

# GMB-503/506/512 Digital Weighing Scale Operation Manual

---

Version 2.1



---

Gamma Scale  
Tel: (905) 455-8333  
Fax: (905) 455-0658  
E-mail: [info@gammascale.com](mailto:info@gammascale.com)  
Website: [www.gammascale.com](http://www.gammascale.com)

# CONTENTS

1. Parameters and Specification
2. Functions
- Turn on LCD backlight (2.6)
3. Appearance and Construction
4. Operation Keys
5. Use Guide
6. Operation
7. Battery Maintenance

## 1. Parameters and Specification

- 1.1 Accuracy class: OIML III
- 1.2 Load cell excitation: DC5V
- 1.3 Operation temperature: -10°C ~ +40°C
- 1.4 Relative humidity: < 85% (no condensation)
- 1.5 Display: 6 digit 0.56-inches LCD with backlight or 6 digit 0.4-inch LED
- 1.6 Power supply: AC adaptor of 9V 300mA;  
                    DC: 6 pieces 1.5V AA battery or 6 pieces 1.2Ah rechargeable  
battery
- 1.7 Baud rate: 600, 1200, 2400, 4800 and 9600 (optional)
- 1.8 Platter size: 190 x 200(mm)
- 1.9 Net weight: 2kg
- 2.0 GMB-5xx capacity: 1kg, 3kg, 6kg, 12kg

## 2. Functions

- 2.1 Auto zeroing after power on
- 2.2 Full range tare
- 2.3 Unit converting (kg/lb/oz)
- 2.4 Low voltage indicating
- 2.5 Saving mode (only LED display)
- 2.6 Turn on backlight  
*Keep pressing ZERO for 3 seconds will turn on backlight (for LCD display only)*


## 3. Appearance and Construction

### **3.1 Operation key**

- [CAL] key
- [UNITS] key
- [TARE] key
- [ZERO] key

### **3.2 Display**

- 3.2.1 6 digit 0.56-inch LCD or 6 digit 0.4-inch LED display
- 3.2.2 LCD display with backlight
- 3.2.3 Indicating Cursor

Cursor	Description
→0←	Appears when the weight is within + 0.25e (initial zero setting range)
AC	Appears when AC power is used
	Appears when DC power is droved by storage battery
T	Appears when taring is effective and there is a tare value in storage
lb	Appears when the weight unit selected is "pound" and after the scale is stable
kg	Appears when the weight unit selected is "kilogram" and after the scale is stable
oz	Appears when the weight unit selected is "oz" and after the scale is stable

Note: The indicating cursor for the unit is also stabilization cursor.

## **4. Operation Keys**

### **4.1 [CAL]**

- a. Used for simple rectifying and calibration
- b. Make the digit increase in 0 — 1 — 2 — - - - — 9 — 0 sequence

### **4.2 [UNITS]**

- a. Used for unit converting between lb / kg and oz.
- b. Choose the digit place

### **4.3 [TARE]**

- a. Tare
- b. Confirm the present operation in simple rectifying and calibration

### **4.4 [ZERO]**

- a. Zeroing within zero setting range
- b. Switch on backlight after keep pressing for 3 seconds (only LCD display)

## 5. Use Guide

- 5.1 Do not use under the environment of heavy dusty and high vibration.
- 5.2 Place the article in the center of the platter as far as possible.
- 5.3 Never use high corrosive solvents to clean it.
- 5.4 Do not weigh overload, weight (tare included) can't exceed its Max. Capacity plus 9d ("d" is division value). If the weight exceeds this value, the indicator will display as "FULL", and may possibly give out beep sound.
- 5.5 Do not place article on platter for a long period of time and never bump platter in a sudden, otherwise, the load cell may be damaged.
- 5.6 Be sure that the ground terminal of AC power is properly grounded.
- 5.7 Don't disassemble it without authorization.
- 5.8 If the display doesn't change during operation, turn off the switch of battery and pull out the adaptor plug, then turn on the scale again.
- 5.9 If something is wrong, immediately turn off the switch of battery (or storage battery) and pull out the adaptor plug. Non-professional staff can't fix it without authorization.  
Contact our sales agent in local area.
- 5.10 To recalibrate the scale, do it after warmed up for 30minutes.

## 6. Operation

### **6.1 Power-on**

- 6.1.1 Connect power adaptor and switch on the scale with AC power. The scale will give out beep sound and display a version number. At the same time, the backlight is light on for about 1 second, then displays the max capacity, finally to execute self-checking from 9 to 0. If zero position is normal, the display will show "0.00".
- 6.1.2 Set the switch at 'I' side directly to power on scale with DC power.
- 6.1.3 When the display is LCD, after the adaptor is inserted, DC power will also be cut off even if the switch is set at "I" While the display is LED, press the switch at "I" side, DC power is on, otherwise, DC power is off.
- 6.1.4 If the "Lo-bat" appears, change the battery or to charge the storage battery in time. Otherwise, it will shut off power automatically.
- 6.1.5 When the display is LED, in order to prolong the battery working time, the scale has been set a saving mode, i.e. within 10 seconds, if the scale remains at zero and no keypad is pressed, the scale will display only "0".

### **6.2 Zero setting**

When the weight is within  $\pm 2\%F \cdot S$ , press [ZERO] to make the indicator displays "0". The repeated zero range is  $\pm 5\%F \cdot S$ .

Note: Under tare state, zero setting does not work.

### **6.3 Tare**

Place the load on platter, press [TARE], the scale will display "0", and the cursor on "T" appears:

If press [TARE] again, it will return to the original tare value and at the same time, the cursor will disappear.

If removing the load, the scale display a negative value, press [TARE] again, "0" displays and the cursor disappears.

<b>Steps</b>	<b>Display(kg)</b>	<b>Description</b>
Load the deducting-tare article on the platter	0.10	The tare weight is 0.1 kg.
Press [TARE]	0.00	Tare storing is effective, the cursor "T" appears.
Remove the article	-0.10	A negative tare value.
Press [TARE] again	0.00	The negative tare is cleared and the cursor "T" disappears.

### **6.4 Weight unit converting**

When the unit converting function is allowed, press [UNITS] to switch the weight unit between "kg", "Lb" and "oz", the relevant cursor will appear.

## **7. Battery Maintenance**

When the "Lo-bat" appears, if using the rechargeable battery, please recharge them in time. Otherwise immediately replace them with 6 pieces new AA battery.