GP100-USB and GP250-USB

Electronic General Purpose Bench Scale

User Instructions

AWT 35-500825
Issue AC

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1 General Information and Warnings

The GP family of bench scales is intended to be used as a general purpose, portable bench scale to weigh objects or packages for determining shipping weights and weight verification.

The GP series is not intended for “Legal for Trade” applications. Brecknell offers other “Legal for Trade” scales, you can visit our web-site at www.brecknellscales.com.

1.1 About this Manual

This manual is divided into chapters by the chapter number and the large text at the top of a page. Subsections are labeled as shown by the 1 and 1.1 headings shown above. The names of the chapter and the next subsection level appear at the top of alternating pages of the manual to remind you of where you are in the manual. The manual name and page numbers appear at the bottom of the pages.

1.1.1 Text Conventions

The keys used to interface with the GP100/250 are located on the front panel of the indicator. The keystrokes are shown in **BOLD** between brackets. (e.g. **[ZERO]**)

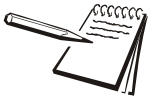
Displayed messages appear in ***bold italic*** type and reflect the case of the displayed message.

1.1.2 Special Messages

Examples of special messages you will see in this manual are defined below. The signal words have specific meanings to alert you to additional information or the relative level of hazard.

CAUTION!
This is a Caution symbol.
Cautions give information about procedures that, if not observed, could result in damage to equipment or corruption to and loss of data.

ELECTRICAL WARNING!
THIS IS AN ELECTRICAL WARNING SYMBOL.
ELECTRICAL WARNINGS MEAN THAT FAILURE TO FOLLOW SPECIFIC PRACTICES OR PROCEDURES MAY RESULT IN ELECTROCUTION, ARC BURNS, EXPLOSIONS OR OTHER HAZARDS THAT MAY CAUSE INJURY OR DEATH.



NOTE: This is a Note symbol. Notes give additional and important information, hints and tips that help you to use your product.

1.2 Specifications

Construction	22 gauge steel
Capacity	GP100: 0 – 100 x 0.2 lbs / 0 – 45 x 0.1 kg
	GP250: 0 – 250 x 0.5 lbs / 0 – 110 x 0.2 kg
Accuracy:	+/- 3 divisions: GP100 - 0.6 lbs / 0.3 kg)
	GP250 – 1.5 lbs / 0.6 kg
Display	Large 1” High Backlit LCD
Platter Size	10.95”W x 12.50”L x 2.20” H
Keypad	Discrete keyboard switch with ZERO/ ON/OFF, UNITS, TARE, and HOLD.
Power	One 9 volt battery (included) or USB cable if available. AC Power supply is optional.

1.3 Features

Auto Power Off

The unit is factory configured for the unit to shut off after 2 minutes of non-use. This feature is designed to save the battery and backlit display life. If the scale is going to be powered via the USB cable and you would like to disable the Auto Power Off feature, see page 9 for detailed instructions.

Units

This feature is factory configured for the UNITS switching feature to be active. The **[UNITS]** key allows you to weigh or compare weights in Pounds (lb) or Kilograms (kg). When powering the scale on, the units of measure default, lb or kg, will be used depending on your country of origin. The default weighing unit is identified by the annunciator on the display. See page 10 for detailed instructions on changing the default units of measure or deactivating the **[UNITS]** button.

TARE

The tare feature is used when you want to weigh items on the scale while using an empty container to hold them in place on the scale. Simply place the empty container on the scale, press the **[TARE]** key, the scale will now display ***0.0*** weight. Place items in the empty container to obtain the actual weight of the items in the container. See page 8 for detailed instructions.

HOLD

The Weight HOLD feature is used when you have a object placed on the scale that is to large for you to view the weight on the display. Pressing the **[HOLD]** button prior to placing the object on the scale will activate the hold feature. Once the item is placed on the scale for 2-5 seconds, remove the object and the scale will display the average weight of the item. See page 9 for detailed instructions.

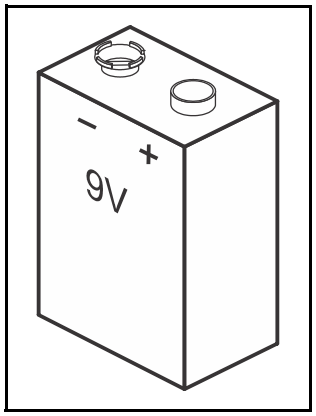
1.4 Installation

Carefully unpack and inspect the shipping container for evidence of shipping damage. If such evidence is discovered, stop unpacking and immediately notify the shipper to arrange to have the shipment inspected by an authorized representative. All damages must be promptly filed with the shipper.

1. Open the box and carefully remove the scale from the shipping carton (save the shipping carton for future use).
2. Place the scale on a flat level surface free from vibration.

1.5 Battery Installation

CAUTION!
Use 9V Alkaline battery only! No other type provides a suitable power output.



1. Remove the cover on the underside of the scale. See (a) in Figure 1.1.
2. Place the battery firmly into the battery holder.
3. Connect the terminals to the battery. See (b) in Figure 1.1.
4. Reinstall the battery cover

.

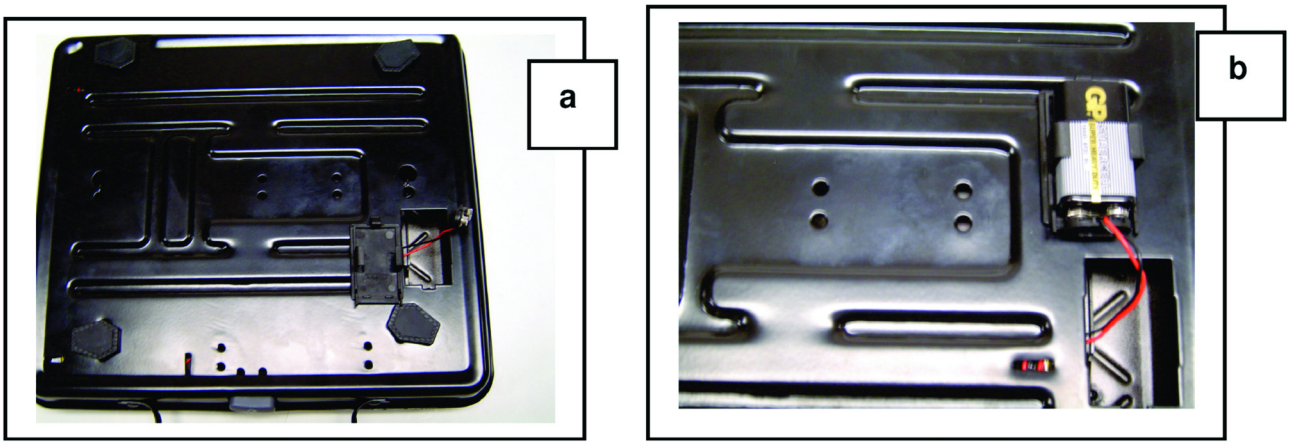


Figure 1.1 Battery Replacement

1.6 Routine Maintenance

IMPORTANT: This equipment must be routinely checked for proper operation and calibration.
Application and usage will determine the frequency of calibration required for safe operation.

Always turn off the machine and isolate from the power supply before starting any routine maintenance to avoid the possibility of electric shock.

1.7 Warranty

This product has a 1 year warranty from the date of delivery against defects in material and workmanship. This warranty does not apply if the product was subject to misuse, neglect, damage or abuse. Calibration is not covered under warranty

1.8 Cleaning and Care

- Handle the scale with care. Dropping the scale may cause damage to the scale, which will not allow the scale to weigh properly. This type of damage is considered abuse and violates the product warranty.
- To avoid damage to the scale, never drop heavy objects or exceed capacity on the scale.
- Clean the scale with a slightly damp cloth. DO NOT immerse the scale in water or use chemical/abrasive-cleaning agents.
- If the scale is not being used for a long period of time, remove the battery or turn off the scale.

2 General Operation

2.1 Key Functions

2.1.1 Zero/ON-OFF

This key performs three functions.

- Turn on the scale
- Returns the scale to zero weight
- Turn off the scale.

Turn ON power to the scale:

1. Remove all items from the scale. Press the **[Zero/ON-OFF]** key.
2. The display will show perform a display test ***8888*** then ***0.0***.

Turn OFF the power to the scale:

1. Press the **[Zero/ON-OFF]** key for 3-5 seconds.

Zero to the scale:

1. Press the **[Zero/ON-OFF]** key if the scale will not return to zero weight or a negative weight appears on the display.

NOTE: It is recommended to press the **[Zero/ON-OFF]** *key before placing an item on the scale. This will help ensure the accurate weight readings.*

2.1.2 Tare

To use the tare feature:

1. Place an empty container on the weighing platform.
2. Press the **[TARE]** key. The scale will display zero weight.

   When an item is placed on the container, the scale only displays the weight of the item, not the weight of the container and the item.
3. To reset the scale for no tare, remove the container and its contents from the weighing platform and press the **[TARE]** key.

The tare function will work over the full weighing range of the scale but will not extend the overall capacity of the scale.

2.1.3 Units

The unit is factory configured for the units switching feature to be active. The **[UNITS]** key allows you to weigh or compare weights in pounds (lb) or kilograms (kg). The displayed weight being used can be identified by checking to make sure the bullet on the display is pointing to lb or kg.

See page 10 for detailed instructions on changing the default units of measure or deactivating the **[UNITS]** key.

Press the **[UNITS]** key to scroll between lb and kg displayed weight.

2.1.4 Hold

This key is used when you are unable to view the displayed weight because an item is larger than the weight platter and display. Pressing this key will hold the stable weight in the display, after the package has been removed.

To use the weight Hold feature:

1. Remove all items from the scale, making sure the scale is at zero weight.
2. Press the **[HOLD]** key. An annunciator will flash indicating weight hold is active.
3. Place an item on the scale, wait two seconds for the weight to become stable.
4. When the weight becomes stable, the *Hold* annunciator will no longer flash.
5. Remove the item, from the scale. The weight of the item will be held in the display.
6. To clear the display, press the **[HOLD]** key.

2.2 Auto Power Off Configuration

The default setting for sleep mode is 120 seconds. The sleep mode can be configured to 120, 240 seconds or OFF via keyboard. If there is no activity, the scale will turn itself off after 120 seconds.

The Auto Power Off feature can be changed, when needed, by the following instructions:

1. With the scale turned on, remove all weight from the scale
2. Press and hold the **[TARE]** key for 3 seconds. The display will read ***TARE***, ***SET***, ***Unit***
3. Press the **[UNITS]** key to scroll to the next selection ***A.OFF***
4. Press **[TARE]** key to enter into the auto power off configuration menu.
5. Press the **[TARE]** key to accept the current setting or use the **[UNITS]** key to scroll between ***240*** (240 seconds), ***120*** (120 seconds) or ***OFF***.
6. After selecting your desired setting and pressing the **[TARE]** key to accept.
7. Press the **[UNITS]** key twice to scroll to ***END***

8. Press the **[TARE]** key to exit the setting and return the scale to ***0.0*** weight.

2.3 Unit Switching Configuration

The default setting for switching is ON. In this menu you can change the scale to weigh in kilograms (kg) only, pounds (lb) only, or units switching on.

To change units:

1. With the scale turned on, remove all weight from the scale.
2. Press and hold the **[TARE]** key for 3 seconds. The display will read ***TARE***, ***SET***, ***Unit***

To turn OFF units switching and weigh in lbs only:

1. Press the **[TARE]** key enter into configuration menu. The display will read ***kg***
2. Press **[TARE]** key. The display will read ***ON***
3. Press the **[UNITS]** key once to scroll to ***OFF***
4. Press **[TARE]** key. The display will read ***0.1***
5. Press the **[TARE]** key. The display will read ***kg***
6. Press the **[UNITS]** key 5 times. The display will read ***END***
7. Press the **[TARE]** key to exit the setting and return the scale to ***0.0*** weight.

2.4 Scale Calibration

Periodically your scale may require calibration to ensure proper weighing. Calibration may be required if the scale has been improperly used by mishandling or by dropping the scale. You will need an accurate 50 or 200 pound weight to calibrate the scale. If calibration is performed with a weight other than 50 or 200 pounds, it will cause your scale to weigh inaccurately.

IMPORTANT: Do not enter into Calibration Mode without an accurate weight.

To calibrate the scale:

1. Make sure the scale is turned off.
2. Remove all weight from the scale.
3. Press and hold the **[ZERO/ON-OFF]** key and press the **[UNITS]** key three times. The display will read ***CAL***.

3a. Press **[TARE]** to display current calibration units; ***KG*** or ***LB***.

3b. Press **[UNITS]** to select an alternate calibration unit; ***KG*** or ***LB***.

3c. Press **[TARE]** to advance to scale capacity;***100*** or ***250***.

3d. Press **[TARE]** to return to "***CAL***".

4. Press the **[UNITS]** key once to accept and enter into calibration mode. ***1000 - 4000*** is displayed.
5. Press the **[TARE]** key once to zero the scale. ***0*** is displayed.
6. Place ***XX*** weight on the scale (refer to Table 2.1 below).
7. Press **[TARE]** key once to accept the calibration weight. ***CAL*** is displayed.
8. The display will prompt ***CAL*** for 2-3 seconds, then exit the calibration mode and return to normal weighing mode. If the calibration weight is left on the scale, a weight will be displayed.

Table 2.1 Calibration Weight

Model	Calibration Weight (LB)	Calibration Weight (KG)
GP100	50 lb	20 kg
GP250	200 lb	100 kg

Table 2.2 Span Range

Model	Span Range (LB)	Span Range (KG)
GP100	4500 - 9000	4000 – 8000
GP250	18000 – 36000	20000 – 40000

2.5 Connection with a PC

The scale can automatically connect to a PC via a USB cable.

Note: The USB cable is not included with the scale. A USB A to USB B cable is required. Refer to the following photo.

Figure 2.1 USB A to USB B cable

Win 7 users can just plug in the USB and the PC will search and download necessary driver to operate the device. In case this does not happen, please follow the procedure in *Install / Update the USB Driver* on page 12 to download and install the driver.

2.5.1 Install / Update the USB Driver

Use the link below to access the USB Installation Guide. The document provides detailed installation and basic operation procedure and setup.

http://www.brecknellscales.com/downloads/Installing%20335%20USB%20Driver.pdf

2.6 Scale Communications

1. Turn the scale on.
2. Press and hold the **[TARE]** key for 3-5 seconds. The scale will display ***TARE***, ***SET***, ***VERSION NUMBER*** and ***UNIT***.
3. Release the **[TARE]** key when you see ***UNITS*** on the display
4. Press the **[UNITS]** key until ***Port*** on the display.
5. Press the **[TARE]** key and then press the **[UNITS]** key to toggle to the desired software protocol.
6. Once the correct selection is displayed, press the **[TARE]** key to accept.
7. With ***Port*** on the display, press the **[UNITS]** key. ***Baud rate*** will be displayed.
8. Press the **[TARE]** key and press the **[UNITS]** key to toggle to the desired baud rate communication setting needed for your software.
9. Press the **[TARE]** key and press the **[UNITS]** key. ***Par*** will be displayed.
10. Press the **[TARE]** key and press the **[UNITS]** key to toggle to desired parity format.
11. Press the **[TARE]** key to accept the selection. ***Par*** is displayed.
12. Press the **[UNITS]** key and ***End*** will be displayed.
13. Press the **[TARE]** key to exit the menu structure.

NOTE: For UPS Worldship software, you will need to select the NCI protocol, 4800 baud rate, 7 even parity in the scale menu configuration. In the actual UPS software, select the 3835 for type of scale.

3 Troubleshooting

Symptom	Recommended Action
Not weighing correctly or inaccurate weight	The scale is under zero. Press the “ON/OFF(ZERO)” key. or Damage to the scale has occurred, calibrate the scale, see page 6 for instructions. or Press the **[IUNITS]** key, the unit is displaying the incorrect unit of measure, lb or kg.
Weight fluctuates	Press **[ZERO]** key, to zero the scale before placing an item on the scale. or Ensure scale is placed in a stable, level environment free from vibration. or Turn the scale Off, then back on.
“Lo” is displayed	Replace the battery.
“Over” is displayed	The weight placed on the scale is over the scales capacity. Remove the weight from the scale. or The weight placed on the scale plus the tare weight is over the scales maximum capacity. Remove the weight from the scale.
“ErrL” is displayed	The scale is under zero. Press the **[ZERO]** key. or Damage to the scale has occurred, Calibrate the scale, see page 10 for instructions.
After pressing the **[HOLD]** key and placing a weight on the scale, the weight will not hold on the display. The “ . ” continues to flash	Remove weight from scale and place the Weight in the center of the scale. or The scale is not in a stable environment that allows the weight hold feature to work. Remove the item and place it back onto the scale. or Not enough weight is applied for the weight hold to work, minimum weight required is 1 pound.
“ErrE” is displayed	Software error, turn the scale off then on again
“8888” is displayed	Software error, turn the scale off then on again. or **[ZERO/ON-OFF]** key is stuck. Gently free **[ZERO/ON-OFF]** key.
Unit will not stay on	Auto power off is activated, See page 9 for configuration.
Backlit display does not work	Display is broken.
I lost my power supply and battery cover	Contact the factory at 1-800-637-0529 for replacement parts.
Incorrect hold weight	Scale was not able to stabilize and determine a hold weight, repeat hold. or Hold key is stuck, gently free hold button. or Item was not placed on the scale quick enough.

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