Neoteck NTK021

Neoteck DTI Digital Indicator 0-25.4mm/1" User Manual

Model: NTK021

Brand: Neoteck

INTRODUCTION

The Neoteck DTI Digital Indicator is designed for precise measurement of small linear distances in mechanical and industrial processes. This tool helps to verify tolerance levels during machine part inspection, making it an ideal instrument for mechanical, industrial, and laboratory applications. It features a large LCD screen for clear readings and offers high resolution for accurate measurements.

Figure 1: Neoteck DTI Digital Indicator

Product Features

- **Large LCD Display:** Equipped with a 4-digit LCD screen for clear and easy-to-read measurements.

- **Wide Measuring Range:** Capable of measuring from 0 to 25.4 mm (0 to 1 inch).

- **High Resolution:** Provides high precision measurements up to 0.01 mm (0.0005 inch).

- **Unit Conversion:** Easily switch between millimeters (mm) and inches (in) for versatile use.

- **Zero Setting Function:** Allows for convenient zero calibration at any point.

- **Removable Back Cover:** Features a 6.5 mm hole diameter, allowing attachment to various magnetic base holder stands.

- **Data Output Interface:** Includes an RS232 data output interface for connectivity.

- **Easy Battery Replacement:** Designed with an accessible SR44 battery compartment.

Figure 2: Digital Indicator Features

SETUP

1. **Battery Installation:** Locate the battery compartment on the back of the indicator. Insert one 1.5V SR44 button cell battery, ensuring correct polarity. Close the compartment securely.

2. **Attaching Back Cover:** The indicator comes with a back cover. This cover can be attached to the rear of the unit. If using with a magnetic base, ensure the back cover is compatible or removed as needed. The 6.5mm hole allows for mounting on various stands.

3. **Mounting (Optional):** For stable measurements, it is recommended to mount the digital indicator onto a suitable stand, such as a magnetic base, using the provided back cover or directly if the stand supports it.
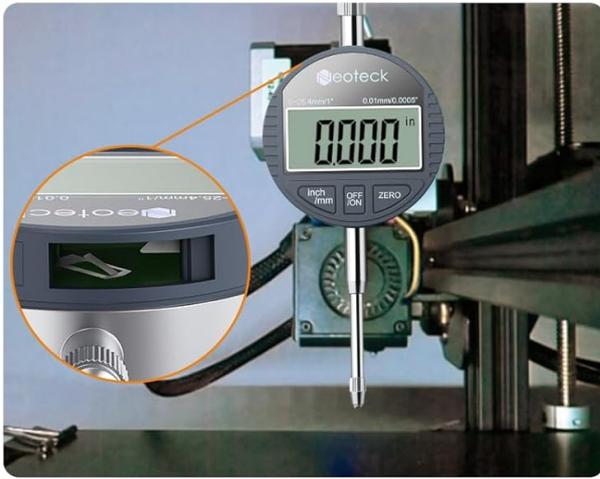
Figure 3: Storage Case and Batteries Included

OPERATING INSTRUCTIONS

1. **Power On/Off:** Press the 'ON/OFF' button to turn the indicator on or off.

2. **Zero Setting:** Position the measurement probe at the desired reference point. Press the 'ZERO' button to set the display to zero. This allows for comparative measurements.

3. **Unit Conversion:** Press the 'inch/mm' button to switch between millimeter and inch units. The selected unit will be displayed on the LCD screen.

4. **Taking Measurements:** Gently lower the measurement probe onto the surface or into the feature to be measured. Read the value displayed on the LCD screen. Ensure the probe moves smoothly without excessive force.

5. **Data Output:** If connecting to a computer or data logger, use the RS232 data output interface. Refer to the specific software or device manual for connection and data transfer procedures.

Convenient Ports, Easy to Use
LR44 Battery Compartment,
Easy to Replace Battery.

M2.5 Screw Thread Contact Point
Durable and Sensitive to Test.

Units Conversion
Convenient to Read.

Multiple Usages
Rear Covered Attached
Hole Diameter: 6.5mm.

Figure 4: Unit Conversion and Multiple Usages

0-1"/0-25.4mm Digital Indicator - 0.0005"/0.01mm
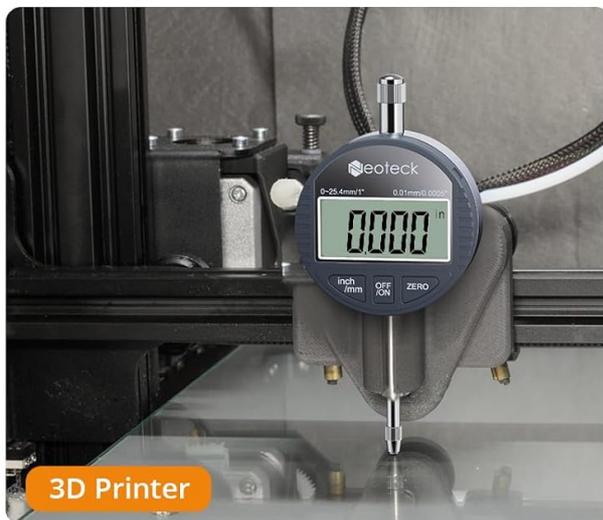## Professional Tool for Mechanical and Industrial Measuring

Figure 5: Applications of the Digital Indicator

MAINTENANCE

- **Cleaning:** Wipe the indicator with a soft, dry cloth. Avoid using solvents or abrasive cleaners, as they may damage the display or housing.

- **Storage:** Store the indicator in its protective case when not in use to prevent dust accumulation and physical damage. Keep it in a dry environment, away from direct sunlight and extreme temperatures.

- **Battery Replacement:** When the display becomes dim or unresponsive, replace the SR44 button cell battery. Follow the battery installation steps outlined in the Setup section.

- **Probe Inspection:** Periodically check the measurement probe for any signs of wear or damage. A damaged probe can affect measurement accuracy.

TROUBLESHOOTING

- **Display Not Working:**

  - Check if the battery is correctly installed and has sufficient charge. Replace the battery if necessary.

- Ensure the 'ON/OFF' button has been pressed.

- **Inaccurate Readings:**

  - Ensure the 'ZERO' function has been properly used at the reference point.
  - Check for any debris or obstruction on the measurement probe or the surface being measured.
  - Verify that the indicator is securely mounted and stable during measurement.
  - Ensure the probe is not bent or damaged.

- **Unit Conversion Not Working:**

  - Press the 'inch/mm' button firmly. If the issue persists, try replacing the battery.

SPECIFICATIONS

Feature	Specification
Measuring Range	0 - 25.4 mm (0 - 1 inch)
Resolution	0.01 mm (0.0005 inch)
Response Speed	≤ 0.5 m/s
Operating Temperature	0 ~ 40 °C (32 ~ 104 °F)
Storage Temperature	-20 ~ 70 °C (-4 ~ 158 °F)
Relative Humidity	≤ 80 % R.H
Material	Aluminum Alloy
Power Source	1 x 1.5V SR44 Button Cell Battery (included)
Item Size	Approx. 122 (L) x 55 (W) x 26 (D) mm (4.8 x 2.94 x 1.04 inches)
Item Weight	Approx. 129 g (4.55 oz) (battery included)
Model Number	NTK021

Measuring Range: 0-25.4mm

LCD display

0-25.4mm/1"   0.01mm/0.0005"

16mm/0.63in

129mm/5.08in

inch/mm

OFF/ON

ZERO

on/off switch

in/mm switch

Zero-setting

Holding Ponit for Clamp

Spring-loaded Probe

8mm/0.31in   21mm/0.82in

4.5mm/0.18in

35mm/1.38in

5mm/0.20in

Figure 6: Product Dimensions and Components

PACKAGE CONTENTS

The following items are included in your package:

- 1 x Neoteck DTI Digital Indicator
- 1 x Back Cover
- 1 x 1.5V SR44 Battery
- 1 x User Manual

Storage Case & Batteries Included

2*Batteries
For Longer Using time

Storage Case
For Well Protecting & Easy Carrying

Figure 7: Package Contents

Warranty and Support

All Neoteck products come with an 18-month UK-based warranty. For technical support, troubleshooting assistance, or warranty claims, please refer to the contact information provided with your purchase or visit the official Neoteck website.