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OPERATING INSTRUCTIONS

12:1 MULTI-LASER INFRARED THERMOMETER

MODEL#—52224-D

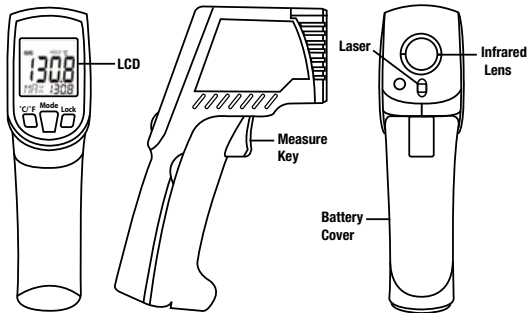


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12:1 MULTI-LASER INFRAROT-THERMOMETER

MODELL#—52224-D

12:1 MULTI-LASER INFRARED THERMOMETER



Please remember to keep away from children and don't use it for safety related applications.

1. Simply aim the thermometer at the target with Lens and press Meas. key to display the surface temp.
2. Please make sure the target area is within the appropriate field of view.

Press the Mode Key for scrolling through display functions.

E	Shows the emissivity data. (The default emissivity is 0.95)
↑E↓	Press the Mode key, then press the Up key or Down key to set the emissivity, then press the Mode key to confirm. The emissivity can be changed from 0.10 (10E) to 1 (100E.)
MAX MIN DIF AVG	Press Mode key for 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.
HAL LAL	Press the Up key or the Down key to change the High Alarm (HAL) or Lo Alarm (LAL), then press Meas. key to confirm. When reading is outside the High Alarm (HAL) or Lo Alarm (LAL) limit the high or low icon will flash and you will hear a beep.

*The thermometer will automatically shut off if left idle for more than 60 seconds.

In E, MAX, MIN, DIF, AVG mode	Press Up key for LOCK mode ON/OFF. The lock mode is particularly useful for continuous monitoring of temperatures for up to 60 minutes.
	Press Down key for °C or °F transferred.
In MAX, MIN mode: Hold the Meas. key	The Bar display indicates the measuring temperature. The bar shows RED color when the reading is close to maximum value, and shows BLUE when close to minimum. While the temperature is between the maximum and minimum, the bar will display in YELLOW.
Backlight	LCD backlight is always on
Measure Key	and press the Down key for the laser function to be turned ON or OFF.

⚠ 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

Unit should be stored at room temperature. 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 'Lo' is displayed when the temperature being measured is outside of the setting of HAL and LAL.

'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, 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 measure is outside 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.

SPECIFICATIONS

	12:1 Thermometer
Measurement Range	-60 to 760°C (-76 to 1400°F)
Operating Range	0 to 50°C (32 to 122°F)
Accuracy, (Tobj=15-35°C, Tamb=25°C)	±1.0°C (1.8°F)
Accuracy, (Tamb=23 ±3°C)	Tobj=-60~0: ±(2+0.05/°C) °C, Tobj=0~760: ±2% of reading or 2°C (4°F) whichever is greater
Emissivity	0.95 default - adjustable 0.1 to 1 step .01
Resolution	0.1°C/0.1°F at -76 to 999.9(°C/°F), otherwise 1°C/1°F
Response Time (90%)	1 sec
Distance:Spot	12:1 (90% energy covered)
Battery Life	Min. 30 hours continuous use without laser Min. 7 hours continuous use with laser
Dimensions	119.2x47.5x171.8 mm (4.7×1.87×6.76 inch)
Weight	255.7 grams (9.02 oz) including batteries (AAA*2pcs)

Note: Under the electromagnetic field of 3V/m from 200 to 600MHz, the maximum error is 10°C (18°F)

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.



USA

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