

AWS

American Weigh Scales

CÜBE

User Manual



CUBE-100 (100g x 0.01g)

CUBE-650 (650g x 0.1g)

CUBE Manual

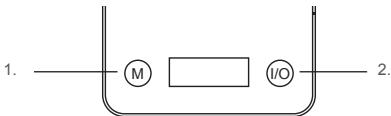
Thank you for purchasing the American Weigh CUBE digital pocket scale. Please read all operating instructions carefully before use. Scales are precision measuring devices and should always be handled with proper care. To ensure years of reliable service, keep these simple tips in mind:

- 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 (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 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.
- Calibration should be checked and adjusted occasionally as part of routine scale maintenance.

I. Part List

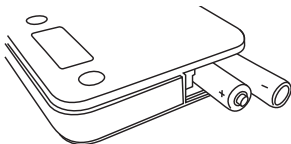
1. Scale
2. Hard Case / Tray
3. AAA Batteries (x2)

II. Key Description



1. **M** - Tap to change weighing unit. Hold to enter calibration (see Section VII)
2. **I/O** - Turns the scale on or off when platform is clear. Zeros the weight of a container or tray if present.

III. Battery Installation



Proper Battery Orientation

Low batteries can cause inaccuracies 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.

IV. Operation

1. Place the scale on a flat, level surface and press the **I/O** 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 **I/O** key again.

V. Changing the Unit of Measure

1. Press the **M** 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.
- **CUBE-100 & CUBE-650 Units:** g (gram) ▶ gn (grain) ▶ oz (ounce) ▶ ozt (troy ounce) ▶ ct (carat) ▶ tl (tael) ▶ 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. Tap the **I/O** key briefly. The display will then reset to zero after a couple seconds. 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 **I/O** 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 (\pm)	Calibration Weight	Recommended Accuracy Class
CUBE-100	0.02g	100g	OIML M2
CUBE-650	0.2g	500g	OIML M2

Adjustment

WARNING: If you do not use the correct weight listed in the above chart for your scale, you WILL miscalibrate and lose the factory calibration.

Calibration requires an accurate weight.

1. Press and hold the **M** button to enter calibration mode. The display will show the required weight.
2. Make sure no weight is on the platform then tap the **M** key again to set the zero point. The LCD will flash "CAL" followed by the required calibration weight again (see chart above).
3. Place the required weight on the center of the scale platform. The display will flash "PASS" then return to normal weighing. NOTE: PASS only indicates that calibration has completed and is not a confirmation that you have used the correct weight.
4. Test the accuracy by placing the same calibration weight back on the platform and checking the value. If the value is within the acceptable tolerance limit above, calibration is complete. If not, try repeating calibration under more stable conditions.

VIII. 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, vibration, and static electricity. Nearby radio wave emitting devices can cause fluctuations.
- **Problem:** Displayed weight is inaccurate
- **Solution:** Perform a calibration adjustment. If you are still having trouble, contact our warranty department.

IX. Error Codes

1. **OUTZ** - 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.

X. Specifications

	CUBE-100	CUBE-650
Max. Capacity	100g	650g
Readability	0.01g	0.1g
Min. Weight	0.03g	0.2g
Power	2 x 1.5V "AAA" Alkaline	
Dimensions	3.1 x 3.1 x 0.7 in.	
Platform Dimensions	3.1 x 3.1 in.	
Warranty	10 Year Limited Warranty	

XI. Capacity/Readability Charts

CUBE-100	CUBE-650
100g x 0.01g	650g x 0.1g
3.527oz x 0.001oz	22.92oz x 0.01oz
3.215ozt x 0.001ozt	20.89ozt x 0.01ozt
64.30dwt x 0.01dwt	417.95dwt x 0.1dwt
500ct x 0.05ct	3250ct x 0.5ct
1543.2gn x 0.2gn	10031gn x 2gn
2.666tl x 0.001tl	13.333tl x 0.001tl

American Weigh Scales, Inc.

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Made In China to our exact
specifications and quality control.