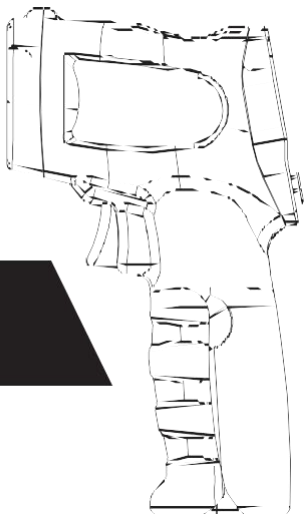
ERICKHILL



IR THERMOMETER

ROOK 400/600 SP

USER MANUAL

Made in China

Attention:

Please confirm your product model before reading this manual.

Bitte wählen Sie Ihr Produktmodell aus, bevor Sie dieses Handbuch lesen.

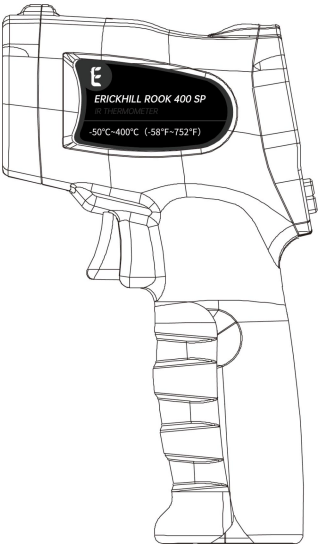
Veuillez confirmer le modèle de votre produit avant de lire ce manuel.

Si prega di confermare il modello del vostro prodotto prima di leggere questo manuale.

Confirme el modelo del producto antes de leer este manual.

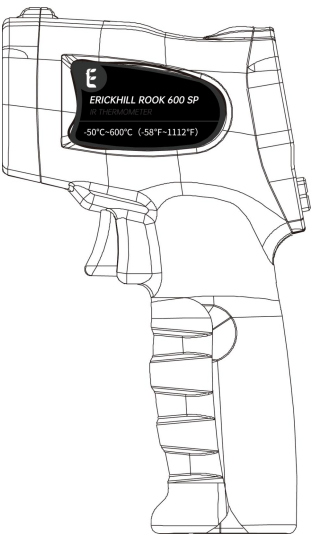
ROOK 400 SP

-50°C~400°C (-58°F~752°F)



ROOK 600 SP

-50°C~600°C (-58°F~1112°F)



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Introduction

The ERICKHILL infrared thermometer is suitable for non-contact temperature measurement. The thermometer determines the surface temperature of the object by measuring the infrared energy of the radiation from the surface of the object.

This unit consists of optics system, photoelectric sensor, signal amplifier, signal processing circuit and LCD display.

Symbols & Safety Markings

	Laser, warning
	Warning, important safety mark
°C	Centigrade degree
°F	Fahrenheit degree
	Low battery
CE	Product complies with all relevant European laws.
	Do not discard this product into household garbage.

Warning & Maintenance

Warning

- DO NOT point laser directly at eye or indirectly at reflective surfaces.
- DO NOT view the beam with optical instruments.
- DO NOT allow children to operate the device.
- DO NOT connect the battery terminals together.
- DO NOT disconnect or squeeze the battery.
- DO NOT store batteries in containers that may cause short circuit terminals.
- DO NOT place the batteries near the heat source or the fire source.
- DO NOT shine the batteries under the sun.
- PLEASE remove batteries for storage if the meter is not used for a long time.
- PLEASE make sure that the batteries is correct in order to prevent the battery leakage.
- PLEASE first repair the batteries if it leakage occurs.

Cautions

To avoid damaging the ERICKHILL thermometer or the tested equipment, please protect it from the following effects:

- EMF (electromagnetic fields) from arc welders, induction heaters.
- Do not put the thermometer near or put it on a high-temperature object.
- Keep the thermometer clean and avoid dust entering the barrel.

Maintenance

Lens tube clean: Use compressed air to remove dust particles from the lens barrel. Carefully wipe the surface with a cotton swab dipped in water.

Surface clean: Wet the sponge or soft cloth with soap and water. Do not use abrasives or solvents. Never immerse the thermometer in water.

Functions & Display

Component description

① Unit switch button (℃/℉)
Digital Increase▲

② Backlight on/off
Laser on/off
Digital decrease▼

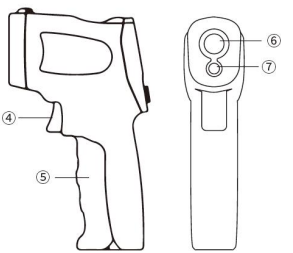
③ Mode button

④ Measurement trigger

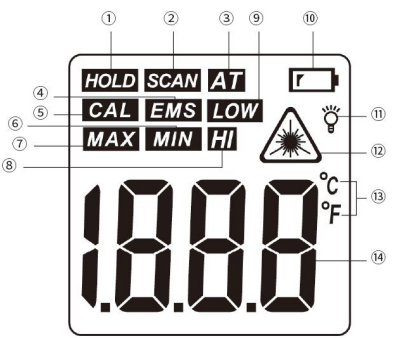
⑤ Battery cover

⑥ IR sensor

⑦ Laser hole



LCD description



① Data hold

② Measuring

③ Current environment temperature

④ Emissivity display

⑤ Under self-calibration mode to calibrate the unit between ±5℃

⑥ Minimum measurement

⑦ Maximum measurement

⑧ High temperature alarm

⑨ Low temperature alarm

⑩ Low battery reminder

⑪ Backlight on

⑫ Laser on

⑬ Temperature units

⑭ Temperature display

Batteries & Measurement

Replacing the batteries

1) Open the battery cover and load two 1.5V AAA batteries.
2) Pull the trigger to turn on the unit.

Note: When the battery power is insufficient, the meter displays the " ▭ " symbol and the battery must be replaced at this time.

Operating ERICKHILL thermometer

1) Once the battery is properly installed, press the measurement trigger to activate the device.
2) Point the Laser towards the surface of measurement and the ratio of the measured distance to the measured target size is 12:1.
3) Press and hold the measurement trigger and the laser will activate for aiming guidance.
4) Keep holding the trigger as you move the handle if you wish to scan the surface area for temperature measurement.
5) Once the laser is pointed to the desired point of measurement, release the trigger and the LCD display will lock the calculated temperature.
6) Press the measurement trigger once again to make another measurement.
7) After 12s without any operation, the thermometer will be turned off automatically. To restart the thermometer, pull the trigger.
8) Long-pressing ⟨◈⟩ when adjusting value will increase the speed of increasing or decreasing value.

HOLD to measure temperature continuously

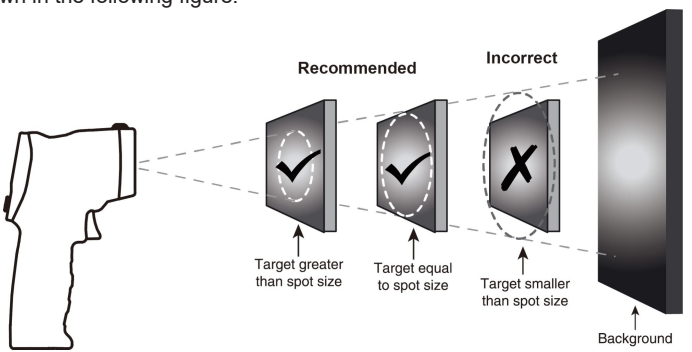
RELEASE to lock temperature reading

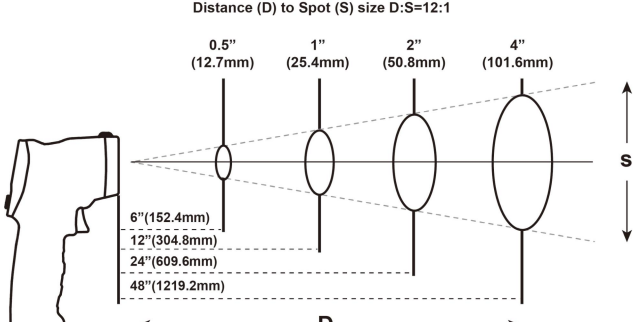
Note:

- DO NOT measure through transparent surfaces such as glass or plastic. It will measure the surface temperature of these materials instead.
- DO NOT measure in the environment of steam, dust, smoke. This particles can prevent accurate measurement by obstructing by the optics units.

D:S Ratio

Make sure that the target is larger than the unit's spot size. The smaller the target is, the closer you should be to it.
The ratio of the measured distance to the measured target size is 12:1, as shown in the following figure.





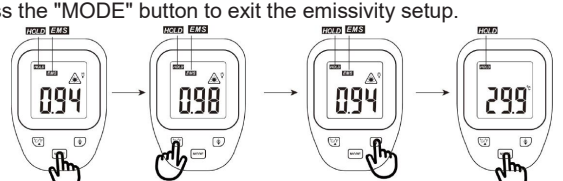
Emissivity

The radiant rate represents the ability of an object to radiate infrared radiation. The greater the radiation rate is, the stronger the radiation ability of the object surface is. The emissivity of most organic or metal oxide surfaces is between 0.85~0.98. The thermometer adjustable emissivity ranging from 0.10~1.00, 0.95 is the preset emissivity. The emissivity of the instrument should be consistent with the emissivity of the measured object when measuring. Attention should be paid to the effect of radiation on measurement results.

Marterial	Emissivity	Marterial	Emissivity
Aluminum	0.30	Iron	0.70
Asbestos	0.95	Lead	0.50
Asphalt	0.95	Limestone	0.98
Basalt	0.70	Oil	0.94
Brass	0.50	Paint	0.93
Brick	0.90	Paper	0.95
Carbon	0.85	Plastic	0.95
Ceramic	0.95	Rubber	0.95
Concrete	0.95	Sand	0.90
Copper	0.95	Skin	0.98
Dirt	0.94	Snow	0.90
Frozen food	0.90	Steel	0.80
Hot food	0.93	Textiles	0.94
Glass (plate)	0.85	Water	0.93
Ice	0.98	Wood	0.94

Emissivity setting

1) To adjust the emissivity, press the MODE button [MODE] multiple times until "EMS" appears on the screen when the trigger is pulled. The display shows the current emissivity value.
2) To set it to another value, use the "▲/▼" button.
3) Press the "MODE" button to exit the emissivity setup.



Mode & Alarm Setting

Function setting

Press the MODE button MODE cycle through multiple function settings
HOLD→MAX→MIN→AT→EMS→CAL→HI→LOW→HOLD

Temperature unit setting

Press the unit switch button °C/°F change temperature unit ℃/℉.

Laser on/off

To activate and deactivate the laser, short-press ▲ while the thermometer is on.

Backlight on/off

To activate and deactivate the backlight, long-press ▲ at any time while the thermometer is on.

High/Low temperature alarm setting

1) Press the "MODE" button to enters the set state.
2) Switch to alarm high/low limit set state, display the "Hi"/ "Low".
3) Then press "▲/▼" button to increase or decrease to set the value quickly.

The instrument will alarm continuously when the measured value is higher than the high limit alarm value or is lower than the low limit alarm value.

Max/Min temperature checking

Note: The max/min temperature is the value of a single measurement.

1) Press the "MODE" button to enter "MAX" mode, hold on the trigger then release it. The maximum temperature will be displayed.
2) Press the "MODE" button again to enter "MIN"mode, hold on the trigger then release it. The minimum temperature will be displayed.

AT: Press the "MODE" button to enter the AT state and it will display the current ambient temperature.

CAL(zero offset adjustment): Press the "MODE" button to enter the CAL state and set the zero point between -5°C and +5°C through "▲/▼" button.

Technical Specifications

Display	LCD display
D:S	12 : 1
Radiance	0.10~1.00
Response spectrum	5~14 ㎛
Response time	About 0.5S, 95% Response
Auto power off	12 seconds
Work temperature	0~40°C(32°F ~104°F)
Storage temperature	-10~60°C(14 °F ~140°F)
Power supply	2 x 1.5V AAA battery
Measurement range	ROOK 400 SP**:** -50°C~400°C (-58°F~752°F)
	ROOK 600 SP**:** -50°C~600°C (-58°F~1112°F)
Accuracy	**Max Error Range:** -50°C~0°C : ±3°C 0°C~100°C : ±1.5°C 100.1°C~600°C : ±1.5% reading