

# Forehead Thermometer

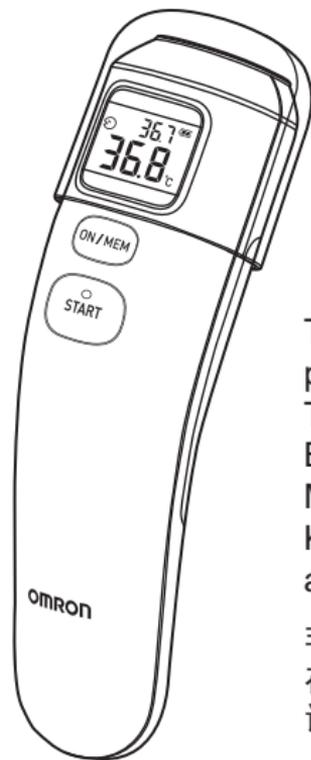
## 额式体温计

型号 **MC-720**  
Model

### INSTRUCTION MANUAL

### 使用说明书

All for Healthcare



Thank you very much for purchasing the Forehead Thermometer.

Be sure to read this Instruction Manual thoroughly before use. Keep this Instruction Manual at hand for future reference.

非常感谢您购买本额式体温计。在使用前请详细阅读本说明书。请保存本说明书以备后用之需。

# Contents

Thank you for purchasing the OMRON Forehead Thermometer MC-720.

## Intended Use:

The OMRON Forehead Thermometer MC-720 offers safe, comfortable and quick temperature measurement from the forehead.

It is mainly designed for household use.

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**Please read this instruction manual thoroughly before using this unit.**

**Please keep for future reference. For specific information about your own temperature, CONSULT YOUR DOCTOR.**

# Important Safety Information

To assure correct use of the product, basic safety measures should always be followed, including the precautions listed below.

**⚠ Warning: The following situations are potentially hazardous and, if not avoided, could result in death or serious injury.**

- Conducting self-diagnosis based on the measurement results and/or treatment can be dangerous. Please follow the instructions of your doctor. Self-diagnosis may worsen the symptoms.
- A high or prolonged fever requires medical attention, especially for young children. Please contact your doctor.
- Keep the unit out of children's reach.
- If a child swallows the battery, immediately consult with a doctor.
- Do not throw batteries into a fire. The battery may explode.
- Remove the battery when the unit will not be used for three months or more. Failure to do so may lead to fluid leakage, heat generation or bursting, resulting in damage to the unit.
- Do not use the unit to measure any item with a temperature higher than 80.0°C (176.0°F).

## General Precautions

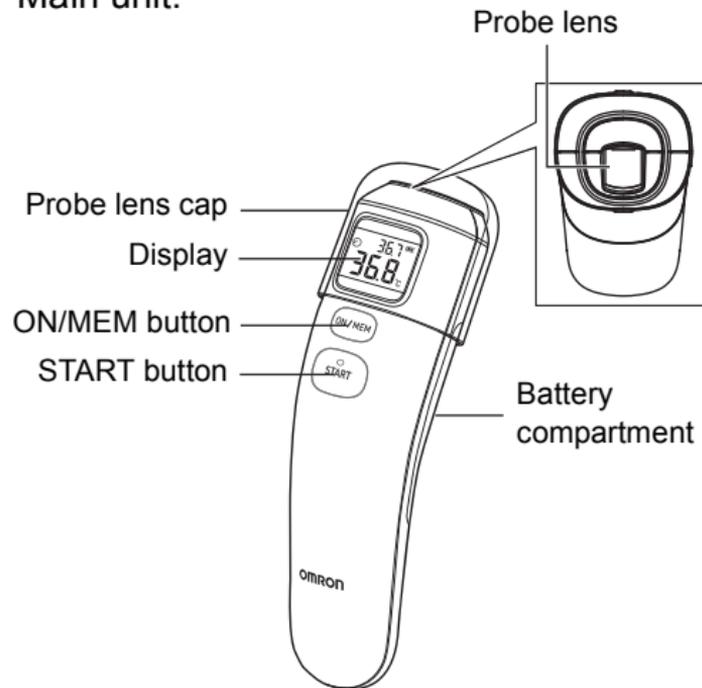
- Do not apply a strong shock to, drop, step on, or vibrate the main unit.
- Do not use a mobile phone near the unit.
- The main unit is not waterproof. Be careful when handling this unit so that no liquid (alcohol, water, or hot water) will get into the main unit. When the unit is wet with vapor, wait until it dries or wipe it lightly with a soft dry cloth.
- Do not disassemble, repair, or modify the unit.
- When the probe lens becomes dirty, wipe it lightly with a soft dry cloth or a cotton swab. Do not wipe the probe lens with tissue paper or a paper towel. For details, refer to section 4.3.
- If there is any temperature difference between the places where the unit is stored and where you are going to measure, leave the unit in the room where you are going to use it for more than 30 minutes to allow it to reach room temperature first, then measure.

## Important Safety Information

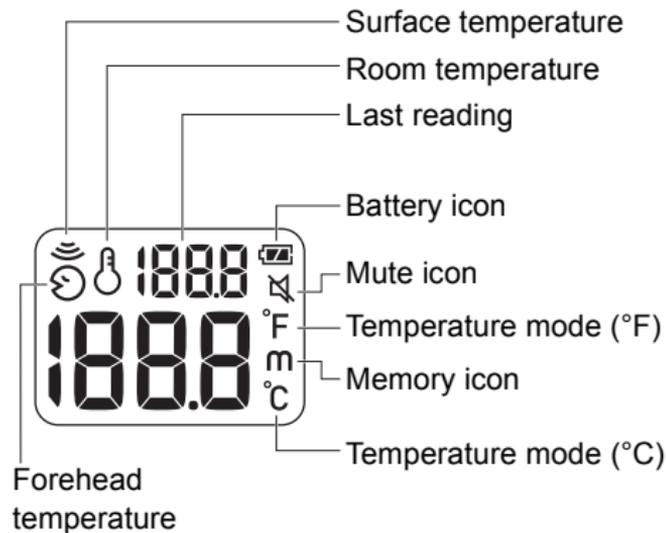
- If the forehead is cold, wait until the forehead is warmed up before taking a temperature measurement. The measured result may indicate low when you use an ice bag or an ice pack, or immediately after coming in from outdoor in winter.
- Do not use the unit when wet after swimming, bathing, or through sweating after physical exercise, as skin temperature may have fallen. Wipe away moisture and allow 30 minutes for the body to acclimatize to room temperature before measuring.
- Do not touch the probe lens with a finger or breathe on it.
- Do not attempt measurements when the unit is wet as inaccurate readings may result.
- Check the icon on the display before and after the measurement so that the measurement is taken in the appropriate mode.
- When taking the temperature of an object with low emissivity such as gold or aluminum, inaccurate readings may result.
- When taking the temperature of something with low emissivity (such as milk) in surface measurement mode, slightly lower readings may result.
- Do not use the unit in places where strong static electricity or electromagnetic fields are present. Doing so may lead to inaccurate readings and may contribute to instrument failure.
- When you inform your doctor of your temperature, make sure you state that you measured the temperature from the forehead.

# 1. Overview

Main unit:



Display:



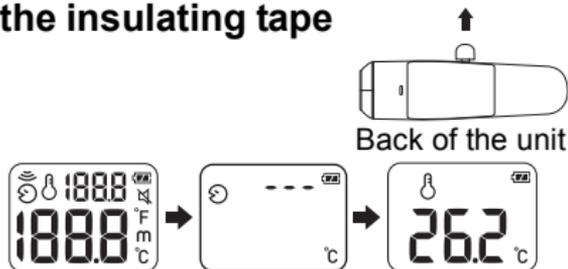
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## 2. Preparation

### 2.1 Removing the Insulating Tape

When using the unit for the first time, pull the insulating tape out of the battery compartment.

The unit is turned on and after 1 minute the room temperature appears on the display.



**Notes:**

- The room temperature remains on the display even after the unit turns off.
- Place the unit on a level surface, in a place that is at room temperature (away from direct sunlight or air conditioning, etc.).

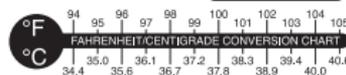
### 2.2 Switching between °C and °F

This unit is set in °C as default.

1. While the room temperature is displayed, press and hold the **START** button.
2. While holding it down, press and hold the **ON/MEM** button until °F appears on the display with two beeps.

**Notes:**

- To select °C mode again, start from step 1.
- When the unit is switched between °C and °F, all the readings stored in the memory are deleted.



### 2.3 Setting the Buzzer

The buzzer is activated by default, but can be deactivated.

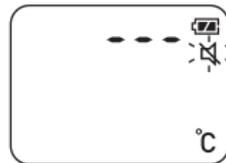
**Note:** The buzzer is only available in forehead measurement mode.

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**1. Press the ON/MEM button to turn on the unit.**

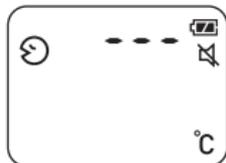
**2. Press and hold the ON/MEM button for 3 seconds.**

The "🔊" icon flashes on the display.



**3. Release the ON/MEM button.**

The "🔊" icon remains lit and the buzzer is deactivated.



**Notes:**

- If the ON/MEM button is pressed down for more than 5 seconds after the "🔊" icon starts flashing, the unit turns off without deactivating the buzzer.
- To activate the buzzer again, start from step1.

# 3. Using the Unit

## 3.1 Taking a Reading

### *Forehead Measurement Mode*

This mode displays the oral-equivalent value of the measured forehead temperature.

Always make sure the probe lens is clean and undamaged, and the forehead is clean with no sweat, cosmetics, scars, etc.

Prior to measurement, ensure that the patient has not taken a bath or exercised within the last 30 minutes, and has remained in a stable environment for at least 5 minutes.

It is recommended to perform measurement three times. If the three measurements are different, select the highest temperature.

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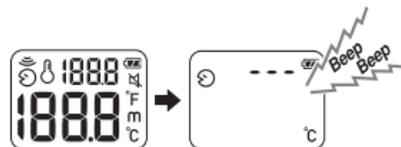
### 1. Pull off the probe lens cap to remove it.

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### 2. Press the ON/MEM button.

All indicators appear on the display for 1 second.

Then the display shown on the far right appears with two beeps.



### 3. Using the Unit

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#### 3. Hold the unit with the probe lens 1 to 3 cm away from the center of the forehead.

**Notes:**

- Holding the unit too long in the hand may cause a higher ambient temperature reading of the probe. This could make the body temperature measurement lower than usual.
- Keep still during measurement.



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#### 4. Press the START button.

The measurement is complete in 1 second with a long beep.



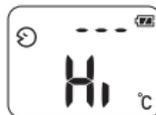
### 3. Using the Unit

#### 5. Move the unit away from the forehead and check the measurement result.

The display lights up for 5 seconds.

**Notes:**

- If the result is higher than 42.2°C (108.0°F), "Hi" appears on the display. If the result is lower than 34.0°C (93.2°F), "Lo" appears on the display.
- You can take another measurement after the display light turns off with two beeps. Make sure the "☺" icon remains lit.
- After the second measurement, the first measurement is displayed in the top right corner, while the second is displayed in the center.



#### 6. Press and hold the ON/MEM button until "OFF" appears on the display to turn off the unit.

The unit stores the measurement in memory, then turns off with the room temperature on the display. The unit also turns off automatically if no operation is performed for 1 minute.

### 3. Using the Unit

#### **Surface Measurement Mode**

Surface measurement mode shows the actual and unadjusted surface temperature of an object, which is different from the body temperature. This mode can help you determine if the object temperature is suitable for a patient or baby (such as baby milk).

The unit is set to forehead measurement mode as default. Follow the steps below to switch to surface measurement mode.

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- 1. Press the ON/MEM button to turn on the unit.**
- 2. Press and hold the ON/MEM button. While holding it down, press the START button.**

The "☺" icon appears on the display.



- 3. Move the unit close to the object and press the START button.**

It measures continuously until the START button is released.



#### **Notes:**

- Move the probe lens as close to the object as possible when using in surface measurement mode (1 cm apart is recommended). Do not apply the probe lens to the object directly.
- Surface measurement mode shows the surface result. The surface and internal temperature may be different. Make sure it is safe when measuring an object with extremely high or low temperature.
- The display does not light up and the buzzer is off when using this mode.
- To switch to forehead measurement mode, go back to step 2 and make sure the ☺ icon changes to the ☺ icon.
- The unit automatically turns off if no operation is performed for 1 minute with the room temperature on the display. To manually turn off the unit, you can press and hold the ON/MEM button until "OFF" appears on the display.
- Surface measurement mode is not intended for body temperature measurement or medical use.

## 3. Using the Unit

### 3.2 Using the Memory Function

This unit automatically stores the last 25 measurement results (excluding Hi/Lo results).

**Notes:**

- If the memory is full, the unit will delete the oldest reading.
- When the unit is switched between °C and °F, all the readings stored in the memory are deleted.

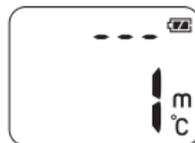
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**1. Press the ON/MEM button to turn on the unit.**

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**2. Press the ON/MEM button again.**

The memory number appears on the display.



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**3. Release the ON/MEM button.**

The most recent result appears on the display.  
Press the ON/MEM button repeatedly to view the older results.



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**4. Press and hold the ON/MEM button until "OFF" appears on the display to turn off the unit.**

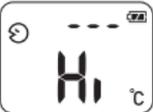
The unit turns off with the room temperature on the display.

# 4. Troubleshooting and Maintenance

## 4.1 The Icons and Error Messages

Error Display	Cause	Remedy
	Battery is low.	Replace the battery. (Refer to section 4.4)
	Taking measurement before unit stabilizes.	Wait until the “⊙” icon stops flashing.
	The unit is showing a rapid ambient temperature change.	Allow the unit to rest in a room for at least 30 minutes at room temperature: 10°C–40°C (50°F–104°F).
	The ambient temperature is not within the range between 10°C–40°C (50°F–104°F).	Allow the unit to rest in a room for at least 30 minutes at room temperature: 10°C–40°C (50°F–104°F).
	Errors 5–9 indicate a malfunction of the unit.	Remove the battery, wait for 1 minute, reinsert the battery, and turn on the unit again. If the message reappears, please contact the OMRON representative.

## 4. Troubleshooting and Maintenance

Error Display	Cause	Remedy
 	<ul style="list-style-type: none"> <li>• Forehead measurement mode: The temperature taken is higher than +42.2°C (108°F).</li> <li>• Surface measurement mode: The temperature taken is higher than +80°C (176°F).</li> </ul>	<p>Use the unit within its measurable range. If a malfunction still exists, please contact an OMRON representative.</p>
 	<ul style="list-style-type: none"> <li>• Forehead measurement mode: The temperature taken is lower than +34°C (93.2°F).</li> <li>• Surface measurement mode: The temperature taken is lower than -22°C (-7.6°F).</li> </ul>	<p>Use the unit within its measurable range. If a malfunction still exists, please contact an OMRON representative.</p>
	<p>The unit cannot be powered on to ready stage.</p>	<p>Change to a new battery. (Refer to section 4.4)</p>

### 4.2 Questions and Answers

#### 1. The temperature indicated is rather high.

- The unit has been stored in a cold room.

When the unit has been stored in a cold room, the measured temperature may be rather high if you measure the temperature shortly after bringing the unit to a room that is at normal temperature. Measure temperature after leaving the unit for 30 minutes in the room where it will be used. It is advisable to store the unit in the room where you are going to measure temperature.

- The probe lens has been exposed to direct sunlight.
- Measurement was taken shortly after the subject cried.  
Crying can increase facial temperature.

#### 2. The temperature indicated is rather low.

- The body is sweaty.

Do not use the unit when wet after swimming, bathing, or through sweating after physical exercise, as skin temperature may have fallen. Wipe away moisture and allow 30 minutes for the body to acclimatize to room temperature before measuring.

- The probe lens is dirty.
- Measurement was taken in surface temperature mode.  
Use forehead measurement mode.
- Measurement was taken shortly after the subject was outdoors in cold weather.  
Wait until the forehead has warmed up.
- Measurement was taken at a location other than the forehead.  
Be sure to measure exactly at the forehead, not surrounding areas such as the hairline.

## 4. Troubleshooting and Maintenance

### **3. There are variances in the measurement values.**

- Measurements were not taken at the same location.
- The probe lens is dirty.

### **4. The temperature measured on this unit is not equivalent to oral-temperature.**

- Forehead thermometers may not always calculate the exact oral-equivalent value.  
It is recommended to take regular measurements on subjects such as family members, etc., who are in good physical condition, to know their normal temperature.

## **4.3 Maintenance**

- Check the unit if it is dropped. If unsure, please contact your local OMRON representative to have your unit checked.
- When the probe lens becomes dirty, wipe it lightly with a soft dry cloth or a cotton swab.  
Do not wipe the probe lens with tissue paper or a paper towel.
- Clean the probe lens carefully to avoid damaging it.
  - Use a 70% alcohol swab or soft cotton moistened with 70% alcohol to clean the probe lens.
  - Allow the probe lens to fully dry for at least 1 minute.
- Do not store the unit in the following types of places. Doing so may damage the unit.
  - Wet locations.
  - Locations with high heat and humidity or those that are exposed to direct sunlight. Areas close to heating equipment, dusty locations, or environments where there are high salt concentrations in the air.
  - Locations where the unit will be subjected to leaning over, falling, shock, or vibration.
  - Pharmaceutical storage areas or locations where corrosive gases are present.

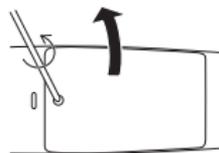
### 4.4 Replacing the Battery

Battery: CR2032 lithium button battery

**Note:** To protect the environment, discard the used batteries in accordance with the local regulations regarding waste disposal procedure.

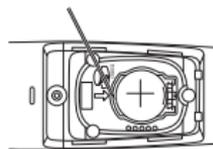
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1. Release the screw and remove the battery cover.



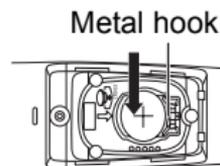
2. Remove the battery with a pointed object.

**Note:** Do not use a metal tool as it may damage the surrounding parts.



3. Insert the new battery under the metal hook on the right side and press the left side of the battery down until it clicks.

**Note:** Replace the new battery with the plus (+) side on the top.



4. Close the battery cover and tighten the screw.

# 5. Technical Data

<b>Product Description:</b>	Forehead Thermometer
<b>Model:</b>	MC-720
<b>Sensor:</b>	Thermopile
<b>Temperature Display:</b>	4-digit, °F display in 0.1 degree increments 3-digit, °C display in 0.1 degree increments
<b>Accuracy:</b>	Forehead measurement mode $\pm 0.2^{\circ}\text{C}$ ( $\pm 0.4^{\circ}\text{F}$ ) within $35.0^{\circ}\text{C}$ to $42.0^{\circ}\text{C}$ ( $95.0^{\circ}\text{F}$ to $107.6^{\circ}\text{F}$ ), $\pm 0.3^{\circ}\text{C}$ ( $\pm 0.5^{\circ}\text{F}$ ) for other range Surface measurement mode $\pm 0.3^{\circ}\text{C}$ ( $\pm 0.5^{\circ}\text{F}$ ) within $22.0^{\circ}\text{C}$ to $42.2^{\circ}\text{C}$ ( $71.6^{\circ}\text{F}$ to $108.0^{\circ}\text{F}$ ). Outside this range, it is $\pm 2^{\circ}\text{C}$ ( $\pm 3.6^{\circ}\text{F}$ ) or $\pm 4\%$ (percentage of actual temperature), whichever is greater. Room temperature mode $\pm 2^{\circ}\text{C}$ ( $\pm 3.6^{\circ}\text{F}$ ) within $10^{\circ}\text{C}$ to $40^{\circ}\text{C}$ ( $50^{\circ}\text{F}$ to $104^{\circ}\text{F}$ ). Out of this range, the measurement result cannot meet the aforementioned accuracy.
<b>Measurement Range:</b>	Forehead measurement mode $34.0^{\circ}\text{C}$ ( $93.2^{\circ}\text{F}$ ) to $42.2^{\circ}\text{C}$ ( $108.0^{\circ}\text{F}$ ) Surface measurement mode $-22.0^{\circ}\text{C}$ ( $-7.6^{\circ}\text{F}$ ) to $80.0^{\circ}\text{C}$ ( $176.0^{\circ}\text{F}$ ) Room temperature mode $10^{\circ}\text{C}$ ( $50^{\circ}\text{F}$ ) to $40^{\circ}\text{C}$ ( $104^{\circ}\text{F}$ )
<b>Power Supply:</b>	3.0V DC, 1 CR2032 lithium button battery
<b>Power Consumption:</b>	0.018 W
<b>Battery Life:</b>	With a new battery, approx. 2,500 measurements
<b>Operating Temperature and Humidity:</b>	$10^{\circ}\text{C}$ ( $50^{\circ}\text{F}$ ) to $40^{\circ}\text{C}$ ( $104^{\circ}\text{F}$ ), 15 to 85%RH

## 5. Technical Data

**Storage Temperature/  
Humidity/Air Pressure:**

-20°C (-4°F) to 60°C (140°F), 10 to 95%RH, 200 to 1060 hPa

**Protection against  
electric shock:**

Internally powered ME equipment

**Applied Part:**



= type BF

**Weight:**

Approx. 90 g (with battery installed)

**Outer Dimensions:**

45(w) × 155(h) × 39(d) mm

**Package Contents:**

Main unit, test battery (CR2032 installed), probe lens cap, instruction manual.

### Notes:

- The specification may be changed without prior notice.
- This OMRON product is produced under the strict quality system of OMRON HEALTHCARE Co. Ltd., Japan.
- This unit fulfills the provisions of the EC directive 93/42/EEC (Medical Device Directive) and the European Standard EN ISO 80601-2-56:2012: Particular requirements for basic safety and essential performance of clinical thermometers for body temperature measurement.

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## 5. Technical Data

### **Important information regarding Electro Magnetic Compatibility (EMC)**

With the increased number of electronic devices such as PC's and mobile (cellular) telephones, medical devices in use may be susceptible to electromagnetic interference from other devices. Electromagnetic interference may result in incorrect operation of the medical device and create a potentially unsafe situation. Medical devices should also not interfere with other devices.

In order to regulate the requirements for EMC (Electro Magnetic Compatibility) with the aim to prevent unsafe product situations, the EN60601-1-2 standard has been implemented. This standard defines the levels of immunity to electromagnetic interferences as well as maximum levels of electromagnetic emissions for medical devices.

This medical device manufactured by OMRON HEALTHCARE conforms to this EN60601-1-2:2007 standard for both immunity and emissions.

Nevertheless, special precautions need to be observed:

- Do not use mobile (cellular) telephones and other devices, which generate strong electrical or electromagnetic fields, near the medical device. This may result in incorrect operation of the unit and create a potentially unsafe situation. Recommendation is to keep a minimum distance of 7 m. Verify correct operation of the device in case the distance is shorter.

Further documentation in accordance with EN60601-1-2:2007 is available at OMRON HEALTHCARE EUROPE at the address mentioned in this instruction manual.

Documentation is also available at [www.omron-healthcare.com](http://www.omron-healthcare.com).

### **Correct Disposal of This Product (Waste Electrical & Electronic Equipment)**

This marking shown on the product or its literature, indicates that it should not be disposed with other household wastes at the end of its working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate this from other types of wastes and recycle it responsibly to promote the sustainable reuse of material resources.

Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take this item for environmentally safe recycling.

Business users should contact their supplier and check the terms and conditions of the purchase contract. This product should not be mixed with other commercial wastes for disposal.

Disposal of used batteries should be carried out in accordance with the national regulations for the disposal of batteries.



# 6. Some Useful Information

## How the Forehead Thermometer MC-720 Works

This unit measures the temperature at the surface of the forehead by sensing infrared emission of the skin at the measured point, and then calculates the oral-equivalent value using a unique algorithm based on actual body temperature survey data.

## About Body Temperature

*Body temperature* refers to the stable temperature of the inner body (also known as *core body temperature*). While temperature measurements at the armpit or mouth provides surface temperature values, holding the thermometer steadily at the measurement point for approx. 10 minutes provides a temperature measurement more closely representing that of core body temperature.

Since forehead temperature measurement involves no bodily support of the thermometer, the resulting measured temperature is typically lower than that of the armpit or mouth.

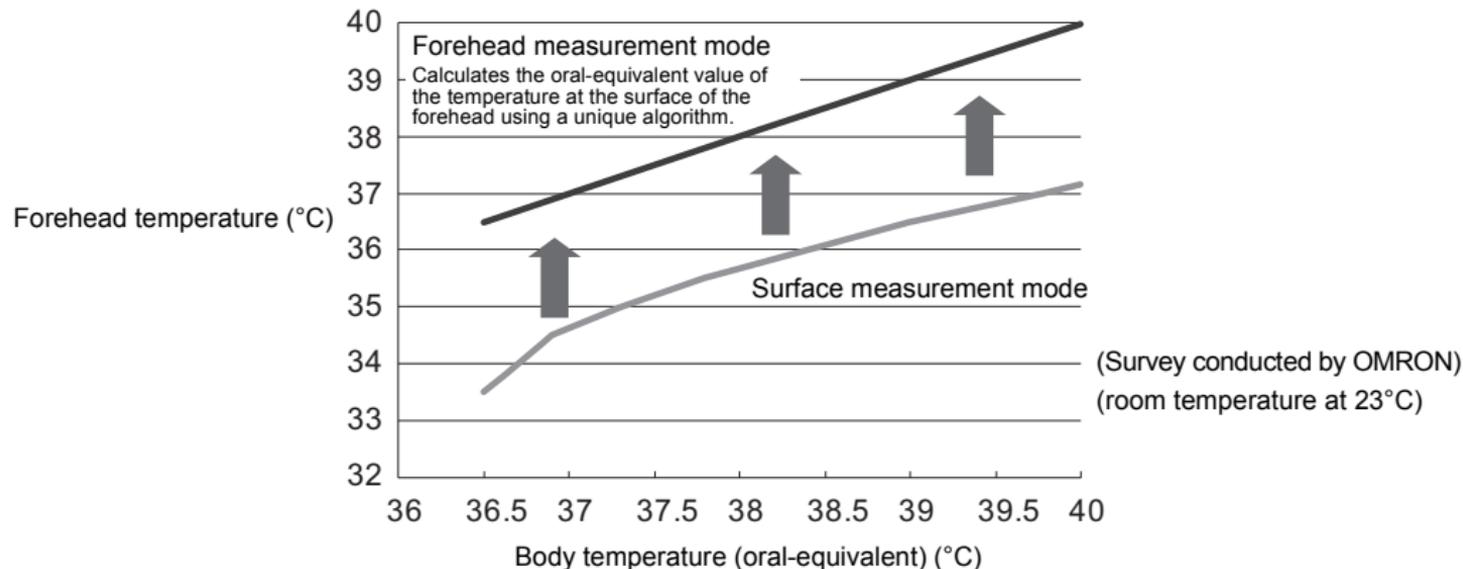
However, since the forehead has blood vessels that are much less prone to vascular constriction (a natural function of body temperature adjustment), it is supposedly a better measurement area for determining core body temperature, even in a lower temperature environment. By contrast, temperature measured at the arm or leg, for example, is not a suitable gauge of core body temperature, since such body areas are more subject to vascular constriction.

(Note that temperature measured at the forehead may still be influenced by other conditions, such as sweating, or wind from an air conditioner, etc. It is therefore advised to perform measurement in as stable an environment as possible.)

When measuring the temperature of an infant, note that infant body temperature is generally higher than adult body temperature and easily affected by external factors. For example, body temperature tends to increase after nursing or crying. Therefore, it is recommended to take measurements with the infant in calm and normal condition.

## 6. Some Useful Information

Temperature differences between body temperature and forehead temperature



This unit measures the temperature at the surface of the forehead by sensing infrared emission of the skin at the measured point, and then calculates the oral-equivalent value using a unique algorithm (forehead measurement mode) based on actual body temperature survey data.

## 6. Some Useful Information

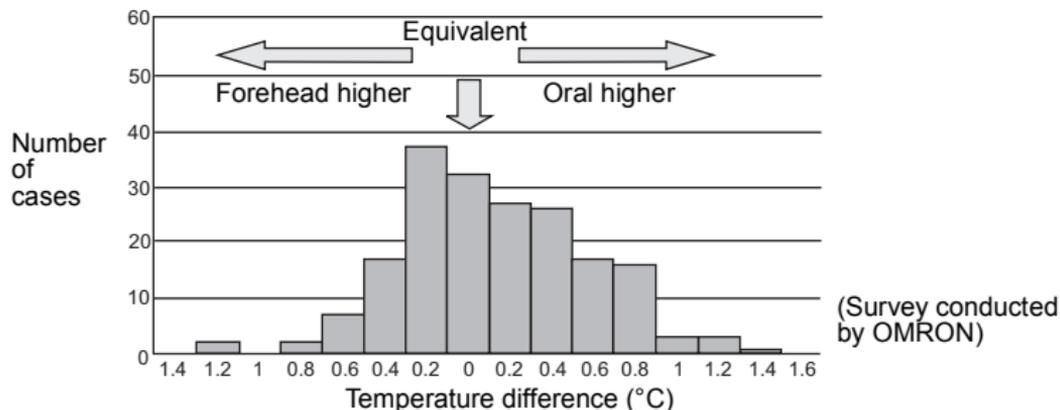
### Knowing One's Normal Temperature

In order to make a correct judgment of suspected fever conditions, it is important to know one's normal temperature. Normal temperature varies with the individual and also changes depending on the time through a day. In addition, measured body temperatures may vary depending on the thermometer or the body part where you measure (see the graph "Variances in core body temperatures obtained at the forehead and mouth"). To find out one's normal temperature, therefore, we recommend performing regular measurements under the following conditions:

- Measure with the same thermometer.
- Measure at the same area.
- Measure at the same time of day.

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Variances in core body temperatures obtained at the forehead and mouth  
(Cases surveyed: 190, ages: 0-68, environment temperature:  $23 \pm 2^{\circ}\text{C}$ )



<b>Manufacturer</b> 	<b>OMRON HEALTHCARE Co., Ltd.</b> 53, Kunotsubo, Terado-cho, Muko, Kyoto,617-0002 JAPAN		
<b>EU-representative</b> <table border="1" data-bbox="164 445 321 507"><tr><td>EC</td><td>REP</td></tr></table>	EC	REP	<b>OMRON HEALTHCARE EUROPE B.V.</b> Scorpius 33, 2132 LR Hoofddorp, THE NETHERLANDS
EC	REP		
<b>Asia Pacific HQ</b>	<b>OMRON HEALTHCARE SINGAPORE PTE LTD.</b> 438A Alexandra Road, #05-05/08, Alexandra Technopark Singapore 119967 <a href="http://www.omronhealthcare-ap.com">www.omronhealthcare-ap.com</a>		



# 目录

感谢您购买 OMRON 额式体温计 MC-720。

## 设计用途：

OMRON 额式体温计 MC-720 提供安全舒适且快速的温度测量。

本体温计为家用产品。

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3.2 使用记忆功能 .....	10		



请在使用装置前通读本使用说明书。

并妥善保管以备将来参考。有关您个人体温的具体信息，请咨询医生。

# 安全注意事项

说明书中所表示的警告记号和图例，目的是为了您能够安全及正确地使用本产品，并防止对您和他人造成伤害。

**⚠ 警告记号、图例及其含义表示错误使用时有发生人员死亡或重伤可能性的内容。**

- 对测量结果进行自我判断和治疗很危险。请遵照医生的指导。自我判断可能导致病情恶化。
- 高烧或长期发烧需要就医，尤其是对于幼儿。请咨询医生。
- 请将电池放在儿童接触不到的地方。
- 如不慎将电池吞食，请立即与医生联系。
- 请勿将电池作为可燃物进行处置，否则有可能会造成电池爆炸。
- 长时间（3 个月以上）不使用时，请取出电池。否则可能会造成电池漏液、发热、破裂等，损害本装置。
- 请勿用本装置测量任何温度超过 80.0°C (176.0°F) 的物体。

## 一般注意事项

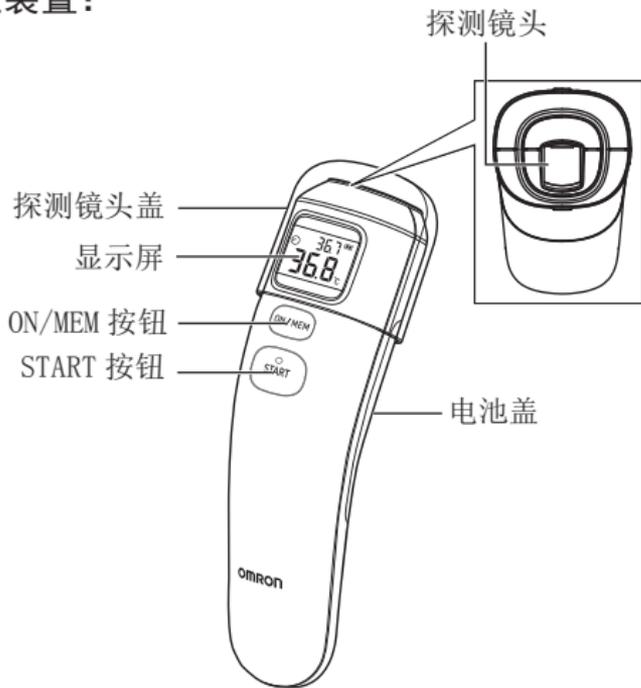
- 请勿强烈碰撞、摔落、踩踏或振动主装置。
- 请勿在本装置附近使用手提电话。
- 本装置不防水。使用时请小心，以免液体（酒精、水或热水）进入。当本装置因接触蒸气而被弄湿时，请等到其变干或用柔软的干布轻轻擦拭。
- 请勿拆卸、修理和改装本装置。
- 当探测镜头变脏时，请用柔软干布或棉签轻轻擦拭。请勿用纸巾或毛巾擦拭探测镜头。详情请参阅 4.3 节。
- 如果本装置存放处与您要进行测量的所在处有温差，请将本装置留在您要使用的室内超过 30 分钟，以便让其先达到室温，然后再进行测量。

## 安全注意事项

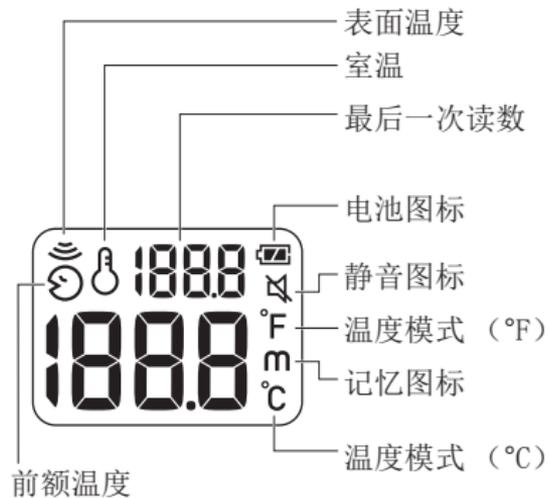
- 如果前额冰凉，请等到前额变暖后再进行体温测量。如果您使用冰袋或冰包，或冬天从室外进入室内后立即使用，可能会导致测量结果偏低。
- 请勿在游泳、洗澡后身体还湿的时候，或在体育锻炼出汗后使用本装置，因为皮肤温度会下降。擦去水分，并等待 30 分钟让身体适应室温后再进行测量。
- 请勿用手指触摸探测镜头或对镜头呼气。
- 请勿尝试在本装置潮湿时进行测量。可能会导致读数不正确。
- 请在测量前后查看显示屏上的图标，以便在适当的模式下进行测量。
- 当测量金或铝等含有低放射性的物体温度时，可能会导致读数不正确。
- 当在表面测量模式下测量某些含有低放射性的物体（如牛奶）温度时，可能会导致读数偏低。
- 请不要在有强烈静电或电磁波的地方使用本体。可能导致测量出现误差或引起机器故障。
- 当您将自己的体温告知医生时，请务必说明是从前额测量的体温。

# 1. 概述

主装置：



显示屏：



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## 2. 准备工作

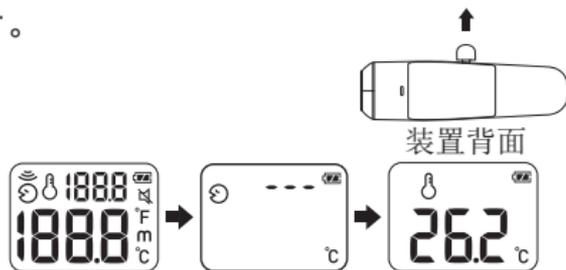
### 2.1 取下绝缘垫片

首次使用体温计时，请从电池盖拉出绝缘垫片。

本装置开启，没有进行任何按钮操作的状态下，1 分钟后显示屏上出现室温。

注：

- 即使本装置关闭后，显示屏中仍然保留室温显示。
- 将本装置放在处于室温（远离直射阳光或空调等）的水平表面上。



### 2.2 切换 °C 和 °F

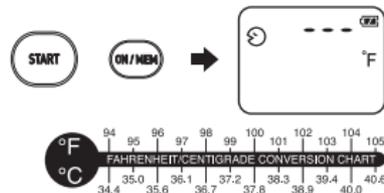
本装置默认设定为 °C。

1. 当显示室温时，按住 START 按钮。

2. 保持按住不放，然后再按住 ON/MEM 按钮直到显示屏上出现 °F 并发出两声提示音。

注：

- 若要重新选择 °C，请从步骤 1 开始操作。
- 当本装置切换 °C 和 °F 时，所有内存中保存的读数将被删除。



### 2.3 设定蜂鸣声

默认设定为启用蜂鸣声，但是可以将其禁用。

注：蜂鸣声仅在前额测量模式下有效。

1. 按 ON/MEM 按钮打开本装置。

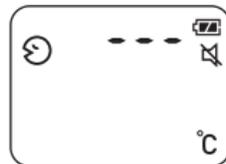
2. 按住 ON/MEM 按钮 3 秒钟。

显示屏上的“🔊”图标闪烁。



3. 松开 ON/MEM 按钮。

“🔊”图标保持亮起，蜂鸣声即被禁用。



注：

- 如果在“🔊”图标开始闪烁后仍按住 ON/MEM 按钮超过 5 秒钟，本装置将关闭而不禁用蜂鸣声。
- 若要重新启用蜂鸣器，请从步骤 1 开始操作。

## 3. 使用本装置

### 3.1 测量温度

#### 前额测量模式

此模式显示所测量的前额温度相当于口腔测量值。

请务必确保探测镜头清洁无损，前额干净没有汗水、化妆品、疤痕等。

测量前，请确认病人在 30 分钟内没有洗澡或锻炼，并已保持在稳定环境下至少 5 分钟。

建议进行三次测量。如果三次测量值不同，请选择最高的温度值。

---

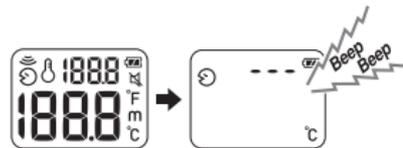
#### 1. 取下探测镜头盖。

---

#### 2. 按 ON/MEM 按钮。

显示屏上的所有指示出现 1 秒钟。

然后出现最右侧显示的显示画面并发出两声提示音。



### 3. 使用本装置

#### 3. 将探测镜头对准距离前额中心 1 至 3 cm 处。

注：

- 长时间握住本装置可能会造成探头读取较高的环境温度。因此可能会使测量结果比实际额温低。
- 请在测量期间保持静止。



CS

#### 4. 按 START 按钮。

测量在 1 秒钟后完成，并发出一声长提示音。



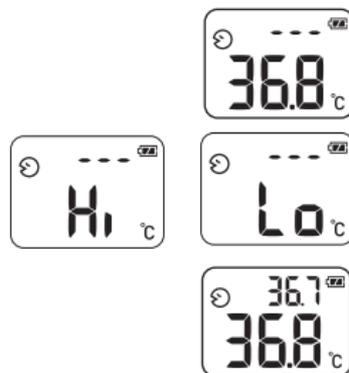
### 3. 使用本装置

#### 5. 将本装置从前额处拿开并查看测量结果。

显示屏亮起 5 秒钟。

注：

- 如果测量结果高于 42.2°C (108.0°F)，显示屏上会出现“Hi”。
- 如果测量结果低于 34.0°C (93.2°F)，显示屏上会出现“Lo”。
- 您可以在显示屏灯熄灭并发出两声提示音后进行另一次测量。确保“☉”图标保持亮起。
- 第二次测量后，第一次测量值显示在右上角，而第二次测量值显示在中央。



#### 6. 按住 ON/MEM 按钮直到显示屏上出现“OFF”以关闭本装置。

本装置将测量结果保存在内存中，然后关闭并在显示屏上显示室温。如果 1 分钟内没有执行任何操作，本装置也会自动关闭。

### 3. 使用本装置

#### 表面测量模式

表面测量模式显示物体未调节的实际表面温度，该温度与体温不同。此模式可帮助您判断物体温度是否适合于病人或婴儿（如婴儿奶粉）。

本装置默认设定为前额测量模式。请按照以下步骤切换到表面测量模式。

CS

1. 按 ON/MEM 按钮打开本装置。
2. 按住 ON/MEM 按钮。保持按住不放，然后按 START 按钮。  
显示屏上出现 “☺” 图标。



3. 将本装置靠近物体并按 START 按钮。  
将会持续测量直到松开 START 按钮为止。



注：

- 当在表面测量模式下使用时，请将探测镜头尽量靠近物体（建议距离 1 cm）。请勿将探测镜头直接放在物体上。
- 表面测量模式显示表面温度结果。表面温度和内部温度可能不同。当测量极高或极低温度的物体时，请确保安全。
- 当使用此模式时，显示屏不亮且蜂鸣声关闭。
- 若要切换到前额测量模式，请返回步骤 2，并确认 ☺ 图标变为 ☉ 图标。
- 如果 1 分钟内没有执行任何操作，本装置将自动关闭并在显示屏上显示室温。若要手动关闭本装置，请按住电源/记忆按钮直到显示屏上出现“OFF”。
- 表面测量模式不适用于体温测量或医疗用途。

### 3. 使用本装置

#### 3.2 使用记忆功能

本装置自动保存最后 25 次测量结果（不包括 Hi/Lo 结果）。

注：

- 如果内存已满，本装置将删除最早一次的读数。
- 当本装置切换 °C 和 °F 时，所有内存中保存的读数将被删除。

---

1. 按 ON/MEM 按钮打开本装置。

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2. 再次按 ON/MEM 按钮。

显示屏上出现记忆编号。



---

3. 松开 ON/MEM 按钮。

显示屏上出现最近一次的测量结果。  
反复按 ON/MEM 按钮查看较早的测量结果。



---

4. 按住 ON/MEM 按钮直到显示屏上出现“OFF”以关闭本装置。

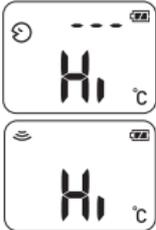
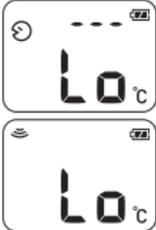
本装置关闭并在显示屏上显示室温。

# 4. 故障排除和保养

## 4.1 画面显示出错时

错误显示	原因	解决方法
	电池电量低。	更换电池。 (请参阅 4.4 节)
	在本体稳定前进行测量。	请等到图标“⊖”停止闪烁。
	本装置正在显示快速环境温度变化。	将本装置置于室温环境下至少 30 分钟: 10°C - 40°C (50°F - 104°F)。
	环境温度不在 10°C - 40°C (50°F - 104°F) 的范围内。	将本装置置于室温环境下至少 30 分钟: 10°C - 40°C (50°F - 104°F)。
	错误 5 - 9 表示本装置故障。	取出电池, 等待 1 分钟, 重新插入电池, 然后再次 打开本装置。如果再出现错误显示, 请联系 OMRON 代理商。

## 4. 故障排除和保养

错误显示	原因	解决方法
	<ul style="list-style-type: none"> <li>前额测量模式：测量的温度高于 +42.2°C (108°F)。</li> <li>表面测量模式：测量的温度高于 +80°C (176°F)。</li> </ul>	<p>请在可测温度范围内使用本装置。如果仍然出现故障，请联系 OMRON 代理商。</p>
	<ul style="list-style-type: none"> <li>前额测量模式：测量的温度低于 +34°C (93.2°F)。</li> <li>表面测量模式：测量的温度低于 -22°C (-7.6°F)。</li> </ul>	<p>请在可测温度范围内使用本装置。如果仍然出现故障，请联系 OMRON 代理商。</p>
	<p>开机后无法进入测量模式。</p>	<p>更换新电池。 (请参阅 4.4 节)</p>

### 4.2 问答

#### 1. 指示的温度相当高。

- 本装置被存放在寒冷的室内。  
当本装置被存放在寒冷的室内时，如果将装置拿到处于常温的房间后立刻测量温度，则测得的温度可能会相当高。将本装置留在您要使用使用的室内 30 分钟后再测量温度。最好将本装置存放在您打算测量温度的室内。
- 探测镜头一直暴露在直射阳光下。
- 测量对象哭泣后不应立即测量。  
哭泣可导致面部温度升高。

#### 2. 指示的温度相当低。

- 身体出汗。  
请勿在游泳、洗澡后身体还湿的时候，或在体育锻炼出汗后使用本装置，因为皮肤温度会下降。擦去水分，并等待 30 分钟让身体适应室温后再进行测量。
- 探测镜头脏了。
- 以表面温度模式进行了测量。  
使用前额测量模式。
- 测量对象在寒冷天气到户外后立即进行了测量。  
请等到前额变暖。
- 对前额以外的其他部位进行了测量。  
务必准确测量前额，而不是发际线等周围部位。

## 4. 故障排除和保养

3. 测量值之间有差异。
  - 未在相同位置进行测量。
  - 探测镜头脏了。
4. 在本装置上测得的温度不同于口腔温度。
  - 额式体温计换算出的口腔温度与实际口腔温度可能存在差异。  
建议对身体状况良好的家庭成员等测量对象进行定期测量，以了解他们的正常体温。

### 4.3 保养和保管

- 如果本装置掉落请检查。如果不确定，请联系 OMRON 代理商进行装置检查。
- 当探测镜头变脏时，请用柔软干布或棉签轻轻擦拭。  
请勿用纸巾或毛巾擦拭探测镜头。
- 请小心清洁探测镜头以免损坏。
  - 用 70% 酒精棉签或软棉布蘸取 70% 的酒精清洁探测镜头。
  - 让探测镜头完全晾干至少 1 分钟。
- 请勿将本装置存放在以下场所。否则可能会损坏本装置。
  - 潮湿的地方。
  - 温度和湿度较高或易受阳光直射的地方。靠近加热装置的位置、灰尘多的地方，或空气中含有高浓度盐分的环境。
  - 装置可能会倾斜、掉落、受到撞击或振动的地方。
  - 药品存放区或存在腐蚀性气体的地方。

## 4. 故障排除和保养

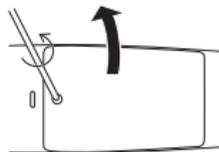
### 4.4 更换电池

电池：CR2032 钮扣锂电池

注：为了保护环境，请根据当地有关废物处理程序的相关规定丢弃废旧电池。

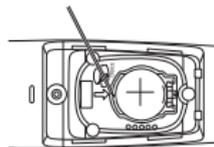
CS

1. 拧松螺丝，拆下电池盖。



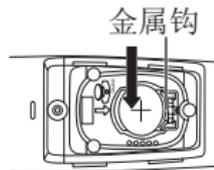
2. 用尖头物体取出电池。

注：请勿使用金属工具，否则可能会损坏周围部件。



3. 将新电池插入右侧的金属钩下，然后按下电池的左侧直到发出咔嗒声。

注：更换新电池时，请使正（+）面朝上。



4. 关闭电池盖，拧紧螺丝。

## 5. 技术数据

产品描述:	额式体温计
型号:	MC-720
传感器:	热电堆式
温度显示屏:	4 位数 °F 显示, 以 0.1°C 为增量 3 位数 °C 显示, 以 0.1°C 为增量
测量精度:	前额测量模式 $\pm 0.2^{\circ}\text{C}$ ( $\pm 0.4^{\circ}\text{F}$ ), 在 $35.0^{\circ}\text{C} - 42.0^{\circ}\text{C}$ ( $95.0^{\circ}\text{F} - 107.6^{\circ}\text{F}$ ) $\pm 0.3^{\circ}\text{C}$ ( $\pm 0.5^{\circ}\text{F}$ ) 其他范围。 表面测量模式 $\pm 0.3^{\circ}\text{C}$ ( $\pm 0.5^{\circ}\text{F}$ ), 在 $22.0^{\circ}\text{C} - 42.2^{\circ}\text{C}$ ( $71.6^{\circ}\text{F} - 108.0^{\circ}\text{F}$ ) 范围内。超出此范围时为 $\pm 2^{\circ}\text{C}$ ( $\pm 3.6^{\circ}\text{F}$ ) 或 $\pm 4\%$ (实际温度的百分比), 以较大者为准。 室温模式 $\pm 2^{\circ}\text{C}$ ( $\pm 3.6^{\circ}\text{F}$ ), 在 $10^{\circ}\text{C} - 40^{\circ}\text{C}$ ( $50^{\circ}\text{F} - 104^{\circ}\text{F}$ ) 范围内。超出这个范围, 不能满足上述测量精度。
测量范围:	前额测量模式 $34.0^{\circ}\text{C}$ ( $93.2^{\circ}\text{F}$ ) - $42.2^{\circ}\text{C}$ ( $108.0^{\circ}\text{F}$ ) 表面测量模式 $-22.0^{\circ}\text{C}$ ( $-7.6^{\circ}\text{F}$ ) - $80.0^{\circ}\text{C}$ ( $176.0^{\circ}\text{F}$ ) 室温模式 $10^{\circ}\text{C}$ ( $50^{\circ}\text{F}$ ) - $40^{\circ}\text{C}$ ( $104^{\circ}\text{F}$ )
电源电压:	DC3.0V, 1 个 CR2032 钮扣锂电池
功耗:	0.018 W
电池寿命:	使用新电池约不少于 2500 次测量
使用温湿度:	$10^{\circ}\text{C}$ ( $50^{\circ}\text{F}$ ) - $40^{\circ}\text{C}$ ( $104^{\circ}\text{F}$ ), 15 - 85% RH
存放温度 / 湿度 / 气压:	$-20^{\circ}\text{C}$ ( $-4^{\circ}\text{F}$ ) - $60^{\circ}\text{C}$ ( $140^{\circ}\text{F}$ ), 10 - 95% RH, 200 - 1060 hPa

## 5. 技术数据

电击保护：  
应用部分：

内部供电 ME 装置



=BF 型

重量：  
外形尺寸：  
包装内容：

约 90 g (含电池)

宽 45 × 高 155 × 厚 39 mm

主装置、试用电池 (已装入 CR2032)、探测镜头盖、使用说明书

CS

注：

- 规格若有变更，恕不另行通知。
- 本 OMRON 产品根据日本 OMRON 健康医疗事业株式会社严格的质量体系生产。
- 本设备符合 EC 指令 93/42/EEC (医疗设备指令) 和欧洲标准 EN ISO 80601-2-56:2012 的规定：  
对于体温测量的体温计的基本安全和必要功能的特定要求。

# CE0197

<p><b>Manufacturer</b></p> 	<p><b>OMRON HEALTHCARE Co., Ltd.</b>  53, Kunotsubo, Terado-cho, Muko, Kyoto,617-0002 JAPAN</p>		
<p><b>EU-representative</b></p> <table border="1" data-bbox="166 491 322 555"> <tr> <td data-bbox="166 491 244 555">EC</td> <td data-bbox="244 491 322 555">REP</td> </tr> </table>	EC	REP	<p><b>OMRON HEALTHCARE EUROPE B.V.</b>  Scorpius 33, 2132 LR Hoofddorp, THE NETHERLANDS</p>
EC	REP		
<p><b>Asia Pacific HQ</b></p>	<p><b>OMRON HEALTHCARE SINGAPORE PTE LTD.</b>  438A Alexandra Road, #05-05/08, Alexandra Technopark  Singapore 119967  <a href="http://www.omronhealthcare-ap.com">www.omronhealthcare-ap.com</a></p>		