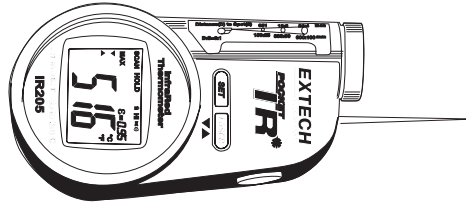# User's Manual

EXTECH INSTRUMENTS

Pocket InfraRed Thermometer
Model IR205

Introduction

Congratulations on your purchase of Extech's IR201 Pocket InfraRed Thermometer. This device allows the user to take non-contact temperature measurements simply by pointing the meter and pressing a button. Features include: Laser pointer, Max/Min, Adjustable emissivity, Lock ON and HI audible alarm. This meter is shipped fully tested and calibrated and, with proper use, will provide years of reliable service.

IR Measurements

Taking Measurements

Point the meter toward the object being measured, then press and hold the MEASURE button. The meter will turn ON and take readings (SCAN). Read the measured temperature on the LCD. When the MEASURE button is released, the last measurement is HELD in the display for approximately 8 seconds before the meter shuts down.
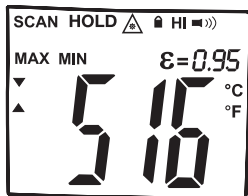
Laser Pointer

While pressing the MEASURE button, Press the LASER button to turn the laser pointer ON or OFF.

Set Feature

While in the MEAS mode;
Press the SET button to gain access to the following features in sequence.
Release the MEAS button when the feature needed is selected
Press the Laser button to change the selection or value
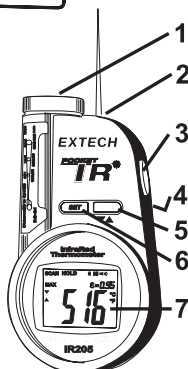Press the MEAS button to confirm the selection.

#1: **Max/Min**:	Displays only the maximum or minimum value during a measurement scan.
#2: **°C/°F**:	Select measurement units
#3: **Є ▲:**	Increase emissivity value.
#4: **Є ▼:**	Decrease emissivity value
#5: **🔒:**	Lock On/Off (Overrides auto-power off)
#6: **Hi ▲:**	Increase High Alarm value
#7: **HI ▼:**	Decrease High Alarm value
#8: **◀))**	Audible Alarm On/Off:

Display

Controls

1. IR Sensor
2. Laser Pointer
3. MEASURE Button
4. Battery Compartment (rear)
5. LASER button
6. SET button
7. Display

Specifications

Display	3 ½ -digit (2000 count) LCD display
Power off	Automatic shutoff after approx. 8 seconds
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)

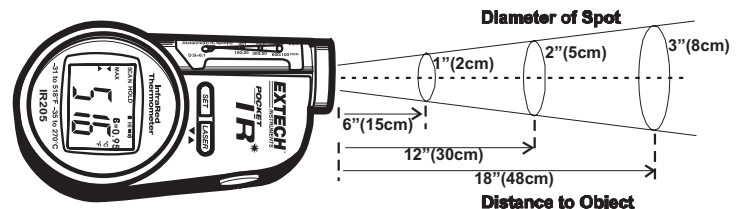|	
Ranges(Resolution)	-31 to 518°F/ -35 to 270°C (1°F/1°C)
Accuracy	± (2.5% of reading + 3°F or 2°C) (-4° to 518°F / -20° to 270°C):
	± 10°F or 5°C (-31° to -4°F / -35° to -20°C)
Recommended measuring distance	2" to 36" / 5cm to 91cm
Emissivity settings	0.1 to 1.00 adjustable
Distance to Target Ratio	6:1

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.

If the surface of an object to be measured is highly reflective with a very low emissivity value, apply masking tape or apply flat black paint to the surface to raise to improve the accuracy of the measurement.

The object being measured should be larger than the spot size as illustrated in the distance to spot diagram.

Distance to spot diagram

Battery Replacement

A flashing display indicates that the AAA batteries which power the meter have weakened. Open the battery compartment on the rear of the meter, replace the batteries and close the compartment.

Warranty

IR205   V1.0   3/06