

# Ultrasonic Distance Measurer

## OWNER'S MANUAL

### PREPARATION:

#### INSTALLING BATTERIES

Your measurer requires one 9V battery (not supplied) for power. For the best performance and life, we recommend alkaline battery.

Follow these steps to install a battery.

1. Slide the battery compartment cover in the direction of the arrow to remove it.
2. Snap the battery in the compartment, and on top of the attached ribbon, as indicated by the polarity symbols (+ and -) marked inside.
3. Replace the cover.

When **LOW BATT** appears or the measurer stops operating properly, replace the battery.

**Caution:** If you do not plan to use the measurer for a month or more, remove the battery.

Batteries can leak chemicals that can destroy electronic parts.

#### STABILIZING THE MEASURER

Your measurer is sensitive to changes in temperature and humidity. Before you use the measurer, wait about 15 minutes for it to stabilize to the current room's temperature.

### OPERATION:

#### TURNING THE MEASURER ON/OFF

To turn on the measurer, set **LD/NORMAL/OFF** on the side of the measurer to **LD** or **NORMAL**.

The measurer turns itself off after about 4 minutes. To turn off the measurer sooner, set **LD/NORMAL/OFF** to **OFF**.

**Note:** When you set **LD/NORMAL/OFF** on the side of the measurer to **OFF**, it clears all measurements stored in the memory.

## TAKING A MEASUREMENT:

1. If the distance you are measuring is 35 feet (10.67 meter) or less, set **LD/NORMAL/OFF** to **NORMAL** (normal range). Otherwise, set **LD/NORMAL/OFF** to **LD** (long distance range).
2. Repeatedly press **FEET/METER** until **FEET** appears (to measure in feet) or until **METER** appears (to measure in meter)
3. Hold the button of the measurer flat against a wall, about halfway between the floor and ceiling. Be sure there is a clear path to the point you want to measure and that your head or hands do not block the front of the measurer.
4. Press **MEASURE/ON**. The measurer beeps then the distance between the measurer and the point you measured appears.

### Notes:

- The measurement appears for about 4 minutes (or longer if you press another key)
- **ERROR** might appear if you try to measure a distance longer or shorter than the set range or longer than 60 feet (18.288 meters)

### Measuring Tips

- Some types of curtains and blinds can absorb sound waves, causing measurements to be inaccurate. If you are measuring distances in a room with curtains, open the curtains before measuring the distance to a window behind them. Also, be sure that the window is closed.
- If there is not a clear path between the points where you are measuring, you might receive a false reading from sound waves bouncing off objects such as chairs, tables and objects with uneven surfaces. If you are not sure if a measurement is correct, move slightly to one side then measure the distance again.
- If the surface of a wall you are measuring is not solid and flat, or if you are measuring in a narrow corridor, you might receive a false reading. If this happens, use a solid surface to measure or move to the center of the corridor.
- To help avoid false readings, if you set **LD/NORMAL/OFF** to **LD**, make sure there are no objects within 8.2 feet (2.5 meters) of the point you are measuring (expect the floor below that point).
- To measure a distance longer than 60 feet (18.288 meters), select a point in the middle of the room (for example), measure from the center of the room toward each side, then add the two measurements.

## **SAVING A MEASUREMENT:**

1. Follow the steps under "Taking a Measurement" to measure a dimension.
2. Press **STORE** then a memory key (**M1**, **M2** or **M3**) and the number of the memory location you chose (**1**, **2**, or **3**) appear and the measurer stores the reading in that memory location.
3. If necessary, repeat steps 1 and 2 to save up to three measurements.
4. To display a measurement stored in a memory location, press that memory key (**M1**, **M2**, or **M3**) The measurement stored in that memory location appears.

To delete a measurement stored in a memory location, simply store a new one in its place.

To clear all stored measurements, set **LD/NORMAL/OFF** to **OFF** or hold down **ALL MEMORY CLEAR** for about 3 seconds. The measurer beeps and M and the number of the memory location you chose (**1**, **2**, or **3**) disappears.

## **CALCULATING VOLUME:**

To find the volume of a room, measure the height, width and the length of the room and store each measurement in a different memory location (see "Saving a Measurement"). Then press **VOL. FEET3** or **METER3, VOLUME**, and the volume calculation result appear.

## **CALCULATING AREA:**

Follow these steps to find the area of any two stored measurements.

1. Measure the width and length of a room and store the measurements in **M1** and **M2** (see "Saving a Measurement").
2. Press **AREA, M1**, and **M2. METER2** or **FEET2** and **AREA** and the area calculation appear.

## **ADDING/SUBTRACTING STORED MEASUREMENTS:**

1. Measure any two dimensions of a room and store the measurements in memory locations 1 and 2 (see "Saving a Measurement")
2. Press **ALL MEMORY CLEAR**.
3. Press **+**, **M1 + M2**, then **+** to add the measurements, or **+**, **M1 - M2**, then **+** to subtract them. The value of the calculation appears.
4. To clear the display and do another measurement, press **ALL MEMORY CLEAR**.

## **USING THE BACKLIGHT:**

To light the display, press **LIGHT**.

The display lights for about five seconds then automatically turns off.

## **SPECIFICATIONS**

Power Source:	1 x 9 Volt Alkaline Battery
Unit of Measurement:	Feet or Meters
Accuracy:	0.5% ( $\pm$ 1 digit)
Working Frequency:	40kHz
Working Temp:	32° to 109.4° F (0° to 43° C)
Range:	3 to 60 ft (0.91 to 18.288m)

Specifications are typical; individual units might vary. Specifications are subject to change and improvement without notice.