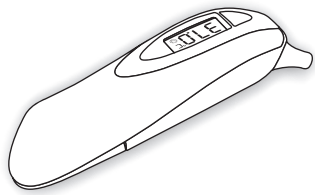




INSTRUCTION MANUAL



Infrared Ear Thermometer Model KI-8170

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

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

Contents

- Precaution 1
- Parts Identification2
- Information You Should Know Before Operating the IR Ear Thermometer 3
- Preparation for Use4
- How to Operate the Thermometer5
- Memory Mode 8
- Cleaning and Care.....9
- Error Message10
- Specifications..... 11
- Limited Warranty.....12
- FCC Statement13
- Additional Information14

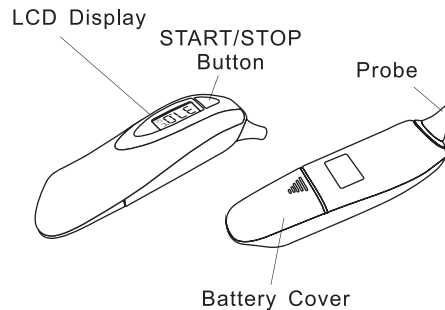
Precautions

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 AAA (1.5V) x 2

WARRANTY:
ONE YEAR FROM THE DATE OF
PURCHASE

Parts Identification



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.

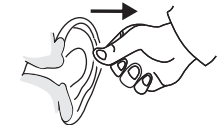
Information You Should Know Before Operating the IR Ear Thermometer

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:

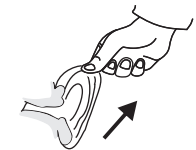
For Children under 12 months:

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.



Preparation for Use

Installing/Replacing the Battery

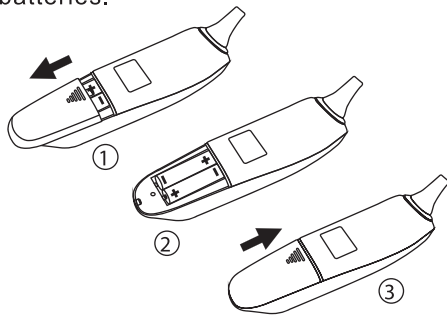
1. Slide the battery cover off in the direction shown.
2. Clean the battery contacts and also those of the device prior to battery re-installation.
3. Install two new "AAA" batteries into the battery compartment matching correct polarities.
4. Replace and fasten the battery cover securely.

WARNING:

Batteries contain mercury. Do not put in household trash. Manage as hazardous waste. Never dispose of in fire. Do not recharge, put in backwards or disassemble, as this may cause explosion, leakage and injury.

Caution:

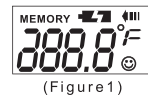
When replacing batteries, do not mix old ones and new ones. Do not mix alkaline, standard(carbon-zinc) or rechargeable(nickel-cadmium) batteries.



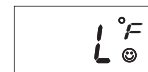
4

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 5 seconds until the OFF message is displayed. A long beep is heard. (Figure5)



(Figure1)



(Figure2)



(Figure3)



(Figure4)



(Figure5)

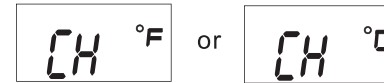
5

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.

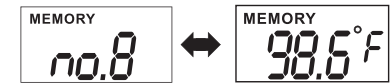
6

Memory Mode

Recalling Memory:

1. If the power is on, first turn off the device
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

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

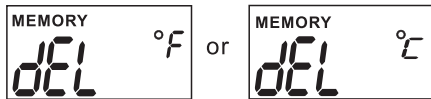
6. It is now ready to take a new temperature reading.

7

Memory Mode

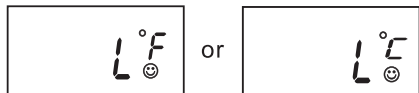
Deleting Memories:

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

| | |
|--|---|
| | Do not drop or expose thermometer to electric shock as this may adversely affect its performance |
| | Please do not modify or disassemble the unit. |
| | Please use a cotton swab with rubbing alcohol to gently clean the surface of the lens. Before next measurement, wait at least 40 minutes before using the unit. |
| | Please avoid thinner and benzene or other harsh cleaners. |
| | Please remove the batteries 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 |
|---------|---|
| | The temperature measured was higher than the specified measuring range. Please measure again. |
| | The temperature measured was lower than the specified measuring range. Please measure again. |
| | The ambient (room) temperature was outside the operating range. Keep it at room temperature approx. 60.8°~104°F (16°~40°C) for 30 minutes before using. |
| | Failed self-diagnostic test. Reinstall batteries and try again. |
| | Replace the two "AAA" batteries. |

Specifications

| | |
|-----------------------|--|
| Measurement Site | Ear canal |
| Measurement Time | 1 second |
| Measuring range | 90.0~109.9°F (32.2 ~ 43.3°C) |
| Accuracy | <ul style="list-style-type: none"> • 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) |
| Resolution | ±0.1°F (°C) |
| Memory Sets | One (or nine) sets |
| Operating Environment | 60.8 – 104°F (16 – 40°C) 15 – 95% RH (non condensing) |
| Storage Environment | -4 – 122°F (-20 – 50°C) |
| Battery | AAA x 2 |
| Battery Life | Approx. 1000 measurement cycles |
| Auto Shut Off | After 1 minute of non-use |
| Dimensions | 137mm x 33mm x 42mm |
| Weight | Approx. 48g (including batteries) |
| Warranty | 1 year |
| Guarantee of Quality | Certification ISO 13485 Conformity EN 12470-5 & IEC 60601-1 |

ASTM laboratory accuracy requirements in the display range of 98 to 102°F (37 to 39°C) for IR thermometers is ± 0.4°F (± 0.2°C), whereas for electronic and mercury-in-glass thermometers, the requirement is ± 0.2°F (± 0.1°C) per ASTM Standards E667-86 and E1112-86.

This device complies with all requirements of ASTM E1965-98 Standard Specification for Infrared Thermometers for Intermittent Determination of Patient Temperature, EN 12470-5 Clinical thermometers – Part 5: Performance of Infrared ear thermometers (with maximum device).

Limited Warranty

This device (batteries excluded) is guaranteed for one year from the date of purchase against manufacturer's defect under normal use and without evidence of tampering.

WARRANTY EXCLUSIONS:

- Device is not properly operated according to the instructions as described in this manual.
- Device shows any signs of tampering or attempted modification.
- Evidence of improper handling or storing, such as dropping, heat, liquid or cleaner damage.
- Natural disasters (such as fire, flood, earthquake, lightning).
- ***No receipt or proof of purchase showing date of purchase***

Following the instructions closely will ensure years of dependable operation.

If the device does not function properly, please contact 180 INNOVATIONS at info@180innovations.com or call 1-877-299-6700. Our representative will provide further instruction to correct the trouble or will ask you to return it along with proof of purchase for repair or replacement.

FCC Statement

POTENTIAL FOR RADIOS/TELEVISION INTERFERENCE (For USA 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:

- 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.

Additional Information

Full responsibility for this product meeting applicable portions of this standard is assumed by 180 INNOVATIONS, Lakewood, CO 80215. Clinical accuracy characteristics and procedures are available from 180 INNOVATIONS on request. Calibration is recommended every two years. 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

Any changes or modifications not expressly approved by 180 INNOVATIONS may void the user's authority to operate this device.

Made in China www.180innovations.com

REV.20160525

P/N 8281700016