Model NO:UL110

Ultrasonic Distance Measure

INSTRUCTION MANUAL

Illustration 1:

Laser pointer — Ultrasonic sensor

LCD

READ

Measurement Benchmark

Mode Switch — LED

+/=

FT/M — CLEAR

Illustration 2:

Previous measurement(s)

Measurement mode indicator

Active measurement   Units
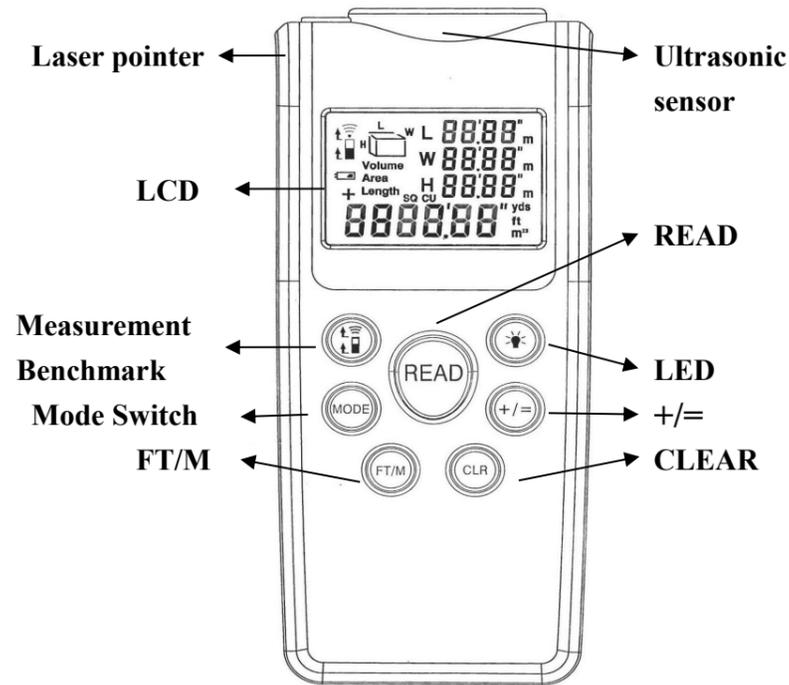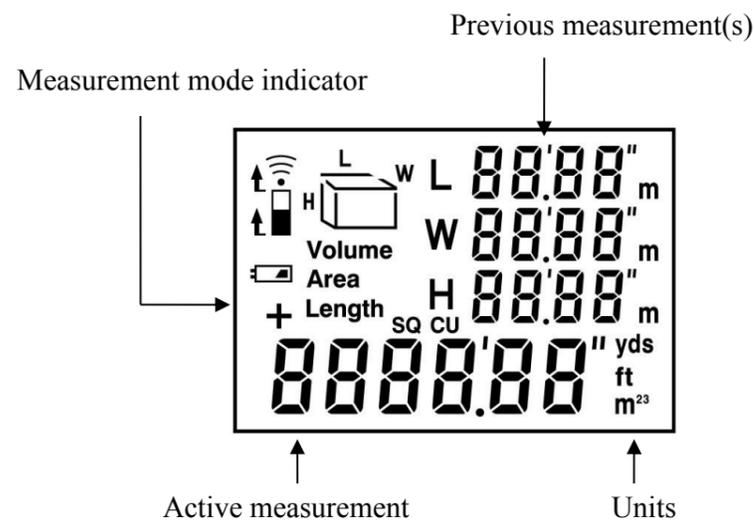
The UL110 ultrasonic estimator is a fast, convenient distance measuring tool. This tool allows contractors, realtors, homeowners and appraisers to make fast and easy estimates of distances, areas and volumes in rooms at work or home. Multiple measurements may be added to allow for overall measurements of greater than 60 feet.

The UL110 ultrasonic estimator is intended for fast, convenient measurements with a high degree of accuracy. For precision measurements other measuring instruments should be used.

Operating Instructions
1.0 Battery Installation:

The UL110 uses a 9 volt battery (not included) which is inserted in the bottom of the unit .To install the battery, remove the battery door form the button of the case and attach the battery connector onto the 9 volt battery. Reassemble the bottom to the case making sure it snaps into place. When the battery needs replacement the Low Battery indicator will appear in the LCD display.

2.0 Taking Measurements:

1. For consistent readings hold UL110 perpendicular to and pointed toward the surface being measured and press, release the "READ" button.

2. Press " 🔘 " button to change the benchmark of measuring the distance front of or behind of the UL110.

3. To change the units of measurement press the "FT/M" button. The display will cycle

through the units of measurement. The reading will be converted with each measurement change.

4. When repeating the reading make certain that the estimator is perpendicular to the surface, the distance is within its' measuring range and that there are no obstructions in the way like desks, chairs, half walls or step ladders to reflect the sound waves.
   Caution: Some types of surfaces such as curtains, padded walls, furniture or carpeting may absorb the ultrasonic sound waves instead of reflecting them, making readings difficult to take. These surfaces or irregular surfaces can also cause variations in readings. Try taking readings from different angles or positions to achieve consistent measurements.

5. When the light is dark, the LCD can be lighted by pressing " " button and also can be shut off.

6. The displayed reading will be shown for at least 30 seconds before the estimator shuts off.

3.0 Addition of Measurements:

If the distance to be measured is greater than 60 feet or a series of measurements need to be added together the Add feature can be used.
1. If the reading currently in the display is not to be included in the added measurements press the "CLR" button to zero the display.
2. Take the first measurement.

3. Press the "+/=" button. The "+" indicator will appear in the LCD
4. Take additional reading as described in the **Taking Measurements** Section.
5. The new measurement will be displayed along with the previous.
6. Press the "+/=" button again to display the sum of the previous measurements and the "+" indicator disappear.
7. Press the "+/=" button again. New measurements can continue to be added by pressing the "+/=" button.

4.0 Area and Volume Functions:

The area or volume can be quickly determined by the following steps. Area and volume are only calculated from current values of length, width and height and are displayed in meters or feet, not feet-inches.
Caution: When repeating the reading make certain that the estimator is perpendicular to the surface.

4.1 Area:

1. Press "MODE" button once to display area indicator (Illustration 2).
2. Press "READ" button to take first measurement.
3. Press "READ" button again to take second measurement.
4. Calculated area will be shown on bottom of LCD.
5. Press "MODE" button twice to return to distance mode.

4.2 Volume:

1. Press "MODE" button twice to display volume indicator (Illustration 2).
2. Press "READ" button once to take first measurement.
3. Press "READ" button again to take second measurement.
4. Press "READ" button again to take third measurement.
5. Calculated volume will be shown on bottom of LCD.
6. Press volume button once to return to distance mode.

Specifications

Battery :   9 volt, alkaline recommended
Low battery indicator
Auto shutoff :   30 seconds after last keystroke
Accuracy :   ±0.5% of reading
Range :   2 to 60 feet (0.6 to18 meter)
Measurement point : defined from bottom edge of case
Calculates and displays, length, area and volume
Units of measure : Meters, Feet-Inch

Operating temperature range: 0℃ to 50℃