

## Infrared thermometer

Aim the thermometer on desired surface and our robust Sonic infrared thermometer measures the exact temperature in less than a second. The infrared function ensures efficiency on measuring hot, hazardous or hard-to-reach objects.

#### How it works

Our Sonic infrared thermometer measures the surface temperature of any object.

The optic sensor of this device emits, reflects and transmits the energy which is collected onto a detector. The electronics translate the information into a temperature which is displayed on the LCD screen. Due to the infrared laser, aming and measuring becomes even more precise.

### **Parts specifications**

- Single dot laser
- LCD back light
- Automatic data retention
- Automatic shutdown
- Low battery indication
- 9V battery (included)

Temperature range	-30°C~330°C (-22°F~626°F)
Accuracy	±2% or ±2°C
Resolution	0.1°C / 0.1°F
Display selection	°C / °F
Distance spot ratio	10: 1
Emissivity	0.95

Wavelength ...... 8~14µm Max power output ......< 1mw class II laser

Response time ...... 500ms

### **Contents**



- 1. Battery icon
- 2. Laser icon
- 3. °C / °F symbol
- 4. Temp. reading
- 5. Temp. scan
- 6. Temp. hold



- 7. LCD
- 8. LCD Light on/off
- 9. °C / °F
- 10. Laser on/off
- 11. Laser
- 12. Infrared lens
- 13. Trigger
- 14. Battery cover



# IMPORTANT SAFETY INSTRUCTIONS READ AND UNDERSTAND ALL INSTRUCTIONS. FAILURE TO FOLLOW ALL INSTRUCTIONS DETAILED IN THIS MANUAL MAY RESULT IN SERIOUS PERSONAL INJURY.

### **Quick start instructions**

- 1. Open the battery cover (14) by using the slide and install batteries correctly.
- 2. Press the trigger (13). The LCD screen will turn on and show measured temperature. By releasing the trigger, the temperature measured will hold for 10 seconds.
- 3. To locate a hot spot, turn on the laser pointer (10) and aim the Sonic infrared thermometer on desired surface. By scanning across the surface with an up and down motion, you are able to locate the hotspot.

### Operating instructions \_

- 1. By pressing the trigger and aiming the thermometer, you are able to measure the temperature of desired object. The desired object should be larger than the calculated view of diagram.
- 2. When the distance from object increases, the measuring area becomes larger.
- 3. Make sure that the desired object is larger than the device's spot size. The smaller the desired object, the closer the measuring distance. When accuracy is critical, make sure the target is at least twice as large as the spot size.
- 4. Most organic materials, painted or oxidized surface have an emissivity of 0.95 (pre-set in device). Inaccurate readings will result from measuring shiny or polished metal surfaces. To avoid these inaccuracies, cover these surfaces with masking tape and measure the temperature of taped surface once it reaches the same temperature as original surface.



#### WARNING

Do not point laser directly or indirectly (through reflective surfaces) at eye.

### Maintain

- 1. Lens cleaning: Use clean compressed air to blow off loose particles. Use a clean soft brush to remove any debris away. If necessary clean with a clean damp cotton cloth.
- 2. Case cleaning: Clean the case with a damp sponge/cloth and mild soap.

#### Note:

- \* Do not use solvent to clean lens.
- \* Do not submerge the unit in water.

## P CAUTION

Infrared thermometer should be protected from the following:

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