

TOUCHLESS THERMOMETER
TF-93



USER GUIDE

Please read this user guide carefully and keep in a safe place for future reference.

Welcome..

to your new Motorola Touchless Thermometer!

The thermometer has been carefully developed to make accurate, fast and contact-free human body temperature measurements (at a distance of 3 to 5 cm (1 - 2 inches)) on the forehead.

The TE-93 is a non-sterile, reusable, clinical thermometer intended for the intermittent determination of human body temperature on people of all ages, using the center of the forehead as the measurement site.

No-touch infrared technology

For safe and hygienic non-intrusive measurements. Helps to minimize the spread of germs.

Simply to use

Point the thermometer at the forehead and simply press the measurement button for accurate and reliable results.

Fast readings

Fast two second reading immediately after power on. Beeps when done.

High temperature alert

Audible alert when temperatures are > 37.3 °C (99.1 °F). This threshold is user adjustable.

This user guide has all the information you need to make the most out of your product.

For product related questions, please call: XXXXX.

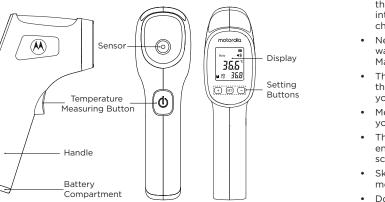
Jauct.

Inside the box

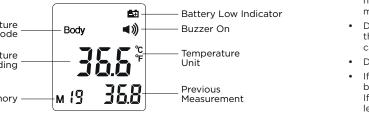
- 1 x Thermometer
- 2 x AA Batteries

1 x User Guide

1. PRODUCT OVERVIEW



DISPLAY OVERVIEW



IMPORTANT SAFETY INFORMATION

- Keep out of reach of children under 12 years. Never use the thermometer for purposes other than those for which it has been intended. Please follow the general safety precautions when using on children. This device is not a toy.
- Never immerse the thermometer into water or other liquids (not waterproof). Please follow the instructions in the "Cleaning and Maintenance" section.
- This thermometer is intended for household use only. Use of this thermometer is not intended as a substitute for consultation with your physician.
- Measurement results are for reference only. Contact your physician if you experience or suspect any health concerns.

 Time of dath throughout thr
- The infrared sensor must be completely clean, dry and undamaged to
 ensure accurate measurements. Never insert a sharp object into the
 scanner area or any other open surface on the thermometer.
- Skin surface lipids on the forehead may cause an inaccurate measurement, so make sure the forehead is clean.
- Don't touch or blow on the infrared sensor. A dirty infrared sensor may produce inaccurate readings.
- Do not use to measure the temperature of other body parts.
- Do not use the thermometer if there is any injury, trauma or local lesions such as postoperative scarring.
- If the temperature of the storage area differs greatly from that of the measuring area, please wait until the thermometer temperature has equalized to the room temperature, about 15 minutes, prior to use.
- Do not store the thermometer under extreme temperature or extreme humidity conditions. Failure to store device under proper conditions may cause inaccurate readings.
- Do not use the thermometer if the device is damaged (for example, if the infrared sensor is broken). Continued use of a damaged unit may cause injury, inaccurate results or serious hazard.
- Do not disassemble, repair or change any parts of the unit.
- If your thermometer will not be used for a long time, remove the
 batteries to prevent possible damage caused by chemical leakage.
 If the batteries are leaking, remove then carefully. Do not allow the
 leaking fluid to touch your bare skin.
- Store the thermometer in a dry, clean place. Do not expose the product to chemical solvents, lint, dust, direct sunshine or high temperature.
- Do not dispose of batteries by fire. When placed in a fire, the battery is likely to explode.
- Do not maintain or service the device while it is in use.
- Should any unexpected operations or events occur, please report them to the manufacturer.

Save these instructions

TEMPERATURE TAKING INFORMATION

- It is important to note that a patient's temperature may be impacted by age, gender or medical condition, or by factors such as ambient temperature, time of day, medications taken or the temperature measurement site. These can include:
- A person's individual metabolism
- Age. Body temperature is higher in babies and toddlers than in adults.
 Greater temperature fluctuations occur faster and more often in children. Normal body temperature decreases with age.
- Clothing.
- Time of day. Body temperature is lower in the morning and increases throughout the day towards evening.
- Exposure to very hot or very cold foods.
- Recent swimming or bathing.
- Outside temperature. When changing the location of use where the temperature before and after is substantially different before use the product should be placed in the new location for at least 30 minutes in advance for the product to adjust to the ambient temperature of the new location.

 2 Insert Court of the product to adjust to the ambient temperature of the new location.
- The person should be in the location of use for at least 20 minutes so that the body temperature can be balanced before measuring.
- Activities. Physical and, to a lesser extent, mental activities increase body temperature. After strenuous exercise, you should rest for at least 30 minutes before taking measurements.
- Make sure there is no hair, sweat, hat or makeup on the forehead during the temperature measurement.
- The environment around the person to be measured must be stable, and it cannot be measured in places with substantial changes in air flow such as fans and air conditioners.
- In order to avoid human error, it is recommended to take multiple measurements to display at most one set of data.

This is why we recommend that you practice using the thermometer on yourself and family members when you are healthy. By doing so, you will know how the thermometer works and will feel more confident regarding

PRIOR TO USE

- The key to obtaining accurate readings is a clean sensor. To clean the sensor, use a cotton swab slightly moistened with disinfectant or 70% alcohol to gently wipe its surface, and then immediately wipe dry using a clean cotton swab. Wait at least 20 minutes to make sure that the sensor is completely dry before taking temperature.
- Skin surface lipids on the forehead may cause an inaccurate measurement, so make sure the forehead is clean. If you clean the forehead, please keep waiting a further 5 to 10 minutes before measuring.
 If the temperature of the storage area differs greatly from that of the
- equalized to the room temperature, about 15 minutes, prior to use.

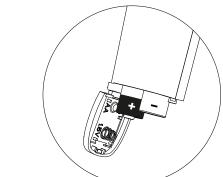
 3.1 INSTALLING THE BATTERIES

3.1 INSTALLING THE BATTE

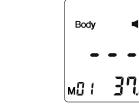
This product uses 2 AA alkaline batteries, these are included inside the packaging.

measuring area, please wait until the thermometer temperature has

- Push open the battery cover at the bottom of the thermometer handle in the direction indicated by the arrow.
- Install the 2 AA batteries following the correct polarity markings.



Once the batteries are installed and the battery cover is closed, press the **Temperature Measuring** button. The display will switch on and show:



3.2 MEASURING THE FOREHEAD TEMPERATURE

Place the thermometer in your hand with your thumb on the
 Temperature Measuring button. Position the device at 3 - 5 cm
 (1 - 2 inches) away from the center of the forehead, just between the eyebrows.



- Press the Temperature Measuring button, keeping the thermometer close to your forehead until you hear a confirmation beep. This indicates the measurement is complete, and the measurement value will be shown on the backlit display within 2 seconds.
- 3. Read the temperature on the display.



4. The thermometer will automatically power off after 15 seconds with no further action.

3.3 FEVER ALERT

If the temperature reading is in the normal range, a short beep will sound when the measurement is complete. If the temperature is in the fever range, a series of beeps (beep-beep, beep-beep, beep-beep) will sound to indicate the measurement is complete and alert the user to a possible

3.4 CHECK THE MEMORY

The thermometer can store up to 32 sets of memory data for recording forehead temperature measurements. The current measurement is always stored in the last storage space. When all storage spaces have been occupied, the earliest measurement is always deleted from the memory.

 When the thermometer is powered on, press the - key to scroll down through the memory data. Press + key to scroll up through the memory data. The memory number and the measured temperature will be displayed.

- Alternatively, press and hold + or keys for 2 seconds to automatically scroll up or down the memory data. The main display will show 3 bars and the memory number and associated temperature will begin scrolling.
- Press the Temperature Measuring button to exit the function settings, or the thermometer will automatically power off after 15 seconds with no further action.

4. SETTINGS OVERVIEW

	Description	Default
F1	Switch temperature setting between Celsius (°C) and Fahrenheit (°F).	Celsius (°C)
F2	Change the Fever Alert value.	37.3 °C (99.1 °F)
F3	Change the Temperature Offset value setting.	0.0°C (0.0°F)
F4	Switch the audible alerts on and off.	On
F5	Switch the display backlight on and off.	On

4.1 CELSIUS/FAHRENHEIT OPTION

You can switch between Celsius (°C) and Fahrenheit (°F) temperature scale. The default setting is °C.

- 1. When the thermometer is powered on, press and hold the **SET** key to enter the function settings. **F1** will be displayed on the screen.
- 2. Press the **SET** key again, and press the **-** key to select Fahrenheit **°F**. To select Celsius **°C** press the **+** key.
- Press SET to move to the next function setting, or press the Temperature Measuring button to exit the function settings. Alternatively, the thermometer will automatically power off after 15 seconds with no further action.

4.2 CHANGE THE FEVER ALERT VALUE

The fever alert is set to any measurement greater than $37.3\,^{\circ}\text{C}$ (99.1 °F). This value can be adjusted in the function settings by following the below steps:

- When the thermometer is powered on, press and hold the SET key to enter the function settings. F1 will be displayed on the screen.
- Press the SET key until the screen displays F2. Press the + key to increase the temperature value by 0.1°C (0.1°F) or press the key to decrease the temperature value by 0.1°C (0.1°F).
- Press SET to move to the next function setting, or press the Temperature Measuring button to exit the function settings.
 Alternatively, the thermometer will automatically power off after 15 seconds with no further action.

4.3 TEMPERATURE OFFSET VALUE SETTING

You can manually adjust the temperature reading. The default value is 0.0°C (0.0°F).

enter the function settings. F1 will be displayed on the screen.

- 2. Press the **SET** key until the screen displays **F3**. press the **+** key to increase the temperature value by 0.1°C (0.1°F) or press the **-** key to decrease the temperature value by 0.1°C (0.1°F).
- 3. Press **SET** to move to the next function setting, or press the **Temperature Measuring** button to exit the function settings. Alternatively, the thermometer will automatically power off after 15 seconds with no further action.

1. When the thermometer is powered on, press and hold the **SET** key to

4.4 TURN AUDIBLE ALERTS ON / OFF

You can turn the beeps off so you can take temperature readings silently. The default setting is ON. To turn the beep ON or OFF in the function settings follow the steps below:

1. When the thermometer is powered on, press and hold the **SET** key to

- enter the function settings. F1 will be displayed on the screen.

 2. Press the SET key until the screen displays F4. Press the key to turn
- 3. The (*) icon is shown on the display when the audible alert is
- Press SET to move to the next function setting, or press the Temperature Measuring button to exit the function settings. Alternatively, the thermometer will automatically power off after 15 seconds with no further action.

the beep sound **OFF** or press the + key to turn the beep sound **ON**.

4.5 SWITCH DISPLAY BACKLIGHT ON / OFF

You can switch the display backlight OFF. The default setting is ON.

- When the thermometer is powered on, press and hold the SET key to enter the function settings. F1 will be displayed on the screen.
- Press the SET key until the screen displays F5. Press the key to turn the backlight OFF. The display backlight will turn off. Press the + key to turn the backlight back ON.
- 3. Press **SET** to return to power off or press the **Temperature Measuring** button to exit the function settings. Alternatively, the thermometer will automatically power off after 15 seconds with no further action.

4.6 REPLACING THE BATTERY

thermometer fails to operate, you should insert new batteries as soon as possible. You will be unable to make any further measurements or view the memory until the battery is replaced.

When the battery low indicator appears on the display, or if the



1 2 3

Please remove the batteries by pushing open the battery cover at the bottom of the thermometer handle in the direction indicated by the arrow. Remove the batteries and follow the instructions for installing the batteries at the beginning of this user guide.

4.7 CALIBRATION

The thermometer is initially calibrated during manufacturing, before exfactory. If the thermometer is used in accordance with the instructions periodic recalibration is not required. Should you question the accuracy of measurements at any time, contact the retailer immediately.

Do not attempt to modify or reassemble the thermometer.

5. GENERAL INFORMATION

Battery Safety Instructions

 Do not burn, disassemble, mutilate, or puncture the battery. The battery contains toxic materials that could be released, resulting

Warning! Use only the approved batteries supplied. (2x DC1.5V AA Alkaline batteries)

There is a risk of explosion if you replace the battery with an incorrect battery type. Use only the batteries that came with the thermometer or an authorized replacement recommended by the manufacturer.

- Keep batteries out of the reach of children.
- Remove batteries if storing over 30 days.
- Do not dispose of batteries in fire, which could result in explosion
- The batteries that power this product must be disposed of properly and may need to be recycled. Refer to your battery's label for battery type. Contact your local recycling center for proper disposal methods.

Save these instructions

Cleaning and Maintenance

- Check whether the battery level is sufficient before each use. If the battery level is low, it is recommended to test after replacing the
- Before each use, please check the equipment casing for damage. If it is damaged, stop using it
- To ensure accurate measurements, it is very important to keep the infrared sensor clean and free of scratches. Fingerprints and dirt will affect the accuracy of the thermometer. In order to get an accurate measurement, please clean the infrared sensor.
- Clean the measuring sensor after each use. Use a clean cloth or cotton bud that can be moistened with disinfectant or 70 % alcohol.
- To clean the entire product, please use a soft cloth slightly moistened with a mild soapy solution. Under no circumstances may liquid enter

- Do not use the product again until it is completely dry.
- Use a soft dry cloth to clean the body of the thermometer. Never clean the thermometer using an abrasive cleanser, thinner or benzene, nor immerse the thermometer in water or other liquids. Store it in a clean. dry place at room temperature.
- Never expose the thermometer to extreme temperatures, humidity. direct sunlight or shock.

• When not in use for a long time (more than 3 months), please remove

outdoor environment, its temperature should be 5 ~ 40°C.

- the batteries and store it in the paper box. Please place this product at normal room temperature, if it is placed in
- Please do not use petrol, volatile oil, thinner, alcohol and other chemical solvents to wipe the product. If necessary, use a soft cloth slightly moistened with a mild soapy solution. Under no circumstances

Environmental

may liquid enter the product.

- Do not place your product on carpets or other surfaces which generate fibres, or place it in locations preventing the free flow of air over its surfaces.
- Do not submerge any part of your product in water and do not use it in damp or humid conditions, such as bathrooms.
- Do not expose your product to fire, explosives or other hazardous

Product Disposal Instructions

At the end of the product life cycle, you should not dispose of this product with normal household waste. Take this product to a collection point for the recycling of electrical and electronic equipment. The symbol on the product, user's guide and/or box indicates this obligation.

Product disposal instructions for residential users

When you have no further use for it, please remove any batteries and dispose of them and the product according to your local authority's recycling processes. For more information, please contact your local authority or the retailer where the product was purchased.

Product disposal instructions for business users

Business users should contact their suppliers and check the terms and conditions of the purchase contract and ensure that this product is not mixed with other commercial waste for disposal.

Consumer Products and Accessories Warranty

Thank you for purchasing this Motorola branded product manufactured under license by Meizhou Guo Wei Electronics Co. Ltd., AD1 section. Economic Development Area, Dongsheng Industrial District, Meizhou, Guangdong, China. ("MZGW")

What Does this Warranty Cover?

Subject to the exclusions contained below, MZGW warrants that this Motorola branded product ("Product") or certified accessory ("Accessory") sold for use with this product that it manufactured to be free from defects in materials and workmanship under normal consumer parts due to normal wear and tear are excluded from coverage.

usage for the period outlined below. This Limited Warranty is your exclusive warranty and is not transferable.

Who is covered?

or Replaced

This warranty extends only to the first consumer purchaser, and is not

What will MZGW do?

MZGW or its authorized distributor at its option and within a commercially reasonable time, will at no charge repair or replace any Products or Accessories that do not conform to this limited warranty. We may use functionally equivalent reconditioned / refurbished / pre-owned or new Products. Accessories or parts.

What Other Limitations Are There?

ANY IMPLIED WARRANTIES. INCLUDING WITHOUT LIMITATION THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. SHALL BE LIMITED TO THE DURATION OF THIS LIMITED WARRANTY. OTHERWISE THE REPAIR OR REPLACEMENT PROVIDED UNDER THIS EXPRESS LIMITED WARRANTY IS THE EXCLUSIVE REMEDY OF THE CONSUMER. AND IS PROVIDED IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OF IMPLIED, IN NO EVENT SHALL MOTOROLA OR MZGW BE LIABLE. WHETHER IN CONTRACT OF TORT (INCLUDING NEGLIGENCE) FOR DAMAGES IN EXCESS OF THE PURCHASE PRICE OF THE PRODUCT OR ACCESSORY OR FOR ANY INDIRECT, INCIDENTAL, SPECIAL OR CONSEQUENTIAL DAMAGES OF ANY KIND, OR LOSS OF REVENUE OR PROFITS, LOSS OF BUSINESS. LOSS OF INFORMATION OR OTHER FINANCIAL LOSS ARISING OUT OF OR IN CONNECTION WITH THE ABILITY OR INABILITY TO USE THE PRODUCTS OR ACCESSORIES TO THE FULL EXTENT THESE DAMAGES MAY BE DISCLAIMED BY LAW.

Some jurisdictions do not allow the limitation or exclusion of incidental or consequential damages, or limitation on the length of an implied warranty, so the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights, and you may also have other rights that vary from one jurisdiction to another.

Length of Coverage Consumer Products One (1) year from the date of the products original purchase by the first consumer purchaser of the Consumer Accessories (battery, | Ninety (90) days from the date of **power supply(s) and line cords)** I the accessories original purchase by the first consumer purchaser of the Consumer Products and The balance of the original warranty Accessories that are Repaired or for ninety (90) days from the date If a warranty card was included in your box, a completed warranty returned to the consumer, whichever

Normal Wear and Tear. Periodic maintenance, repair and replacement of

TROUBLESHOOTING

Batteries. Use only AA Alkaline batteries. Only batteries whose fully ERROR SYMBOL charged capacity falls below 80% of their rated capacity and batteries that leak are covered by this limited warranty.

Abuse & Misuse. Defects or damage that result from:

• Use of the Products or Accessories for commercial purposes or

from coverage.

- Improper operation, storage, misuse or abuse, accident or neglect. such as physical damage (cracks, scratches, etc.) to the surface of the product resulting from misuse;
- Contact with liquid, water, rain, extreme humidity or heavy perspiration, sand, dirt or the like, extreme heat, or food:
- subjecting the Product or Accessory to abnormal usage or conditions; Other acts which are not the fault of Motorola or MZGW are excluded

Use of Non-Motorola branded Products and Accessories. Defects or damage that result from the use of Non-Motorola branded or certified Products or Accessories or other peripheral equipment are excluded from

Unauthorized Service or Modification. Defects or damages resulting from service, testing, adjustment, installation, maintenance, alteration, or modification in any way by someone other than Motorola. MZGW or its Body ■3 authorized service centers, are excluded from coverage.

Altered Products, Products or Accessories with

- Serial numbers or date tags that have been removed, altered or
- Broken seals or that show evidence of tampering:
- Mismatched board serial numbers; or;
- Nonconforming or non-Motorola branded housings, or parts, are excluded from coverage.

Communication Services. Defects, damages, or the failure of Products or Accessories due to any communication service or signal you may subscribe to or use with the Products or Accessories is excluded from

Body ◀测

How to Obtain Warranty Service or Other Information?

For service or information, please contact Customer Services on: XXXXX. You will receive instructions on how to ship the Products or Accessories at your expense and risk, to a MZGW Authorized Repair Center. To obtain service, you must include:

- The Product or Accessory:
- The original proof of purchase (receipt) which includes the date, place and seller of the Product:
- card showing the serial number of the Product;
- A written description of the problem; and, most importantly;
- Your address and telephone number.

REASON RESOLUTION METHOD Battery voltage is too Replace the battery as soon as possible Make sure the SYSTEM ERROR thermometer has The thermometer been in the location has been negatively vou will take the affected by the persons temperature temperature change in measurement for at its environment. least 30 minutes. Do not Exceeding operating place under fan, cooler ambient temperature. or heater, for example, Make sure vou are neasuring the forehead Measured temperature of the person, as is too high described in section 3. Stop measurement Make sure you are Measured temperature measuring the forehead is too low of the person, as

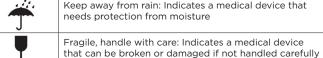
SPECIFICATIONS

Model No.	TE-93	
Forehead measurement range	32.0 to 43.0°C (89.6°F to 109.4°F)	
Forehead measurement accuracy	± 0.2°C @ 36.0 to 39.0°C (0.4°F @ 96.8°F to 102.2°F)	
	Outside the range: ± 0.3°C (0.5°F)	
Unit	°C / °F (The default unit is °C)	
Measure time	Within 2 seconds	
Measurement interval	2 seconds	
Measuring distance	3 - 5 cm (1 - 2 inches) from the forehead	
Memory	32 sets	
Operating conditions	Temperature: 10.0°C to 40.0°C (50°F to 104.0°F),	
	Relative humidity ≤85%RH;	
Storage and transportation	Temperature: -20°C to + 55°C (-4°F to 131°F);	
conditions	Relative humidity ≤93%RH;	
	Atmospheric pressure 70~106KPa	
Power	DC 3V (2 x 1.5V AA Battery)	
Battery service life:	With a new battery, approx. 6 months based on a usage frequency of 5 times/day	
Product size	152.9 (L) x 109.6 (D) x 44.0 (W) mm	
Product weight	95g (excluding batteries) 141.5g (including batteries)	

NORMALISED SYMBOLS

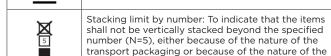
Type BF Applied Part: To identify a type BF applied part complying with IEC 60601-1 Waste stream disposal status: Do not dispose of electronic products in the general waste stream Refer to instruction manual/booklet: To signify that the instruction manual/booklet must be read EN 60601-1-2:2015 Electromagnetic disturbances, Requirements and tests. Degree of protection: N1=2. Protected against solid EN 60601-1-11:2015 foreign objects of 12,5 mm Ø and greater (e.g. a finger); N2=2, Protection against vertically falling water drops when ENCLOSURE tilted up to 15° EN ISO 80601-2-56:2017 + A1:2020 Serial number: Indicates the manufacturer's serial

number so that a specific medical device can be identified









items themselves.



CE marking: CE marking indicates that a product complies with applicable European Union regulations C 0123 | accompanied by the identification number of the notified body performing the conformity assessment.

Manufacturer: Indicates the medical device

Authorized Representative in the European



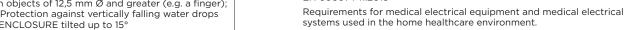


EC REP Community / European Union: Indicates the authorized representative in the European Community / European

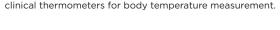
COMPLIANCE





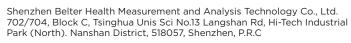












Tel: 0086 +400-160-6668 E-mail: service@ebelter.com



Dongguan Simple Industrial Co., Ltd. No. 86, Shaxin Road, Science Message Park, Tangxia Town, 523718,

Dongguan City, Guangdong, P.R.C



Wellkang Ltd Suite B. 29 Harley Street, LONDON, W1G 9QR, U.K.

WWW.CE-Marking.EU











Made in China



described in section 3.