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› Soonkoda Digital Force Gauge Push and Pull Meter User Manual

Soonkoda S-3N

Digital Force Gauge User Manual

Model: S-3N

Brand: Soonkoda

1. INTRODUCTION

The Soonkoda Digital Force Gauge is a high-precision instrument designed for measuring push and pull forces. It is widely used in various industries for load testing, tension, compression, and destructive experiments. This manual provides essential information for the safe and effective operation, maintenance, and troubleshooting of your device. Please read it thoroughly before use.

2. PRODUCT OVERVIEW

2.1 Key Features

- **Measurement Range:** 0.001N-3N; 0.001 KG-0.3KG; 0.001lbs-0.65lbs
- **Multiple Units:** N (Newton), Kg (Kilogram), Lb (Pound), and Oz (Ounce) for selection and conversion.
- **Gravity Acceleration Setting:** User-adjustable gravity acceleration value for enhanced testing and unit conversion accuracy.
- **Buzzer Alarm:** Configurable upper and lower limits with an audible alarm for out-of-range measurements.
- **Minimum Force Value Shielding:** Ability to ignore data within a set minimum range.

2.2 What's in the Box

- Digital Push Pull Gauge
- Storage Case
- AAA Battery x2
- Assorted Accessories (probes)
- User Manual

2.3 Product Components and Controls



Figure 1: The Digital Force Gauge unit with its various included accessories, including different probes and an extension rod.

4 units

ONE BUTTON FREE SWITCHING

Widely used in high and low voltage electrical appliances, electronic wires Hardware lock, auto parts, lighter and ignition Installation, pen making, light industry construction, fishing gear, textile Push and pull in chemical industry, machinery industry and scientific research institution Load test, insert and pull test, destructive Experiments, etc.



Figure 2: Detailed view of the force gauge's control panel, highlighting the LCD display, SET, ZERO, PEAK, and UNIT buttons, and the power button.

The force gauge features a clear LCD display, control buttons (SET, ZERO, PEAK, UNIT, Power), and a threaded connector at the top for attaching various probes.

3. SETUP

3.1 Battery Installation

The device requires 2 AAA batteries (included). Locate the battery compartment on the back of the unit. Open the cover, insert the batteries according to the polarity indicators, and close the compartment securely.

3.2 Attaching Probes

Select the appropriate probe for your specific measurement task. The gauge comes with several push-pull probes, a hook probe, and an extension rod. Screw the desired probe securely into the threaded connector at the top of the force gauge. For applications requiring extended reach, first attach the extension rod, then screw the probe onto the rod.

Five kinds of gifts

REPLACEABLE PROBE

Push, pull and press three measurement methods as you like

Push pull probe

Widely used in high and low voltage electrical appliances, electronic wires Hardware lock, auto parts, lighter and ignition Installation, pen making, light industry construction, fishing gear, textile Push and pull in chemical industry, machinery industry and scientific research institution Load test, insert and pull test, destructive Experiments, etc.

Hook probe

Use with push pull gauge It can measure the weight of objects.

Extension probe

Install the extension rod, which can be extended Measure the distance.

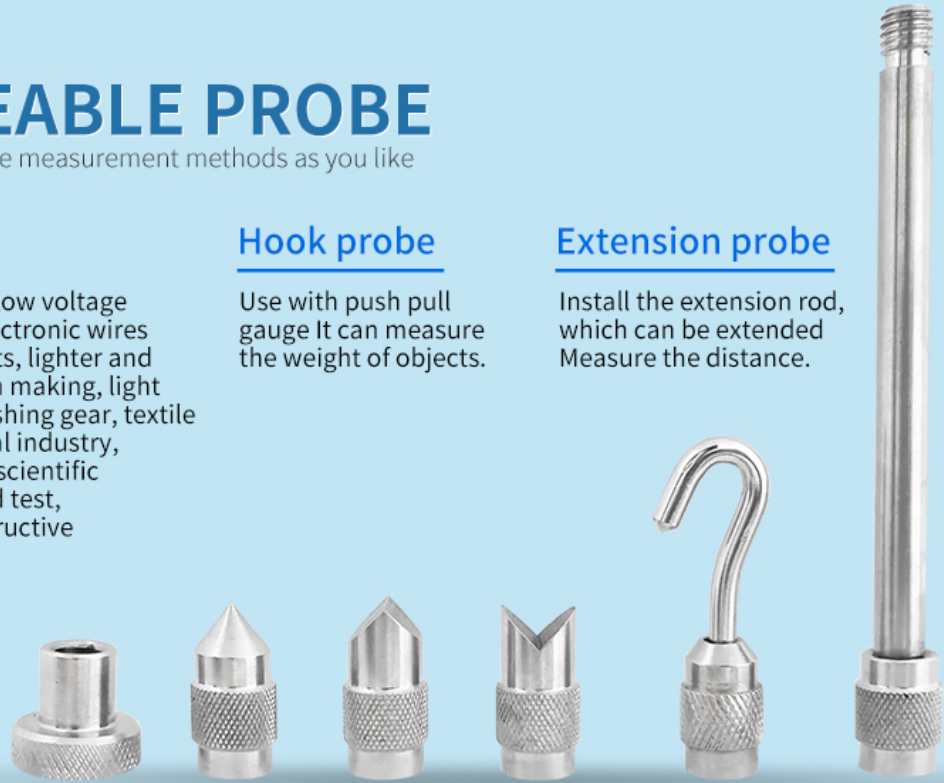


Figure 3: Various replaceable probes including push-pull probes, a hook probe, and an extension probe, demonstrating their use cases.

4. OPERATING INSTRUCTIONS

4.1 Power On/Off

Press the **red power button** located on the front panel to turn the device on or off.

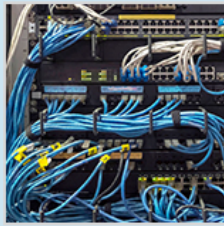
4.2 Unit Selection

Press the **UNIT** button to cycle through the available measurement units: Newtons (N), Kilograms (Kg), Pounds (Lb), and Ounces (Oz). The selected unit will be displayed on the LCD screen.

Model: S-3N

WIDELY USED

Applicable tension and compression load test



Electronic wire



Chemical industry



Spin



Hardware



Figure 4: The force gauge display showing measurements in Newtons (N), Kilograms (Kg), Pounds (Lb), and Ounces (Oz), illustrating the unit switching capability.

4.3 Zeroing the Gauge

Before initiating a measurement, ensure the gauge reads zero. If a non-zero value is displayed, press the **ZERO** button to reset the display to zero.

4.4 Measurement Modes (Real-time / Peak Switching)

The device supports three distinct measurement modes:

1. **Real-time Mode:** This is the default mode upon power-on. The displayed value continuously updates with the applied load. No specific mode indicator is shown on the screen.
2. **Peak Mode:** Press the **PEAK** button once. The letter "P" will appear on the screen. In this mode, the instrument captures and displays the maximum force value detected during the measurement cycle.
3. **First Peak Mode:** Press the **PEAK** button a second time. The letters "P" and "T" will appear on the screen. This mode displays the first significant peak force value measured within a given period. The test can be re-initiated by pressing the **ZERO** key.

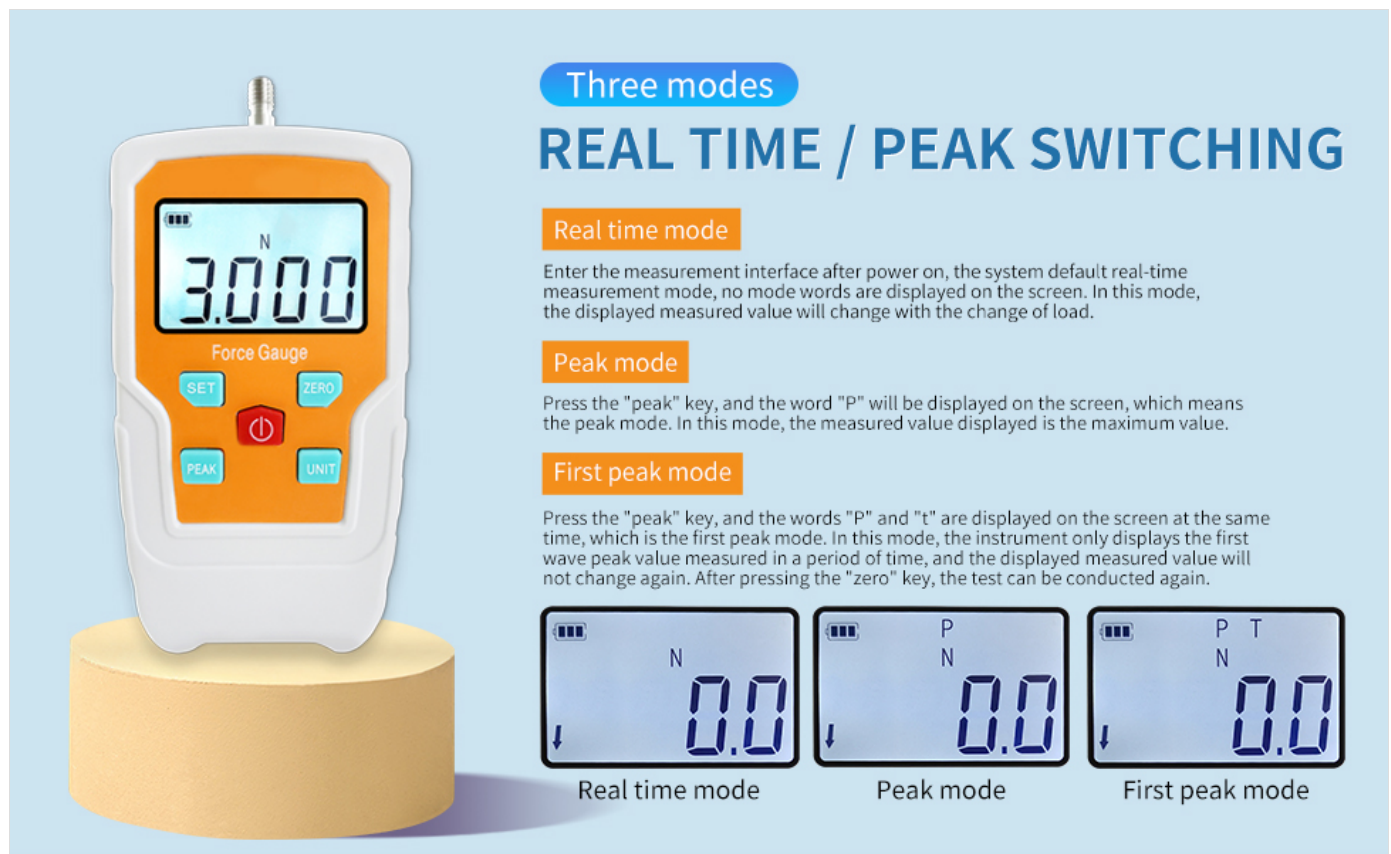


Figure 5: The force gauge display showing the indicators for Real-time mode (no indicator), Peak mode ("P"), and First Peak mode ("P T").

4.5 Advanced Settings (Gravity Acceleration, Buzzer, Shielding)

The device allows for advanced configurations such as setting the local gravity acceleration value for more precise calculations, defining upper and lower limits for the buzzer alarm, and shielding data within a minimum force range. Detailed instructions for accessing and adjusting these settings via the **SET** button are provided in the comprehensive user manual included with your product.

5. MAINTENANCE

5.1 Cleaning

To clean the device, gently wipe it with a soft, dry cloth. Avoid using abrasive cleaners, solvents, or harsh chemicals, as these can damage the unit's surface or internal components.

5.2 Storage

When not in use, store the force gauge and its accessories in the provided storage case. Keep the case in a cool, dry place, away from direct sunlight, extreme temperatures, and high humidity. If storing for extended periods, remove the batteries to prevent potential leakage and damage to the device.

5.3 Calibration

For optimal accuracy and performance, periodic calibration by a qualified professional is recommended. Refer to the manufacturer's guidelines or contact customer support for calibration services.

6. TROUBLESHOOTING

6.1 Device Does Not Power On

- Check battery installation: Ensure batteries are inserted correctly, observing polarity.
- Replace batteries: Install fresh AAA batteries.

6.2 Inaccurate Readings

- Zero the gauge: Always press the **ZERO** button before taking a measurement.
- Verify unit selection: Ensure the correct measurement unit (N, Kg, Lb, Oz) is selected.
- Check for physical damage: Inspect the probe and the gauge for any visible damage or obstructions.
- Consider calibration: If issues persist, the device may require professional calibration.

6.3 Buzzer Alarms Unexpectedly

- Review limits: Check the configured upper and lower force limits. The measured force might be exceeding these thresholds, triggering the alarm.

7. SPECIFICATIONS

Feature	Detail
Model	S-3N
Measurement Range	0.001N-3N; 0.001 KG-0.3KG; 0.001lbs-0.65lbs
Units	N (Newton), Kg (Kilogram), Lb (Pound), Oz (Ounce)
Product Dimensions (L x W x H)	4.88 x 2.36 x 1.18 inches
Weight	1.04 Pounds
Batteries	2 AAA batteries (included)
Material	Acrylonitrile Butadiene Styrene (ABS)
Manufacturer	Soonkoda

8. WARRANTY AND SUPPORT

For detailed warranty information, technical support, or service inquiries, please refer to the documentation included with your product packaging or visit the official Soonkoda website. Our customer service team is available to assist you with any questions or concerns regarding your Digital Force Gauge.

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question