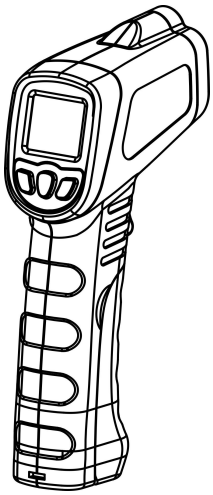
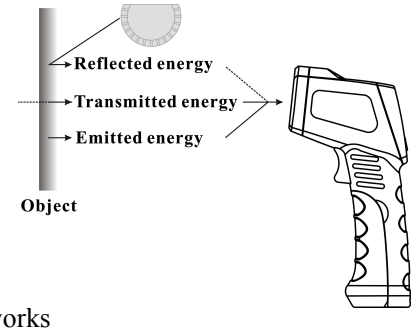
Non-contact infrared thermometer
981A
Instruction manual



1、Introduction

Compact, rugged and easy to use. Just aim and push the button, read current surface temperatures in less than a second. Safely measure surface temperatures of hot, hazardous or hard-to-reach objects without contact.



How it works

Infrared thermometer measures the surface temperature of an object. The unit's optics sense emitted, reflected, and transmitted energy which is collect and focused onto a detector. The unit's electronics transmitted energy which is display on the unit. For increased ease and accuracy the laser pointer makes aiming even more precise.

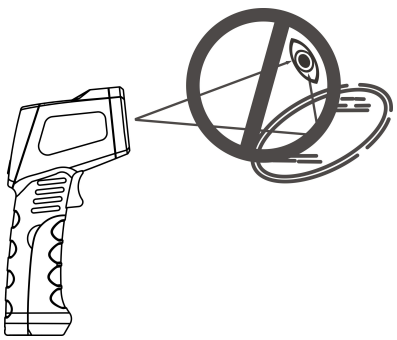
Cautions

Infrared thermometer should be protected for the following:

--EMF(electro-magnetic fields) from arc welders, induction heaters.

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

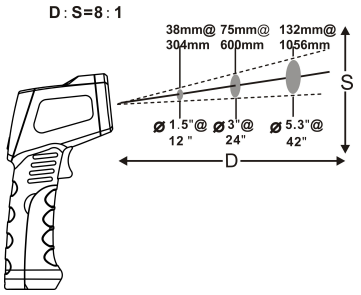
--Do not leave the unit on or near objects of high temperature.



Warning

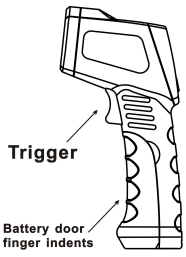
Do not point laser at eye or indirectly off reflective surfaces.

1. When take measurement, point thermometer toward the object to be measured and hold the yellow trigger. The object under test should be large than the spot size calculated by the field of view diagram.
2. Distance & spot size: As the distance from the object increase, the spot size of measuring area becomes large.

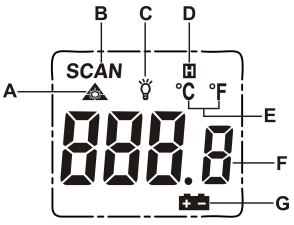


3. Field of view: Make sure the target is larger than the unit's spot size. The smaller the target the close measure distance. When accuracy is critical, make sure the target is at least twice as large as the spot size.
4. Emissivity: Most organic materials and painted or oxidized surfaces have an emissivity of 0.95. Inaccurate readings will result from measuring shiny or polished metal surfaces. To compensate, cover the surface to be measured with masking tape or flat black paint. Measure the tape or painted surface when the tape or painted reach the same temperature as the material underneath.

2、Quick start instruction



(Figure 1)

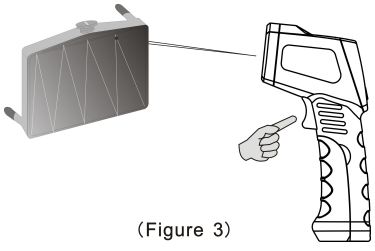


(Figure 2)

1. Press battery door clip, install battery correctly. Pull the trigger, LCD display reading & battery icon. Release the trigger and the reading will hold for 10 seconds

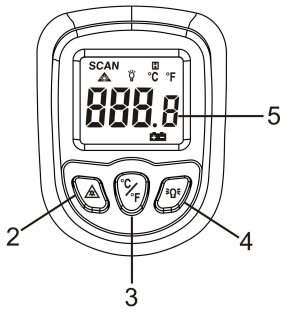
LCD display:

A Laser pointer turn on prompt
B Measure prompt
C Backlight prompt
D Data Hold
E Temperature unit symbols
F Measure result
G Low-voltage

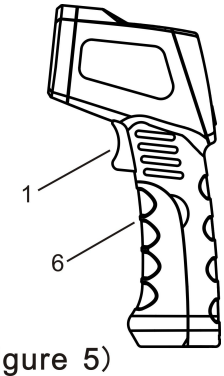


(Figure 3)

2. Locating a hot spot aim the thermometer outside the area of interest, then scan across with up and down motions until you locate the hot spot.(please turn on the laser to for accurate measuring)



(Figure 4)



(Figure 5)

3. Diagram description

(1) Trigger ： Press for turn on, and then display test result and hold data 10 seconds automatically ("HOLD") after unclamping switch. Trun off automatically after 10 seconds without operate.

(2) Laser pointer button ： press it for turn on laser pointer, press again for turn off.

(3) ℃/ ^{0}F button：press it for ℃, press again for ^{0}F.

(4) Backlight button ： press it for turn on backlight pointer, press again for turn off.

(5) LCD

(6) Battery door: When replace battery door, please using the finger indents to pull open the battery door.

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) Please take out the battery when not using for a long time.

Note:

1) Do not use solvent to clean lens.
2) Do not submerge the unit in water.

4、specifications

Temperature range	-30℃ to 350℃(-22to 662^{0}F) -30℃ to 450℃(-22 to 842^{0}F)
Accuracy	±3% of rdg or ±3℃,-30℃ to 0℃(-22 to 32^{0}F) ±2% of rdg or ±2℃, 0℃ to 100℃(32 to 212^{0}F) ±3% of rdg or ±3℃, ≥100℃(212^{0}F)
Repeatability	1%of reading or 1℃
Response time	500msec, 95%response
Spectral response	8-14um
Emissivity	0.95
Ambient operating range	0℃ to ~60℃(32 to 140^{0}F)
Relative humidity	10-95% RH noncondensing
Storage temperature	-20~60℃(-4~140^{0}F) without battery
Weight/dimensions	155g;165×72×41mm
Power	9V battery ,6F22 or NEDA 1604
Battery life	Laser models:12hrs
distance spot ratio	8:1

Above picture and content just for your reference. Please be subject to the actual products if anything different or updated. Please pardon for not informing in advance.

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