

MiniiiR TRACEABLE® THERMOMETER INSTRUCTIONS

SPECIFICATIONS

Range: -7 to 230°F / -22 to 110°C
 Resolution: 0.1°
 Accuracy: ± 1°C between 15.0 to 40.0°C
 and ± 1.5°C outside of this range
 Emissivity: 0.95
 Sampling Rate: 1 second
 Measurement Distance: 0 to 10 inches (0 to 2.5cm)
 Features: Fast reading, field view 1:1, auto power off, minimum/maximum
 Size/Weight: 2½ x 1½ x ½ in. / 1 oz (18 x 37 x 68 mm / 32 gm)
 Attachments: Keychain and stand
 Battery: 3-Volt Lithium

CONTROLS AND INDICATORS

- MEASUREMENT Button** - (large button)
Turns unit on, displays temperature, and changes display from °C (Celsius) to °F (Fahrenheit).
- MODE Button** - Changes mode to minimum or maximum or lock.

OPERATION

Measurement

Press the MEASUREMENT button twice to capture and display a single temperature reading. The temperature will be displayed for approximately 15 seconds and the unit will turn off. Press and continuously hold down the MEASUREMENT button to continuously take temperatures. See the Lock Mode instructions for continuous measurements without holding down the button.

°C/°F Conversion

To change from °C to °F or °F to °C turn the unit on by pressing the MEASUREMENT button once, then press the MODE button four times. The °C or °F symbol will flash on the display, press the MEASUREMENT button to change the symbol, press the MEASUREMENT button again to confirm the symbol change.

Minimum or Maximum Mode

Use this mode for targets that are continuously changing temperatures and you wish to capture *only* the lowest temperature achieved or *only* the highest temperature achieved. The unit will not simultaneously display minimum and maximum, one or the other must be selected. Turn the unit on by pressing the MEASUREMENT button once, then press the MODE button once for minimum *only* readings or twice for maximum *only* readings. The MIN or MAX symbol will flash on the display, then press and continuously hold down the MEASUREMENT button to continuously take temperatures. The unit will display the minimum temperature achieved or the maximum temperature achieved during the time the button is held down.

Lock Mode

The lock mode permits continuous monitoring of temperatures without continuously holding the MEASUREMENT button down. Turn the unit on by pressing the MEASUREMENT button, then press the MODE button three times. The LOCK symbol will flash, then press the MEASUREMENT button to confirm the lock measurement mode. The unit will continuously display temperatures for up to 60 minutes or until the MEASUREMENT button is pressed.

Measurement Distance

To take a temperature, point the unit at the surface to be measured and press the MEASUREMENT button. The unit should be positioned as close to the target as possible. Distance from an object can affect accuracy. The target must completely fill the spot diameter seen by the infrared sensor; otherwise, the reading will be influenced by the surface temperatures surrounding the target. The ratio of distance to the size of the spot being measured is 1:1. For example: an object 15 cm away has an infrared measurement spot diameter of 15 cm, and object 25 cm away has an infrared measurement spot diameter of 25 cm. For best accuracy, measure as close to the target object as possible.

Stand/Key Chain

Use the flip-open stand on the back of the unit on a bench or desk.. Use the key chain to fasten the unit to a button hole or loop.

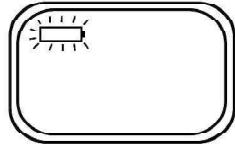
Battery Indicator Display



'Battery OK': measurements are possible.



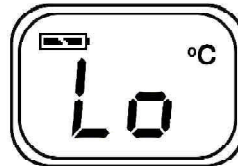
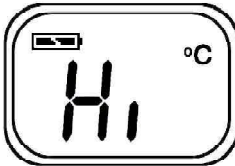
'Battery Low': battery needs to be replaced, measurements are possible.



'Battery Exhausted': measurements are not possible.

Error Message Display

'Hi' or 'Lo' is displayed when the temperature being measured is outside of the range of the unit, 'Hi' when higher than 110°C and 'Lo' when lower than -22°C.



'Er2' is displayed when the unit is exposed to rapid changes in the ambient temperature. 'Er3' is displayed when the ambient temperature of this unit exceeds -10 to 50°C. In both cases allow plenty of time (minimum 30 minutes) for this device to stabilize to the working/room temperature (0 to 40°C).



'Er' for all other error messages it is necessary to reset this unit. To reset, turn off the unit, remove the battery and wait for a minimum of one minute, reinsert the battery and turn on (see battery replacement instructions).



ALL OPERATIONAL DIFFICULTIES

If this unit does not function properly for any reason, replace the battery with a new high quality battery (see "Battery Replacement" section). Low battery power can occasionally cause any number of "apparent" operational difficulties. Replacing the battery with a new fresh battery will solve most difficulties.

BATTERY REPLACEMENT

Erratic readings, a faint display, no display or a flashing display are all indicators that the battery must be replaced. Make certain the unit is off before replacing the battery. Turn the battery compartment panel on the back of the unit in the direction of the arrow. Replace the exhausted battery with a new 3-volt lithium battery. Note that the lip of the battery must be placed under the upper metal contact. Turn the panel back into place.