

EM50

ULTRASONIC TAPE MEASURE

USER'S MANUAL

Supco



CONTENTS

1. SAFTY INFORMATION	1
2. NEED TO KNOW BEFORE USE	2
3. NAMES OF COMPONENTS	3
4. LCD DISPLAY	4
5. SPECIFICATIONS	5
6. HOW TO USE	6
7. LENGTH MEASUREMENT	7
8. AREA MEASUREMENT	9
9. VOLUME MEASUREMENT	11
11. MAINTENACE	13

1. SAFETY INFORMATION

This tool emits a laser beam, which, projects a visible spot on the target surface when the tool is used indoors. The power of the emission of the laser beam is less than 1mW in class II (US version), **so the following warnings must be followed to avoid injury.**

DO NOT stare directly at the laser beam.

DO NOT project the laser beam directly into the eyes of others.

DO NOT set up the tool at eye level or operate the tool on or near a reflective surface, as the laser beam could be projected into your eyes or the eyes of others.

2. NEED TO KNOW BEFORE USE

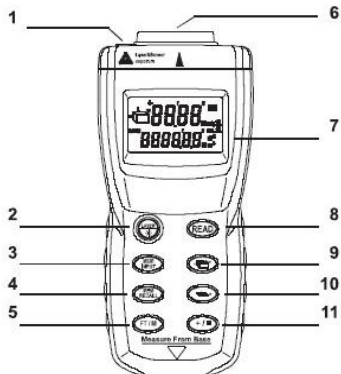
Inaccurate measurement may result from the following:

- * When the battery runs out.
- * When the measured distance is out of the specified range (0.6m to 15m / 1'11" to 49'3").
- * When another ultrasonic source is nearby.
- * When the unit is not held perpendicularly to the target.

An error message "Err" will be displayed under the following conditions

- * The calculation result exceeded the calculation range as specified.
- * The target surface does not provide good reflection for ultrasonic pulse (i.e. soft and irregular surface such as thick carpet, curtain or irregular wall paper etc.)
- * The distance measured is out of specified range (>15m / 49'3").

3. NAMES OF COMPENTS



1. Laser pointer
2. Laser / back light key

Note:

(1) Press the key, the laser appears, and press it once more, the laser will disappear.
(2) Press and hold the key for 3 seconds to turn the back light on; press and hold it for 3 seconds once more, the back light will be turned off.

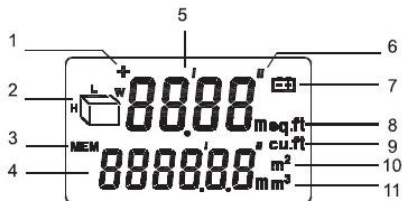
3. Memory input key
4. Memory recall key
5. Feet / meter conversion key
6. Ultrasonic sensor aperture
7. LCD display
8. On / read / reset key

Note: Press and hold the key for 3 seconds, the unit will be reset,

9. Volume computation key
10. Area computation key
11. Addition key

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4. LCD DISPLAY



1. Addition
2. Area / volume L=length, W=width, H=height
3. Memory
4. Memory / computation result
5. Current result
6. Feet
7. Low battery indication
8. Square feet
9. Cubic feet
10. Square meter
11. Cubic meter

5. SPECIFICATIONS

Recommended use: indoor

Measurement range: 0.6~15m (1' 11" ~ 49' 3")

Accuracy: $\pm 0.5\%$ ± 1 digit

Resolution: 0.01m

Aperture angle: Approx. $\pm 5^\circ$

Laser type: 630 ~ 650nm

Laser power: ≤ 1 mW

Laser class: class II (US version)

Battery: 9V 6F22 006P NEDA1604

Size: 130 × 50 × 30mm

Weight: Approx. 150g

Note:

For accurate measurement, the meter should be used in the following circumstance:

Temperature: 0~40°C (32°F~104°F); Humidity: 40~70%

Altitude: -0.1~0.1km


6. HOW TO USE

- * Position and point the unit perpendicular to the target.
The laser pointer will show where the tool is pointing and is only on while a reading is being taken.
- * The target must be a hard regular surface unencumbered by objects / obstacles in the measurement field.
- * For accurate result, choose a target that is flat and large with hard surfaces.
- * put a piece of cardboard in front of the target if the measured target is small, irregular or soft.
- * This tool cannot measure through glass even though the laser beam can pass through.
- * Measurement is from the base of the unit.
- * For avoiding the disturbance from other objects, the measurement had better be taken in the wide or empty space.

WARNING!

Do not stare into Laser beam. Hold tool with beam above or below eye level.

7 LENGTH MEASUREMENT

- (1) Be sure to accord with the measurement conditions.
- (2) Press "READ" key to start the unit. LCD will display last measurement result.
- (3) Point the unit to the target. Press "", you can use laser to aim the target when necessary.
- (4) Press "READ" key again to measure, and the measurement result will be displayed on top of the LCD screen.
- (5) Take another measurement, just press "READ" key again.

* Press "FT/M" key, you can select the measurement unit.

* Unit automatically turns itself off after 30 seconds of inactivity.

LENGTH ADDITION

- (1) Press "Read" for measurement.
- (2) Press "+/= " to enter the addition mode. A "+" icon will appear on LCD.
- (3) Press "Read" again for the second measurement.
- (4) The second measurement result will be displayed on top of LCD screen.
- (5) Press "+/= " again, then the addition length will be displayed on the second line of the LCD.
- (6) When need add length several times, repeat the step (3) to (5).

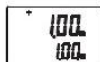
Note: When press and hold "Read" key for 3 seconds, the unit will revert to length measurement state.



Press "READ"



Press "+/= "



Press "READ" again



Press "+/= " again



8 AREA MEASUREMENT

- (1) Press the "w^L" key to enter area mode for calculation of a room area.
- (2) "L" will blink showing which measurement you will be taking. Press "Read" to take "L" measurement that is displayed on upper portion of screen.
- (3) "W" will blink showing the next measurement to take. Press "Read" to take "W" measurement that is displayed on upper portion of screen.
- (4) Then the area is automatically displayed on the lower portion of the screen.
- (5) Press "Read" again will toggle back and forth between the "L" and "W" measurements.
- (6) Press "w^L" again to take another area measurement.

* Press "FT/M" key, you can select the measurement unit.

* Unit automatically turns itself off after 30 seconds of inactivity.

AREA ADDITION

- (1) Press "Mem input" to save the calculated area.
- (2) Press " \square " to measure new area.
- (3) After getting the desired area, press "+/= " to enter the addition mode. A "+" icon would appear on LCD.
- (4) Press "Mem recall" to recall the first calculated area for the addition. The "MEM" icon will disappear and the stored memory will be automatically cleared.
- (5) Press "+/= " again, the sum of both areas is shown on bottom.
- (6) When need add area several times, repeat the above steps.

Note: When press and hold "Read" key for 3 seconds, the unit will revert to length measurement state.

Press "MEM INPUT"



Take new measurement



Press "+/= "





Press "MEM RECALL"



Press "+/= " again




9 VOLUME MEASUREMENT

- (1) Press " " to enter Volume mode for calculation of a room volume.
- (2) "L" will blink showing which measurement you will be taking. Press "Read" to take "L" measurement that is displayed on upper portion of screen.
- (3) "W" will blink showing the next measurement to take. Press "Read" to take "W" measurement that is displayed on upper portion of screen.
- (4) "H" will blink showing the next measurement to take. Press "Read" to take "H" measurement that is displayed on upper portion of screen.
- (5) Then the Volume is automatically displayed on the lower portion of the screen.
- (6) Press "Read" again will toggle back and forth between "L", "W" and "H" measurements.
- (7) Take another volume measurement, just press " " again.

* Press "FT/M" key, you can select the measurement unit.

* Unit automatically turns itself off after 30 seconds of inactivity.

VOLUME ADDITION

- (1) Press "Mem input" to save the calculated volume.
- (2) Press "  " to measure new volume.
- (3) After getting the calculated volume. Press "+/= " to enter the addition mode. A "+" icon will appear on LCD.
- (4) Press "Mem recall" to recall the first calculated volume for the addition. Then "MEM" icon will disappear and the stored memory will be automatically cleared.
- (5) Press "+/= " again, the sum of both volume is shown on bottom.
- (6) When need add volume times, repeat the above steps.

Note: When press and hold "Read" key for 3 seconds, the unit will revert to length measurement state.

Press "MEM INPUT"



Take new measurement



Press "+/= "



Press "MEM RECALL"




Press "+/= " again



10 MAINTENANCE

- * This tool is a precision instrument which must be handled with care.
- * Avoid shock, vibrations and extreme heat.
- * Keep the tool dry and clean.
- * check battery regularly to avoid deterioration.
- * Remove battery if the tool is to be stored for an extended period of time.

BATTERY REPLACEMENT

If the sign "  " appears on the LCD display, it indicates that the battery should be replaced. Open the case on the back cover. Replace the exhausted battery with a new one.

WARRANTY

Sealed Unit Parts Co., Inc. warrants that it will repair or furnish without charge a similar product to replace any product which, within the specified warranty term after the date of sale by the Wholesaler, is proved to the satisfaction of Sealed Unit Parts Co., Inc. , to have been defective at the time it was sold. Said warranty is in effect only when said item is used in accordance with the instructions and recommendations of Sealed Unit Parts Co., Inc.

This warranty applies only to products which after shipment from the factory, have not been altered, changed, repaired, or treated in any manner whatsoever.

This warranty to repair or replace is the only warranty either expressed, implied or statutory and is the only warranty being issued herein; Sealed Unit Parts Co., Inc.'s liability in connection with its products is expressly limited to the repair or replacement of defective parts. All other damages and warranties, statutory or otherwise, are being expressly excluded.

No representative of Sealed Unit Parts Co., Inc. has authority to change this warranty in any manner whatsoever. No attempt to repair or promise to repair or improve any part covered by this warranty by any representative of this company shall be effective unless signed by a properly authorized officer of Sealed Unit Parts Co., Inc.



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