

**INSTRUCTION
MANUAL**



Infrared Ear Thermometer

Model KI-8160

Distributed by :
180 INNOVATIONS LAKEWOOD, CO 80215
(877) 299-6700.
www.180innovations.com

Manufactured by :
K-jump Health Co., Ltd.
Made in China

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Precautions

1. Please consult your physician to verify your body temperature.
2. **DO NOT** scrape or scratch the lens as it will hamper the effectiveness of the device.
3. The device is intended for consumer-use only.
4. Calibration is recommended every two years.

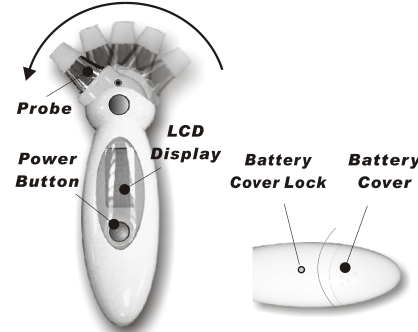
POWER SOURCE

**SIZE CR2032 (3.0 VDC)
LITHIUM BATTERY (1)**

**WARRANTY:
TWO YEARS FROM THE DATE OF
PURCHASE**

Parts Identification

Adjustable Probe Positions



Why IR ear thermometer?

The tympanic membrane (eardrum), and the hypothalamus, the part of the brain which controls body temperature, share a common blood supply, so tympanic readings rise and fall rapidly with core temperature (deep-body temperature). This makes the ear temperatures one of the best indicators of internal body (core) temperature.

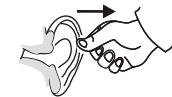
What are normal temperature values?

Human body temperature varies from person to person. One person's body temperatures are different from time to time. Therefore, it is very important to know your normal body temperature range. Because of this, we recommend that you measure yourself when healthy to establish reference temperatures which will make you feel more confident of the measured temperature when ill.

Information You Should Know Before Operating the IR Ear Thermometer

How to use the IR ear thermometer correctly?

1. It is useful to try this thermometer on yourself first to become familiar with its operations.
2. Please do not take the temperature immediately after waking up. Sleeping on the ear may cause the temperature to be higher than normal.
3. It is common for the readings to be slightly different between the right and the left ear. Therefore, we suggest using the same ear to obtain temperature.
4. **To make the ear canal straight for measurement:**
For Children under 12 months:
 Make the ear canal straight by pulling the ear back.



For Children over 12 months and Adults:

Make the ear canal straight by pulling the ear back and up.



5. This IR ear thermometer automatically converts measured ear temperature reading to oral temperature.

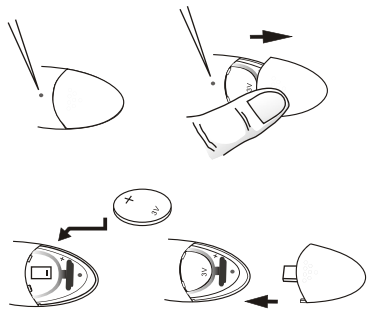
Preparation for Use

Installing/Replacing the Battery

1. Use a pointed object such as the tip of a pen to push down on the battery cover lock.
2. Pull the cover off while the cover lock is pushed down.
3. Extract the battery from the battery holder with an insulated instrument. Avoid using any sharp metal object in this operation. Discard old battery properly.
4. Place one new 3 VDC lithium battery CR2032 or equivalent into the chamber with the positive (+) side up and the negative (-) side down.
5. Replace and fasten the battery cover securely.

Warning :

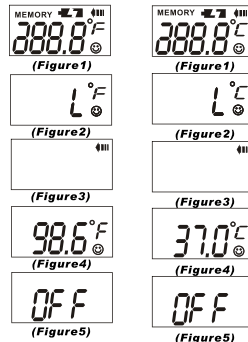
Battery Contains Mercury. Do Not Put in Trash. Recycle or Manage as Hazardous Waste. Never dispose of battery in fire. Dispose in recycling trash only. Do not recharge, put in backwards or disassemble. This may cause explosion, leakage and injury.



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How to Operate the Thermometer

1. Press and release the START/STOP button to **turn on** the unit. (Figure1) A beep is heard. After about 2 seconds, the display shows that the unit is ready for measurement. (Figure2)
2. Place the probe into the ear canal then press and release the START/STOP button again to start measurement.
3. While it is measuring, the display will show an "arrow" sign. (Figure3)
4. A "beep-beep" sound is heard when the measurement is completed. (Figure4)
5. After the smiling face symbol stops flashing, you can repeat measurement by pressing the START/STOP button again.
6. **Turn off** the unit by pressing and holding the START/STOP button for 3 seconds until the OFF message is displayed. A long beep is heard. (Figure5)



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How to Operate the Thermometer

For Centigrade and Fahrenheit Switchable Models:

The Centigrade or Fahrenheit mode can be switched by turning the unit on then pressing the START/STOP button again immediately and holding it down. The display will show "CH" with "F" or "C". Release the button when the mode you desire is in the display window. The unit will show "L" with the degree sign and the smiling face symbol in the display and is ready to take a new temperature reading.



Operational Hints:


1. Between each measurement, please allow a **5-second** interval in order to obtain the most accurate result.
2. Ensure that the probe lens is clean before each measurement. Dirty probe lens may cause inaccurate measurement.
3. Because the thermometer is a very sensitive device, it must be at room temperature approx. 60.8~104°F (16~40°C) for at least 30 minutes before using to avoid any incorrect measurements.

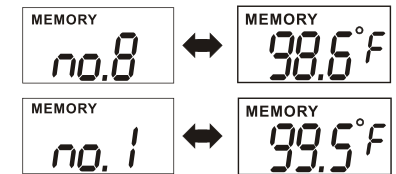
Warning : Performance of the device may be degraded if the device is operated or stored outside the stated temperature and humidity range or if the patient's temperature is below ambient (room) temperature.

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Memory Mode


Recalling Memory:

1. If the power is on, turn off the power first.
2. Press and hold the START/STOP button for about 3 seconds until the last recorded temperature is displayed. 
3. For models with 9 memories Press the START/STOP button repeatedly will take you to each recorded temperature in the memory. you may toggle the button to see the recorded temperatures.



4. After you release the START/STOP button the unit will return to the measurement mode.



5. "L" will appear on the display. The unit is then ready for Measurement again. 

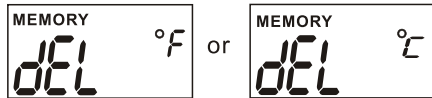
6. It is now ready to take a new temperature reading.

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Memory Mode

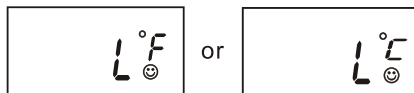
Deleting Memories:

1. Repeat the first two steps of "Recalling Memories".
2. Press and hold the START/STOP button for three seconds until "dEL" is displayed.



3. (a) **To delete:**
Press and release the START/STOP button to erase all of the records in the unit. A beep is heard and the unit is turned off. All records are now deleted.

- (b) **To cancel:**
DO NOT press the START/STOP button for 10 seconds until the display "L" appears. At that moment, the unit is ready for measurement again.



Cleaning and Care

	Please do not drop the unit. It is not shock-proof. Warning: following mechanical shock, the unit should not be used before re-calibration.
	Please do not modify or disassemble the unit.
	Please use a cotton swab with isopropyl alcohol to gently clean the surface of the lens. Before next measurement, wait at least 40 minutes for the unit to dry.
	Please avoid thinner and benzene or other harsh cleaners.
	Please remove the battery if the unit will not be used for a long time.
	Please keep the unit in a suitable place avoiding high temperature, direct sunlight, high moisture, and dust. The unit is not water proof.

Error Message

Message	Correction
H	The temperature measured was higher than the specified measuring range. Please measure again.
L	The temperature measured was lower than the specified measuring range. Please measure again.
Er1	The ambient (room) temperature was outside the operating range. Keep it at room temperature approx. 60.8~104°F (16°C~40°C) for 30 minutes before using.
Err	Failed self-diagnostic test. Reinstall battery and try again.
 or No display	Replace the lithium battery CR2032(3V)

Specifications

Power Source

DC3V, lithium battery CR2032

Measuring Range

90.0 ~109.9°F (32.2 ~ 43.3°C)

Resolution

±0.1°F(°C)

Accuracy

96.8 – 102.2°F (36 – 39°C)

±0.4°F (0.2°C)

Less than 96.8°F (36°C) or

Greater than 102.2°F (39°C)

±0.5°F (0.3°C)

Memory

One (or nine) sets

Low Battery

Replace the battery if the low battery indicator appears.

Auto Shut Off

Auto shut off after one minute of non-use

Battery Life

Approximately 1000 measurements.

Operating Environment

60.8~104.0°F (16.0~40.0°C), < 95% RH

Storage Environment

-13~131°F (-25.0~55.0°C), < 95% RH

Guarantee of Quality

Certification ISO 13485

Conformity EN 12470-5 & EN 60601-1

ASTM laboratory accuracy requirements in the display range of 37° to 39°C (98 to 102°F) for IR thermometers is +/- 0.2°C (+/-0.4°F) whereas for mercury-in-glass and electronic thermometers, the requirement per ASTM standards E667-86 and E1112 is +/-0.1°C (+/-0.2°F). *Full responsibility for this product meeting applicable portions of this standard is assumed by 180 INNOVATIONS, Lakewood, CO 80215
Device Standards: Device corresponds to the requirements of the standard for infrared thermometers: ASTM E 1965, IEC 60601-1, IEC 60601-1-2
Electromagnetic Compatibility: Device fulfills the stipulations of the standard IEC 60601-1-2

Limited Warranty

This device is guaranteed for one year from the date of purchase against manufacturer's defect under normal, household use. Following the instructions closely will ensure years of dependable operation.

If the device does not function properly, please write 180 INNOVATIONS at 11100 West 8th Ave, Lakewood, CO 80215 or call customer service at 1-877-299-6700. Our representative will provide further instruction on how to correct the trouble or will ask you to return it for repair or replacement.

Thank you for purchasing a 180 INNOVATIONS product.

FCC Statement

NOTE: POTENTIAL FOR RADIO/TELEVISION INTERFERENCE (for U.S.A. Only)

Operation is subject to the following two conditions: 1) This device may not cause harmful interference, and 2) this device must accept any interference received, including interference that may cause undesired operation.

This product has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC rules.

These limits are designed to provide reasonable protection against harmful interference in a residential installation. The product generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If the product does cause harmful interference to radio or television reception, which can be determined by turning the product on and off, the user is encouraged to try to correct the interference by one or more of the following measures :

FCC Statement

- Reorient or relocate the receiving antenna.
- Increase the separation between the product and the receiver.
- Consult the dealer or an experienced radio/TV technician for help.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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