User's Manual EXTECH INSTRUMENTS Model IR100

Pocket InfraRed Thermometer



Introduction

Congratulations on your purchase of Extech's IR100 Pocket InfraRed Thermometer. This device allows the user to take non-contact temperature measurements simply by pointing the meter and pressing a button. This meter is shipped fully tested and calibrated and with proper use will provide years of reliable service.

Operation

IR Temperature Measurements

Point the IR sensor toward object to be measured,

Press and Hold the MEASURE button.

The meter will turn ON, "SCAN" will flash in the display and the measured surface temperature will appear in the display. Release the MEASRE button, "HOLD" will appear in the display and the meter will turn off after 15 seconds.

Max display

Release the MEASURE button so that "HOLD" is in the display. Press the "Mode" button once and "MAX" appears in the display. Press and Hold the MEASURE button. The display will only capture a new reading if it is higher than the previous one.

Min display

Release the MEASURE button so that "HOLD" is in the display. Press the "Mode" button twice and "MIN" appears in the display. Press and Hold the MEASURE button. The display will only capture a new reading if it is lower than the previous one.

Lock (disable auto-power off)

Release the MEASURE button so that "HOLD" is in the display. Press the Mode button three times and the LOCK icon will flash. Press and Release the MEASURE button to "Lock" the meter in the On position.

Press the Mode button once to exit LOCK mode.

Displaying °F or °C

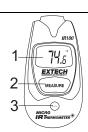
Release the MEASURE button so that "HOLD" is in the display. Press the Mode button four times until the °F or °C icon starts to flash. Press and hold the MEASURE button until the unit of measure changes

Meter Description

1. LCD Display

Measure button

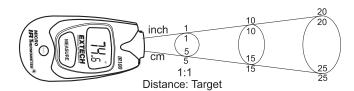
Mode button



Measurement considerations

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

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 with a very low emissivity value, apply masking tape or apply flat black paint to the surface to improve the accuracy of the measurement.



Battery Replacement

A flashing battery icon on the display indicates that the battery which powers the meter has weakened. Open the battery compartment on the rear of the meter, replace the battery and close the compartment.

Warranty

EXTECH INSTRUMENTS CORPORATION warrants this instrument to be free of defects in parts and workmanship for one year from date of shipment (a six month limited warranty applies on sensors and cables). If it should become necessary to return the instrument for service during or beyond the warranty period, contact the Customer Service Department at (781) 890-7440 for authorization. A Return Authorization (RA) number must be issued before any product is returned to Extech. The sender is responsible for shipping charges, freight, insurance and proper packaging to prevent damage in transit.

This warranty does not apply to defects resulting from action of the user such as misuse, improper wiring, operation outside of specification, improper maintenance or repair, or unauthorized modification. Extech specifically disclaims any implied warranties or merchantability or fitness for a specific purpose and will not be liable for any direct, incidental or consequential damages. Extech's total liability is limited to repair or replacement of the product.

The warranty set forth above is inclusive and no other warranty, whether written or oral, is expressed or implied.

Specifications

Ranges -27.4 to 230°F (-33 to 110°C)

Resolution 0.5oF/0.2°C

Accuracy $\pm 2.5\%$ of reading or 5°F (2.5°C),

whichever is greater

Recommended 2" to 36" / 5cm to 91cm

measuring distance

Emissivity settings 0.95 fixed

Distance to Target 1:1

Ratio

Display 3 ½ -digit (2000 count) LCD display

Power off Automatic shutoff after approx. 15

seconds

Operating 32 to 122°F (0 to 50°C)

Temperature

Operating Humidity Max. 80% RH

Power Supply 1 x CR2032 3V battery

Weight 2.7 oz. / 76g

Size 3 x 1.6 x 0.7" (76.2 x 41 x 17.8 mm)



Support line (781) 890-7440

Technical support: Extension 200; E-mail: support@extech.com

Repair & Returns: Extension 210; E-mail: repair@extech.com

Product specifications subject to change without notice

For the latest version of this User's Guide, Software updates, and other up-to-the-minute product information, visit our website: www.extech.com Extech Instruments Corporation, 285 Bear Hill Rd., Waltham, MA 02451