



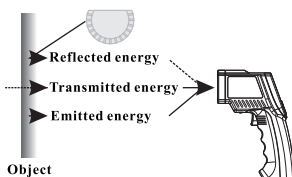
MODEL: □ AS842A
□ AS852B
□ AS862A

Non-contact infrared thermometer Instruction manual



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 measure the surface temperature of an object. The unit's optical system sense the object's emitted energy with different wavelength. It is collected and focus onto a detector. The unit's electronics system translated the information into a temperature reading which is displayed on the unit.

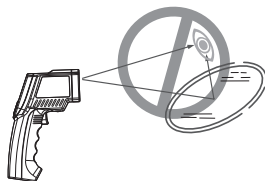
Cautions

Infrared thermometer should be protected for the following:

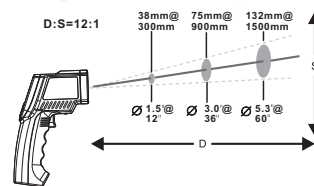
- EMF (electro-magnetic fields) from arc welders, induction heaters.
- Thermal shock (cause by large or abrupt ambient temperature changes allow 30 minutes for unit to stabilize before use).
- Do not leave the unit on or near objects of high temperature.

Warning

Do not point laser directly 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 larger 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 larger.

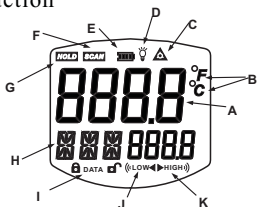


3. Field of view: Make sure the target is larger than the unit's spot size. The smaller the target the closer measure distance. When accuracy is critical, make sure the target is at least twice as large as the spot size.
4. Emissivity: Most organic materials and painted or oxidized surfaces have an emissivity of 0.95 (pre-set in the unit). 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.

Material	Emissivity	Material	Emissivity
Aluminum	0.30	Iron	0.70
Asbestos	0.95	Lead	0.50
Asphalt	0.95	Limestone	0.98
Basalt	0.70	Oil	0.94
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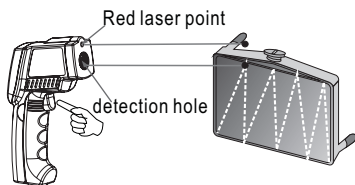
Quick start instruction

(Figure1)



LCD display:

- A measuring reading
- B measuring unit
- C laser on icon
- D back light on icon
- E battery power icon
- F scanning icon
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- H mode indicator
- I data storage / read icon
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(Figure 3)

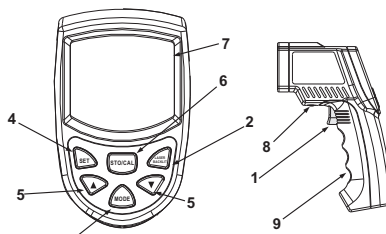
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Red laser point only position the general direction the detection hole is the main parts measure the temperature

2. Locating a hot spot: To find 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 for accurate measuring)
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on, any operations will remain back light for 10 sec. LCD indicate on/off status.



(Figure3)

(Figure4)

- (3)---(6) key functions: press 3 key, LCD subdisplay blinks MAX-MIN-DIF-AVG-HAL-LAL-STO segment (only main display means normal measuring mode) press 4 key to enter.

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(7) LCD

(8) Battery door clip

- (9) Battery door: When replace battery door, please press battery door clip and pull the battery door.

- (10) Celsius / Fahrenheit switch: Please open battery and push the slide switch for conversion

Maintenance

- 1) Lens cleaning: Blow off loose particles using clean compressed air. Gently brush remaining debris away with a moist cotton cloth.
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Note:

- 1) Do not use solvent to clean lens.
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Specifications	AS842A	AS852B	AS862A
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Accuracy	100°C(212°F) to 600°C(1112°F) ±2°C or ±2% 0°C(32°F) to 100°C(212°F) ±2°C or ±2% -50°C(-58°F) to 0°C(30°F) ±3°C or ±3% whichever is greater		
Repeatability	1% of reading or 1°C		
Response time	500 mSec, 95% response		
Spectral response	8-14 um		
Emissivity	0.10 to 1.00 adjustable (pre-set 0.95)		
Ambient operating range	0~40°C (32~104°F)		
Relative humidity	10-95% RH noncondensing		
Storage temperature	-20 to 60°C (-4 to 140°F) without battery		
Weight/Dimensions	170G; 175*100*49mm		
Power	9v Alkaline or NiCd battery		
Battery life (Alkaline)	Laser Models: 12 hrs		
Distance to Spot Size	12:1		





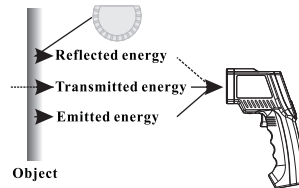
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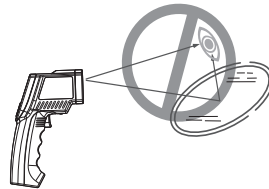
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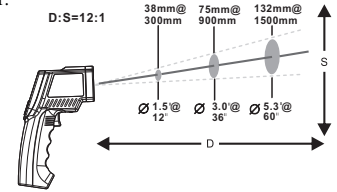
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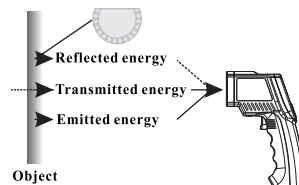
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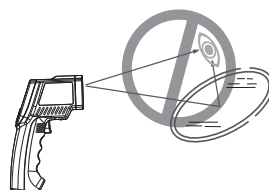
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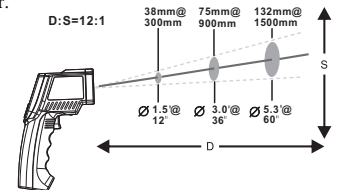
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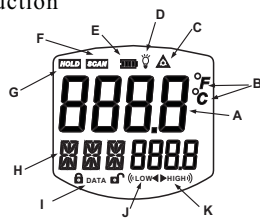


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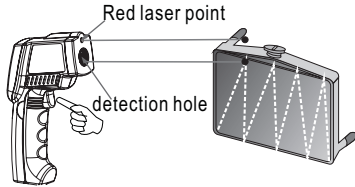
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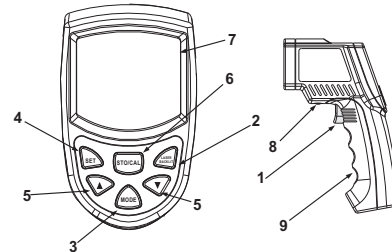
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- 1) Lens cleaning: Blow off loose particles using clean compressed air. Gently brush remaining debris away with a moist cotton cloth.
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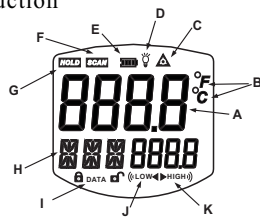
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Response time	500 mSec, 95% response		
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Ambient operating range	0~40℃ (32~104℉)		
Relative humidity	10-95% RH noncondensing		
Storage temperature	-20 to 60℃ (-4 to 140℉) without battery		
Weight/Dimensions	170G; 175*100*49mm		
Power	9v Alkaline or NiCd battery		
Battery life (Alkaline)	Laser Models: 12 hrs		
Distance to Spot Size	12:1		



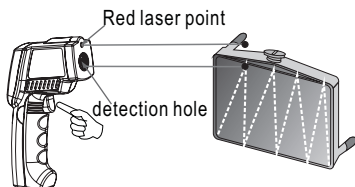
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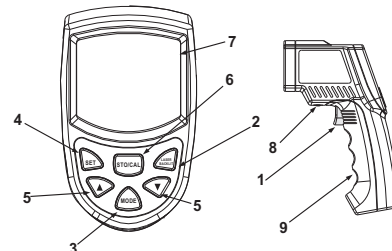
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