Neoteck NTK120 Electronic Digital Dial Indicator Instruction Manual

Contents

Neoteck NTK120 Electronic Digital Dial Indicator

INTRODUCTION

The Neoteck NTK120 Electronic Digital Dial Indicator is a small, reliable tool for accurate measuring. It's a great choice for both professionals and people who like to do their own projects. This digital dial indicator has a measuring range of 25.4 mm and an accuracy of 0.01 mm (0.0005 inch). It is great for measuring small mechanical parts, machinery, or precision instruments. The Neoteck NTK120 is made of a strong metal that will last through daily use. The LCD screen on this instrument is very clear, so readings are easy to read. The NTK120, which costs $24.99, is a good choice for people who need to take accurate measures. The company Neoteck, which is known for making high-performance measuring tools, released it for the first time on April 22, 2021. This digital dial display runs on two LR44 batteries and is small and easy to use. It's also portable, so you can take it with you to work in different places.

SPECIFICATIONS

Brand	Neoteck
Material	Aluminum
Range	25.4 Millimeters
Measurement Accuracy	0.01 mm (0.0005 Inch)
Price	$24.99
Product Dimensions	4.8 x 2.17 x 0.04 inches
Weight	4.55 ounces
Item Model Number	NTK120
Batteries Required	2 LR44 batteries
Date First Available	April 22, 2021
Manufacturer	Neoteck

WHAT'S IN THE BOX

- Digital Dial Indicator
- Battery
- Manual

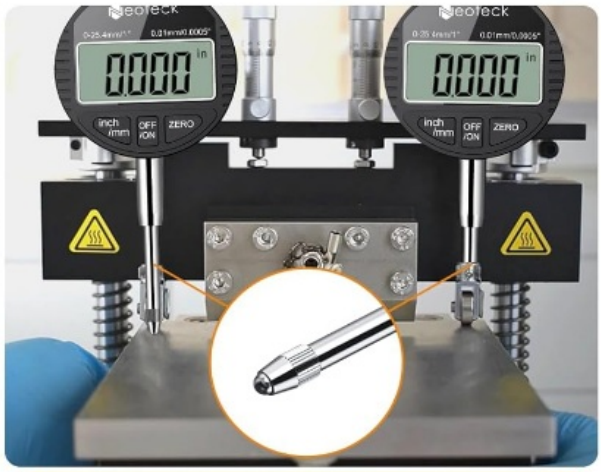
PRODUCT OVERVIEW

FEATURES

- **Range of Measurements**: The Neoteck NTK120 can measure from 0 to 25.4 mm (0 to 1 inch), so it can be used in a wide range of industrial and mechanical settings to find small linear distances.
- **High Resolution**: This display has a high resolution of 0.01 mm (0.0005 inch), which means that it can measure things very precisely, right down to the smallest detail.
- **Large LCD Display**: The device has a large, three-digit LCD display that is easy to read. This lets users see the numbers clearly and without any mistakes.
- **Inch/Metric Conversion**: The dial indicator works with both inch and metric measurements, so it can be used for a variety of tasks and lets the user switch between mm and inches as required.
- **Zero Setting Function**: The indicator has a zero setting function that makes it easy to change the reading to zero at any point in the measurement range.
- **Fits a magnetic base**: The unit has a 6.5 mm-diameter hole in the rear cover that can be taken off and used on a magnetic base holder stand for stable and accurate measures.
- **Automatic Off Function**: To save battery life, the device has an automatic off function that turns off the sign when it hasn’t been used for a while.
- **Durable Aluminum Alloy Construction**: The indicator is made from a high-quality aluminum alloy, which makes it strong, light, and resistant to wear and tear. This means it will last a long time in mechanical and industrial settings.

- **Convenient Battery section**: The LR44 battery section is easy to get to so that batteries can be changed quickly and easily.

- **Little and Light**: The indicator is very small and light. It measures 4.8 by 2.17 by 0.04 inches and weighs only 4.55 ounces. This makes it very movable and easy to use in a variety of work settings.
- **High Accuracy**: The Neoteck NTK120 has a measurement accuracy of 0.01 mm (0.0005 inch), which is very accurate and makes sure that the results are always accurate.
- **Ideal for Mechanical and Industrial Use**: The Neoteck NTK120 is made to be used in mechanical, industrial, and laboratory settings, for example to level 3D printers, check parts, and align things.
- **Easy to Use**: Both pros and beginners can easily use it thanks to its large screen, user-friendly interface, and functions that are clear.
- **Replacement Batteries Included**: The device comes with two LR44 batteries, so you can use the monitor as soon as you take it out of the box.
- **Uses Across Multiple Fields**: This tool is great for measuring mechanical parts and can be used for accurate readings in manufacturing, machine alignment, quality control, and other areas.



SETUP GUIDE

- **Unboxing**: Take the package apart and check what's inside: 1 digital display, 2 LR44 batteries, and the back cover.
- **Install Batteries**: Put the two LR44 batteries in the battery box and make sure they are in the right place so the device can be powered.
- **Turning It On**: Press the power button to turn the gadget on. When the LCD screen lights up, the sign is ready to be used.
- **Setting Zero**: To start measuring, press the zero button to reset the gadget to 0.0. This will make sure that your readings are set to zero correctly.
- **Toggle between inches and millimeters (mm)** by pressing the unit conversion button. You can do this based on your taste or the measurement unit you need.
- **Setting up on a Magnetic Stand**: Take off the back cover and connect the dial indicator to a magnetic base holder stand so that measures are steady.
- **How to Place the Indicator**: Put the indicator's probe on the surface, hole, or gap of the item you want to measure.
- **Taking a Measure**: Move the probe so that it touches the thing you want to measure. Read the number that's shown on the LCD screen.

- **Using the Measuring Probe**: Make sure the probe is lined up correctly with the item and move it vertically or horizontally to measure the inside or outside dimensions.
- **Zero-Reset After Measurement**: Press the zero button again to set the device for the next measurement after the measurement is over.
- **Writing down or recording the measurement** from the LCD screen is possible if needed, especially for measures that need to be done more than once.
- **Auto-Off**: To save battery life, the device will turn off itself if it is not being used for more than a few minutes. To get back to work, just press the power button.
- **Using with 3D Printer**: To level the 3D printer, use the indicator to check the bed height at different locations and make sure the setting is correct.
- **Check Calibration**: To make sure the tool is properly set, check the accuracy by measuring known standards before you start taking important measurements.
- **Getting Ready to Store**: When you're done, take the tool off the magnetic base, turn it off, and put it somewhere safe.

CARE & MAINTENANCE

- **Clean**: To keep dust and dirt from building up, clean the LCD screen and the probe regularly with a soft, lint-free cloth.
- **Keep Harsh Chemicals Away**: To clean the tool, don't use harsh chemicals or abrasive tools. They can damage the surface and the screen.
- **Keep it in a Dry Place**: Keep the dial indicator somewhere dry so that wetness doesn't build up and damage the electronic parts.
- **Battery Care**: To keep the batteries from corroding, always take them out of the gadget when it's not being used for a long time.
- **Replace Batteries Often**: If the LCD screen starts to dim, replace the batteries right away to make sure the device keeps working.
- **Be careful not to drop or hit the tool**, as the contact could damage the internal parts or throw them out of alignment.
- **Use a Protective Case**: If you can find one, store the clock indicator in a protective case to keep it from getting damaged by dirt or outside forces.
- **Check Calibration**: Regularly compare the tool's calibration to known standards to make sure the measurements are correct.
- **Extreme Temperatures**: Keep the device away from temperatures that are too hot or too low; these could affect how well it works and how accurate it is.
- **Stay away from water**: Always keep the indicator dry, since water can damage the electrical parts and make them work less well.
- **Do Not Force the Measurement**: When measuring things, don't use too much force because it can damage the probe or make the tool less accurate.
- **Use Only for What It Was Made for**: Make sure the tool is only used for the data it was made for, like in a lab, an industrial setting, or a mechanical one.
- **Replace Broken Parts**: If any part of the tool is broken or not working right, it needs to be replaced right away to keep it working right.

- **Stay away from sources of static electricity**. This could mess up the electronics, so keep the tool away from them.
- **Check Before Use**: Before using the device, you should always check it for any damage or problems that you can see that might affect how it works.

TROUBLESHOOTING

Issue	Possible Cause	Solution
Display is blank	Battery is dead or improperly installed	Replace the **LR44** batteries with fresh ones and ensure correct installation.
Measurements are inconsistent	Calibration issue	Recalibrate the dial indicator according to the manufacturer's instructions.
Display shows "ERR"	Internal error or malfunction	Reset the dial indicator and check if the issue persists.
Reading fluctuates	External interference or dirt on the measuring surface	Clean the measuring surface and ensure proper alignment of the dial indicator.
LCD screen is hard to read	Poor lighting or dirty screen	Clean the screen with a soft cloth and ensure proper lighting conditions.
Unit is not zeroing properly	Incorrect zero setting	Press the **zero button** to reset to zero and check the measurements again.
Display is dim	Low battery voltage	Replace the **LR44** batteries with fresh ones.
Buttons not responding	Dirt or obstruction in the buttons	Clean the button contacts using a soft cloth.
Caliper jaws are not moving freely	Dirt or obstruction in the moving parts	Clean and lubricate the moving parts as needed.
Reading fluctuates under use	Incorrect positioning of the caliper or external vibration	Stabilize the caliper and avoid external vibrations.
Display is stuck on one unit	Mode setting issue	Press the **unit button** to switch between **millimeters** and **inches**.
Inconsistent readings for small objects	Measuring surface not flat or dirty	Ensure the measuring surface is clean and level.
Measurement is too high/low	Misalignment of the indicator	Check and realign the indicator for accurate measurements.
Unit is not measuring properly	Insufficient pressure on the measuring jaws	Apply even pressure to ensure accurate reading.
Device is not turning on	Dead or incorrectly installed batteries	Replace the **LR44** batteries and ensure proper installation.

PROS & CONS

Pros:

- High accuracy of 0.01mm, ensuring precise readings.
- The affordable price of $24.99, offering great value for professionals and hobbyists.

- Made from aluminum, it is both lightweight and durable.
- Features a clear LCD display, making measurements easy to read.
- Compact design that is portable and easy to use on the go.

Cons:

- Requires two LR44 batteries, which may need frequent replacement.
- Limited range of 25.4mm, not suitable for larger measurements.
- Small screens might be difficult to read in low-light conditions.
- Not suitable for high-precision industrial applications due to its limited range.
- No backlight for the LCD display, making it hard to use in poorly lit environments.

WARRANTY

The **Neoteck NTK120 Electronic Digital Dial Indicator** comes with a **12-month warranty**, ensuring peace of mind for users. This warranty covers any defects in materials or workmanship. If any issues arise within the warranty period, customers can contact **Neoteck's customer support** for assistance, which may include a product replacement or refund. However, the warranty does not cover damage caused by misuse or accidents.

FREQUENTLY ASKED QUESTIONS

What is the measuring range of the Neoteck NTK120 Electronic Digital Dial Indicator?

The Neoteck NTK120 Electronic Digital Dial Indicator has a measuring range of 25.4 millimeters, making it ideal for precise measurements of small parts and components.

What is the accuracy of the Neoteck NTK120 Electronic Digital Dial Indicator?

The Neoteck NTK120 Electronic Digital Dial Indicator offers an accuracy of 0.01 mm (0.0005 inch), providing highly precise readings for accurate measurements.

What material is the Neoteck NTK120 Electronic Digital Dial Indicator made from?

The Neoteck NTK120 Electronic Digital Dial Indicator is made from durable aluminum, providing a sturdy and lightweight build for long-lasting performance.

What type of battery does the Neoteck NTK120 Electronic Digital Dial Indicator use?

The Neoteck NTK120 Electronic Digital Dial Indicator uses 2 LR44 batteries, which are widely available and provide reliable power for operation.

What are the dimensions of the Neoteck NTK120 Electronic Digital Dial Indicator?

The Neoteck NTK120 Electronic Digital Dial Indicator has dimensions of 4.8 x 2.17 x 0.04 inches, making it compact and easy to store in toolboxes or carry for on-the-go measurements.

How much does the Neoteck NTK120 Electronic Digital Dial Indicator weigh?

The Neoteck NTK120 Electronic Digital Dial Indicator weighs 4.55 ounces, providing a lightweight, portable design without sacrificing durability.

What is the model number of the Neoteck NTK120 Electronic Digital Dial Indicator?

The model number of the Neoteck NTK120 Electronic Digital Dial Indicator is NTK120, which helps identify this specific version.

Is the Neoteck NTK120 Electronic Digital Dial Indicator suitable for both imperial and metric measurements?

Neoteck NTK120 Electronic Digital Dial Indicator supports both imperial (inches) and metric (millimeters) measurements, offering versatile functionality for different measuring needs.

What is the price of the Neoteck NTK120 Electronic Digital Dial Indicator?

The Neoteck NTK120 Electronic Digital Dial Indicator is priced at $24.99, providing good value for an accurate and reliable tool for professionals and hobbyists.

How does the Neoteck NTK120 Electronic Digital Dial Indicator display measurements?

The Neoteck NTK120 Electronic Digital Dial Indicator features a digital display, making it easy to read measurements clearly and precisely, reducing the chances of human error.

Can the Neoteck NTK120 Electronic Digital Dial Indicator be used for small components?

Neoteck NTK120 Electronic Digital Dial Indicator is excellent for measuring small components, as it has a 25.4 mm range and high accuracy.

What is the repeatability of the Neoteck NTK120 Electronic Digital Dial Indicator?

The Neoteck NTK120 Electronic Digital Dial Indicator offers high repeatability due to its accurate resolution, ensuring consistent measurements across multiple uses.

How do you change the battery in the Neoteck NTK120 Electronic Digital Dial Indicator?

To replace the battery in the Neoteck NTK120 Electronic Digital Dial Indicator, simply remove the battery compartment cover and insert 2 new LR44 batteries.

What is the display resolution of the Neoteck NTK120 Electronic Digital Dial Indicator?

The Neoteck NTK120 Electronic Digital Dial Indicator has a resolution of 0.01 mm (0.0005 inch), allowing for highly detailed measurements.

What is the primary application of the Neoteck NTK120 Electronic Digital Dial Indicator?

The Neoteck NTK120 Electronic Digital Dial Indicator is commonly used in precision machining, quality control, and other applications that require accurate measurements of small parts or mechanical components.

VIDEO – PRODUCT OVERVIEW

https://manuals.plus/wp-content/uploads/2024/11/Neoteck-NTK120-Electronic-Digital-Dial-Indicator-Instruction-Manual.mp4

References

- User Manual