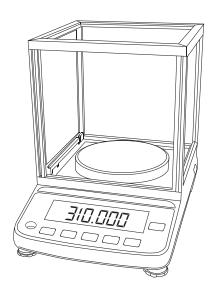


# BALANCE<sup>®</sup> 311



**USER MANUAL** 

# BALANCE 311 USER MANUAL







Capacity 310g x 0.001g

Thank you for purchasing the My Weigh®iBalance® i311 digital scale. Please read all operating instructions carefully before use. This electronic scale is a precision instrument. With normal care and proper treatment, it will provide years of reliable service. For more information please visit www.myweigh.com.

Never load the scale with more than the maximum capacity. Although the iBalance® i311 is designed to be extremely durable with extra overload protection built into the case, overloading will permanently damage it! Avoid any exposure to extreme heat or cold, your scale works better when operated at normal room temperature. Keep your scale in a clean environment. Dust, dirt, moisture, vibration, air currents and/or a close 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. Avoid shaking, dropping or otherwise shocking 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. Failure to follow these instructions will void your warranty.

Always allow the scale to acclimate to normal room temperature for at least one hour before use. Give your scale sufficient warm up time. Usually 30-60 seconds before calibration to give the internal components a chance to stabilize.

# PRECAUTIONS BEFORE USING THE BALANCE

- 1. Matter charged with static electricity can affect accuracy. Discharge all static electricity. For example, one method is to use Static-Guard spray, and spray it on both sides of the weighing platform.
- 2. The balance must be in an exact horizontal position in order to achieve accurate measurement results. In order to bring the balance into a horizontal position, the adjustable feet are turned either clockwise or counter-clockwise until the air bubble on the front panel is in the center of the marked circle.
- 3. Please use an independent power outlet to avoid interference from other electrical appliances.
- 4. Do not put any objects on the platform before powering on.
- 5. When possible please allow the scale to warm up for several minutes before operation.
- 6. Items should always be placed on the center of the platform when being weighed.
- 7. For optimum accuracy, recalibrate frequently.

#### **POWER SUPPLY**

The i311 is powered by DC 6 V/1.3Ah rechargeable battery or directly by DC 9V - 500mA power adapter.

# To connect the rechargeable battery follow these steps:



**1.** The battery compartment is located underneath the scale.



2. Open the screw and remove the battery cover.



**3**. Connect the battery to the terminals.



4. Replace the battery

# **OPERATION INSTRUCTIONS**

# WEIGHING PROCEDURES

- 1. Place the scale on a flat hard surface.
- 2. Press [ON/OFF] to turn on the scale. Wait for "0" to appear on the display.
- 3. Press [UNITS] to select a weighing unit g, ct, oz, dwt, ozt, lb, gn, kg, t, gsm, tar.
- 4. Gently place the items to be weighed on the scale platform.

### TARE

Tare can be used for eliminating the weight value of an empty container. Place an empty container on the scale and press **[TARE]**. Then place the items to be weighed into the container. NOTE: When all weight is removed from the weighing tray, the tared value of a container will be displayed as a negative number. Press **[TARE]** again to return the scale to zero.

# COUNTING / PCS MODE

- 1. Press [ON/OFF] to turn on the scale. Wait for "0" to appear on the display.
- 2. Place the sample size on the tray either 10, 20, 50, 100, 150, 200, 250 or 500.
- 3. Press [PCS] to enter counting mode (the indicator should be on pcs).
- $4. \, Select \, the \, sample \, size \, by \, pressing \, \textbf{[PCS]} \, to \, toggle \, either \, 10, \, 20, \, 50 \, , \, 100, \, 150 \, , \, 200, \, 250 \, or \, 500.$
- 5. Remove the samples from the tray and the scale is ready to count.
- 6. Place the items that you want counted onto the tray. The total number of items will show on the display.
- 7. Press [UNITS] to exit and return to normal weighing mode.

# **Printing**

To print press [PRINT].

io print press [FKINT].

**Baud Rate**: 1200 / 2400 / 4800 / 9600 BPS

Data Format: 8 Data Bit, No Parity Bit, 1 Stop Bit

| Output | WEIGHT: | XXXXXXXX | SP | XXX |
|--------|---------|----------|----|-----|
| Note   | Α       | В        | C  | D   |

- A- Display Weigh
- B- A Symbolic (+/-) 6 Data, Decimal point
- C- The space character
- D- Unit Weight

# FUNCTION SETTINGS (for Advance Users Only)

To access the function settings mode press and hold [TARE] until the display shows "SET-UP".

#### Data Transmission Mode

The first function setting is data transmission mode.

- 1. Press [PRINT] to toggle the settings:
- "P----1" (default) = Single Transmission
- "P----2" = Continuous Transmission
- 2. Press [PCS] to confirm and move to next setting.
- 3. Press [ON/OFF] to exit at anytime.

# **Baud Rate Setting**

The next setting is Baud Rate Setting.

- 1. Press [PRINT] to toggle the settings:
  - "b----1"= Baud Rate 1200
  - "b----2" = Baud Rate 2400 (default)
  - "b----3" = Baud rate 4800
  - "b---4" = Baud Rate 9600
- 2. Press [PCS] to confirm and move to next setting.
- 3. Press [ON/OFF] to exit at anytime.

# **Backlight Setting**

The next setting is backlight setting.

- 1. Press [PRINT] to toggle the settings:
  - "BL----1" = Backlight On
  - "BL----2" = Backlight Off
- 2. Press [PCS] to confirm and move to next setting.
- 3. Press [ON/OFF] to exit at anytime.

#### **Unit Selection**

In this setting you can activate or deactivate weighing units.

- 1. Press [PRINT] to toggle the settings:
  - "ON"=weighing unit activated
  - "OFF" = weighing unit deactivated
- 2. Press [PCS] to confirm and move to the next weighing unit setting and repeat the the activate or deactivate process.
- 3. When all the unit settings have been selected, press [PCS] to confirm and move to next setting.
- 4. Press [ON/OFF] to exit at anytime.

# **Restore Default Settings**

- 1. Press [PRINT] to toggle the settings:
  - "rES--0" = Do not restore default settings
  - "rES--1" = Restore factory default settings
- 2. Press **[PCS]** to confirm and return to the start of the function settings.
- 3. Press [ON/OFF] to exit at anytime.

#### CALIBRATION

When to calibrate - calibration is RARELY required.

Calibration may be required when the scale is first set up for use, or if the scale is moved to a different altitude or new location. This is necessary because the weight of a mass in one location is not necessarily the same in another location. Also, with time and use, mechanical deviations can occur.

How to calibrate: \*\*you must have an accurate 200g weight or combination of weights in order to calibrate\*\*

- 1. Press **[CAL]** to enter calibration mode, the display will flash the required calibration weight.
- 2. Now place the corresponding calibration weight on the platform, the display will show "------".
- 3. Calibration is complete when the display shows the correct reading, you can remove the weight(s).

# **DISPLAY SYMBOLS**

→○← Scale is in ZERO/Tare mode.

BATTERY needs recharging.

The display reading is UNSTABLE.

| SPECIFICATIONS  |               |                                       |                              |  |  |  |
|-----------------|---------------|---------------------------------------|------------------------------|--|--|--|
| Capacity        | 310g x 0.001g | Units                                 | g, ct, oz, dwt, ozt, lb, gn, |  |  |  |
|                 |               |                                       | kg, t, gsm, tar, pcs         |  |  |  |
| Repeatability   |               | ± 0.002g                              |                              |  |  |  |
| Linearity       |               | ± 0.002g                              |                              |  |  |  |
| Stabalization ' | Time          | 4 seconds                             |                              |  |  |  |
| Scale dimension | on            | 290mm x 215mm x 285mm                 |                              |  |  |  |
| Tray dimensio   | n             | Ø 80mm                                |                              |  |  |  |
| Scale Weight    |               | 2 kg                                  |                              |  |  |  |
| Operating ten   | nperature     | Optimum 20°C ± 2.5 °C (68°f ± 36.5°f) |                              |  |  |  |
| Power Source    |               | DC 6 V/1.3Ah rechargeable battery or  |                              |  |  |  |
|                 |               | DC 9V 500mA power adapter             |                              |  |  |  |
| Tare range      |               | Up to scale's maximum capacity        |                              |  |  |  |
| Zero range      |               | $\pm$ 5% of maximum capacity          |                              |  |  |  |

## ADJUSTABLE FEET

on bottom of each corner of the scale



# DATA TRANSMISSION PORT















