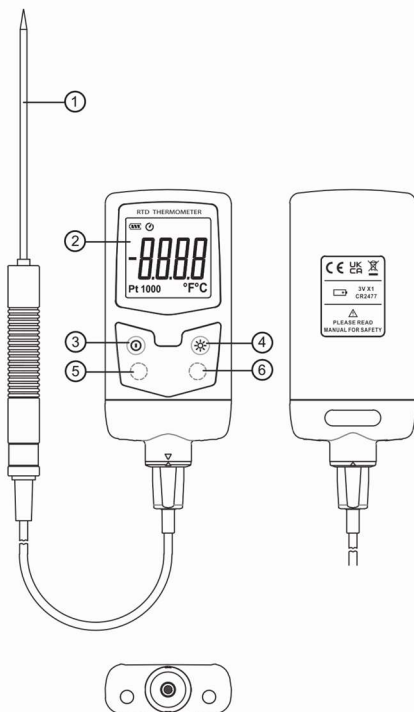
Battery Life: Approx. 2 years

Accessory: Pt-1000 probe (class A), battery, instruction manual

3. Symbol definition and button location



-	: This indicates that the minus temperature is sensed.
°C °F	: Temperature unit indication.
Pt 1000	: Platinum type Indication
	: The Battery status indication.
	: This indicates Auto power off is enabled.



- ① Temperature probe
- ② LCD display
- ③ Power ON/OFF button
- ④ Back light button
- ⑤ Hidden Key A is required only for the setting mode
- ⑥ Hidden Key B is required only for the setting mode

4. Operation Instructions:

4.1 Power-Up:

Short press the **Power button**  to turn on, and long press to turn off.

Auto power off:

By default, when the meter is powered on, it is under auto power off mode. The meter will power itself off after 10 minutes if no key operation is performed.

Deactivating auto power off:

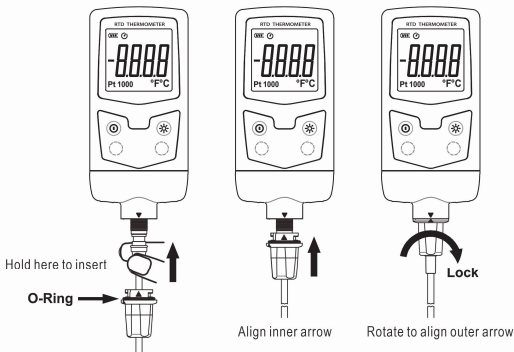
Press and hold the **Back light button**  and then power on the meter. Make sure the auto off symbol “” disappears from the screen.

4.2 Connection the temperature probe:

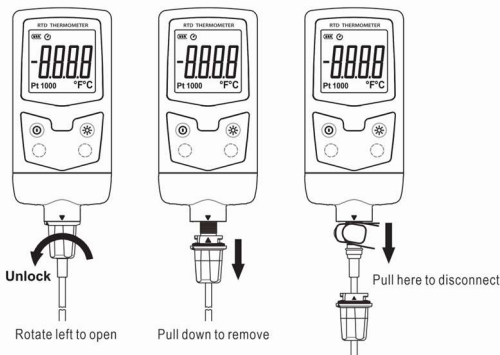
For measurement, plug the temperature probe into the input connectors.

Install temperature probe:

Ensure the O-ring is correctly positioned before installing the temperature probe.



Remove the temperature probe:



4.3 Selecting the temperature unit:

Make sure that the meter is powered off.

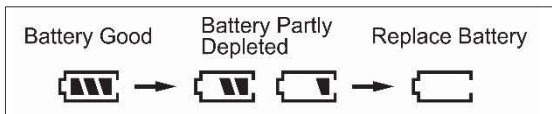
Press and hold **Hidden Key A** (see page 3.) and then press **Power button**  to switch the temperature unit between °C/°F. Once confirmed, release **Hidden Key A** to return to normal mode.

4.4 Back light operation:

Press the **Back light button**  to turn the back light on. Press it again to turn it off. The back light will turn off automatically if the **Back light button**  is not pressed for 10 seconds.

4.5 Battery capacity indicator:

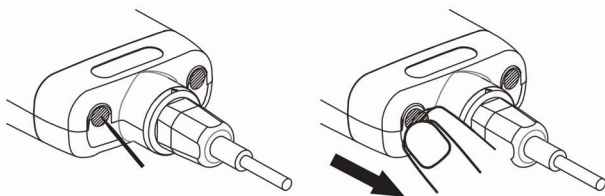
When operating the meter on battery, periodically check this indicator to determine the remaining battery capacity.



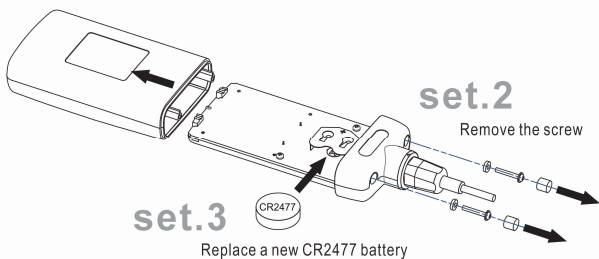
(1) The meter's front cover is equipped with rubber caps at the lower front. First, remove the rubber caps using a sharp, cone-shaped object. (see set.1) Then, remove the screw behind the caps to take off the cover. Verify the polarity and install a new CR2477 battery. (see set.2 & set.3)

(2) Fit cover properly and tighten screw.

Note: After replacing the battery, ensure that the rubber caps are properly seated before use. Improper seating of the rubber caps will compromise the meter's water-resistant function, and possibly result in damage to the equipment.



set.1 Remove the rubber caps



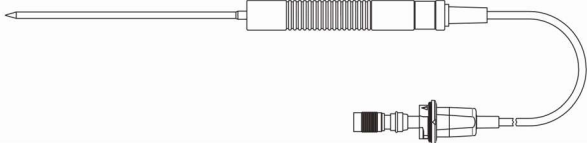
5. Cleaning

In order to ensure the accuracy of the thermometer the unit should be calibrated once a year.

Clean the meter and the window of the display with a clean, lint-free, antistatic and dry cleaning cloth.

Do not use cleaning agents that contain benzenes, alcohol or anything similar to clean the product since these substances damage the surface of the instrument.

6. Piercing type temperature probe specification



Sensor Type	Platinum resistance sensor Pt 1000
Accuracy	IEC60751, $\pm 0.15\text{ }^{\circ}\text{C} \pm 0.002\text{ t}$ (t: measurement temperature)
Temperature Sensor Dimensions	Approx. $\varnothing 3.2\text{ mm}$ ($\varnothing 0.125\text{''}$)
Temperature Sensor Length	Approx. 122 mm (4.8")
Cable Length	Approx. 1500 mm (59.0")
Water-resistant	EN60529:1991 IP67



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