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# 红外额温计使用说明书



**型号：WT-2**

- 感谢您购买啄木鸟非接触式红外额温计。
- 为了能够安全的使用本产品，使用前请务必阅读使用说明书。
- 阅读后请妥善保管，以便随时查阅、参考。
- 该产品为3V供电，请使用7号碱性电池。（消费者需自行购买合适的AAA号电池）
- 本产品仅供测量体温使用，不能用于疾病诊断；所有的治疗请遵医嘱。
- 声明1：可提供电路图、元器件清单、图注、校正细则或其他有助于使用者修理可修理部件的资料。
- 声明2：使用别的部件和材料会降低安全度，所以仅限对本机配置的附件、部件和材料进行使用。
- 仅供防控疫情应急使用。

**桂林市啄木鸟医疗器械有限公司**  
Guilin Woodpecker Medical Instrument Co., Ltd.



# 目 录

1. 产品介绍	3
2. 产品用途及适用范围	3
3. 产品使用环境条件	3
4. 产品的结构组成	3
5. 产品技术指标	3
6. 产品特征	4
7. 机器配置	4
8. 禁忌症	4
9. 安装调整	4
10. 使用方法	5
11. 故障分析与排除	7
12. 注意事宜	8
13. 符号说明	8
14. 产品保养维护	9
15. 特殊储存条件、运输条件	9
16. 环境保护	10
17. 电磁兼容	10
18. 特别说明	14
产品保修卡	15



## 1. 产品介绍

本产品是一款运用红外技术测量人体体温的温度计，可以通过人体额头测量出人体体温，使用时只需要将产品测温头对准测量目标，按测量键一下，1 秒钟内完成并显示出测量值，整个测量过程操作简单，测量速度快。

## 2. 产品用途及适用范围

通过测量额头的热辐射来显示被测对象的体温，该产品可重复使用。

## 3. 产品使用环境条件

环境温度： $16^{\circ}\text{C} \sim 35^{\circ}\text{C}$

相对湿度： $\leq 93\%$

大气压力： $70\text{kPa} \sim 106\text{kPa}$

## 4. 产品的结构组成

产品结构及组成：主要由红外传感器组件、电路板组件、显示组件和外壳组件等组成。

## 5. 产品技术指标

产品名称：红外额温计

产品型号：WT-2

测量部位：额头

测量范围： $32.0^{\circ}\text{C} \sim 42.5^{\circ}\text{C}$

分辨力： $0.1^{\circ}\text{C}$

最大允许误差： $32.0^{\circ}\text{C} \sim 42.5^{\circ}\text{C} \pm 0.3^{\circ}\text{C}$

电量提示：电池低电压提示

自动关机时间：在没有任何操作的情况下约 60 秒

尺寸：约  $153 \times 93 \times 41\text{mm}$  (长 x 宽 x 高)



重量：125g ± 10g( 不含电池 )

## 6. 产品特征

1. 本产品能够快速通过人体额头测出人体体温，操作简单，测量速度快
2. 按防电击类型：内部电源设备
3. 按防电击程度：BF 型应用部分
4. 按对有害进液的防护程度：普通设备
5. 按与空气混合的易燃麻醉气或氧或氧化亚氮混合的易燃麻醉气情况下使用的安全程度分类：不能在有易燃麻醉剂的情况下使用的设备
6. 红外额温计按运行模式分类为：连续运行模式
7. 红外额温计不具有对除颤放电效应防护的应用部分
8. 红外额温计无信号输入、信号输出口
9. 设备的额定电压：DC 3V
10. 非永久性安装设备

## 7. 机器配置

红外额温计	1 台	说明书	1 本	合格证	1 张
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## 8. 禁忌症

不适用。

## 9. 安装调整

### 1. 电池安装与更换：

当产品显示屏提示低电压或产品使用前需要进行电池更换或安装。







将电池盖打开，取1.5V AAA型号电池2颗，按照上图符号提示方向装入，再盖上电池盖完成电池更换。

## 2. 功能设定：

### 2.1℃与°F温度单位转换

按“”键开机 / 关机，按“℃ / °F”键进入温度单位转换模式，选择“℃与°F”。

### 2.2 人体测量与物温测量模式转换


按“”键开机，按“MODE”键来选择人体测量与物温测量模式。

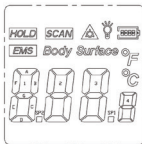
### 2.3 测量

按住测量键进行测试。

# 10. 使用方法

## 1. 额温测量

按“”键开机，显示屏全显约2秒，蜂鸣器“哔”一声短鸣，产品进入额温测量模式，将测温头对准测量人的额头，按下测量键，伴随“哔”声提示音完成测量并显示测量结果。如下图：





 注：测量时需要对准额头眉心并 < 5cm 进行体温测量。

## 2. 关机

完成测量后如果无任何操作，产品约 60 秒自动关机。

## 3. 清洁消毒

产品本身及配件不能进行高温高压灭菌。禁止使用强酸或强碱性溶液进行擦拭消毒。每次使用前，患者应用部分使用 75% 医用酒精进行擦拭消毒。

产品正常使用时不需要经常清洁消毒，当发现以下情况时请按提示操作。

（1）外部脏污：用干净的软布沾水擦拭脏污处，或者用棉签沾医用酒精擦拭，用医用酒精擦拭还可以兼具杀菌消毒作用。留意水或酒精不要太多，以免流入内部造成产品的损坏。

（2）内部脏污：内部红外探测器是重要器件，不要用手指或者其他物品触摸或者顶压，否则会影响测量值的准确性。当发现红外传感器脏污时，请用棉签沾 95% 的无水酒精擦拭。

注：不能使用 75% 的消毒酒精擦拭红外探测器（会残留水的痕迹）。不能使用其他化学试剂擦拭红外探测器（会对红外探测器造成损坏）。

## 4. 疑难解答

常见问题 1：显示不出温度，开机后重复全屏显示，问题出现在哪儿？

答：红外额温计出现这类问题可基本判定是电池电量不足所致，可尝试更换新电池。

常见问题 2：部分人体体温在同一环境中测量出现“Lo”时，请问是什么原因？

答：要排除的原因如下：

1、当被测人体额头有毛发遮挡、额头有汗、贴过退烧贴或吃过退烧药物的、额头对准空调吹过、有强烈的风流吹过表面的都可能出现“Lo”，需要在稳定环境下休息 5~ 10 分钟再进行测量。

2、A：有极个别人体的表面温度比一般人的低，如有个别人员每次测量都示“Lo”时，可以用手背感应额头温度与他人比对，然后再试一试他人的作个对比。

B：当个体（不是所有人体）体温出现“Lo”时，可以当该人体温度正常来判定，主要关注的是超温提示（超温出现“Hi”）。出现“Lo”说明此时该人体额头表面温度很低，



超出产品的显示范围。屏幕显示 Lo 的主要原因：

显示 Lo 信息的原因	建议
温度读取时有头发或汗水遮挡	确保没有障碍物于前额
有冷空气吹额头	确保没有冷空气直接吹额头
额头刚冷敷过	冷敷后等 10 分钟后再测量
测量距离太远	建议测量距离为 3~5cm

常见问题 3：产品是否对人体有伤害，是否对人体有辐射？

答：产品的原理是通过采集人体的辐射红外线来计算人体的体温，产品是不直接接触人体，不会带来不同人体的交叉感染，本公司生产的红外额温计是对人体无辐射的，所以对人体无伤害，望广大消费者放心使用。

常见问题 4：红外额温计与水银温度计的区别在哪里？

答：1、红外额温计是非接触式的，水银温度计需要直接接触人体，容易带来不同人体间的交叉感染。

2、水银温度计测量时间长，不易读数且不安全，特别是测量小孩温度时，由于好动而不易夹住，给家长带来很大不便。

## 11. 故障分析与排除


不良现象	不良原因	处理对策
物体温度显示“Hi”和“Lo”	环境温度超出规定范围	移至产品使用环境条件下使用
体温显示“Hi”	人体温度高于 43.0℃	1. 依说明书严格操作 2. 联系生产厂商
体温显示“Lo”	人体温度低于 32.0℃	1. 依说明书严格操作 2. 联系生产厂商
电池电量闪烁	低电量	更换电池









## 12. 注意事宜

1. 使用前请仔细阅读使用说明书，不当使用可能导致产品性能减损及不正确的测量值。
2. 其它障碍物或测量部位炎症、外伤、术后等局部病变将影响产品使用准确性。
3. 本产品已经校正，如依循使用说明书使用，不需要重新校正。
4. 本产品不能代替医师之诊疗。
5. 测量前请做勿淋浴与运动，请将被测量人和本产品测量环境中保持 30 分钟以上。
6. 测量时请在本产品操作环境条件下使用。
7. 本产品请不要重摔在地上，避免受到强烈的冲击与震荡。
8. 长期（1 个月以上）不使用时，请将电池取出，将产品放入包装物中。
9. 请不要将产品放在阳光直射、高温潮湿、灰尘多、腐蚀性气体环境中保存。
10. 电池漏液发霉请勿使用，电池不要接近火源或投入火中，以免爆炸。使用中请勿将正负极装反。
11. 丢弃电池或本产品及包装物时需按当地相关法规处理。
12. 请不要用有毒液体或挥发油、稀释剂或汽油等擦拭本产品。

## 13. 符号说明

	注册商标	 可回收	可循环利用
	BF 型应用部分	 怕雨	怕雨
	直流电	 易碎物品	易碎物品，小心轻放



	符合欧盟 WEEE 指令		怕晒
	注意！查阅随机文件	本产品不与 危险品混装	本产品不与危险品混装
	贮存条件，湿度范围为 10%~93%	AAA	7 号碱性电池
	贮存条件，大气范围为 70kPa~106kPa		
	贮存条件，温度范围为 -20°C ~+55°C		

## 14. 产品保养维护

1. 经常保持产品表面干净、整洁，有助于延长本产品的使用寿命。
2. 长期不使用时将电池取出，将产品放入包装物中，并放置在干燥 25 度左右环境中，有助于延长本产品的使用寿命。
3. 本产品如有脏污，请用干的软棉布进行擦拭。
4. 测温头要保持清洁，镜面不可有脏污与划花，如有异物可用棉签清理干净。

## 15. 特殊储存条件、运输条件

### · 储存条件：

1. 产品必须保持干净以及放在干燥的地方。勿将产品放在有电击的地方。
2. 勿将产品放置在高于 55°C 或低于 -20°C、湿度高于 93% 的极端温度环境下存储。

### · 运输条件：

1. 运输过程中应防止过度的冲击和震动，小心轻放。
2. 运输时不应与危险品混装。
3. 运输时应避免日晒或雨雪浸淋。



## 16. 环境保护

部件名称	有毒有害物质或元素					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr6+)	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
主机	○	○	○	○	○	○

○：表示该有毒有害物质在该部件所有均质材料中的含量在 SJ/T-11363-2006 《电子信息产品有毒有害物质的限量要求》规定的限量要求以下。

×：表示该有毒有害物质至少在该部件的某一均质材料中的含量超出 SJ/T11363-2006 规定的限量要求。

（本产品符合欧盟 RoHS 环保要求；目前国际上尚无成熟的技术可以替代或减少电子陶瓷、光学玻璃、钢及铜合金内的铅含量）

根据《电器电子产品有害物质限制使用管理办法》、《废弃电器电子产品回收处理管理条例》及相关标准，请遵守产品的安全及使用注意事项，并在产品使用后根据各地的法律、规定以适当的方法回收再利用或废弃处理本产品。

## 17. 电磁兼容

⚠ 注意：

- WT-2 红外额温计符合 YY0505-2012 标准电磁兼容有关要求。
- 用户应根据随机文件提供的电磁兼容信息进行安装和使用。
- 便携式和移动式射频通信设备可能影响 WT-2 红外额温计性能，使用时避免强电磁干扰，如靠近手机、微波炉等。
- 基本性能：“红外额温计未受到电磁干扰时能测量 32.0℃ -42.5℃ 范围内的人体温度（最大允许误差  $\pm 0.3^{\circ}\text{C}$ ）。受到电磁干扰时，红外额温计能测量 32.0℃ -42.5℃ 范围内的人体温度。”



– 指南和制造商的声明详见附件。

 警示：

– 设备或系统不应与其他设备接近或叠放使用，如果必须接近或叠放使用，则应观察验证在其使用的配置下能正常运行。

– 除设备或系统的制造商作为内部元器件的备件出售的电缆外，使用规定外的附件和电缆可能导致设备或系统发射的增加或抗扰度的降低。

附件：


指南和制造商的声明 – 电磁发射		
WT-2 红外额温计预期使用在下列规定的电磁环境中，WT-2 红外额温计的购买者或使用者应该保证它在这种电磁环境下使用：		
发射试验	符合性	电磁环境 – 指南
射频发射 GB4824	1 组	WT-2 红外额温计仅为其内部功能而使用射频能量。因此，它的射频发射很低，并且对附近电子设备产生干扰的可能性很小。
射频发射 GB4824	B 类	WT-2 红外额温计适于在所有的设施中使用，包括家用设施和直接连接到家用住宅公共低压供电网。
GB17625.1 谐波发射	不适用	
GB17625.2 电压波动 / 闪烁发射	不适用	

指南和制造商的声明 – 电磁抗扰度			
WT-2 红外额温计预期使用在下列规定的电磁环境中，WT-2 红外额温计的购买者或使用者应该保证它在这种电磁环境下使用。			
抗扰度试验	IEC 60601 测试电平	符合电平	电磁环境 – 指南



静电放电 (ESD) GB/T 17626.2	±6 kV 接触放电 ±8 kV 空气放电	±6kV 接触放电 ±8kV 空气放电	地面应该是木质、混凝土或瓷砖，如果地面用合成材料覆盖，则相对湿度应该至少30%。
电快速瞬变脉冲群 GB/T 17626.4	±2 kV 对电源线 ±1 kV 对输入 / 输出线	不适用	不适用
浪涌 GB/T 17626.5	±6 kV 差模电压 ±8 kV 共模电压	不适用	不适用
电源输入线上电压 暂降、短时中断和电压变化 GB / T 17626.11	<5% UT, 持续 0.5 周。(在 UT_ 上, >95% 的 暂 降) 40% UT, 持续 5 周 (在 UT_ 上, 60% 的 暂 降) 70% UT, 持续 25 周 (在 UT_ 上, 30% 的 暂 降) <5% UT, 持续 5s (在 UT_ 上, >95% 的 暂 降)	不适用	不适用
工频磁场 (50/60Hz) GB/T 17626.8	3A/m	3A/m 50Hz	工频磁场应具有在典型的商业或医院环境中典型场所的工频磁场水平特性。
注: UT 指施加试验电压前的交流网电压。			



<p>射频传导 GB/T 17625.6</p> <p>3 Vrms 150 kHz ~ 80 MHz</p>	<p>3 V/m 80MHz ~ 2.5GHz</p>	<p>不适用</p> <p>3 V/m</p>	<p>便携式和移动式射频通信设备不应比推荐的隔离距离更靠近 WT-2 红外额温计的任 何部分使用, 包括电缆。该 距离应由与发射机频率相应 的公式计算。推荐的隔离距 离: d=1.2/P d=1.2/p 80MHz ~ 800MHz d=2.3/p 800MHz ~ 2.5GHz 其中, P 是根据发射机制造 商提供 的发射机最大输出额定功 率, 以瓦特 (W) 为单位, d 是推荐的隔离距离以米 (m) 为单位。固定式射频发射机 的场强通过对电磁场所勘测 a 来确定, 在每个频率: 范 围 b 都应比符合电平低。在 标记下列符号的设备附近可 能出现干扰。 </p>
<p>注 1: 在 80 MHz 和 800 MHz 频率上, 采用较高频段的公式。 注 2: 这些指南可能不适合所有的情况, 电磁波传播受建筑物、物体和人体的吸收和反射的影响。</p>			
<p>固定发射机场强, 诸如: 无线 (蜂窝/无绳) 电话和地面移动式无线电的基站、业余无线电、AM (调幅) 和 FM (调频) 无线电广播以及电视广播等, 其场强在理论上都不能准确预知。为评定固定式射频发射机的电磁环境, 应该考虑电磁场所的勘测。如果测得 WT-2 红外额温计所处场所的场强高于上述应用的射频符合电平, 则应观测 WT-2 红外额温计以验证其能正常运行。如果观测到不正常性能, 则补充措施可能是必需的, 如重新对 WT-2 红外额温计定向或定位。</p>			
<p>便携式及移动式射频通信设备和 WT-2 红外额温计之间的推荐隔离距离。</p>			



WT-2 红外额温计预期在辐射射频骚扰受控的电磁环境下使用。依据通信设备最大输出功率，WT-2 红外额温计的购买者或使用者可通过下面推荐的维持便携式及移动式射频通信设备（发射机）和 WT-2 红外额温计之间最小距离来防止电磁干扰。

发射机的额定最大输出功率 /W	对应发射机不同频率的隔离距离 /m		
	150kHz~80MHz d=1.2/P	80MHz~800MHz d=1.2/P	800MHz~2.5GHz d=2.3/P
0.01	不适用	0.12	0.23
0.1	不适用	0.38	0.73
1	不适用	1.2	2.3
10	不适用	3.8	7.3
100	不适用	12	23

对于上表未列出的发射机额定最大输出功率，推荐隔离距离 d，以米 (m) 为单位，能用相应发射机频率栏中的公式来确定，这里 P 是由发射机制造商提供的发射机最大输出额定功率，以瓦特 (W) 为单位。

注 1：在 80 MHz 和 800 MHz 频率上，采用较高频率范围的公式。

注 2：这些指南可能不适合所有的情况，电磁传播受建筑物、物体和人体的吸收和反射的影响。

## 18. 特别说明

产品生产日期参见包装标签，产品使用期限：5 年。



## 产品保修卡

### · 保修说明:

1. 本产品自售出之日起, 在一年内凭保修卡我公司负责免费维修。
2. 在保修期内, 凡属于产品质量、工艺结构等引起的故障均属于保修范围。
3. 违反操作规程或达不到设备所需条件而引起的故障。
4. 用户使用不当或擅自拆装造成的设备故障或损坏的。
5. 因用户运输、存储不当或其他原因引起设备损坏的。
6. 保修卡中无售出单位盖章或填写不完整的不予保修。

名称: 红外额温计

型号: WT-2

用户姓名		电话	
详细地址			
产品型号		产品编号	
购买日期		经办人	
故障描述			

桂林市啄木鸟医疗器械有限公司

注册/生产地址: 桂林市国家高新区信息产业园 邮编: 541004

销售部电话: 0773-5831172/5835305

传真: 0773-5822450

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<http://www.glwoodpecker.com>





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## 桂林市啄木鸟医疗器械有限公司 Guilin Woodpecker Medical Instrument Co., Ltd.

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ZMN-SM-055 V1.1- 修订日期：20200408





# Infrared thermometer Instruction Manual

**Model: WT-2**

- Thank you for purchasing Woodpecker Non-contact Infrared thermometer.
- In order to use this product safely, please read the instruction manual before use.
- After reading, please keep it in a safe place for easy check and reference.
- This product is powered by 3V. Please use AAA alkaline batteries. Consumers need to buy a suitable AAA battery by themselves.
- This product is for temperature measurement only, not for disease diagnosis.
- Please consult your doctor for all treatments.



**Guilin Woodpecker Medical Instrument Co., Ltd.**



# Contents

1. Description -----	19
2. Intended use and scope of application-----	19
3. Operational environment -----	19
4. Structure and component -----	19
5. Technical data -----	19
6. Features -----	20
7. Configurations-----	20
8. Contraindication -----	20
9. Installation and adjustment -----	20
10. Operation method-----	21
11. Troubleshooting -----	24
12. Cautions-----	25
13. Icon description -----	25
14. Maintenance -----	26
15. Special storage and transport conditions -----	26
16. Electromagnetic Compatibility -----	27
17. Statement-----	30
Warranty Card -----	31



## 1. Description

This product is a thermometer that uses infrared technology to measure human body temperature. It can measure human body temperature by just pointing the product at the human forehead, pressing the measurement button. The body temperature will be displayed on screen within 1 seconds. It is simple and fast.

## 2. Intended use and scope of application

By measuring the heat radiation from the forehead, it can show the body temperature of the target group. The product can be reused.

## 3. Operational environment

Ambient temperature: 16 °C ~ 35 °C

Relative humidity: ≤93%

Atmospheric pressure: 70kPa-106kPa

## 4. Structure and component

Product structure and composition: It is mainly composed of infrared sensor, circuit board, displaying components and casing

## 5. Technical data

Product name: Infrared thermometer

Model: WT-2

Measurement site: Forehead

Measuring range: 32.0 °C ~ 42.5 °C

Resolution: 0.1 °C

Maximum allowable error: 32.0 °C ~ 42.5 °C ± 0.3 °C

Battery prompts: low battery prompts

Automatic shutdown time: If there is no operation for 60s, the device will automatically shut down.

Size: about 153 × 93 × 41mm (length x width x height)



## 6. Features

1. This product can quickly measure human body temperature through the forehead of the human body, with simple operation and fast measurement.
2. Type of protection against electric shock: Internal power supply equipment
3. Degree of protection against electric shock: BF applied part
4. Degree of protection against harmful ingress of water: Ordinary equipment
5. Degree of safety application in the presence of a flammable anesthetic mixture with air, oxygen, or nitrous oxide: Equipment cannot be used in the presence of a flammable anesthetic mixture with air, oxygen, or nitrous oxide.
6. Type of operation mode: Continuous operating device
7. The Infrared thermometer does not have an application part that protects against the effects of defibrillation discharge.
8. The Infrared thermometer has no signal input or signal output.
9. Rated voltage of the equipment: DC 3V.
10. Non-permanently installed equipment

## 7. Configurations

Infrared thermometer	X1	Manual	X1
Certificate	X1		

## 8. Contraindication

N/A

## 9. Installation and adjustment

### 1. Battery installation and replacement

If the product display indicates low battery, replace the battery. Before first use, load the battery.






Open the battery cover, load two AAA batteries as the picture shown, and install the battery cover.

## 2. Function setting:

### 2.1 °C and °F temperature unit conversion

Press the “” key to turn on / off, press the “°C / °F ” key to enter the temperature unit conversion mode, and select “°C or °F ”.

### 2.2 Conversion of body measurement and object measurement modes


Press the “” key for power on, and press the “MODE” key to select the body measurement mode or object measurement modes.

### 2.3 Measurement

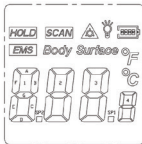
Press and hold the measurement key to test.

## 10. Operation method

### 1. Body temperature measurement

Press the “” key for power-on, wait for the display for about 2 seconds, and the buzzer will beep once which means that the product enters the forehead temperature measurement mode. Point the device at human forehead, and press the measurement button. With a “beep” sound, the measurements ends and the temperature will be displayed on screen. As shown below:





⚠ Note: When measuring, you need to aim at the forehead, <5cm for temperature measurement.

## 2. Power-off

If there is no operation after the measurement, the product will automatically shut down in about 60 seconds.

## 3. Cleaning and disinfection

The product and its accessories cannot be autoclaved. Do not use strong acid or alkaline solution for disinfection.

Before each use, the applied part on patient should be wiped and disinfected with 75% medical alcohol.

The product does not need to be cleaned and disinfected frequently during normal use. When the following conditions are found, please follow the instructions.

(1) External dirt: Wipe the dirt with a clean soft cloth and water, or wipe with a cotton swab and medical alcohol. Wiping with medical alcohol can also have sterilization effect. Take care not to add too much water or alcohol to prevent damage to the product if it flows into the interior.

(2) Internal dirt: The internal infrared detector is an important device. Do not touch or press with your fingers or other objects, otherwise the accuracy of the measurement value will be affected. When the infrared sensor is found to be dirty, wipe it with a cotton swab moistened with 95% absolute alcohol.

Note: Do not wipe the infrared detector with 75% sterilized alcohol (as the water traces will remain). Do not wipe the IR detector with other chemicals (as it will damage the IR detector).

## 4. Q&A



FAQ 1: The temperature cannot be displayed, and the full-screen display is repeated after booting. What is the cause?

Answer: If this kind of problem occurs in the Infrared thermometer, it can be basically determined that the battery is low. You can try to replace the battery with a new one.

FAQ 2: When some people's body temperature is measured in the same environment, if the screen displays "Lo", what is the reason?

Answer: The possible causes to be excluded are as follows:

1. When the person's forehead is covered with hair or sweat, the patient had been pasted with antipyretic paste or taken antipyretic drugs, or the forehead is pointed at the air conditioner and strong wind is blown across the surface, "Lo" may appear. Please have a rest in a stable environment for 5-10 minutes before measuring.

2. There are extremely few people whose surface temperature is lower than other people. If an individual shows "Lo" for each measurement, you can compare the forehead temperature with the back of the hand with others, and then test the body temperature of other people for comparison.

B: When the body temperature of an individual (not all human bodies) appears "Lo", it can be deemed as a normal body temperature. The main concern is the over-temperature prompts ("HI"). The appearance of "Lo" indicates that the surface temperature of the forehead of the human body is very low at this time, which is beyond the display range of the product. The main reasons why the screen shows Lo:

<b>Reasons why the screen shows Lo</b>	<b>Advice</b>
There is hair or sweat on the forehead when reading temperature.	Make sure there are no obstacles on the forehead
Cold air blows forehead	Make sure no cold air is blowing directly on the forehead
Forehead just cold applied	Wait for 10 minutes after cold compress before measuring
The measurement distance is too long	Recommended measurement distance is 3-5cm



FAQ 3: Is the product harmful to the human body and is it radiating to the human body?

Answer: The principle of the product is to calculate the body temperature of the human body by collecting the infrared radiation of the human body. The product does not directly contact the human body and does not cause cross infection of different human bodies. Therefore, it is harmless to the human body, so please rest assured that the use of.

FAQ 4: What is the difference between an Infrared thermometer and a mercury thermometer?

Answer: 1.The Infrared thermometer is non-contact type. The mercury thermometer needs to directly contact the human body, which is likely to cause cross infection between different human bodies.

2. The mercury thermometer has a long measurement time, which makes it not easy to read and not safe, especially when measuring the temperature of children, it is not easy to pinch because children are active, which brings great inconvenience to parents.

## 11. Troubleshooting





Abnormality	Cause	Solution
Display object temperature as "Hi" and "LO	Ambient temperature exceeds the specified range	Use the product under its using environment conditions
Display body temperature as "Hi"	Body temperature is higher than 43.0 °C	1. Strict operation according to instructions 2. Contact the manufacturer
Display body temperature as "HO"	Body temperature is below 32.0 °C	1. Strict operation according to instructions 2. Contact the manufacturer
Battery level indicator flashes	Low battery	Replace the battery
Err	Defective sensor or hardware	Contact the manufacturer












## 12. Cautions

1. Please read the instruction manual carefully before use. Improper use may cause loss of product performance and incorrect measurement values.
2. Other obstacles or local lesions at measured site such as inflammation, trauma, and postoperative will affect the accuracy of measurement.
3. This product has been calibrated. If it is used according to the instruction manual, it does not need to be recalibrated.
4. This product is not a substitute for physician consultation.
5. Please do not take shower or exercise before measurement. Please keep the person being measured and the product in the measurement environment for more than 30 minutes.
6. Please use it under the operating environment of this product.
7. Please do not drop the product on the ground, and please avoid strong impact and shock.
8. If it will not be used for a long time (more than 1 month), please remove the battery and put the product in the package.
9. Please do not store the product in environment with direct sunlight, high temperature and humidity, dusty and corrosive gas.
10. Do not use if the battery is leaking or moldy. Keep batteries away from fire or throw them into a fire to avoid explosion. Do not mistakenly install the positive and negative poles during use.
11. Dispose of the battery, the product or packaging should be in accordance with local regulations.
12. Please do not rub the product with toxic liquid or volatile oil, thinner or gasoline.

## 13. Icon description

	Trademark		Recovery
	BF Type Applied part		Keep dry



	Direct current		Handle with care
	AAA battery		Keep away from sunlight
	Follow instructions for use		Atmospheric pressure for storage
	Temperature limit for storage		Humidity limit for storage
	Appliance compliance WEEE directive		

## 14. Maintenance

1. Always keep the product surface clean and tidy, which will help prolong the service life of the product.
2. Take out the battery if it will not in use for a long time, put the product in the package, and place it in a dry environment of about 25°, which will help extend the service life of the product.
3. If the product is dirty, wipe it with a dry soft cotton cloth.
4. The temperature measuring head should be kept clean. The screen surface must be free from dirt and scratches. If there is a foreign object, it can be cleaned with a cotton swab.

## 15. Special storage and transport conditions

### • Storage conditions:

1. The product must be kept clean and stored in a dry place. Do not place the product in a place subject to electric shock.
2. Do not store the product in extreme temperature environments above 55 ° C or below 20 ° C and humidity above 93%.

### • Transport conditions:

1. Excessive impact and shake should be prevented during transportation. Lay it



carefully and lightly.

2. Do not put it together with dangerous goods during transportation.
3. Avoid being exposed to sun, rain, and snow during transportation.

## 16. Electromagnetic Compatibility

### Cautions:

- WT-2 Infrared thermometer meets the electromagnetic compatibility requirements of IEC 60601-1-2 standard.
- The user should install and use the device as per the electromagnetic compatibility information provided in the accompanying documents.
- Portable and mobile RF communication equipment may affect the performance of the WT-2 Infrared thermometer, so avoid strong electromagnetic interference when using it; therefore, please do not use it near mobile phones, microwave ovens, etc.
- Basic performance: The infrared forehead thermometer can measure human body temperature within the range of 32.0 °C -42.5 °C (maximum allowable error  $\pm 0.3$  °C ) without electromagnetic interference. When receiving electromagnetic interference, the infrared forehead thermometer can measure human body temperature in the range of 32.0 °C -42.5 °C .
- Guidance and manufacturer's declaration are detailed in the attachment.

### Warnings:

- The equipment or system should not be used in close proximity to or stacked with other equipment. If it must be used close or stacked, it should be able to work normally in the configuration in which it is used.
- Except for cables sold by the equipment or system manufacturer as spare parts for internal components, the use of accessories and cables other than those specified may result in increased emissions or reduced immunity of the equipment or system.

Annex:


Guidance and manufacturer's declaration – electromagnetic emissions		
WT-2 is intended for being used in the electromagnetic environment specified below. The customers or users of WT-2 should assure that it is used in such an environment.		
Emission test	Compliance	Electromagnetic environment – guidance



RF emissions GB 4824	Group 1	The WT-2 infrared forehead thermometer uses radio frequency energy only for its internal functions; therefore, its RF emissions are low and there is little chance of interference with nearby electronic equipment.  WT-2 is suitable for being used in domestic establishment and in establishment that is directly connected to a low voltage power supply network which is for domestic power supply.
Conducted emissions GB 4824	Class B	
Harmonic emissions GB 17625.1	Not applicable	
Voltage fluctuations/ flicker emissions GB 17625.2	Not applicable	

Guidance and manufacturer's declaration – electromagnetic immunity			
WT-2 is intended for being used in the electromagnetic environment specified below. The customers or users of WT-2 should assure that it is used in such environment.			
Immunity test	IEC 60601 test level	Compliance level	Electromagnetic environment – guidance
Electrostatic discharge (ESD) GB/T 17626.2	±6kV Contact discharge ±8kV Air discharge	±6kV/contact discharge ±8kV Air discharge	Floors should be made of wood, concrete or ceramic tile. If floors are covered with synthetic material, the relative humidity should at least reach 30%.
Electrical fast transient bursts GB/T 17626.4	±2kV For power supply lines ±1kV For Input/ Output lines	N/A	N/A
Surge GB/T 17626.5	±1kV Line to line ±2kV Line to earth	N/A	N/A



Voltage dips, short interruption and voltage variations on power supply input lines. GB/T 17626.11	< 5%UT, ( > 95% dip in UT) for 0.5 circle 40%UT, (60% dip in UT) for 5 circles 70%UT, (30% dip in UT) for 25 circles < 5%UT, ( > 95% dip in UT) for 5s	N/A	N/A
Power frequency magnetic field (50/60Hz) GB/T 17626.8	3A/m	3A/m 50Hz	Power frequency magnetic field should be at levels characteristic of a typical location in a typical commercial or hospital environment.
Note: $U_T$ is the alternative current mains voltage prior to application of the test level.			
Conducted RF GB/T 17626.6  Radiated RF GB/T 17626.3	3 Vrms 150 kHz ~ 80 MHz  3 V/m 80MHz ~ 2.5GHz	3Vrms  3V/m	<p>Portable and mobile RF communications equipment should not be used closer than the recommended separation distance to any part of WT-2, including cables. The separation distance should be calculated from the corresponding formula of transmitter frequency.</p> <p>Recommended separation distance:  <math>d=1.2/P</math>  <math>d=1.2/P</math> 80MHz ~ 800MHz  <math>d=2.3/P</math> 800MHz ~ 2.5GHz  P is the maximum rated power output of the transmitter in Watts (W) provided by transmitter manufacturer. d is the recommended separation distance in meters (m).</p> <p>As field strength from fixed RF transmitters is determined by an electromagnetic site survey a, therefore it should be less than the compliance level in each frequency range.</p> <p>Interference may occur near the device marked by the following symbols.</p> 
<p>Note 1: At 80MHz and 800MHz frequency, adopt formula of higher frequency range.</p> <p>Note 2: These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from buildings, objects, and human body.</p>			



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 taken into consideration. If the measured field strength in the location where WT-2 is used exceeds the applicable RF compliance level above, the WT-2 should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as reorienting or relocating the WT-2.

Recommended separation distance between portable and mobile RF communications equipment and the WT-2

WT-2 is intended for being used in electromagnetic environment where radiated RF disturbance is controlled. As per the maximum power output of communication device, the customer or user of WT-2 can help to prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communication device (transmitter) and WT-2 recommended below.

Maximum rated power output of transmitter/ W	Separation distance according to frequency of transmitter/ m		
	150kHz ~ 80MHz d=1.2/P	80MHz ~ 800MHz d=1.2/P	800MHz~2.5GHz d=2.3/P
0.01	N/A	0.12	0.23
0.1	N/A	0.38	0.73
1	N/A	1.2	2.3
10	N/A	3.8	7.3
100	N/A	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 80MHz and 800MHz, the separation distance for the higher frequency range applies.

Note 2: These guidelines may not apply in all solutions. Electromagnetic propagation is affected by absorption and reflection from buildings, objects, and human body.

## 17. Statement

The date of manufacture is listed on the product packaging label. Product service life: 5 years.



## Warranty Card

· Warranty:

1. Since the date of sales, with warranty card, this device enjoys one-year free repair.
2. During the warranty period, all faults caused by product quality and process structure are covered by the warranty.
3. Failure caused by violation of operating procedures or failure to meet the requirements of the equipment is not covered by the warranty.
4. Equipment failure or damage caused by improper use or unauthorized disassembly is not covered by the warranty.
5. Equipment damage caused by user's improper transportation, storage or other reasons is not covered by the warranty.
6. If the warranty card does not have the seal of Woodpecker or the seal is incomplete, the warranty card is invalid.

Product: Infrared thermometer

Model: WT-2

User name		Cell	
Address			
Model		Serial number	
Date of purchase		Responsible person	
Fault description			

Manufacturer: Guilin Woodpecker Medical Instrument Co., Ltd.

Plant address: Information Industrial Park, National High-tech Zone, Guilin, Guangxi, 541004 P. R. China.

Sales department: 0773-2350599/5873196

Fax: 0773-5822450

After-sales service department: 0773-5827898/13977382317

E-mail: woodpecker4@glwoodpecker.com

Website: <http://www.glzmn.com>, <http://www.glwoodpecker.com>



Scan and Login website  
for more information



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