

120-Z / 200Z / 300-Z Owner's Manual & Troubleshooting

Z TROUBLESHOOTING & OPERATION NOTES:

Low Batteries & bad battery connections are the #1 cause of scale malfunction and inaccuracy! We test all of our scale returns from consumers. Fully 60% of consumer returns are battery related problems. This sounds silly but it's true! A scale will perform slowly, or read inaccurately when it has low batteries. Please replace the batteries often (and only use good quality batteries). We include good quality batteries with all of our scales but batteries can run low in storage. If your scale simply won't turn on while on Battery power, this is often caused by loose battery connections. Battery prongs (terminals) are made of metal. They must be making good contact with your batteries in order for the scale to power on. You can use a paperclip to slightly bend the battery prongs to make them have a better connection. Also some poorly designed batteries have recessed or partially obstructed battery terminals. This may cause your prongs to be touching the plastic housing of the battery instead of the metal battery terminal.

- 1) If the Display ever becomes locked showing "Out2", please recalibrate the scale as outlined in the manual
- 2) If the Display ever becomes locked on LLLL or EEEE, this indicates that the scale was shocked, dropped or otherwise damaged and the delicate weighing sensors have been damaged. You can try recalibrating the scale (If the sensor has not been hurt too badly it will work again after recalibration). Otherwise you will have to follow the warranty instructions that came with your scale.
- 3) If the display becomes locked on 8888, this often indicates low batteries. However sometimes it also may indicate a serious zero mark error. This means when you turn the scale on, it can't determine what zero is (a slight zero mark error will cause situation #1 above) Thus, if new batteries do not fix this error the scale will have to be sent to us for replacement under our Lifetime/30 year warranty program.
- 4) If the display shows UNST, this means the scale is not stable. Please try operating the scale on a more stable surface and be sure nothing is on the tray or stuck under the tray when you turn it on. If this situation persists, it may be an indication of fatal load cell damage. Try calibrating the scale - if this does not work please follow the warranty instructions.

Although the Z is designed to be extremely durable, It's important that you never overload or drop/shock the scale. Scales are delicate instruments and unlike Cellular phones, scales have delicate sensors that determine how much an item weighs. If you drop or shock your scale, these sensors "feel" the shock and are sometimes destroyed. This happens with all digital scales. We design our scales to be as resistant to shock or drops as possible, however there is no way for us to protect 100% against load cell or sensor damage. A well-treated scale will provide years of reliable and accurate weighing. However an abused scale will only work until it's sensors are damaged.

PLEASE READ COMPLETE INSTRUCTIONS BEFORE USE

Thank you for purchasing The Z. With normal care and proper treatment it will provide years of reliable service. Please read all operating instructions carefully.

.KEEP THE FOLLOWING POINTS IN MIND:

- * If the display becomes locked on **Out2** please recalibrate the scale.
 - * Avoid lengthy exposure to extreme heat or cold, your scale works best when operated at normal room temperature. **Always allow the unit to acclimate to a normal room temperature for at least one hour before use.**
 - * Allow sufficient warm up time. Turn the scale On and wait several seconds to give the internal components a chance to stabilize before weighing.
 - * The cleaner the environment the better. Dust, dirt, moisture, vibration, air currents and proximity to other electronic equipment can all cause an adverse effect on the reliability and accuracy of your scale.
 - * Handle with care. Gently apply all items to be weighed onto tray top. Although this scale is designed to be quite durable, try to avoid rough treatment as this may permanently damage the internal sensor and void your warranty.
 - * Avoid shaking, dropping or otherwise shocking the scale. This is a precision instrument and **MUST BE HANDLED WITH EXTREME CARE.**
- *IMPORTANT ADVICE: Place the item to be weighed on the platform, after the stable weight is displayed remove the item immediately. This will prolong the longevity and accuracy of this weighing instrument..**

.** These electronic scale are precision instruments. Do not operate near an in-use cell phone, cordless phone, radio, computer or other electronic device. These devices emit RF and can cause unstable scale readings. If your scale ever performs poorly, try moving the scale to a different room or location. This is a very precise scale - the display may seem to wander or jump when weighing. This is due to air currents or vibrations. Stable weighing is achieved when the display remains fixed for 3 seconds.

OPERATION_____

Battery Replacement:

- 1) Three #357 button batteries are required.
- 2) To install batteries:
 - a) Turn the scale upside-down and open the battery compartment
 - b) Place batteries into battery compartment aligned correctly.
 - c) Replace battery cover.

DO NOT USE EXCESSIVE FORCE & DO NOT PRESS ON THE TRAY!!!

- 3) The scale is now ready for battery operation.

(Advanced users only) CALIBRATION_____

NOTE: There are two versions of the 120-Z scale. One has a switch on the bottom of the scale to change the mode from "Cal to Norm". The other does not.


IMPORTANT: This scale was professionally factory calibrated before shipment and does NOT need to be recalibrated by the end user. However, if you wish to recalibrate your scale we provide these instructions


for calibration: Repeat calibration if the scale ever shows Out2. Incorrect calibration can occur if you do not follow the steps exactly. If your scale does not perform accurately, please try replacing your batteries before you calibrate. You will need a 100gram weight to calibrate this scale. *NOTE: if you do not have access to a 100g weight you can purchase one at your local store or in emergency situations you can use 100g of coins or weights (ie 20 US Nickels = 100g) as a 100g weight..*

A) Instructions for the Z that does not have the switch on the bottom of the scale:


1) Turn the scale OFF and Place the it on a Flat, very stable surface


(Be certain the scale is OFF)

2) Press and hold the  key for 10 seconds until a random large number appears on the display - then release the key.

3) Press the  key again, the display will show 2Ero and then 100.0

4) Gently place a 100 gram weight on the scale and wait 3 seconds.

5) Press the  key. The display will show CAL and then PASS,


calibration is complete. Remove the weight, then Press and hold the  key for 5 seconds to turn the scale off.

NOTE: if after calibration your scale does not read accurately, this indicates calibration error and the calibration process should be repeated more slowly.

Please calibrate on a very stable flat surface


B) Instructions for the Z with the switch on the bottom of the scale:

1) Turn the scale OFF, Slide the switch on the bottom of the scale from "Norm" to "CAL". Then Place the scale on a Flat, very stable surface (Be certain the scale is OFF)

2) Press the  key, a random number will appear on the display

3) Press the  key again, the display will show 2Ero and then 100.0

4) Gently place a 100 gram weight on the scale and wait 3 seconds.

5) Press the  key. The display will show CAL, PASS, then it will return to normal weighing and show 100.0.

6) calibration is complete. Remove the weight, then slide the switch on the bottom of the scale from "CAL" to "Norm".

INACCURACY / ERROR

The primary reasons for inaccuracy or malfunction are low batteries, incorrect calibration, overload or operating on an unstable surface. Please keep this in mind and maintain and operate your scale properly. The scale is a precise instrument and must be handled with the upmost care and caution.

FEATURE

* **Power Up Segment Test**

When first turning the unit on, all segments of the display will appear as shown below. This display will remain for approximately 2 seconds and then reset to 0.

1:8:8:8:8

* **Overload**

When an applied load exceeds the capacity. "EEEE" will appear on the display. Remove the excessive load immediately!

!Remember: You can permanently damage the scale by overloading it!

* **Negative Value**

Any tarred value or a value left in memory will be displayed as a negative number once all weight is removed from the unit. Press tare to re-Zero the unit.

* **Auto off**

An auto shut off feature is provided to conserve battery power. The unit will automatically turn off after approximately 3 minutes of inactivity.

***Stable Indicator**

There is a stable indicator that appears on the left side of the LCD whenever the scale is stable and at Zero

KEY PAD FUNCTIONS

* **UNIT (the left key)**

Unit (mode) selection: Press and hold the left key to change weight unit You can select g (grams), oz (ounces), dwt (pennyweight) or ct (carats).

* **ON/OFF**



Press this key to turn unit on. Once the unit is on, press and hold the same key for 5 seconds to turn the scale off

* **Special Tray/Cover**

The protective cover of the Z is designed to also be used as a platform expansion tray. Simply remove the cover, turn it upside-down, and place it on the scale's weighing platform. Now turn the scale ON and the scale will automatically TARE (zero) itself with the tray on the scale.(if this does not work properly, you can turn the scale ON, then place the upside down cover on the tray and press the TARE key) This is perfect for weighing loose objects, gunpowder, gems, Chinese herbs and more.

Please keep the protective cover installed when the scale is not in use (it will help protect the scale from possible damage)

* **ZERO (TARE)**

After the scale is ON, you can press  to reset the scale to zero. This can be used for eliminating from a sample (or a Tray/Container) the weight value of a container weight is permanently removed for the remainder of the procedure. Just turn the scale ON, place the tray or container on weighing platform, and press the  key. The scale will show 0.0 (or 0.00) on the display and you can add items to the container/tray.

NOTE: When all weight are removed from the weighing tray, the tared value of a container will be displayed as a negative number. Cycle the power on the scale to reset the scale to zero.

** These electronic scale are precision instruments. Avoid disturbing environmental conditions such as currents, vibrations, strong electrical and magnetic fields as well as a rapid change of the ambient temperature.