

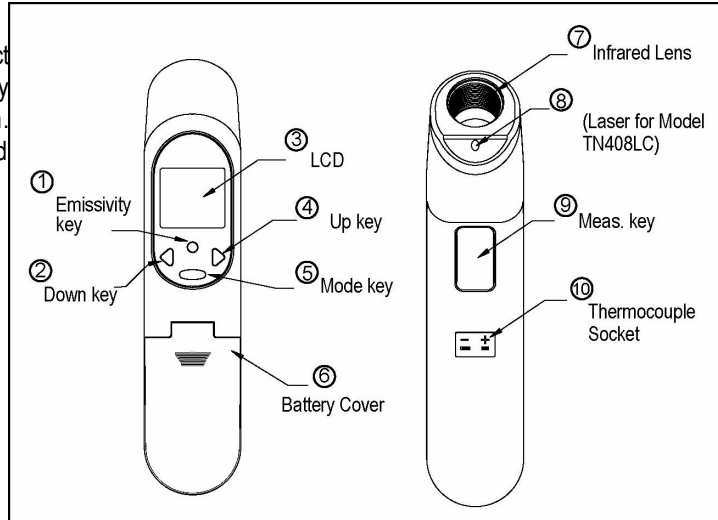
TN4 series Thermometer Operating Instructions

Model: TN408XC, TN408LC (with Laser).

The TN4 series thermometer is a non-contact infrared thermometer. There are many mathematical modes for the Infrared function. Please remember to keep away from children and don't use it for safety related applications.



(Default Screen)



Simply aim the TN4 at the measure target with Lens (7) and press Meas. key (9) to display the surface temperature.

The Distance: Spot is 12:1. Please make sure the target area is within the field of view.

FUNCTION

Press Emissivity key (1) for setting the emissivity.

E	Press Emissivity key (1) and Press Up key (4) or Down key (2) to set the emissivity , then press Mode key (5) to confirm it. The emissivity can be changed from 0.10 (10E) to 1 (100E).
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Press Mode key (5) for scrolling more display function as follows.

E	Here will show the emissivity data. (The default emissivity is 0.95.)
MAX	Press Mode key (5) for the Maximum (MAX), Minimum (MIN), Different between MAX and MIN (DIF) and Average (AVG) modes . During the measurement, the special modes reading will be displayed beside the mode icon.
MIN	
DIF	
AVG	
HAL	Press Up key (4) & Down key (2) key to change the High Alarm (HAL) or Lo Alarm (LAL) , then press Meas. key (9) to confirm it. For example: When the reading 27 °C < LAL 27.1 °C, the Low icon will flash and you will hear a beep sound.
LAL	
PRB	Connect the thermocouple with TN4's Thermocouple socket (10) and put the probe in the target, press Meas. key (9) display the temperature in PRB mode. This mode can only be reference when Thermocouple (Probe) is connected with. ⚠ After measure high temp, the probe may remain HOT for a while.

** TN4 thermometer will automatically shut off if left idle for more than 15sec, unless in PRB mode. (In PRB mode, it will shut off if left idle for more than 12 minutes.)

ADD VALUE

In MAX, MIN, DIF, AVG, PRG mode:	Press Up key (4) for LOCK mode ON/OFF . The lock mode is particularly useful for continuous monitoring of temperatures for up to 60 minutes.
	Press Down key (2) for °C or °F transferred .
In all modes: First hold on the Meas. key (9)	and press Up key (4) for backlight function ON/OFF .
	and press Down key (2) for laser function ON/OFF . (only for model TH408LC.)

⚠ CAUTION

1. WHEN DEVICE IS IN USE, DO NOT LOOK DIRECTLY INTO THE LASER BEAM—PERMANENT EYE DAMAGE MAY RESULT.
2. USE EXTREME CAUTION WHEN OPERATING THE LASER.
3. NEVER POINT THE DEVICE TOWARDS ANYONE'S EYES.
4. KEEP OUT OF REACH OF ALL CHILDREN.

STORAGE & CLEANING

The sensor lens is the most delicate part of the TN4 thermometer. The lens should be kept clean at all times, care should be taken when cleaning the lens using only a soft cloth or cotton swab with water or medical alcohol. Allowing the lens to fully dry before using the TN4. Do not submerge any part of the TN4. The TN4 should be stored at room temperature between -20 to +65 °C.

LCD ERROR MESSAGES

The TN4 thermometer incorporates visual diagnostic messages as follows:



'Hi' or 'Lo' is displayed when the temperature being measured is outside of the settings of HAL and LAL.



For all other error messages it is necessary to reset the TN4. To reset the TN4, 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.

BATTERIES

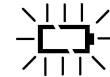
The TN4 incorporates visual low battery indication as follows:



'Battery OK': measurements are possible



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



'Battery Exhausted': measurements are not possible

⚠ When the 'Low Battery' icon indicates the battery is low, the battery should be replaced immediately with AAA, 1.5V batteries. Please note: It is important to turn the instrument off before replacing the battery otherwise the TN4 may malfunction.

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

SPECIFICATION

Item	Non-contact Infrared Scan function	Thermocouple Probe Scan function (K type not included.)
Measurement Range	-60 to +500°C (-76 to +932°F)	-64 to +1400°C (-83.2 to +1999°F)
Operating Range	0~50°C (32~122°F)	
Accuracy, (Tobj=15-35°C, Tamb=25°C)	+/-1.0°C	+/-1% of reading or 1°C (whichever is greater)
Full Range Accuracy	+/-2% of reading or 2°C (whichever is greater)	
Resolution (9.9~199.9°C)	0.2°C/0.5°F	
Response Time (90%)	1sec	
Distance:Spot	12:1	
Battery Life	Typ. 180, min 140 hours continuous use (Alkaline, without Laser and Back Light.)	
Dimensions	175.2 x 39.0 x 71.9mm	
Weight	179 grams including batteries (AAA*2pcs)	

⚠ 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.

