

TCT012 Thermocouple Thermometer Operating Instructions

Congratulations on the purchase of the product. We hope that you can make use of this product for a long time and that it helps you with your work. Information that are useful and important for understanding the function are highlighted in the instructions text.

Powered by a replaceable lithium battery, the thermometer is a handy, temperature measurement device for a whole range of measurement and control applications.

1. LCD
2. ON/HOLD
3. °C/°F
4. Thermocouple probe
5. Protection Sleeve
6. Battery Cover



OPERATION

1. Power on :
To switch the thermometer on, keep Key ON/HOLD(2) pressed for approximately one second.
2. Display LCD
All necessary information is displayed on an LCD. The individual symbols have the following meanings:
2.1 Display for current measured values
2.2 Minus sign (negative measured values)
2.3 Battery status indicator
2.4 HOLD -- Auto shut down after 15 sec.
2.5 Temperature unit



* IP65 Splash Proof

- 3 Measuring temperature
Select the required unit of measurement °C or °F.

°C / °F can be changed only when "Hold" is shown

4. Position the tip of the thermocouple where you wish to measure the temperature and press ON/HOLD key. Wait till the temperature has stabilized and subsequently read the value from the display. Now, the current temperature is displayed for about 4 min. If you press ON/HOLD a second time, the word "HOLD" appears in the LCD.

*The last measured value is frozen and the thermometer deactivates itself automatically after about 15 seconds to save battery power.

CAUTION

The thermometer should be protected from the following:

1. Electro Static Discharge
2. "Thermal shock" caused by large or abrupt ambient temperature changes
- allow 30 minutes for unit to stabilize before use when exposed to "thermal shock".
3. Do not leave the unit on or near objects of high temperature.
4. Keep out of reach of all children.

STORAGE & CLEANING

Clean the device with a damp cloth. Do not use any solvents such as Aceton as they corrode the plastic. Isopropyl alcohol may be used to disinfect. Do not submerge any part of the thermometer. The thermometer should be stored at room temperature between -20 to +65°C (-4~149°F).

LCD ERROR MESSAGES

The thermometer incorporates visual diagnostic messages as follows:

Er 2
Er 3

'Er2' is displayed when the thermometer is exposed to rapid changes in the ambient temperature.

'Er3' is displayed when the ambient temperature exceeds 0°C(32°F) or +50°C (122°F). The thermometer should be allowed plenty of time (minimum 30 minutes) to stabilize to the working/room temperature.

Er

Error 5~9, for all other error messages it is necessary to reset the thermometer. To reset it, turn the instrument off, remove the battery and wait for a minimum of one minute, reinsert the battery and turn on. If the error message remains please contact the Service Department for further assistance.

Hi Lo

'Hi' or 'Lo' is displayed when the temperature being measured is outside of the measurement range.

BATTERIES

The thermometer incorporates visual low battery indication as follows:



'Battery OK': measurements are possible



'Battery Low': battery needs to be replaced, measurements are still possible



'Battery Exhausted': measurements are not possible

BATTERY REPLACEMENT

When the 'Low Battery' icon indicates the battery is low, the battery should be replaced immediately with a CR2032 lithium cell. The battery is located under the twist cover at the rear of the thermometer. Please note: It is important to turn the instrument off before replacing the battery otherwise the thermometer may malfunction.

⚠ Dispose of used battery properly and keep away from children.

SPECIFICATION

Measurement Range	-50~350°C(-58~662°F)
Operating Range	0~50°C (32~122°F)
Accuracy (Tamb=25°C)	+/-0.8% of reading or 0.8°C (1.5°F) whichever is greater
Resolution (-9.9~199.9°C)	0.1°C/0.1°F, otherwise 1°C/1°F
Battery Life	TCP:100 hours continuous use
Dimensions	203.7*42*20mm(8.0*1.7*0.8 inch)
Weight	43.95 grams(1.55 oz) including a CR2032 lithium cell

** The thermometer will automatically shut off if left idle for more than 15 sec.

⚠ **Caution: Please make sure the target to be measured will not exceed the temperature range of the probe to avoid permanent damage of the thermocouple probe.**

⚠ **Caution: To avoid electric shock and thermometer damage, do not measure live circuit where voltage exceeding 24V AC RMS or 60V DC with the thermocouple probe.**

⚠ **EMC/RFI:** Readings may be affected if the unit is operated within radio frequency electromagnetic field strength of approximately 3 volts per meter, but the performance of the instrument will not be permanently affected.

ZyTemp

A new way to measure temperature

Radiant Innovation Inc. [Http://www.ZyTemp.com](http://www.ZyTemp.com)
1F, No.3, Industrial East 9th Road, Science-Based Industrial Park,
HsinChu, Taiwan 300.

Ref.No. : 032011

