User Manual

Thermocouple Thermometer

Please read this user manual thoroughly before using

this unit and keep it for your future reference.

Contents

1. ⚠ Safety

Read the following safety information carefully before attempting to operate the meter.

Use the meter only as specified in this manual; otherwise, the warranty may be invalidated.

◆ **Environment conditions:**

Altitude up to 2000 meters

RH≤90％（Non-Condensation）

Operating Temperature: -25°C ～ 70°C

◆ **Maintenance**

Repairs or servicing should only be performed by ATP Instrumentation Ltd.

Cleaning: Wipe the unit with a dry soft cloth. Do not use abrasives or solvents on this instrument.

◆ **Safety Symbol**

$C\epsilon$ Complies with EMC

2. Features

This device is a contact thermometer with Type K/J dual input. It is widely used in safety and fire inspection, plastic moulding, asphalt, marine, printing ink and ink dryer temperature, diesel and fleet maintenance.

◆ Precise contact measurement

◆ Type K/J dual input measurement

◆ Dual measurement and dual display

◆ Large LCD display with backlight

◆ MAX,MIN,AVG,HOLD function

◆ °C/°F selection

◆ Auto power off

3. Specifications

Range	Type K	-200℃ ～ 1370℃ (-328°F～2498°F)
	Type J	-200℃ ～ 1100℃（-328°F～2012°F）
Accuracy	Type K	-200℃～0℃(-328°F～32°F)；±(0.5%rdg+2℃/3.6°F)
		0℃～1000℃(32°F～1832°F)；±(0.15%rdg+1℃/1.8°F)
		1000℃～1370℃(1832°F～2498°F)；±(0.5%rdg+1℃/1.8°F)
	Type J	-200℃～0℃(-328°F～32°F)；±(0.5%rdg+2℃/3.6°F)
		0℃～1000℃(32°F～1832°F)；±(0.15%rdg+1℃/1.8°F)
		1000℃～1100℃(1832°F～2012°F)；±(0.5%rdg+1℃/1.8°F)

Resolution	0.1℃/ °F ＜1000 ' 1℃ / °F / ＞ 1000
AVG	The average value for last 10 readings
Power Supply	1x 9V battery
Power Life	At least 30 hours
Operating conditions	-20℃～60℃，10％RH～90％RH
Storage conditions	-20℃～60℃，10％RH～75％RH
Dimensions(L*W*H)	185 x 66 x 33 mm
Weight	245g

4. Meter Description

① T1 thermocouple input connector

② LCD display

③ T1-T2 function button

④ Backlight button

⑤ AVG button

⑥ HOLD button

⑦ Power ON/OFF button

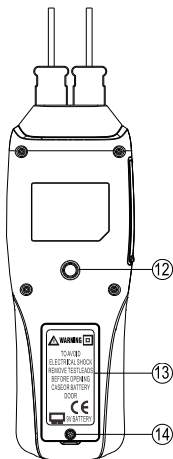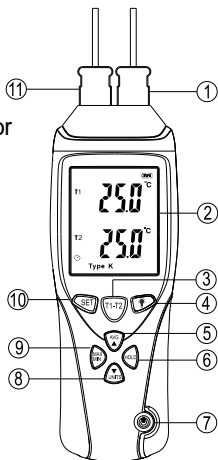⑧ °C/°F selection button

⑨ MAX/MIN button

⑩ SET button

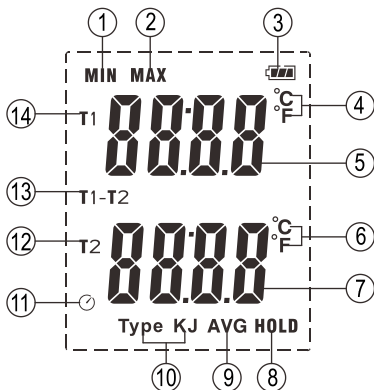⑪ T2 thermocouple input connector

⑫ ¼" Tripod bush

⑬ Battery cover

⑭ Battery cover screw

5. LCD Display Description

① Min icon

② Max icon

③ Low battery Icon

④ Temp. units icon

⑤ T1 reading

⑥ Temp. units icon

⑦ T2/T1-T2 reading

⑧ Data Hold icon

⑨ AVG icon

⑩ Type K/J thermocouple

⑪ Auto power off icon

⑫ T2 icon

⑬ T1-T2 icon

⑭ T1 icon

Note: When T2 icon appears, the ⑦ area displays the T2 value, when T1-T2 icon appears, the ⑦ area displays the DIF value for T1-T2.

6. Operating Instructions

6.1 Operating steps:

6.1.1 Open the battery compartment, install a 9V battery and close the battery compartment cover.

6.1.2 Connect thermocouples

6.1.3 Power the meter on to start measurement.

Note: 1. When the low battery icon "⬚" appears, replace the meters' battery.

2. Whilst measuring, the tip of the temperature sensor must be fully in contact with the object being measured.

6.2 Button Function

6.2.1 ⟨SET⟩ Button:

After powering the meter on, press "⟨SET⟩" button to select K-type or J-type measurement.

6.2.2 $\overset{\boxed{\text{T1-T2}}}{\bigtriangledown}$ Button：

Whilst measuring, press "$\overset{\boxed{\text{T1-T2}}}{\bigtriangledown}$" button once, T1-T2 icon will appear on the LCD display, the DIF value for T1-T2 will be displayed at the T2 display area. Press this button again to enter into T2 measurement mode.

6.2.3 $\overset{\boxed{\text{💡}}}{\bigtriangledown}$ Button：

After powering the meter on, press "$\overset{\boxed{\text{💡}}}{\bigtriangledown}$" button to turn the backlight on/off. The meter will be automatically powered off after 30 seconds inactivity.

6.2.4 $\overset{\boxed{\text{HOLD}}}{\bigtriangledown}$ Button：

After powering the meter on, press "$\overset{\boxed{\text{HOLD}}}{\bigtriangledown}$" button to freeze the current reading, press it again to return to normal mode.

6.2.5 $\overset{\boxed{\text{AVG}}}{\blacktriangle}$ Button：

Whilst measuring, press "$\overset{\boxed{\text{AVG}}}{\blacktriangle}$" button, AVG icon will appear,

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then the LCD screen will display the average of the last 10 readings. Press this button again to return to normal mode.

6.2.6 (MAX/MIN) Button：

Whilst measuring, press "(MAX/MIN)" button once to view the current MAX/MIN reading. Press and hold "(MAX/MIN)" button for 3 seconds to return to normal mode.

6.2.7 (▼ UNITS) Button：

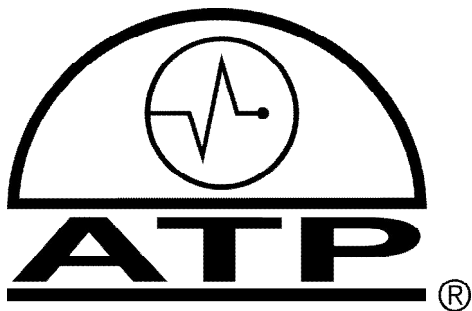After powering the meter on, press "(▼ UNITS)" button to select °C or °F.

6.2.8 (⏻) Button：After installing the battery, press "(⏻)" button to power the meter on. Press and hold this button for 3 seconds to turn the meter off.

7. Notes

◆ Repairs or servicing should only be performed by ATP Instrumentation Ltd.

◆ Remove the battery when the meter is to be stored for long periods of time to avoid battery leakage.

◆ Check if the thermocouple is well connected with the meter (Plug the thermocouple into the meter's thermocouple input jack).

8. Accessories

◆ User manual
◆ Tripod (Optional)
◆ 9V Battery
◆ Type-K thermocouple

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