**Operating Instructions**

### Temperature Taking

**Place the Probe Cover**

1. Proper installation of the probe cover ensures accurate measurements.
2. Keep the probe covers away from children.

**Power On**

1. Press the “ON/MEM” button (on the left side) to turn the temperature meter on.
2. See the “ON” icon on the LCD and hear two beeps.

**Taking Ear Temperature**

1. Gently pull the ear back to straighten the ear canal and snugly position the probe into the ear canal, aiming towards the membrane of the eardrum to obtain an accurate reading.

**Measuring**

1. Insert the probe into the probe cover fixer (in the storage box) until you feel a “click.” That means the probe cover has been connected firmly.
2. Insert the probe into the probe cover fixer (in the storage box) until you feel a “click.” That means the probe cover has been connected firmly.

**Press the “Scan” button for 1 second until you hear a long beep sound. The measurement is completed. You can read the result from LCD.**

**Fever Alarm:**

If the thermometer detects a body temperature ≥ 37.5°C (99.5°F), three short beep sounds will follow one long beep sound to warn the user for potential fever.

**Power Off**

Automatically shut down after 1 minute pending to extend battery life.

### Other Functions

- **Last Reading**
  - After getting a new temperature reading, the last reading will be shown on the screen (at top right corner) with the ☑ icon.

- **Memory Locations (25 sets)**
  - When power on, Press the “ON/MEM” button to see the temperature records with ☑ icon.

- **°C / °F Switch**
  - To change the LCD from °C to °F: In ‘Power Off’ mode, press and hold the “SCAN” button, then press the “ON/MEM” button for 3 seconds, icon “°C” will be switched to icon “°F.” You can also use the same process to change the LCD display from “°F” to “°C.”

### Specifications

- **Temperature measurement range:** 34~42.2°C (93.2~108°F)
- **Operating temperature range:** 10~40°C (50~104°F)
- **Storage temperature range:** It should be stored at room temperature between -20~+50°C, RH ≤ 85%
- **Transportation temperature shall be less than 70°C, RH ≤ 95%**
- **Accuracy:** ±0.2°C (0.4°F) within 35.5~42°C (95.9~107.6°F), ±0.3°C (0.5°F) for other range.
- **Fever alarm & Memory, °C / °F Switch function**
- **Battery:** one lithium cell battery (CR2032 1pcs), Battery life is estimated at 3,000 readings. Enable normal use: 1 year
- **This thermometer converts the ear temperature to display its “oral equivalent.” (according to the result of the clinical evaluation)**
- **E-LED Backlight (optional)**
  - LED Backlight will be automatically turned on after measurement, and automatically turned off after 5 seconds.
  - There is no gender and age limitation for using infrared thermometer.
  - This is not an AP or AGP product.
**Normal Body Temperature**

Normal body temperature is a range that will fluctuate throughout the day. The normal range for adult body temperature is typically considered to be 36.1 to 37.8°C (97 to 100°F). The body temperature varies by age, person, gender, time of day, position of body, and is usually highest in the evening. It can be affected by activity, emotion, clothing, medications, ambient conditions, hormones and other factors. Normal temperature will also be different depending on the place on the body at which the temperature is taken, with rectal or ear temperature readings generally being higher than oral temperature readings, and armpit temperature readings generally lower than oral readings.

Temperature variations affected by age:

<table>
<thead>
<tr>
<th>AGE</th>
<th>Temp.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td></td>
</tr>
<tr>
<td>Old</td>
<td>36.4°C (97.5°F) ~ 38.0°C (100.4°F)</td>
</tr>
<tr>
<td>0 ~ 2 yrs</td>
<td>36.1°C (97.0°F) ~ 37.8°C (100.0°F)</td>
</tr>
<tr>
<td>3 ~ 10 yrs</td>
<td>35.9°C (96.6°F) ~ 37.6°C (99.7°F)</td>
</tr>
<tr>
<td>11 ~ 65 yrs</td>
<td>35.8°C (96.4°F) ~ 37.5°C (99.5°F)</td>
</tr>
<tr>
<td>&gt; 65 yrs</td>
<td></td>
</tr>
</tbody>
</table>

Clinical repeatability: 0.18°C (<1 year old), 0.17°C (1-5 years old), 0.15°C (>5 years old)

**Important Notes**

The probe is the most delicate part of the thermometer. Use with care when cleaning the lens to avoid damage.

**Replace the probe cover after each use to ensure an accurate reading and avoid cross contamination.**

- Storage temperature range: It should be stored at room temperature between -20 ~ +50°C, RH < 85%.
- Transportation temperature shall be less than 70°C, RH < 95%.
- Keep the unit dry and away from any liquids and direct sunlight.
- The probe should not be submerged into liquids.

If device is accidentally used without probe cover, clean the probe as follows:

- a. After the measurement, please use the cotton swab with the Alcohol (70% concentration) to clean the lens, (on the inside of the probe).
- b. Allow the probe to fully dry for at least 1 minute.

Note: Please check if the device is damaged once it drops. If you can’t make sure of it, please send the complete device to your local dealer for recalibration.

**Warranty**

Warranty: 12 months

Manufacture Date: as the serial number (please open the battery cover, it is shown on the inside of the device.) Ex.SN.E912A000001, the first “E” is External, the second number “9” is the manufacture year 2009, the third and the fourth number “12” is the manufacture month, the others is the serial number.

Note: The thermometer is calibrated at the time of manufacture. If at any time you question the accuracy of temperature measurements, please contact the dealers or nearest service address.

Please read the instructions for use BF type applied part

Portable and mobile HF communication equipment can affect medical electrical equipment such as this product. This device complies with

CISPR 11 group 1, Class B. During measurement it is recommended to keep at least 1.5 meter separation between this device and the surrounding electrical devices. If interference occurs, please increase the separation further or turn off the electrical equipment in the vicinity. For detailed description regarding the EMC precautions you need to take, please contact our authorized representative or us on address as given below.

Add: 1F, No.3, Industrial East 9th Road, Science-Based Industrial Park, HsinChu, Taiwan 300.

Medical Technology Promedt Consulting GmbH
Add: Altenhofstrasse 80, D-66386 St. Ingbert, Germany

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**Trouble shooting**

<table>
<thead>
<tr>
<th>Error Message</th>
<th>Problem</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Er 1</td>
<td>Measurement before device stabilization.</td>
<td>Wait until all the icons stops flashing.</td>
</tr>
<tr>
<td>Er 2</td>
<td>The device showing a rapid ambient temperature change.</td>
<td>Allow the thermometer to rest in a room for at least 30 minutes at room temperature: 10°C and 40°C (50°F ~ 104°F).</td>
</tr>
<tr>
<td>Er 3</td>
<td>The ambient temperature is not within the range between 10°C and 40°C (50°F ~ 104°F).</td>
<td>Check the integrity of the probe cover and take a new temperature measurement.</td>
</tr>
<tr>
<td>H1</td>
<td>Temperature taken is higher than +42.2°C (108°F)</td>
<td>For detailed description regarding the EMC precautions you need to take, please contact our authorized representative or us on address as given below.</td>
</tr>
<tr>
<td>Lo</td>
<td>Temperature taken is lower than +34°C (93.2°F)</td>
<td>Make sure the probe cover is clean and take a new temperature measurement.</td>
</tr>
<tr>
<td></td>
<td>Device cannot be powered on to the ready stage.</td>
<td>Change with a new battery.</td>
</tr>
</tbody>
</table>

Note: This device complies with

CE Marked

ISO 13485

GSM R11 group 1, Class B. During measurement it is recommended to keep at least 1.5 meter separation between this device and the surrounding electrical devices. If interference occurs, please increase the separation further or turn off the electrical equipment in the vicinity.
The TH7xy series is intended for use in the electromagnetic environment specified below. The customer or the user of the TH7xy series should assure that it is used in such an environment.

**Emissions test**

- **Compliance**
  - Group 1

- **Electromagnetic environment – guidance**
  - The TH7xy series uses RF energy only for its internal function. Therefore, its RF emissions are very low and are not likely to cause any interference in nearby electronic equipment.

- **RF emissions CISPR 11**
  - Class B

- **Harmonic emissions IEC 61000-3-2**
  - Not applicable

- **Voltage fluctuations/flicker emissions IEC 61000-3-3**
  - Not applicable

**Guidance and manufacturer’s declaration – electromagnetic immunity**

The TH7xy series is intended for use in the electromagnetic environment specified below. The customer or the user of the TH7xy series should assure that it is used in such an environment.

**Imunity test**

- **IEC 60601 test level**
  - 3 Vrms
  - 3 V/m

- **Compliance level**
  - Not applicable

- **Electromagnetic environment – guidance**
  - Portable and mobile RF communications equipment should be used no closer to any part of the TH7xy series, including cables, than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter.

**Recommended separation distance**

<table>
<thead>
<tr>
<th>Frequency Range</th>
<th>Separation Distance (m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>150 kHz to 800 MHz</td>
<td>( d = \frac{P}{80} )</td>
</tr>
<tr>
<td>800 MHz to 2,5 GHz</td>
<td>( d = \frac{P}{1,2} )</td>
</tr>
</tbody>
</table>

where \( P \) is the maximum output power rating of the transmitter in watts and \( d \) is the recommended separation distance in meters.

Field strengths from fixed RF transmitters, as determined by an electromagnetic site survey, should be less than the compliance level in each frequency range. Interference may occur in the vicinity of equipment marked with the following symbol:

**Recommended separation distances between portable and mobile RF communications equipment and the ME EQUIPMENT or ME SYSTEM**

The TH7xy series is intended for use in an electromagnetic environment in which radiated RF disturbances are controlled. The customer or the user of the TH7xy series can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and the TH7xy series as recommended below, according to the maximum output power of the communications equipment.

**Recommended separation distances**

- For transmitters rated at a maximum output power not listed above, the recommended separation distance \( d \) in meters (m) can be estimated using the equation applicable to the frequency of the transmitter, where \( P \) is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer.

<table>
<thead>
<tr>
<th>Transmitter Power (W)</th>
<th>Separation Distance (m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.1</td>
<td>12</td>
</tr>
<tr>
<td>1</td>
<td>12</td>
</tr>
<tr>
<td>10</td>
<td>12</td>
</tr>
<tr>
<td>100</td>
<td>12</td>
</tr>
</tbody>
</table>

For transmitters rated at a maximum output power not listed above, the recommended separation distance \( d \) in meters (m) can be estimated using the equation applicable to the frequency of the transmitter, where \( P \) is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer.

**Power frequency magnetic field**

- **IEC 61000-4-8**
  - 3 A/m

**NOTE UT** is the a.c. mains voltage prior to application of the test level.