Instant Ear Thermometer

Model 18-107-000

Please read this detailed guidebook completely before operating this unit.
**Helpful Hints**

- For infants, it is best to position infant flat with the ear facing upwards.
- For children and adults, it is best to stand behind and slightly to the side.
- Always take measurements in the same ear since temperature readings may differ from ear to ear.
- readings taken while a child is sleeping should not be compared to readings taken while awake.
- It is recommended to take three readings in the same ear with the highest interpreted as the reading for:
  - newborn infants in the first 100 days,
  - children under three years of age with compromised immune systems or with conditions where the absence of fever is critical,
  - a new user of an Instant Ear Thermometer until proper technique is established.
**Introduction**

Thank you for purchasing an Instant Ear Thermometer. Please read the following instructions to achieve the most accurate temperatures and safe operation. With proper care and use, your thermometer will provide you with many years of reliable readings.

Your Instant Ear Thermometer is intended for monitoring human body temperature in the home and is appropriate for all ages. It is less threatening than a rectal thermometer, is easier and faster than standard oral measurements and can even be used while a child is sleeping.

In one second, 512 readings are taken. These readings are converted into a single temperature with the peak temperature displayed on the screen.

**NOTE:** Measurements taken with an Instant Ear Thermometer are comparable to oral readings.

**Product Features**

Your Instant Ear Thermometer features an illuminating digital display. The display will illuminate for approximately 5 seconds every time the SCAN button is pressed to take a measurement. After each measurement is complete, the display will remain illuminated for approximately 5 seconds. The display will also illuminate for approximately 5 seconds every time the ‘M’ button is pressed to recall a reading in memory.
General Care & Important Information

Your Instant Ear Thermometer measures the heat radiated from the eardrum and the surrounding tissue. This energy is transferred through the probe and converted into a single temperature value. Although readings taken from the eardrum (tympanic membrane) can provide the most accurate readings, improper technique can generate lower readings, resulting in a misdiagnosed fever.

1. The thermometer should only be used under the supervision of an adult.
2. Earwax in ear canal may cause an inaccurate reading. Consult your healthcare professional for proper removal and ear cleaning procedures.
3. Do not use excessive force to insert probe into ear.
4. Do not use if ear canal is wet or if infection is present.
5. Ear measurements are comparable to oral measurements. Remember temperatures can vary from 97.0°F to 99.0°F (36.1°C to 37.2°C) and still may be considered ‘normal’. Time of day, level of activity, exercise and other activities can attribute to variations in temperature. However, unlike oral temperatures, factors such as smoking, talking and drinking do not affect ear measurements.
6. Do not walk, run or talk during temperature taking.
7. Clean the probe tip before and after each use.
8. Store the unit in the protective case when not in use.
9. Do not touch the probe with fingers.
10. Do not store the unit where it will be exposed to direct sunlight, dust or humidity. Avoid extreme temperatures.
11. Dropping or subjecting your thermometer to strong shocks should be avoided.
12. Do not attempt to disassemble the unit, except to replace the battery.
13. If measurement is not attainable, the unit must be replaced.

NOTE: Performance of the device may be degraded if: operated outside of stated temperature and humidity range; stored outside of stated temperature and humidity range; thermometer undergoes mechanical shock (drop); patient temperature is below ambient temperature.

Cleaning and Storage

To ensure accurate measurements, clean the probe lens before and after each use. Fingerprints and earwax can cause inaccurate readings.

To Clean:
• Use an alcohol swab or a soft cotton swab moistened with alcohol (70% Isopropyl) to the thermometer casing and probe lens, Figs. 1-3. Do not use paper towels. The fibers may scratch the lens.
• Make sure that liquid does not enter the interior of the thermometer.
• Never use abrasive cleaning agents, thinners or gasoline for cleaning.
• Do not immerse into water or other cleaning liquids.

To Store:
• Remove the battery if the thermometer will not be used for an extended period of time.
• Store in a sun-free and dust-free, dry area at a temperature between 68°F – 122°F (20°C – 50°C).
• Protect the thermometer from severe impact or shock. Keep stored in the protective storage case.
Taking a Reading

**NOTE:** Many pediatricians recommend the use of ear thermometers for children older than 6 months.

1. Press and hold the SCAN button for one second, then release. The system will perform a self-test, **Fig. 1**.

2. After performing the self-test, the display will show the last temperature taken, **Fig. 2**. The thermometer will beep indicating that the unit is ready for measurement.

3. Gently insert the probe snugly into the ear canal until a slight resistance is felt. Press the SCAN button, **Fig. 3**, and promptly release the button.

4. If the measurement is below 100.4°F (38°C), the thermometer will beep once and the measurement will be shown on the display with a happy face symbol, **Fig. 4**.

5. If the temperature is 100.4°F (38°C) or above, the thermometer will sound one long beep followed by two short beeps. The measurement will be shown on the display with a sad face symbol to indicate fever, **Fig. 5**.

6. Thermometer will automatically beep and shut off after approximately 1 minute of non-use.

**NOTE:** To ensure accuracy,
1. Please wait at least 10 seconds between successive readings.
2. Clean the probe lens before and after each use.

Changing Modes

Temperature readings can be displayed in either Fahrenheit or Celsius. To switch between °F or °C, press and hold the SCAN button. Without releasing, also press the ‘M’ button and toggle between the modes, **Fig. 1 and 2**.

Recalling Measurements in Memory

The last 10 measurements taken are automatically stored into memory. To recall measurements, press the SCAN button to turn the unit on. After the unit beeps, press the ‘M’ button to view measurements in memory. Continue to press the ‘M’ button to view the next previously stored measurement, **Fig. 1**. The unit will beep each time a recorded measurement is viewed.

Replacing the Battery

Your Instant Ear Thermometer requires one lithium battery, type CR2032. The battery needs to be replaced when the low battery symbol appears on the display.

To replace the battery:
1) Slide the battery cover off.
2) Using a non-metal pointed tool, carefully remove the battery and insert the new battery with the positive (+) side facing up.
3) Replace the battery cover.

**NOTE:** Please properly dispose the battery away from small children and heat.
Troubleshooting

<table>
<thead>
<tr>
<th>Display Symbol</th>
<th>Condition/Cause</th>
<th>Corrective Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lo</td>
<td>Measurement is below normal temperature range.</td>
<td>Retake temperature positioning the probe snugly into the ear canal.</td>
</tr>
<tr>
<td>Hi</td>
<td>Measurement is above normal temperature range.</td>
<td>Retake temperature positioning the probe snugly into the ear canal.</td>
</tr>
<tr>
<td>Err</td>
<td>Operating temperature is outside of the permissible range (60.8°F – 104.0°F; 16.0°C – 40.0°C).</td>
<td>Take thermometer to a room where the temperature is within the permissible range. Wait 45 minutes to stabilize thermometer. Retake temperature positioning the probe snugly into the ear canal.</td>
</tr>
<tr>
<td>Blank display</td>
<td>Blank display</td>
<td>Check battery polarity or voltage. May need to replace battery.</td>
</tr>
<tr>
<td>Low battery</td>
<td>Low battery</td>
<td>Replace battery immediately.</td>
</tr>
<tr>
<td>Low battery warning</td>
<td>Low battery warning</td>
<td>Unit will work; however, replace battery when possible.</td>
</tr>
</tbody>
</table>

Symbols

- Fahrenheit/Celsius: °F / °C
- Memory symbol and measurement number: ![Memory symbol](image)
- Scanning in progress: ![Scanning symbol](image)
- Low battery: ![Low battery](image)
- Happy face: Indicates temperature is lower than 100.4°F (38.0°C): ![Happy face](image)
- Sad face: Indicates temperature is higher than 100.4°F (38.0°C): ![Sad face](image)
Product Specifications

Name and model number
Instant Ear Thermometer, 18-107-000

Display system
Liquid Crystal Display with 0.1°F (0.1°C) resolution

Accuracy
±0.4°F, 96.8°F – 102.2°F (±0.2°C, 36.0°C – 39°C)
±0.5°F, <96.8°F or >102.2°F (±0.3°C, <36.0°C or >39°C)

Measuring range
93.2°F – 109.4°F (34.0°C – 43.0°C)

Memory
Automatically stores up to 10 readings.

Tone
One short beep sounds when the unit is turned ON. After the measurement is complete, one beep sounds for temperatures under 100.4°F (38.0°C). One long beep followed by two short beeps sound for temperatures over 100.4°F (38.0°C). One short beep sounds for temperatures <93.2°F (34°C) Lo or >109.4°F (43°C) Hi. Thermometer beeps once for each memory recall and when unit automatically turns off. Short rapid continually beeps indicate battery is low.

Operating temperature
60.8°F to 104.0°F (16.0°C to 40.0°C) at relative air humidity (not condensing) of up to 95%

Storage temperature
-4.0°F to 122.0°F (-20.0°C to 50.0°C)

Automatic power-off
Automatic shut off after approximately 1 minute of non-use.

Battery
1 each, CR2032 battery

Dimensions
4-1/2” (L) x 1-3/8” (W) x 1” (H) (11.5cm x 3.5cm x 2.5cm)

Weight
With battery, 1.6 ounces (45 grams)

Accessories
Storage case, Instruction Guidebook, Quick Start Guide, one CR2032 battery

Standards
Complies with US ASTM E-1965-98

Specifications are subject to change without notice.