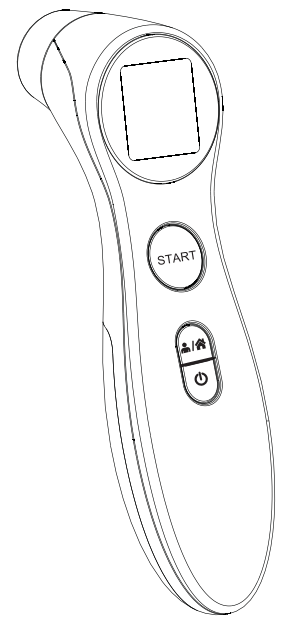


size:340*297mm

BESTMED Owner's Manual Infrared Forehead Thermometer Model DET-306

Model DET-306



Introduction

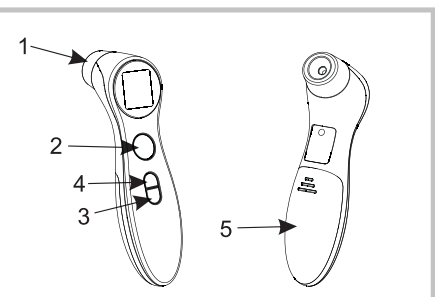
The DET-306 infrared forehead thermometer is specifically designed for safe use on the forehead. The Infrared Forehead Thermometer is a device capable of measuring people's body temperature by detecting the intensity of infrared light emitted from the forehead.

Please read all instructions carefully and thoroughly before using this product.

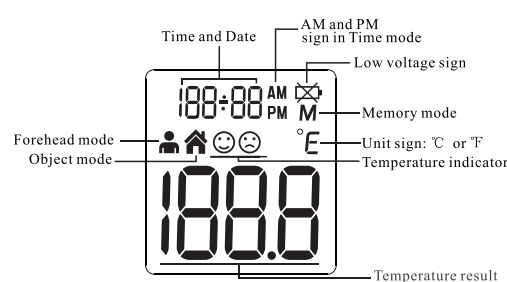
- 1. There is no gender or age limitation for using infrared forehead thermometer. This thermometer can be reused by many people.
2. Use of this Forehead thermometer is not intended as a substitute for consultation with your physician.
3. Do not allow children to take their temperatures unsupervised, some parts are small enough to be swallowed.
4. Never immerse this device in water or other liquids(not waterproof).
5. Do not modify this equipment without authorization of manufacturer.
6. Do not expose the thermometer to temperature extremes (below -25°C/-13°F or over 55°C/131°F) nor excessive humidity (>95%RH).
7. Keep the battery away from children.
8. Remove battery from the device when not in operation for a long time.

Product Description

- 1. Probe
2. START Button
3. ON Button
4. Mode Button
5. Battery Cover



LCD Display Introduction



Basic Functions

Table with 2 columns: Function Name and Description. Functions include Real Time Clock, Forehead Mode, Object Mode, Beep Alarm, Memory Mode, and °C/°F Switch.

Forehead Thermometer Advantages

Infrared Forehead Thermometer measures core body temperature, which is the temperature of a body's vital organs. (See Figure 1) This thermometer is designed to measure the temperature of the skin surface over the temporal artery, a major artery of the head.

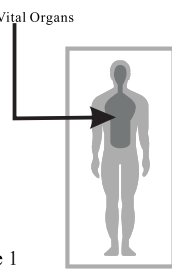


Figure 1

Real Time Clock Setting

When using thermometer for the first time, please set the parameters of the thermometer. With the thermometer off, press and hold ON BUTTON to enter into setting mode for 3 seconds.

- 1. Set the time format: The device can display the time in either an AM/PM (12-hour) or a 24:00(24-hour) format. Press and release START BUTTON to select the format. With the preferred time format on the display, press ON BUTTON, the Hour figure is flashing automatically.
2. Set the hour: Press and release the START BUTTON to advance one hour until the correct hour appears. After the hour is set, press ON BUTTON, the Minute figure is flashing automatically.
3. Set the minute: Press and release the START BUTTON to advance one minute until the correct minute appears. After the minute is set, press ON BUTTON, the Year figure is flashing automatically.

Real Time Clock Setting

- 1. Set the year: Press and release the START BUTTON to advance one year until the correct year appears. After the year is set, press ON BUTTON, the Month figure will appear.
2. Set the month: Press and release the START BUTTON to advance one month until the correct month appears. After the month is set, press ON BUTTON, the Date figure is flashing automatically.
3. Set the date: Press and release the START BUTTON to advance one day until the correct month appears. After the day is set, press ON BUTTON to exit the setting mode.

Temperature Taking Hints

To ensure that the reading always reflects the body temperature accurately, you need to take account of the following factors which may affect an accurate reading.

- 1. It is important to know each individual's normal temperature when they are well. This is the only way to accurately diagnose a fever. To determine normal temperature, take multiple readings when healthy. Re-measure with a standard digital thermometer for confirmation.
2. Users must be inside for 30 minutes before taking a measurement. Note: Users and the thermometer should be in the same ambient temperature for at least 10 minutes before taking a reading.
3. Users should not drink, eat, or be physically active such as bathing, showering, shampooing and hair drying before/while taking the measurement. Remove hat and hair and wait 10 minutes before taking a reading.
4. Oils or cosmetics on the forehead may give a lower temperature reading than the actual one. Remove dirt from the forehead before taking a measurement. Wait at least 10 minutes after washing the forehead area before taking a reading.

Temperature Taking Hints

- 5. Holding a hand on the forehead for any length of time will affect the temperature reading.
6. Do not take temperature over scar tissue, open sores or abrasions.
7. Do not use the thermometer on a perspiring or sweating forehead, as this may affect the reading.
8. Don't take a measurement while or immediately after nursing a baby.
9. Do not use this thermometer outdoors.
10. Do not take temperatures with this thermometer near places that are very hot, such as fireplaces and stoves.
11. The probe window of the thermometer is the most delicate part of the device. Do not touch the probe window. The accuracy of the reading may be affected if the probe window is damaged or dirty.
12. If the thermometer is stored in a significantly different environment than testing location, place it in the testing location for approximately 30 minutes prior to use.
13. It is not intended for use in the oxygen rich environment or presence of flammable anesthetic mixture with air, oxygen or nitrous oxide.

Illustration For Use

- 1. To measure forehead temperature: Press the ON BUTTON. The display is activated to show all segments. After self-checking Figure 2 appears on the display screen with beeps, so you can start a new measurement.
2. Aim the thermometer at the center of the forehead with a distance of 2 to 3 cm(See Figure 3) and then press the START BUTTON.

Note: Do not remove the thermometer from the forehead before hearing the final beep. A waiting period of 3 seconds between testing is recommended to ensure complete accuracy.

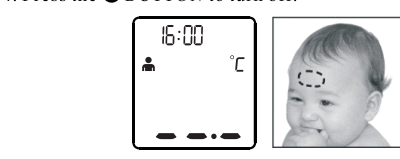


Figure 2



Figure 3

Illustration For Use

How to change the forehead mode and object mode: You can press ON BUTTON to switch the mode between Forehead mode and Object mode.

To measure object temperature: 1. Press the ON BUTTON to turn on the thermometer, you can take the object temperature after hearing two beep sounds. (see figure 4) 2. Aim the thermometer at the center of the object you want to measure with a distance of 1 to 2 cm. 3. Press the START BUTTON and then read the temperature on the display. 4. Press the ON BUTTON to turn off.



Figure 4

Illustration For Use

After measurement: 1. Power off: Device will automatically shut off if left idle for more than 1 minute to extend battery life. 2. Clean the probe after each use to ensure an accurate reading and avoid cross contamination. (See the section of Care and Cleaning for details.)

BackLight: In forehead mode: 1. The display will be lighted GREEN for 3 seconds with a happy face when the unit is ready for measurement and a measurement is completed with a reading less than 37.3°C(99.1°F). 2. The display will be lighted YELLOW for 3 seconds with a happy face when a measurement is completed with a reading less than 37.8°C(100.0°F). 3. The display will be lighted RED for 3 seconds with a bad face when a measurement is completed with a reading equal to or higher than 37.8°C(100.0°F).

Temperature indicator: 1. If the temperature reading is below 37.8°C(100.0°F), a happy face will be displayed next to the reading. 2. If the temperature reading is 37.8°C(100.0°F) or above, a bad face will be displayed next to the reading.

Memory Mode

- 1. The Memory Mode can be accessed either in forehead mode or object mode. When the thermometer has been turned on and followed by Figure 2/4 or finished testing, press and hold the ON BUTTON for three seconds. The letter M will appear in the center right corner of the display. (See Figure 5)
2. The thermometer will automatically memorize the last 10 temperature readings. Each memory also records the measurement date/time mode icon. Each time the ON BUTTON is pressed, the screen displays past readings that correspond with a number 1-10. The number 1 reflects the most recent reading, while the number 10 reflects the oldest reading stored in memory.(See Figure 6)
3. In the memory mode, M mark or M mark always exist. The user can press the START BUTTON to take new measurements.

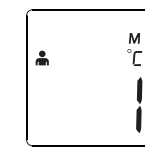


Figure 5

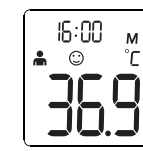


Figure 6

Selecting A Temperature Scale

- 1. Temperature readings are available in the Celsius (°C) or Fahrenheit (°F) scale.
2. With the thermometer off, press and hold the START BUTTON for 3 seconds to enter into unit changing mode.
3. Press and release START BUTTON to select the unit.
4. When the preferred unit on the display, press ON BUTTON to exit the unit changing mode.

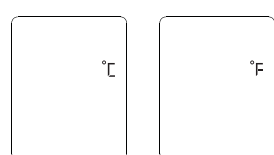


Figure 7

Care And Cleaning

- 1. The probe window must be kept clean, dry, and undamaged at all times to ensure accurate readings. The accuracy of temperature readings can be affected by damage to the probe window, or the presence of dirt, fingerprints, earwax, dust and other soiling compounds on the probe window. Degraded sensors can degrade performance or cause other problems.
2. Periodic cleaning and disinfection of the device following in order to prevent patient cross infection. Please clean and disinfect the thermometer immediately after each use.
For cleaning:
1) Soak a clean soft cloth in drinking water, wring it out and then wipe the thermometer(including probe) no less than 3 times;
2) Then use another clean soft cloth to wipe the residue water on thermometer;
3) Put the thermometer in the original packaging.
For disinfection:
1) Soak a clean soft cloth in drinking water, wring it out and then wipe the thermometer(including probe) no less than 3 times;
2) Then use another clean soft cloth to wipe the residue water on thermometer;
3) Using a clean soft cloth dipped in 70% medical alcohol, wipe the probe 3 times, at least one minute for each time;
4) Using a clean cotton swab dipped in 70% medical alcohol, wipe the sensor window 3 times;
5) Wait at least 10 minutes to let the alcohol volatilization and then put the thermometer in the original packaging
3. Use a soft, dry cloth to clean the thermometer display and exterior.
4. The thermometer is not waterproof. Do not submerge the unit in water when cleaning.
5. Store the thermometer in a dry location, free from dust and contamination and away from direct sunlight.
6. Strong electromagnetic fields may interfere with the proper operation of the thermometer. The device needs special pre-cautions regarding EMC according to the EMC information.
7. Put the thermometer back to the original packaging after using.

Battery Replacement

- 1. Replace battery when "Lo" appears in the upper right corner of LCD display. (See Figure 8)
2. Slide battery cover down as shown in Figure 9.
3. Remove battery and install 2 new AAA alkaline batteries as shown in Figure 10.
4. Slide battery cover back on.

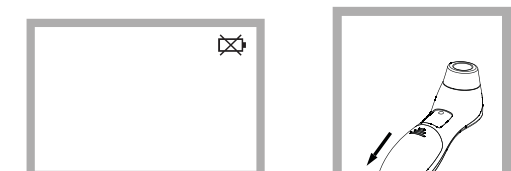


Figure 8

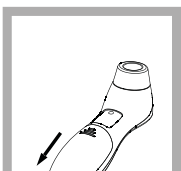


Figure 9

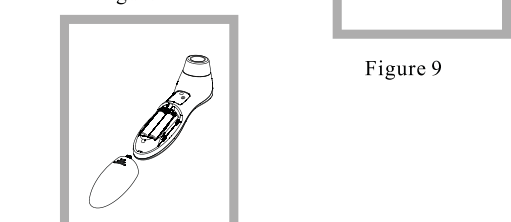


Figure 10

Specifications

Table with 2 columns: Measuring range, Measuring site, Reference body site, Operation mode. Values include: Forehead mode: 34.0°C-43.0°C(93.2°F-109.4°F); Object mode: 0.0°C-100.0°C(32.0°F-212.0°F); Forehead/Forehead Mode; Oral (This thermometer converts the forehead temperature to display in digital mode); Forehead mode/Adjust mode.

Table with 2 columns: Laboratory accuracy, Display resolution, Measuring time, Operating temperature range, Storage and transport temperature range, Clinical accuracy, Shock, Dimension, Weight, Battery, Battery life, Expected service life, Ingress protecting rating.

Troubleshooting

Table with 3 columns: Error message, Problem, Solution. Messages include Er1, Er2, Er3, Er4, Er5.

Table with 3 columns: Error message, Problem, Solution. Messages include Hi, Lo, and a battery warning icon.

Calibration

The thermometer is initially calibrated at the time of manufacture. If the thermometer is used according to the use instruction, periodic readjustment is not required. However, we recommend checking calibration every two years or whenever clinical accuracy of the thermometer is in question. Please send the complete device to the dealers or manufacturer.

The above recommendations do not supersede the legal requirements. The user must always comply with legal requirements for the control of the measurement, functionality, and accuracy of the device which are required by the scope of relevant laws, directives or ordinances where the device is used.

A clinical summary and procedures for checking calibration are available upon request. Turn on the thermometer and press the power button long time until entering into calibrate mode, software version will be displayed.

ASTM laboratory accuracy requirements in the display range of 36.0 to 39.8 °C (96.8 to 103.2 °F) for IR thermometers is ±0.2°C(±0.4°F), whereas for mercury-in-glass and electronic thermometers, the requirement per ASTM Standards E67-98 and E-112-86 is ±0.1°C(±0.2°F).

Table with 2 columns: Type-BF applied part, Direct Current. Includes disposal instructions and batch code information.

Service

The thermometer has a limited one year warranty. Do not attempt to disassemble or repair the thermometer by yourself. Should service be required during or after the warranty period you must contact the manufacturer. Repackage the thermometer carefully in its original packaging or securely pack to avoid damage during shipping. Include the original sales slip indicating the date of purchase, a note describing the problem, and your return address. Send the thermometer prepaid and insured. The lay operator or lay responsible organization should contact the manufacturer or the manufacturer's representative.

Warranty

This appliance conforms to the following standards: ASTM E1965-98 Standard Specification for Infrared Thermometers for Intermittent Determination of Patient Temperature, ISO 80601-2-56 Medical electrical equipment—Part 2-56: Particular requirements for basic safety and essential performance of clinical thermometers for body temperature measurement, IEC 60601-1-11 Medical electrical equipment—Part 1-11: General requirements for basic safety and essential performance—Collateral Standard: Requirements for medical electrical equipment and medical electrical systems used in the home healthcare environment and complies with the requirements of IEC 60601-1-2(EMC), AAMI ANSI ES60601-1(Safety) standards. And the manufacturer is ISO 13485 certified.

The thermometer is warranted by manufacturer to be free from defects in material and workmanship under normal use and service for a period of one year from the date of delivery to the first user who purchases the instrument. This warranty does not cover batteries, damage to the probe window, or damage to the instrument caused by misuse, negligence or accident, and extends to only the first purchaser of the product.

FCC Information

Caution: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user authority to operate the equipment. Note: This equipment 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. This equipment generates, uses, and can radiate radio frequency energy. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try and correct the interference by one or more of the following measures: - Reorient or relocate the receiving antenna. - Increase the distance between the equipment and the receiver. - Connect the equipment to an outlet on a circuit different from that to which the receiver is connected. - Consult the dealer or an experienced radio/TV technician for help.

Electromagnetic Compatibility Information

The device satisfies the EMC requirements of the international standard IEC 60601-1-2. The requirements are satisfied under the conditions described in the table below. The device is an electrical medical product and is subject to special precautionary measures with regard to EMC which must be published in the instructions for use. Portable and mobile HF communications equipment can affect the device. Use of the unit in conjunction with non-approved accessories can affect the device negatively and alter the electromagnetic compatibility. The device should not be used directly adjacent to or between other electrical equipment.

Table 1: Guidance and declaration of manufacturer's electromagnetic emissions. Includes columns for Emissions test, Compliance, and Electromagnetic environment guidance.

Warning: 1. The use of this equipment adjacent to or stacked with other equipment should be avoided because it could result in improper operation. If such use is necessary, this equipment and the other equipment should be observed to verify that they are operating normally. 2. Portable RF communications equipment (including peripherals such as antenna cables and external antennas) should be used no closer than 30 cm (12 inches) to any part of the (M/E EQUIPMENT OR ME SYSTEM), including cables specified by the manufacturer. Otherwise, degradation of the performance of this equipment could result.

Table 2: Guidance and declaration of manufacturer's electromagnetic immunity. Includes columns for Immunity test, Compliance, and Electromagnetic environment guidance.

Table 3: Guidance and declaration of manufacturer's electromagnetic immunity. Includes columns for Immunity test, Compliance, and Electromagnetic environment guidance.

Table 4: Recommended separation distances between portable and mobile RF communications equipment and the device. Includes columns for W, 80 MHz to 800 MHz, 900 MHz to 2.7 GHz.

For transmission and a maximum output power and load 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 of the transmitter in watts (W) according to the transmitter manufacturer.

NOTE1: At 80 MHz and 900 MHz, the separation distance for the higher frequency range applies. NOTE2: These guidelines may not apply in all situations. Electromagnetic protection is affected by absorption and reflection from structures, objects and people.