# WESTLAB ANALYTICAL BALANCE


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Thank you for choosing this equipment. We trust you will enjoy your electronic balance, series MP. We highly recommend looking after this equipment according to what is stated in this manual.

We develop our products according to CE marking regulations as well as emphasizing ergonomics and security for its user.

Correct usage of the equipment and its good quality will allow you to enjoy this equipment for years.

Improper use of the equipment can cause accidents, electric discharges, fires and other damage.

TO GET THE BEST RESULTS AND A LONGER LIFE SPAN OF THE EQUIPMENT IT IS ADVISABLE TO READ THIS MANUAL THOROUGHLY BEFORE OPERATING IT.

Please note the following:

- This manual should not be separated from the balance and it should be readily available for all users.
- Handle the balance carefully, avoiding sudden movements, knocks, free fall of heavy / sharp objects on to it. Avoid spilling liquids on the equipment.
- Never dismantle or try to repair the balance yourself; it can cause injury and it would void the product warranty.
- To prevent fire or electric discharges avoid using in dry or dusty environments. In the event that it does happen unplug the equipment immediately.
- If you have any doubt about the set up, installation or functioning of the unit do not hesitate to contact Westlab.
- This equipment is protected under a 2 year warranty.
- Maintenance is not covered by the equipment warranty.
- Repairs made by non-qualified staff will automatically void the warranty.
- Accessories, including their loss, are not covered by the product's warranty. The warranty also does not cover product deterioration cause by the passage of time.
- Please make sure you keep the invoice it will be required to make a claim for warranty coverage. If retuning the equipment for warranty coverage you should enclose a copy of the invoice.
- Manufacturer reserves the right to modify or improve the manual and equipment.

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## 1. SPECIFICATIONS

Precision balances MP series work on a high precision strain gauge load cell which implements high speed stabilization and high reliability.

### Technical parameters

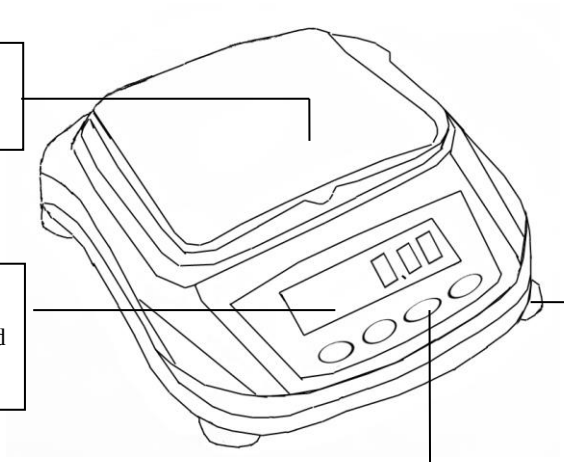
| Code | 663-462C | 663-466C | 663-512C |
|---|---|---|---|
| Max. capacity (g) | 200 | 600 | 2000 |
| Tare range (g) | 0-200 | 0-600 | 0-2000 |
| Readability | 0.1g | | |
| Pan size (mm) | 143*192mm | | |
| Dimensions (LxWxH) | 280x180x80mm | | |
| Power supply | AC 110-120V/220-240V | | |

| Code | 663-507C | 663-508C |
|---|---|---|
| Max. capacity | 200 | 500 |
| Tare range (g) | 0-200 | 0-500 |
| Readability | 0.01g | |
| Pan size (mm) | 133*182mm | |
| Dimensions | 280x180x80mm | |
| Power supply | AC 110-120V/220-240V | |

- High precision load cell
- Full plastic housing
- Stainless steel pan
- Easy to read LCD with backlight
- Overload display indicator
- Low or charged battery display indicator
- Mains adapter supplied as standard
- With built-in rechargeable battery
- Lock/Unlock battery switch
- Height adjustable feet
- Full capacity taring
- Simple 4 key menu for easy operation
- Intelligent calibration
- Selectable measuring units: g, ct, oz, ozt, lb, kg, dr, gn, m, mm, tlJ, tlt, tlh, 95m, tmr, TAR, PKT.
- Piece counting function

## 2. DESCRIPTION

### Structure



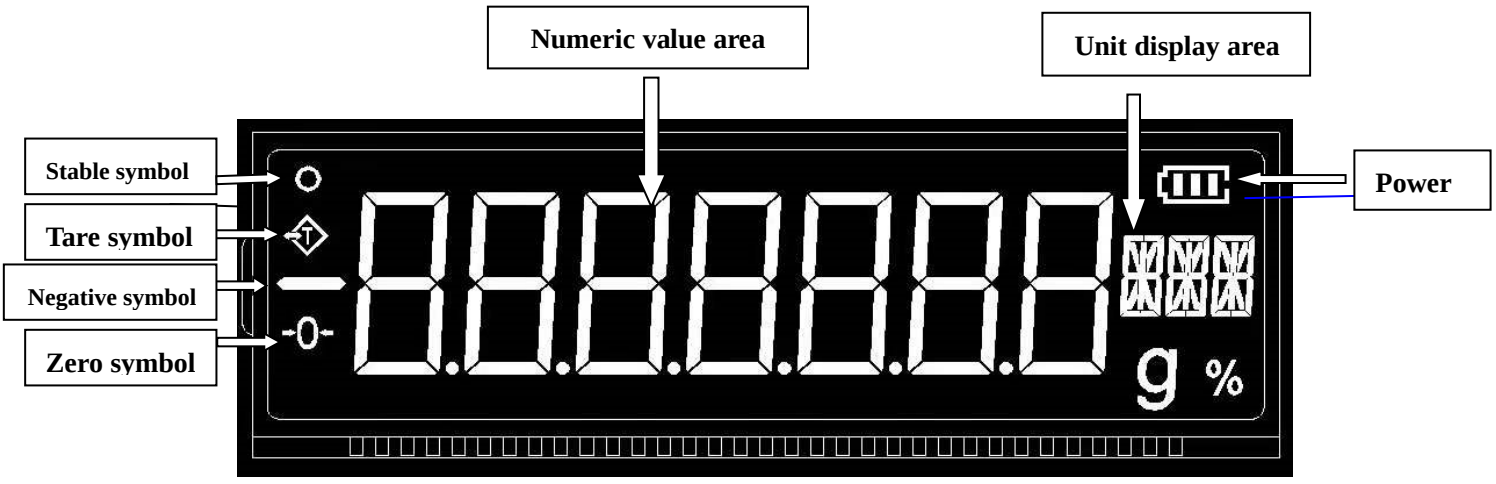
**Pan**
Place the object to be weighed here

**Display panel**
Shows the weighing results and parameter information

**Leveling screws**
Adjust to level the balance

**Operation keys**
Used to turn the balance on and off, tare the balance and perform calibration.

### Name and function of the components



**Operation key functions**

| Key | In weighing mode | |
|---|---|---|
| | Press once and release | Keep pressed for a while |
|  | To turns the balance on and off | — |
| CAL | — | To make calibration |
| UNIT/COU | To convert the units | For piece counting mode |
| TARE | To tare | — |

## 3. INSTALLATION

**Choosing the installation place**

The measuring performance of the balance is greatly influenced by the environment where it is installed.

Observe the following points to ensure a safe and accurate weighing.

### Caution


**Do not use the balance anywhere exposed to explosive, combustible or corrosive gases. This could result in fire or other serious problems.**

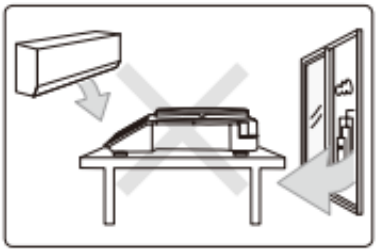

**Use the correct power supply and voltage with the balance.**

Using an incorrect power supply or voltage with the balance will lead to fire or trouble with the balance.

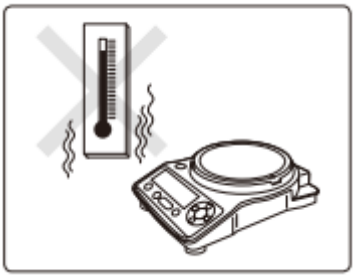
Note also that if the power supply or voltage is unstable or if the power supply capacity is insufficient, it will not be possible to obtain satisfactory performance from the balance.


**Avoid locations where the balance will be exposed to any of the following situations:**

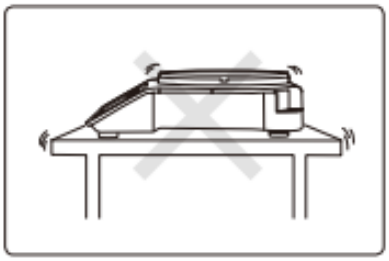
¤ Air flow from an air conditioner, ventilator, door or window.



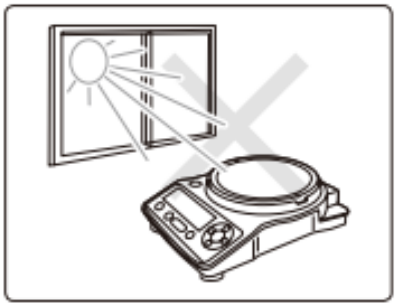
¤ Extreme temperature changes



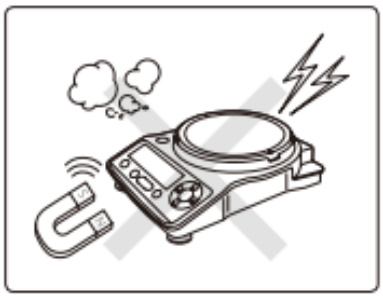
¤ Vibration from surroundings or nearby equipment



¤ Direct sunlight



¤ Dust, electromagnetic waves or a magnetic field



Instructions

**Install the balance on a strong and stable flat table or floor.**

Placing the balance in an unstable site could lead to inaccurate readings, general trouble with the balance or injury to users.

When selecting the installation site, take into account the combined weight of the balance and the item to be weighed.

## Unpacking and delivery inspection

Check that all of the items indicated below are included in the package, and that nothing has been damaged:

- Balance
- Pan
- Instruction manual
- Power Cord

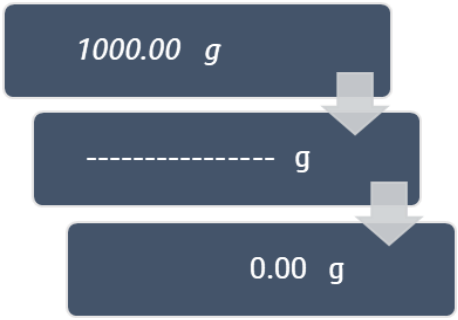
If the balance or any component appear to be damaged due to transport, inform Westlab immediately so we can make a claim.

**Turning the power on**

1. Insert the plug of the power cord into the DC connector at the back of the balance.
2. Unlock the rechargeable battery by the switch at the bottom of the balance.

**Note:** if you are not using the balance for a long period of time lock the battery to preserve it in good condition.

3. Connect the power cord to the electrical outlet.
4. Press “ON”; The display will automatically light on and go through the changes indicated below:




**Warming up**

Before performing calibration on the balance or measuring its accuracy, it is necessary to ensure that the balance is in a stable state.

For balance stabilization it is important that the environmental temperature is stable.

Leave the balance on and in weighing mode for at least 15-30 minutes before performing calibration; this is called “warming up”.

**Calibration**

Perform balance calibration each time the balance is moved, or the temperature/humidity changes a lot. Weights are required for external calibration balances and must be purchased separately.

Necessary calibration weight depending on maximum capacity of the balance

| **Max. capacity** | **Calibration weight** |
|---|---|
| 300 g | 200 g |
| 500 g | 500 g |
| 1000 g | 500 g |
| 2000 g | 1000 g |
| 3000 g | 2000 g |
| 5000 g | 2000 g |
| 6000 g | 5000 g |

Before performing calibration, warm up the balance in advance.

1. Keep pressed “CAL” key; The necessary weight value will flash.

2. Place the calibration weight on the pan; Wait until the flashing weight value display changes to a steady state (e.g. 500.00 g).
3. Remove the weight of the pan; “0.00” will be displayed and the balance will return to the weighing mode.

**Linearity Calibration**

If tolerance (error) after calibration is too high, then it is necessary to make linearity calibration. For this, proceed as follows:

1. Long press CAL key when the number flashes, and long press CAL again.
2. The necessary weight value will flash, put the according weight on the pan and wait until the display shows 0.00g.

## 4. USE OF THE BALANCE

**Weighing function**

1. Enter the weighing mode
2. Place a container on the pan
3. Once the weight on display has stabilized, press “TARE” key; value on display will change to 0.00.
4. Place the sample to be weighed in the container.
5. Once the value on display has stabilized, read the display.

**Piece counting function**

1. Long Press “UNIT/COU” key to enter in piece counting mode; The display will show 10-20-50-100 in sequence.
2. Place the corresponding sample of pieces on the pan. (e.g. put 10pcs sample on the pan, when the display shows 10, press “UNIT/COU” to save the data.) Then it works.

   **Note**: In counting mode, the weight of the pieces must be even and the weight of an individual piece should not be less than the readability of the balance.
5. To return to weighing mode, press “UNIT/COU” key.

**Weighing unit selection**

Balance can perform weighing in different measuring units.
In weighing mode press repeatedly “UNIT” key to consecutively display all available weighing units and select the desired one.
The weighing unit by default is g.

**Overload**

The weight of the sample cannot exceed the rated maximum capacity of the balance; when exceeded, the upper line “----OL-----“ will be displayed. Remove the sample immediately to avoid damages to the balance.

**Energy saving mode**

Press “ON/OFF” key, before entering the weight mode, Double press “TARE” key, then press “UNIT/COU” key to enter the setting mode. It will show “01-diu”. Press “TARE” to until it shows “07-LED”, press “CAL” enter the setting for backlight saving mode. And press “UNIT/COU” to choose below mode.

- 0: display backlite is off
- 1: backlite is on
- 2: backlite of display will turn off after 15 seconds of no use.

To exit energy saving mode, press CAL key to confirm the setting and turn off the balance to enter new mode.

## 5. MAINTENANCE AND CLEANING

***To get the best results and a longer life span of the balance it is essential to follow these processes of use.***

- Follow the steps of use in this manual.
- This manual should be available for all users of this equipment.
- Prevent the balance from sudden movements and knocks, as well as from direct sunlight or air flows. The balance is a precision instrument, you must handle it carefully.
- The balance is supplied with a power cord and must be plugged into a grounded electrical outlet. In case of an emergency unplug the balance immediately.
- Never unplug the power cord by pulling the wire, do it from the base.
- Never use the balance in a wedged location as for example a shelf.
- Never use sharp objects as pens, etc… to press the buttons of the control panel; only use your fingers.
- Never place an object on the pan that is heavier than the maximum capacity of the balance, this could damage the sensor.
- Never submerge or spill liquids on the balance.
- When you are not using the balance for a long period of time lock the rechargeable battery.
- If any liquid comes into contact with the electric parts of the balance, immediately disconnect it from the power supply.
- Only use original components and accessories. Non original parts can damage the equipment and void the warranty.

**Cleaning**

- Never use scouring pads or abrasive chemicals for cleaning metallic parts such as stainless steel, aluminium, coatings, etc. as they damage the balance and produce an early ageing of the equipment.
- Use a fluff-free cloth dampened with soaped water that does not contain abrasives.

**ATTENTION!! THE BALANCE MUST BE PROPERLY CLEANED AND MAINTAINED TO BE REPAIRED BY OUR TECHNICAL SERVICE.**

*Note: According to the in force legislation regarding "Non-automatic weighting instruments" in which balances are included, by means of writ dating from 22nd October, 1994 (BOE 1/3rd/95), these balances must not be used for:*

- *Commercial transactions*
- *Calculating taxes, tariffs, rates, indemnities and other similar canons*
- *Judicial surveys*
- *Pharmaceutical medicine preparations, as well as analysis made in medical or pharmaceutical laboratories*
- *Determining the price or total amount in sale price or in pre-packaged preparations*

***Instructions on environmental protection***

The MP series electronic balance can operate with rechargeable batteries. Batteries contain heavy metals (zinc, lithium, mercury, etc.) that could contaminate water, soils, etc.

At the end of its life cycle, please, do not dispose of this equipment by throwing it in the usual garbage; It must be taken to a facility that recycles electronics and appliances. It does not contain dangerous or toxic products for humans but improper disposal would damage the environment.
The materials are recyclable as mentioned in its marking. By recycling material or by other forms of re-utilization of old appliances you are making an important contribution to protect our environment.
Please inquire at your community administration for an authorized disposal location.