

U5810 ULTRASONIC DISTANCE MEASURER

INSTRUCTION

This instrument adopts the technology of ultrasonic and can measure distance, area and volume. It has the functions of laser location, selectable reading unit, auto power off and so on. It can be used in building, house measurement, etc.

INSTRUCTION

- Measure distance, including instant measurement and continuous measurement.
- It can select imperial and metric units.
- Calculate sum, area and volume.
- Use laser to locate the position
- It can store and display the readings used in area or volume calculation.
- Auto power off

TECHNICAL SPECIFICATION

- Range:** 40cm~18m
- Accuracy:** $\pm (0.5\% \text{ of reading} + 1 \text{ digit})$ (in still air)
- Resolution:** 0.01m
- The max. measuring distance:** 18m(in still air)
- Battery:** 9V, 6F22
- Operating temperature:** 0°C~50°C
- Storage temperature:** -10°C~60°C
- Dimension:** 12.8cm x 5.3cm x 3.6cm
- Weight:** about 100g (including battery)

SPECIFICATION



Figure 1

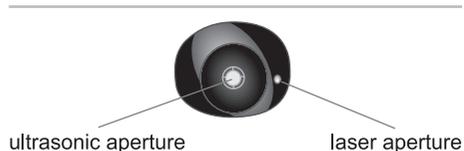


Figure 2

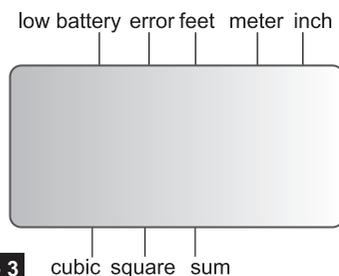


Figure 3

FUNCTION OF KEY

Read key:

- After the instrument is turned on, you can press this key to perform distance measurement. After the instrument has been turned on, the instrument will measure distance continuously if you press and hold this key.
- After the instrument is turned off, you can press this key for more than 1 second to turn on the instrument.

+/= key:

- This key can be used to erase all the readings
- This key can also be used in addition computation.

X/= key:

- This key can be used in area calculation and volume calculation.
- This key can also be used to display the distance readings used in area or volume calculation, but this operation should be done directly after the area or volume calculation.

OPERATION INSTRUCTION

• Turn on the instrument:

Press **Read** for more than 1 second to turn on the instrument, and the display will show the previous reading, it doesn't mater.

• Measure distance:

- Position and point the instrument squarely to the target. Measurement will start from the measurement start point, which means the length

of the instrument is included in the reading(refer to **Figure 1**).

Please keep in mind whenever you perform distance measurement.

- Press **Read**, the display will measure the distance and show the reading.

- The instrument will measure distance continuously if you press and hold **Read**.

• Addition computation for distance readings:

- Press **+/=** for more than 2 seconds, the display will shows a zero value.
- Press **Read** to get the first distance value.
- Press **+/=**, the LCD shows "SUM" on the display.
- Press **Read** to get the second distance value, "SUM" disappears.
- Press **+/=**, the LCD shows "SUM" again, meanwhile the LCD shows the addition result of the two readings.
- To do more addition computation, repeat the step d and the step e.

• Measure area or volume and display the distance readings used:

- Press **+/=** for more than 2 seconds, the display will shows a zero value.
- Press **Read** to get the first distance value.
- Press **X/=**.
- Press **Read** to get the second distance value.
- Press **X/=**, the display shows the area value (It is the result of the two readings' multiplication), meanwhile " SQU " is displayed as an area indicator.
- Press **Read** to get the third distance value.
- Press **X/=**, the display shows the volume value (It is the result of the three readings' multiplication), meanwhile " CUB " is displayed as a volume indicator.

Note: After you just finish area or volume calculation, you can press and hold **X/=** to display the distance readings used in the calculation.

Release **X/=**, the area or volume value will be shown again.

• Erase the readings:

After the instrument is turned on, pressing **+/=** for more than 2 seconds will erase the current reading and all the stored readings together, and the display will show a zero value.

• Select imperial unit or metric unit:

To switch reading's unit between imperial unit and metric unit, press and hold **+/=** with a thumb, immediately press **X/=** with another thumb (You should press **X/=** within 2 seconds after you begin to press and hold **+/=**).

NOTE

- Metric unit is meter (**Figure 3**)
 - Imperial unit :
- When you measure distance, the imperial units include Ft (feet) and INCH.

For example:

Ft	Inch
2	3

 means 2 feet and 3 inches.

When you calculate area and volume, the imperial units are square feet ("SQU" and "F" on the display) and cubic feet ("CUB" and "F" on the display) , respectively.

• Auto power off

If you don't operate the detector for about 20 seconds, it will auto power off. To turn on it again, press **Read** for more than 1 seconds.

NOTE

- When you measure distance, any obstacle found within of the viewing angle of the instrument will be regarded as the target.

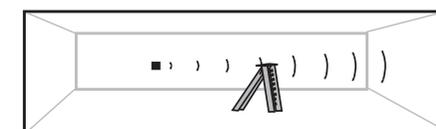


Figure 4 In this figure the distance to the ladder will be measured instead of the wall. The instrument requires a clear view within a cone of $\pm 7^\circ$

- While measuring, point the ultrasonic aperture vertically to the surface of the target to be measured.
- It will affect the results of measuring if the surface of the target is irregular or soft.
- The result of measuring will be affected if there is another ultrasonic source in the vicinity.
- Make sure that the laser and ultrasonic do not aim at any person's eye.
- The LCD may show the "Err" symbol in the following conditions:
 - The distance is shorter than about 40cm.
 - The distance to be measured is more than 18m or the reflected ultrasonic pulses are not strong enough.

• Measure Long Distance

When you want to measure a long distance, you can divide it into two parts, then you can measure the each part, finally you can add them.



Figure 5

• Measure Irregular Area

When you want to measure an irregular area, you can divide it into two parts, then you can measure the each part, finally you can add them.

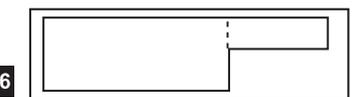


Figure 6

- Distance measurement starts from the measurement start point, which means the length of the instrument is included in the reading(refer to Figure 1).

BATTERY REPLACEMENT

While the LCD panel displaying the symbol " ", it indicates that the power of the battery is low. Please replace it .

To replace the exhausted battery, lightly press the battery cover with thumb and slide it out, carefully replace the battery with a new one of the same type. Slide the cover in until it click.

Take out the battery if you don't use the instrument for a long time.

CLEANING

While cleaning, use a soft moist cloth. Never use any solvent.

DISPOSAL OF THIS ARTICLE

Dear Customer,

If you at some point intend to dispose of this article, then please keep in mind that many of its components consist of valuable materials, which can be recycled. Please do not discharge it in the garbage bin, but check with your local council for recycling facilities in your area.

