SEALEY Professional TOOLS
AUTO SERVICE LINE

INSTRUCTIONS FOR:
INFRARED LASER THERMOMETER 6:1

MODEL: **VS903**

Thank you for purchasing a Sealey product. Manufactured to a high standard this product will, if used according to these instructions and properly maintained, give you years of trouble free performance.

⚠ ***IMPORTANT:*** **PLEASE READ THESE INSTRUCTIONS CAREFULLY. NOTE THE SAFE OPERATIONAL REQUIREMENTS, WARNINGS & CAUTIONS. USE THE PRODUCT CORRECTLY AND WITH CARE FOR THE PURPOSE FOR WHICH IT IS INTENDED. FAILURE TO DO SO MAY CAUSE DAMAGE AND/OR PERSONAL INJURY AND WILL INVALIDATE THE WARRANTY. PLEASE KEEP INSTRUCTIONS SAFE FOR FUTURE USE.**

1. SAFETY INSTRUCTIONS

❒ **WARNING!** *Ensure Health & Safety, local authority, and general workshop practice regulations are adhered to when using this equipment.*
✓ Familiarise yourself with application and limitations of the product, as well as potential hazards peculiar to the use of the thermometer.
✓ Keep the thermometer clean for best and safest performance.
✗ **DO NOT** use equipment for any purpose other than that for which it is designed.
✗ **DO NOT** allow untrained persons to operate the thermometer.
✓ When not in use, store in a safe, dry, childproof area.

LASER SAFETY

The VS903 utilises a Class II laser that emits low levels of visible radiation (i.e. wavelengths between 400 and 700 nanometres) which are safe for the skin but not inherently safe for the eyes. The Class II emission limit is set at the maximum level for which eye protection is normally afforded by natural aversion responses to bright light. Accidental eye exposure is therefore normally safe, although the natural aversion response can be overridden by deliberately staring into the beam, and can also be influenced by the use of alcohol or drugs.

❒ **WARNING!** Do not look or stare into the laser beam as permanent eye damage could result.
✗ **DO NOT** direct the laser beam at any person's (or animal's) eyes as eye damage could result.
✗ **DO NOT** operate the thermometer when you are tired or under the influence of alcohol, drugs or intoxicating medication.
✓ Be aware that reflections of the laser beam from mirrors or other shiny surfaces can be as hazardous as direct eye exposure.

2. INTRODUCTION & SPECIFICATION

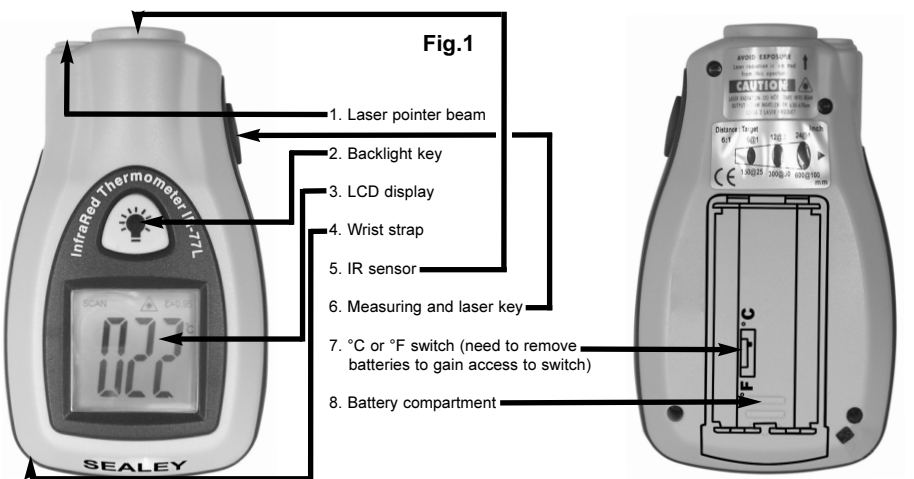
Quick and easy way to diagnose engine and vehicle faults. VS903 Detects energy emissions in the infrared spectrum and converts them into a display of temperature within 1 second of use. Medium resolution 6:1 optics allow accurate readings even in areas of temperature clutter. Features laser pointer to indicate the area being sampled. Temperature is displayed on a backlit LCD panel with automatic hold. Temperature can be shown in either °C or °F. Powered by 2 x AAA batteries.

Specification

Display:	3½ digit (2000 count) LCD display.
Measurement Range:	Temperature: -30 to 270°C/(-22 to 518°F).
Power Off:	Auto shutoff after aprox 7-8 seconds.
Laser Power:	Laser power less than1mW (red).
Operating Temperature:	0 - 50°C (32 - 122°F).
Operating Humidity:	Max. 80% RH.
Power Supply:	2 x AAA battery.
Weight:	81g.
Size:	97x57x29mm.

Ranges/Resolution	-30 to 270°C/-22 to 518°F	1°C/1°F
Accuracy	-30 to 270°C/-22 to 518°F:± (2.5% of rdg + 2°C/4°F)	
Accuracy Notes	1. Accuracy is given @ 18°C to 28°C (64°F to 82°F) and less than 80% RH. 2. Accuracy specified for emissivity of 0.95	
Emissivity settings	0.95 fixed	
Distance: Target Diameters	6:1	

Fig.1



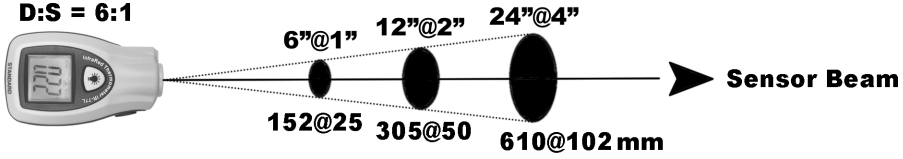
3. OPERATION

3.1 IR Measurements

3.1.1 Point the meter towards the object to be measured.
3.1.2 Press and hold the MEASURE button. (fig.1.6)
3.1.3 The meter and laser will turn on and take a reading.
3.1.4 Read the measured temperature on the displayed LCD.
3.1.5 The meter will turn OFF aprox 7 - 8 seconds after releasing the button.
Note: The object being measured should be larger than the spot size (see fig. 2).

Measurement considerations: If the surface of an object to be measured is covered with frost, dust or other materials, surface cleaning must be performed before accurate measurements can be made.
Highly Reflective Surfaces: If the surface of an object to be measured is highly reflective, apply masking tape or flat black paint to the surface (black has a fixed emissivity value).

Distance (D) to Spot Sizes(S) Fig.2



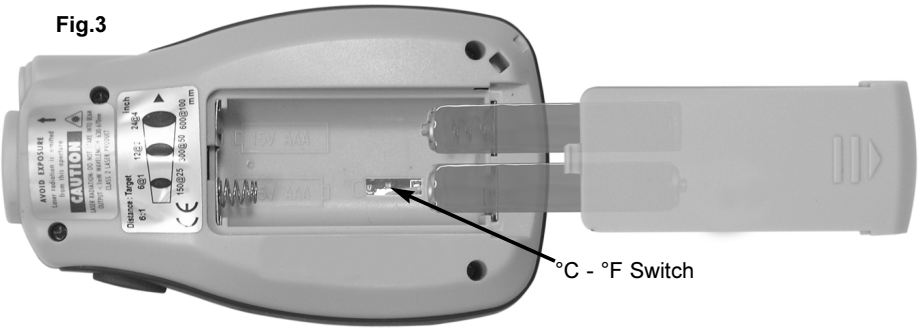
3.2 Backlight Function

3.2.1 Press the ☀ key (fig.1.2) to turn on the LCD backlight function. The backlight will turn off automatically approximately 8 seconds after the backlight button is released.

3.3 Displaying °F or °C

3.3.1 Open the battery compartment and remove the batteries.
3.3.2 Move the slide switch located in the opening beneath the batteries to °C or °F. (Fig.3)
3.3.3 Replace batteries and battery cover and check the display shows the chosen value when taking a temperature reading.

Fig.3



4. STORAGE AND CLEANING

❒ **WARNING! DO NOT** attempt to repair or service your thermometer, refer to an authorised service agent.
4.1. Periodically wipe the case with a damp cloth and mild detergent. Do not use solvents.
4.2. Turn the meter off when not in use and remove the batteries if stored for a long period of time.
4.3. Do not store the meter in a place of high humidity or high temperature

INFRARED LASER THERMOMETER 6:1
Model: VS903
EN 60825-1 Laser Safety
93/68/EEC CE Marking Directive

Declaration of Conformity We, the sole importer into the UK, declare that the product listed here is in conformity with the following standards and directives.

CE The construction file for this product is held by the Manufacturer and may be inspected, by a national authority, upon request to Jack Sealey Ltd.

Signed by Mark Sweetman 2nd June 2005

For Jack Sealey Ltd. Sole importer into the UK of Sealey Professional Tools.

NOTE: *It is our policy to continually improve products and as such we reserve the right to alter data, specifications and component parts without prior notice.*
IMPORTANT: No liability is accepted for incorrect use of this product.
WARRANTY: Guarantee is 12 months from purchase date, proof of which will be required for any claim.
INFORMATION: Call 01284 757525 for our catalogue & promotions. Leave your full name, address & postcode.

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