AWS

American Weigh Scales

SC-Series User Manual

SC-501, SC-501A (500g x 0.01g)
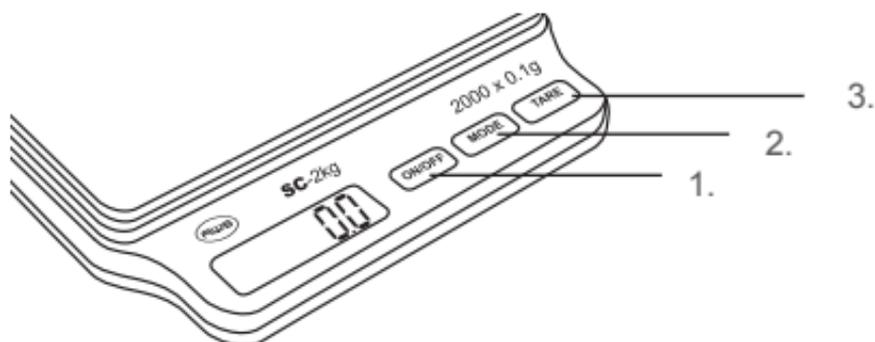**SC-2KG, SC-2KGA (2000g x 0.1g)**

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Thank you for purchasing the American Weigh SC-Series digital pocket 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. This scale has integrated overload protection, but any overload protection has its limits!
- Avoid exposure to extreme heat or cold. Scales perform best at normal room temperature. If temperatures have changed dramatically, recalibration may be necessary.
- Allow your scale to warm up for 30-60 seconds before performing calibration.
- 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 cordless phones.
- Always weigh on a flat and level surface, free from vibrations and drafts.
- 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.
- For best accuracy, calibration should be performed at least once every 12 months, depending on frequency of use. Calibration is already performed at the factory.
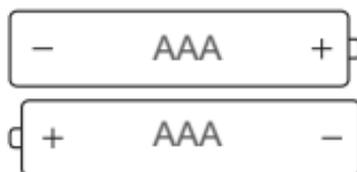
I. Part List

1. Scale
2. Cover/Expansion Tray (1 large, 1 small)
3. AAA Batteries (x2)
4. AC Adapter

II. Key Description

1. **ON/OFF key -** Press to turn the scale ON or OFF.
2. **MODE key -** Changes the displayed weighing unit.
3. **TARE key -** Re-zeros the scale. Used to remove the weight of a tray or container.

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+	AAA	−

Proper Battery Installation

III. Power

Low batteries can cause inaccuracy in digital scales. If you are experiencing issues with your scale, first try new batteries. Most times, this will solve the problem.

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.
3. Only use the included adapter when plugging the scale into AC power. (SC-501A & SC-2KGA only)

IV. Operation

1. Place the scale on a flat, level surface and press the **ON/OFF** 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.
5. To turn the scale OFF, press the **ON/OFF** key again.

V. Changing the Unit of Measure

1. Press the **MODE** 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.
- **SC-501/A Units:** g (gram) ▶ oz (ounce) ▶ ct (carat) ▶ gn (grain)

- **SC-2KG/A 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 (subtractive taring).

1. Place the empty container or vessel on the weighing platform.
2. Press the **TARE** key once. The display will then reset to zero. If the container is removed, its 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** key again to re-zero the scale.

VII. Calibration

Initial calibration is performed at the factory. However, the calibration can drift slightly due to stresses from 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 on next page), adjustment is required.

Model	Acceptable Tolerance (±)	Calibration Weight	Recommended Accuracy Class
SC-501, SC-501A	0.02g	200g, 400g	OIML M2
SC-2KG, SC-2KGA	0.2g	1000g, 2000g	OIML M2

VIII. Adjustment

Do Not Proceed Without Proper Weights (see above)

1. Turn the scale ON.

2. Press and hold the **MODE** key until the display shows "CAL", then release.

3. Make sure no weight is on the platform and press **MODE** again. The display will flash "CAL" followed by the first required calibration weight.

4. Place the first required weight on the platform.

5. Once the first weight is confirmed, the display will flash the second required calibration weight. Place the required weight on the platform.

6. Once the second weight is confirmed, the display will show "PASS" and return to normal weighing mode. Calibration is complete!

IX. Troubleshooting

- **Problem:** Scale will not turn on
- **Solution:** Check the batteries and battery contacts.

- **Problem:** Displayed weight fluctuates randomly
- **Solution:** Make sure your workspace is stable and

free of any air currents or vibration. In some cases, nearby radio wave emitting devices can cause fluctuations. Try new batteries.

- **Problem:** Displayed weight is inaccurate
- **Solution:** Perform a calibration adjustment. If you are still having trouble, contact our warranty department. Make sure you are using a trusted weight to calibrate and adjust accuracy. Adjustment must be performed with the weights listed in the chart on the previous page or inaccuracy will occur.

X. Error Codes

1. **OUTZ (or OUE2)** - Zero point has drifted out of the acceptable range. Try to perform a calibration adjustment. If the problem persists, the load cell may be permanently damaged due to overloading.
2. **O-Ld** - Overload. The maximum capacity has been exceeded. Remove the extra weight to avoid permanently damaging the load cell.
3. **Lo** - Batteries are low. Replace the batteries.
4. **UNST** - The scale is unstable or in motion. Use in a more stable position.

XI. Specifications

	SC-501/A	SC-2KG/A
Max. Capacity	500g	2000g
Readability	0.01g	0.1g
Min. Weight	0.05g	0.3g
Power	2 x 1.5V "AAA" Alkaline or AC-Adapter (5V/500mA)*	
Auto-Off Time	90 Seconds of Non-Use Disabled when using AC Adapter*	
Dimensions	4.1 x 5.0 x 0.7 in.	
Platform Dimensions	4.0 x 4.0 in.	
Warranty	10 Year Limited Warranty	

*SC-2KGA & SC-501A Only

XII.   Capacity/Readability Charts

SC-501/A	SC-2KG/A
500g x 0.01g	2000g x 0.1g
17.64oz x 0.001oz	70.55oz x 0.01oz
2500ct x 0.05ct	64.30ozt x 0.01ozt
7716gn x 0.2gn	1286dwt x 0.1dwt

American Weigh Scales, Inc.

Norcross, GA 30092

Made In China to our exact
specifications and quality control.