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› SOVARCATE Infrared Thermometer HS960D User Manual

SOVARCATE HS960D

SOVARCATE Infrared Thermometer HS960D User Manual

Non-Contact Digital Laser Temperature Gun -58°F 1112°F(-50°C 600°C) Adjustable Emissivity IR Temp Gun

1. INTRODUCTION

Thank you for choosing the SOVARCATE Infrared Thermometer HS960D. This non-contact digital laser temperature gun is designed for safe and accurate temperature measurement across a wide range of applications. It combines the latest temperature sensor technology with an advanced Fresnel lens to provide high-accuracy readings in a fraction of a second. This manual provides essential information for the proper setup, operation, and maintenance of your new device.



Figure 1: SOVARCATE Infrared Thermometer HS960D and included meat thermometer.

2. IMPORTANT SAFETY INFORMATION

WARNING: This is not a medical thermometer. Do not use to take the temperature of human foreheads or animals. Infrared thermometers are only able to read external surface/skin temperatures and are not designed to measure internal body temperature. The measured temperature for humans or animals will not be correct.

- Do not point the laser directly at eyes or indirectly off reflective surfaces. This product contains a Class 2 laser.
- Keep out of reach of children.
- Do not immerse the device in water or other liquids.
- Avoid exposing the device to extreme temperatures or direct sunlight for prolonged periods.
- Use only as directed in this manual.

3. PRODUCT FEATURES

- High Accuracy: Reads values up to $\pm 2\%$ in only 0.5 seconds.
- Wide Temperature Range: -58°F 1112°F (-50°C 600°C).
- Adjustable Emissivity: Customize for precise measurements on various surfaces (0.10 to 0.95).
- Built-in Red Laser: For precise aiming and accurate target identification.
- Color Large Screen Display: Clear and easy-to-read results with backlight.
- Distance to Spot Ratio (D:S): 12:1, allowing measurement from a longer distance.
- Data Hold Function: Freezes the last reading on the display.
- Auto-Off Function: Conserves battery life by automatically turning off after 15 minutes of inactivity.
- Low Battery Indicator.
- Includes a separate meat thermometer for internal temperature measurement.



Positive Display

Showcase buttons and data to give you a clearer picture of our products



Figure 2: Detailed view of the thermometer's display and controls.

4. SETUP

4.1 Battery Installation

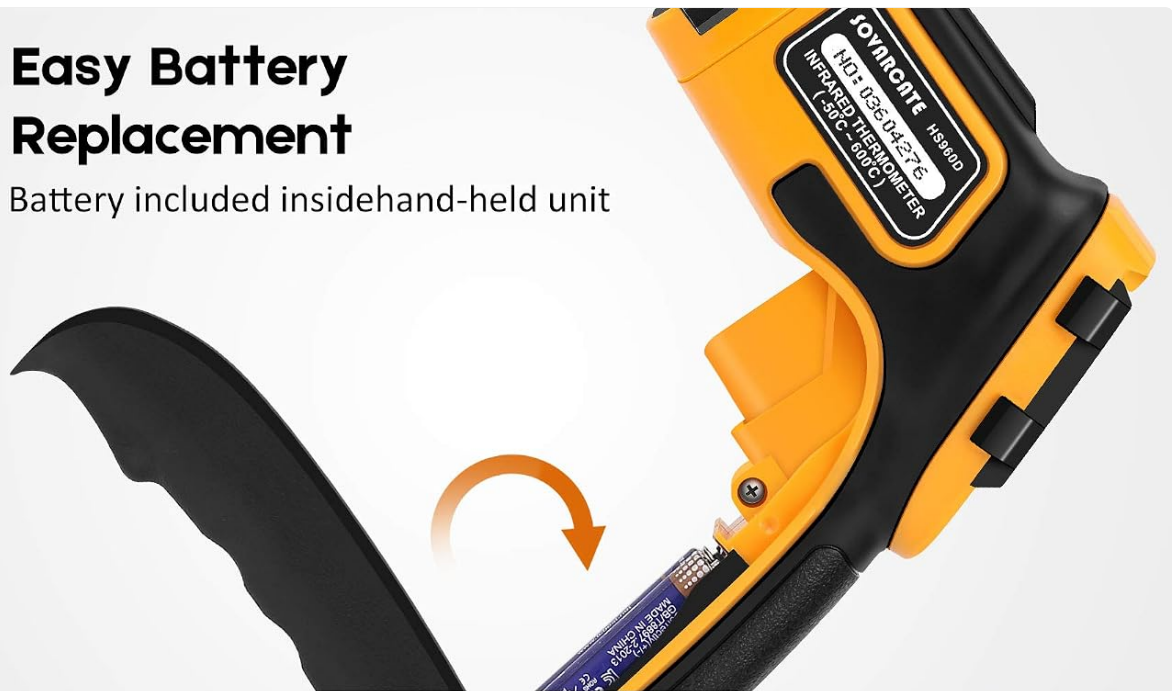
Your SOVARCATE Infrared Thermometer requires 2 AAA batteries (included). To install or replace batteries:

1. Locate the battery compartment on the handle of the device.
2. Gently pull down the battery cover to open the compartment.
3. Insert two AAA batteries, ensuring correct polarity (+/-).
4. Close the battery cover securely until it clicks into place.



Easy Battery Replacement

Battery included inside hand-held unit



Highly sensitive sensor:
laser indication, 0.5 second
fast measurement

Figure 3: Battery installation process.

4.2 Unit Selection (Celsius/Fahrenheit)

To switch between Celsius (°C) and Fahrenheit (°F), press the "°C/°F" button located below the display screen. The selected unit will be displayed on the screen.

5. OPERATING INSTRUCTIONS

5.1 Basic Measurement

To take a temperature reading:

1. Point the infrared thermometer at the target surface.
2. Press and hold the trigger button. The laser will activate (if enabled) to help you aim.
3. The temperature reading will appear instantly on the display.
4. Release the trigger to hold the last reading on the screen. The device will automatically turn off after 15 minutes of



Product Accessories



Figure 4: Laser-assisted positioning for accurate measurement.

5.2 Adjustable Emissivity

Emissivity is the ability of a surface to emit energy by radiation. Different materials have different emissivity values. For accurate readings, adjust the emissivity setting using the "EMS" button. The default setting is 0.95, suitable for most organic materials and painted surfaces. Refer to the included quick guide for common emissivity values for various materials.



Oil

Emissivity : 0.95

Ice

Emissivity : 0.98

Better Accuracy With adjustable Emissivity

Adjustable emissivity from 0.10 to 0.95 allows you to measure temperatures precisely on different surfaces such as clay, brass, wood, and marble.

Figure 5: Adjustable emissivity for better accuracy on diverse surfaces like oil and ice.

5.3 Practical Applications

This infrared thermometer is versatile and can be used for:

- **Cooking & Food Preparation:** Ideal for checking the surface temperature of cooking surfaces, pizza ovens, BBQ grills, and food.
- **Home Maintenance:** Useful for checking insulation, HVAC systems, and appliance temperatures (e.g., refrigerators, freezers).
- **Automotive:** Measure engine components, tires, and other vehicle parts.
- **Industrial Use:** Suitable for various industrial temperature measurements, including steel, glass, and plastics.

Your browser does not support the video tag.

Video 1: Product demonstration showing temperature measurement of hot coffee and cooking food. This video highlights the thermometer's utility in kitchen settings.

Your browser does not support the video tag.

Video 2: Product demonstration showing temperature measurement of a car engine and a super hot pan handle. This video illustrates the thermometer's use in automotive and high-temperature cooking scenarios.

5.4 Using the Included Meat Thermometer

The included meat thermometer is designed for measuring the internal temperature of food, ensuring it is cooked to a safe and desired doneness. It has a temperature range of -58°F to +572°F (-50°C to +300°C) and features a large-screen LCD display and a 304 stainless steel probe. It automatically turns off after 15 minutes.

1. Insert the stainless steel probe into the thickest part of the food, avoiding bones.
2. Read the internal temperature on the digital display.

6. MAINTENANCE

6.1 Cleaning

To clean the device, wipe it with a soft, damp cloth. Do not use abrasive cleaners or immerse the device in water. The meat thermometer probe can be wiped clean or washed with mild soap and water.

6.2 Storage

Store the thermometer in a cool, dry place away from direct sunlight and extreme temperatures when not in use. Remove batteries if storing for extended periods to prevent leakage.

7. TROUBLESHOOTING

- **No Display/Low Battery:** Check battery polarity or replace batteries if the display is blank or shows a low battery indicator.
- **Inaccurate Readings:**
 - Ensure the target surface is within the recommended distance-to-spot ratio (12:1).
 - Adjust the emissivity setting for the material being measured.
 - Ensure there are no obstructions between the thermometer and the target.
- **Laser Not Working:** Check if the laser function is enabled via the button below the display.

8. SPECIFICATIONS

Feature	Specification
Brand	SOVARCATE
Model Name	HS960D
Temperature Range	-58°F 1112°F (-50°C 600°C)
Accuracy	±2%
Response Time	0.5 seconds
Distance to Spot Ratio (D:S)	12:1
Emissivity	Adjustable (0.10 to 0.95)
Display Type	Digital, Color Backlit LCD
Power Source	2 x AAA batteries (included)

Feature	Specification
Auto-Off	15 minutes
Item Weight	5.3 ounces
Included Components	AAA battery & LR44; meat thermometer

9. WARRANTY & SUPPORT

SOVARCATE provides **Lifelong after-sales service** for your Infrared Thermometer HS960D. For any questions, concerns, or support needs, please contact our customer service team. Refer to your product packaging or the SOVARCATE official website for the most current contact information.

We are committed to ensuring your satisfaction with our products.

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page’s manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question