


84mm

145.00mm


## Instruction Manual

### Non-Contact, Multimode Infrared Forehead Thermometer



**Model ET03**

**Hamilton Buhi**



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### Safety Information

- This product is only suitable for the purpose described in the instructions.
- The manufacturer is not liable for damage caused by incorrect use.
- Please operate under appropriate environmental conditions.
- Stop using the device if you think this device is damaged or malfunctioning.
- Do not attempt to disassemble this device yourself.
- This equipment includes sensitive components and must be treated with care.
- Follow storage and operating conditions as described in the technical specifications section.
- This is not a toy. Keep away from small children.
- This device contains small parts. Children should not use this device unless under adult supervision.
- Keep away from extreme temperatures, shocks and drops, pollution and dust, direct sunlight, hot and cold environments.
- When the device is not in use for an extended period (3 months or more), remove the battery as a safety precaution.
- Do not use the thermometer near large electromagnetic fields such as found with cordless or cell phones.
- Never immerse this device in water or other liquids.
- Do not use any chemicals to clean this device.
- Keep device away from water, heat and direct sunlight.
- Do not put in close proximity with metal products such as other batteries, coin, etc., to prevent short circuiting.
- Do not expose to a fire, or it might explode.
- Battery disposal should follow local standards.

⚠ Use of this device is not a substitute for medical attention.

### Product Information

In order to ensure the accuracy of the measurement and the safety of use, please read the instructions carefully.

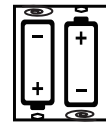
- In the early stages of fever, vasoconstriction may occur, and the temperature of the skin surface decreases. At this time, the measured temperature may be abnormally low.
- If the measurement result does not match the individual's diagnosis or the measured temperature seems abnormally low, repeat the measurement every 15 minutes or take another temperature in a different core zone of the body to calibrate the measurement result.

### Features

- Infrared Temperature Measurement
  - Body Temperature
  - Object Temperature
- Memory Storage Function (32 readings)
- Two Temperature Units – °C Celsius and °F Fahrenheit
- Automatic Shutdown Function – after approx. 40 seconds of non-use (Battery-Saving Mode)

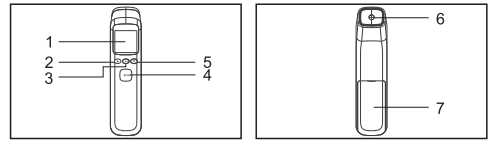
### Battery Installation

On the back of the unit, push down the battery cover horizontally and place 2 "AAA" batteries (not included) in the battery compartment correctly according to the "+" and "-" and securely replace the cover.

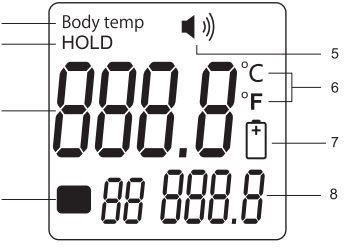


\*Always dispose of used batteries/electronics in accordance with the prevailing community regulations that may apply to the disposal of batteries/electronics.

### Unit Diagram



- LCD Display
- ▲ Button
- Mode Button
- Scan Button
- ▼ Button
- Infrared Sensor
- Battery Door Cover



- Body Temperature
- HOLD Object Temperature
- Temperature Reading
- LOG: Temperature Memory (1-32)
- ON/OFF Indicator
- °F Fahrenheit or °C Celsius Switch
- Low Battery Indicator
- Memory Temperature Readings

### Taking Temperature Measurements


This Infrared Thermometer measures the infrared radiant energy on the forehead or the ear of the human body and converts it into the corresponding body temperature value.

There are 2 modes for measuring temperature. You can switch between these 2 modes by pressing "▼" button to toggle between the modes:


- Body Temp = for measuring a person's temperature
- HOLD = for measuring an object's temperature

- Point the thermometer sensor to the desired surface (1-20mm distance) and press the scan button for approx. 3 seconds for a reading.

Body Temp Mode



HOLD Mode


- When the reading is complete, the thermometer will beep and the temperature will be displayed on the LED screen.
- To switch between °F Fahrenheit or °C Celsius mode for the reading, press the "▲" button to toggle back and forth.
- When the temperature of an individual is too high, in BODY TEMP mode, above 42°C / 107.6°F, the LED screen will illuminate red and show that the temperature is "HI" instead of reading a value.
- When the temperature of an individual is too low, in BODY TEMP mode, below 32°C / 89.6°F, the LED screen will show that the temperature is "LO" instead of reading a value.
- After approximately 40 seconds of non-use, the thermometer will turn off and go into battery-saving mode.

### Taking Temperature Measurements (continued)

- Press the "SCAN" Button or aim the thermometer and press the "SCAN" button to take a temperature or to turn it back on.
- Temperature History
  - The unit will automatically store temperature readings up to 32 times.
  - To view temperature history, hold down the "MODE" button for 3 seconds until you see "LOG" displayed on the bottom left corner of the screen.
  - Use the "▲" or "▼" buttons to read the previously scanned temperature readings (up to 32 readings).
  - To exit the temperature history, press the "MODE" button for 3 seconds.

### Tips for Accurate Measurements

- Ensure the temperature sensor is clear of dirt or dust.
- Ensure the forehead is clean and dry.
- Ensure the individual's temperature has not been affected by exercise or extreme emotions prior to temperature readings.
- Do not hold the thermometer for an extended period of time as it is sensitive to heat.
- If the thermometer or the individual has been transferred from one place to another where the ambient conditions are different, wait for a minimum of 30 minutes before use.
- Before checking an object's temperature, clean its surface with a dry, soft cloth.

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### Technical Specifications

| Method                | Non-contact  |
|-----------------------|--|
| Operating Distance    | 0mm-20mm   |
| Body Measuring Range  | Normal range: 32°C-42.2°C<br>Shows "Lo" when lower than 32°C<br>Shows "Hi" when higher than 42°C |
| Display Resolution    | 0.1°C/0.1°F  |
| Body Accuracy         | Body mode: 35°C-42°C ±0.2°C; Others: ±0.3°C  |
| Operating Temperature | 10°C-40°C (50°F-104°F), Humidity ≤85%  |
| Storage Temperature   | -20°C-55°C (-4°F-131°F), Humidity ≤85%   |
| Power                 | 3V 1.5W AAA (NO.7) 2   |
| Power Dissipation     | ≤30mW  |
| Low Voltage Indicator | Shows battery symbol when battery voltage is too low   |
| Memory                | 32 groups  |
| Display               | (C)/(F)  |
| Automatic Turn Off    | 30 sec-40 sec  |
| Size                  | 166mm*39mm*40mm  |
| Net Weight            | 68.6g (Not including battery)  |
| Body Accuracy         | ±0.3°C   |

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### Electromagnetic Compatibility

**⚠ Note:**

- This product conforms to relevant requirements of YY0505 electromagnetic compatibility.
- The user shall install and use the product according to the electromagnetic compatibility information provided in the random file.
- Convenient and mobile RF communication equipment may affect the performance of the product, avoid strong electromagnetic interference when using, as if close to a mobile phone, microwave oven, etc.
- The guide and manufacturer's statement are attached.


**⚠ Warning:**

- This product should not be used close to or stacked with other equipment.
- If it must be used close to or stacked, it should be observed to verify whether the equipment can operate normally under such conditions.
- This product may be disturbed by other equipment even if other equipment meets the launch requirements of corresponding national standards.

**EMC Table:**

| Guidance and manufacturer's declaration-electromagnetic emissions   |  |  |   |
|---|--|--|---|
| The ET03 is intended for use in the electromagnetic environment specified below. The customer of the user of the ET03 should assure that it is used in such an environment. |  |  |   |
| Emissions test  | Electromagnetic environment guidance   |  |   |
| RF emissions<br>GB 4824   | Group 1<br>The product 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<br>GB 4824   | Class B<br>The product is suitable for use in all establishments, including domestic establishments and those directly connected to the public low-voltage power supply network that supplies buildings used for domestic purpose. |  |   |
| Harmonic emissions<br>GB 17625.1  | Not Applicable   |  |   |
| Voltage fluctuations<br>Flicker emissions<br>GB 17625.2   | Not Applicable   |  |   |
| Guidance and manufacturer's declaration-electromagnetic immunity  |  |  |   |
| The ET03 is intended for use in the electromagnetic environment specified below. The customer of the user of the ET03 should assure that it is used in such an environment. |  |  |   |
| Immunity Test   | EC 60601 test level  | Compliance level                                     | Electromagnetic environment guidance  |
| Electrostatic discharge<br>GB/T 17626.2   | GB/T 17626.2<br>±8kV contact<br>±15kV air  | Electrostatic discharge<br>±8kV contact<br>±15kV air | None should be used, concrete or ceramic tile. If none are covered with synthetic material, the rubber handle should be at least 30%. |
| Electrostatic fast transient/burst<br>GB/T 17626.4  | ±2kV for power supply lines<br>±1kV for input/output lines   | Not Applicable                                       | Not Applicable  |
| Surge<br>GB/T 17626.5   | (±1kV line-to-line)<br>(±2kV line-to-earth)  | Not Applicable                                       | Not Applicable  |

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| Interruptions and voltage variations on power supply input lines<br>GB/T 17626.11   | <5% UT for 0.5 cycle<br>>5% UT for 5 cycles<br>(50% dip in UT)<br>70% UT for 25 cycles<br>(50% dip in UT)<br><5% UT<br>(±95% dip in UT)<br>for 5 sec | Not applicable   | Not Applicable   |
|---|--|------------------|--|
| Power frequency<br>GB/T 17626.8   | 3A/m   | 3A/m<br>3000Hz   | Power frequency magnetic fields include the field characteristics of a typical location in a typical commercial or hospital environment.   |
| NOTE: UT is the a.c. mains voltage prior to application of the test level   |  |                  |  |
| Guidance and manufacturer's declaration - electromagnetic immunity  |  |                  |  |
| The product is intended for use in the electromagnetic environment specified below. The Customer or the user of the product should assure that it is used in such an environment.   |  |                  |  |
| Immunity test   | EC 60601 Test Level  | Compliance level | Electromagnetic environment guidance   |
| Conducted RF<br>GB/T 17626.6  | 30V (Value)<br>150 kHz to 80 MHz   | Not applicable   | Portable user made RF communications equipment should be tested to ensure that it is not affected by the electromagnetic environment. The test should be conducted in a typical location in a typical commercial or hospital environment. The frequency of the transmitter, in the range of 150 kHz to 80 MHz, should be 1.2 V/m<br>d = 1.2 V/m<br>80 MHz-800 MHz<br>d = 2.3 V/m<br>800 MHz-2.5 GHz<br>Where V is the maximum output power rating of the transmitter, in watts (W) according to the transmitter manufacturer and d is the recommended separation distance in meters (m). |
| Conducted RF<br>GB/T 17626.3  | 3V/m<br>80 MHz-25 GHz  | 3V/m             | Field strength from fixed RF transmitters, as determined by an electromagnetic site survey. If should be taken into account the propagation level in each frequency range. Interference may occur in the vicinity of equipment marked with the following symbol:<br>  |
| NOTE 1: At 80 MHz and 800 MHz, the higher frequency range applies.<br>NOTE 2: These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.   |  |                  |  |
| a. Field strengths from fixed transmitters, such as base stations for radio cellular mobile telephony and mobile radio, should not be considered. The radio frequency field strength in the location in which the product is used should be measured. An electromagnetic site survey should be conducted. The applicable RF compliance level above, the product should be observed to verify normal operation. If abnormal phenomena is observed, additional measurements may be necessary. Steps for returning to reducing the product, b. Over the frequency range 150 kHz to 80 MHz, field strengths should be less than 3 V/m |  |                  |  |

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

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

| Immunity Test                               | EC 60601 test level       | Compliance level          | Electromagnetic environment guidance |
|---|---------------------------|---------------------------|--------------------------------------|
| Rated maximum output power of transmitter/W | 150MHz-80MHz<br>d=1.2 V/m | 80MHz-800MHz<br>d=1.2 V/m | 800MHz-2.5GHz<br>d=2.3 V/m           |
| 0.01  | Not Applicable            | 0.12                      | 0.23                                 |
| 0.1   | Not Applicable            | 0.38                      | 0.73                                 |
| 1   | Not Applicable            | 1.2                       | 2.3                                  |
| 10  | Not Applicable            | 3.8                       | 7.3                                  |
| 100   | Not Applicable            | 12                        | 23                                   |

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.

NOTE 1: At 80 MHz and 800 MHz the separation distance for the higher frequency range applies.  
NOTE 2: These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.

### Description of hazardous substances

The name and content of harmful substances in the product

| Component        | Hazardous substance |    |    |         |     |      |
|------------------|---------------------|----|----|---------|-----|------|
|                  | Pb                  | Hg | Cd | Cr (VI) | PBB | PBDE |
| Shell            | O                   | O  | O  | O       | O   | O    |
| PCBA             | X                   | O  | O  | O       | O   | O    |
| Package material | O                   | O  | O  | O       | O   | O    |
| Label/ticker     | O                   | O  | O  | O       | O   | O    |
| Cell             | X                   | X  | O  | O       | O   | O    |
| Li battery       | X                   | X  | O  | O       | O   | O    |

Remark: This form has been prepared in accordance with SJ/T 11364.  
O: Indicates that the content of the harmful substance in all homogeneous materials of the component is specified limit of GB/T 26572 is as follows.  
X: Indicates the content of the hazardous substance in at least one homogeneous material of the component Exceed the limit stipulated by GB/T 26572.

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