

I/R Thermometer Gun 12:1

800103

INSTRUCTION MANUAL

SPER
SCIENTIFIC

Contents	Page
1. Introduction	2
2. Safety Information.....	3
3. Display And Button Locations.....	4-5
4. Distance to Spot	5
5. Measuring Procedures	6
6. Battery Replacement	6
7. Cleaning.....	7
8. Specifications	7-8
9. Warranty	8

1. INTRODUCTION

Simply hold the IR gun, press the trigger and aim the laser guide at the target. Temperature results immediately appear on the display. Non-contact IR thermometers are especially useful for safely measuring the temperature of hot or hazardous objects, engines, moving machinery, food, and inaccessible areas.

Features include °C/°F selectable scales, 4-digit backlit LCD, laser guide, wide measuring range, and automatic shut off.

Comes with a carrying case and a 9V battery.

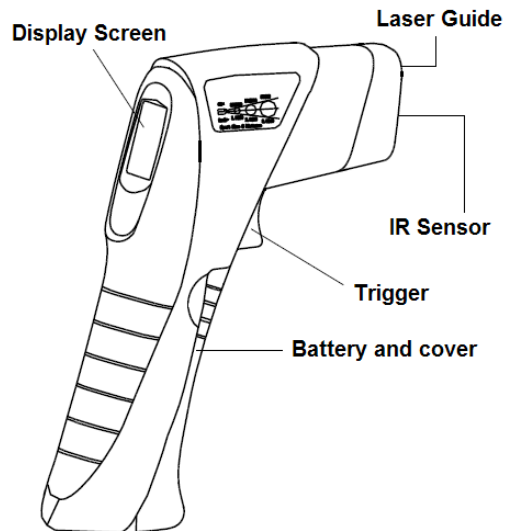


2. SAFETY INFORMATION

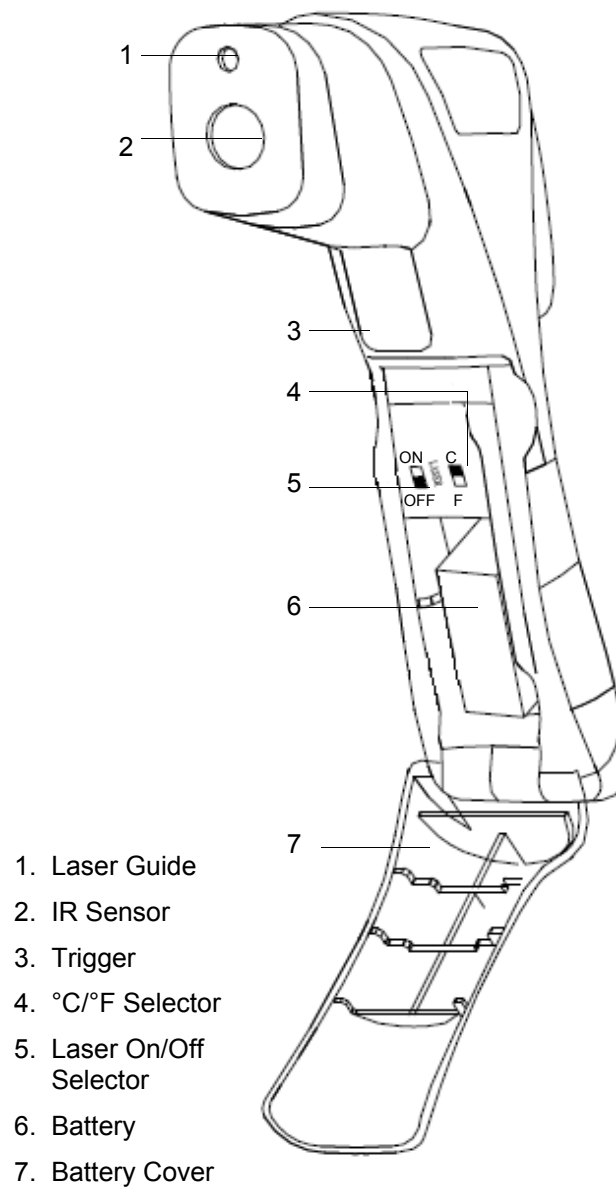
Read the following safety information carefully before attempting to operate or service the IR Gun.

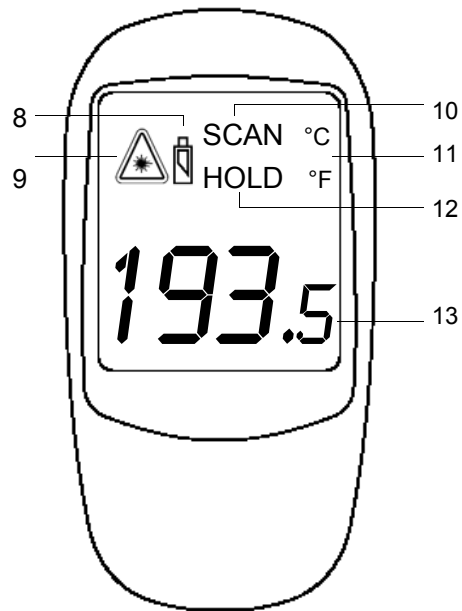
Only qualified technicians should perform repairs.

- DO NOT submerge the IR Gun in water.
- Protect the IR Gun from water, shock, dust, and extreme environments.
- The IR Gun may be used to measure body temperature simply for reference. This unit is not intended for medical evaluations.
- Dispose of properly.
- Contains a laser pointer. Keep away from children.



3. DISPLAY AND BUTTON LOCATIONS

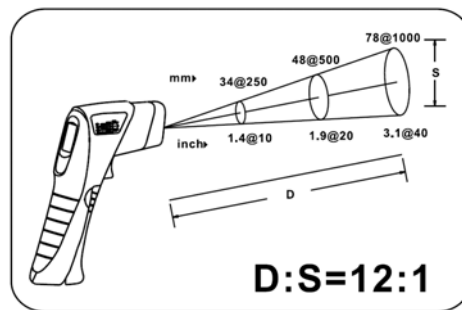




- | | |
|--------------------------|-------------------------|
| 8. Low Battery Indicator | 11. °C & °F |
| 9. Laser Guide On/Off | 12. Hold |
| 10. Scan | 13. Temperature Reading |

4. Distance-to-Spot

The distance-to-spot ratio is 12:1. As the distance from the object increases, the spot size of the area measured by the gun also increases.



5. MEASURING PROCEDURES

See page 4-5 for display and button locations. For best results, allow the thermometer to adjust to the ambient temperature for 30 minutes before use. For accurate readings, the IR lens must be clean (pg 7).

- Slide the **Laser ON/OFF Selector** (5) to turn the **Laser Guide** (1) on or off.
- Slide the **°C/°F Selector** (4) to switch temperature units.
- Point the IR Gun at the object to be measured.
- Pull and hold the **Trigger** (3) to obtain a continually updated temperature until the trigger is released. "**SCAN**" (10) flashes on the display.
- Release the **Trigger** (3), "**HOLD**" (12) and last temperature reading is displayed for about 6 seconds until the thermometer turns off.

Notes

- Your reading may fluctuate if the IR Gun is moved during measurement.
- Emissivity is the ability of an object to emit or absorb energy. The factory set emissivity value of 0.95 covers about 90% of typical applications. When measuring highly reflective surfaces, apply masking tape to the surface or a paint that has a 0.95 emissivity. If the object is covered with frost, clear the frost to expose the surface prior to measurement.

6. BATTERY REPLACEMENT



- Replace the battery when the **Low Battery Indicator** (8) is displayed.
- Open the battery cover, install a fresh 9V battery and close the cover.

7. CLEANING

To obtain accurate readings, the lens must be clean. Clean the lens with compressed air, soft brush, or a moist cotton swab. Do not use solvents on the lens. Clean the case with mild soap on a cloth or sponge.

8. SPECIFICATIONS

D:S Ratio	12:1
Range	-32~535°C (-25~999°F)
Resolution	0.1°C/F
Accuracy	±3°C (±5°F) From -32~-20°C (-25~-4°F)
	±2°C (±3°F) From -20~100°C (-4~212°F)
	±2% From 100~535°C (212~999°F)
Thermophile	5~14µm
Dim (approx.)	6 3/4 X 4 7/8 x 1 2/3" (170 x 133 x 45 mm)
Weight (approx.)	5 2/3 oz (163g)
Response Time	500 ms
Operating Temp	32~122°F (0~50°C) 10~90% RH
Emissivity	Fixed 0.95
Battery Life	Approx. 16 hours



Conforms to the following standards:

- EN61326: Electrical equipment for measurement, control and laboratory use.
- IEC61000-4-2: Electrostatic discharge immunity.
- IEC61000-4-3: Radiated, radio-frequency, electro-magnetic field immunity test.
- IEC61000-4-8: Power frequency magnetic field immunity test.
- CFR 1040.10 subchapter J Class II Laser Product

Tests were conducted using a frequency range of 80~1000MHz with the unit in three orientations. The average error is $\pm 0.5^{\circ}\text{C}$ ($\pm 1.0^{\circ}\text{F}$) at 3V/m throughout the spectrum. However, between 781~1000MHz at 3V/m, the unit may not meet its stated accuracy.

9. WARRANTY

Sper Scientific warrants this product against defects in materials and workmanship for a period of 5 years from the date of purchase, and agrees to repair or replace any defective unit without charge. If your model has since been discontinued, an equivalent Sper Scientific product will be substituted if available. This warranty does not cover probes, batteries, or damage resulting from accident, misuse, or abuse of the product. To obtain warranty service, ship the unit postage prepaid to:

SPER SCIENTIFIC LTD,
7720 E Redfield Rd, Ste 7
Scottsdale, AZ 85260
www.sperscientific.com, info@sperscientific.com

The defective unit must be accompanied by a description of the problem and your return address. Register your product online or return your warranty card within 10 days of purchase.