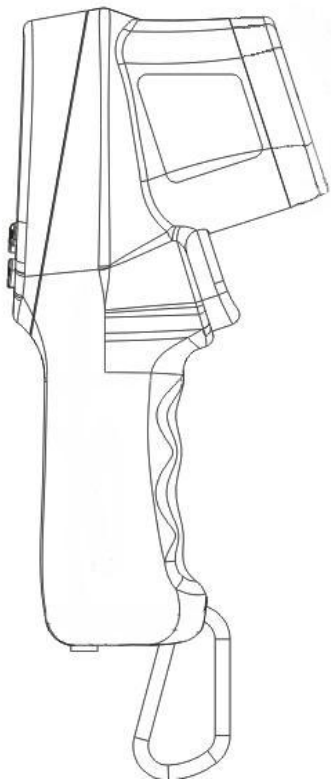
Non-contact infrared thermometer

Instruction manual



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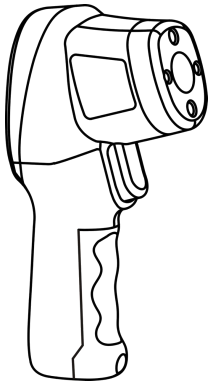
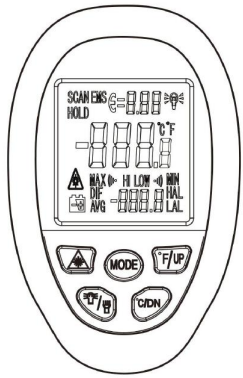
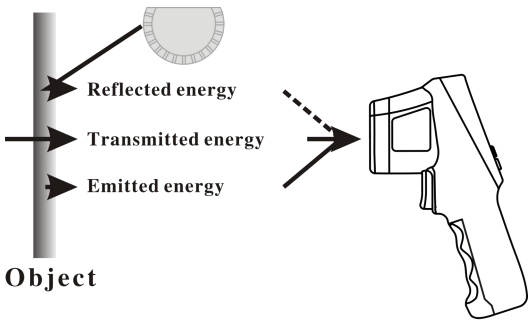




1、Introduction

This thermometer is compact, durable and easy to use. Just press the trigger and aim at the measured area with the laser pointers. It can read the surface temperature of the area within 1 second. It can help you to measure the surface temperature safely of high-heat, dangerous or difficult-to-reach objects without contact.



How it works

The infrared thermometer measures the surface temperature of the object. The light sensor reflects and transmits energy, then the energy is collected and focused by the probe, and then the information is converted into readings and displayed on the IR thermometer by other circuits. The laser beams are equipped with the machine. It can aim at the measured object more effectively and improve the measurement accuracy.

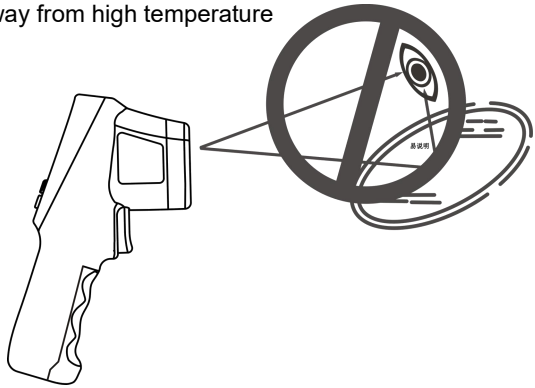
Cautions

Be careful to avoid using in the following places

--EMF(electromagnetic fields), such as: Such as arc welding machine, induction heater, etc.

--Thermal shock(cause by large or abrupt ambient temperature changes allow 1 hours for unit to stabilize before use).

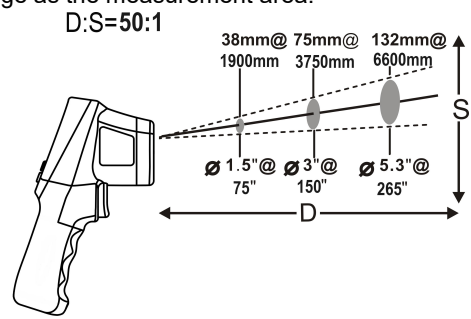
--Keep the meter away from high temperature



Warning

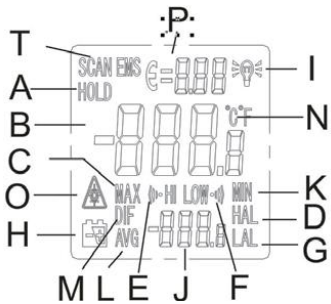
1. Do not aim the thermometer directly at the eyes or indirectly through the reflective surface to the eyes
2. When using this thermometer for temperature measurement, point it at the measured object and press the trigger. At this time, pay attention to the ratio between the distance and the measurement area size should be 50:1
3. Measuring range: Make sure that the measured target is larger than the measuring area of the thermometer.

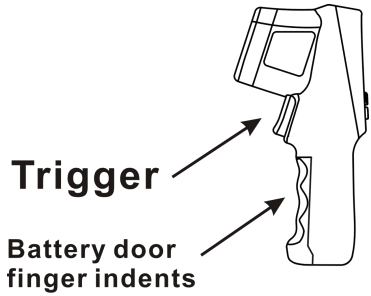
   The smaller the measured target, the closer the distance to the measured target should be. When accurate measurement is required,Ensure that the measured target is at least twice as large as the measurement area.



4. Emissivity: Most organic materials and painted or oxidized surfaces have an emissivity of 0.95. Glossy or polished metal surfaces may cause inaccuracy in measured values. You can stick a tape or black paint on the surface and wait for it to be the same as the temperature of the material below, and then measure the temperature.

2、Quick start instruction





(Figure1)

1. Remove the battery cover screw with a screwdriver, and then slide out the battery door, install battery correctly. And assemble the battery cover. Pull the trigger, LCD display reading & battery icon. Release the trigger and the reading will hold for 30 seconds.

LCD display:

Display area:36.4×34.6(mm)，character 13.3mm high.

LCD display:

A Data Hold Function

B Test value

C Maximum Mode

D High temperature alarm Mode

E High temperature alarm icon

F Low temperature alarm icon

G Low temperature alarm Mode

H Low battery reminder

I Backlight on reminder

J Second reading display(MAX/MIN/HAL/LAL/AVG/DIF)

K Minimum Mode

L Average Mode

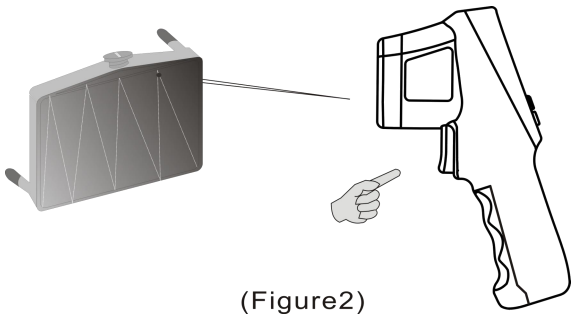
M DIF Mode(The difference between MAX and MIN)

N Temperature unit

O Laser pointer turn on icon

P Emissivity icon

T Scanning icon

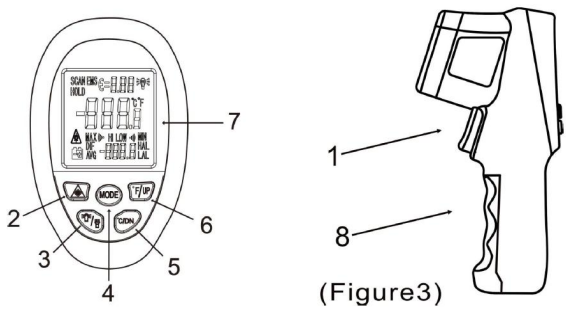


(Figure2)

2. High temperature positioning

Hold the trigger(As shown in figure 2), then scan across with up and down motions until you locate the hot spot.(please turn on the laser to for accurate measuring)

3. Name and function of each part



(Figure3)

(1) Trigger ： Press to turn on and measure. After release the trigger, the reading will be hold automatically and display “HOLD” icon. The instrument will be off automatically after 30 seconds without operation

(2) Laser pointer button ： press it display “” to turn on laser pointer, press again to turn off laser pointer,

(3) Backlight / Front Lamp ： During the measurement, press it to turn on backlight, press again to turn off. Press it with trigger together to turn on the front flashlight

(4) MODE button：Press MODE button for cycle options - MAX - AVG - MIN – DIF - LAL – HAL mode. Long Press the button, enter setting emissivity and setting alarm temperature. Press button for cycle options: Setting emissivity- alarm of low temperature-alarm of high temperature. Long Press again to exit

A、MAX：Measure maximum data ；

B、MIN：Measure minimum data ；

C、AVG：Calculate the average of all measure data；

D、DIF: Calculate the difference between MAX and MIN.

E、HAL：High temperature alarm. Into HAL mode, press“UP/DN”button to set alarm temperature. When LCD display ” HI”means measure result exceeded the alarm temperature；

F、LAL：Low temperature alarm. Into HAL mode, press“UP/DN”button for set alarm temperature. When LCD display ” LOW ” means measure result lower than alarm temperature

(5) ℃/DN button ：In “Alarm temperature” and “setting emissivity” mode for low down value. In measurement mode, press to select ℃

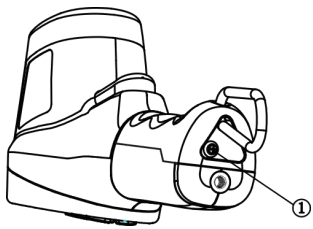
(6) ℉ /UP button ： In “Alarm temperature” and “setting emissivity” mode for raise value. In measurement mode, press to select 0F.

(7) LCD

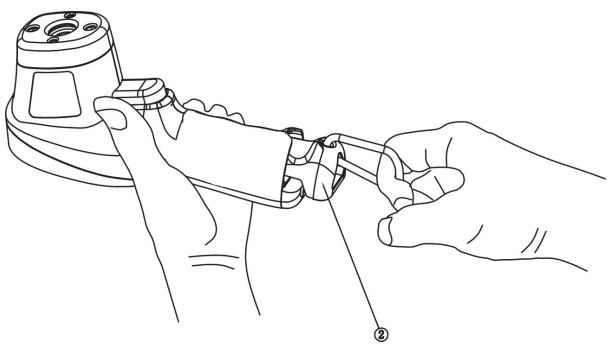
(8) Battery Cover: Unscrew the screw from the bottom, then hold the D-shaped ring to slide the battery cover off to replace a new battery.

Please follow the instruction and figure below:：

1. Use the screwdriver to unscrew the bottom screw；



2. Catch the hook and take off the battery cover from the bottom;



3、Maintenance

1) Lens cleaning: Blow off lose particles using clean compressed air. Gently brush remaining debris away with a moist cotton cloth.
2) Case cleaning: Clean the case with a damp sponge/cloth and mild soap.
3) If not used for a long time, please remove the battery.

Note:

1) Do not use solvent to clean lens.
2) Do not submerge the unit in water.
3) Emissivity will be reset to the original value (0.95) after replacing battery, please adjust the emissivity if necessary.

4、specifications

Temperature range	-50℃ to 1800℃(-58 to 3272^{0}F)
Accuracy	±3%of rdg ±3℃,-50℃ to 0℃(-58 to 320F) ±2%of rdg ±2℃ , 0℃ to 100℃(32 to 2120F) ±3%of rdg ±3℃ , ≥100℃(2120F)
distance spot ratio	50:1
Emissivity	0.1～1.0 adjustable
Resolution	0.1℃(0.1^{0}F)<1000, 1℃(1^{0}F)>1000
Repeatability	1% of reading or 1℃
Response time	<250msec, 95%response
Spectral response	8-14um
Operating temperature	0℃ to ~40℃(32 to 104^{0}F)
Storage temperature	-20~60℃(-4~140^{0}F) without battery
Relative humidity	Operating :10-95%RH; Storage: 10-95%RH
Ambient temp range of guarantee for accuracy	23℃~28℃
Weight/dimensions	160g; 192×95×63mm
Power	9V battery, 6F22 or NEDA 1604
Battery life	Laser mode :12hrs

Note:
Display above code in normal Ambient temp, probable means this meter was broken.

Attached list ： Applicable Emissivity for Different Material (For reference only)

Material	Emissivity	Material	Emissivity
Asphaltum	0.90 to 0.98	Textile（Black）	0.98
Beton	0.94	Human Skin	0.98
Cement	0.96	Soap bubble	0.75 to 0.80
Sand	0.90	Charcoal（powder）	0.96
Soil	0.92 to 0.96	Lacquer	0.80-0.95
Water	0.92 to 0.96	Lacquer （reluster）	0.97
Ice	0.96 to 0.98	Rubber（Black）	0.94
Snow	0.83	Plastic	0.85-0.95
Glass	0.90 to 0.95	Timber	0.90
Ceramic	0.90 to 0.94	Paper	0.70-0.94
Marble	0.94	Chromic oxide	0.81
Gypsum	0.80 to 0.90	Copper Oxide	0.78
Compo	0.89 to 0.91	Iron Oxide	0.78 to 0.82
Brick	0.93 to 0.96	Stainless steel	0.2-0.3

The above product images and contents are for reference only. In case of any discrepancies or updates, please refer to the actual product without prior notice.

CONTACT US

For any problem or concern, welcome to email us for prompt response.

AFTERSALES1010@HOTMAIL.COM

P.S.

To make sure you can receive immediate solution and your requests processed quickly, please email us with these information:

1. Order Number

2. Platform of Your Purchase

3. Full Model Number

4. Description of the Problem(Attaching videos or photos can help us troubleshoot the problems even faster)