

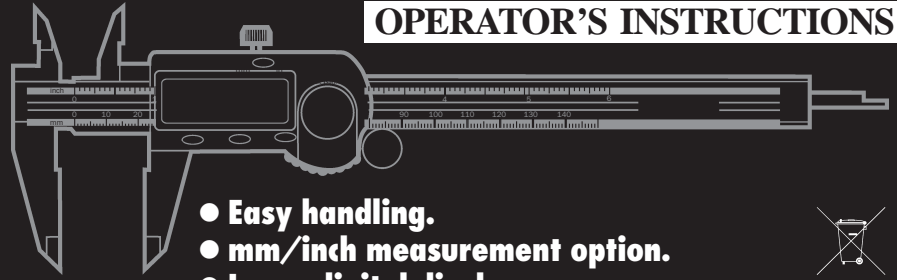
# OXFORD PRECISION

## ABS Digital Caliper

- 150mm/6" OXD-331-2260K
- 200mm/8" OXD-331-2280K
- 300mm/12" OXD-331-2320K

Please retain this information for future reference.

## OPERATOR'S INSTRUCTIONS



- Easy handling.
- mm/inch measurement option.
- Large digital display.
- Quick response speed.
- Inside, outside, step and depth readings.
- Full scale accuracy to  $\pm 0.03\text{mm}$ .
- Zero set at any point.



### Safety



To ensure operator safety, use this instrument in conformance with the directions and specifications given in this leaflet.

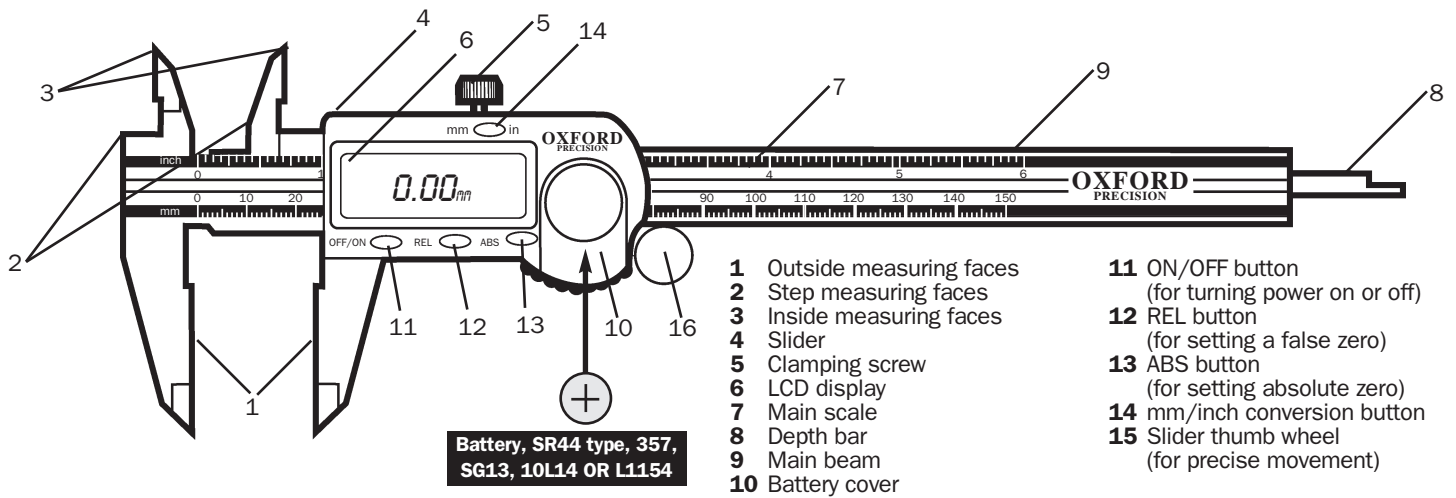
- The outside and inside measuring faces of this caliper have sharp edges.
- Do not measure the workpiece if it is rotating.
- Do not recharge or incinerate the battery. Dispose of in an appropriate manner.
- Immediately consult a doctor if the battery is accidentally swallowed,

### Care

- Apply clean oil to the sliding surfaces.
- Do not subject the caliper to water or oil. Apply a slight amount of low-viscosity oil to the scale surface to keep out water.
- Do not scratch the scale surface.
- Do not use an electrical engraver when applying an ID number. An external voltage applied to the caliper may result in its failure.
- Do not disassemble the caliper.
- Do not expose to extreme humidity, direct sunlight or dusty environments.
- Do not apply excessive force.

### Specification

- Resolution:** . . . . . 0.01mm/0.0005"
- Measuring range:** . . . . 150, 200, 300mm
- Instrumental error:**  
 . . .  $\pm 0.03\text{mm}$  within 200mm of Travel  
 . . .  $\pm 0.04\text{mm}$  within 300mm of Travel
- Repeatability:** . . . . . 0.01mm
- Functions:** . . .mm-inch conversion/Zero set
- Battery:** . . . . .SR44 1pc EDI-904-4000K
- Battery life:** . . . . .Approx. 2 years normal use  
 . . . . .Approx. 1 year continuous use
- Max. response speed:** Approx. 1600mm/s
- Ambient temperature:** 0 to 40°C (Operation)  
 . . . . . -10 to 60°C (Storage)



- 1 Outside measuring faces
- 2 Step measuring faces
- 3 Inside measuring faces
- 4 Slider
- 5 Clamping screw
- 6 LCD display
- 7 Main scale
- 8 Depth bar
- 9 Main beam
- 10 Battery cover
- 11 ON/OFF button (for turning power on or off)
- 12 REL button (for setting a false zero)
- 13 ABS button (for setting absolute zero)
- 14 mm/inch conversion button
- 15 Slider thumb wheel (for precise movement)

## Quality Guarantee & Warranty

### Quality Guarantee

Oxford Precision products carry a one year manufacturers warranty.  
 Oxford Precision products are designed and manufactured to the highest standards and specifications.  
 Assuring the quality and performance required by all sectors of industry.  
 Oxford Precision products are fully guaranteed against faulty materials and workmanship.  
 Should they be found to be defective, they will either be repaired or replaced free of charge (fair wear and tear and/or misuse excepted). Unauthorised opening of the caliper forfeits the warranty.  
 Please retain supplier invoice as proof of purchase.

# PRECISION

Oxford Precision, Leicester, England

## Use

- When using the caliper for the first time after purchase, wipe away the rust-preventive oil on the caliper with a soft cloth soaked in oil.
- Install the supplied battery, by pressing and pushing the battery lid away from the main body.
- Before measuring, wipe the sliding surfaces and measuring faces to remove dust and dirt.
- Close the jaws and make sure that there is no light observed between the jaws, if the caliper is not already reading "0.00mm" press the "ABS" button once.
- **Please note that the digital caliper must be switched off after use and should be kept in its original box.**

## Absolute Measurement (ABS)

- With 'power-on' the caliper is in ABS mode and displays a measurement from zero.

## Relative Measurement

- For taking repeated measurements relative to a proposed zero point.
- Move the slider to the proposed zero point.
- Press the REL button (REL will be displayed).
- Measurements will now read  $\pm$  from the chosen relative zero point.
- During this operation, if you decide you want a reading from the absolute zero simply press the REL button again to take reading.
- You will then need to reset the chosen relative zero point.

## Replacing Battery

- Insert the battery + side facing up. Inserting the battery upside down may result in caliper failure.
- If the display on the digital caliper does not show "0.00" after the battery change, remove battery and insert again.
- Your Oxford caliper is supplied with one 1.5V silver oxide button cell battery. Replace with either SR44 type, 357, SG13, 10L14 or L1154. Dimensions: 11.6 x 5.4mm. ORDER CODE EDI-904-4000K



## Measuring Examples

### External Dimensions

Put the workpiece as close to the reference surface as possible, and have the measuring faces firmly in contact with the workpiece without excessive force.



### Depth Measurement

For depth measurement, set the depth bar perpendicular to the measured surfaces.



### Internal Dimensions

For inside measurement, put the inside jaws as deep as possible and have the measuring faces firmly in contact with the workpiece without excessive force.



### Step Measurement

For step measurement, have the step-measuring-faces firmly in contact with the workpiece.



This product does not contain any restricted substances in concentrations and applications which are banned by the European RoHS Directive.



Always dispose of unwanted tools, accessories and packaging materials in an environmentally friendly manner.



For EU and EEA countries only.

In observance of European Directive 2002/96/EC on Waste Electrical and Electronic Equipment (WEEE) and its implementation in accordance with national law, electrical goods that have reached the end of their life must be collected separately and returned to an environmentally compatible recycling facility.

Do not dispose of electrical goods with domestic waste materials as inappropriate disposal may cause potential hazards to the environment and human health. For further information, please contact your local authority or the retailer from whom you purchased the product.

# METROLOGY & CALIBRATION

**UKAS Accredited Metrology & Calibration Service at Wigston, Leicester.** For the calibration and repair of a vast range of precision measuring and gauging equipment and torque wrenches. Purpose built instrument repair division and calibration laboratory (**United Kingdom Accreditation Service** approved for over 12 years). All calibrations traceable to national standards.

**Telephone: 0116 257 2396**

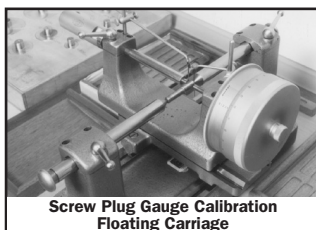
**Fax: 0116 257 2512**



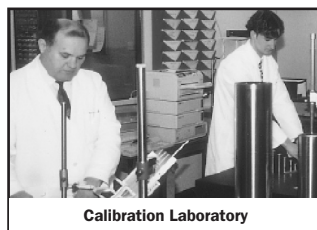
**Micrometer Pitch Calibration  
SIP MUL 1000**



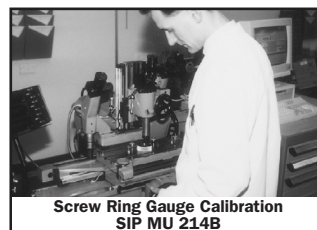
**Micrometer Parallelism  
Angle Dekkor and Dowell Prism**



**Screw Plug Gauge Calibration  
Floating Carriage**



**Calibration Laboratory**



**Screw Ring Gauge Calibration  
SIP MU 214B**



**Computerised Slip Gauge Calibration  
By Comparison**