User's Manual
Pocket Infrared Thermometer

Introduction

This device allows the user to take non-contact temperature measurements simply by pointing the meter and pressing a button. This meter, with proper care, will provide years of safe reliable service.

Specifications
General Specifications

Measurement Range	Temperature: -22 to 518°F/ -30 to 270°C
Power off	Automatic shut off after approx. 10seconds
Blcklight /Laser power	Laser power less than 1mW (red)
Operating Temperature	32 to 122°F (0 to 50°C)
Operating Humidity	Max. 80% RH
Power Supply	2 x AAA battery
Weight	2.7 oz. / 76g
Size	3.7 x 2 x 1" (94 x 51 x 25 mm)

Range Specifications

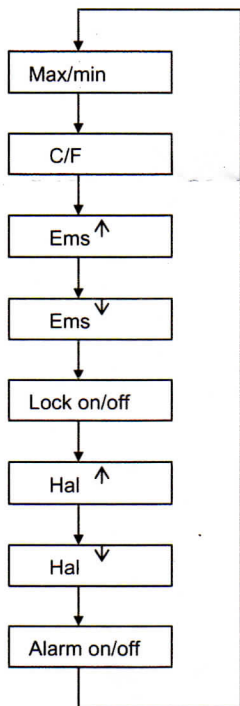| Ranges/Resolution	-30 to 270°C/ -22 to 518°F	0.1°C /0.1°F
Accuracy	-22° to 518°F / -30 to 270°C: ± (2.5% of reading + 4°F/2°C)	
Accuracy notes	Accuracy is given at 18 °C to 28 °C (64 °F to 82 °F), less than 80 % RH	
Emissivity settings	Emissivity digitally adjustable from 0.10 to 1.0	
Distance Factor	Distance to Target Ratio 6:1	

IR Measurements

Taking Measurements

Point the meter toward the object being measured, then press and hold the MEAS button. The meter will turn ON and take a reading. Read the measured temperature on the LCD. The meter turns off automatically approximately 10 seconds after the MEAS button is released.

Pressing the Set button also allows you to access the set state (High Alarm(HAL), Emissivity (EMS)). Each time you press Set you advance through the mode cycle.

The diagram shows the sequence of functions in the mode cycle.

Min(minimum) / Max(maximum) mode. The 'Max' or 'Min' icon will flash, Pressing the Laser button once for Max or twice for Min function. then pressing the MEAS button, to confirm the Max or Min mode,

c/f mode. Pressing the SET button two times, The "° C' or '° F' symbol will flash, pressing the Laser key to change to scale, To change the meter from '° C' to '° F' or from '° F' to '° C', Then pressing the MEAS button to confirm the mode.

Ems ↑and Ems ↓mode. Emissivity digitally adjustable from 0.10 to 1.0

Lock mode. The lock mode is particularly useful for continuous monitoring of temperatures. Pressing the Laser button to turn off, Pressing the MEAS button to confirm the lock measurement mode. The meter will continuously display the temperature until the Laser button is pressed.

Hal↑ and Hal↓ mode . High alarm digitally adjustable from –30 to 270

Alarm on/off. .Pressing the Laser button to turn on or turn off, Pressing the MEAS button to confirm the alarm measurement mode

Mode cycle diagram:
- Max/min
- C/F
- Ems ↑
- Ems ↓
- Lock on/off
- Hal ↑
- Hal ↓
- Alarm on/off

If not in Set mode, press the Laser button to turn on or off the laser and backlight.

Measurement considerations: If the surface of an object to be measured is covered with frost, dust or other materials, surface cleaning must be performed before accurate measurements can be made.
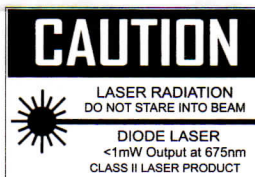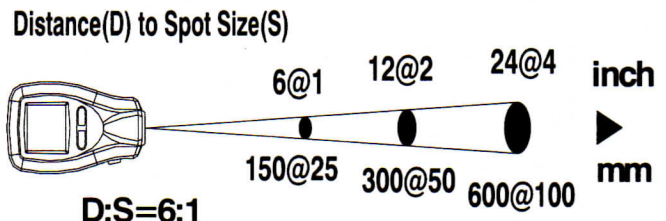
High Reflective Surfaces: If the surface of an object to be measured is highly reflective, apply masking tape or apply flat black paint to the surface since black paint has a fixed emissivity value.

Battery Replacement

As battery power is not sufficient, LCD will display " ▮ " replacement with AAA batteries, Open the battery compartment on the rear of the meter, replace the batteries and close the compartment.

Distance to Target

The object being measured should be larger than the spot size as illustrated at right.

Distance(D) to Spot Size(S)

6@1   12@2   24@4   inch
150@25   300@50   600@100   mm

D:S=6:1

CAUTION

LASER RADIATION
DO NOT STARE INTO BEAM
DIODE LASER
<1mW Output at 675nm
CLASS II LASER PRODUCT

CAUTION: Do not directly view or direct the laser pointer at an eye. Low power visible lasers do not normally present a hazard, but may present some potential for hazard if viewed directly for extended periods of time.

FRONT PANEL DESCRIPTION

1. Laser pointer beam
2. Set key
3. LCD display
4. Hand Strap
5. IR sensor
6. Meas key
7. Laser key
8. Battery compartment