



USER MANUAL



SP62022

**MINI INFRARED
THERMOMETER**

**RETAIN THESE INSTRUCTIONS
AND ATTACH RECEIPT TO
MANUAL FOR FUTURE
REFERENCE**

NOTE: Proof of purchase must be retained by the customer as it will be required in the event of a claim under warranty.



AFTER SALES SUPPORT:

WWW.SPTOOLS.COM

AUSTRALIA: Visit the website's **contact page** to get in touch with your local service department.

INTERNATIONAL: Use the **county selector** to get in touch with your service department in your country or region.



IMPORTANT

ALL PERSONS WHO ARE TO USE THIS EQUIPMENT MUST THOROUGHLY READ AND UNDERSTAND THIS INSTRUCTION MANUAL PRIOR TO OPERATION.

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INTRODUCTION

Introduction

This meter is a convenient non-contact infrared thermometer with the functions of laser targeting, back light display, data hold and auto power off.

Safety Information

- Please read the following information carefully before using this tool.
- Do not clean this tool with solvents



Warning: Do not point laser directly at eyes or reflective surfaces.

Caution for accurate readings:

When the ambient temperature changes quickly, you must wait 30 minutes for the internal IR sensor to equalise with the new ambient temperature.

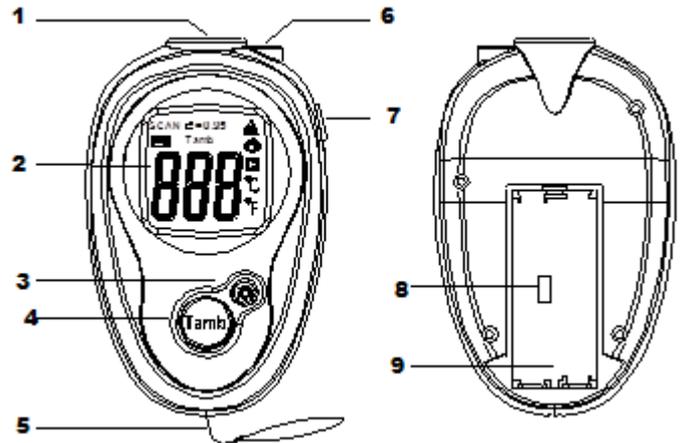
Do not operate in strong Electro Magnetic Fields (EMF)
i.e. Arc welders, alternators, induction furnaces.

Do not rest the unit on or near high temperature objects. Or leave in direct sunlight.

Do not allow dust or foreign objects into the sensor window.

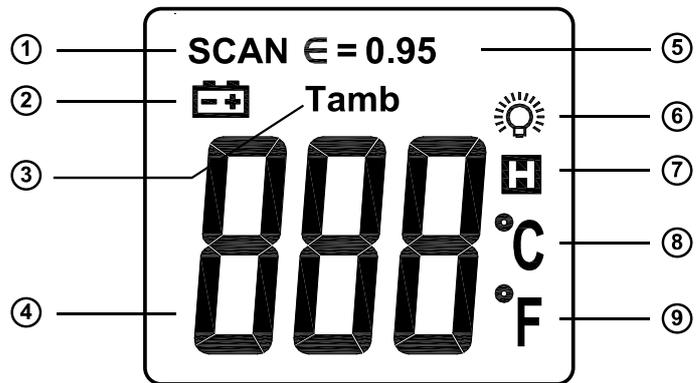
Panel Descriptions

1. Infrared Sensor
2. LCD Display
3. Black Light Button
4. Ambient temp measurement button
5. Wrist Strap
6. Laser targeting aperture
7. Scan Button
8. °C/°F selection switch
9. Battery Cover



LCD DISPLAY

1. Measurement indication
2. Low power indication
3. Ambient temperature indicator
4. Measurement result
5. Emissivity display
6. Back light indicator
7. Data hold indicator
8. °C temperature unit
9. °F temperature unit



Specifications

- Measurement range: $-20^{\circ}\text{C} \sim 270^{\circ}\text{C}$; ($-4^{\circ}\text{F} \sim 518^{\circ}\text{F}$)
- Accuracy at ambient of $22^{\circ}\text{C} \pm 2^{\circ}\text{C}$: \pm (2% reading +3 °C/6 °F).
- Ambient temperature measurement range: $0^{\circ}\text{C} \sim 50^{\circ}\text{C}$ ($32^{\circ}\text{F} - 122^{\circ}\text{F}$)
- Resolution: $1^{\circ}\text{C}/1^{\circ}\text{F}$
- Emissivity: 0.95
- Field of view: 6:1
- Laser power: $<1\text{mW}$
- Over range warning: "OL" or "-OL"
- Auto power off: 20s

Measurement Principle

Non-contact Thermometer detects the infrared ray of the object, the instrument focalizes infrared energy of the object onto a sensor through a lens, transfers the surface temperature into electric signal. A microcomputer calculates and displays the measurement temperature on the LCD. The method can measure object's surface temperature without contact. The laser is used to aim at the target only.

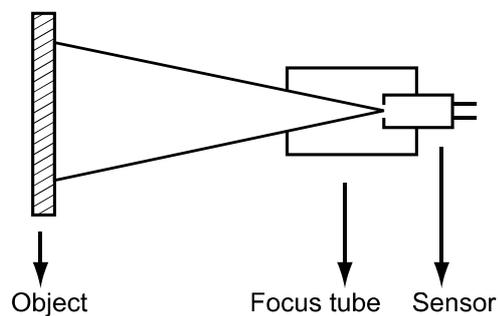
Operating Instructions

To measure an object's temperature

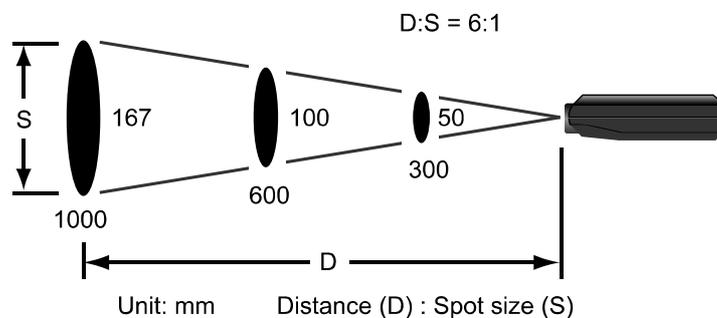
- Note size of the object to scan temperature.
- Move the unit to the appropriate distance to scan its temp. i.e. For a 50mm object, you will need to be 300mm away.
- Point the infrared sensor to the object, and then press the "SCAN" button, the unit begins working, and the laser appears.
- Read the measured result from the LCD display.
- Release the "SCAN" button, the measured result will hold automatically. Unit automatically turns off after about 20 seconds of inactivity.

Distance: Size Ratio

The thermometer has a visual angle and visual spot size; a drawing is shown as following:



Make sure that the target is larger than the unit's visual spot size. The smaller the target, the closer you should be to it. The relationship between distance and spot size is 6:1, the drawing as following:



To measure the ambient temperature

(Please balance the heat of the instrument before use.)

- Press the “SCAN” button to start the unit.
- Press the “Tamb” button to select the ambient temperature measurement mode, and the sign of “Tamb” will appear on LCD, then press the “SCAN” button, the measured ambient temperature will be displayed on LCD.
- Release the “SCAN” button, the measured result will hold automatically. Unit automatically turns off after about 20 seconds of inactivity.
- To continue measuring an object’s temperature, press the “Tamb” button again, the sign “Tamb” will disappear from LCD, and then follow the steps in “To measure an object’s temperature”

Note:

When the symbol “Tamb” appears, the measurement for object temperature is not available.

Note:

If an object surface is very shiny, such as stainless steels, the emissivity from surface is low, and the measurement accuracy will be affected. An effective solution is to use black adhesive tape to cover the object surface, starting the measurement when the adhesive tape’s temperature is same as the object

Other Functions

Back light: Press the  key to start the backlight.

Celsius or Fahrenheit Selection: To change unit measurement open the battery cover and take the battery out, shift the switch to select the desired measurement unit.



Battery Replacement

If the sign “ ” appears on the LCD display, it indicates that battery should be replaced. Remove the battery cover and replace with new AAA batteries (2).

LIMITED WARRANTY

This Limited Warranty applies only to new products* distributed by SP Tools Pty Ltd ("SP Tools"). It is a condition of this Limited Warranty Policy that the purchaser read the owner's manual for the product and only use the product to the extent or for the purposes stated therein. The purchaser must also ensure that all servicing requirements are completed as listed in the owner's manual (said servicing is at the owner's expense). We recommend that all servicing is completed by an authorised service agent and that records of said servicing are retained by the purchaser as proof in the event of a warranty claim.

Whilst the owner's manual, packaging, and/or other documentation supplied with SP Tools' products may provide details in respect of a Limited Warranty, the terms set out herein supersede these matters, and this Limited Warranty applies in their place. This warranty is no less advantageous than otherwise described in such other documentation.

SP Tools agrees, subject to the terms and conditions specified below, to repair or replace at SP Tools' cost, the product purchased by you when the product does not perform in accordance with its specifications during the limited warranty period, due to any fault in manufacturing, materials and/or workmanship. SP Tools is not liable to repair or replace products that the purchaser uses in a manner that is inconsistent with the owner's manual or in the circumstances set out in paragraphs 1.1 – 1.7 below.

The benefits to the purchaser under this warranty are in addition to other rights and remedies under the *Competition and Consumer Act 2010* (Cth). The limited warranty period, within which a defect in the product must appear, commences from the date of purchase and ceases on expiration of the specified term below.

THE LIMITED WARRANTY PERIOD

- SP Speciality Tools – 12 Months



THE PURCHASERS ATTENTION IS DRAWN TO THE FOLLOWING

To the extent permitted by law and subject to this Limited Warranty, and as part of the terms of the sale of the equipment or part thereof: SP Tools shall not be liable for any form of loss, damage, cost, injury or harm of any kind (whether direct, indirect, special or consequential) howsoever arising from the use or supply of the equipment to the purchaser.

EXCLUSIONS TO LIMITED WARRANTY POLICY

This Limited Warranty will not apply where the equipment or any part thereof:

- 1.1 Fails due to an accident (including liquid spillage), abuse, misuse, neglect or normal wear and tear;
- 1.2 Has been used in a manner other than for which it was originally designed;
- 1.3 Has been tampered with or is otherwise than as supplied by SP Tools;
- 1.4 Where any damage, malfunction or other failure of the equipment or any part thereof resulted directly or indirectly from unauthorized persons, adjusting or failing to adjust any part requiring normal maintenance and service (examples include adjustment of tappets, air filter maintenance, lubrication and tightening of screws nuts and bolts);
- 1.5 Malfunctions due to the use of defective or incompatible accessories;
- 1.6 Is damaged by lightning or thunderstorm activity; or
- 1.7 Has been transported to a country where no authorised Service Agents exist.

CLAIMING WARRANTY

This Limited Warranty may be claimed on in the following manner:

- 2.1 In order to make a claim under this Limited Warranty, the purchaser must deliver the equipment or any part thereof to an SP Tools authorised repair agent and pay all costs of transportation and all costs incidental to making a claim under this Limited Warranty. The purchaser must first contact SP Tools (contact details described above) and request the delivery address of an SP Tools authorised repair agent.
- 2.2 The purchaser must deliver to the repair agent written reasons why the purchaser considers that the purchaser has a claim under this Limited Warranty and must provide all necessary details, including:
 - The place, date and from whom the unit or part was purchased.
 - The unit or part involved, Model and Serial Number.
 - The defect, malfunction or failure in respect of which the claim is being made.
 - Proof of service of the unit or part (if applicable)
 - Proof of purchase in respect of the unit or part.
- 2.3 If the Limited Warranty claim is valid, the repair agent will carry out repairs and return the product at no charge to the purchaser. These repairs are limited to the Limited Warranty fault identified and as such will not include any other faults due to misuse, abuse, failure to maintain, fair wear and tear or the replacement of serviceable items such as oil, spark plugs, air filters, fuel etc.

Our goods come with guarantees that cannot be excluded under Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

Note: Units which are failing to perform in accordance with specifications due to non-warrantable causes will be subject to freight, repair and or quote charge