

# USER MANUAL ELECTRONIC DIGITAL INDICATOR 3900A SERIES



3900A-5 Digital Indicator

TRUST IS IN THE NAME

# Starrett User Guide for the 3900A Electronic Indicator

## READ THIS MANUAL BEFORE USING THE INSTRUMENT

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All specifications in this document are correct at time of production and are subject to change.



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## PRECAUTIONS WHEN USING THE INDICATOR

- Avoid dropping the Indicator.
- Avoid extreme temperatures, direct sunlight or below freezing for extended periods.
- Protect the Indicator from exposure to liquids and dust.
- Avoid shocks to the contact point and spindle. Do not apply any radial force to the spindle.
- If the Indicator is stem-mounted, protect the Indicator from being struck or bumped to prevent stem/case mechanical alignment damage.
- Do not over-tighten the mounting mechanism and use clamp mounting rather than set screws, if possible, to prevent damage to the spindle.
- Frequently clean the spindle using a dry cloth or a chamois to prevent sluggish or sticky movement.
   Isopropyl alcohol may be used to remove gummy deposits on metallic parts.
- Do not apply any type of lubricant to the spindle and do not use solvents.
- Avoid any disassembly or modification of the Indicator.
- Avoid using anything that might damage the buttons when pressing the buttons.
- Use the appropriate gage stand or Indicator holder for the job intended.



## 3900A-5 INDICATOR COMPONENTS



Note: The pictures shown are illustrative; the components may vary according to the model.



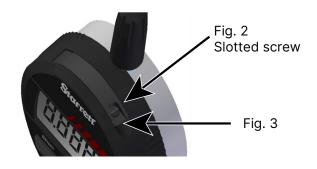
## **BASIC OPERATING INSTRUCTIONS**

- 1. Install the batteries that came with the Indicator. See "Installation/ replacement of the battery" on page 7.
- 2. Clean the spindle and the contact point.
- 3. Fasten the Indicator onto an appropriate holding device.
- 4. If needed, turn the Indicator on by moving the spindle.
- 5. Pick the unit of measure, inch or millimeter by pressing the **IN/mm button**.
- 6. Place the Indicator perpendicular to the reference surface being measured. Allow enough movement to be able to take a higher or lower measurement.
- 7. Reset the display by pressing the **zero setting button**.
- 8. Lift the spindle to remove the reference surface and carefully place the piece to be measured under the spindle making contact with the surface. The value measured on the display will be the difference between the reference and the measured piece.
- 9. To change the travel direction press the "+/-" button. A minus sign "-" will appear on the display indicating a negative reading.
- 10. The tool will turn off at around 4 minutes of non-use.

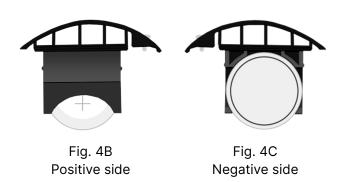


# INSTALLATION/ REPLACEMENT OF THE BATTERY

- The battery tray is located at the top of the Indicator and is fastened with a slotted screw pointed out in Fig. 2.
- 2. Loosen the screw on the battery tray. Carefully place a small flat screwdriver under the right side of the battery tray, Fig. 3, and lightly lift the tray enough to use your fingers to remove it. Lift the tray straight out of the Indicator body as shown in Fig 4A.
- 3. Fig. 4B shows the tray and battery as seen from the front of the Indicator. Fig. 4C shows the reverse. Remove the existing battery.

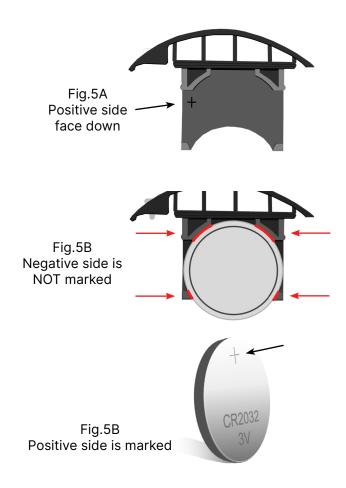






# INSTALLATION/ REPLACEMENT OF THE BATTERY

- 4. Install the new battery with the positive side facing the positive symbol on the battery tray pointed out in Fig. 5A.
- 5. In Fig. 5B, the red lines show the contact points of the battery tray where the battery is held in with a light friction fit.
- 6. Return the battery tray into the Indicator body and secure it with the slotted screw. The Indicator will turn on.
- 7. The number of the replacement battery is CR2032.



## 3900A-5 SERIES SPECIFICATIONS

| SPECIFICATIONS          | INCH   | MILLIMETER |
|-------------------------|--------|------------|
| Resolution <sup>1</sup> | .0005" | 0.01mm     |
| Accuracy <sup>2</sup>   | .001"  | 0.03mm     |
| Range                   | .50"   | 12.7mm     |
| Data Output A           | No     | No         |

Resolution: Smallest difference between indications of a displaying device that can be meaningfully distinguished. For a digital displaying device, this is the change in the indication when the least significant digit changes by one step (VIM).

Accuracy: The closeness of the agreement between the result of a measurement and a true value of the measure (VIM).

(VIM) International Metrology Vocabulary

- Instant millimeter/inch conversion
- Reverse travel to indicate direction (±)
- Zero at any position
- Battery 3V CR2032
- Serial Number for production traceability
- · Lug-on-Center back included.

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