

# PIT6L MINI-INFRARED THERMOMETER

(with Ambient Temperature)

USER'S MANUAL



## 1 Introduction

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

## 2 Safety Information

- Please read the following information carefully before using the meter.
- Do not clean the meter using solvents.



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

## **Cautions:**

**When** ambient temperature changes quickly, wait 30 minutes to before taking measurements.

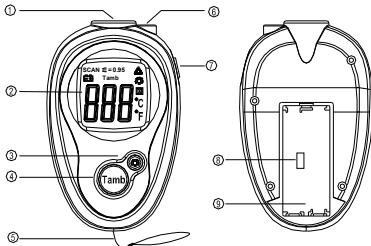
**Avoiding** EMF(electro magnetic fields) from arc weld, induction furnace, etc...

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

## **3. Instrument Description**

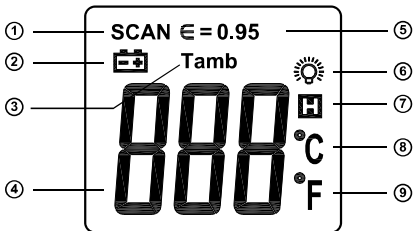
- ① Infrared sensor
- ② LCD display
- ③ Back light button
- ④ Ambient temperature measurement button
- ⑤ Wrist band

- ⑥ Laser targeting aperture
- ⑦ Scan button (Measurement and laser button)
- ⑧ °C/°F selection switch
- ⑨ Battery cover



## LCD display

- ① Measurement indication
- ② Low power indication
- ③ Ambient temperature measurement indication



- ④ Measurement Display
- ⑤ Emissivity display
- ⑥ Back light indication
- ⑦ Data hold indication
- ⑧ °C temperature units
- ⑨ °F temperature units

## **4 Specifications**

Measurement range: -4°F to 518°F (-20°C to 270°C)

Accuracy at ambient of 72°F (22°C) +/- (2% reading + 6°F(3°C))

Temperature measurement range: 32°F to 122°F (0°C to 50°C)

Resolution: 1°F (1°C)

Emissivity: 0.95

Distance to Spot (D:S) Ratio: 6:1

Laser power: <1mW

Over range indication: "OL" or "-OL"

Auto power off: After 20 sec.

## 5. Operating Instructions

5-1 Point the infra-red sensor at the object, and press the "SCAN" button. Release the "SCAN" button and the measured result will hold automatically.

The meter shuts off after 20 seconds of inactivity.

To get an accurate measurement result, refer to **D:S ratio, Emissivity** section.

## 5-2 To measure the ambient temperature

Press the “SCAN” button to start the unit.

Press the “Tamb” button to select the ambient temperature measurement mode, and “Tamb” will appear on LCD. Now, press the “SCAN” button, the measured ambient temperature will be displayed on the LCD.

Release the “SCAN” button, the measured result will hold automatically. Unit automatically turns off after about 20 seconds of inactivity.

To return to infra-red measurements, press the “Tamb” button again, “Tamb” will disappear from LCD, and then follow the steps in section

6-1.

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

**NOTE:**

If an object surface is very slick, such as stainless steel, the emissivity from surface is low, and the measurement accuracy will be affected. An effective solution is that using the black adhesive tape to cover the object surface, starting the measurement until the adhesive tape's temperature is same as the object.



**Warning: Do not point laser directly at eye or indirectly off reflective surfaces.**

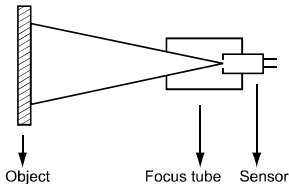
## Other functions

**Back light:** Press the  key to turn on the backlight.

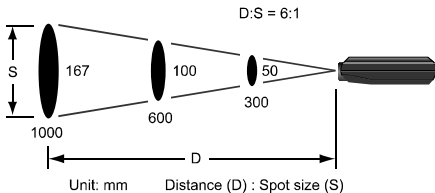
**Measurement unit (°C/°F) selection:** Open the battery cover and take the battery out, shift the switch to select the measurement unit.

### 6. D:S ratio


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



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:



## 8 Replace batteries

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

## **WARRANTY**

Sealed Unit Parts Co., Inc. warrants that it will repair or furnish without charge a similar product to replace any product which, within the specified warranty term after the date of sale by the Wholesaler, is proved to the satisfaction of Sealed Unit Parts Co., Inc. , to have been defective at the time it was sold. Said warranty is in effect only when said item is used in accordance with the instructions and recommendations of Sealed Unit Parts Co., Inc.

This warranty applies only to products which after shipment from the factory, have not been altered, changed, repaired, or treated in any manner whatsoever.

This warranty to repair or replace is the only warranty either expressed, implied or statutory and is the only warranty being issued herein; Sealed Unit Parts Co., Inc.'s liability in connection with its products is expressly limited to the repair or replacement of defective parts. All other damages and warranties, statutory or otherwise, are being expressly excluded.

No representative of Sealed Unit Parts Co., Inc. has authority to change this warranty in any manner whatsoever. No attempt to repair or promise to repair or improve any part covered by this warranty by any representative of this company shall be effective unless signed by a properly authorized officer of Sealed Unit Parts Co., Inc.