



# THERMAL IMAGING CAMERA

MODEL NO: **VS913**

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. KEEP THESE INSTRUCTIONS SAFE FOR FUTURE USE.



Refer to instructions



Hot surfaces

## 1. SAFETY

- ❑ **WARNING!** Ensure that Health & Safety, local authority and general workshop practice regulations are adhered to when using this equipment.
- ✓ Familiarise yourself with the applications, limitations, and potential hazards of the Thermal Camera.
- ✓ Keep the Thermal Camera clean and in good condition.
- ✓ Protect the Thermal Camera from the following:
  - Thermal shock caused by large and/or rapid ambient temperature change.
  - High temperatures.
- ✗ **DO NOT** get the Thermal Camera wet or use in damp or wet locations or areas where there is condensation.
- ✗ **DO NOT** use the Thermal Camera for any purpose other than that for which it is designed.
- ✗ **DO NOT** allow untrained persons (particularly children) to operate the Thermal Camera.
- ✗ **DO NOT** operate the Thermal Camera when you are tired or under the influence of alcohol, drugs or intoxicating medication.
- ✗ **WARNING!** The warnings, cautions and instructions discussed in this instruction manual cannot cover all possible conditions and situations that may occur. It must be understood that common sense and caution are factors which cannot be built into this product, but must be applied by the operator.

## 2. INTRODUCTION

Thermal imaging camera for the detection of high and low temperature. Heat-mapped colour palettes and temperature reading. Includes on-screen cursor to accurately locate minimum/maximum temperature variation. Suitable for many industries including automotive, building and electrical.

## 3. SPECIFICATION

<b>Model no.:</b> .....	<b>VS913</b>
Colour Palette .....	3
Emissivity .....	On Screen
Field of Vision .....	33° x 33°
Image Mix (Camera to Thermal) .....	Thermal
Memory Capacity .....	4Mb SD Memory Card
Power Source .....	4 x AAA (Not Included)
Resolution .....	32 x 32 pixels
Screen Size .....	1.8" 128 x 160mm TFT
Temperature Range .....	-20° C to +650° C

## 4. OPERATION

### 4.1. BATTERY INSTALLATION

- 4.1.1. Use a small cross-head screwdriver to remove the battery cover (fig.1).
- 4.1.2. Fit 4 AAA batteries (not supplied) and replace cover (**DO NOT** over tighten).
- 4.1.3. Press and hold the On/Off button (fig.1) for 2-3 seconds until the start screen appears.

### 4.2. HOME SCREEN DISPLAY (fig.2)

- 4.2.1. Press the "OK" button (fig.3.6) to display the settings menu. Using the  $\wedge$  or  $\vee$  buttons (fig.3.8) highlight the field you wish to set/adjust and press "OK".

- 4.2.2. Once you have the selected the options to suit your usage, use the return button (fig.3.7) to start using the unit. Options are:

- SD Card: View images taken or format SD card
- Colour: Three variations to choose from.
- Emissivity: Five settings (.95, .90, .80, .60, .30) See chart (fig.4) overleaf.
- Temperature units: Celsius or Fahrenheit.
- Date/Time: 12 or 24 hour clock.
- Auto Off: Off, 1, 2, 5, and 10 minute settings.



fig.1

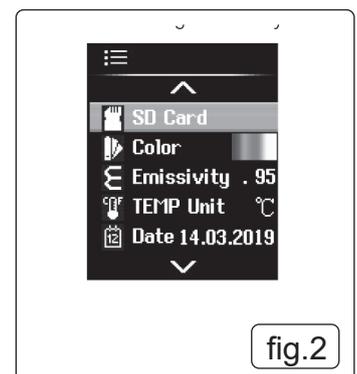
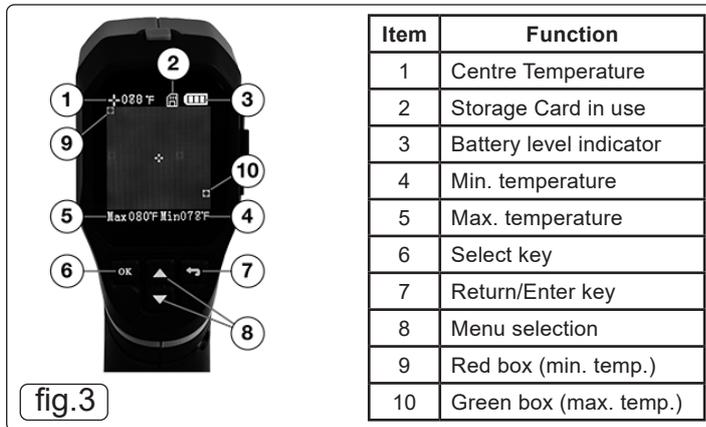


fig.2



### 4.3. TAKING A READING

**NOTE:** Keep Camera a safe distance from objects being viewed to avoid causing damage to the camera.

4.3.1. Use the menu to set up the parameters of your investigation (4.2.2).

4.3.2. To use the camera, simply point it at the object in question and view the LCD screen. Minimum temperature is indicated in a small red box while maximum is indicated in a small green box. These values will display along the bottom of the screen at all times.

4.3.3. The centre of the view is indicated by the + on the screen. The temperature at the centre of the screen is displayed in the top left hand corner of the screen (fig.3.1).

4.3.4. The battery state is indicated when the thermal image is viewed (fig.3.3).

4.3.5. With an SD card installed (fig.1), point the camera at the required area and pull the trigger to record the screen display.

## 5. MAINTENANCE

5.1. Use a clean, damp cloth to clean the outer casing. **DO NOT** use abrasive compounds or any form of solvent to clean the case, screen or lens. This can cause damage to the lens and prevent the camera from operating properly,

\* **DO NOT** splash water onto the camera.

5.2. Store camera and USB cable in supplied pouch when not in use.

Material	Thermal Radiation	Material	Thermal Radiation
Asphalt	0.90-0.98	Black Cloth	0.98
Concrete	0.94	Human Skin	0.98
Cement	0.96	Bubble	0.75-0.80
Sand	0.9	Charcoal Dust	0.96
Soil	0.92-0.96	Paint	0.80-0.95
Water	0.92-0.96	Matt Paint	0.97
Ice	0.96-0.98	Black Rubber	0.94
Snow	0.83	Plastic	0.85-0.95
Glass	0.90-0.95	Wood	0.90
Ceramic	0.90-0.94	Paper	0.70-0.94
Marble	0.94	Chromic Oxide	0.81
Gypsum	0.80-0.90	Copper Oxide	0.78
Mortar	0.89-0.91	Ferric Oxide	0.78-0.82
Brick	0.93-0.96	Texture	0.90

fig.4



### ENVIRONMENT PROTECTION

Recycle unwanted materials instead of disposing of them as waste. All tools, accessories and packaging should be sorted, taken to a recycling centre and disposed of in a manner which is compatible with the environment. When the product becomes completely unserviceable and requires disposal, drain any fluids (if applicable) into approved containers and dispose of the product and fluids according to local regulations.



### WEEE REGULATIONS

Dispose of this product at the end of its working life in compliance with the EU Directive on Waste Electrical and Electronic Equipment (WEEE). When the product is no longer required, it must be disposed of in an environmentally protective way. Contact your local solid waste authority for recycling information.



### BATTERY REMOVAL

Under the Waste Batteries and Accumulators Regulations 2009, Jack Sealey Ltd are required to inform potential purchasers of products containing batteries (as defined within these regulations), that they are registered with Valpak's registered compliance scheme. Jack Sealey Ltd Batteries Producer Registration Number (BPRN) is BPRN00705.

**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.

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