SURPEER IR-1574

Infrared Thermometer User Manual

Model: IR-1574

Brand: SURPEER

1. Introduction

This manual provides essential information for the safe and effective operation of your SURPEER IR-1574 Infrared Thermometer. Please read it thoroughly before use and retain it for future reference.

2. Safety Information

- **Laser Safety:** Do not point the laser directly at eyes or indirectly off reflective surfaces.
- **Electrical Safety:** Do not use the device near live electrical circuits without proper precautions.
- **Temperature Limits:** Do not expose the device to extreme temperatures outside its operating range.
- **Maintenance:** Refer to the maintenance section for proper cleaning and care.

3. Product Overview

The SURPEER IR-1574 is a non-contact infrared thermometer designed for accurate temperature measurement across a wide range of applications. It features a high distance-to-spot ratio, multiple measurement modes, and a clear backlit display.

3.1 Key Features

- Wide Temperature Range: -58°F to 1796°F (-50°C to 980°C)
- High Distance-to-Spot Ratio: 50:1
- Multiple Modes: MIN/MAX/AVG/DIF
- Unit Selection: Celsius (°C) / Fahrenheit (°F)
- Automatic Power-Off

- Low Battery Indicator
- Data Retention Function
- Guiding Laser for precise aiming
- Advanced Infrared Fresnel Lens Sensor

3.2 Components and Display

Figure 1: Screen display and button functions. All settings can be controlled via display quick buttons.

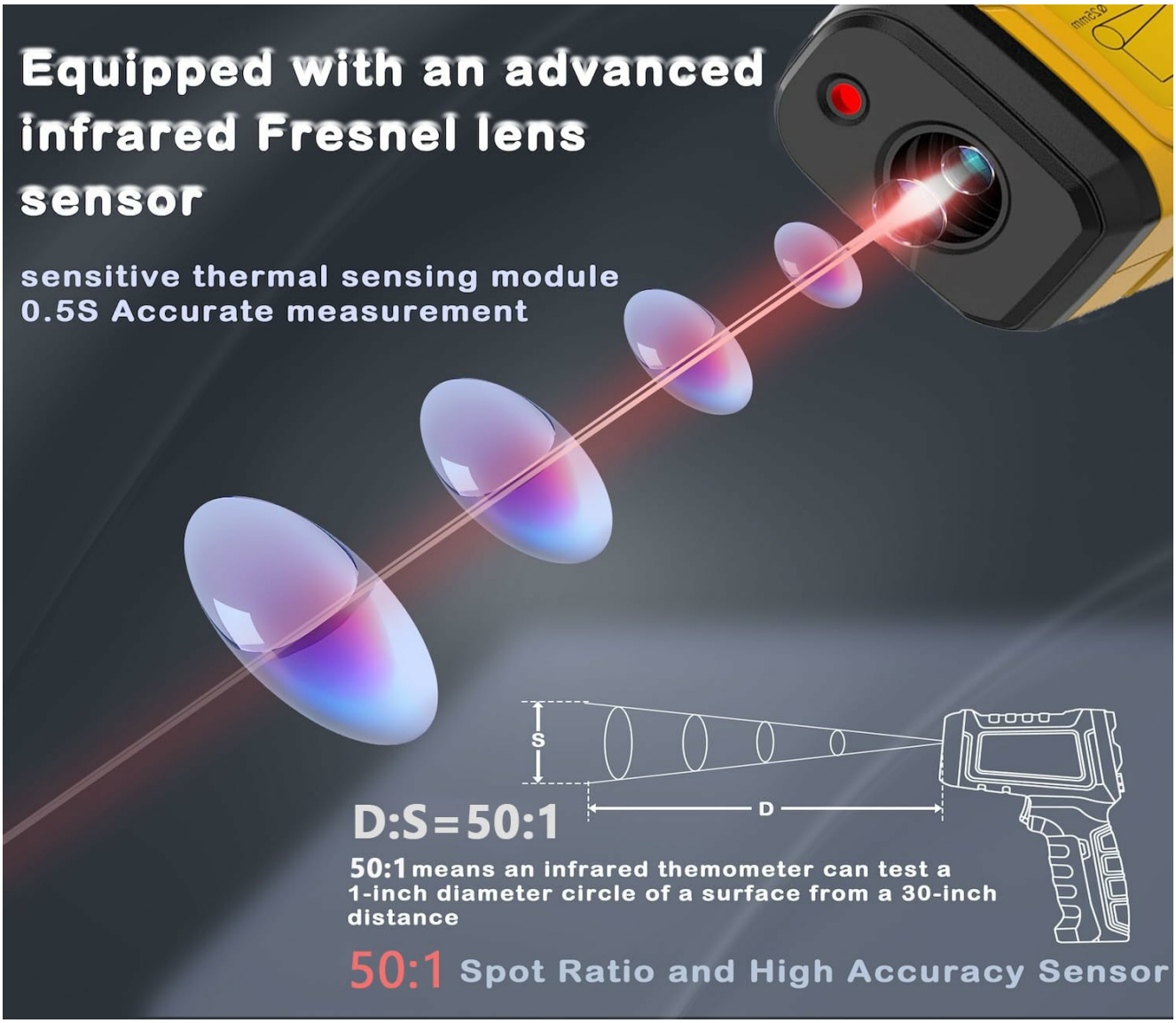

Figure 2: Overview of the thermometer's multiple functions and display modes.

Figure 3: Explanation of the advanced infrared Fresnel lens sensor and the 50:1 distance-to-spot ratio, indicating a 1-inch diameter spot from a 30-inch distance.

4. Setup

4.1 Battery Installation

Your SURPEER IR-1574 thermometer requires 2 AAA batteries (included). To install or replace batteries:

1. Open the battery compartment cover, usually located on the handle.
2. Insert the 2 AAA batteries, ensuring correct polarity (+/-).
3. Close the battery compartment cover securely.

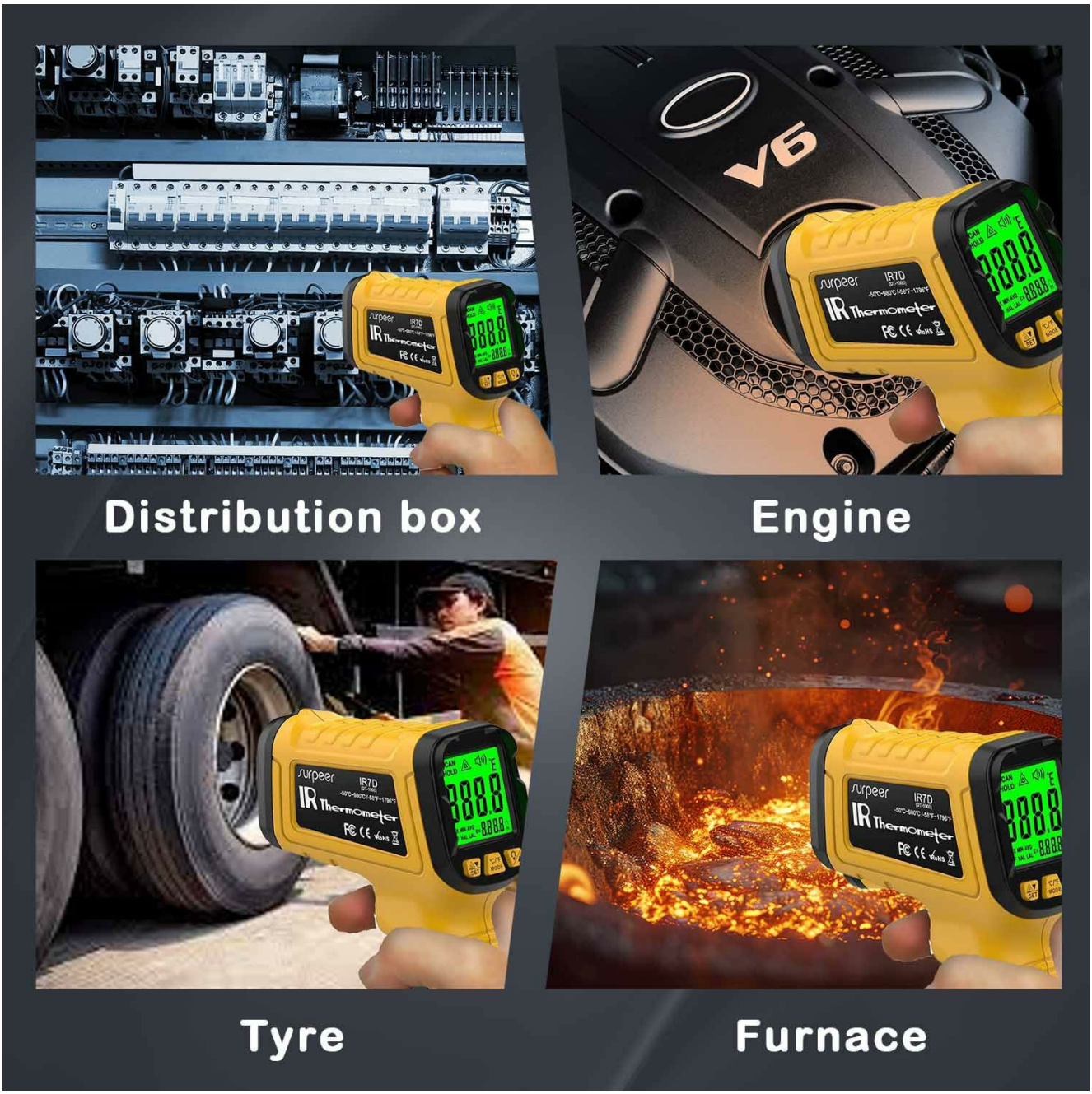

Figure 4: Included components: thermometer, batteries, storage bag, and user manual.

4.2 Attaching the Probe (if applicable)

Some models include a probe for contact temperature measurement. If your model includes one, it can be attached to the designated port on the side of the device. Refer to the video below for a demonstration.

Video 1: Demonstration of the infrared thermometer, including how to attach and use the probe for internal temperature readings.

5. Operating Instructions

5.1 Basic Temperature Measurement

1. Point the thermometer at the target surface.
2. Press and hold the trigger to activate the laser and begin measurement.
3. The temperature reading will appear on the display. Release the trigger to hold the reading.

5.2 Using the Probe (Contact Measurement)

For internal or contact temperature measurements, insert the probe into the substance. The display will automatically switch to show the probe's reading. The video in Section 4.2 demonstrates this feature.

5.3 Switching Temperature Units (°C/°F)

Press the 'C/F' button on the device to toggle between Celsius and Fahrenheit temperature units.

5.4 Understanding Display Modes

The thermometer offers various display modes accessible via the 'MODE' button:

- **MIN:** Displays the minimum temperature recorded during a scan.
- **MAX:** Displays the maximum temperature recorded during a scan.
- **AVG:** Displays the average temperature recorded during a scan.
- **DIF:** Displays the difference between the maximum and minimum temperatures recorded.

5.5 Interpreting Temperature Difference Indicator

The device may feature a visual indicator (e.g., green/red light) to show significant temperature differences between the measured surface and ambient air, or between set high/low alarm thresholds. A green light typically indicates temperatures within an acceptable range, while a red light may indicate a significant deviation or an alarm condition.

5.6 Applications

Figure 5: Measuring high temperatures in an industrial environment, demonstrating the wide temperature range.

Figure 6: Examples of the thermometer's use in distribution boxes, engines, tires, and furnaces.

Figure 7: Controlling the temperature inside a pizza oven for optimal cooking.

Figure 8: Safely measuring higher temperatures in applications like kilns and forges.

Figure 9: Measuring indoor temperatures and detecting potential heat sources from a distance.

6. Maintenance

- **Cleaning:** Wipe the device with a soft, damp cloth. Do not use abrasive cleaners or immerse the device in water.
- **Lens Care:** The infrared lens is the most delicate part. Clean it gently with a soft cloth or cotton swab and water or medical alcohol.
- **Storage:** Store the thermometer in its provided storage bag in a cool, dry place when not in use. Remove batteries if storing for extended periods.

7. Troubleshooting

- **Inaccurate Readings:** Ensure the target surface is within the device's distance-to-spot ratio. Check battery levels; low batteries can affect accuracy. Replace batteries if necessary.
- **No Display/Power:** Check battery installation and ensure batteries are not depleted.
- **Laser Not Working:** Ensure the laser function is enabled (if applicable) and check for any obstructions.

8. Specifications

Feature	Specification
Model Number	IR-1574
Temperature Range	-58°F to 1796°F (-50°C to 980°C)
Distance-to-Spot Ratio	50:1

Measurement Accuracy	±2%
Power Source	2 AAA batteries (included)
Display Style	Digital
Item Weight	160 g
Product Dimensions	16 x 8.71 x 4.83 cm
Special Features	50:1 Distance-to-Spot Ratio, High Accuracy, Infrared thermal Fresnel lens sensor

9. Warranty and Support

This product comes with included batteries and a convenient storage bag. Should you encounter any technical or quality concerns, please do not hesitate to reach out to our customer service. We are committed to providing a prompt response within 24 hours.