COCET KFT-03 Soft Tip Digital Thermometer User Manual

DIGITAL THERMOMETER
MODEL: KFT-03/KFT-04
User manual V1.4

Contents

KFT-03 Soft Tip Digital Thermometer

- Appreciate for you purchased 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 understanding of the safety precautions in this instruction.
- Expected use. The body temperature measured is displayed through a thermistor.

Safety Precaution

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

⚠ Caution

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

SIGNS	
	Said notice, the attention of the specific content in' 'or near, in words or pictures. (left mark) sa id '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'.
IP54	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 ma terials can be reused or recycled circuit.
	**DEVICE:** Do not dispose of the device with your normal household waste at the end of its life. E nquire 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 OF COST

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

⚠ **WARNING**

It is very dangerous for self-judgment and treatment that only by the measuring result, so please be sure to follow the doctor's instructions.
*Self-judgment could result in deterioration.
Please use simple disinfection in medical alcohol after use.
A hot bath, long exposure to 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 sleeping with a water pillow or water sac or just back home in winter, if take the measurement immediately may get the measurement result to be low.
Do not disassemble and repair your thermometer at will.
Do 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.

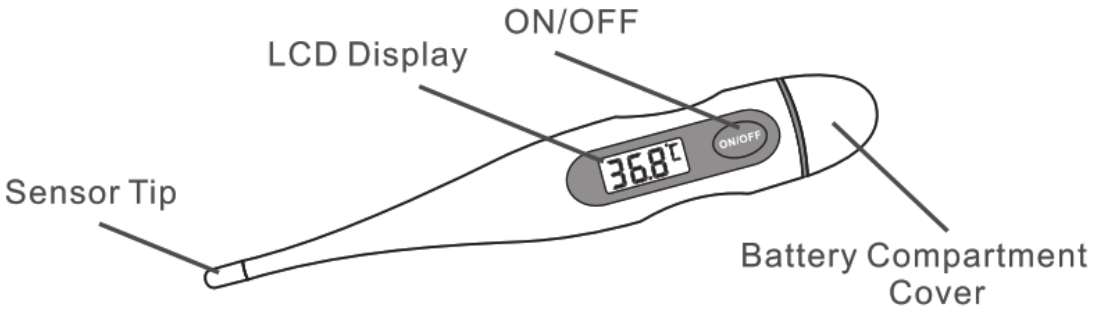
CONTRAINDICATIONS

*When the child himself measures, it may lead to accidental injury.
*Accidentally swallowed the battery, please contact the doctor immediately.
*Please don't use it after swimming, or bathing.
*Measurement sites such as inflammation, trauma, and 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 or shake the body of the product.
*Please don't use this product in an environment with serious electromagnetic interference.
*Please don't dismantle, repair or reform the product.
*Please note don't let the liquid (alcohol, drip, hot water, and so on) into.
*All the operations without the following advice will lead to an incorrect result of the test.
*Cleaning and disinfection methods: Before and after the use of a 75 % alcohol cotton ball to wipe the probe area of the thermometer, dry with a soft cloth. Clean the thermometer regularly once a month.

PARTS NAME



SPECIFICATION

- **Model No.:** KFT-03/KFT-04
- **Display:** LCD,3.5digits, 16mmx7mm
- **Temperature measurement:** thermistor
- **Apply for:** Oral / Axillary / Rectal
- T**emperature measuring time:** 1 minute
- **Accuracy:** ±0.1℃ (±0.2℉)
- **Resolution:** 0.1℃ (0.1℉)
- **Measurement scope:**
  32.0℃~42.9℃ (90.0℉~109.9℉)
  Temperature<32.0℃ (90.0℉) display L℃ (L ℉)
  Temperature>42.9℃ (109.9℉) display H℃ (H℉)
- **Waterproof level:** IP54
- **Memory records:** 1 set
- **Low voltage Indication**
- **Automatically turn off function (8 min)**
- **Validity:** 3 years, (Battery not included)
- **Power source and voltage:** DC 1.5V, LR41 or AG3
- **Battery life: Approx.** 1200 times or 1 year
- **Dimension:** 128mm×19mm×11mm
- **Unit weight**: Approx. 9.4g including battery
- **Work environment:**
  Temperature: 5℃~40℃ (41℉~104℉);
  Humidity: 15%RH~85%RH;
  Atmospheric pressure: 70KPa~106KPa;
- **Transport/Storage condition:**
  Temperature: -20℃~55℃ (-4℉~131℉);
  Humidity: 10%RH~85%RH;
  Atmospheric pressure: 70KPa~106KPa;
  *if there is any specification change for the product, without prior notice.

NOTICE BEFORE THE MEASUREMENT

When the room temperature is above 34℃ (93.2℉), Please use a wet towel to cool the test parts before the measurement.

When measured in the mouth and armpit
Please keep quiet on the following occasions to get the correct temperature. Otherwise, it will cause errors.
After you get up, the body's temperature will rise quickly, Please wait for a moment then test the body's temperature.
Please test the body's temperature 30 minutes later after sports and a bath.
Please test the body's temperature 30 minutes later after diet.

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

Measurement in Oral

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

Measurement in the armpit

The following occasions will cause underarm sweat and will get the incorrect temperature.

Stay in the bed with covers for too much time.

Please use a dry towel to wipe the underarm sweat before the measurement.

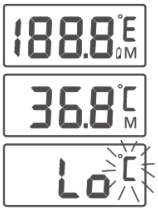
Clamp the armpit too much time.

Please use a dry towel to wipe the underarm sweat before the measurement.

30 minutes after diet.

Please use a dry towel to wipe the underarm sweat before the measurement.

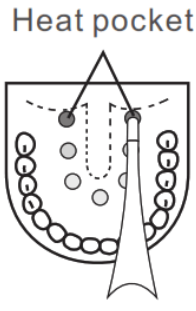
BODY TEMPERATURE MEASUREMENT

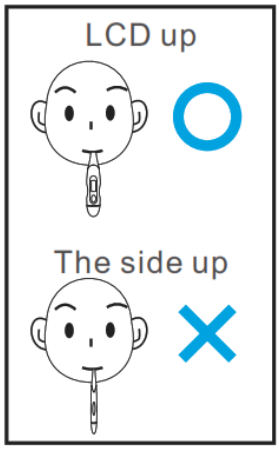


1. Press the ON/OFF button to activate. The unit Would beep and display This LCD display test will go on for around 2 seconds.
2. Then, the temperature taken last time would be displayed with an "M" mars in the right corner.
3. When "Lo" and flashing ℃(℉) display, the thermometer is ready for temperature measuring.
4. The beep will sound when temperature measuring is complete.
5. Press the ON/OFF button of the unit. (The unit will automatically power off after approximately 8 minutes after use.)
6. (For ℉ and ℃ switch functions, hold the button for 3 seconds when turning on.)

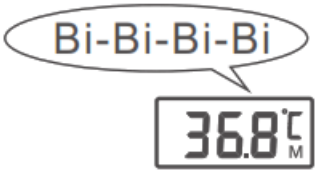
TAKING AN ORAL TEMPERATURE

1. Place the probe tip under the tongue as near as possible to the heat pocket.





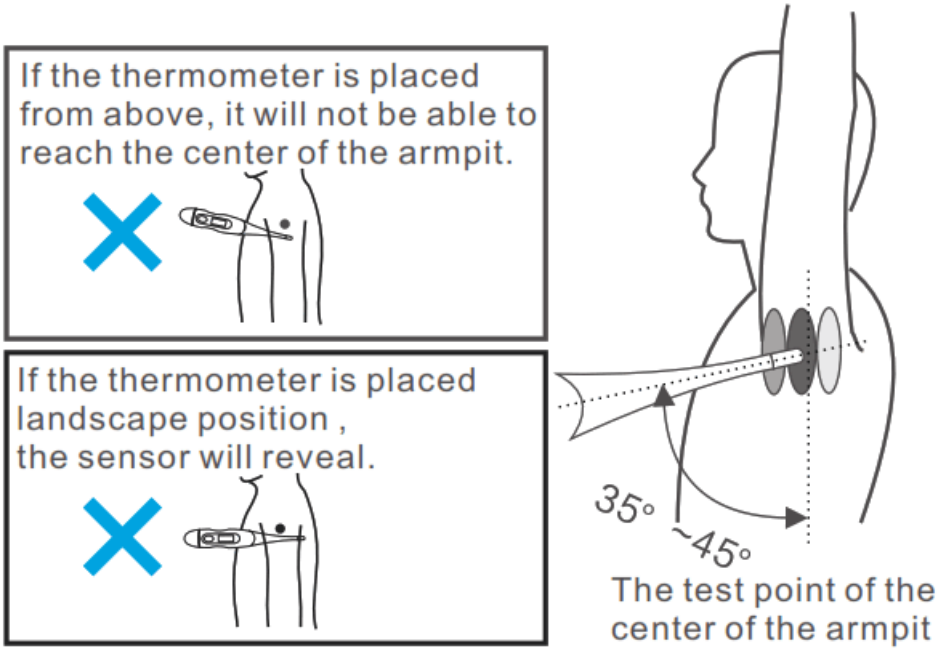
2. Approximate measuring time: 1 minute



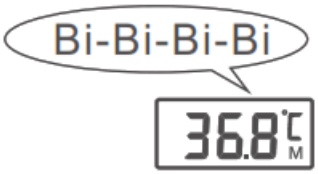
Please keep quiet in the measurement process to keep the precise measurement. It is recommended to continue measuring for about 10 seconds after the digital thermometer alarm then removes it.

TAKING AN AXILLARY TEMPERATURE

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



2. Approximate measuring time: 5 minutes



Please keep quiet in the measurement process to keep the precise measurement. It is recommended to continue measuring for about 30 seconds after the digital thermometer alarm then removes it.

TAKING A RECTAL TEMPERATURE

Apply a water-soluble lubricant to the probe cover. Gently insert the probe (0.5to 1 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: 1 minute.

REPLACING THE BATTERIES

Replace the battery as shown:

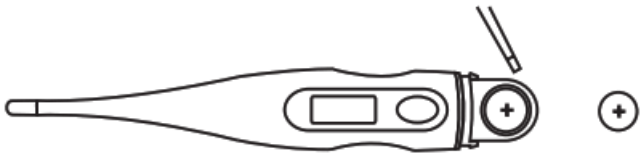
The symbol is displayed together with other ones and flashing a frequency of 1Hz, the buzzer alarm will be invalid and no measurement display.

If any of the above-mentioned circumstances occur, please exchange the battery to avoid the temperature error.
If do not use the product for a long time (more than 90 days).
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 replacement method for battery

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

2. Take out the battery with 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	
IEC 60601-1	Medical electrical equipment – Part 1: General requirements for basic safety and essential performance
IEC 60601-1-2	Medical electrical equipment – Part 1: General requirements for basic safety and essential performance – Collateral standard: Electromagnetic compatibility – Requirements and tests
ISO 80601-2-56	medical electrical equipment Part 2-56: Particular requirements for basic safety and essenti al performance of clinical thermometers for body temperature measurement
ISO15223-1	ISO15223-1 Medical devices–symbols to be used with medical device labels, labeling, and i nformation to be supplied lined–Part 1:General requirements The product fulfills the require ments of Directive 93/42/EEC.

ELECTROMAGNETIC COMPATIBILITY
The device complies with the IEC 60601-1-2 standard for electromagnetic compatibility. Please do not let the thermometer become a source of the disturbance, also try your best to avoid the source of the disturbance. Inquire at COCET 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 top of other electronic equipment such as cell phones, transceivers, 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 cords 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 digital thermometer is intended for use in the electromagnetic environment specified below. The customer or the user of the digital thermometer should assure that it is used in such an environment.		
Emissions test	**Compliance**	**Electromagnetic environment – guidance**
RF emissions CI SPR 11	Group 1	The digital thermometer 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 CI SPR 11	Class B	The digital thermometer 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	N/A	
Voltage fluctuations / flicker emissions IEC 61000-3-3	N/A	

Guidance and manufacturer´s declaration – electromagnetic immunity

The digital thermometer is intended for use in the electromagnetic environment specified below. The customer or the user of the digital thermometer 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 61000-4-2	± 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	± 2 kV for power supply lines100 kHz repetition frequency ± 1 kV for input/ output lines	± 2 kV for power supply lines 100 kHz repetition frequency	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.
	0 % UT	0 % UT	
	(100 % dip in UT)	(100 % dip in UT)	

	for 0.5 cycles at 0°,	for 0.5 cycles at 0°,	Mains power quality should be that of a typical commercial or hospital environment. If the user of the digital thermometer product name requires continued operation during power mains interruptions, it is recommended that the digital thermometer be powered from an uninterruptible power supply or a battery. environment.
	45°, 90°, 135°,180°,	45°, 90°, 135°,180°,	
Voltage dips,	225°, 270°, and 315°	225°, 270°, and 315°	
short interruptions and voltage variations on	0 % UT (100 % dip in UT) for 1 cycle at 0°	0 % UT (100 % dip in UT) for 1 cycle at 0°	
power supply input lines IEC 61000-4-11	70 % UT (30 % dip in UT) for 25/30 cycles at 0°	70 % UT (30 % dip in UT) for 25/30 cycles at 0°	
	0 % UT	0 % UT	
	(100 % dip in UT)	(100 % dip in UT)	
	for 250/300 cycles at 0°	for 250/300 cycles at 0°	
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 digital thermometer

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

Rated maximum output of transmitter W	**Separation distance according to the frequency of transmitter/m**		
	150kHz to 80MHz 	80kHz to 800MHz 	800MkHz to 2.5GHz 
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 m aximum 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 digital thermometer is intended for use in the electromagnetic environment specified below. The customer or the user of the digital thermometer should assure that it is used in such an environment.

Immunity test	**EC 60601 test level**	**Compliance level**	**Electromagnetic environment – guidanc e**
			Portable and mobile RF communications e quipment should be used no closer to any part of the digital thermometer, including ca bles, than the recommended separation dis tance calculated from the equation applicable to the frequency of the transmitt er. Recommended separation distance
Conducted RF I EC 61000-4-6	3 Vrms 150 kHz to 80 MHz 6 Vrms 150 kHz to 80 MHz outside ISM ban ds	3 Vrms 150 kHz to 80 MHz 6 Vrms 150 kHz t o 80 MHz outside ISM bands	  80MHz to 800MHz  800MHz to 2.7GHz

Radiated RF IEC 61000-4-3	10 V/m 80 MHz to 2.7 GHz	10 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 meters (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: 

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 21,4 MHz, 24,89 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 broadcasts,s and TV broadcasts 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 digital thermometer 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 digital thermometer.
d. Over the frequency range of 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.

Frequency MHz	**Maximum Power W**	**Distance**	**IEC 60601 Test Level**	**Compliance Level**	**Electromagnetic Environment – Guidance**
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** $E = \frac{6}{d}\sqrt{p}$ 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: 
450	2	0.3	28	28	
710					
745	0.2	0.3	9	9	
780					
810					
870	2	0.3	28	28	
930					
1720					
1845	2	0.3	28	28	
1970					
2450	2	0.3	28	28	
5240					
5500	0.2	0.3	9	9	
5780					

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

KUNGFU MEDICAL EQUIPMENT FACTORY
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Tel: 0577-62579668
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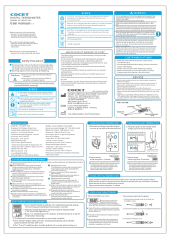
Email: cocet@cocet.com.cn

EC REP Luxus Lebenswelt GmbH
Kochstr. 1, 47877, Willich, Germany
0049-1715605732

Year of Manufacture: See Product Label

Documents / Resources

	COCET KFT-03 Soft Tip Digital Thermometer [pdf] User Manual KFT-03, KFT-04, Soft Tip Digital Thermometer, Digital Thermometer, Soft Tip Thermometer, Thermometer, KFT-03

References

- KANGFU MEDICAL EUIPMENT FACTORY