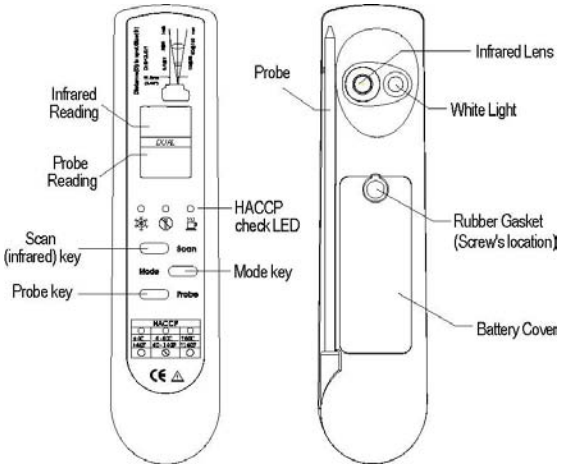


TCT303F Thermometer Operating Instructions

The thermometer is a non-contact infrared thermometer, also with Probe thermometer. You can select only one Mode at the same time but can change the Mode at will. Please remember to keep away from baby and children and don't use it for safety related applications.

* Special Features:
1. HACCP Zone Display;
2. Splash Proof (IP65)

In Non-contact Infrared Thermometer function (IRT Mode)

The white light will automatically turns on while the Scan button is pressed.

Distance:Spot (FOV)= 2.5:1
Emissivity = 0.1~1 Step.01
Wave Length = 8um-14um

Simply aim the thermometer at the measure target with "Infrared Lens" and press Scan (infrared) key to display the surface temperature. The distance to target ratio is 2.5:1 therefore the thermometer should be positioned as close to the target as possible.

While scanning, the newest temperature will be updated on the LCD and the measurement will continue as long as the Scan (infrared) key is depressed. When the Scan (infrared) key is released, icon "Hold" will appear on the display and the last measurement will remain visible for 15 seconds before the display goes blank.

Mode Selection MIN → MAX → LOCK → °C/ °F → EMIS

MINIMUM OR MAXIMUM MODE

The thermometer will display the minimum or maximum reading during the measurement period only until the Mode key is pressed.
To utilize the minimum mode, please press Scan (infrared) key → Mode key → Scan (infrared) key. And keep pressing Scan (infrared) key for measurement.
To utilize the maximum mode, please press Scan (infrared) key → Mode key *twice→ Scan (infrared) key. And keep pressing Scan (infrared) key for measurement.

LOCK MODE

The lock mode is particularly useful for continuous monitoring of temperatures. The thermometer will continuously display the temperature for up to 60 minutes or until the Scan (infrared) key button is pressed.
To utilize the lock mode, please press Scan (infrared) key → Mode key *three times→ Scan (infrared) key.

°C OR °F MODE

To change the '°C' or '°F' mode, please press Scan (infrared) key → Mode key *four times→ Scan (infrared) key.
Same steps can be taken when switching from °F to °C.

EMISSIVITY

The infrared thermometer is supplied with a default emissivity of 0.95. The emissivity can be changed from 0.10 (10E) to 1 (100E). Changes should only be carried out by experienced personnel. For information relating to the emissivity of specific materials, please contact the nearest retailer. Note: non-contact infrared thermometers are not recommended for use in measuring the temperature of shiny or polished metals.
To change the emissivity, please Scan (infrared) key → Mode key *five times→ Scan (infrared) key for each 0.01 (1E) adjustment→ Mode key.

In Contact Thermocouple Probe function (COT Mode)

Attach the thermometer at the measure target with "Probe" and press Probe key to continuously display the temperature for up to 4 minutes. After that the device will automatically shut off to extend the battery life. Press Probe key will interrupt the scanning to display the last temperature with a 'Hold' wording. To reenter scanning just press Probe key again.

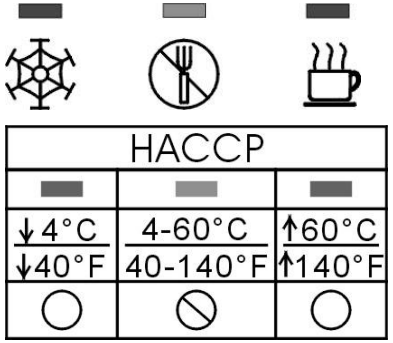
⚠ 1. Do not twist the probe and rotate the probe in wrong direction.
2. Over stress on probe may cause break.
3. After measure high temp, the probe may remain HOT for a while.
4. Probe is dangerous for human when the probe is in an open position. Remember to hold the probe back when not in use.

⚠ The probe of contact thermometer may be damaged if exceeding the specification of measurement temperature range.

⚠ 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.

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).

LCD ERROR MESSAGES

The thermometer incorporates visual diagnostic messages as follows:

'Hi' or 'Lo' is displayed when the temperature being measured is outside of the range of the instrument, 'Hi' when higher than +250°C (482°F) and 'Lo' when lower than -55°C (-67 °F).

'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.

For all other error messages it is necessary to reset the thermometer. To reset it, waiting for auto power 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.

BATTERIES

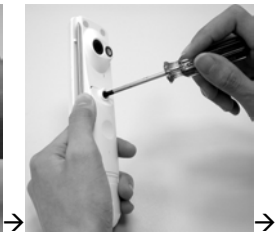
The thermometer incorporates visual low battery indication as follows:

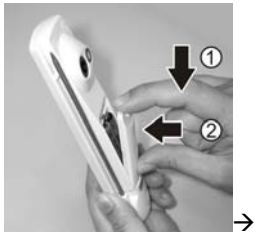
'Battery OK': measurements are possible

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

'Battery Exhausted': measurements are not possible

CHANGE BATTERIES

1.  →  → 2.  →

3.  → 4.  →

5.  → 

⚠ Since the thermometer is splash proof, please make sure the battery cover is tight for the thermometer and also with the rubber gasket.

1. Please pick the rubber gasket on the battery cover by using small, pointed screwdriver with the "X" shaped, then release the screw on the battery cover.
2. Open the battery cover.
3. Replace the new battery.
   (Power Supply: AAA*2pcs, 1.5V)
4. First, close the bottom side and insert the battery cover, push downward and then press forward.
5. Use the same way as point 1 to close the battery cover and stuff the screw hole with the rubber gasket.

⚠ When the 'Low Battery' icon indicates the battery is low, the battery should be replaced immediately with AAA*2 batteries. Please note: It is important to turn the instrument off before replacing the battery otherwise the thermometer may malfunction. Dispose of used battery promptly and keep away from children.

SPECIFICATION

	Infrared Scan function (IRT Mode)	Thermocouple Probe (K type, Grounded) (COT Mode)
Measurement Range	-55~250°C (-67~482°F)	-55~330°C (-67 to +626 °F)
Operating Range	0~50°C (32~122°F)	
Accuracy (Tobj=15-35°C, Tamb=25°C)	+/-0.6°C (1.1 °F)	below -5 :+/-1°C -5~ 65 : +/-0.5°C above 65 :+/-1% of reading
Accuracy (Tamb=23+/-3°C)	-33~0:+/-(1°C+0.1/degree) 0~ 65: +/-1°C 65~250:+/-1.5% of reading	
Emissivity Range	0.95 default – adjustable 0.1 to 1 step .01	
Resolution (-9.9~199.9°C)	0.2°C/0.5°F	0.2°C/0.5°F
Distance:Spot	2.5:1	
Dimension	22.18*38*160 mm(0.87*1.50*6.3inch)	
Weight (with battery)	98.1g(3.5oz)	
Battery Life	18 hours continuous use (auto power off after 15 seconds)	

⚠EMC/RFI

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