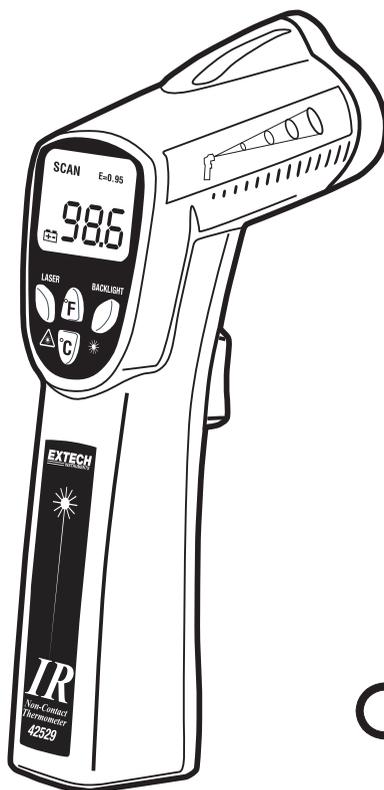


**InfraRed Thermometer
with Laser Pointer**

MODEL 42529



Introduction

Congratulations on your purchase of the Model 42529 IR Thermometer. This thermometer makes non-contact (infrared) temperature measurements at the touch of a button. The built-in laser pointer increases target accuracy while the backlit LCD and handy push-buttons combine for convenient, ergonomic operation. Proper use and care of this meter will provide years of reliable service.

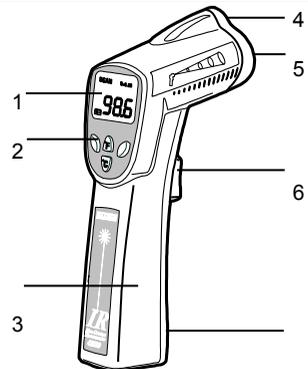
Safety

- Use extreme caution when the laser pointer beam is on
- Do not point the beam toward anyone's eye or allow the beam to strike the eye from a reflective surface
- Do not use the laser near explosive gases or in other potentially explosive areas



Meter Description

1. LCD Display
2. Function Buttons
3. Handle Grip
4. Laser Pointer
5. IR Sensor
6. Measurement Trigger
7. Battery Compartment



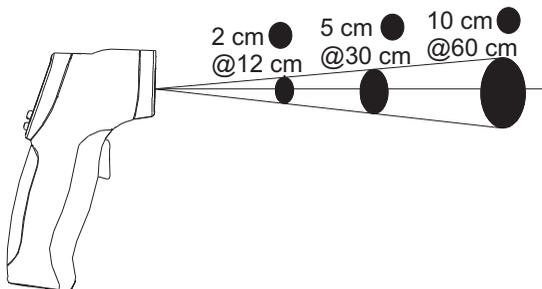
Operating Instructions

1. Hold the meter by its **Handle Grip** and point it toward the device whose temperature is to be measured.
2. Press and hold the red **Trigger** to turn the meter on and begin testing. The display will light if the battery is charged. Replace the battery if the display does not light.
3. While continuing to press the Trigger, push the red **Laser** button to turn on the laser pointer. Aim the red beam approximately a half inch higher than the point of test as shown in the diagram below (pressing the Laser button again turns the laser off).
4. While measuring, the SCAN display icon will appear on the LCD above the temperature measurement and to the left of the emissivity value (fixed at 0.95.).
5. If the measurement exceeds the useable temperature range (0 to 600°F), the meter will emit a tone and the LCD will display 'OVER'.
6. Release the Trigger when the temperature stabilizes. The HOLD display icon will appear on the LCD indicating that the reading is being held.
7. Set the temperature units (°C or °F) using the blue **°C** and **°F** buttons.
8. Press the yellow **Backlight** key to turn on the LCD backlighting function.
9. The meter will automatically power down after 7 seconds.

Field of View

The meter's field of view is 6:1. For example, if the meter is 30.4cm from the target (spot), the diameter of the target must be at least 5.08cm. Other distances are shown below in the field of view diagram.

Note that measurements should normally be made less than 60.9cm from the target. The meter can measure from further distances but the measurement may be affected by external sources of light. In addition, the spot size may be so large that it encompasses surface areas not intended to be measured.



Measurement Notes

1. The object under test should be larger than the spot (target) size calculated by the field of view diagram (see diagram on previous page or on side of the meter).
2. If the surface of the object under test is covered with frost, oil, grime, etc., clean before taking measurements.
3. If an object's surface is highly reflective apply masking tape or flat black paint before measuring.
4. The meter cannot measure through transparent surfaces such as glass.
5. Steam, dust, smoke, etc. can obscure accurate measurements.
6. The meter compensates for deviations in ambient temperature. It can, however, take up to 30 minutes for the meter to adjust to extremely wide ambient temperature changes.
7. To find a hot spot, aim the meter outside the area of interest then scan across (in an up and down motion) until the hot spot is located.

Specifications

Infrared Thermometer Specifications

| | | |
|--------------------|--|-------|
| Range / Resolution | -20 to 320°C (0 to 600°F) | 1°C/F |
| Accuracy | ± 2% of reading or ± 2°C (4°F) whichever is greater. Note: Accuracy is specified for the following ambient temperature range: 18 to 28°C (64 to 82°F) | |
| Emissivity | 0.95 fixed value | |
| Field of View | D/S = Approx. 6:1 ratio (D = distance, S = spot) | |
| Laser power | Less than 1mW | |
| Spectral response | 6 to 14 μm (wavelength) | |

General Specifications

| | |
|-----------------------|--|
| Display | 3½ digit backlit LCD display with function indicators |
| Display rate | 1 second approx. |
| Over range indication | Audible tone sounds and 'OVER' appears on the LCD when the measurement exceeds the measurement range spec. |
| Operating Temperature | 0°C to 50°C (32°F to 122°F) |
| Operating Humidity | Max. 80% RH. |
| Power Supply | 9V battery |
| Automatic Power Off | Meter shuts off automatically after 7 seconds |
| Weight | 180g / 6.35 oz. |
| Size | 211 x 89 x 38mm (8.3 x 3.5 x 1.5") |

Battery Replacement

When the low battery symbol  appears on the LCD, replace the meter's 9V battery. The battery compartment is located on the bottom of the meter's handle. Open the compartment by sliding the battery compartment cover off in the direction of the arrow. Replace battery and re-install the battery compartment cover.



Never dispose of used batteries or rechargeable batteries in household waste.

As consumers, users are legally required to take used batteries to appropriate collection sites, the retail store where the batteries were purchased, or wherever batteries are sold. Disposal: Do not dispose of this instrument in household waste. The user is obligated to take end-of-life devices to a designated collection point for the disposal of electrical and electronic equipment

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