

User Guide

Body fat scale

Now that you have purchased a CRANE® product you can rest assured in the knowledge that, as well as your Manufacturer's warranty, you have the added peace of mind of dedicated helplines and web support





AFTER SALES SUPPORT



MODEL: MD I4659 / ITEM CODE# I056 / 01/2014



Contents

4	Introduction
4	Legend of symbols and key words used in these instructions
5	About this scale
5	Package contents
5	Safety instructions
7	Notes on measurements
12	Getting started
13	Overview
15	Presettings
16	Measuring weight
16	Carrying out a body analysis measurement
18	Error messages
18	Cleaning your scale
19	Disposal
20	Technical data

Introduction



Please read these operating instructions carefully before using the scale for the first time, paying special attention to the safety information.

This scale should only be used as designated and described in these instructions.

Please keep these instructions in a safe place for future reference.

Always include these instructions if passing the scale on.

Please also keep your original cash register receipt as it may be needed as proof of purchase to validate your warranty.

2 Legend of symbols and key words used in these instructions



CAUTION!

Please note the following guidelines to avoid potential injuries and/or property damage!

ATTENTION!

Please note the following guidelines to avoid property damage!



NOTICE!

Additional information on using this scale.

- Bulleted item/information on operating steps and results
- Tasks to be performed

3 About this scale

As well as measuring your weight, your Crane Sports body fat scale allows you to carry out comparative measurements of body fat, body water, muscle mass, bone mass and body mass index as well as measure progress toward your target weight.

This scale is not a medical product and is not intended for clinical use. Do not use this scale for medical diagnosis. It is intended solely for personal home use. You should discuss any health concerns with a licensed health care provider.

4 Package contents

After unpacking, ensure that the following parts have been supplied:

- Body Fat Scale
- I x 3 V button cell battery, size CR 2032 (already installed)
- Instruction Manual & Warranty

5 Safety instructions

Unauthorized persons

CAUTION!



The following people should not use this scale:

- Pregnant women
- Children under six years of age
- Individuals who have fitted pacemakers or other implanted medical devices
- Individuals who are suffering from fever
- Individuals with swollen legs or oedema, severe water retention or heavily dehydrated

General



Only place the scales on an firm level surface.



Protect the scale from moisture.



Do not stand on the scale when your feet or body are wet. Always stand on the center of the scale.



Place your feet on the metal measuring surfaces so the scale can measure your body fat and water.



Step on the scale only barefoot.



Do not put weights on the scale unless you are measuring them and do not store items on it.

- Do not store the scale in a vertical position.
- Do not continue using the scale under any circumstances if it is damaged as you could injure yourself.
- Do not use the scale under extreme temperature conditions.

Handling batteries properly

The scale is powered by a 3 V button cell battery, size CR 2032.

- Batteries can be fatal if swallowed. If a battery is swallowed, please obtain immediate medical assistance.
- Before inserting the battery, check that the contacts in the scale and on the battery are clean and, if necessary, please clean them.
- Only use new batteries.
- Do not use rechargeable batteries.
- Never try to recharge normal batteries. There is a risk of explosion.
- Store batteries in a cool, dry place. Strong direct heat can damage batteries. Therefore, never place the scale on sources of heat (e.g. radiators) or in direct sunlight.
- Never throw batteries into a fire.
- If the scale is not going to be used for long periods of time, remove the batteries.

6 of 22

- Remove dead batteries immediately from the scale.
- Remove a leaking battery from the scale immediately. Clean the contacts before inserting a new battery. There is a risk of chemical burns due to battery acid.

Never carry out repairs yourself



CAUTION!

Never try to open and/or repair the scale yourself. In the event of a fault, contact our Service Center.

6 Notes on measurements

Please consult a physician with any questions.

Functionality

The body fat scale displays the percentage of muscle mass, body fat, body water and bone mass in relation to total body weight. The standing area of the scale has electrodes which measure body fat by means of the body's electric resistance. Lean body tissue has a lower resistance than fatty body tissue. The scale automatically compares the body fat measured to the person's body height, age, sex and total weight. This results in the body fat value.

Body fat

Too much body fat is unhealthy. What is more important is that a high body fat level is usually accompanied by an increased blood fat level and this dramatically increases the risk of various illnesses, such as diabetes, coronary artery disease, high blood pressure, etc.

However, if the body fat percentage is too low this is also unhealthy. In addition to subcutaneous fat tissue, the body also creates important fat deposits to protect internal organs and safeguard important metabolic functions. If these essential fat reserves are used, it can lead to metabolic disorders, for instance, an increased risk of osteoporosis.

The normal body fat level varies with age and gender. The normal value for women is around IO% higher than for men. As we get older, our bodies break down muscle mass and this increases the body fat level.

Percentage of body fat to total weight

Age	Low body fat percentage	Female Normal body fat percentage	High body fat percentage	Very high body fat percentage
6-12	∢7	7-19	19-25	> 25
13-19	∢20	20-31	31-37	> 37
20-39	⟨2	21-32	32-38	> 38
40-59	₹ 23	23-34	34-40	> 40
60 and older	₹ 25	25-36	36-42	→ 4 2
Athlete		12-25		

Male				
Age	Low body fat percentage	Normal body fat percentage	High body fat percentage	Very high body fat percentage
6-I2	< 7	7-18	18-25	> 25
13-19	∢8	8-19	19-25	> 25
20-39	۷9	9-20	20-26	> 26
40-59	∢	II-22	22-28	> 28
60 and older	< I3	13-24	24-30	> 30
Athlete		3-15		

Body water

About 60% of an adult's body is made up of water. This varies according to certain factors: older people have a lower water level than younger people, and men have a higher water level than women. The difference between men and women is based on women's higher body fat mass. As the majority of the body water is found in the fat-free mass (73% of the fat-free mass is water) and the water content of fat tissue is naturally very low (around I0% of fat tissue is water), when the body fat ratio is high the body water ratio falls automatically.

A 5% loss of water can reduce body energy by 20–30%. Drink at least 8 cups of liquid every day.

Normal percentage of body water

	Female	Male
Child	> 58	> 60
Adult	> 52	> 58
Athlete	> 56	→ 60

In general, athletes have 5% more body water. With increasing age, the amount of water falls by around I0%.

Muscle mass

The muscle mass is the body's motor. The most of the energy we use is consumed by muscles. The muscles ensure that the body temperature is maintained and are the basis of our physical performance.

Checking the muscle mass is particularly important for people with weight or fat problems. As the body needs muscles to remove excess energy reserves or fat deposits, weight reduction can only be successful in the long term if muscles are built up at the same time.

Age	Female	Male
6-12	>36	>40
13-79	>30	>34
Athlete	>38	>42

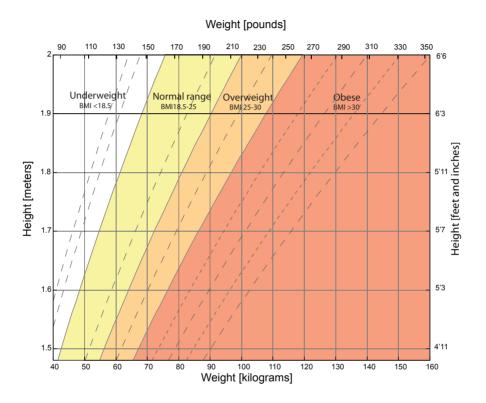
Athlete mode

Your scale has a special setting for well-trained and muscular people ("athletes"). As muscle cells have a similar bioelectric resistance to fat cells, the scale could interpret muscles as fat. This problem only occurs if the muscle mass is large; if a person has a normal range of muscles the scale does not measure this as fat.

The athlete mode prevents this incorrect interpretation. In this mode, the actual body fat values are measured using a different mathematical formula.

Body Mass Index (BMI)

The Body Mass Index (BMI) indicates whether you have an over-, under- or ideal weight. The value represents the ratio height to weight. The following graph shows the various divisions of the body mass.



Possible reasons for imprecise measurement results

The analysis is based on measuring the electrical resistance in one's body. Eating and drinking habits over the day and your personal lifestyle affect the level of water. This is noticeable from variations in the measurements displayed.

In order to achieve an analysis result that is as precise and repeatable as possible, ensure that the measurement conditions are the same because this is the only way to observe changes over a longer period of time. You will receive the most reliable measurement results if you always take the measurement in the morning after waking up. This is the best way of detecting a trend.

Other factors can also affect the level of water:

- After bathing you may get a result where the displayed body fat level is too low and the body water level too high.
- The result may be higher after a meal.
- Women experience differences as a result of their menstrual cycle.
- A loss of body water as a result of illness or physical exertion (sport).
 After sporting activity you should wait 6 to 8 hours before taking another measurement.

Variances or implausible results can occur for:

- Individuals with osteoporosis
- Individuals being treating with dialysis
- Individuals taking cardiovascular medicine
- Thick calluses on the feet
- Athletes who do over IO hours of intensive training per week and have a resting pulse of less than 60 beats per minute
- Young people under I7 years of age

The athlete mode is designed for individuals who train frequently and/or intensively. Please see "Athlete mode" on page 9).

7 Getting started

Inserting batteries

The scale is operated with a 3 V button cell battery, size CR 2032. The battery is inserted in the scale at the factory. In order to activate the scale, pull the flap of the protective foil to remove it from the battery compartment. If the foil is not removed, the scale will not function.

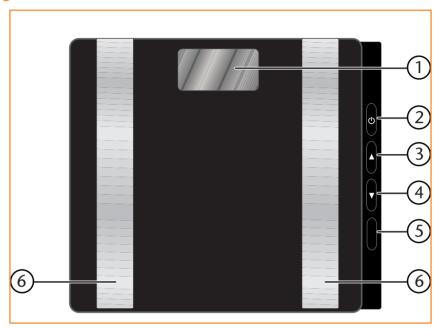
- ▶ To remove or change the battery, open the battery compartment cover on bottom of the scale.
- ▶ When inserting the battery, ensure that the +/- terminals are correct (with the positive pole facing up).
- ▶ When the battery has been inserted and the battery compartment is closed, place the scale on the floor and place a little weight onto the scale. Wait until the scale switch off. The scale is now calibrated.

If the screen shows "**Lo**" or the display's intensity falls, the battery must be replaced.

- Only insert one new battery.
- ▶ Do not expose a scale containing a battery to direct heat or sunlight. For example, do not place the scale on a radiator.
- ▶ If the scale is not going to be used for long periods, remove the battery. Please also note the section "Handling batteries properly" on page 6 to ensure you use the batteries correctly.

8 Overview

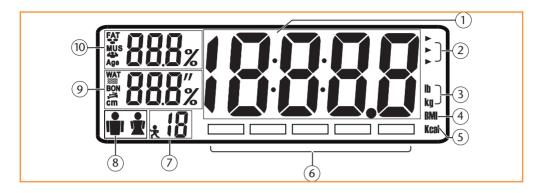
Scale



- I) Display
- 2) U: On/Off Switch
- 3) Set a higher value
- 4) Set a lower value
- 5) **SET**: Confirm entry
- 6) Standing surface with measuring sensors

The display

The following list shows all the possible screen displays:



- I) Digits for displaying the weight
- 2) Indicator for Current weight, Weight difference, Target weight
- 3) Weight in pounds or kilograms
- 4) Measured Body Mass Index (BMI)
- 5) Calorie requirement
- 6) Trend bar (proportion of target weight/measured weight)
- 7) Memory space / Athlete user
- 8) Male user/female user
- 9) **WAT**: Water percentage, **BON**: Bone percentage, **x'xx"**: Size in foot and inches
- 10) **FAT**: Fat percentage, **MUS**: Muscle percentage, **Age**: numeric value

9 Presettings

Select weight unit

- ▶ Place a little weight on the scales by pushing down with your hand on the standing area (do not yet stand on the scales). The positions for the weight display will light up.
- ▶ Select the unit kg or lb with the **SET** button. The display will light up briefly.
- Stand on the scales.

Follow the steps in the next chapter.

Saving personal data

The scale interprets your body fat, body water and muscle mass values on the basis of your personal data. Therefore, you have to enter your personal data before measuring your muscle mass, body fat and body water. Twelve memory spaces are provided for this purpose.

The personal data is: sex, body structure, age, height and the desired target weight. If no entries are made for around 20 seconds, the scale will switch off automatically.

Enter your personal data as follows:

- Press . Wait for the LCD to show "0".
- ▶ Press **SET**. Memory space I will flash on the display.
- Now select a memory space with the ▲ or ▼ buttons and confirm your entry with the SET button.
- Select the sex and body structure with the ▲ or ▼ buttons. In athlete mode, the athlete symbol will be displayed in addition to the sex symbol. Confirm with SET.
- ▶ Use the ▲ or ▼ buttons to select your age and confirm by pressing **SET**.
- Use the ▲ or buttons to select your height in foot and inches and confirm by pressing SET.
- ▶ Use the ▲ or ▼ buttons to select your target weight and confirm by pressing SET.
- ▶ Stand on the scale. The scale now measures your current weight.

10 Measuring weight

- Stand on the scale.
- ▶ The scale switches on automatically and measures your weight.
- ▶ The weight is displayed.
- ▶ The scale switches itself off again automatically.

If the scale does not register any weight within I5 seconds, it switches itself off automatically.

If the scale shows the **O-LD** message, remove the weight immediately from the scale and carry out the measurement again.

II Carrying out a body analysis measurement

Important notes on correct measurement

To measure body fat, body water and muscle mass you have to stand barefoot on the measuring points on the scale where the electrodes are located. Your feet must be dry and free of any skin lotions or moisturizers.

▶ Stand on the scale with straight legs and without bending your knees; ensure that your knees do not touch each other.

Carrying out measurements

- ▶ Press O to switch the scale on and wait until the scale displays 0.0.
- ▶ Select the desired memory space using the ▲ or ▼ buttons.
- Now stand on the scale and wait until the scale has finished measuring your weight.

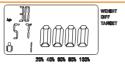
The measured weight is displayed together with your personal data (age, height).



Measured weight

The measurement of body fat percentage, muscle mass percentage, the difference between the current and first weight when you set the target

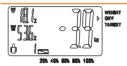
weight, BMI and bone mass percentage will then start, as well as the calculation of the calorie requirement.



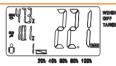
Carrying out other measurements. Remain standing on the scale.



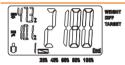
Measured percentage of body fat and body water.



Measured difference between current weight and target weight.



Measured percentage of muscle mass and bone percentage in pounds, as well as a display of the current Body Mass Index (BMI).



Measured percentage of muscle mass and bone percentage in pounds, as well as a display of the daily calorie requirement for the target weight.

The measured values will be shown a number of times on the display and afterwards the scale will switch off automatically.

The sum of the values for body fat, body water and muscle mass can amount to more than 100%. This is possible because body fat and muscle mass also contain water, which is taken into account in the measurement of body water. This does not constitute an incorrect measurement.

Target weight function

The target weight function is carried out using the measurements for body fat, body water and muscle mass, BMI as well as body weight. The corresponding measurement bars are shown on the display to indicate whether you have reached your target weight:

- Ist bar red: 0-20 % reached from the target weight
- 2nd bar yellow: 2I-40 % reached from the target weight
- 3rd bar yellow: 4l-60 % reached from the target weight
- 4th bar green 6I-80 % reached from the target weight
- 5th bar green 8I-I00 % reached from the target weight

Automatic User Recognition

If at least one user is stored (see "Saving personal data"), the scales can automatically recognize the user on the basis of the current measurement if the weight does not deviate by more than +/- 2 kilograms and you stepped onto the scales with your bare feet.

- Step onto the scales.
- ▶ The scales automatically switch on and measure your weight.
- ▶ Remain standing on the scales after your weight has been measured. The scales will compare your data with the stored data. The corresponding user will be shown in the display along with the personal body analysis results. If there are two very similar user values, then these users will be displayed. Now press either ▲ or ▼ to select the correct user and confirm the entry with SET.

12 Error messages

Display	Error message
ERRO	Initialization error. Carry out the measurement again to achieve a proper result.
O-LD	Overloading Remove the weight from the scale immediately otherwise permanent damage may occur.
ERR2	The measurable electricity is beyond the measurement range. Clean the soles of your feet with a dry cloth and carry out the measurement again.
ERR3	The body fat level is outside the measurable range.
LO	Battery level too low. Replace the battery.

13 Cleaning your scale

Only use mild soap solutions for cleaning. Avoid the use of chemical solutions and cleaning products because these may damage the scale's surface or markings. Always dry the scale off completely. There is a risk of slipping.

14 Disposal

Packaging

Your scale has been packaged to protect it from damage in transit. Packaging materials are raw materials and can therefore be reused or recycled. Keep plastic bags out of the reach of children.

Device

At the end of its life, the scale should not be disposed of in the normal household trash. Please consult your local authority for advice on correct and eco-friendly methods of disposal. Before disposal remove the battery.

Batteries

Do not dispose of used batteries in household trash. Batteries should be taken to a collection center for used batteries.

15 Technical data

Electricity supply I x 3 V button cell battery CR 2032

Min. weight II lbs
Max. weight 396 lbs

Tolerance II - 44 lbs: +/- (I%+3 I/2 oz)

45 - 396 lbs: +/- I%

Measurable fat percentage 3 – 50% Measurable water percentage 25 – 75%

Measurable muscle mass

percentage 25 – 75%

Measurable bone mass

percentage I – I5%

Age range 6 - 100 years Height range 2' 8''-7' 2''Operating temperature 50 - 95°F

Specifications subject to change without notice.



Body Fat Scale Warranty Card

Your details:			
Name			
Address			
~ E	mail		
Date of purchase*			
* We recommend you keep the receipt with this warranty card			
Location of purchase			
Location of purchase			
Description of malfunction:			
Return your completed warranty card to:		AFTER SALES SUPPOR	T
MEDION USA, Inc.		- TEN SALES SOFFOR	<u> </u>
P.O. Box 1076		8 (ISA) 866-633-4660	www medion com

Please do not send merchandise to this address.

Highland Park, IL 60035 www.medionusa.com



MODEL: MD I4659, ITEM CODE# I056 0I/20I4

Limited Warranty

PLEASE READ THIS LIMITED WARRANTY CAREFULLY TO UNDERSTAND YOUR RIGHTS AND OBLIGATIONS.

MEDION warrants that the Body Fat Scale (MD I2840, Item I056) accompanied by this limited warranty is free from manufacturing defects in material or workmanship for a period of 36 months from the date of original purchase. Please save your original cash register receipt as it may be required to validate original date of purchase. The limited warranty period also applies to any implied warranties that may exist under applicable law. Some States do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

This limited warranty does not apply to products that have been opened, repaired (except by MEDION or its authorized Service representatives), or otherwise altered. This limited warranty does also not apply to defects resulting from misuse, abuse, accident, neglect, improper maintenance or handling.

If you believe the product is defective please return it to MEDION in the manner described below within the limited warranty period. If MEDION determines a defect covered by this limited warranty, MEDION will, at its option, repair or replace the product. This limited warranty extends to repaired products and replacement products only through the end of the original limited warranty period.

In no event shall MEDION or any of its distributors or resellers be liable for incidental, indirect or consequential damages relating to the product (including any repaired product or replacement product) or its use. Some States do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation and exclusion may not apply to you.

This limited warranty gives you specific legal rights, and you may have other rights which vary from State to State.

To make a claim under this limited warranty you must first contact MEDION Customer Care using one of the options below to obtain a return merchandise authorization (RMA) number. Once you have received the RMA, please return the product as instructed by the RMA. This warranty does not apply to any products returned to MEDION without a RMA.

To obtain a RMA please contact MEDION Toll Free Customer Care at:

866-633-4660

Daily 8:00 am - 8:00 pm CST

except holidays

Email Support (Available 24 hours a day, 7 days a week, with response in 24 hours or less)