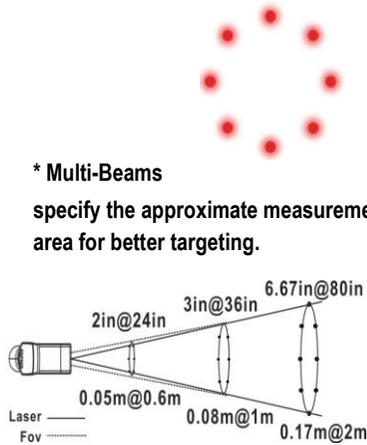
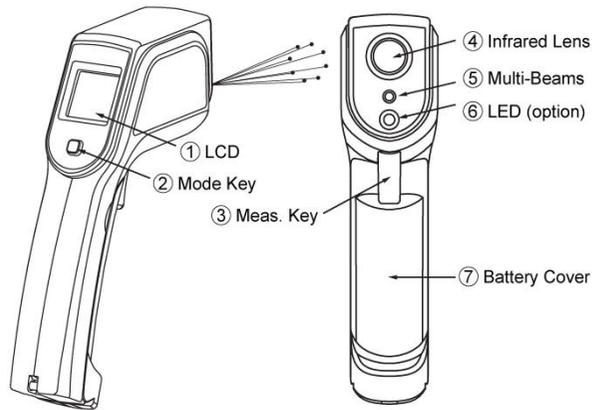


# 422 8-Point Laser IR Thermometer Operating Instructions

The thermometer is a non-contact infrared thermometer, and always with Real-Time Maximum (MAX) data. Please remember to keep away from children and don't use it for safety related applications.



**\* Multi-Beams**  
specify the approximate measurement area for better targeting.



- Simply aim the thermometer at the measure target with Lens (☉) and press Meas. key (⊙) to display the surface temperature.
- During measurement, the MAX Temp captured will be displayed beside the icon.
- The Distance:Spot is 12:1. Please make sure the target area is within the field of view of the 8-Point laser circle.

### COLOR LCD ICONS:

**HOLD** captures last reading until auto OFF in 15 seconds; **Backlight Bulb** ; **SCAN** flashes while trigger is pulled; **Low battery**; **BAR GRAPH** displays change from first measurement taken during **SCAN**.

°C or °F	Press Mode key (☉) for °C or °F
Backlight	LCD Backlight: always on.
Laser	Class IIa Laser; always on.

### ⚠ 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.

\* Note: Under the electromagnetic field of 3V/m from 350 to 550MHZ, the maximum error is 8°C (14.4°F).

### ⚠ CAUTION

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

### STORAGE & CLEANING

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. 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: **THERMAL SHOCK ER2 and ER3**

- Er 2** 'Er2' is displayed when the thermometer is exposed to rapid changes in the ambient temperature. 'Er3' is displayed when the ambient temperature drops below 32°F/ 0C or exceeds +50°C (122°F).
- Er 3** The thermometer should be allowed plenty of time (minimum 30 minutes) to stabilize to the working/room temperature, OR attempt to keep unit "warm" and "shoot" quickly and recover to warm.
- 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 of -76 to 932F (-60 to 500C)

### BATTERIES

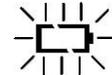
The thermometer incorporates visual low battery indication as follows:



'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.

### SPECIFICATION

Measurement Range	-76 to +932 °F (-60 to +500C)
Operating Range	32~122°F (0-50C)
Accuracy, (Tobj=59-95°F, Tamb=77°F)	+/-1.8°F (+/- 1.0C)
Accuracy	32~932°F :+/-2% of reading or 2°C (4°F) whichever is greater -76~32 °F: +/-4°F (+0.05F per degree below 32F)
Emissivity	0.95 fixed
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.18, min 14 hours continuous use
Dimensions	1.81x5.63x7.28 inch (46.0 x 143.0 x 184.8mm)
Weight	8.5 oz (240g) including batteries ( 2 x AAA )

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



Cooper-Atkins Corporation

33 Reeds Gap Road • Middlefield, CT 06455-0450 U.S.A

860-347-2256 • Fax: 860-347-5135 • www.cooper-atkins.com



