AWS

American Weigh Scales

LB-Series   **User Manual**

LB-501 (500g x 0.01g)
LB-1000 (1000g x 0.1g)
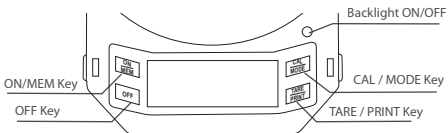**LB-3000 (3000g x 0.1g)**

Thank you for purchasing the American Weigh LB-Series compact bench scale. Please read all operating instructions carefully before use. Scales are precision measuring devices and should always be handled with proper care. To ensure years of reliable service, keep these simple tips in mind:

- Do not exceed the scale's maximum capacity. Overloading your scale can permanently damage it!
- Avoid exposure to extreme heat or cold. Scales perform best at normal room temperature. If temperatures have changed dramatically, calibration and adjustment may be necessary.
- Allow your scale to warm up for 30-60 seconds before performing calibration and adjustment(if available).
- Store your scale in a clean, dry location. Dust, dirt, and moisture can accumulate on the weighing sensors and electronics causing inaccuracy or malfunction.
- Avoid using your scale in close proximity to strong radio wave emitting devices such as computers, cash registers, and cordless phones.
- Always weigh on a flat and level surface, free from vibrations and drafts. The corner of a room is usually the most stable.
- Gently apply all items to be weighed. Do not drop items onto the weighing platform.
- Avoid dropping your scale. The warranty does not cover damage due to rough treatment or overload.
- Check the batteries first if you are having any trouble with your scale. This simple step can remedy most scale issues.
- Do not disassemble your scale. This product contains no user serviceable parts.
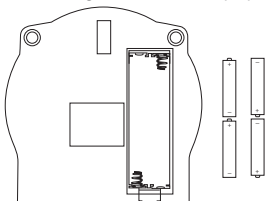
I. Part List

1. Scale
2. Expansion Bowl
3. 200g Calibration Weight (x2) *LB-1000 and LB-501 ONLY*
4. AA Batteries (x4)
5. 6V Power Supply

II. Key Description

Backlight ON/OFF

ON/MEM Key

CAL / MODE Key

OFF Key

TARE / PRINT Key

III. Battery Installation

1. Before using the scale for the first time, check the battery compartment and remove any plastic insulation strips or packaging that may be in place to prevent battery drainage during shipping/storage.

2. If you are replacing the batteries, make sure the positive and negative contacts are properly aligned.

IV. Operation

1. Place the scale on a flat, level surface and press the **ON/MEM** key to turn the scale on.
2. Once the start-up process completes and the scale goes to zero you are ready to weigh.
3. Place the quantity to be weighed onto the weighing platform.
4. Wait a couple seconds for the display to stabilize before taking a weight reading.

V. Changing the Unit of Measure

1. Press the **MODE/CAL** key to change the scales displayed unit of measure.
2. If the scale is turned off then back on, it will default to the last unit used.

- **LB-501 Units:** g (gram) ▶ oz (ounce) ▶ ct (carat) ▶ gn (grain)
- **LB-1000 & LB-3000 Units:** g (gram) ▶ oz (ounce) ▶ ozt (troy ounce) ▶ dwt (pennyweight)

VI. Using the Tare Feature

You can use this scale's tare feature to subtract the weight of an empty container or vessel for net weight determination. NOTE: The weight of the container will subtract from the available capacity.

1. Place the empty container or vessel on the weighing platform.
2. Press the **TARE/PRINT** key once. The display will then reset to zero. If the container is removed, it's weight will be displayed as a negative number.
3. You may now fill the container with the quantity to be weighed. The display will show the net weight of

the contents.

4. To return to normal weight display (gross weight), remove any items from the weighing platform and press the **TARE/PRINT** key again to re-zero the scale.

VII. Counting Feature

1. To enter parts counting mode, press **CAL/MODE** to scroll through the weighing modes until "C" appears on the bottom left of the display. The minimum sample quantity is 5 and will be displayed as "S=5"

2. Continue to press the **CAL/MODE** key to select the desired parts sample quantity: 5, 10, 20, 50 pieces. After "50" is displayed the scale will cycle back to g (grams).

3. With the sample quantity value still displayed on the LCD, place the sample quantity on the platform. Allow the sample to stabilize for 3~5 seconds then press **TARE/PRINT**. The sample quantity is now set.

4. You can now add any number of the item on the scale and a count will be displayed.

VIII. Memory Function

1. With the balance on, press the **TARE/PRINT** key to ensure the balance is zeroed.

2. Place an item on the scale and press **ON/MEM** when the display is stable. This action adds the displayed weight into the memory buffer which is normally set to zero. The display will show "0.0" again.

3. Repeat step 2 above as many times as you need, until you are ready to see the cummulative result.

4. To view the cummulative weight, press **ON/MEM**. The total is displayed and memory cleared.
5. Press **TARE/PRINT** again to zero out the balance and the scale is ready for normal weighing again.

IX. Calibration

Calibration and adjustment are performed at the factory. However, the weighing range can shift slightly during shipping. Also, due to changes in local acceleration of gravity around the world, adjustment is recommended when moving the scale from one location to another. To check calibration:

1. Place the required calibration weight on the scale and note the displayed value.
2. If the displayed value is not within acceptable tolerance (see chart below), adjustment is required.

Model	Acceptable Tolerance (±)	Calibration Weight	Recommended Accuracy Class
LB-501	0.03g	400g	OIML M2
LB-1000	0.2g	400g	OIML M2
LB-3000	0.2g	1000g	OIML M2

X. Adjustment

1. Press and hold the **MODE/CAL** key until the display shows "CAL".
2. Press the **MODE/CAL** key again. The display will flash "CAL" followed by the calibration weight value (see chart).
3. Place the calibration weight on the center of the weighing platform. Make sure you are using the correct weight for your specific model.

4. Once the weight is accepted, the display will show "PASS" then return to normal operation. Calibration is complete!

XI. Troubleshooting

- **Problem:** Scale will not turn on
- **Solution:** Check the batteries

- **Problem:** Displayed weight fluctuates randomly
- **Solution:** Make sure your workspace is stable and free of any air currents or vibration

- **Problem:** Displayed weight is inaccurate
- **Solution:** Perform a calibration adjustment

XII. Error Codes

1. **E** - Calibration error. Repeat calibration.
2. **O-Ld** - Maximum capacity exceeded. Remove the extra weight to avoid damaging the load cell.
3. 🔋 - Batteries are low. Replace the batteries.

	LB-501	LB-1000	LB-3000
Max. Capacity	500g	1000g	3000g
Readability	0.01g	0.1g	0.1g
Power	4 x AA or 6VDC 300mA AC-Adapter		
Dimensions	7.3 x 5.5 x 1.5"		
Platform Dimensions	5.2" Ø		
Warranty	10 Year Limited Warranty		

LB-501
500x0.01g
17.64x0.001oz
2500x0.05ct
7716x0.1gn

LB-1000	LB-3000
1000x0.1g	3000x0.1g
35.27x0.005oz	105.82x0.005oz
32.15x0.005ozt	96.45x0.005ozt
643.1x0.1dwt	1929x0.1dwt