

# Oregon Scientific™ Body Weight Monitor (BWR102)

User's Manual

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### **ABOUT THIS GUIDE**

Thank you for selecting the Oregon Scientific<sup>™</sup> body weight monitor as your healthcare product of choice. Your BWR102 body weight monitor is designed to give you many years of reliable service provided it is used correctly, and includes the following conveniences:

- User selectable weight measurement in kilograms, pounds, or stone pounds.
- Patented step-on technology that automatically turns on the scale whenever you step onto it.
- Wireless remote unit with 8 meter range and large LCD display for viewing information.
- · Storage of height information.
- Automatic calculation and storage of body mass index (BMI).
- Storage of up to seven measurement records for four different users, including time-date stamp, weight, and body mass index (BMI).
- Guest record for weight and BMI calculation (no memory available).
- · Built-in clock.

Keep this manual handy as you use your new product. It contains practical step-by-step instructions, as well as technical specifications and warnings you should know.

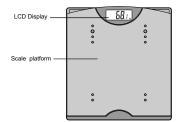




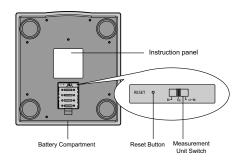


### **KEY FEATURES**

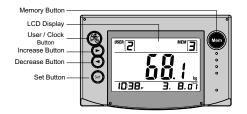
### **SCALE - FRONT**



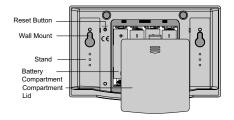
### SCALE - BACK



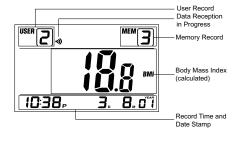
### **REMOTE UNIT - FRONT**



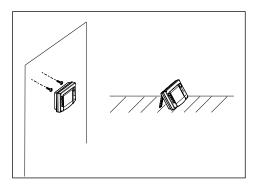
### **REMOTE UNIT - BACK**



### LCD DISPLAY



### HOW TO PLACE THE REMOTE UNIT



Mount or place the remote unit on a wall or flat surface within 8 meters of the scale. Avoid obstructions (such as walls or heavy furniture).

NOTE Images not drawn to scale.





### **GETTING STARTED**

- Unpack the product. In the box you will find:
  - Scale
  - Remote unit
  - 8 x AA 1.5V batteries
  - · Carpet feet
  - · User manual

NOTE Keep all packing materials in a safe place, in case you need to later transport or return the product for servicing.

- Insert the batteries in the remote unit and scale. Be sure to match the polarity as shown in the battery compartment.
- 3. Set the measurement unit (back of scale) to lb, kg, or st-lb (stone pound).
- (Optional) Place the carpet feet on the scale if you will be using the scale on an uneven surface, such as a carpet. (For best results, use the scale on a flat surface.)
- 5. Place the scale on the floor. BBB and

  [R] will show on the display when
  you first set it down. Wait until the display
  is blank before you proceed to Step 6.
- Hold the remote unit in your hands, and step on the scale.
- 7. The scale will beep and show your weight. To set up the remote unit to display this information (first-time use only), press and hold for 2 seconds. The remote unit will beep two times, and \*)) will show on the display, followed by your weight. Once your weight is shown on the remote unit, the set up is complete.

NOTE You will need to repeat Steps 6 - 7 every time you replace the batteries.

- Set the clock and measurement unit on the remote unit ( → next section).
- Create your user profile ( → Set User Profile).
- Place the remote unit on a wall or flat surface within 8 meters of the scale. Avoid obstructions (such as walls or heavy furniture).

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## SWITCH BETWEEN CLOCK AND USER PROFILES

Press to switch between the clock and user profiles.

### SET CLOCK AND MEASUREMENT UNIT

Set the clock to provide a time-date stamp for each record you save, or to use the remote unit as a clock in your bathroom.

- 1. From clock display, press and hold set to enter the setting mode.
- The setting order is as follows:
   24 / 12 hour format, hour, minute, month / day or day / month format, month, date, and measurement unit (kg, lb, or st-lb).
- Press or to increase or decrease a value or change the setting.
- 4. Press set to accept the change and switch to the next setting.

### SET USER PROFILE

With this product, you can create a user profile for up to four people (users 1 - 4) and one guest who regularly use the body weight monitor. This allows the BWR102 to automatically calculate the body mass index (BMI) whenever a user measures their weight.

- 1. Press to switch to the user profiles.
- Press or until the desired user number displays.
- Press and hold set until the height flashes.
- Press or to adjust the setting.
  Height is measured centimeters or feet, inches, and tenths of inches, depending on the weight measurement unit you select (→ Set Clock and Measurement Unit).
- Press set to confirm.







## MEASURE WEIGHT AND BODY MASS INDEX (BMI)

If you do not wish to calculate your BMI, simply step on the scale and wait a few moments until your weight displays.

- 1. Press on the remote unit to switch to the user profiles.
- Press or until the desired user number displays. If you select "GUEST", you will need to enter your height (→3, Steps 2 - 5).
- Step on the scale. "- - -" will flash on the display, followed by your weight. The scale will beep when the measurement is complete, and the weight will show on the remote unit.
- 4. To save the measurement to memory, press and hold for 2 seconds on the remote unit. A "1" will appear in the memory box on the remote display once the record has been stored. (Each new measurement is assigned to the first record number (1). All other records are pushed back one digit e.g., 2 becomes 3, and so on). The weight will be shown first, followed by the BMI value if the height has been set for that user record. If no height has been set, "---" will show for the BMI value.

NOTE The scale display will automatically go off after 5 - 10 seconds, even if weight is still applied. The remote display will return to clock mode if it is left idle for 30 seconds. Press any key to prolong the display.

### **ACCESS USER MEMORY**

This product can save up to 7 records for each user. Each record is saved with the time-date stamp, weight, and body mass index (BMI) calculation. Records cannot be saved for guests.

- 1. Press to switch to the user profiles.
- Press or until the desired user number appears.
- 3. Press mem . A "1" will show in the MEM box for the selected user.
- 4. Press or to scroll through the records. Weight and BMI value will alternatively display every 2 seconds. The time and date for the measurement are shown at the bottom of the screen.

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NOTE If the height has not been set, "----" will display for the BMI value. Refer to the SET USER PROFILE section ( $\rightarrow$ 3) for height setting instructions.

### **RESET SYSTEM**

The RESET buttons are located in or near the battery compartments for the scale and remote unit. Press these buttons with the tip of a blunt object (such as a ballpoint pen) whenever you change the batteries, or whenever performance is not behaving as expected (e.g., unable to establish radio frequency link with remote unit). This will return all settings to default value.

Once you press RESET, repeat Steps 6 - 7 of the GETTING STARTED section ( $\rightarrow$ 3).

NOTE RESET does not erase user profiles, records, or measurement units that were previously stored. To erase a record, simply record new data over it.

#### **BATTERIES**

Batteries for the remote unit and scale are supplied with this product. Replace them whenever the low battery signal (  $L \mathbb{S}$  ,  $\mathbb{N}$  , or  $\mathbb{S}$  ) displays on the scale or remote unit. Remove the battery compartment lid on the bottom of the scale or back of the remote unit, and insert the batteries. Be sure to match the correct polarity, as shown in the battery compartment. Before you close the lid, press the RESET button with the point of a blunt object (such as a ball point pen). Repeat Steps 6 - 7 of the GETTING STARTED section (  $\rightarrow$  3) to set up the remote unit to display scale information.

NOTE Insert the batteries in the remote unit before the scale. Do not use rechargeable batteries. Batteries can be harmful to the environment. Contact your local waste disposal authority for proper disposal instructions.





## HOW THE BODY WEIGHT MONITOR WORKS

## What does the body weight monitor measure?

The body weight monitor measures weight and calculates body mass index (BMI), an international standard for assessing overall health.

### How does the body weight monitor work?

This product uses wireless radio frequency (RF) technology to transmit data from the scale to the remote unit. The range for the transmission is 8 meters, in any direction from the scale.

When you step on the scale, your weight is measured in pounds, kilograms, or stone pounds, depending on the unit you select. The measurement is then transmitted to the remote unit, where the body mass index (BMI) can be calculated provided you have created a user profile for yourself or entered the height if you are using the "GUEST" profile.

### What is body mass index (BMI)?

Body mass index (BMI) is a widely used international standard that measures height to weight ratio to determine obesity. BMI is expressed by the following terms:

 $BMI = \frac{Body \ weight \ (kg)}{[Body \ height \ (m)]^2}$ 

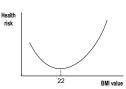
NOTE The BMI index is only a general indicator of overall health. The range may vary depending on your body type and composition. Consult with your doctor to gain a full understanding of your health condition.

#### How to interpret BMI

The result is a value (such as 22) that corresponds to the four BMI ranges: underweight, recommended, overweight, and obese (described to the right). The ranges are based on a comprehensive clinical study of the averages for thousands of people for whom BMI was calculated. BMI can be used to estimate potential health risks. Based on this research, it has been shown that the health risk for people with a BMI of 22 is lowest.

### **BMI** ranges

The chart below gives the values and description for each range.



Health Indication	BMI Range	Description
Underweight	Less than 20.0*	Your body weight is lower than average. Work to maintain a healthy, regular diet and exercise plan to build up your health.
*	Asian BMI: Less than 18.5	
Recommended	20.0 to 25.0*	You are at the recommended level. Maintain a balanced diet and exercise routine to stay at the present level.
*	Asian BMI: 18.5 to 23.0	
Overweight	25.1 to 29.9*	Your body weight may be above normal. Exercise more and maintain a healthy diet to lower your risk for serious illness.
*	Asian BMI: 23.0 to 29.9	
Obese	30.0 or greater*	You may be at risk for heart disease, high blood pressure, and other illnesses. Consult your doctor to create a proper health and fitness plan.

<sup>\*</sup> Asians have a separate BMI range due to their different body composition.



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NOTE Consult your physician before you begin a new diet or exercise program.

NOTE BMI should not be used as a health risk indicator for the following groups:

- Children and teenagers BMI ranges are based on adult heights.
- Athletes and body builders BMI does not differentiate between fat and muscle and can therefore be inaccurate for people with high muscle density.
- Pregnant or nursing women this group may experience elevated fat levels as part of the pregnancy.
- People over age 65 this group may experience elevated fat levels as part of the aging process.

#### References:

Jequier, E. (1987), Energy, obesity, and body weight standards.

American Journal of Clinical Nutrition, 45. 1035-1047.

The Japan Society for the Study of Obesity The Weight Loss Research Center MyDr.com (www.mydr.com.au)

### **SAFETY AND CARE**

Wash the unit with a slightly damp cloth and mild detergent. Avoid dropping the unit, storing it in an upright position, or storing it with objects placed on it.

Allow the scale to rest for at least 30 minutes whenever there is a sudden change in environment (e.g., you move it from a warm, humid room to a cool, air-conditioned room).

Help us protect the environment.
Recycle the packaging, batteries, and product when you no longer need them.

### **WARNINGS**

This product is designed to give you years of service if handled properly. Observe the following guidelines:

- Never immerse the unit in water. This can cause electrical shock and damage the unit.
- Do not subject the unit to extreme force, shock, or fluctuations in temperature or humidity.

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- Do not tamper with the internal components.
- Do not mix new and old batteries or batteries of different types.
- Do not use rechargeable batteries with this product.
- Remove the batteries if storing this product for a long period of time.
- Do not scratch the LCD display.
- Do not make any changes or modifications to this product.
   Unauthorized changes may void your right to use the product.

The contents of this user manual are subject to change without notice. Images not drawn to scale.

### TROUBLESHOOTING GUIDE

Check here before contacting our customer service department.

Problem	Symptom	Remedy
Display is blank	Batteries are inserted incorrectly	Check battery polarity. It should match the diagrams on the inside of the battery compartment.
	Batteries are exhausted	Replace batteries $(\rightarrow 4)$ .
Display is dim	Batteries are low	Replace batteries $(\rightarrow 4)$ .
Display shows t⊕, ⅓, or ᇦ.	Batteries are low	If $\square$ shows, replace the scale batteries $(\rightarrow 4)$ .
		If $\hat{\mathbb{N}}$ shows, replace the remote unit batteries $(\rightarrow 4)$ .
Error message: Err shows on the scale when I take a measurement	The weight is unstable or unevenly distributed	Step off the scale and try again ( $\rightarrow$ 3).







Problem	Symptom	Remedy
Error message: "OL" shows on the scale display	The scale is overloaded. Maximum weight is 150 kg / 330 lb / 23st-8lb	Step off the scale and try again with less weight $(\rightarrow 3)$ .
"" shows on the remote unit where height should show	Height has not been entered for the selected user profile	Input height data, then repeat the measurement $(\rightarrow 3)$ .
"" shows on the remote unit where BMI should show	BMI calculation is out of range	Check the height ( $\rightarrow$ 3).
	Wrong user profile selected	Check the user profile $(\rightarrow 3)$ .
"" shows on the remote unit where weight should show, and •)) is flashing	The remote unit is not set up to receive data from the scale	Set up the remote unit with the scale ( → 3, Getting Started, Steps 6 - 7).
	Remote unit is too far from scale, or there are too many obstructions	Move the remote unit within 8 meters of the scale, with minimal obstructions.
Height (cannot enter)	Remote unit batteries are low	Replace the batteries in the remote unit $(\rightarrow 4)$ .
Memory does not work	Guest profile was selected (you cannot store records to memory for guests)	Select another user profile, then try again $(\rightarrow 3)$ .
	mem was not pressed long enough	Try again. The user profile must be selected, and men must be pressed and held for 2 seconds within 30 seconds of taking a measurement.

Problem	Symptom	Remedy
	The record was accidentally saved to another user memory	Select another user profile, then try again. $(\rightarrow 3)$
	User profile was not selected within 30 seconds of stepping on the scale	Try again. The user profile must be selected, and mem must be pressed for 2 seconds within 30 seconds of taking a measurement.
Weight does not match between remote unit and scale	Measurement units do not match	Check the measurement units ( $\rightarrow$ 3).
Weight is not accurate	Scale is uneven or on carpet	Use the carpet feet or try using the scale on a flat surface ( $\rightarrow$ 3, Getting Started, Step 4).
Remote unit suddenly switches into clock mode	Display has timed-out	Press to switch back to the user profile mode.

### **SPECIFICATIONS**

**Dimensions:** 

Scale W x H x L 290 x 310 x 38 mm

Scale weight 1.2 kg

 $\begin{tabular}{ll} \mbox{(without batteries)}\\ \mbox{Remote unit W x H x L} & 137 x 86 x 30 mm \end{tabular}$ 

Remote unit weight 180 g

(without batteries)

### Weight measuring range:

Weighing mechanism strain gauge

mechanism

Weight units kilogram (kg) /

pounds (lb) / stone pounds (st-lb)

Maximum weight 150kg / 330 lb /

23st-8lb

Graduation 0.1 kg / 0.2 lb



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### Height measuring range:

Height units centimeters (cm) /

feet (') and

inches (")

Min / Max height 94.0 to 240.0 cm /

3' 1.0" to 7' 10.5"

BMI:

Min / Max BMI 5 - 50 kg/m<sup>2</sup>

Radio frequency:

System 433 Megahertz

(MHz) radio frequency

Range 8 meters with no

interference (Partitions, walls, and electrical appliances may affect reception

range)

Display:

Time 12 hr AM / PM or

24hr user selectable

Date MM / DD

(month / date) or

DD / MM

(date / month) user

selectable 2001 - 2050 user

selectable

Power:

Remote unit

Year

Scale 4xLR6 ("AA") UM-3

1.5V batteries 4xLR6 ("AA") UM-3

1.5V batteries
Power save Scale unit auto-off

after 5 to

10 seconds

#### Operating environment:

Operation temperature 5 °C to 45 °C

(41 °F to 113 °F) at 85% relative humidity

Storage temperature -5 °C to 60 °C

(23 °F to 140 °F) at 85% relative humidity

### **MEASUREMENT UNITS**

	Unit	Location	Conversion
kg	Metric kilogram	Global	1 kg = 2.20 lb 1 kg = 0.16 st-lb
lb	Imperial pound	US	1 lb = 0.45 kg 1 lb = 0.07 st-lb
st-lb	British stone pound	UK	1 stone = 14.0 lb 1 stone = 6.35 kg

### **ABOUT OREGON SCIENTIFIC**

Visit our website (www.oregonscientific.com) to learn more about other Oregon Scientific™ products such as digital cameras, projection clocks, health and fitness gear, and weather stations. The website also includes contact information for our customer service department, in case you need to reach us.

### **EC-DECLARATION OF CONFORMITY**

This product contains the approved transmitter module **TX 05** and complies with the essential requirements of Article 3 of the R&TTE 1999/5/EC Directives, if used for its intended use and that the following standard(s) has/have been applied:

Radio frequency spectrum

(Article 3.2 of the R&TTE Directive)

applied standard(s):

ETSI EN 300 220-3 (Ver.1.1.1):2000-09

Electromagnetic compatibility

(Article 3.1.b of the R&TTE Directive)

applied standard(s):

ETSI EN 301 489-1-3 (Ver.1.4.1):2002-08

Safety of information technology equipment (Article 3.1.a of the R&TTE directive)

applied standard(s): EN 60950:2000

Additional information:

The product is therefore conform with the Low Voltage Directive 73/23/EC, the EMC Directive 89/336/EC and R&TTE Directive 1999/5/EC (appendix II) and carries the respective CE marking.

VS-Villingen / Germany August 2003

Gerhard Preis

R&TTE Representative of manufacturer

**C** € 0682

COUNTRIES RTTE APPROVAL COMPLIED

All EC Countries, Switzerland CH

and Norway (N)





