INSTRUCTION MANUAL FOR
DIGITAL EAR THERMOMETER

Model: CTD 504
(Antibacterial Model)
Instruction Manual for
Digital Ear Thermometer
Model: CTD 504 (Antibacterial Model)

PARTS NAMES / Display Symbols

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Measuring Result. Displays the result in Fahrenheit or Celsius.</td>
</tr>
<tr>
<td>2</td>
<td>Low Battery Symbol. Flashes to alert the user to change the battery.</td>
</tr>
<tr>
<td>3</td>
<td>Too High Ambient Temperature. Refer to “Troubleshooting” for details.</td>
</tr>
<tr>
<td>4</td>
<td>Too Low Ambient Temperature. Refer to “Troubleshooting” for details.</td>
</tr>
<tr>
<td>5</td>
<td>Ready to Use Symbol. The CTD504 is ready to use.</td>
</tr>
<tr>
<td>6</td>
<td>Temperature Unit. The default setting is Celsius.</td>
</tr>
<tr>
<td>7</td>
<td>Memory Mode Symbol. With this symbol, the LCD screen displays the previous result.</td>
</tr>
</tbody>
</table>

PRECAUTIONS (Intended Use)

1. The CTD504 is a clinical electronic thermometer that uses an infrared sensor to detect the body temperature of people of any age from the auditory canal in a home setting.
2. Do not use the CTD504 as a replacement for medical advice. Consult your doctor if you have any concerns.
3. ONLY the CTD504 probe tip is waterproof. Do not immerse it in water or any other liquid.
4. Do not drop the CTD504, and avoid any strong impact.
5. Do not use the CTD504 on any body part other than your ear.
6. Do not move or shake your body while measuring.
7. Do not use for any purpose other than the intended use. The manufacturer is not liable for misuse.
8. The CTD504 can measure up to six times a day. To know your normal body temperature range, we suggest you measure regularly.
9. If any damage occurs to the sensor inside the probe tip or to the unit itself, return the product to your local distributor.
10. Keep the CTD504 away from children. Do not let them use the CTD504 on their own. They may choke on the battery or tiny component parts by accident.
11. Install a new CR2032 lithium battery when the power is low. Use of any other battery may lead to inaccurate results or malfunction.
HOW TO SWITCH FROM °C TO °F (FROM °F TO °C).
1. In power-off mode, press and hold the START button for 6 seconds. When °C starts flashing, release the button.
2. Press the START button again to switch from °C to °F.
3. Wait until the CTD504 automatically shuts off and restarts. It is now ready to use.

RECALL MEMORY
1. In power-off mode, press and release the START button to enter Memory Recall Mode. Press the START button again. The LCD screen displays the first memory set number with the latest measuring result.
2. Press the START button repeatedly to scroll through all 12 stored results in a loop.

ERASE MEMORY
1. While holding the START button, press and release the |O button. The CTD504 starts up.
2. When the LCD displays the previous measuring result, release the START button.
3. To check memory erasing, turn the CTD504 off, and enter Memory Recall Mode again.

BATTERY REPLACEMENT
- °C flashes: You can still measure, but the accuracy may not impaired.
- °F lights or no reaction at all: Change the battery as soon as possible.

Note: Change the battery away from small children and any source of heat.

HOW TO OPERATE
1. Press the I/O button. The LCD screen displays all digital segments.
2. If the CTD504 has saved past results, the LCD screen automatically displays the latest result.
3. When °C or °F flashes with a short beep, the CTD504 is ready to use.
   1. To improve accuracy, follow the illustrations below. For adults, pull the ear up and back. For infants and children, pull the ear back.

   Adults
   Infants and Children

2. Fit the probe tip into the ear canal, and then press the START button. Release the button and wait a few seconds until you hear a long beep.
3. Take the CTD504 out of the ear canal. The LCD displays the latest measuring result. Without any operation, the CTD504 automatically shuts off after 1 minute.

Note: Before re-measurement, wait 1 – 3 minutes.
CLEANING INSTRUCTIONS
The CTD504 does not require a probe cover during use. Clean and disinfect the CTD504 before and after each use. If you wish to share the CTD504 with others, follow the instructions below.
◆ Preparation
  2. 70 % concentration alcohol swab: Available in supermarkets.
Note: Dispose of used cotton buds and alcohol swabs in accordance with local regulations.
◆ Cleaning : Probe area
Use a clean cotton bud to wipe off any visible dirt or ear wax. Gently wipe the area clean.
Note: The most delicate and sensitive part of the CTD504 is the sensor inside the probe tip. Poking it with force may cause damage to the CTD504. When cleaning, take extra care.

Hold the CTD504 facing down to prevent water getting into the CTD504. Use an alcohol swab to clean the probe area in a circular motion for 15 seconds (around 20 times).

DISINFECTION (Probe & Exterior Area)
1. Hold the CTD504 facing down to prevent water getting into the CTD504. Use an alcohol swab to clean the probe area in a circular motion for 15 seconds (around 20 times).
2. Then, use the same alcohol swab to wipe the exterior area back and forth for another 15 seconds (around 20 times).
3. Wait at least 30 seconds until the CTD504 is completely dry.

Continue to set units on the next page, and start measuring. Repeat the steps above when measurement is done.

NOTE:
Do not use detergent or any strong chemicals on the CTD504.

FEVER ALERT
The CTD504 has a built-in “Fever Alert” feature. If you have a fever between 37.5 °C – 43.0 °C (99.5 °F – 109.4 °F), the “Fever Alert” function will inform you by a flashing result, red LED backlight, and a series of beeps.
NOTE: Do not use the CTD504 as a replacement for medical advice. Consult your doctor if you have any concerns.

MAINTENANCE and STORAGE
◆ Storage
  1. If you will not use the CTD504 for over 2 months, remove the battery from the compartment.
  2. Always store the CTD504 in its container after use.
  3. ONLY the CTD504 probe tip is waterproof. Do not dip it in water or any other liquid.
4. Keep the CTD504 away from:
  • Extreme temperatures
  • Overly humid or dry environment
  • Direct sunlight
  • Dusty places.

5. For details of environmental conditions, refer to “Specifications”. Using the CTD504 outside the stated range may lead to inaccurate results or malfunction.
◆ Maintenance
  1. Do not disassemble or change any parts of the CTD504. Such action may reduce its accuracy.
  2. Do not drop the CTD504, and avoid any strong impact.

ABOUT THE EAR THERMOMETER
Normal body temperature differs by body parts, time and age. Here are two tables for your reference:
1. Normal Body Temperature Range

<table>
<thead>
<tr>
<th>Site</th>
<th>Age</th>
<th>0 – 2 years old</th>
<th>3 – 10 years old</th>
<th>11 – 65 years old</th>
<th>Over 65 years old</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral</td>
<td>N/A</td>
<td>95.9 – 99.5 °F</td>
<td>35.5 – 37.5 °C</td>
<td>97.6 – 99.6 °F</td>
<td>36.4 – 37.6 °C</td>
</tr>
<tr>
<td>Rectal</td>
<td>97.9 – 100.4 °F</td>
<td>36.6 – 38.0 °C</td>
<td>97.9 – 100.4 °F</td>
<td>36.6 – 38.0 °C</td>
<td>98.6 – 100.6 °F</td>
</tr>
<tr>
<td>Axillary</td>
<td>94.5 – 99.1 °F</td>
<td>34.7 – 37.3 °C</td>
<td>96.6 – 98.0 °F</td>
<td>35.9 – 36.7 °C</td>
<td>95.3 – 98.4 °F</td>
</tr>
<tr>
<td>Ear</td>
<td>97.5 – 100.4 °F</td>
<td>36.4 – 38.0 °C</td>
<td>97.0 – 100.0 °F</td>
<td>36.1 – 37.8 °C</td>
<td>96.6 – 99.7 °F</td>
</tr>
<tr>
<td>Core</td>
<td>97.5 – 100.4 °F</td>
<td>36.4 – 38.0 °C</td>
<td>97.5 – 100.0 °F</td>
<td>36.4 – 37.8 °C</td>
<td>98.2 – 100.2 °F</td>
</tr>
</tbody>
</table>

TROUBLESHOOTING

<table>
<thead>
<tr>
<th>LCD screen</th>
<th>Description &amp; Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>⚠️ flashes</td>
<td>Battery power is low, but the CTD504 can still measure.</td>
</tr>
<tr>
<td></td>
<td>➜ Remove the worn-out battery. Insert a new CR2032 battery as soon as possible. Without enough energy, the CTD504 cannot function as it should.</td>
</tr>
<tr>
<td>⚠️ lights</td>
<td>Battery power is too low to measure.</td>
</tr>
<tr>
<td></td>
<td>➜ Remove the worn-out battery. Insert a new CR2032 battery as soon as possible.</td>
</tr>
</tbody>
</table>

**Outside displayed temperature range I**

Result is higher than 43.0 °C (109.4 °F).

➜ The user should rest in a steady room temperature for at least 30 minutes. Then measure again.

**Outside displayed temperature range II**

Result is lower than 34.0 °C (93.2 °F).

➜ The user should rest in a steady room temperature for at least 30 minutes. Then measure again.

**Error symbol I**

Disturbance occurred while measuring.

➜ Repeat the measuring steps again. If the error persists, return the CTD504 to your local distributor.

**Error symbol II**

Memory error occurred while measuring.

➜ Repeat the measuring steps again. If the error persists, return the CTD504 to your local distributor.

OTHER INFORMATION

This product conforms to the provisions of the EC directive 93/42/EEC (Medical Device Directive). And also complies with following standards (included but not limited):

- Safety standard:
  EN 60601-1 Medical electrical equipment part 1: General requirements for safety

- EMC standard:
  EN 60601-1-2 Medical electrical equipment part 1-2: General requirements for safety- Collateral standard: Electromagnetic compatibility- Requirements and tests

- Performance standards:
  EN 12470-5, Clinical thermometers - Part 5: Performance of infra-red ear thermometers (with maximum device)

Follow instructions for use.

Temperature range:

+40°C (104°F)

The upper and lower limits of temperature.

Keep dry.
Recalibration Notice

Every CTD504 is properly calibrated right after production.

We recommend that USERs bring the CTD504 to certain laboratories every 2 years for proper recalibration.

The CTD504 does not need periodic recalibration, if the user handles it according to this manual.

### SPECIFICATIONS

<table>
<thead>
<tr>
<th>Measurement method</th>
<th>Infrared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimension (L × W × H)</td>
<td>120 × 39 × 52 mm / 4.73 × 1.54 × 2.03 inch</td>
</tr>
<tr>
<td>Weight (without battery)</td>
<td>66.80 g / 2.36 oz</td>
</tr>
<tr>
<td>Measurement range</td>
<td>34.0 °C – 43.0 °C (93.2 °F – 109.4 °F)</td>
</tr>
<tr>
<td>Low temperature display</td>
<td>Temperature&lt;34.0°C (93.2°F): display: L°C (L°F)</td>
</tr>
<tr>
<td>High temperature display</td>
<td>Temperature&gt;43.0°C (109.4°F): display: H°C (H°F)</td>
</tr>
<tr>
<td>Display resolution</td>
<td>0.1 °C or 0.1 °F</td>
</tr>
<tr>
<td>Lab accuracy</td>
<td>35.5 °C – 42.0 °C (95.9 °F – 107.6 °F): ± 0.2 °C (± 0.4 °F)</td>
</tr>
<tr>
<td>Other range</td>
<td>± 0.3 °C ( ± 0.5 °F)</td>
</tr>
<tr>
<td>Clinical accuracy (repeatability)</td>
<td>± 0.3 °C / ± 0.5 °F</td>
</tr>
<tr>
<td>Memory sets</td>
<td>12</td>
</tr>
<tr>
<td>Auto power off</td>
<td>1 minute</td>
</tr>
<tr>
<td>Battery</td>
<td>CR2032 lithium battery (3V) × 1</td>
</tr>
<tr>
<td>Battery life</td>
<td>1000 times</td>
</tr>
<tr>
<td>Operating conditions</td>
<td>Temperature: 10.0 °C – 40.0 °C (50.0 °F – 104.0 °F)</td>
</tr>
<tr>
<td></td>
<td>Humidity: 15 % – 95 % R.H.</td>
</tr>
<tr>
<td>Storage/Transportation conditions</td>
<td>Temperature: -25.0 °C – 55.0 °C (-13.0 °F – 131.0 °F)</td>
</tr>
<tr>
<td></td>
<td>Humidity: ≤ 95 % R.H.</td>
</tr>
<tr>
<td>Safety classification</td>
<td>BF Type equipment</td>
</tr>
<tr>
<td>Accessory</td>
<td>CR2032 lithium battery (3V) × 1</td>
</tr>
</tbody>
</table>
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