User Manual HT8G429

一、Product Intruction

This instrument is a professional hand-held non-contact infrared thermometer，Use simple, rigorous design, measurement accuracy，Wide temperature range and etc.. It has a laser sighting，LCD display with backlight，Over-temperature alarm，Adjustable emissivity and Automatic shutdown function. When you target the object detection window at the subject，then it will be able to quickly and accurately measure the temperature of it 。

二、The basic operating principle

It will lunch a certain proporation of infrared radiation energy in accordance with its own high and low temperature of all objects above absolute zero temperature. Radiation energy by wavelength size and distribution and its surface temperature has a very close relationship. According to this principle，Objects can be measured accurately infrared emission energy，Thus arrive at the exact temperature of the measured object.

三、Features

◆Using HEIMANN infrared temperature probe，high measurement precision, more stable performance；

◆Having a high temperature measurement（Threshold can be set）、Voice prompts；

◆Backlit liquid crystal (LED) digital display；

◆Fahrenheit, Celsius two modes；

◆Emissivity 0.1～1.00 Adjustable；

◆Built-in laser sight；

◆Automatic shutdown（Save battery consumption）；

◆Compact size ,reasonable structure, convenient operation。

四、Main Specifications

（一）、Normal operating conditions：

1. Ambient temperature：10℃～30℃；
2. The storage temperature：-10℃～40℃
3. Relative humidity：≤90%；
4. Power：9V（9V 6F22）；

（二）、Basic size：95mm×43mm×155mm（Length × width × height）.

（三）、Weight （net weight）：145g（Without batteries）.

（四）、LCDDisplay resolution（Accuracy）：0.1℃/℉.

（五）、Measuring range：The faceplate logo is subject to.

（六）、Power consumption：≤50mw.

（七）、Measurement error: ±1.5℃ or ±1.5%（At 0℃-25℃ is ±3.0℃）Whichever is greater.

（八）、Measuring time：≤0.5second.

（九）、Measuring distance：D:S=12:1（measuring distance and the object target ratio, Measurement conditions：Vacuum media）.

（十）、Auto-off time：6second.

（十一）、Safety design standards：conform the European CE safety regulations.

EMC/RFI

It may affect the reading during intensity 3 volts / meter radio frequency electromagnetic fields，But the performance of the instrument will not be permanently affected.

＊Note：At 3V / m Frequency Electromagnetic Fields in the 350MHz ～ 550MHz, The maximum error is 8℃（46.4℉）。

五、Instructions

● Security provisions

1. When the laser beam is turned on, please use caution；
2. Do not place the laser beam at people or animal eyes；
3. Do not use a laser beam to the surface of the object reflected to the human eye；
4. Do not use a laser beam to any explosive gas.

● The method of measuring step

1. To obtain accurate temperature measurement value，After this thermometer installed battery, before the measurement should be placed after 10 minutes, If grafting new environment (new location)，Also 10 minutes after the start of measurement.
2. align the detection window to pull the handle of the object of measurement key, thermometer automatically open，Tip sound of 'Dee'，with the method result display.

Note：Selected emissivity measurement object to be measured, Simultaneously measure the distance object to be measured according to resize.

六、Buttons and LCD display Symbol Description

symbol	Symbol Function Description
⇕💡⇕▲	**Function keys**：Press "EMS" Key to select the emissivity setting, While there " ₀⁰ " symbol display、press "△" key again up-regulation, Press and hold the test button, press "△" key again and hold test key to trigger "△" key to turn on and off the backlight.
△°C/°F▼	**Function keys**：Press "EMS" Key to select the emissivity setting, While there " ₀⁰ " symbol display, press "▽" key again to down regulation, Press and hold the test button, press "▽" again to turn on and off infrared laser light.
SET	**Function keys**：press this key circularly to choose the maximum（MAX）、average value（AVG）、Minimum value（MIN）、Difference between the maximum and minimum（DIF）、Data Retention（HOLD）、Low temperature alarm（LAL）、High temperature alarm（HAL）、Zero offset adjustment（offset）、Emissivity setting（EMS）.
EMS	Press "EMS" key, Select the emissivity setting is also available " ₀⁰ " Symbol display, trigger "△"、"▽" to adjust the emissivity.
△°C/°F▼	Press to choose and Fahrenheit temperature conversion.
℃	Temperature units：Celsius.
℉	Temperature units：Fahrenheit.
	Voice prompts.
	When "⬛" Symbol appears, It indicates that the battery voltage is too low.
	When "HR" Symbol appears, It represents the ambient temperature is too high.

七、Storage and cleaning

㈠、Infrared thermometer probe protective lenses are the most fragile part, Therefore, care must be taken to protect the probe lens.

㈡、Probe lens cleaning method：use a cotton swab or soft cloth dampened with water or alcohol to gently wipe.

㈢、Do not charge the battery or dispose of in fire, Please discard used batteries at designated collection sites. The use of substandard batteries could cause a fire or explosion.

㈣、Note：When not using the product long period of time, remove the batteries.

㈤、This product should not soaking or direct sunlight.

㈥、Do not crash or falling the pruduct heavly , otherwise it will be damaged.

㈦ 、Failure to effectively measured distance or misalignment of the center position may cause objects to be weighed deviation，recommendation may be repeated one or more times to test.

八、Commitment to quality and service

Products within one year warranty from date of purchase

Note：Abnormal use or disassemble caused damage not covered under warranty.

九、List of accessory

1. A manual;2.(1X9V 6F22) battery;

十、Attached form：Common object emissivity form

Material Name	specification	Emissivity	Material Name	specification	Emissivity
aluminum	Oxidation	0.20-0.40	Human skin		0.98
	polishing	0.02-0.04	graphite	Oxidation	0.20-0.60
copper	Oxidation	0.40-0.80	plasic	Transparency > 0.5mm	0.95
	polishing	0.02-0.05
gold		0.01-0.10	rubber		0.95
iron	Oxidation	0.60-0.90	plasic		0.85-0.95
steel	Oxidation	0.70-0.90	Concrete		0.95
asbestos		0.95	cement		0.96
plaster		0.80-0.90	soil		0.90-0.98
asphalt		0.95	Putty		0.89-0.91
pottery		0.95	brick		0.93-0.96
wood		0.90-0.95	marble		0.94
charcoal	powder	0.96	textile		0.90
lacquerware		0.80-0.95	paper	various colors	0.94
lacquerware	Mat	0.97
Carbon plastic		0.90	sand		0.90
Soap bubbles		0.75-0.80	soil		0.92-0.96
water		0.93	Gravel		0.95
Snow		0.83-0.90	glass	tableware	0.85-0.92
ice		0.96-0.98	textile		0.95