ERICKHILL ROOK50

ERICKHILL Infrared Thermometer

Model: ROOK50

Non-Contact Laser Temperature Gun

Introduction

Thank you for purchasing the ERICKHILL Infrared Thermometer. This device is designed for safe, non-contact temperature measurement of various surfaces. It features high precision, a wide temperature range, adjustable emissivity, and a clear LCD display. Please read this manual thoroughly before use to ensure proper operation and safety.

Safety Information

This section contains important safety warnings and precautions. Always adhere to these guidelines to prevent injury or damage to the device.

- **Not for Human or Animal Temperature Measurement:** This thermometer is designed for industrial and household surface temperature measurement only. It cannot accurately measure internal body temperature of humans or animals.
- **Laser Safety:** This product uses a Class 2 laser. **DO NOT look directly into the laser beam or point it at the eyes of people or animals.** Direct exposure can cause eye damage.
- **Avoid Transparent Objects:** Do not use this thermometer to measure the temperature of transparent objects such as glass, plastic, or water, as it will measure the surface temperature of the transparent material, not the object behind it.
- **Electrical Safety:** Do not use the device near strong electromagnetic fields.
- **Maintenance:** Do not attempt to disassemble or modify the device. Refer all servicing to qualified personnel.

Image: The ERICKHILL Infrared Thermometer is not suitable for measuring human body temperature. A clear red 'no' symbol indicates this restriction.

Product Components

The package includes the following items:

- ERICKHILL Infrared Thermometer (Model: ROOK50)
- 2 x AAA Batteries
- User Manual

Image: The ERICKHILL Infrared Thermometer, its user manual, and two AAA batteries as typically found in the product packaging.

Setup

Follow these steps to prepare your thermometer for first use:

1. **Battery Installation:** Locate the battery compartment on the handle of the thermometer. Open the compartment cover and insert two AAA batteries, ensuring correct polarity (+/-). Close the cover securely.
2. **Power On:** Press the 'SCAN' trigger to power on the device. The LCD display will illuminate.

Image: The ERICKHILL Infrared Thermometer and the two AAA batteries required for operation.

Operating Instructions

Learn how to use your infrared thermometer effectively:

Basic Measurement

1. Point the thermometer at the target surface.
2. Press and hold the 'SCAN' trigger. The laser pointer will activate, indicating the measurement area.
3. The temperature reading will appear on the LCD display.
4. Release the trigger to hold the reading on the display. The device will automatically power off after 12 seconds of inactivity to conserve battery life.

Understanding the Display

The LCD display provides various indicators and readings:

Image: Detailed view of the LCD screen, highlighting different modes and indicators such as HOLD, SCAN, Emissivity (EMS), and temperature limits (LOW, MAX, MIN, HI).

- **SCAN:** Indicates active scanning.
- **HOLD:** Indicates the last measured temperature is being held on the display.
- **°C/°F:** Temperature unit indicator.
- **EMS:** Emissivity setting.
- **LOW/HI:** Low/High temperature alarm indicators.
- **MAX/MIN:** Maximum/Minimum temperature recorded during scanning.

Switching Temperature Units (°C/°F)

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

Adjusting Emissivity

Emissivity (EMS) is the ability of a material to emit thermal energy. Different materials have different emissivities. This thermometer allows you to adjust the emissivity from 0.1 to 1.0 for more accurate readings on various surfaces.

1. Press the 'MODE' button until 'EMS' appears on the display.

2. Use the 'Up' and 'Down' arrow buttons to adjust the emissivity value.
3. Press 'MODE' again to confirm and exit.

High/Low Temperature Alarm

The device can be set to alert you when the measured temperature exceeds a high limit or falls below a low limit.

Image: Instructions for setting high and low temperature alarm limits, and how the thermometer indicates these states visually.

1. Press the 'MODE' button repeatedly until 'HI' or 'LOW' appears.
2. Use the 'Up' and 'Down' arrow buttons to set the desired high or low temperature limit.
3. Press 'MODE' again to confirm and exit.
4. When the measured temperature exceeds the 'HI' limit or falls below the 'LOW' limit, the alarm indicator will flash.

Distance-to-Spot Ratio (D:S)

The ERICKHILL ROOK50 has a Distance-to-Spot ratio of 12:1. This means that at a distance of 12 units from the target, the measurement spot diameter will be 1 unit. For example, if you are 12 inches away from the target, the measurement area will be a 1-inch circle. To ensure accurate readings, make sure the target

area is larger than the spot size.

Image: Two ERICKHILL infrared thermometers in use, illustrating the precision of temperature measurement with a laser guide.

Typical Applications

Image: The ERICKHILL Infrared Thermometer is suitable for various applications, including vehicle repair and inspection, to quickly assess surface temperatures.

This thermometer is versatile and can be used for:

- Cooking and BBQ
- Refrigerator and freezer temperature checks
- Industrial maintenance
- Home inspections (e.g., HVAC, insulation)
- Automotive diagnostics

Maintenance

Proper care will ensure the longevity and accuracy of your thermometer:

- **Cleaning:** Use a soft, damp cloth to clean the device casing. Do not use abrasive cleaners or solvents. Keep the lens clean and free of dust or debris.
- **Battery Replacement:** Replace batteries when the low battery indicator appears on the display. Always use new AAA batteries.
- **Storage:** Store the thermometer in a cool, dry place away from direct sunlight and extreme

temperatures. Remove batteries if storing for extended periods to prevent leakage.

Troubleshooting

If you encounter issues with your thermometer, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
No display/Device won't turn on	Dead or incorrectly installed batteries	Check battery polarity or replace with new AAA batteries.
Inaccurate readings	Incorrect emissivity setting; Lens is dirty; Target too small or too far; Measuring transparent object	Adjust emissivity for the material; Clean the lens; Ensure target is within D:S ratio; Do not measure transparent objects.
Laser not working	Laser function disabled (if applicable); Device malfunction	Ensure laser is enabled (if there's a setting); Contact customer support if issue persists.

Specifications

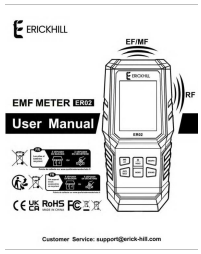
Parameter	Value
Temperature Range	-50°C to 600°C (-58°F to 1112°F)
Accuracy	±1.5°C or ±1.5% (whichever is greater)
Distance Spot Ratio (D:S)	12:1
Emissivity	0.1 to 1.0 (Adjustable)
Response Time	0.5 seconds
Automatic Power Off	12 seconds of inactivity
Laser Class	Class 2
Power Supply	2 x AAA Batteries (included)
Weight	220 grams
Certifications	FDA, FCC, RoHS, UKCA, CE Compliant

Warranty and Support

ERICKHILL provides comprehensive support for its products:

- **Warranty:** This product comes with a 3-year after-sales service.
- **Technical Support:** Lifetime technical support is available for this product.
- **Returns:** You may return the product for a full refund within 30 days of purchase.
- **Contact:** If you have any concerns, questions, or require technical assistance, please contact ERICKHILL customer support through the retailer's platform or the official ERICKHILL website.

Related Documents - ROOK50

	ERICKHILL ROOK 400/600 SP IR Thermometer User Manual User manual for the ERICKHILL ROOK 400 SP and ROOK 600 SP infrared thermometers. Provides instructions on operation, features, safety, and technical specifications.
	ERICKHILL ER02 EMF Meter User Manual Explore the capabilities of the ERICKHILL ER02 EMF Meter with this comprehensive user manual. Learn about its 3-in-1 functionality for measuring electric, magnetic, and radio frequency fields, including operation, specifications, and safety guidelines.
	Erickhill RT-100S EMF Meter User Manual User manual for the Erickhill RT-100S EMF Meter, detailing its features, operation, technical specifications, and applications for measuring electric, magnetic, and RF fields.