## DIGITAL THERMOMETER MODEL: KET-05

## User manual V1.3

- Appreciate for you to purchase the product. In order to use the product properly, please read the instruction carefully. And Keep it in hand to check
- In order to use the product exactly please read and take a full understand the safety precautions in this
- Product warranty card inside, please don't lose.
- Expected use. The body temperature measured is displayed through thermistor.

## Safety Precaution

- Represented in the instructions for warning signs, its purpose for you is to use this product fully and correctly, and prevent the harm to you and others
- Warning signs and the meaning as following

## Caution

- Incorrect use will cause the possibility of casualties.
- Incorrect use will cause the possibility of casualties or damage of goods
- \*The damage of goods are are refers to the relevant housing, property and livestock, pet damage.



△ Said notice, the attention of the specific content 'or near, in words or pictures, (left mark) said 'note burst'. Said prohibits, the prohibits of the specific content in' 'or near, in words or pictures, (left mark) said



'general prohibition'. Said must obey, the obey of the specific content in' 'or near, in words or pictures. (left mark) said 'general imperative'.



Dust protection and Waterproof level



Please refer to the instruction manual.

### SIGNS



PACKING: Your device is safe from damage during transport packaging. Packaging and raw materials can be reused or recycled circuit.



DEVICE: Do not disposal the device with your normal household waste in the end of its life. Enquire about the options for environmentally-friendly disposal.



BATTERY: Used batteries do not belong in household waste. The batteries must be returned to a collection point for used batteries.



Interference may occur in the vicinity of equipment marked with the following symbol.



Type BF equipment.

### HEALTH PRODUCT WARRANTY

- 1.We will be offered one-year free warranty after you buy the health
- Free maintain won't be given under the following circumstance:
- \*The damage caused by dismantle or refit without authorized.
  \*The breakdown, row harm or damaged because of the move or drop.
- \*The damage caused by lack of maintain.
- \*The breakdown caused by the manipulation that hasn't follow the requests of the Manual.
- \*The damage caused by the improper repair of a non-our-company 3. We will charge the cost to you when you need the repair service
- beyond warranty.
  4.Please take the product to sales point when you need the service of
- warranty.

  5. If it is necessary, you can ask our technicians to provide the circuit diagram and the data of repairable components when you make the service of warranty.

## A WARNING

It is very dangerous for the self judgment and treatment that only by the measuring result, so please be sure to follow the doctor's instruction.
"Self judgment could result in deterioration.

Please use simple disinfection in medical alcohol on after

A hot bath, long exposure by the sun and strenuous exercise should not be measured immediately, otherwise it may cause the measured value to be higher than the actual temperature.

After sleep with water pillow or water sac or just back home in winter, if take the measurement immediately may get the measurement result to be low.



No not disassemble and repair your thermometer at will.

No not place the thermometer in a place that is prone to splashing, high temperature, humidity, direct sunlight, dust, or corrosion. This product can not be used in the above environment.

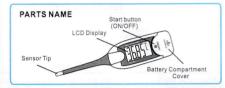
At the end of the service life of this product, do not discard it together with furniture garbage. Please hand over used batteries to the appropriate recycling point according to national and local regulations.

- When the child himself measures, it may lead to
- accidental injury.
  Accidentally swallowed the battery, please contact the doctor immediately.
  \*Please don't use if the after swimming, bathing.
- \*Measurement sites such as inflammation, trauma, postoperative local lesions can not be used.

## ADVICE

- Please don't use this product in any other position except Oral Axillary and Rectal
- 'Please don't collide, break, tread and shake the body of product.

- \*Please don't collide, break, tread and shake the body of product.
  \*Please don't use this product in the environment with serious electromagnetic interference.
  \*Please don't dismantle, repair and reform the product.
  \*Please note don't let the liquid (alcohol, drip, hot water and so on) into.
  \*All the operate without follow advice will lead to the incorrect result of lest.
  \*Cleaning and disinfection methods: Before and after the use of a 75 % alcohol cotton ball to wipe the probe area of the thermometer, 75 % alcohol cotton ball to wipe the probe area of the thermome dry with a soft cloth. Clean the thermometer regularly once a m



-Model No.: KFT-05i

-Display: LCD,4.5digits, 24mmx16mm

- -Temperature measurement: thermistor
- -Apply for: Oral / Axillary / Rectal
- -Temperature measuring time: 10 seconds
- -Accuracy: ±0.1°C (±0.2°F)
- -Resolution: 0.01°C (0.01°F) -Measurement scope:

32.00°C~42.99°C (89.60°F~109.38°F)

Temperature<32.00°C (89.60°F) display L°C (L°F)
Temperature>42.99°C (109.38°F) display H°C (H°F)

-Waterproof level: IP55 -Memory records: 1 set

-Low voltage Indication

-Automatically turn-off function (5 min)

-Validity: 3 years, (Battery not included)

- -Power source and voltage: DC 3V, CR1632
- -Battery life: Approx. 600 times or 1 years -Dimension:135mm×28mm×10mm
- -Unit weight: Approx. 16g including battery

-Work environment:

Temperature: 5°C~40°C (41°F~104°F)-Humidity: 15%RH~85%RH;

Atmospheric pressure: 70KPa~106KPa;

-Transport/Storage condition: Temperature: -20°C~55°C (-4°F~131°F);

Humidity: 10%RH~85%RH;

Atmospheric pressure: 70KPa~106KPa;

\*if there is any specification change for the product, without prior notice

# 2.Approximate

then turn on

Heat pocket

## measuring time: 10 seconds. 35.80°C

1.Place the probe tip under the tongue

as near as possible to the heat pocket.

LCD up

The side up

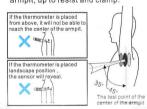
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## TAKING AN AXILLARY TEMPERATURE

1. Place the probe in the middle of the armpit, up to resist and clamp



2.Approximate





- \* When the room temperature is above 34°C (93.2°F), Please use the wet towel to cool the test parts before the measurement
- the measurement.

  When measurement in the mouth and armpit Please keep quiet in the following occasions to get the correct temperature. Otherwise, it will cause error.

   After you get up, the body's temperature will rise quickly, Please wait for a moment then test the body's temperature 30 minutes later after sports and bath.

   Please test the body's temperature 30 minutes later after diet.

  Measurement for children's temperature

- Measurement for children's temperature

  It's best to measure the armpit temperature when taking a child's temperature.

  It's best to measure the armpit temperature when the child is in sleeping.

  Measurement when the child is sitting.
- Measurements must be made by an adult with the thermometer clamped between the arms to preve movement.

- Measurement in Oral
- Measurement in Oral
  The following occasions will cause the body's temperature rises or fails and will get the incorrect temperature.
  Please measurement 30 minutes later after smoking.
  Please don't drink the cold or hot drinks in 30 minutes before measurement.
  Measurement in the armpit
  The following occasions will cause the

- The following occasions will cause the underarm sweat and will get the incorrect
- Stay in the bed with covers too much time. Please use dry towel to wipe the underarm sweat before the measurement.
- Clamp the armpit too much time Please use dry towel to wipe the underarm sweat before the measurement.
- In 30 minutes after diet. Please use dry towel to wipe the underarm sweat before the measurement.

Apply a water-soluble lubricant to the probe cover. Gently insert the probe (0.5 to inch) into the rectum. Never try to force the thermometer past any resistance. Hold the thermometer in place until the beep sounds. Approximate measuring time: 10 seconds

The sound function is available to be turn ON/OFF With the unit is off, press and hold the ON/OFF button until when the screen displays "ON" mark and let go of button. After it, press the button again to display "OFF" mark on LCD. This mean the sound is turn off. Repeat this operation to activate it again

Press the ON/OFF button to turn on the thermometer. The last measured temperature is automatically saved is displayed. The temperature appears with a small "M" in the display You can now perform another measurement or turn off the power with the ON/OFF button. The stored value is automatically overwritten when a new measurement is started.

## BODY TEMPERATURE MEASUREMENT



- 1.Press ON/OFF button to activate. The unit Would beep and display This LCD display test will go on for around 2 seconds
- 2. Then, the temperature taken last time would be displayed with a "M" mars in the right corner.
- 3.When "Lo" and flashing  ${}^{\circ}\text{C}({}^{\circ}\text{F})$  displays,the thermometer is ready for temperature measuring. 4. The beep will sound when temperature measuring is complete.
- 5.Pres ON/OFF button of the unit. (The unit will automatically power off after approximately 5 minutes after use.) 6.(For °F and °C switch function, hold the button for 3 seconds when turning on.)

This device is equipped with a 3 colours backlights LCD that light up at the end of each measurement with a colour that depends by detected temperature, providing an immediate correspondence message to the user. Below are the body temperature ranges corresponding to each color and the corresponding feverish state Interpretation:

Backlight Colour	Temperature Measurement range		
GREEN	36.00~37.29°C(96.80~99.13°F)		
BLUE	32.00~35.99°C; 37.30~37.99°C(89.60~96.79°F; 99.14~100.39°F)		
RED	38.00~42.99°C(100.40~109.38°F)		

Regardless of the measurement site, the backlight GREEN color at the end o asurement indicates always NORMAL measured temperature, while the RED color measurement indicates always NORMAL measured temperature, while the RED color indicates always a detected temperature index of febrile state more or less high. The turning on of the blue color indicates instead a very low reading. (hypothermia or possible error of measurement) or of a condition of potential febrile state depending on the site where the measurement was carried out (a temperature of 37.6 C is index of febrile state in case of axillary or oral measurement, but not in case of rectal measurement).

## REPLACING THE BATTERIES

Replace the battery as is shown:

36.80 The symbol is displayed together with other ones and flashing as frequency of 1Hz, the buzzer alarm will be invalid and no measurement display.

- If any of the above-mentioned circumstances occurs, please exchange the battery avoid the temperature error.
- \*\* Please take out the battery for safekeeping. Please dispose of the discarded batteries in accordance with the relevant environmental protection regulations of the city.

### The replace method of battery

Place the thermometer back up and pull-out the battery cover.



2. Take out the battery by a tool and replace the new one



3. Put back the battery cover



## THE THERMOMETER WAS DESIGNED AND MANUFACTURED IN COMPLIANCE WITH THE FOLLOWING EUROPEAN STANDARDS Medical electrical equipment – Part 1: General requirements for basic safety and essential performance IEC 60601-1 Medical electrical equipment – Part 1: General requirements for basic safety and essential performance – Collateral standard: Electromagnetic compatibility – Requirements and tests IEC 60601-1-2 medical electrical equipment Part 2-56: Particular requirements for basic safety and essential performance of clinical thermometers for body temperature measurement ISO 80601-2-56 ISO15223-1Medical devices--symbols to be used with medical device labels, labelling and information to be suppliedlied--Part 1: General requirements The product fulfills the requirements of Directive 39/42/EEC. ISO15223-1

## **ELECTROMAGNETIC COMPATIBILITY**

The device complies with the IEC 60601-1-2 standard for electromagnetic compatibility. Please do not let thermometer become source of the disturbance, also try your best avoid source of the disturbance. Inquire at distributor for details on this measurement data. We reserve the right to make technical and design changes in the course of continuous product improvement.

## WARNINGS!

\*This device should not be used in the vicinity or on the top of other electronic equipment such as cell phone, transceiver or radio control products. If you have to do so, the device should be observed to verify normal operation.

\*The use of accessories and power cord other than those specified, with the exception of cables sold by the manufacturer of the equipment or system as replacement parts for internal components, may result in increased emissions or decreased immunity of the equipment or system.

## Guidance and manufacturer's declaration - electromagnetic emission

The model KFT-05 is intended for use in the electromagnetic environment specified below. The customer or the user of the model KFT-05 should assure that it is used in such an environment.

Emissions test	Compliance	Electromagnetic environment – guidance
RF emissions CISPR 11	Group 1	The Model KFT-05 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 KFT-05 is suitable for use in all establishments, including
Harmonic emissions IEC 61000-3-2	N/A	domestic establish-ments and those directly connected to the public low-voltage power supply network that supplies buildings used for domestic purposes.
Voltage fluctuations / flicker	N/A	

## Guidance and manufacturer's declaration – electromagnetic immunity

IEC 61000-3-3

The Model KFT-05 are intended for use in the electromagnetic environment specified below. The customer or the user

of the Model KFT-05 should assure that it is used in such an environment.					
Immunity test	EC 60601 test level	Compliance level	Electromagnetic environment - guidance		
Electrostatic discharge (ESD) IEC 01000-4-2	± 8 kV contact ±2 kV, ±4 kV, ±8 kV, ±15 kV air	± 8 kV contact ±2 kV, ±4 kV, ±8 kV, ±15 kV air	Floors should be wood, concrete or ceramic tile. If floors are covered with synthetic material, the relative humidity should be at least 30 %.		
Electrostatic transient / burst IEC 61000-4-4	nsient / burst repetition frequency 100		Mains power quality should be that of a typical commercial or hospital environment.		
Surge IEC 61000-4-5	± 0.5 kV, ± 1 kV differential mode line-line	± 0.5 kV, ± 1 kV differential mode line-line	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	0 % UT (100 % dip in UT) for 0.5 cycle at 0°, 45°, 90°, 135°, 180°, 225°, 270°, and 315° 0 % UT (100 % dip in UT) for 1 cycle at 0° 70 % UT (30 % dip in UT) for 25/30 cycles at 0° 0 % UT (100 % dip in UT) for 25/30 cycles at 0°	0 % UT (100 % dip in UT) for 0.5 cycle at 0°, 45°, 90°, 135°, 180°, 225°, 270°, and 315° 0 % UT (100 % dip in UT) for 1 cycle at 0° 70 % UT (30 % dip in UT) for 25/30 cycles at 0° 0 % UT (100 % dip in UT) for 25/30 cycle at 0°	Mains power quality should be that of a typical commercial or hospital environment. If the user of the model KFT-05 product name requires continued operation during power mains interruptions, it is recommended that the model KFT-05 be powered from an uninterruptible power supply or a battery, environment.		
Power frequency (50/60 Hz) magnetic field IEC 61000-4-8	30 A/m, 50/60Hz	30 A/m, 50/60Hz	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 distances between portable and mobile RF communications equipment and the model KFT-05

The Model KFT-05 is intended for use in an electromagnetic environment in which radiated RF disturbances are controlled. The customer or the user of the Model KFT-05 can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and the maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and the Model KFT-05 as recommended below, according to the maximum output power of the communications equipment.

	Separation distance according to frequency of transmitter/m				
Rated maximum output of transmitter W	150kHz to 80MHz $d = \left[\frac{3.5}{V_1}\right]\sqrt{P}$	80kHz to 800MHz $d = \left[\frac{3.5}{E_1}\right]\sqrt{P}$	800MkHz to 2.5GHz $d = \left[\frac{7}{E_1}\right]\sqrt{P}$		
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 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.

### Guidance and manufacturer's declaration - electromagnetic immunity

The KFT-05 is intended for use in the electromagnetic environment specified below. The customer or the user of the KFT-05 should assure that it is used in such an environment.

`Immunity test	EC 60601 test level	Compliance level	Electromagnetic environment - guidance
Conducted RF IEC 61000-4-6 Radiated RF IEC 61000-4-3	3 Vrms 150 kHz to 80 MHz 6 Vrms 150 kHz to 80 MHz outside ISM bandsa 10 V/m 80 MHz to 2.7 GHz	3 Vrms 150 kHz to 80 MHz 6 Vrms 150 kHz to 80 MHz outside ISM bandsa	Portable and mobile RF communications equipment should be used no closer to any part of the Models KFT-05, including cables, than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter. Recommended separation distance $d = \begin{bmatrix} 3.5 \\ V_i \end{bmatrix} \sqrt{P}$ $d = \begin{bmatrix} 3.5 \\ E_i \end{bmatrix} \sqrt{P}$ 80MHz to 800MHz $d = \begin{bmatrix} 7 \\ E_i \end{bmatrix} \sqrt{P}$ 800MHz to 2.7GHz where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacture 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 be 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.

- a. The ISM (industrial, scientific and medical) bands between 0,15 MHz and 80 MHz are 6,765 MHz to 6,795 MHz; 13,553 MHz to 13,567 MHz; 26,957 MHz to 27,283 MHz; and 40,66 MHz to 40,70 MHz. The amateur radio bands between 0,15 MHz and 80 MHz are 1,8 MHz to 2,0 MHz, 3,5 MHz to 4,0 MHz, 5,3 MHz to 5,4 MHz, 7, MHz to 7,3 MHz, 10,1 MHz to 10,15 MHz, 14 MHz to 14,2 MHz, 18,07 MHz to 18,17 MHz, 21,0 MHz to 24,489 MHz to 24,99 MHz, 28,0 MHz to 29,7 MHz and 50,0 MHz to 54,0 MHz.
- b. The compliance levels in the ISM frequency bands between 150 kHz and 80 MHz and in the frequency range 80 MHz to 2,7 GHz are intended to decrease the likelihood that mobile/portable communications equipment could cause interference if it is inadvertently brought into patient areas. For this reason, an additional factor of 10/3 has been incorporated into the formulae used in calculating the recommended separation distance for transmitters in these frequency ranges.
- c. 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 KFT-05 is used exceeds the applicable RF compliance level above, the TT-CL011 should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as re-orienting or relocating the KFT-05.
- d. Over the frequency range 150 kHz to 80 MHz, field strengths should be less than 3 V/m

## Recommended separation distances between RF wireless communications equipment

The device is intended for use in an electromagnetic environment in which radiated RF disturbances are controlled. The customer or the user of the device can help prevent electromagnetic interference by maintaining a minimum distance between RF wireless communications equipment and the device as recommended below, according to the maximum output power of the communications equipment.

۱	maximum output power of the communications equipment.						
	Frequency MHz	Maximum Power W	Distance	IEC 60601 Test Level	Compliance Level	Electromagnetic Environment - Guidance	
F	385	1.8	0.3	27	27	RF wireless communications equipment should be used no closer to any part of the device, including cables, than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter.  Recommended separation distance	
	450	2	0.3	28	28		
۱	710	0.2	0.3	9	9		
	745						
	780						
	810					$E = \frac{6}{d} \sqrt{p}$	
	870	2	0.3	28	28	d √ P  Where P is the maximum output	
	930			5		power rating of the ransmiter in watts (W) according to the	
	1720			~	transmitter manufacturer and d is the recommended separation		
91	1845	2	0.3	28	28	distance in meters (m). Field strengths from fixed RF transmitter, as determined by an electromagnetic site survey.	
	1970						
	2450	2	0.3	28	28	should be less than the compliance level in each	
	5240			9 9		frequency range. Interference may occur in the vicinity of equipment marked with the following symbol:	
	5500	0.2	0.3		9		
	5780					and remaining symbols	

Note 1: These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.