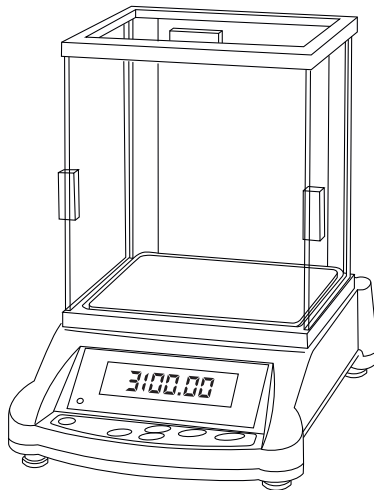




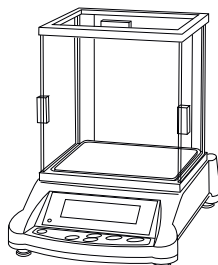
# iBALANCE

## i3100™



## USER MANUAL

# iBALANCE i3100™ USER MANUAL



Capacity  
3100g x 0.01g  
6.8lb x 0.0002oz

Thank you for purchasing the My Weigh® iBalance® 3100™ 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](http://www.myweigh.com)

Never load the scale with more than the maximum capacity. Although the iBalance® 3100™ 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.

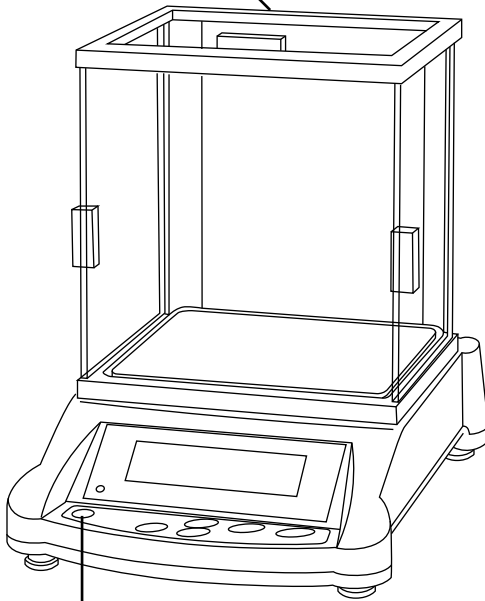
Always allow the scale to acclimate to normal room temperature for at least one hour before use. Give your scale sufficient warm up time. Usually 30-60 seconds before calibration to give the internal components a chance to stabilize.

## 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 exactly 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. Don't place 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.

## SCALE FEATURES

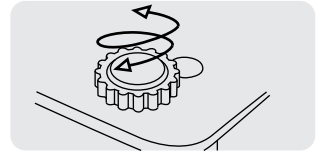
OPTIONAL CLEAR WIND SCREEN



AIR BUBBLE LEVEL

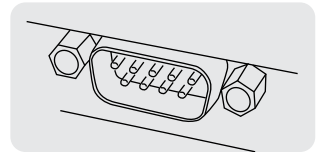
ADJUSTABLE FEET

on bottom of each corner of the scale







DATA TRANSMISSION PORT







on right side of the scale



### DISPLAY SYMBOLS

-  Scale is in ZERO mode.
-  Scale is in TARE mode.
-  BATTERY needs recharging.
-  The display reading is STABLE.

### KEYPAD FUNCTIONS

-  ON/OFF power switch.
-  SAMPLING & COUNTING.
-  UNIT selection
-  TARE is used to deduct the weight of an item or container. The symbol  will appear and reading will go to zero. Press it again to exit the tare mode (when empty), the tare indication will disappear.
-  CAL is used for entering calibration and other function settings

## POWER SUPPLY


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The i3100™ is powered by **DC 6 V rechargeable battery** or directly by **power adapter**.

## OPERATION INSTRUCTIONS

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### Weighing Procedures

1. Press  to turn on the scale.

When the power is turned on, the scale will countdown for a few seconds and "0" will appear on the display.

2. Select the weighing unit with  key.

Press  to select a weighing unit.



Once the unit has been selected, the selected unit will be displayed next to the weight value.

3. Start weighing

Verify the reading is "0". Place objects on the weighing platform to weigh.

When the reading becomes stable, the stable indicator is displayed.

### Tare

Tare can be used for eliminating the weight value of an empty container. Place an empty container on the scale and press . Then place the items to be weighed in 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  again to return the scale to zero.

## ERROR MESSAGES

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When an applied load exceeds the capacity, "-----" will appear on the display. Remove excessive load immediately. The unit may return to normal operation. Remember: You can permanently damage the scale and void your warranty by overloading it! The LCD will display "ERR" if the weight placed on the platform is incorrect during calibration.

## CALIBRATION



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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 1kg weight or combination of weights in order to calibrate\*\***





1. Press and hold , release when the LCD shows "CAL".

2. The display now shows "1000.00". This is where you input the calibration weight you are going to use to calibrate (1000 grams is recommended). Use  to cycle through the numbers shown on the screen and use  on the selected digit to adjust selected digit. To calibrate using the recommended 1000 grams, the screen must read "1000.00". Once this is set, place the 1000 gram calibration weight on the tray.

3. The display will show "OK" and return to normal weighing mode. Calibration is complete.

## COUNTING FUNCTION





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1. Press  to cycle through the weighing modes until the display will show "CA 10 PCS" (means sample size is 10 pcs)
2. Press  to toggle sample size, "10", "20", "50", "100", "200", "500", "1000" pcs will appear in. Stop at the one you want to use.
3. Put the exact quantity of samples desired on the platform and press , the set sample size will appear.
4. Keep adding objects to be counted on the pan, the total number of the objects will be displayed. If the unit weight is too small for the counting resolution, the display will show "Err"
5. To return to normal weighing press 

## WEIGHT RESPONSE SPEED

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The i3100 allows you to adjust the scale reaction time and division selection.





1. Press and hold  (do not release) and power the scale on with . Wait until the display shows "nb0 - nb4" and release
2. Press  to select your response speed. (nb0: fastest, nb4 slowest) Press  to confirm.

## COMMUNICATION AND BACKLIGHT




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1. Press and hold  and press  to power the scale on. The scale will power on and go through the self test.

### COMMUNICATION

2. The scale should now read "bAUd" followed by "12", "24", "48" or "96". These values represent the baud rate settings: 1200, 2400, 4800, 9600.
3. Use  to scroll through the settings and press  to confirm.
4. The display will now read "Pr" (Press Sending), "Co" (Stable Sending) or "St" (Continuous Sending)
5. Use  to scroll through the settings and then press  to confirm







### BACKLIGHT

6. The display should now read "bL On" (Backlight ON), "bL OFF" (Backlight OFF) or "bL AUTO" (Automatic Backlight).
7. Use  to scroll through the settings and press  to confirm
8. Once  is pressed the scale will return to normal weighing.

## SELECTING DESIRED WEIGHING MODES

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The 3100™ comes with a preset 9 units with the option to add another 9 units if required. To enable or disable each unit weighing modes follow these steps:

1. Press and hold  and  together, then press and release , the scale will power on. Release all the keys when the display shows "PASS".
2. Press  4 times and the display will show "YES" and the corresponding unit. Press  again to enable (yes) or disable (no) the selected unit.
3. Press  to move to the next unit. The scale will return to normal weighing mode when all the unit settings are finished.

## DATA TRANSMISSION – SERIES RS-232 INTERFACE (only for communication)

1. iBalance 0232C,s –RS232 C's UART signal
2. Format
  - (1) Baud rate: 1200 bps 2400 bps 4800bps 9600 bps
  - (2) Data bits: 8 bits
  - (3) Parity bit: none
  - (4) Stop bit: 1 bit
  - (5) Code ASCII

### DATA FORMAT :

HEAD1 HEAD2 DATA UNIT CR  
 123 456 789 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25

HEAD1 (2BYTES) HEAD2 (2BYTES)  
 OL - overload NT - net weight mode  
 ST - stable US - unstable

### DATA(8BYTE)

2D (HEX) = "- "(negative sign) 20 (HEX) = " "(blank)  
 2E (HEX) = ". "(decimal point)

### UNIT (4 byte)

g = 20 (HEX); 20 (HEX); 20 (HEX); 67 (HEX)  
 kg = 20 (HEX); 20 (HEX); 6B (HEX); 67 (HEX)  
 ct = 20 (HEX); 20 (HEX); 63 (HEX); 74 (HEX)  
 ozt = 20 (HEX); 6F (HEX); 7A (HEX); 74 (HEX)  
 CR = 0D (HEX); 0A (HEX)

### TRANSMISSION EXAMPLE

stable net + 0.168 g  
 HEAD, HEAD, DATA UNIT CR  
 ST, NT +0.168 g OA, OD

### PRESET UNITS

- **g** GRAM
- **ct** CARAT
- **oz** OUNCE
- **ozt** TROY OUNCE
- **lb** POUND
- **dr** DRAM
- **gn** GRAIN (UK)
- **dwt** PENNY WEIGHT
- **gsm** GRAMS PER METRIC SQUARED

### ADDITIONAL UNITS

- **MM** MOMME (JPN)
- **tl.J** JEWELRY Tael (HONG KONG)
- **tl.T** Tael (TWN)
- **tl.H** Tael (HONG KONG)
- **t** TOLA (INDIA)
- **1/8** 1/8 OUNCE
- **1/4** 1/4 OUNCE
- **TMr** TOLA, MASHA, RATTI
- **TAr** TOLA, ANNIE, RATTI

## SPECIFICATIONS

<b>Capacity</b>	3100g x 0.01g	<b>Units</b>	g, ct, oz, ozt, lb, dr, gn, dwt, gsm, PCS, MM, tl.J, tl.T, tl.H, t, 1/8, 1/4, TMr, TAR
<b>Scale dimension</b>	267mm x 191mm x 70mm		
<b>Tray dimension</b>	127mm x 146mm		
<b>Scale Weight</b>	1100g		
<b>Operating temperature</b>	Optimum 10-40°C (50-104°F)		
<b>Power Source</b>	DC 6 V Rechargeable Battery or power adaptor		
<b>Tare range</b>	Up to scale's maximum capacity		

