

**Model NO:UL100 Ultrasonic Distance Measure**



**Technical Specifications**

<b>Recommended use :</b>	Indoor
<b>Measurement range:</b>	2' to 50'(0.6~15 meter)
<b>Accuracy:</b>	±0.5%±1 Digit
<b>Resolutions:</b>	1"(0.01M)
<b>Aperture angle:</b>	Approx. 5 ±degrees
<b>Laser Diode Type:</b>	Red laser diode 650nm
<b>Laser Class:</b>	Class IIIa(US version)/Class II(Europe version)
<b>Power supply:</b>	9V battery (6F22)
<b>Calculation range:</b>	
<b>Length</b>	-9999'11"(9999M)
<b>Area</b>	-999999 sq ft (99999M <sup>2</sup> )
<b>Volume</b>	-999999 cu ft (99999M <sup>3</sup> )

**Operation environment:**

**Operation temperature:** 32°F to 104°F(0°C to 40°C)

Still air and hard target surface for accurate measurement.

The tool always measures from the base of the tool.

**Important note:**

For long distance measuring between 40 FT to 50 FT(12M to 15M),the relative humidity should be above 48% and target size of at least 10 ft by 10 sq ft /3M BY 3M<sup>2</sup>.

**SAFETY INSTRUCTIONS**

**DANGER:LASER RADIATION,AVOID DIRECT EYE EXPOSURE,SERIOUS EYE INJURE CAN RESULT.**

**IMPORTANT**

Please read all instructions prior to operating the tools.

**Warnings**

Use of controls or performance of procedures other than those specified herein may result in hazardous radiation exposure. The power of the emission of the laser beam is less than 1 mW in class II (Europe) and less than 5mW in Class IIIa(U.S.) and Class IIIR(Europe),so the following warning must be followed to avoid injury:

**DO NOT stare direct at the laser beam.**

**DO NOT project the laser beam directly into the eyes of**

**others/animals.**

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

**POWER SUPPLY**

The tools require one 9 volt battery to operate

**BATTERY INSTALLATION**

1. Open battery door on back of case.
2. Connect a 9-volt battery to battery clip.
3. Insert battery into case and replace battery door.

When battery is low, the low battery icon will be continuously displayed on the LCD

**How to use the ultrasonic distance meter**

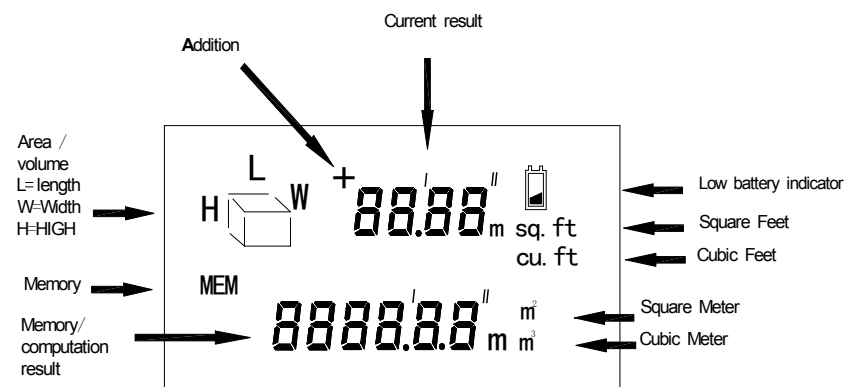
1. Point to wall and get measured distance by press "Read"
2. For dynamic read, press and hold "Read" key to get measured distance displayed while the unit is moving.
3. Each measurement erases the previous one.
4. Measured distance is displayed on top of the LCD screen.
5. Unit automatically turns itself off after 30 seconds of inactivity.

**IMPORTANT NOTE:**

1. 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.
2. The target must be a hard regular surface unencumbered by objects/obstacles in the measurement field.
3. For more accurate result, choose a target that is flat and large with hard surfaces.
4. Put a piece of cardboard in front of the target if the measured target is small, irregular or soft.
5. The ultrasonic distance meter cannot measure through glass, but will measure TO glass.

**Addition (w/o using Mem)**

1. Press "Read" for measurement
2. press "+/= " to enter the addition mode. A "+"icon will appear on LCD
3. Press and hold "Read" again for second measurement

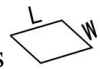


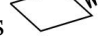
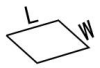
4. Press “+/=” again the sum is shown on the bottom.

**Addition (using Mem):**

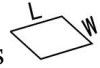
1. Press “Mem input” to save the desired measurement for the addition.
2. Press “Read” for new measurement.
3. After getting the new measurement, press “+/=” to enter the addition mode. A “+” icon will appear on LCD.
4. Press “MEM Recall” to recall previous measurement for the addition. The “MEM” icon will disappear and the stored memory will be automatically cleared.
5. Press “+/=” again, the sum is shown in the bottom.

**Area:**



1. Press  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. (Step1)
3. “W” will blink showing the next measurement to take. Press “Read” to take “W” measurement that is displayed on upper portion of screen. (Step2)
4. Then the Area is automatically displayed on the lower portion of the screen.
5. Pressing the “Read” key again will toggle back and forth between the “L” and “W” measurements.
6. To start another Area mode, press  key again.
7. To leave the Area mode to make a single measurement, press and hold the “Read” key for about 2 seconds.

**Addition of areas under area mode:**

1. Press “Mem input” to save the calculated area.
2. Press  to measure new area (Follow step1&2 under the Area section.)
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.

**Important note:**


**1. Before press and hold “Read” to leave the area mode, the measurement of “L” and “W” must be completed first.**

**Volume**



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 in upper portion of screen. (Step1)
3. “W” will blink showing the next measurement to take. Press “Read” to take “W” measurement that is displayed on upper portion of screen. (Step2.)
4. “H” will blink showing the next measurement to take. Press “Read” to take “H” measurement that displayed on upper portion of screen. (Step3)
5. Then the volume is automatically displayed on the lower portion of the screen.
6. Pressing the “Read” key again will toggle back and forth between the “L”, “W” and “H” measurements.
7. To start another volume mode, press  key again.
8. To leave the volume mode to make a single measurement, press and hold the “Read” key for about 2 seconds.

**Addition of volumes under volume mode:**

1. Press “Mem input” to save to the calculated volume.
2. Press  to measure new volume (Follow step1 to 3 under the volume section).
3. After getting the calculated volume, press “+/=” to enter the addition mode. A “+” icon would appear on LCD.
4. Press “Mem Recall” to recall the first calculated volume for the addition. The “MEM” icon will disappear and the stored memory

will be automatically cleared.

5. Press “+/=” again, the sum of both volumes is shown on bottom.

**Important note:**

**1. Before press and hold “Read” to leave the volume mode, the measurement of “L”, “W” and “H” must be completed first.**

**Mem input:**

Inserts a length, Area or volume into memory

\*The “MEM” icon will appear.

**Mem recall:**

Displays the last stored memory.

This is either length, Area or volume.

The “MEM” icon will disappear and the stored memory will be automatically cleared.

**FT/M:**

Change the measurement unit for length, Area and volume from ft./in. to metric.

**Care and handling:**

1. The laser tape is a precision instrument which must be handled with care.
2. Avoid shock, vibrations and extreme heat.
3. Avoid dust and water, which may obstruct the lens. If needed, use a soft cloth or cotton swab and glass cleaner to clean the lens.
4. Keep the laser tool dry and clean.
5. Check battery regularly to avoid deterioration.
6. Remove battery if the laser tool is to be stored for an extended period of time.