

## WF-1000

Infrared Ear/Forehead Thermometer



EN Instructions for use

### 1. INTRODUCTION

Dear consumer! We congratulate you with a B.Well infrared thermometer buying! Thank you for choosing our product!

#### WF 1000 has the following advantages:

- 2 in 1 unique design: it can take ear temperature and forehead temperature, i.e. one for two functions.
- Instant measurement: it provides you the reading in seconds.
- Convenient, economic, probe cover free, waterproof probe and easy to clean.

### 2. INTENDED PURPOSE

Infrared thermometers are used for measuring body temperature by measuring the heat generated by the eardrum or the surface skin of the forehead.

### 3. PRECAUTIONS

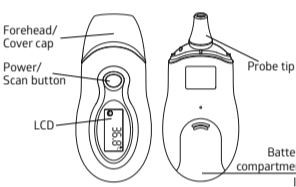
When using this product, please be sure to follow all the notices listed below. Any action against these notices may cause injury or affect the accuracy.

- Do not disassemble, repair or remodel the thermometer.
- Be sure to clean the thermometer lens each time after usage.
- Avoid direct finger contact with the lens.
- No modification of this equipment is allowed.
- It is recommended that user may take 3 temperatures. If they are different, use the highest reading.
- Do not expose the thermometer to extreme temperature, very high humidity, or direct sunlight.
- Avoid extreme shock or dropping the device.
- Before the measurement, patients and thermometer should stay in steady state room condition for at least 30 minutes.
- Avoid measuring temperature in 30 minutes after exercise, bathing or returning from outdoor.
- To protect the environment, dispose of empty batteries at appropriate collection sites according to national or local regulations.
- It is ill-advised to disassemble the thermometer.
- Please use the thermometer solely for its intended purpose.
- Carefully hold the device when in use to avoid dropping the device.
- Allow one minute between successive measurements as slight variations may occur if measurements are taken over a short period of time. Use average temperatures instead.
- There are no absolute body temperature standards. Keep reliable records of your personal temperature to serve as a reference for judging a fever.
- Under any circumstances, the temperature taking result is ONLY for reference. Before taking any medical action, please consult your physician.
- It is recommended to calibrate the device every 1 year.
- Please keep this device away from pets, pests, and children.
- Danger of explosion if battery is incorrectly replaced. Replace only with the same type recommended by the manufacturer, discard used batteries according to the manufacturer's instructions.

### 4. CONTRAINDICATIONS

Contraindications: are not revealed.

### 5. PRODUCT IDENTIFICATION



### 6. DESCRIPTION OF LCD DISPLAY

- 38.8 °C Measurement display
- °C or °F Celsius Scale or Fahrenheit Scale
- "Measurement in progress" symbol
- Battery warning symbol
- Last memorized
- Forehead Scan Mode
- Ear Scan Mode
- Object Scan Mode
- Temperature Display
- Err Error

### 7. WHAT IS A "NORMAL" TEMPERATURE?

Infrared forehead temperature readings are equivalent to oral temperature readings.

| MEASURING METHODS    | NORM           |
|----------------------|----------------|
| Ear measurement      | 35.5 – 37.5 °C |
| Forehead measurement | 35.5 – 37.3 °C |

### Tips for measuring human temperature

Bear in mind that the thermometer needs to have been in the room in which the measurement is taken for at least 30 minutes before use.

#### NOTE:

- Some people produce different readings in their left and right ear. In order to record temperature changes, always measure a person's temperature in the same ear.
- The ear thermometer may be used by children only under adult supervision. Measurement is usually possible over the age of 6 months. In infants under 6 months, the ear canal is still very narrow so the temperature of the eardrum often cannot be recorded and the result displayed is often too low.
- The measurement must not be taken in an ear affected by inflammatory diseases (e.g. discharging pus or secretion), after possible ear injuries (e.g. eardrum damage) or in the healing period after operative procedures. In all of these cases, please consult your doctor.
- Use of the thermometer on different persons can be inappropriate in the event of certain acute infectious diseases because of the possible spread of germs despite cleaning and disinfection. If you have any doubts, please consult your doctor.
- This thermometer may only be used without a disposable protective cover.
- If you have been lying on one ear for some time, the temperature is slightly raised. Wait a little while or measure in the other ear.
- As ear wax can affect the measurement, you should clean the ear before measuring if necessary.

### 8. HOW TO TAKE YOUR TEMPERATURE

To switch from ear scan mode to forehead scan mode, simply take off the Cover cap. To switch from forehead scan mode to ear scan mode, put on the Cover cap again. It is recommended to use your thumb to pull from either side of the Cover cap to remove it easily.

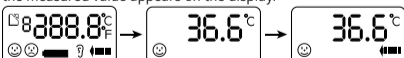
When taking the forehead temperature, the reading is provided for reference only because the condition of skin is likely affected by the surroundings.

#### Measuring body temperature in the ear

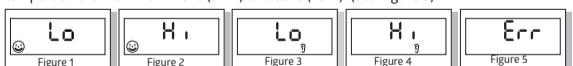
- Press the Power/Scan button for 1 second to switch the thermometer on. All symbols appear in the display at first. The last temperature measured will appear. As soon as the Ear measurement mode "E" appears in the display, the device is ready for use. Following a successful self test, the device emits a beep.
- Make sure that the sensor tip and also the ear canal are clean. As the ear canal is slightly curved, you have to pull the ear slightly up and backwards before inserting the sensor tip. This is important so that the sensor tip can be pointed directly at the eardrum.
- Insert the sensor tip into ear canal carefully and then press the Power/Scan button for 1 second and release.
- The end of the measuring time is signalled with a short beep and the measured value appears on the display.

#### Measuring body temperature on the forehead

- Please note that the forehead/temple must be free from sweat and cosmetics and that taking medication and skin irritations can distort the result when measuring temperature on the forehead.
- Make sure that the Forehead/Cover cap is put on. Press the Power/Scan button for 1 second to switch the thermometer on. Following a successful self test, the device emits a beep.
- Place the measuring head with the Forehead/Cover cap fitted on the temples, hold on the Power/Scan button and move the thermometer smoothly over the forehead to the other temple.
- Release the button. The end of the measuring time is signalled with a short beep and the measured value appears on the display.



The screen displays "Lo" or "Hi" when the temperature measured is out of the measurement range. (See Figure 1, 2, 3, 4). The mark "Err" appears if the operating temperature is NOT within 15°C (59°F) and 35°C (95°F). (see Figure 5)



If the temperature is lower than 34°C or higher than 43°C the display shows "O" for object temperature.

To ensure a long battery life, this thermometer will be automatically power-off after every one minute idling.

### Measuring the temperature of air, water surface and items

Make sure the cap is on the thermometer. Turn on the thermometer. If you wish to measure the temperature at a specific spot or water temperature, point the thermometer to the spot, water surface (as close to water as possible, but do not immerse the thermometer in water), or surface of an item (bring the thermometer close to the object so that there is no distance). Press the measurement button once. The temperature measured will be displayed on the screen.

### 9. CLEANING INSTRUCTIONS

#### Lens/ Measurement Sensor:

Gently clean with an alcohol swab. Do not use water to wash the thermometer lens directly.

#### Thermometer:

Clean with a soft, dry cloth. Do not use water to rinse the device.

### 10. BATTERY REPLACEMENT

The low battery symbol will be shown at the lower part of the screen during the low battery power. Replace the battery as soon as possible. However, you may continue to use it (see Figure 6). When the battery power comes to the lowest value, the screen displays a "Lo" sign, the battery symbol on the screen blinks and

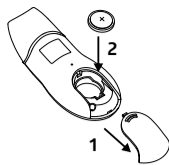
beep sounds are triggered (see Figure 7). It cannot work until the battery is replaced. At this moment, press any button to turn it off.

#### NOTE:

- When changing the batteries, use batteries of the same type, make and capacity.
- Do not use rechargeable batteries.
- Use batteries free from heavy metals.

#### To replace the battery:

- Open the battery case by sliding off the cover on the back of the unit.
- Remove used battery.
- Replace with a lithium 3V CR2032 battery in designated area. The larger part of the battery should be facing up. You should still be able to see the "+" sign when battery is installed.
- Slide the cover back on. Unit is ready for immediate use. Dispose of used batteries in accordance with the applicable legal regulations. Never dispose of batteries in the normal household waste.



NOTE: Please keep the battery away from children. Do not store the battery at a high temperature. It is recommended to remove the batteries if the unit will not be used for an extended period of time.

### 11. TROUBLESHOOTING

#### 1. Consistent low temperature readings.

- The Probe is not positioned properly. The probe tip must be snugged and fully seated against the opening of the ear canal. Failure to properly position the probe may lead to a low temperature reading (see "How to take your temperature" part).
- The Probe lens is dirty. Clean the lens with a piece of soft, alcohol moistened cotton cloth thoroughly (see "Cleaning instructions" part).

#### 2. Low battery warning.

- Battery power is too low to take the measurement. Replace the battery (see "Battery replacement" part).

#### 3. Error codes

When a malfunction or incorrect temperature measurement occurs, an error message will appear as described below.

| LCD Display | Cause  | Solution  |
|-------------|--|---|
| Hi          | The temperature measured is higher than 50°C (122°F)                       | Operate the thermometer only between the specified temperature ranges. If necessary, clean the sensor tip. In the event of a repeated error message, contact your retailer or Customer Services |
| Lo          | The temperature measured is lower than 10°C (50°F)                         |   |
| Err         | The operating temperature is not in the range 16°C - 40°C (60.8°F - 104°F) | Operate the thermometer only between the specified temperature ranges   |

### 12. APPLIED STANDARDS

This product conforms to the provisions of the EC directive MDD (93/42/EEC).

The following standards apply to design and/or manufacturing of the products:

- 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/EN 60601-1 Medical electrical equipment – Part 1: General requirement for safety
- IEC/EN 60601-1-2 Medical electrical equipment – Part 2: Collateral standard: Electromagnetic compatibility – Requirements and tests

### 13. PRODUCT SPECIFICATIONS

|                                      |   |
|--------------------------------------|---|
| Measuring range                      | 10°C – 50°C (50°F – 122°F)  |
| Human Body:                          | 34°C – 43°C +0.2°C (93.2°F – 109.4°F ±0.1°F)  |
| Object measurement:                  | 10°C – 33.9°C / 43.1°C – 50°C +5% (50°F – 93.02°F / 109.58°F – 122°F) ±5% 0.1°C (0.05°F)  |
| Display resolution                   | 15°C – 35°C (59°F – 95°F)   |
| Operating environment                | with relative humidity up to 95% (non condensing), -25°C – 55°C (-13°F – 131°F)   |
| Storage / Transportation environment | with relative humidity up to 95% (non condensing), -25°C – 55°C (-13°F – 131°F)   |
| Power supply                         | 1 × 3V CR2032 Size Lithium Battery  |
| Weight                               | ~ 51g (with batteries)  |
| Dimensions                           | ~ 110 × 34 × 50mm (W × D × H)   |
| Additional Features                  | 1. POST (Power-On-Self-Test)<br>2. Scanning Mode: Continuous scanning, automatic latch of maximum temperature reading.<br>3. Out of operating temperature (Lo/Hi) Indication.<br>4. Low battery power checking.<br>5. Waterproof lens and probe cover free. |

### 14. THERMOMETER SET

| Thermometer set:             |  |
|------------------------------|--|
| 1. Thermometer               |  |
| 2. Battery 1 × CR2032 LI, 3V |  |
| 3. Instructions for use      |  |

### 15. UTILIZATION

The unit must be utilized in accordance with current standards separately from domestic wastes. For utilizing it is necessary to contact special organizations licensed to make utilization.

### 16. WARRANTY

Warranty period is 2 years from the date of purchase. This warranty doesn't cover any damages caused by improper use, and also battery, protective cover and packaging. When a manufacturing defect is revealed during the warranty period a faulty unit would be repaired or, if repairing is impossible, replaced with another one.

Manufacturing date is on of the unit in a serial number: last 2 figures of the year, then month number. The manufacturer may change units partially or completely if necessary, without prior notice.

### 17. SYMBOL INFORMATION

**FOLLOW INSTRUCTIONS BEFORE USE**

**HOUSING INGRESS PROTECTION RATE:**  
IP 22 (Protected from the penetration of solid bodies with dimension greater than 12.5 mm. Protected from the penetration of vertically falling water drops)

**MANUFACTURER'S NAME**

**ARTICLE NUMBER**

**SERIAL NUMBER**

**TYPE BF EQUIPMENT**

**DISPOSAL FOR SEPARATE COLLECTION**

**CE MARK (0044)**

OPERATING CONDITION, TEMPERATURE 15°C – 35°C

STORAGE CONDITION, TEMPERATURE -25°C – 55°C

### ELECTROMAGNETIC COMPATIBILITY INFORMATION

| Emissions test                                       | Compliance     | Electromagnetic environment-guidance  |
|--|----------------|---|
| RF emissions CISPR 11                                | Group 1        | The WF-1000 Thermometer 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        | The WF-1000 Thermometer 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 purposes |
| Harmonic emissions IEC 61000-3-2                     | Not applicable |   |
| Voltage fluctuations/flicker emissions IEC 61000-3-3 | Not applicable |   |

The WF-1000 Thermometer is intended for use in the electromagnetic environment specific below. The customer or the user of the WF-1000 Thermometer should assure that it is used in such an environment.

| Immunity test   | IEC 60601 test level       | Compliance level          | Electromagnetic environment-guidance   |
|---|----------------------------|---------------------------|--|
| Electrostatic discharge (ESD) IEC 61000-4-2             | + 6 kV contact ± 8 kV air  | + 6 kV contact ± 8 kV air | Floors should be wood, concrete or ceramic tile. If floors are covered with synthetic material, the relative humidity should be at least 30%   |
| Power frequency (50/60 Hz) magnetic field IEC 61000-4-8 | 3 A/m                      | 3 A/m                     | Power frequency magnetic fields should be at levels characteristic of a typical location in a typical commercial or hospital environment   |
| Radiated RF IEC 61000-4-3                               | 3 V/m<br>80 MHz to 2.5 GHz | 3 V/m                     | Portable and mobile RF communications equipment should be used no closer to any part of the WF-1000 Thermometer, including cables, than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter.<br><b>Recommended separation distance</b><br>d=1.2√P<br>d=1.2√P 80 MHz to 800 MHz<br>d=2.3√P 800 MHz to 2.5 GHz<br>where P 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 metres (m).<br>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: |

NOTE 1 At 80 MHz and 800 MHz, 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.  
a. Field strengths from fixed transmitters, such as base stations for radio (cellular/cordless) telephones and land mobile radios, amateur radio, AM and FM radio broadcast and TV broadcast cannot be predicted theoretically with accuracy. To assess the electromagnetic environment due to fixed RF transmitters, an electromagnetic site survey should be considered. If the measured field strength in the location in which the WF-1000 Thermometer is used exceeds the applicable RF compliance level above, the WF-1000 Thermometer should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as reorienting or relocating the WF-1000 Thermometer.  
b. Over the frequency range 150 kHz to 80 MHz, field strengths should be less than 3 V/m.

The WF-1000 Thermometer is intended for use in an electromagnetic environment in which radiated RF disturbances are controlled. The customer or the user of the WF-1000 Thermometer can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and the WF-1000 Thermometer as recommended below, according to the maximum output power of the communications equipment.

| Rated maximum output power of transmitter W | Separation distance according to frequency of transmitter, m |                                |                                 |
|---|--|--------------------------------|---------------------------------|
|   | 150 kHz to 80 MHz<br>d = 1.2√P                               | 80 MHz to 800 MHz<br>d = 1.2√P | 800 MHz to 2.5 GHz<br>d = 2.3√P |
| 0.01  | 0.12   | 0.12                           | 0.23                            |
| 0.1   | 0.38   | 0.38                           | 0.73                            |
| 1   | 1.2  | 1.2                            | 2.3                             |
| 10  | 3.8  | 3.8                            | 7.3                             |
| 100   | 12   | 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.

Last revision 2020-W48

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