

# FI40P Thermometer Operating Instructions

For Model FI40P (with thermocouple probe)

The thermometer is a non-contact infrared thermometer, also with Probe thermometer. Please remember to keep away from children and don't use it for safety related applications.

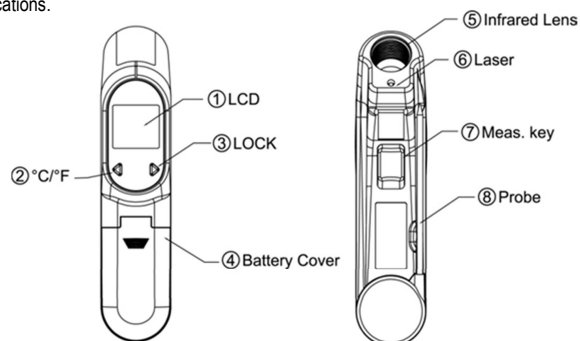


(Default Screen)

Press Meas. Key (07) to power on.

The default mode of thermometer is

PRB mode. Simply aim the thermometer at the measure target with Lens (06) and press Meas. key (07) to display the surface temperature. The Distance:Spot is 12:1. Please make sure the target area is within the field of view.



## FUNCTION

<b>LOCK mode</b>	Press LOCK key (03) for <b>LOCK mode ON/OFF</b> . The lock mode is particularly useful for continuous monitoring of temperatures for up to 60 minutes.
<b>°C /°F</b>	Press °C /°F key (02) for °C or °F transferred.
<b>First hold on the Meas. key (07)</b>	and press LOCK key (03) for backlight function ON/OFF.
	and press °C /°F key (02) for laser function ON/OFF.

\*\* The thermometer will automatically shut off if left idle for more than 5 min and 30 sec.

## 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 thermometer should be stored at room temperature between -20 to +65 °C (-4~149°F).

The sensor lens is the most delicate part of the 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 thermometer. Do not submerge any part of the thermometer.

## LCD ERROR MESSAGES

The thermometer incorporates visual diagnostic messages as follows:

( ( HI ) )  
( ( LOW ) )

'HI' or 'LOW' is displayed when the temperature being measured is outside of the measurement range.

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

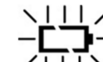
The thermometer incorporates visual low battery indication as follows:



'Battery OK': measurements are possible



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



'Battery Exhausted': measurements are not possible

- ⚠ 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 thermometer may malfunction.
- ⚠ Dispose of used battery promptly and keep away from children.
- ⚠ If the device is not to be used for a long time, turn the power off, remove and store the batteries in a cool, dry place.

## SPECIFICATION

Item	Non-contact Infrared Scan function	Contact Probe Scan function
Measurement Range	-60 to +500 °C (-76 to +932 °F)	-55 to +330°C (-67 to +626 °F)
Operating Range	0 to +50°C (32 to +122°F)	
Accuracy (Tobj=15-35°C, Tamb=25°C)	+/-1C at 0-65°C	±1% of reading or 0.8°C (1.4 °F) which is greater (tested in Tamb=23±6 °C)
Accuracy (Tamb=23±3°C)	-60-0 oC: ±(2°C+0.05/degree C) 0- 65 oC: +/-1°C 65-500oC: ±2% of reading or 2°C (4°F) whichever is greater	
Emissivity	Fixed at 0.97	
Resolution (-9.9~199.9°C/°F)	0.1°C/0.1°F, otherwise 1°C/1°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(6.9x1.54x2.83 inch)	
Weight	179 grams including batteries (AAA*2pcs)	
Note: Under the electromagnetic field of 3V/m from 200 to 600 MHz, the maximum error is 10 °C (18 °F).		

⚠ **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.

## 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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