HT-6510A

REED INSTRUMENTS

Scale Durometer

WARRANTY 1 YEAR WARRANTY

Instruction Manual

REED Instruments
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Introduction

Thank you for purchasing your REED HT-6510A Durometer. Please read the following instructions carefully before using your instrument.
By following the steps outlined in this manual your meter will provide years of reliable service.

Product Quality

This product has been manufactured in an ISO9001 facility and has been calibrated during the manufacturing process to meet the stated product specifications. If a certificate of calibration is required please contact the nearest authorized REED distributor or authorized Service Center. Please note an additional fee for this service will apply.

Safety

Never attempt to repair or modify your instrument. Dismantling your product, other than for the purpose of replacing batteries, may cause damage that will not be covered under the manufacturer's warranty. Servicing should only be provided by an authorized service center.

Features

- Shore "A" hardness tester designed to measure hardness of rubber, elastomers, natural rubber products, neoprene, polyester, resin, leather and soft PVC
- Meets DIN 53505, ASTM D2240, ISO 7619 and JISK 7215
- 4-digit, LCD display
- Pocket-sized model with integrated probe
- Maximum and Average functions
- Zero adjustment button
- Low battery indicator and auto shut off

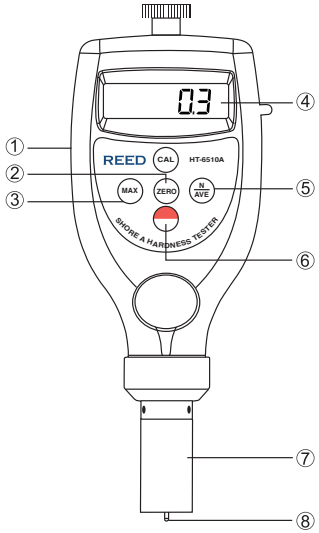
Included

- Wrist Strap
- Test Block
- Batteries
- Hard Carrying Case

Specifications

Measuring Range:	10 to 90HA
Deviation:	±1HA
Resolution:	0.1HA
Sampling Time:	1 second
Display:	4-digit, LCD
Zero Button:	Yes
Max and Average Functions:	Yes
Power Supply:	2 x AAA Batteries
Low Battery Indicator:	Yes
Product Certifications:	CE
Operating Temperature:	32 to 104°F (0 to 40°C)
Storage Temperature:	-4 to 140°F (-20 to 60°C)
Operating Humidity Range:	20 to 90%
Dimensions:	6.4 x 2.6 x 1.5" (162 x 65 x 38mm)
Weight:	6.1oz (173g)

Instrument Description



1. Battery Cover
2. Zero Button
3. Max Hold Button
4. LCD Display
5. Average Measaurement Button
6. POWER Button
7. Presser Foot
8. Indenter

Operating Instructions

Power ON/OFF

Turn the meter on by pressing the button. To turn the meter off, press and hold the button for approx. 2 seconds and release when "OFF" appears on the display.

Measuring Procedure

The material under test should be a minimum of 6mm (0.25"). The test area should allow measurements to be taken at least 12mm from any edge. The test area may be layered with multiple pieces to achieve the necessary thickness requirements, however the measurements taken may not be as accurate as those taken on solid test areas, due each layer not being in complete contact.

1. When first powered on, the meter should display "0.0". If any other value appears on the display, perform a zero calibration (see *Zero Calibration section* for details).
2. To check accuracy, simply insert the indenter into the hole of the calibrated test block.
3. Apply enough force to make enough contact between the top surface of the test block and the presser foot.
4. The reading should match the test block.
5. If inaccurate, perform a single point calibration (see *Single Point Calibration section* for details).
6. When ready to use, simply hold the durometer vertically with the point of the indenter at least 12mm from any edge.
7. Place the presser foot onto the test piece while keeping the foot parallel to the surface.
8. Apply enough force to ensure proper contact between the presser foot and the test piece.
9. Keep in place and Hold for approx. 2 seconds.
10. The LCD will display the measured value and will hold this value until the presser foot is removed from the test piece.
11. Repeat steps 6 through 10 for each measurement.

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Maximum Measurement Mode

1. Press the **MAX** button to enter the maximum value mode.
2. The Max Indicator will appear on the display.
3. Hold the durometer vertically with the point of the indenter at least 12mm from any edge.
4. Place the presser foot onto the test piece while keeping the foot parallel to the surface.
5. Apply enough force to ensure proper contact between the presser foot and the test piece.
6. Keep in place and Hold for approx. 2 seconds.
7. The LCD will display the measured maximum value and will hold this value.
8. To take the next maximum value, press the **ZERO** button to clear the reading.
9. Repeat steps 3 through 8 for each maximum value measurement.
10. Press the **MAX** button to exit maximum measurement mode and resume normal operation.

Average Measurement Mode

The average value is calculated using the number of test measurements the user selects which can range from 1 to 9.

1. To set the amount of test measurements required during a test session, hold and release the $\frac{N}{AVE}$ button to enter the average measurement mode.
2. The display will indicate "N" confirming it is now in average measurement mode as well as the number of set test measurements.
3. Press the $\frac{N}{AVE}$ button again to scroll through the required number of test measurements ranging from 1 to 9.
4. Press the **ZERO** button to confirm the selected number of test measurements.
5. Press the **MAX** button to begin.
6. Hold the durometer vertically with the point of the indenter at least 12mm from any edge.

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7. Place the presser foot onto the test piece while keeping the foot parallel to the surface.
8. Apply enough force to ensure proper contact between the presser foot and the test piece.
9. Keep in place and Hold for approx. 2 seconds.
10. The LCD will display the measured maximum value and will hold this value.
11. Press the **ZERO** button to take the next test measurement.
12. Follow steps 6 through 11 until the selected number of test measurements have been reached.
13. When completed, the meter will emit 2 beeps and automatically display the average measurement value of the test session.

Auto Power Off

To preserve battery life, the meter is programmed to turn itself off after 10 minutes of inactivity.

Zero Calibration

Press the **ZERO** button to perform a zero calibration when required.

Single Point Calibration

1. Place the indenter onto a flat test piece of glass.
2. Apply enough force to make firm contact between the glass and the presser foot.
3. The readings on the display should be between 99.7 and 101.
4. If the reading is not within the above range, hold the button until "CAL" appears on the display while continuing to keep pressure against the glass.
5. When the reading has stabilized, press the N/AVE button to display "0.0" which confirms that calibration is complete.
6. Repeat steps 1 through 3 to confirm that the reading is now within range.
7. Repeat single point calibration if reading is still out of range.

Battery Replacement

1. When the low battery symbol  appears on the display, the batteries need to be replaced.
2. Remove the battery cover on the back and insert 2 x AAA batteries.

Accessories and Replacement Parts

- **R8888** Medium Hard Carrying Case

Don't see your part listed here? For a complete list of all accessories and replacement parts visit your product page on www.reedinstruments.com.

Product Care

To keep your instrument in good working order we recommend the following:

- Store your product in a clean, dry place.
- Change the battery as needed.
- If your instrument isn't being used for a period of one month or longer please remove the battery.
- Clean your product and accessories with biodegradable cleaner. Do not spray the cleaner directly on the instrument. Use on external parts only.

Product Warranty

REED Instruments guarantees this instrument to be free of defects in material or workmanship for a period of one (1) year from date of shipment. During the warranty period, REED Instruments will repair or replace, at no charge, products or parts of a product that proves to be defective because of improper material or workmanship, under normal use and maintenance. REED Instruments total liability is limited to repair or replacement of the product. REED Instruments shall not be liable for damages to goods, property, or persons due to improper use or through attempts to utilize the instrument under conditions which exceed the designed capabilities. In order to begin the warranty service process, please contact us by phone at 1-877-849-2127 or by email at info@reedinstruments.com to discuss the claim and determine the appropriate steps to process the warranty.

Product Disposal and Recycling

Please follow local laws and regulations when disposing or recycling your instrument. Your product contains electronic components and must be disposed of separately from standard waste products.

Product Support

If you have any questions on your product, please contact your authorized REED distributor or REED Instruments Customer Service by phone at 1-877-849-2127 or by email at info@reedinstruments.com.

Please visit **www.REEDINSTRUMENTS.com** for the most up-to-date manuals, datasheets, product guides and software.

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