



# DIGITAL MEASURING SET

MODEL NO: **AK9637D.V2**

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

## 1. SAFETY

- ❑ **WARNING!** Ensure Health and Safety, local authority and general workshop practice regulations are adhered to when using tools and equipment.
- ✗ **DO NOT** use caliper or micrometer if damaged.
- ✓ Maintain caliper or micrometer in good and clean condition for best and safest performance.
- ✓ Keep the work area clean, uncluttered and ensure there is adequate lighting.
- ✓ Maintain correct balance and footing. Ensure the floor is not slippery and wear non-slip shoes.
- ✓ Remove ill fitting clothing. Remove ties, watches, rings and other loose jewellery. Contain or tie back long hair.
- ✓ Keep children and unauthorised persons away from the work area.
- ✗ **DO NOT** use the micrometer or caliper for any purpose other than for which it is designed.
- ✗ **DO NOT** get micrometer or caliper wet or use in damp or wet locations, or areas where there is condensation. Keep micrometer clean using a dry cotton cloth only.
- ✗ **DO NOT** dip or submerge the micrometer or caliper in any type of liquid.
- ✗ **DO NOT** expose micrometer or caliper to bright sunlight or dust.
- ✗ **DO NOT** dis-assemble micrometer or caliper. The device must be checked by qualified service personnel only.
- ✗ **DO NOT** apply any voltage to the micrometer or caliper i.e. with an electric marker pen.
- ✓ The micrometer and caliper are precision instruments, treat with care, avoid using force and do not subject to knocks or shocks.
- ✓ Take particular care not to damage or scratch the scale surface.
- ✓ Use micrometer or caliper in reasonably constant temperature conditions of approximately 20°C.
- ✓ When not in use, store micrometer in a safe, dry, childproof location.

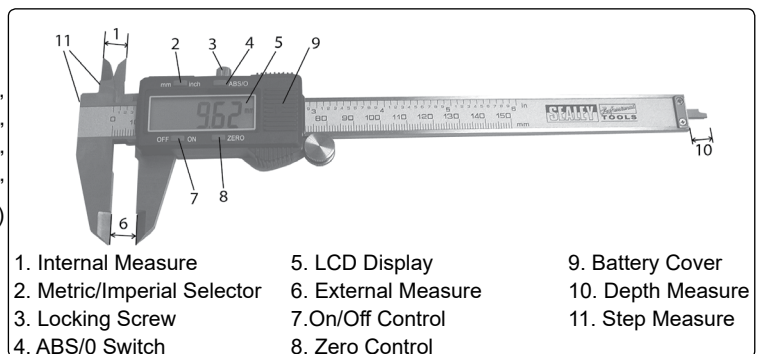
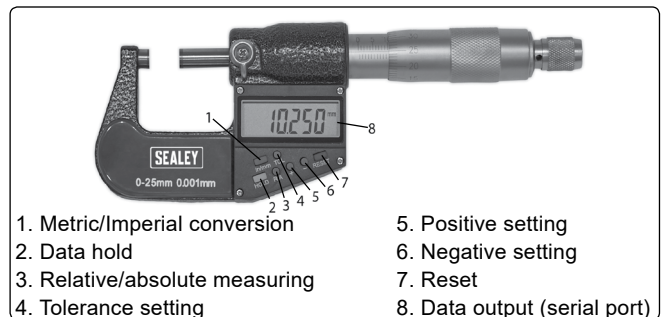
## 2. INTRODUCTION

Seven button digital micrometer with satin chrome thimble and sleeve with hardened and tempered, satin finish stainless steel digital vernier caliper. Large, easy-to-read LCD read-outs. Displays switchable between metric and imperial units. Zero display at any point allows comparative measurement. Both instruments include serial port for connection to computer. Supplied in storage case with micrometer adjustment wrench.

## 3. SPECIFICATION

Micrometer  
 Range: .....0-25mm (0-1")  
 Graduation:..... 0.001mm (0.00005")  
 Battery: ..... LR44 (supplied)  
 Accuracy:..... ±0.002mm (0.0001")

Vernier Caliper  
 Range: ..... "0-200mm(0-8")"  
 Resolution:..... "0.01mm(0.0005")"  
 Accuracy <100mm: ..... "±0.02mm(0.001")"  
 Accuracy >100mm: ..... "±0.03mm(0.001")"  
 Battery: ..... 1 x LR44 (supplied)

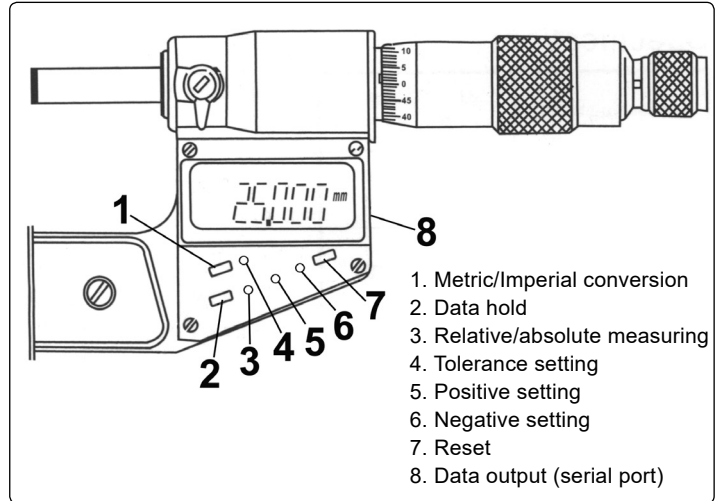


## 4. CALIPER OPERATION

- ❑ **WARNING!** Ensure that you have read and understood Section 1 safety instructions before commencing.
- 4.1. Ensure all measuring surfaces are clean and then turn on calliper by pressing 'On-Off' switch. Wait at least one second before use.
- 4.2. Loosen locking screw/thumb lock and close calliper; if read-out does not show zero **when in closed position**, reset by pressing 'Zero' switch again.
- 4.3. Select 'inch' or 'mm' units, as required, with the 'Inch/mm' selector switch. Check that display shows the required units.
- 4.4. Measurements will now be shown directly on the LCD display.
- 4.5. A new 'zero' may be obtained, at any open position of the instrument, by pressing the 'Zero' switch.

## 5. MICROMETER OPERATION

- ❑ **WARNING!** Ensure that you have read and understood Section 1 safety instructions before commencing.
- 5.1. Ensure all measuring surfaces are clean.
- 5.2. **Origin setting.** Use this function to preset the origin value. (Value can be anything from 0-25mm and can be used for calibration purposes).
  - 5.2.1. Press (RESET) and (-) buttons together and hold until "SET" begins to flash on the LCD.
  - 5.2.2. Press the (+) or (-) button to preset the origin value as required. Now press (RESET) to confirm the setting.
- 5.3. **Origin resetting.** Use this function to calibrate the device using the preset origin value entered in step 5.2.
  - 5.3.1. Ensure the measuring faces of the micrometer are in contact with the object being used to calibrate it and that the measurement is precisely the distance required (i.e. identical to the preset origin value) and press (RESET).
- 5.4. To measure an object: open the micrometer by revolving the large barrel, place the object between the measuring surfaces and close the micrometer using the smaller ratchet barrel (the ratchet is used to prevent over tightening which could otherwise result in inaccurate measurement, damage to the micrometer and damage to the object being measured). The reading is taken from the LCD display.
- 5.5. **Metric/Imperial conversion.** Press the "in/mm" button (1) to convert the display format from inches to millimetres and visa versa.
- 5.6. **Data hold.** This function is used to temporarily hold or fix data on the LCD display for ease of recording.
  - 5.6.1. Once a measurement has been taken, press the HOLD button (2). The letter H will appear at the top of the display and the data currently shown will become fixed. When the data has been recorded, press the HOLD button again to release the display.
- 5.7. **Relative/Absolute measuring.** To use relative measuring e.g. to determine the difference in width of two objects, measure the first object (as explained in section 5.4), press the R/A button (the letters "REL" should appear in the LCD) and immediately measure the second object. The LCD will display the difference between the two objects. To revert back to absolute measuring simply press the R/A button once more.
- 5.8. **Tolerance setting.** Use to set a tolerance e.g. for use when measuring a large number of components to check they are within acceptable size limits.
  - 5.8.1. Press the TOL button. "TOL up" should appear in the LCD. Turn the micrometer to set the upper level.
  - 5.8.2. Press the TOL button again, "TOL down" should now appear in the LCD. Turn the micrometer once more to set the lower level. Press the TOL button again to confirm the settings, "OK" should appear in the LCD.
  - 5.8.3. To wipe the tolerance setting, press the TOL button three times in quick succession.



1. Metric/Imperial conversion
2. Data hold
3. Relative/absolute measuring
4. Tolerance setting
5. Positive setting
6. Negative setting
7. Reset
8. Data output (serial port)

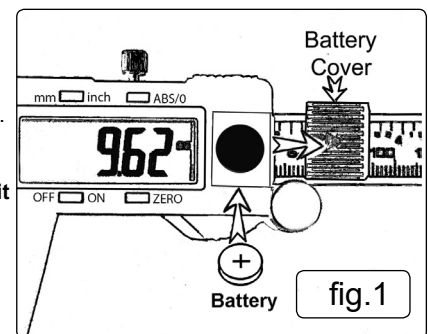
## 6. BATTERY FITTING

### 6.1. Fitting a new battery in caliper

A flashing display indicates that the battery is exhausted - replace as follows:

1. Switch off and then remove battery cover (9) by firmly sliding towards the right.
2. Remove exhausted battery and fit replacement with **positive side uppermost** (fig.1).
3. Refit battery cover.
4. Dispose of old battery in a safe and approved manner. **Do not burn.**

**Note: If the display fails to alter when the slide is moved, remove the battery - wait at least 30 seconds and then refit the battery.**

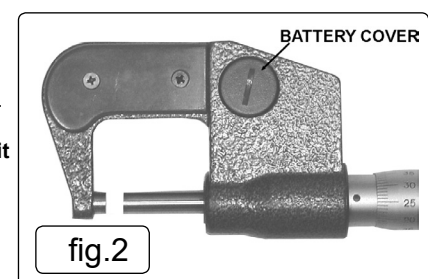


### 6.2. Fitting a new battery in micrometer

A flashing display indicates that the battery is exhausted - replace as follows:

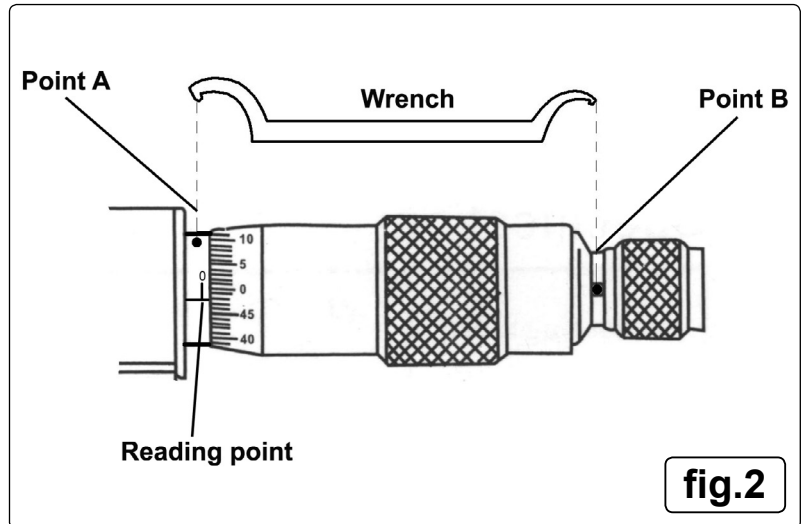
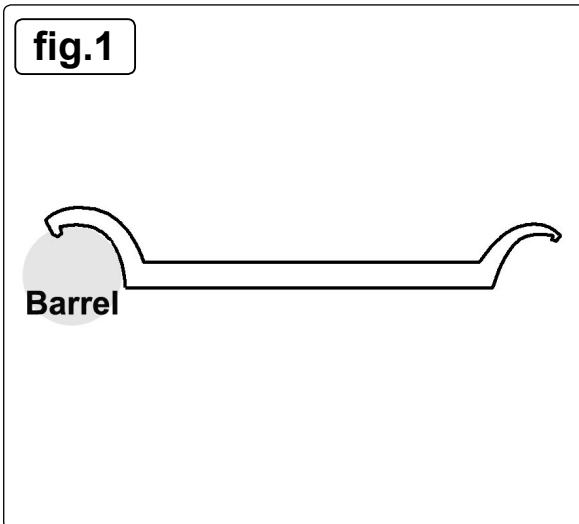
1. Remove battery cover using the semi-circular side of the supplied wrench (fig. 2.).
2. Remove exhausted battery and fit replacement with **+ve side uppermost**, Refit cover.
3. Dispose of old battery in a safe and approved manner. **Do not burn.**

**Note: If the display fails to alter when the slide is moved, remove the battery - wait at least 30 seconds and then refit the battery.**



## 7. MICROMETER MAINTENANCE

- 7.1. If the micrometer is not to be used for an extended period of time, remove the battery for storage.  
**Note:** The LCD will flash continuously if the battery is run down.
- 7.2. To remove/change the battery: Using the semi circular back of the adjustment wrench provided and unscrew the battery compartment lid located on the back of the micrometer. Remove/replace battery (anode (+) facing outward) and screw the lid back on.
- 7.3. After prolonged service, the reading point may become slightly loose and misaligned. This can be corrected using the wrench provided. Fully close the micrometer. Place the wrench as shown in Fig 2 i.e. with the small protrusion hooking the hole at Point A. Using the wrench, alter the position of the reading point until it is once more aligned with the "0" on the barrel scale.
- 7.4. The ratchet barrel may also become loose over time. The wrench is then used in a similar fashion (i.e. with the smaller end of the wrench hooked in Point B) to tighten the ratchet barrel.
- 7.5. The micrometer contains no user serviceable parts. See your authorised stockist for advice/repairs.



Parts support is available for this product. Please contact  
[www.sealey.co.uk](http://www.sealey.co.uk), email [sales@sealey.co.uk](mailto:sales@sealey.co.uk) or telephone 01284 757500



### 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.



### BATTERY REMOVAL PLEASE SEE SECTION 6

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 is required for any claim.

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