



EAR/FOREHEAD INFRARED THERMOMETER



BW-MTX1

MyThermo POCKET

THE MANUFACTURER RESERVES THE RIGHT TO MODIFY THE PRODUCT TECHNICAL SPECIFICATIONS WITHOUT PRIOR NOTICE.

Find out how to install and use the BewellConnect APP by visiting our website at https://bewell-connect.com/en/applications-support/

Dear Customer,

Thank you for purchasing MyThermo Pocket Infrared Ear/Forehead Thermometer BW-MTX1, by Visiomed. We hope that you enjoy using it and recommend reading this user guide carefully.

1. PRODUCT DESCRIPTION

Item	man jic
① Measurement button	30
② IR Probe	3
③ Forehead temperature cap	
4 Window of the probe	4
5 LCD display	
6 Battery	
Battery compartment	
8 °C/°F button	· ·
MEM button	•
10 Battery cover	7

2. SAFETY INSTRUCTION

It is important to read all the warnings and precautions in this manual. They are for your safety, to prevent injuries and avoid situations that could damage the device.

Consult your doctor, if you have a serious illness or if you want to know more about using this medical device.

2.1 Warning

- Do not use the unit to measure temperature near the air outlet of air fan or air condition.
- Do not use the unit out door or in strong sunshine.
- It is recommended to take 3 measurement each time, subject to the data displayed most.
- The unit will shut down automatically in 15s after measurement finished if no other operation.
- Do not leave this unit within the reach of children. A self-measurement taken forcibly by children can damage their ear. In the event of accidental ingestion of the battery or the protective film, see a physician immediately.

- The measurement results are for informational purposes only. If unsure about your results, please contact your physician.
- Do not use the unit if the probe is damaged.
- This product should not encourage you to self-medicate or adapt your treatment
- Stop using the unit if any pain occurs. There is a risk of damaging the ear canal.
- It is not recommended to use the device on patients with ear diseases such as otitis externa and tympanitis.
- Do not use the unit in a wet ear canal, such as after swimming or after a bath. There is a risk of damaging the ear canal.
- Do not touch or blow on the infrared sensor. A dirty or damaged infrared sensor may cause inaccurate results.

2.2 Caution

- △ Constraints before taking the temperature:
- △ For a forehead temperature reading (centre forehead), take care to brush away the hair, wipe any sweat off the brow, avoid air flows, (e.g. supplemental oxygen, air conditioning, etc.).
- To measure the tympanic temperature, make sure that the ear canal is clean, as an ear with excess wax can give inaccurate readings.
- If there is sweat on forehead or use ice to cool the temperature may cause the measuring temperature lower than its real value, do not use the unit under this circumstance.

Please contact your doctor when the unit is warning after measuring. High fever or fever in long time should go to hospital, especially for infants and children.

2.3 General precautions

- Use this unit only for its intended purpose as described in this manual.
- Follow the maintenance instructions specified in this manual.
- This device is designed for external use.
- Use and storage: Refer to the technical features (range of room temperature, relative humidity, atmospheric pressure).
- This unit should always be stored in a clean, dry place.
- Do not expose this unit to sunlight or water.
- Do not use this unit outdoors.
- Do not expose this unit to electrical shocks.
- Never drop this unit.
- Do not touch the screen by finger.
- Do not perform maintenance on this unit yourself. Do not attempt to open the unit. In the event of a problem, contact your retailer.
- Stop using the unit in the event of a failure or malfunction.
- This electrical medical equipment requires special precautions regarding electromagnetic compatibility. It must be installed and used in accordance with electromagnetic information provided in the EMC Data table.
- Readings may be distorted if the unit is used near a television, microwave oven, mobile phone or any other device with an electrical field.

3. PRODUCT INTENDED USE

The Ear/forehead Infrared Thermometer is intended for human body temperature measuring for all ages, especially for infant, children and adult. Body temperature can be achieved from forehead or ear canal. It is intended to be used for family healthcare and hospital clinical reference.



4. INTRODUCTION

It is imperative to use Pocket Thermometer appropriately to obtain a reliable and stable result. It is therefore advisable to read the instruction manual and safety instructions before use.

It is suitable for the whole family.

Normal temperature by age.

AGE	°C	°F
0-2	36.48.0	97.500.4
3-10	36.17.8	97.000
11-65	35.97.6	96.6 - –9.7
> 65	35.87.5	96.4 - –9.5

Chamberlain, J.M., et al., Determination of Normal Ear. Temperature with an Infrared Emission Detection Thermometer, Annals of Emergency Medicine, January 1995. / Chamberlain, J.M., et al., Determination of Normal Ear. Temperature with an Infrared Emission Detection Thermometer, Annals of Emergency Medicine, enero de 1995. / Chamberlain, J.M., et al., Determination of Normal Ear. Temperature with an Infrared Emission Detection Thermometer, Annales de médecine d'urgence, janvier 1995.

Normal temperature according to procedure.

Measurement method	Normal T°
Rectal	36.6 - 38°C
Oral	37.5°C
Axillary	34.7 - 37.3°C
Aural	35.8 - 38°C
Temporal/Forehead-Temple	35.8 - 37.8°C

Chamberlain, J.M., Terndrup, T.E., New Light on Ear Thermometer. Readings, Contemporary Pediatrics, March 1994. Chamberlain, J.M., et al., Determination of Normal Ear. Temperature with an Infrared Emission Detection Thermometer The temperature of the human body varies throughout the day. It can also be influenced by numerous external factors: age, sex, type and thickness of skin... / Chamberlain, J.M., Terndrup, T.E., New Light on Ear Thermometer. Readings, Contemporary Pediatrics, marzo de 1994. Chamberlain, J.M., et al., Determination of Normal Ear.

5. PRECAUTION BEFORE USE

The Pocket Thermometer is pre-configured at the factory. It is not necessary to calibrate the device when it is first use. To obtain reliable, stable results, please follow below instruction.

- Check the unit if there is any damage in appearance, check the LCD screen full display as below picture. Do not use the unit if any abnormality and contact your retailer. If battery capacity is low, follow the instruction to change a new battery.



- Before any new temperature measurement, wait for the screen to turn off.
- It is advisable, with each change of environment with a significant difference in ambient temperature, leave the MyThermo Pocket at this ambient temperature for at least 30 minutes before use. It is important to wait a period of 1 minute between measurements. If the person come from the different ambient temperature than the unit, please stay at least 5 minutes before taking temperature.
- If there is sweat on forehead or use ice to cool the temperature may cause the measuring temperature lower than its real value, do not use the unit under this circumstance.

6. BODY TEMPERATURE

The normal body temperature is located within a range, and a fixed value. Everyone has their own temperature range. When the body temperature rises or falls, the body initially regulates its temperature from the brain. Since the forehead and the ear are the body parts nearest the brain, they are the first to be informed of a temperature rise.

Practical considerations when taking a temperature

- In the interests of precision and measurement quality, it is essential that each user is adequately informed and trained in the temperature measurement technique when using such a device.
- It is essential to remember that the procedure of taking a temperature although simple, should not be ignored.
- The patient should not carry out strenuous activities before taking their temperature.
- Temperature fluctuations due to physiological factors must be taken into consideration in the evaluation of the results:
- The temperature increases by 0.5°C/0.9°F between 6:00 and 15:00,
- The average temperature of women is about 0.2°C / 0.36°F and varies according to their ovarian cycle,
- It increases by 0.5°C/0.9°F during the first half of the cycle and during the first months of pregnancy.
- Age, sex, type and thickness of skin.
- The temperature of a seated person is lower by around 0.3°C -.4°C/0.54°F -.52°F than that of a person standing.

Haut Conseil de Sante Publique [online]. Health Recommendations of the National Heatwave Plan 2014. P123 [Consulted on 25 July 2016] Available at http://social-sante.gouv.fr/IMG/pdf/ Recommendations_ sanitaires_Plan_canicule_2014. Pdf

7. SUGGESTIONS BEFORE MEASURING

- 1. Replace batteries that are too drained to effectively power the unit.
- 2. For a proper reading, condition the thermometer by placing it in the environment where the measurement will be taken 30 minutes before use.
- 3. An unexpected fluctuation of the ambient temperature may distort the accuracy of the reading. For example, if the temperature of the place where the measurement is taken is different from the temperature where the thermometer is stored, when one wants to take a temperature reading near an air conditioner. The results will be unreliable.
- 4. The measurement should be taken at rest, to yield accurate results.

Body temperature is likely to increase just after exercise or after a bath.

- 5. Before taking a temperature, in order to obtain a stable, reliable result
- Take care to brush away the hair.
- Wipe any sweat from the brow.
- Avoid air flows (e.g. supplemental oxygen, air conditioning, etc.).
- Wait a period of 1 minute between measurements.
- With each change of environment having a high ambient temperature difference, leave the thermometer at this ambient

temperature for at least 30 min before use.

8. MENU SETTING & FUNCTIONS

8.1 MAIN FUNCTIONS

- 1. Display of the temperature reading in degrees Celsius or Fahrenheit: Temperature range from 30°C to 43°C (86°F to 109.4°F).
- 2. Memorization of the last 10 readings taken: The temperature is recorded.
- 3. Audible alarm during temperature measurement based on the result.

8.2 CHOICE OF TEMPERATURE UNIT

Open the battery cover, press the °C/°F button to select the temperature unit. The display shows °C to display degrees Celsius, °F to display degrees of Fahrenheit.

8.3 HOW TO MEASURE TEMPERATURE

Insert the batteries. For the first use or when inserting new batteries, wait about 10 minutes to preheat the device.

1. For a forehead measurement

4. Picture A



- (1) Before measuring, dry your forehead and fix the forehead temperature cap on the device.
- (2) Press the measurement button once to start the temperature reading and release it. The last measuring result will be displayed after a full-screen-display. Aim the infrared probe at the forehead, and the probe need touch skin gently, then press the measuring button for one second. The unit will beep once. It indicates the measurement is completed. LCD Screen will display the measured temperature value, if the temperature exceeds the alarm temperature value, the buzzer will beep four times.
- (3) The infrared probe should be pointed to the centre of forehead (above the eyebrow) and kept vertical, the measured site cannot be covered by hair, and the device should be in contact with the forehead.
- (4) Holding the device in long time will make the detector read a higher ambient temperature, which may lead to an inaccurate measurement. (lower than actual temperature)
- (5) Keep static during the measuring.
- (6) The measured site is showed on picture A.

2. For a tympanic temperature measurement

Picture B



- (1) Before measuring, take off the forehead temperature cap. Insert the tympanic probe along the ear canal.
- (2) Press the measuring button to start, the last measuring result will be displayed after a full-screen-display. Insert the tympanic probe along the ear canal, and then press the measuring button for one second. The unit will beep once. it indicates the measurement is completed, and the LCD screen will display the measured temperature value.
- (3) If the temperature exceeds the alarm temperature value, the buzzer will beep four times.

- (4) Clean the ear canal before measuring.
- (5) In case of difficulty for inserting the probe, you can gently pull the ears backwards, insert gently along the ear canal, do not insert it strongly.
- (6) The measured site is showed on picture B.

Before any temperature measurements, take care to brush away the hair and clear any sweat from the forehead.

The result is automatically stored. When taking consecutive temperature measurements, it is possible that the results will not be identical. Wait at least 1 minute between each measurement.

8.4 DATA MEMORY

Open the battery compartment to access the setting buttons. Press the MEM button, the LCD screen reads and displays the last temperature reading.

- 1. --- will be displayed if no data is stored
- 2. Press the MEM button to scroll through the previous data, then press the °C/°F to scroll through the next data. 10 measurements are memorized.

Note: When changing batteries, the stored data will be erased.

BATTERY REPLACEMENT

During the measurement, if the the screen with icon flashing, it means the battery is drained;



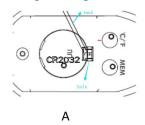
When the unit is turned on, and then turns off immediately, that also means the battery is drained.

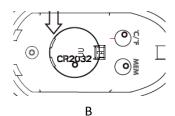
Remove the battery cover and use a tool to take out the old battery (below picture A), then place a new battery, taking care to respect the polarity.

The LCD screen will display all the symbols on the screen.

Use only new batteries (1 x CR2032), never use rechargeable batteries. Do not mix an old battery with a new battery. Replace the cover after inserting the battery (below picture B).

Insert a long and strong tool in the hole





IMPORTANT:

- Respect the polarity of the batteries. A polarity error can cause damage and void the warranty of your unit.
- Do not use battery other than the battery mentioned, do not recharge non-rechargeable battery, do not incinerate them.
- Remove the battery when not using the thermometer over a prolonged period. This may damage the product.

The symbol on the product or on its packaging indicates that this product must not be disposed of with your other household waste. Instead, it is your responsibility to dispose of your waste equipment by handing it over to a designated collection point for the recycling of waste electrical and electronic equipment. The separate collection and recycling of your waste equipment at the time of disposal will help to conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment. For more information about where you can drop off your waste equipment for recycling, please contact your local city office or your household waste disposal service.

10. BLUETOOTH DATA TRANSMISSION

- Press measurement button to wake up MyThermo Pocket.
- Open the BewelleConnect APP in your mobile device, choose body temperature mode. MyThermo Pocket's Bluetooth will connect with APP automatically. Bluetooth symbol will be displayed on the LCD screen of MyThermo Pocket.
- Measuring data of body temperature will upload to APP automatically after Bluetooth connected well.
- Diagnostic will be display on your device

Ear/forehead mode temperature	Display on LCD	Warning	Display on APP.
то/℃	screen	indication	
To < 30.0	Lo	Di-Di-Di	Red
30.0 ≤ To < 34.7	Measuring result	Di-Di-Di-Di	Red
34.7 ≤ To ≤ 37.3	Measuring result	Di	Green
37.3 < To ≤ 38.0	Measuring result	Di-Di-Di	Orange
$38.0 < To \leqslant 43.0$	Measuring result	Di-Di-Di	Red
To > 43.0	HI	Di-Di-Di	Red

If you have trouble with the Bluetooth connection:

- Check that you are in range of the Bluetooth accessory which you are trying to pair with MyThermo Pocket.
- Make sure that your Bluetooth accessory is turned on and fully charged or connected to power.

11. UPKEEP, STORAGE AND CALIBRATION

UPKEEP:

- 1. Remove any spots on the case with a soft, dry cloth.
- 2. Clean the probe tip as follows: wipe the surface very gently with a buffer, a soft cloth lightly moistened with 70% surgical spirit; you can use the thermometer once the alcohol has completely evaporated.
- 3. Do not immerse the unit in any liquid whatsoever.
- 4. When dirty, gently clean the IR sensor with a soft, dry cloth.

Do not clean the infrared sensor with tissue or paper towel that may scratch it, which could lead to inaccurate results.

- 5. Do not touch the display screen when using alcohol to clean the device.
- 6. For stubborn stains, wipe the device with wrung cloth after dipping water or neutral solvent, then wipe the device with soft, dry cloth.
- 7. Do not use benzene, diluent, gasoline or other strong solvents to clean the device.
- 8. Do not use ultrasonic cleaning to clean the device.
- 9. For disinfection, please use a cotton swab or soft dry cloth with 70% alcohol dipped to wipe the device.
- 10. Do not use other chemical reagents to wipe the lens.

11. If you do not use the device for a long time, it is recommended to clean one time each month.

STORAGE:

- 1. Do not expose the thermometer to direct sunlight, extreme temperatures conditions ($T^{\circ} > 60^{\circ}C$ or $T^{\circ} < -20^{\circ}C$), or under conditions of high humidity (above 95%), dust, near fire or high concentrations of salt in the air; do not subject it to inclinations, vibrations or direct impacts; Preservation of chemicals or the presence of corrosive gases.
- 2. Remove the batteries from the housing if you do not plan to use the unit over a long period.

CALIBRATION:

This thermometer is pre-configured at the factory. If the operating instructions are followed, a re-calibration is not necessary. If you have doubts about the accuracy of temperature readings, please contact your retailer.

Do not disassemble the thermometer yourself - this will void your warranty.

12. PRODUCT SPECIFICATION

Product name	Ear/forehead infrared thermometer
Model NO.	BW-MTX1 (connected BLE)
Product size	76mm×50.6mm×25.5mm (L×W×H)
Measuring range and accuracy	30°C~34.9°C: ±0.3°C 35.0°C~42°C: ±0.2°C 42.1°C~43°C: ±0.3°C
Repeatability	≤±0.2°C
IR wavelength	5-14μm
Emissivity	0.95
Automatic shutoff	15s
Data storage	10 readings
Displaying of reading	°C/°F
Display resolution	0.1°C
Internal time of each measurement	>60s
Battery	CR2032×1
Voltage	2.5V~3.3V
Dynamic current	≤15µA
Quiescent current	≤25mA
Consumption	≤90mW
Product weight	38g

Normal condition of use	Temperature:15°C~40°C
	Humidity:10%~85%RH
	Air pressure:70kPa \sim 106kPa, non-condensing
Storage conditions	Temperature:-20°C~60°C
	Humidity: ≤95%RH,
	Air pressure:50kPa \sim 106kPa, non-condensing
Water proof	IP22
Warning temperature	37.3>0°C
	<34.7°C
Alarm method	Voice: Di-Di-Di
	Back light: white LED
Display format	Black character in white background, LCD
Bluetooth version	4.0 BLE
Bluetooth emission current	≤25Ma (for BW-MTX1)
Frequency range	2402~2480MHz
MAX RF output power	+4dBm
Expected life time	5 years

13. TROUBLESHOOTING

Problem	Possible cause	Solution
The device does not switch on	The batteries are discharged	Put new batteries in the device
	The batteries are not properly installed	Install the batteries properly, following
		the correct polarity
Temperature reading hampered by		Make sure there is no obstruction prior
hair, sweat,		to taking the temperature.
Temperature reading hampered by an		Be careful not to be in the axis of an
air flow		airflow, this could cause interference
		with the infrared system.
The display indicates temperatures	The temperature is indicated in	Change the unit of measure to Celsius.
above 95°:	Fahrenheit.	
The screen displa Er1	Ambiant temperature is lower than	
	15°C	
The screen display Er2	Ambiant temperature is higher than	
	40°C	

14. EMC data

Guidance & Declaration — electromagnetic immunity

The models BW-MTX1, VM-ZXP1 are intended for use in the electromagnetic environment specified below. The customer or the user of the models BW-MTX1, VM-ZXP1 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, ±8 kV contact ±2 kV, ±4 kV, ±8 kV, ±15 kV air	±6 kV, ±8 kV contact ±2 kV, ±4 kV, ±8 kV, ±15 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 %.
Electrical fast transient/burst IEC 61000-4-4	±2kV for power supply lines ±1 kV for Input/output lines	Not applicable	Not applicable
Surge IEC 61000-4-5	±1 kV line to line ±2 kV line to earth	Not applicable	Not applicable
Voltage dips, short interruptions and voltage variations on power supply input lines IEC 61000-4-11.	<5 % U _T (>95% dip in U _T .) for 0.5 cycle <5 % U _T (>95% dip in U _T) for 1 cycle 70% U _T (30% dip in U _T) for 25/30 cycles <5% U _T (>95 % dip in U _T) for 5/6 sec	Not applicable	Not applicable
Power frequency (50/60 Hz) magnetic field IEC 61000-4-8	3 A/m, 30 A/m ains voltage prior to applic	3 A/m, 30 A/m	Power frequency magnetic fields should be at levels characteristic of a typical location in a typical commercial or hospital environment.



Guidance & Declaration - Electromagnetic immunity

The models BW-MTX1, VM-ZXP1 are intended for use in the electromagnetic environment specified below. The customer or the user of the models BW-MTX1, VM-ZXP1 should assure that it is used in such an environment.

environment.	environment.			
Immunity test	IEC 60601 test level	Compliance level	Electromagnetic environment - guidance	
			Portable and mobile RF communications equipment should be used no closer to any part of the models BW-MTX1, VM-ZXP1, including cables, than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter.	
			Recommended separation distance	
Conducted RF IEC 61000-4-6	3 Vrms 150 kHz to 80 MHz 6 Vrms in ISM bands	Not applicable	d=[3,5/V ₁]×P ^{1/2}	
Radiated RF IEC 61000-4-3	80 MHz to 2.5 GHz	10 V/m	d=1.2×P ^{1/2} 80 MHz to 800 MHz Hz	
	385MHz- 5785MHz Test specifications for ENCLOSURE PORT IMMUNITY to RF wireless communication equipment (Refer to table 9 of IEC 60601- 1-2:2014)	385MHz- 5785MHz Tes specifications for ENCLOSURE PORT IMMUNITY to RF wireless communicati equipment (Refer to tabl 9 of IEC 6060 1-2:2014)	separation distance in meters (m). Field strengths from fixed RF transmitters, as determined by an electromagnetic site survey, a 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.

15. FCC compliance

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Caution: changes or modifications not expressly approved by the party responsible for compliance could void the user's

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 and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

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 to correct the interference by one or more of the following measures:

- -- Reorient or relocate the receiving antenna.
- -- Increase the separation between the equipment and receiver.
- -- Connect the equipment into 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.

16. WARRANTY

Visiomed will repair or replace this product free of charge in the case of defective parts or manufacturing defects, in accordance with the conditions mentioned below as follows:

DURATION: 24 MONTHS RETURN TO WORKSHOP

LIMITS AND EXCLUSIONS: This guarantee concerns only the original final purchaser. A purchase invoice, or another proof of purchase, with this guarantee card will be required to obtain an after-sales service, in accordance with this guarantee. This guarantee card will not be extended to another person only the original final purchaser. This guarantee becomes void if the serial numbers on the product are modified, replaced, illegible, absent, or if repair has been carried out by a service not approved, including the user. This guarantee covers only the defects of the material or parts, occurring during normal use of the pro-duct. It does not cover the damage caused during the transport of the apparatus, causes due to repairs being carried out by the distributor, by any modifications undertaken, any connection of equipment not approved by Visiomed, or causes contrary to those written in the user manual or notice. Moreover, the present guarantee does not cover damage due to falls, bad handling, bad installations, damage by fire, floods, lightning, or any other natural disaster. This guarantee does not cover the packing of the material, the accessories, the defects caused by commercial exposure of the product, show room, sale space, demonstration etc...

Normal maintenance, cleaning and the replacement of parts where wear is normal, are not covered by the terms of this guarantee. Visiomed and its representatives and agents will not in any case be held responsible for any damage and consecutive damages due to the mishandling of this product.

This guarantee is the only valid one at Visiomed, any other guarantee (commercial guarantee) except this one will not be taken into account.

IMPORTANT: During the guarantee period if you are dissatisfied with the repairs of this product, please contact the Visiomed customer service