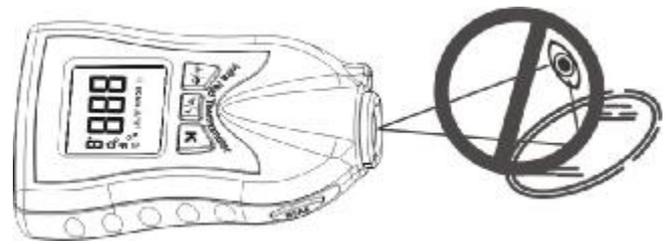


Non-contact infrared thermometer Instruction manual

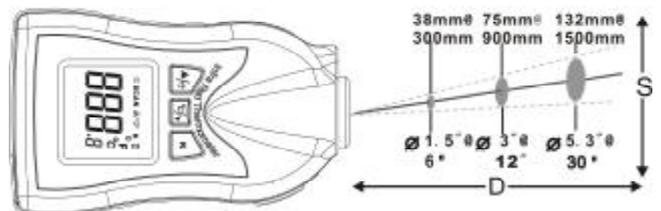


Warning

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

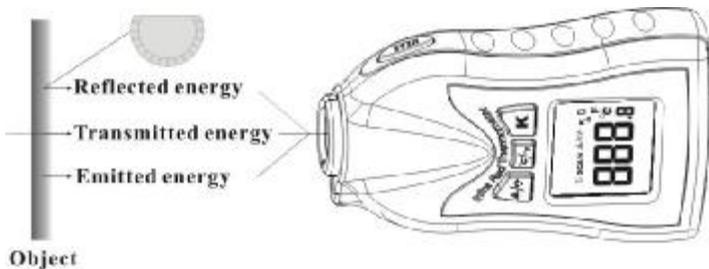
1. When take measurement, point thermometer toward the object to be measured and hold the yellow trigger. The object under test should be large than the spot size calculated by the field of view diagram.
2. Distance & spot size: As the distance from the object increase, the spot size of measuring area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

D : S = 6 : 1



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.

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 0.97. 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.

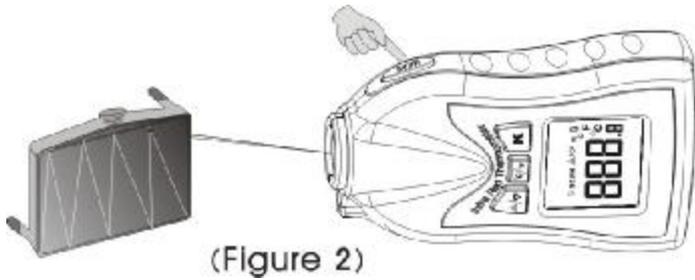
2、 Quick start instruction



(Figure 1)

1. LCD display:

- A Data Hold
- B SCAN icon
- C Laser pointer turn on prompt
- D backlight pointer turn on prompt
- E K- type contact thermocouple on prompt (only for K-type)
- F Low Voltage icon



(Figure 2)

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)

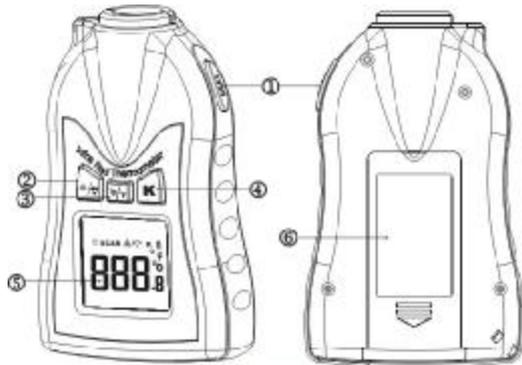


Figure 3

3. Diagram description

- (1) MEAS button: Press the measurement button to display the surface temperature.
- (2) Back light / Laser pointer button : press it for turn on Back light, press again for turn off, When product working, press it for turn on Laser pointer, press again for turn off.
- (3) K-type thermocouple button : Press for turn on K-type thermocouple measure mode (only for K-type) .

Note : As a result of operation principle different . the measure result maybe have a few error of NTC and infrared, it is normal situation.



- (4) Celsius/Fahrenheit switch button: press direct for °C / °F select.
- (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°C to 275°C (-22 to 527°F)
Accuracy	±2°C, -30°C to 0°C (-22 to 32°F) ±1°C, 0°C to 65°C (32 to 149°F) ±1.5% of rdg+1°C, ≥65°C (149°F)
Emissivity	0.95
Ambient operating range	0°C to ~60°C (32 to 140°F)
Relative humidity	10-95% RH noncondensing
Storage temperature	-20~60°C (-4~140°F) without battery
Ambient temp range of guarantee for accuracy	23°C~28°C
Weight/dimensions	81g; 56.5×20.5×95.0mm
Power	1.5V AAA×2
Battery life(alkaline)	Laser models: 12hrs
Display spot size	6:1

Note:

Display "AL" means Ambient temp lower than 0°C";
Display "AH" means Ambient temp higher than 60°C";
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 and Aluminum	0.2-0.3



1141 Budapest, Fogarasi út 77. 1095 Budapest, Mester utca 34.
Tel.: *220-7940, 220-7814, 220-7959. Tel.: *218-5542, 215-9771, 215-7550,
220-8881, 364-3428 Fax: 220-7940 216-7017, 216-7018 Fax: 218-5542
Mobil: 30 531-5454, 30 939-9989 Mobil: 30 940-1970, 20 949-2688

E-mail: delton@delton.hu Web: www.delton.hu

www.holdpeak.hu