

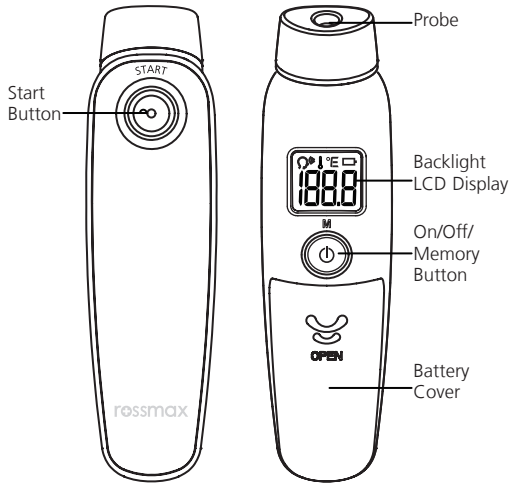


Introduction

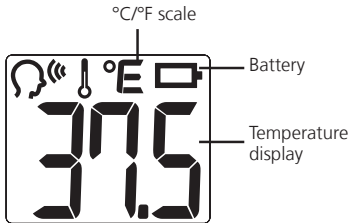
Rossmax non-contact temple thermometer using an infrared detector to detect body temperature from the temple for adult and child at home. This thermometer could also detect ambient temperature.

- The quality of the infrared temple thermometer has been verified and conforms to the provisions of the EC council directive 93/42/EEC (Medical Device Directive) Annex I essential requirements and applied harmonized standards. Comply with ASTM E1965-98.
- This thermometer converts the temple temperature to display its “oral equivalent.” (according to the result of the clinical evaluation)

Please read the instruction manual carefully before using the product and be sure to keep this manual.



LCD display



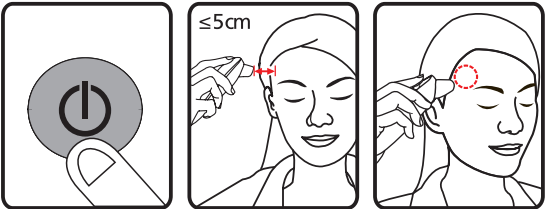
- The **temple** temperature measurement mode
- The **object** temperature measurement mode
- When battery icon shows, please replace the battery.

Function

Temple Temperature	The thermometer has been designed for practical use. It's not meant to replace a visit to the doctor. Please also remember to compare the measurement result to your regular body temperature.
Object Mode	The object mode shows the actual, unadjusted surface temperatures, which is different from the body temperature. It can help you to measure any object other than body surface, for example the baby's milk.
Fever Alarm	If thermometer detects a body temperature => 37.5°C, there will be four beeps sound with flashing reading to warn the user for potential fever.

How to measure temple temperature

1. Always make sure the probe is clean, and without damage.
2. Press “ON/OFF/Memory” button to power on the device.
3. Vertically aim the thermometer at the temple with a distance of less than 5 cm. If the temple is covered with hair, sweat or dirt, remove the obstacle from the temple to improve the measuring accuracy.
4. Press the “Start” button to take temperature. Measurement is complete when you hear a long beep sound.
5. Read the recorded temperature from the LCD display.
6. Clean the probe after each use to ensure an accurate reading and avoid cross contamination. (See the section of Care and Cleaning for details.)
7. Remember to put in the storage case when not in use.



Switching between Fahrenheit and Celsius

1. Make sure the device is off. (Or you can turn off the device by pressing and holding the “On/Off/Memory” button for 3 seconds.)
2. Hold onto the “Start” button, then press and hold the “On/Off/Memory” button until °C appears on the LCD.
3. Press the “On/Off/Memory” button to select the desired scale °C or °F, once you decide the scale, wait for 5 seconds and the setting will be confirmed while you will hear 2 short beep sounds.

How to measure object temperature

When you want to measure object temperature, you have to change to Object Mode.

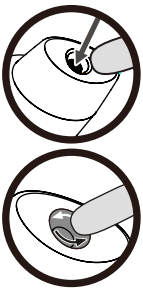
1. Make sure the device is turned off.
2. Press and hold down the “Start” button. After about 3 seconds, the display will show this sequence:
3. Release the “Start” button when the desired measurement mode is shown and 1 short beep sound will be heard.
4. When you are at Object Mode, press the “Start” button to get the real temperature.

Note:

1. Applications include temperature measurements for Water, Milk, Cloth, Skin or other object.
2. This mode shows the actual, unadjusted object temperatures, which is different from the body temperature.

Care and cleaning

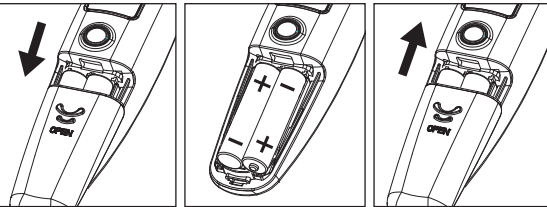
1. The probe is the most delicate part of the thermometer. Use with care when cleaning the lens to avoid damage.
2. After the measurement, please use the cotton swab with the Alcohol (70% concentration) to clean the inside of the probe, including lens and metal parts.
3. Allow the probe to fully dry for at least 5 minutes.
4. Storage temperature range: It should be stored at room temperature between -25~+55°C, RH<=95%



5. Keep the unit dry and away from any liquids and direct sunlight.
6. The probe should not be submerged into liquids.
7. Please check the device if damaged once it falls. If you can't make sure of it, please send the complete device to the nearest retailer for re-calibration.
8. Holding the thermometer too long may cause a higher ambient temperature reading of the probe. This could make the body temperature measurement lower than usual. Please try not to touch the thermometer probe part for avoiding the incorrect reading.

Battery Replacement

1. Open the battery cover: use thumb to push battery cover out.
2. Hold the device and flip the battery out.
3. Insert the new battery down with the correct electrical polarity.
4. Place back the battery cover.
5. Keep the battery away from children.



Troubleshooting:

Error Message	Problem	Solution
EE	The system is not functioning properly.	Unload the battery, wait for 1 minute and re-power it. If the message reappears, contact the retailer for service.
E1	Exceeding operating temperature range	Allow the thermometer to rest in a room for at least 30 minutes at room temperature: 15~40°C (59~104°F).

	(1) In Temple mode: Temperature taken is higher than +42.2°C (108°F) (2) In Object mode: Temperature taken is higher than 99°C (210.2°F)	Please select the target within specifications. If a malfunction still exists, please contact the nearest retailer.
	(1) In Temple mode: Temperature taken is lower than +34°C (93.2°F) (2) In Object mode: Temperature taken is lower than 0°C (32°F)	Please select the target within specifications. If a malfunction still exists, please contact the nearest retailer.
	Device cannot be powered on to the ready stage.	Change with a new battery.

Specification

Temperature measurement range	Temple mode: 34~42.2°C (93.2~108°F) Object mode: 0~99°C (32~210.2°F)
Accuracy	For temple mode: +/-0.3°C (0.5°F) during 34~42.2°C (93.2~108°F). For object mode: +/-5°C (8°F) room temperature 15~40°C (59~104°F).
Operating temperature range	Temple mode :15~40°C (59~104°F). Object mode :10~40°C (50~104°F). RH ≤= 95%
Storage and transportation temperature range:	Temperature:-25~55°C (-13~131°F), RH ≤= 95%
Memory	9 set
Display resolution	0.1
Battery	AAA x 2
Weight (without battery)	55g (without battery)
Size	14.5cm(L) x 3.95cm(w) x 4.0cm(H)
Auto shutdown	60 sec.
Battery life	3000 consecutive measurements or 1 year with 1-2 measurements per day including stand-by mode.
Safety classification	 Type BF equipment

*Dispose of device and batteries according to local regulations

Caution

- Only use the device once you have read and understood these instructions for use. Keep the instruction manual for use.
- The thermometer and patient needs to stay in the room in which the measurement is taken for at least 30 minutes before use.
- It is recommend that you always take the temperature in the same location, since temperature readings may vary according to the locations.
- It is recommended that three temperatures are taken and the highest one taken as the reading if:
a) New born infants
b) Children with a compromised immune system and for whom the presence or absence of fever is critical.
c) When the user is learning how to use the thermometer for the first time until he/she has familiarized himself/herself with the instrument and obtains consistent readings.
d) The reading is extremely low.
- Do not take a measurement while drinking, eating, sweating or exercising.
- Do not take measurement while or immediately after nursing.
- Children is not allowed to use the device. Medical products are not toys.
- Influences on body temperature
a) A person's individual metabolism
b) Age: Greater temperature fluctuations occur faster and more often in children. Normal body temperature decreases with age.
c) Clothing
d) Outside temperature
e) Time of day: Body temperature is lower in the morning and increases throughout the day towards evening.
f) Activities: Physical and, to a lesser extent, mental activities increase body temperature.
- This device is not shock-protected. Do not drop or expose to heavy shock this device.
- Do not bend the device.
- Do not disassemble or make modifications the device.
- Please do not dispose of the product in the household waste at the end of its useful life. Disposal can take place at your local retailer or at appropriate collection points provided in your country.
- Do not boil the probe.
- Do not use the device if it operates irregularly or any error message showed.
- Do not use thinner or benzene to clean the device.
- Wipe the device clean before storing.
- When take the device from storage at below or above 15~40°C(59~104°F), place it in 15~40°C(59~104°F) temperature range for at least 30 minutes before use.
- Remove the battery if the device will not be used for a long time.
- If this device is used according to the operation instruction, periodic re-calibration is not required. If you still have questions, please send the complete device to dealers.

- Please note that this is a home healthcare product only, and it is not intended to serve as a substitute for the advice of a physician or medical professional.
- Do not use this device for diagnosis or treatment of any health problem on disease. Measurement results are for reference only. Contact your physician if you have or suspect any medical problems. Do not change your medications without the advice of your physician or healthcare professional.
- This device may not meet its performance specification if stored or used outside temperature and humidity ranges specified in specifications.
- Battery should not be charged or placed into extreme heat as it may explode.
- The thermometer contains small parts (ex: battery, etc.) that can be swallowed by children. Therefore never leave the thermometer unattended to children.
- Be sure to consult a doctor if you feel that your health is in poor condition.
- Do not judge your health only on the presence or absence of a fever.

EMC guidance and manufacturer's declaration

Guidance and manufacturer's declaration-electromagnetic emissions		
The HA500 is intended for use in the electromagnetic environment specified below. The customer or the user of the HA500 should assure that it is used in such an environment.		
Emission test	Compliance level	Electromagnetic environment-guidance
RF emissions CISPR 11	Group 1	The HA500 uses RF energy only for its internal function. Therefore, its RF emissions are very low and are not likely to cause any interference in nearby electronic equipment.
RF emissions CISPR 11	Class B	The HA500 is suitable for use in all establishments, including domestic establishments and those directly connected to the public low-voltage power supply network that supplies buildings used for domestic purposes.
Harmonic emissions IEC 61000-3-2	Not applicable	
Voltage fluctuations/flicker emissions IEC 61000-3-3	Not applicable	

Guidance and manufacturer's declaration-electromagnetic immunity			
The HA500 is intended for use in the electromagnetic environment specified below. The customer or the user of the HA500 should assure that it is used in such an environment.			
Immunity test	IEC 60601 test level	Compliance level	Electromagnetic environment-guidance
Conducted RF IEC 61000-4-6	3 Vrms 150 KHz to 80 MHz	Not applicable	Portable and mobile RF communications equipment should be used no closer to any part of the HA500, including cables, than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter. Recommended separation distance: d = 1,2 √P d = 1,2 √P 80MHz to 800 MHz d = 2,3 √P 800MHz to 2.5 GHz
Radiated RF IEC 61000-4-3	3 V/m 80MHz to 2,5 GHz	3 V/m	

			Where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer and d is the recommended separation distance in metres (m). 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. ^b Interference may occur in the vicinity of equipment marked with the following symbol: 
NOTE1: At 80 MHz and 800 MHz, the higher frequency range applies. NOTE2: These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.			
a. Field strengths from fixed transmitters, such as base stations for radio (cellular/cordless) telephones and land mobile radios, amateur radio, AM and FM radio broadcast and TV broadcast cannot be predicted theoretically with accuracy. To assess the electromagnetic environment due to fixed RF transmitters, an electromagnetic site survey should be considered. If the measured field strength in the location in which the HA500 is used exceeds the applicable RF compliance level above, the HA500 should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as reorienting or relocating the HA500. b. Over the frequency range 150 kHz to 80 MHz, field strengths should be less than 3 V/m.			

Guidance and manufacturer's declaration-electromagnetic immunity			
The HA500 is intended for use in the electromagnetic environment specified below. The customer or the user of the HA500 should assure that it is used in such an environment.			
Immunity test	IEC 60601 test level	Compliance level	Electromagnetic environment-guidance
Electrostatic discharge (ESD) IEC 61000-4-2	± 6 kV contact ± 8 kV air	± 6 kV contact ± 8 kV air	Floors should be wood, concrete or ceramic tile. If floors are covered with synthetic material, the relative humidity should be at least 30%
Electrical fast transient/burst IEC 61000-4-4	± 2kV for power supply lines ± 1kV for input/output lines	Not applicable Not applicable	Mains power quality should be that of a typical commercial or hospital environment.
Surge IEC 61000-4-5	± 1kV differential mode ± 2kV common mode	Not applicable Not applicable	Mains power quality should be that of a typical commercial or hospital environment.
Voltage Dips, short interruptions and voltage variations on power supply input lines IEC 61000-4-11	<5% UT(>95% dip in UT) for 0,5 cycle 40% UT(60% dip in UT) for 5 cycles 70% UT(30% dip in UT) for 25 cycles <5% UT(>95% dip in UT) for 5 s	Not applicable Not applicable Not applicable	Mains power quality should be that of a typical commercial or hospital environment. If the user of the HA500 requires continued operation during power mains interruptions, it is recommended that the HA500 be powered from an uninterruptible power supply or a battery.
Power frequency (50/60 Hz) magnetic field IEC 61000-4-8	3 A/m	3 A/m	Power frequency magnetic fields should be at levels characteristic of a typical location in a typical commercial or hospital environment.
NOTE: UT is the a.c. mains voltage prior to application of the test level.			

Recommended separation distance between portable and mobile RF communications equipment and the HA500			
The HA500 is intended for use in an electromagnetic environment in which radiated RF disturbances are controlled. The customer or the user of the HA500 can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and the HA500 as recommended below, according to the maximum output power of the communications equipment.			
Rated maximum output power of transmitter / W	Separation distance according to frequency of transmitter / m		
	150 kHz to 80 MHz / d=1,2√P	80 MHz to 800 MHz / d=1,2√P	800 MHz to 2,5 GHz / d=2,3√P
0,01	0,12	0,12	0,23
0,1	0,38	0,38	0,73
1	1,2	1,2	2,3
10	3,8	3,8	7,3
100	12	12	23
For transmitters rated at a maximum output power not listed above, the recommended separation distance d in metres (m) can be estimated using the equation applicable to the frequency of the transmitter, where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer. NOTE 1: At 80 MHz and 800 MHz, the separation distance for the higher frequency range applies. NOTE 2: These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.			

Warranty

This instrument is covered by a 5 year guarantee from the date of purchase, batteries and accessories are not included. The guarantee is valid only on presentation of the guarantee card completed by the dealer confirming date of purchase or the receipt. Opening or altering the instrument invalidates the guarantee. The guarantee does not cover damage, accidents or non-compliance with the instruction manual. Please contact Rossmax service.

Date of purchase:

Store where purchased:

Price Paid (excl. Tax):

Purchase for:



Rossmax International Ltd.
12F, No.189, Kang Chien Rd., Taipei 114, Taiwan
Rossmax Swiss GmbH
Ramstrasse 16, CH-9442 Berneck, Switzerland



ISO 9001:2015
CE 0120



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