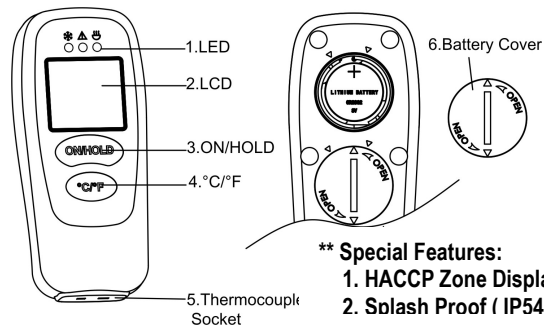


# TCT053T Thermocouple Thermometer Operating Instructions

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.LED(HACCP Zone Display)
- 2.LCD(Display with Backlight)
- 3.ON/HOLD
4. °C/°F :
- 5.Thermocouple Socket
- 6.Battery Cover



## OPERATION

1.Power on : To switch the thermometer on, keep KeyON/HOLD(3) pressed for approximately one second.

### 2. Display LCD

All necessary information is displayed on an LCD.

The individual symbols have the following meanings:

- ① Display for current measured values
- ② Minus sign (negative measured values)
- ③ Battery status indicator
- ④ HOLD -- Auto shut down after 15 sec
- ⑤ Temperature unit

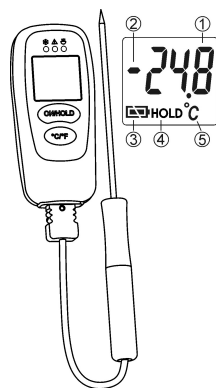
3 Measuring temperature: Select the required unit of measurement °C or °F.

**°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.

- \*\* Special Features:**
1. HACCP Zone Display
  2. Slash Proof (IP54)



Plug in a probe

## 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

## HACCP CHECK

The "HACCP CHECK" feature is incorporated in our thermometer temperature to graphically indicate critical temperature zone. The icons and LED indicators located above the display indicate a food product stays in a safe or unsafe HACCP " Danger Zone" temperature. The green and red LED light will always be lit before power off. A Green LED appears with icon " ❄️ " indicates a safe cool or frozen condition below 4°C(40°F) or appears with icon " 🍷 " indicates a safe holding temperature above 60°C(140°F).

When temperature is between 4°C and 60°C, the red LED with icon " ⚠️ " will appear and indicate that the temperature is fallen within the HACCP "Danger Zone" from 4°C to 60°C (40~140°F).

HACCP		
❄️	⚠️	🍷
●	●	●
↓4°C	4-60°C	↑60°C
↓40°F	40-140°F	↑140°F
○	○	○

## LCD ERROR MESSAGES

The thermometer incorporates visual diagnostic messages as follows:



'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.

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

## BATTERIES

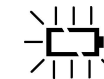
The thermometer incorporates visual low battery indication as follows:



'Battery OK': measurements are possible



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



'Battery Exhausted': measurements are not possible

## BATTERY REPLACEMENT

There are two CR2032 lithium cells are located under the twist cover at the rear of the thermometer, the upper one is for measurement, the lower one is for LED and backlight. If the 'Low Battery' icon indicates the battery is low ,please replace the upper one. If LED or backlight is dark or off, please replace the lower one.

⚠️ It is important to turn the instrument off before replacing the battery otherwise the thermometer may malfunction.

⚠️ **After replacing new battery, the o-ring on the battery cover must be well fixed before placing back the cover to make sure that the device is splash proof.**

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

## SPECIFICATION

Probe Measurement Range	-50~350°C(-58~662°F) - T type, Socket
Operating Range	0~50°C (32~122°F)
Accuracy (Tamb=25°C)	+/-1% of reading or 1°C (1.8°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	100.56 x 44.7 x 19.88 mm(3.96×1.76×0.78 inch)
Weight	55.3 grams(1.95 oz) including 2 CR2032 lithium cells

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

⚠️ **Caution: The measure range is for thermometer only. User should choose proper probe types for different kinds of application. 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.

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Ref.No. : 032011

