



## ***Professional Weighing Equipment***

### **WPB Series intelligent weighing scale**

**HIGH RESOLUTION BALANCE  
WITH COUNTING FUNCTION**



WPB Series

## **Operation Manual**

# Table of Contents

<u>Section</u>	<u>Page</u>
Declaration of	3
Conformity Customer	4
Service Introduction	5
Safety	6
Weight Scale	7
Functions	8
Features	9
Application & Conformity	10
Getting Started	11
Delivery	11
Assembly & Installation	12
Display	13
Weighing	13
Calibration	14
Function Setting	15
Maintenance & Service	16
Transportation & Storage	16
Warranty	17

# Declaration of Conformity

Declaration of conformity for apparatus with CE mark

We hereby declare that the product to which this declaration refers conforms to the following standards.

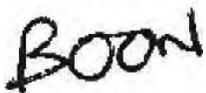
Electronic scale:WPB - High Resolution Balances

USA model

WPB-13 lb

Mark applied	EU Directive	Standards
	2004/108/EC	EN 61326-1: 2006

Signature:



Boon Lim, R & D Manager

Date: 14. 06. 2012

LW Measurements LLC, 620 Carlson Court, Rohnert Park, CA 94928

# Customer Service

## **USA**

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620 Carlson Court  
Rohnert Park, CA 94928  
USA  
Tel: (707) 542-2185  
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<http://lwmeasurements.com>

# Introduction

What you should know about these Operating Instructions:

Tree® Professional Weighing Equipment products are simple to operate.

Nevertheless, you should read through these operating instructions in their entirety, so that you can make optimum use of the full potential and the diverse possibilities of the weighing scale in your daily work.

These operating instructions contain guidance in the form of pictograms and keyboard diagrams, which should help you in finding the required information:

For the labeling of potential hazards and advice, please see Safety below.

# Safety

## Representations and symbols

Important instructions, which involve safety, are highlighted with the appropriate mark:



## Safety recommendations

When using the weighing equipment in surroundings with increased safety requirements, the corresponding regulations must be observed.

The weighing scale may only be used with the power adapter supplied. Before connecting the power adapter to the scale, the user must ensure that the operating voltage stated on the power adapter is compliant with the mains voltage. If not, please contact Customer Service at the address above.

If the power adapter or its cable is damaged, the weighing scale must immediately be disconnected from the electricity supply (pull out the power adapter).

If there should be any reason to believe that it is no longer safe to operate the scale, it should be immediately unplugged from the electricity supply (pull out power adapter) and secured against inadvertent operation.

In carrying out maintenance work, it is essential to follow the recommendations set out in maintenance and servicing.

The weighing scale must not be operated in an area subject to explosion risks.

Care must be taken when weighing liquids to ensure that no liquid is spilled into the inside of the scale or into connections on the rear of the equipment or the power adapter. If liquid is spilled on the scale, it must immediately be unplugged from the main electricity supply (pull out power adapter).

The weighing scale may be operated after it has first been inspected by a service technician.

These operating instructions must be read by each user and should be easily accessible at the workplace at all times.

# Weight Scale

## Construction & Functions

The weighing scale consists of the following parts;

- Weight scale body (1)
- The scale-pan (2)
- The adapters (3)
- Operating manual



## Functions

The HRB Series are high-quality electronic precision weighing scales with counting function and the following specifications

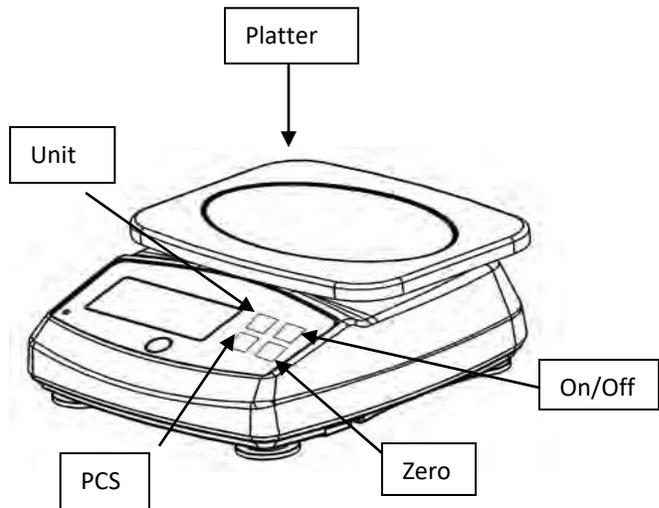
Model number	Capacity	Graduation	Weighing pan Size
WPB 13lb	6000g 13 lb.	0.2g 0.01 oz.	210mm x 160mm 8.3 in x 6.3in
WPB 33lb	15000g 33 lb.	0.5g 0.02 oz.	210mm x 160mm 8.3 in x 6.3 in
Net/gross weight	3100g/3500g / 1.4 lb. / 1.6 lb.		
Package (Standard carton)	4 Units in one box: 65 x 56 x 24 (cm <sup>3</sup> )/ 25.6 x 22 x 9.5 in WPB 3kg/6kg/15kg/30kg:31.5 x27.5 x21.5(cm <sup>3</sup> )/12.4x10.8 8.5 in		
Package (Master carton)	4 Units in one box: 65 x 56 x 24 (cm <sup>3</sup> ) 25.6 x 22 x 9.5 in		
Operating Temp.	0-40°C (32-104°F)		
Power source	WPB Series: 6 x AA dry cells(not included) or AC/DC		
	Adapter :WPB Series: 9V DC/100mA		

# Features

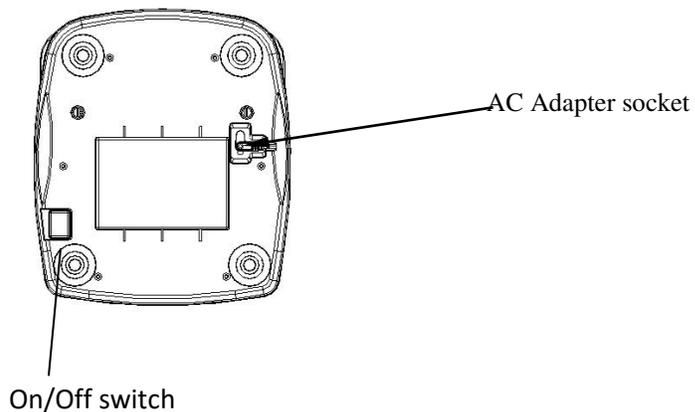
- Auto shut off (selectable)
- Auto zero tracking
- Low battery indication
- Stainless steel casing and platter
- Large square weighing pan
- Net weight/stability indication
- 1/30000 division available
- Auto calibration (AnyCal Software)
- Auto backlight (selectable)
- kg/g/lb/oz/lb:oz conversion
- Counting function

Details of your weighing scale

Top of unit



Bottom of unit



## Application & Conformity

The Following are instructions of how to correctly use the weight scale:

The weighing scale may only be used for the weighing of solid-materials and of liquids filled into secure containers.

The maximum capacity load of the weighing scale must never be exceeded, otherwise the weighing scale may be damaged.

In using the weighing scale in combination with other devices as well as with devices produced by other manufacturers, the appropriate regulations for the safe use of the relevant attachments and their application in accordance with instructions must be observed.

The weighing scale has been manufactured and tested in accordance with the standards and recommendations set out in the declaration of conformity.

The power adapter supplied for the weighing scale complies with the appropriate electrical protection class.

The following applies to WPB series

Power supply:

Use only AC adapter with the scale/balance. Other adapters may cause damage.  
Adapter 9V/100mA

If you have any questions on the technical data or require detailed technical information on your balance, please contact your technical representative.

## **GETTING STARTED**

The scale is packaged in an environmentally-friendly carton, which provides optimum protection for the balance during transportation.

We suggest that you keep the original packaging in order to avoid damage if you are shipping or transporting the scale to a different location. It is also the best way to keep it in the best conditions if it will not be used for an extended period of time.

In order to avoid damage, please follow the instructions provided below, when unpacking the scale:

- Unpack the scale carefully.
- When outside temperatures are very low, the scale should be stored for a couple hours and kept in its box in a dry room at normal temperature, so that no condensation settles on the unit when opening the box.
- Check the scale immediately after unpacking for any external visual damage. If there is any damage on scale, contact customer service immediately.
- If the scale is not to be used immediately after purchase, it should be stored in a dry place where fluctuations in temperature are low. (Reference pg. 16).
- Read through these operating instruction, before you work with the unit and pay attention to the Safety recommendations (reference Safety pg. 6).

## **Delivery**

Inspect delivery for completeness immediately on unpacking all components.

### **Checklist for complete delivery**

	<b>Component delivered present yes / no</b>
Weighing unit body	
Weighing pan	
Power adapter	
Operating manual	

# Assembly & Installation

The weighing scale is delivered in a partly dismantled condition. Assemble the individual components in the following sequence:

- Place your machine on a level, clean, and dry surface to obtain accurate readings.
- Place the stainless steel platter on top of the plastic platter with the flat side facing up.

## Connecting the AC Adapter

The following Safety recommendations must be observed when connecting the scale:



The Scale should only be connected to the mains voltage socket with the power adapter supplied. Check before connecting the power adapter to the mains socket, that the operating voltage stated on the power adapter complies with the local mains voltage. If the operating voltage is not the same as the mains voltage, the power adapter must not be connected to the mains socket and contact customer service.

## Placement of Scale

The location in which the scale is placed is very important in order for the scale to work to its full potential. Certain conditions can affect the capabilities of the scale, conditions like: the presence of air flow, variations in temperature, and direct sunlight. Please follow the recommendations given below in choosing a location to place your scale.

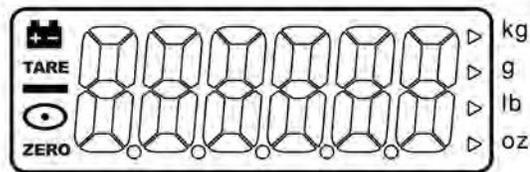
- Place the scale on a solid, firm and preferably vibration-proof, horizontal base
- Make sure that the weighing machine cannot be shaken or knocked over
- Protect from direct solar radiation
- Avoid drafts and excessive temperature fluctuations
- Avoid placing the scale near or on any magnetic surfaces.

## Display messages:

Low Battery

Tare

Zero Function



## Key Functions:

- The On/Off key is to turn the Balance On or Off (Note: it has an On/Off hard switch at the bottom).
- The Zero key allows the user to subtract the container value multiple times within the capacity weight, and is used to set or re-adjust the weighing scale in correct zero position.
- The Print key is to send data to external device through RS232 connector.
- The Unit key is to toggle between different units of measurement.
- The PCS key is for piece counting

## Weighing

Please see our web-site at <http://lwmeasurements.com> for practical demonstrations of application usage.

### Before weighing

#### Error messages:

- Err-O: Overload
-  Symbol: Low battery

### Weighing procedures

- Press switch key at the bottom of the scale to be ON, and press (**ON/OFF**) key to turn on the scale. When power is turned on, the display will show segments and then "0" will appear on the display.
- Select the weighing units with the (**UNIT**) key. Press (**UNIT**) to select a weighing unit, e.g. "kg", "g", "lb", "oz", "lb:oz". Once the unit has been selected, the unit arrow will be displayed next to the weigh value.
- Start weighing. **If you do not use a container for weighing:** Verify if the reading is "0". If not, press (**ZERO**) to display "0". Place the objects on the weighing platform to weigh. When the reading becomes stable, the stability indicator is displayed. **If you use a container for weighing:** Place an empty container on the platform. Wait for the stability indicator to be displayed and press (**ZERO**). Place the objects to be weighed in the container. When the reading becomes stable, the stability indicator is displayed.

### Pieces counting

- Press the “On/Off” to turn on the Balance, wait for “0” to appear on the display, If necessary, press [ZERO] key to set the display to “0”.
- Press “PCS” key to enter “PCS” mode, display will show P = XX
- Press “Unit” key to select XX value (10, 20, 50 or 100).
- Place a given number of samples of one item on the pan, the sample size should be 10, 20, 50 or 100 pieces.
- Press the “PCS” key to confirm sample quantity, start counting by adding weight on the platform.
- Press the “Unit” key to return to the weighing mode.

## Calibration

**Note: Calibration is done in the factory. Do not re-calibrate the scale unless it is not accurate.**

### How to calibrate

Before entering calibration mode, press the switch key at the bottom of the scale to be ON, and then press (**ON/OFF**) to turn the power on for 1 minute for warming up the scales.

- While the scale is in off condition, press and hold (**ZERO**) key then press (**ON/OFF**) key to turn on the scale. The display will show **CAPu=**, Press twice (**PCS**) key, it will show **CALU=** (Calibration unit selection), Press (**UNIT**) key to select unit between kg or lb, the display will show a small unit arrow on the right to indicate kg or lb, press (**PCS**) key to confirm your selection.
- Press (**PCS**) key again to enter next menu, the display will show CAL. Press (**UNIT**) key, the display will show flashed digit. Press (**ZERO**) key to increase the flashed digit, press (**UNIT**) key to move flashed digit, press (**PCS**) key to confirm your selection.
- Press (**ZERO**) key, it will show CAL and then the AD value, press (**UNIT**) key, it will show a flashing calibration weight, put the shown weight on the platform and wait the stability indicator shows, then press (**UNIT**) key to confirm, the display will show ----- and then the AD value, now the calibration is done. Press (**ON/OFF**) to turn off the scale, press (**ON/OFF**) again to turn on the scale to test if the weighing is accurate, if not, repeat above step.

If calibration is repeatedly incorrect then: 1) Replace the batteries, 2) Try a more stable surface and interference free location.

## Function Settings

- Enter function setting menu. Press **(ON/OFF)** to turn the power off. Press and hold **(PCS)**, then press **(ON/OFF)** to turn on the scale, the display will show **A\_ON** or **A\_OFF**, it enters the function setting menu now.
- Selection of auto backlight mode. After the scale enters function setting menu, press **(PCS)** key, the display will show **L\_ON** or **L\_OFF**, press **(ZERO)** for selection of **L\_ON** or **L\_OFF**, **L\_ON** means backlight function active **L\_OFF** means auto backlight function inactive.
- Selection of auto shut off mode. After the balance enter function setting menu. Press **(PCS)** key, the display will show **A\_ON** or **A\_OFF**, press **(ZERO)** for selection of **A\_ON** or **A\_OFF**. **A\_ON** means auto shut off function active, **A\_OFF** means auto shut off function inactive.
- Return to weighing mode. Press **(ON/OFF)** to turn the power off, press **(ON/OFF)** again to turn on the power and the scale returns to weighing mode.

## Maintenance & Service

The weighing scale is a precision instrument, it must be treated carefully and cleaned regularly

### **DANGER**

For maintenance-work, the balance must be disconnected from the power supply (remove power adapter plug from socket). Also ensure that the balance cannot be connected to the power supply during the work by a third party.

Make sure that no liquid spills into the scale while performing maintenance work. If liquid is spilled on the scale, it must be inspected by a service technician.

Regularly perform maintenance to the weighing pan and the weighing pan holder by removing any dirt or dust from under the weighing pan and on the weighing scale housing. Use a soft brush or a soft, lint-free cloth, moistened with a mild soap solution

### **CAUTION**

Never use solvents, acids, alkalis, paint thinners, scouring powders or other aggressive or corrosive chemicals for cleaning; these substances can cause damage to the surfaces of the scale housing.

## Transport & Storage

Your weighing machine is a precision instrument, treat it carefully. Avoid shaking, severe impacts and vibration during the transportation. Make sure that there are no marked temperature fluctuations during the transportation and that the weighing machine does not become damp (condensation).

If you would like to take the weighing machine out of service for an extended period, disconnect it from the electricity supply, clean it thoroughly (refer to Maintenance & Service) and store it in a place which meets the following conditions:

- No violent shaking, no vibrations
- Minimum temperature fluctuations
- No direct solar radiation
- Minimum moisture

## Warranty

The products are under warranty against factory defects for a period of two (2) years from the date of shipment.

For Customers within the lower 48 states of the continental United States. LW Measurements will pay for freight both ways for the first 30 days after purchase. After 30 days expire the customer is responsible for shipping the product back to us. After the product is received we will inspect it and as necessary we will repair or replace and will ship the product back to the customer at our expense.

Any new scales returned for warranty must be properly packaged in the original box. If they are not properly packed and in the original box, the customer pays for shipping cost. If we determine there is a factory defect, we will pay for the shipping back. If we determine that it is not a factory defect, the customer will pay shipping.

For Customers outside the lower 48 States, including Mexico, Canada, Puerto Rico, Hawaii, Alaska and all other countries, customers must pay for shipping.

Our warranty does not cover misuse or neglect including but not limited to battery or water damage, overloading, and chewed or cut wires. If the product is found to have been misused or damaged by the customer, LW measurements is not responsible for the cost of return.

For warranty claims please go online to [lwmeasurements.com](http://lwmeasurements.com) and fill out the warranty submission form or call your customer service representative.