## User manual Peace of mind

#### **Wireless Thermometer**

Product model: UCT-CMT1 Version: V1.0

#### Precaution!!!

In order to avoid unnecessary issues, please read the following information before using the wearable thermometer.

- 1. Warning: Any form of modification to this device is forbidden.
- 2. To avoid risk of explosion, do not use device with flammable anesthetic gas.
- 3. A qualified doctor should make the diagnosis of clinical manifestation and symptoms, with device as a subsidiary tool.
- 4. Please check device regularly to make sure that it is in firm contact with the skin. Otherwise data may be inaccurate.
- 5. Soaking device in liquid or disinfectant may lead to incorrect date or breakage.
- 6. Sudden movement of the users may lead to incorrect data.
- 7. Make sure to keep receiver charged when using it to monitor body temperature for a long period time
- 8. The temperature monitoring feature of device is primarily applicable to children. Muscle and fat affect wireless transmission, so range of transmission decrease if an adult or obese child uses device.
- 9. Pay attention to operating temperature and humidity. Using device in conditions that do not satisfy requirements may lead to measurement error.
- 10. Device is for indoor use only.
- 11. DO NOT apply pressure to device. If the cover is broken, stop using the device.
- 12. DO NOT use device together with MRI or CT equipment.
- 13.DO NOT use the patch for any other purpose besides measuring human body temperature.
- 14. DO NOT place the patch over wounds, sores or abrasions.

- 15. DO NOT excessively bend or twist the patch prior to application.
- 16. DO NOT immerse the patch in water. Patch may be removed for a bath or shower and then re-applied afterwards.
- 17. DO NOT use the patch if it has been damaged or immersed in water.
- 18. DO NOT attempt to take apart the patch.
- 19. DO NOT wear successive patches under the same arm. When removing one patch and starting another, place the second patch on the other side of the body.

## **Package contents**

- 1.Baby thermometer host x 1pc
- 1.CR2025 battery x 1pc
- 2. Silicon rubber case x 1pc
- 3. Medical Patches x 10pcs
- 4.User manual x 1pc

## **Functional description**

- 1.Monitoring and recording

  APP can monitor body temperature continuously and keep data record for your doctor reference when needed any time.
- 2.Reminding

When body temperature reaches threshold you already set up; when your phone is out of the "thermometer" Bluetooth range; When medicine is administered;

When the device is in a low battery;

- 3.Remote Monitoring via WIFI WIFI connectivity (connect via Bluetooth to thermometer) allow to access real time data with another smart phone which connects to the WIFI network.
- 4.Remote Monitoring via Sever
  One smart phone via Bluetooth access real time data indoor and login in account, when another phone with same app and login in same account then can share any data. Ease at work. (待核对)

## **Specifications**

Product name: Wireless Thermometer

Product model: UTC-CMT1

Battery: 3V CR2025 (Can be replaced)

Battery life: 150 days at 8 hours per day

Product dimension: 45 X 27 X 6 (mm)

Weight:7g (Excluding rubber case)

Response time: 10S

Measurement range:25℃-45℃

Accuracy : $\pm 0.05^{\circ}(35^{\circ}-38.5^{\circ})$ ,  $\pm 0.1^{\circ}(<35^{\circ})$  and >38.5);

Or  $\pm 0.09$ °F(95°F-101.3°F), $\pm 0.18$ °F(<95°F and>101.3°F)

Operation environment: Temperature 5℃-40℃(41°F-104°F),

Humidity:15%RH - 85%RH

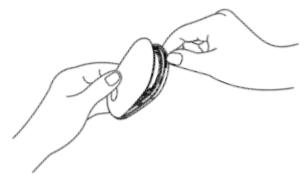
Receiver: iOS: BLE4.0&iOS8.0 and above

Android: BLE4.0&Android4.3 and above

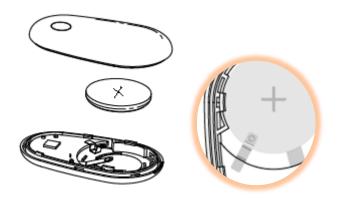
## **Getting Started**

## 1.Insert Battery

-Take the rubber case off and find the "Opening position" on side of host to open case even using your fingernail.



-Put the battery in  $\ \ (+$  - attention  $\ )$  then close the case .



#### 2.Download APP

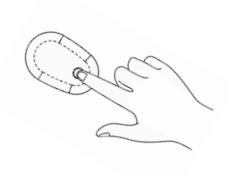
-Scanning the QR code (QR code need)

Or search for "Baby thermometer" in Google play or Apple store.

-Download and install APP on your smart phone.

### 3. Setting up connection

- -Turn on your smart phone and its Bluetooth.
- -Switch on the device (Press the button for 2 seconds. A single LED blink in Blue 5times quickly indicates power is on.)



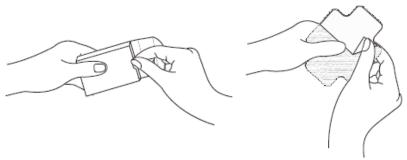
- -Open the "Baby thermometer" APP and create a new user.
- -Connection will be established automatically and APP synchronize the current data.

For the most accurate results, make sure the device has been at room temperature for at least 5 minutes before using it.

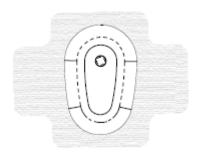
## 4. Wearing preparation

Make sure the device being on power before followings:

-Take one patch from box and remove the cover away.

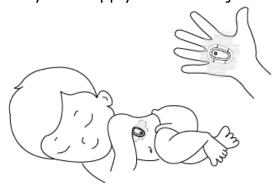


-Face the temperature sensor up and stick the other side (with button) to the patch. Make sure the device is in the center of the patch.



## 5.Wearing

-Lift the arm naturally then apply the device just below the armpit.



-Hold arm tight against side for at least 8 minutes.

#### Note:

- -Make sure the area of the skin that contacts with the device stays flat and smooth.
- -Make sure the device taken the rubber case on when working for child.

#### 6.Switch the device off

Press the button 2 seconds a single LED blink in RED indicates power is off.

Make us feel at ease even forget turning device off after using ,since "thermometer" will switch off in 2mins automatically when monitor less 30% (  $^{\circ}$ F).

Warning: Children MUST be used with the help of the guardian.

#### **Maintenance**

The probe should be cleaned and disinfection.

- -Replace the battery when low battery is indicated on app, otherwise the device will not function as intended.
- -Clean the surface of the device and rubber case with 75% concentrated medicinal alcohol before and after using.
- -Do not soak the device in any liquid.
- -Do not sterilize or use an autoclave on the device.
- -If you notice any deterioration or damage, stop using the device immediately.

## **Troubleshooting**

1. The device is not switched on?

Please check if low or no battery power. If yes, please replace battery.

2.App cannot read data?

Please check if device switch on and worn correctly; if your phone's Bluetooth on; if the deice and your phone being on valid range.

3. Unusual temperature data?

Please check the wearing position; make sure held tight for first 8mins; make sure device already being indoor for 5mins before using.



Read instructions before use.



Device classification: Type BF



Waste Electrical and Electronic Equipment Directive



#### **EMC DESCRIPTIONS**

The EMC declaration according to the requirement of EN 60601-1-2

#### **Cautions:**

- ➤ User must regard EMC, please install and put in service **K-020** according to the EMC information provided in the accompanying documents.
- Portable and mobile RF communications equipment can affect medical electrical equipment.
- > The performance of the EQUIPMENT and SYSTEM that was determined to be essential performance.
- ➤ Table 201-Guidance and manufacturer's declaration-electromagnetic emissions-for *K-020, as following table.*
- ➤ Table 202-Guidance and manufacturer's declaration-electromagnetic immunity -for **K-020**, as following table.
- > Table 204 -Guidance and manufacturer's declaration-electromagnetic immunity -for **K-020**, as following table.
- ➤ Table 206 Recommended separation distances between portable and mobile RF communications equipment and **K-020**, as following table.

#### Table 201

# **Guidance and manufacturer's declaration – electromagnetic emissions**

The **K-020** is intended for use in the electromagnetic environment specified below. The customer or the user of the **K-020** should assure that it is used in such an environment.

<b>Emissions test</b>	Compliance	Electromagnetic environment - guidance		
RF emissions		The <b>K-020</b> uses RF energy only for its internal function.		
CISPR 11	Group 1	Therefore, its RF emissions are very low and are not likely to		
		cause any interference in nearby electronic equipment.		
RF emissions		The <b>K-020</b> is suitable for use in all establishments, including		
CISPR 11	Class B	domestic establishments.		
Harmonic				
emissions	Not applicable			
IEC 61000-3-2				
Voltage				
fluctuations /	Not applicable			
flicker emissions				
IEC 61000-3-3				

## <u>Table 202</u>

# Guidance and manufacturer's declaration – electromagnetic immunity

The **K-020** is intended for use in the electromagnetic environment specified below.

The customer or the user of the **K-020** should assure that it is used in such an environment.

	The customer or the user of the <b>K-020</b> should assure that it is used in such an environment.				
Immunity	IEC 60601 test level	Compliance level	Electromagnetic environment -		
test			guidance		
Electrostatic	± (2, 4, 6) kV	± (2, 4, 6) kV	Floors should be wood, concrete or ceramic		
discharge	contact	contact	tile. If floors are covered with synthetic		
(ESD)	± (2, 4, 8) kV	± (2, 4, 8) kV air	material, the relative humidity should be at		
	air		least 30 %.		
IEC 61000-4-2					
Electrical fast	±2 kV for	Not applicable	Mains power quality should be that of a		
transient/burs	power		typical commercial or hospital		
t			environment.		
	supply lines				
IEC 61000-4-4	±1 kV for				
	input/output				
	lines				
Surge	±1 kV	Not applicable	Mains power quality should be that of a		
	differential		typical commercial or hospital		
IEC 61000-4-5			environment.		
	mode				
	±2 kV common				
	mode				
Voltage dips,	<5 % <i>U</i> T	Not applicable	Mains power quality should be that of a		
short	(>95 % dip in		typical commercial or hospital		
interruptions	<i>U</i> T)		environment. If the user of the <b>K-020</b>		
and	for 0,5 cycle		requires continued operation during power		
voltage			mains interruptions, it is recommended		
variations	40 % <i>U</i> T		that the $\emph{K-020}$ be powered from an		
on power	(60 % dip in		uninterruptible power supply or a battery.		
supply	<i>U</i> T)				
input lines	for 5 cycles				
IEC	70 % <i>U</i> T				
61000-4-11	(30 % dip in				
	<i>U</i> T)				
	for 25 cycles				

	<5 % <i>U</i> T (>95 % dip in <i>U</i> T) for 5 sec			
Power frequency (50/60 Hz) magnetic field	3 A/m	3A/m	Power frequency magnetic fields should be at levels characteristic of a typical location in a typical commercial or hospital environment.	
IEC 61000-4-8				
<b>NOTE</b> <i>U</i> T is the a.c. mains voltage prior to application of the test level.				

## Table 204

# Guidance and manufacturer's declaration – electromagnetic immunity

The  $\emph{K-020}$  is intended for use in the electromagnetic environment specified below.

The customer or the user of the **K-020** should assure that it is used in such an environment.

Immunity	IEC 60601	Compliance	Electromagnetic environment – guidance	
test	test level	level		
			Portable and mobile RF communications equipment should be used no closer to any part of the <b>K-020</b> , including cables, than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter.	
Conducted RF IEC 61000-4-6 Radiated RF IEC 61000-4-3	3 Vrms 150 kHz to 80 MHz 3 V/m	Not applicable  3 V/m	Recommended separation distance $d=1{,}2\sqrt{P}$	
	80 MHz to 2,5 GHz		$d=1,2\sqrt{P} \qquad \text{80 MHz to 800 MHz}$ $d=2,3\sqrt{P} \qquad \text{800 MHz to 2,5 GHz}$ 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 meters (m). Field strengths from fixed RF transmitters, as determined by an electromagnetic site survey, should be less than the compliance level in each frequency range. Interference may occur in the vicinity of equipment marked with the following symbol:	



NOTE 1 At 80 MHz and 800 MHz, the higher frequency range applies.

NOTE 2 These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.

<sup>a</sup> 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 *K-020* is used exceeds the applicable RF compliance level above, the *K-020* should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as reorienting or relocating the *K-020*.

Over the frequency range 150 kHz to 80 MHz, field strengths should be less than 3 V/m.

#### Table 206

## Recommended separation distances between portable and mobile RF communications equipment and the *K-020*

The **K-020** is intended for use in an electromagnetic environment in which radiated RF disturbances are controlled. The customer or the user of the **K-020** can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and the **K-020** as recommended below, according to the maximum output power of the communications equipment.

Rated maximum	Separation distance according to frequency of transmitter				
output power of	150 kHz to 80 MHz	80 MHz to 800 MHz	800 MHz to 2,5 GHz		
transmitter					
W	$d = 1, 2\sqrt{P}$	$d = 1, 2\sqrt{P}$	$d = 2,3\sqrt{P}$		
0,01	0.12	0.12	0.23		
0,1	0.38	0.38	0.73		
1	1.2	1.2	2.3		
10	3.8	3.8	7.3		
100	12	12	23		

For transmitters rated at a maximum output power not listed above, the recommended separation distance d in meters (m) can be estimated using the equation applicable to the frequency of the transmitter, where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer.

NOTE 1 At 80 MHz and 800 MHz, the separation distance for the higher frequency range applies. NOTE 2 These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.

#### Manufacturer

Company Name: Ultra Creation Limited

Address: Unit 10-18, 32/F, Tower 1, Millennium City 1,

388 Kwun Tong, Kowloon, Hong Kong

www.ultracreation.com.hk

## EC Representative (详细特定)

Representative Name:

Address:

Contact person:

Telephone No:

Fax No: Email:

#### Caution:

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.

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.

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

#### RF Exposure

The equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment.

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