



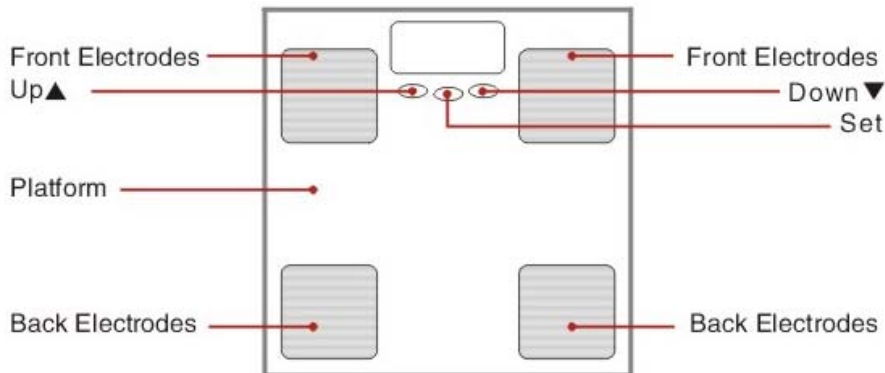
## Whynter Digital Body Fat and Water Scale

# OWNER'S MANUAL

## MODEL: BH-2100/ BH-2200

Please read this instruction booklet completely before operating.

### 1. SCALE CONSTRUCTION



### 2. TECHNICAL SPECIFICATION

- Max weight: 150kg / 330lb / 24st
- Min effective: 2kg / 4.4lb
- Weight division: 0.1kg / 0.2lb
- Weight unit: kg-lb-st
- Body fat division: 0.1%
- Age range for body fat: 10-80 years old
- Height range: 100-220cm / 3ft 3.5in-7ft 2.5in
- Fat range: 0-80%
- Water range: 20-80%
- Height unit: cm / ft-in
- Memory: 10 person
- Power: 2x3 V CR2032 Li-battery

### 3. WORKING PRINCIPLE

#### ■ What is body fat percentage?

Body fat percentage is derived from the ratio between the body weight and body fat.

$$\text{BMI (Body mass index)} = \frac{\text{weight (kg)}}{(\text{height})^2 (\text{m}^2)} \%$$

Body	Underfat	Standard	Overfat	Obese
BMI	<16.5%	16.5–25%	25–30%	>30%

#### Body fat percentage(%)

Age	Female				Male			
	Underfat(-)	Healthy(0)	Overfat(+)	Obese(++)	Underfat(-)	Healthy(0)	Overfat(+)	Obese
20–39	<21	21–33	33–39	>39	< 8	8–19	19–25	>25
40–59	<23	23–35	35–40	>40	<11	11–22	22–28	>28
60–79	<24	24–36	36–42	>42	<13	13–25	25–30	>30

#### Body Water(Hydration) percentage(%)

Age	Female			Male		
	Low(-)	Normal(0)	High(+)	Low(-)	Normal(0)	High(+)
10–15	<57	57–67	>67	<58	58–72	>72
15–30	<47	47–57	>57	<53	53–67	>67
30–60	<42	42–52	>52	<47	47–61	>61
60–80	<37	37–47	>47	<42	42–56	>56

Due to difference in race and region, the charts above are for reference only.

#### ■ Original Measure Method:

Body fat percentage used to be measured in several ways:

**CALIPER:** Using hand-held caliper that exert a standard pressure, the skinfold thickness is measured at various body location.

**DEXA:** Use a whole body scanner that has x-rays to pass a person's reclining body to collect the data.

**UNDERWATER WEIGHING:** This method measures whole body density by determining body volume. There is a variety of equipments available to do underwater weighing. It first requires weighing of a person out of the water and then immersing the person totally in water and weight again. The densities of bone and muscles are higher than water, and fat is less dense than water so a person with more bone and muscle will weigh more in water than a person with more fat.

#### ■ Our Method:

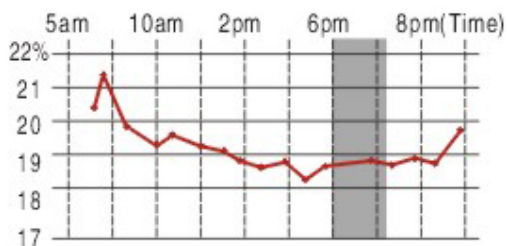
**BIA** We design our method of body fat percentage measuring as BIA (electronic impedance analysis). Body impedance is measured when a small and safe electric signal passes through the body. Body impedance is greatest in fat issue, which fat-free body mass allows the signal to pass through much more easily. Using the impedance measurements along with a person's height, weight, age and gender, the percentage of body fat and water is calculated.

#### ■ Factor affected body fat percentage

Body fat percentage is affected by body hydration. To ensure the accuracy of body fat percentage, have your body fat percentage measured at night. And there will be little difference on the reading of the body fat percentage than weighing yourself at different times of the day. Measuring under consistent environments will yield the best results.

Body fat percentage is also affected by following factor, diet style, drinking too much alcohol, heavy exercise, certain prescription drugs or diuretics, illness or woman's menstrual cycle.

Body fat percentage  
chart of day:



#### 4. MANUAL

##### ■ Button Definition



Press once to start the scale



During setting, press to change the parameter or to confirm the data input



During setting, press to change the parameter

##### ■ Preparation before weighing:

1) Power Supply:

When the LCD indicates "Lo", replace battery.

2) Units option: The scale is equipped with LB / KG /ST unit systems. Please choose unit system on the back of scale as shown in the picture below.



3) Scale position: Always place the scale on hard and flat surface to ensure the accuracy.

▲ **Attention:** Please do not put your foot on the edge of scale to avoid tipping.

#### To measure the weight, body fat and water percentage

Note:

1. Select a person number (P0-P9) and input your gender, height and age before standing on the scale.
2. The personal data only needs to be entered once and the scale will store your data under your person number.



Press ▲ to enter the setting mode.



Press ▲ or ▼ key to choose the person numbers P0-P9, then press “SET” to confirm.



Press ▲ or ▼ to select male or female, then press “SET” to confirm.



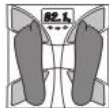
Press ▲ or ▼ to enter height, then press “SET” to confirm.



Press ▲ or ▼ to enter age, then press “SET” to confirm



When “0.0” appears, step on the scale.



Your feet must stand evenly on the 4 electrodes as shown on the picture.



The weight is recorded.



When “0” is display, it indicates that the scale is analyzing. Do not step off the scale.





Your weight, body fat percentage and water percentage will be displayed alternately for 4 times before the scale automatically turns off.

Underfat (-), Healthy (0), Overfat (+), Obese (++)

▲ **Attention:** Please stand on the scale with bare feet and keep your feet clean and dry

### Display

 Indicates the maximum weight is exceeded.

 Indicates incorrect body fat and water percentage calculated.

## 5. ATTENTION FOR SAFETY

### Attention for safety

- The scale **MUST NOT** be used by a person with a pacemaker or with any other electronic medical transplanting. The impedance passing through the body will interfere with the functions of medical devices.
- This scale is for general use only. We do not advise using the scale for medical purposes.
- Do not use it on wet or slippery floors. Do not stand on the edge of scale to avoid tipping.
- Please seek assistance when using the scale if you are elderly, handicapped or pregnant.

### Attention for operation

- Please take off any socks/footwear and keep your bare feet clean and dry.
- Advice to use the scale without any clothing, your clothing will influence the accuracy of the reading.
- Over dieting, water loss, or heavy exercise will affect measurement readings.
- Unstable or incorrect readings may result from a bad connection with the electrode surface, please clean any dirt off the scale and step on the scale as instructed.
- Keep stable when weighing, any shaking will lead to inaccurate readings.
- The scale could not be applied to following groups:
  - People with age below 10 years or above 80 years old.
  - Athletic or muscular body type (body builder).
  - Pregnant woman.

## 10. MAINTENANCE

- Please place the scale on a clean and level surface.
- Please do not use the scale in extreme damp and extreme high or low temperature environments.
- As the scale is a highly precise electronic instrument, please do not jump or stamp on the scale and avoid dropping it.

- To prevent scratches on stainless steel panel, do not wear any footwear while measuring.
- When cleaning the scale, please use a soft piece of cloth and no chemicals should be added to protect against any damage to the scale.
- This product is only designed for home use and should not be used commercially for any reason at all. The <Body Fat / Muscle / Bone / Calorie Chart> is for reference purpose only.
- Please remove the battery from the scale if it is not used for a long time.

#### **7. FREQUENTLY ASKED QUESTIONS:**

- **The scale shuts down after a few seconds.**

Check the battery and ensure the battery is new and installed correctly. Make sure your feet are in good contact with the metal surface.

- **What does “----” mean?**

- a. The scale is auto resetting, wait a few seconds and the “0” will be displayed.
- b. No personal data was found> input your personal data.

- **The scale only displays weight but not body fat and water percentage.**

Keep your body straight when weighing and do not move when the scale is analyzing.

- **The body fat percentage is much higher or lower than normal.**

Double-check your personal data.

Make sure your bare feet are clear and dry and in good contact with the metal surface.

## **180 DAYS LIMITED WARRANTY**

This WHYNTER scale is warranted, to the original owner within the 48 continental states, for 180 days from the date of purchase against defects in material and workmanship under normal use and service. Should your WHYNTER scale prove defective within 180 days from the date of purchase, return the defective part or unit, freight prepaid (within one month of purchase; after one month to one year, customer will be responsible for freight cost to Whynter's service department), along with an explanation of the problem/issue. Please carefully package the scale in its original packaging material to avoid damage in transit. Please retain original box and packaging material. Under this warranty, Whynter will repair or replace any parts found defective. This warranty is not transferable. After the expiration of the warranty, the cost of labor and parts will be the responsibility of the original owner of the unit.

### THIS WARRANTY DOES NOT COVER:

- Acts of God, such as fire, flood, hurricanes, earthquakes and tornadoes.
- Damage, accidental or other wise, to the scale while in the possession of a consumer not caused by a defect in material or workmanship;
- Damage caused by consumer misuse, tampering, or failure to follow the care and special handling provisions in the instructions.
- Damage to the finish of the case, or other appearance parts caused by wear.
  - 1) Surface
  - 2) Damage caused by repairs or alterations of the scale by anyone other than authorized by the manufacturer.
  - 3) Freight and Insurance cost for the warranty service.

To obtain service or information, contact

Whynter Innovations Group via Email at [service@whynter.com](mailto:service@whynter.com)

or call 866-WHYNTER.