BELTER

Diagnostic scale

GB Diagnostic scale
Instruction for Use

eF-706W

CE

ENGLISH

Dear customer,

Thank you for choosing one of our products. Our name stands for high-quality, thoroughly tested products for applications in the areas of weight, blood pressure, body temperature, pulse, beauty, and baby .
Please read these instructions for use carefully and keep them for later use, be sure to make them accessible to other users and observe the notes they contain.

With kind regards,
Your Belter team

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Included in delivery

- Quick Install Guide
- Diagnostic scale
- 4 x 1.5 V AAA batteries
- These operating instructions

1. Getting to know your instrument

Function of the unit

This digital diagnostic scale is intended for weighing and providing a diagnosis of your personal fitness data. It is intended for self-testing in the private domain.
The scale has the following diagnostic functions:

- body weight measurement,
- measurement of body fat percentage,
- body water percentage,
- muscle percentage,
- bone mass,
- basic and active metabolic rate.

This scale also has the following functions:

- switch between kilograms “kg”, pounds “lb” and stones “st”,
- automatic shutoff function,
- battery change indicator for weak batteries,
- Automatic user recognition
- measurements data can be transferred to the app.
- The scale uses Wifi

2. Signs and symbols

The following symbols appear in these instructions.

Warning	Warning instruction indicating a risk of injury or damage to health.
Important	Safety note indicating possible damage to the unit/accessory.
Note	Note on important information.

3. Safety notes

Please read these instructions for use carefully and keep them for later use, be sure to make them accessible to other users and observe the information they contain.

WARNING

- **The scales must not be used by persons with medical implants (e.g. heart pacemakers) Otherwise their function could be impaired.**
- Do not use during pregnancy.
- Do not stand on the outer edge to one side of the scale otherwise it may tip!
- Batteries are highly dangerous if swallowed. Keep batteries and scale out of reach of small children. If batteries are swallowed, get medical help immediately.
- Keep children away from packaging materials (risk of suffocation).
- Caution! Do not step onto the scale with wet feet or when the scale's surface is damp – danger of slipping!

Notes on handling batteries

- Swallowing batteries can be extremely dangerous. Keep the batteries and scale out of the reach of small children. Should a child swallow a battery, seek medical assistance immediately.
- Replace weak batteries before they discharge completely.
- Always replace all batteries at the same time and use batteries of the same type.
- Batteries must not be recharged, taken apart, thrown into an open fire or short circuited.
- Leaking batteries may damage the device. If you do not intend to use the device for longer periods, remove the batteries from the battery compartment.
- If a battery has leaked, put on protective gloves and clean the battery compartment with a dry cloth.
- Batteries can contain toxins that are harmful to health and the environment. Always dispose of batteries in accordance with applicable legal regulations. Do not dispose of batteries with the normal household waste.
- Do not throw batteries into fire. Explosion hazard!

General notes

- The unit is for personal use only and is not intended for medical or commercial applications.
- Note that technical tolerances mean that results may vary, because the scale is not calibrated for professional medical use.
- The capacity of the scale is 180 kg (396 lb, 28 st). For weight measurement and bone mass measurement, the results are shown in 100 g increments (0.2 lb).
- The measuring results of the body fat, body water and muscle percentage are shown in 0.1 % increments.
- The caloric requirements is specified in steps of 1 kcal.
- When supplied to the customer, the scale is set to weigh and measure in "kg" and "cm". You can change the unit settings during initial use of the app.
- Place the scale on a firm level floor; a firm floor covering is required for correct measurement.
- Protect the unit against hard knocks, moisture, dust, chemicals, major temperature fluctuations and heat sources which are too close (stoves, heating radiators).
- We hereby guarantee that this product complies with the European R&TTE Directive 1999/5/EC. Please contact the specified service address to obtain further information, such as the CE Declaration of Conformity.

Storage and maintenance

The accuracy of the measurements and service life of the device depend on its careful handling:

⚠ **IMPORTANT**

- The unit should be cleaned occasionally. Do not use abrasive detergents and never immerse the unit in water.
- Ensure that no liquid gets on the scale. Never dip the scale into water. Never wash it under running water.
- Do not place any objects on the scale when it is not being used.
- Protect the unit against hard knocks, moisture, dust, chemicals, major temperature fluctuations and heat sources which are too close (stoves, heating radiators).
- Do not press the buttons using excessive force or with pointed objects.
- Do not expose the scale to high temperatures or strong electromagnetic fields (e.g. mobile phones).

4. Information

The measuring principle

This scale operates according to the B.I.A. principle (bioelectric impedance analysis). This enables the measurement of physical relationships within seconds by means of an undetectable, completely harmless electric current. The body fat percentage and other physical relationships in the body can be determined by measuring the electrical resistance (impedance) and calculating constants and individual parameters such as age, height, gender and degree of activity.
Muscle tissue and water have good electrical conductivity, and therefore lower resistance. Bones and fatty tissue, on the other hand, have low conductivity as fat cells and bones conduct hardly any current as a result of their very high resistance.
Please be aware that values obtained from the diagnostic scale represent only an approximation of actual analytical medical data. Only a specialist physician can accurately determine body fat, body water, muscle percentage and bone structure using medical procedures (e.g. computed tomography).

General tips

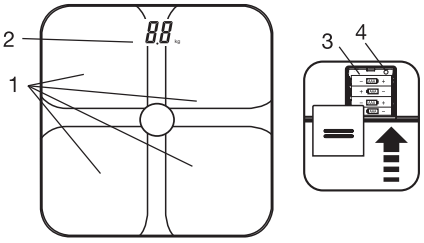
- If possible, always weigh yourself at the same time of day (preferably in the morning), after using the toilet, on an empty stomach and unclothed, in order to achieve comparable results.
- Important for the measurement: only measure body fat when barefoot and with the soles of the feet slightly moist.
  Completely dry soles can result in unsatisfactory measurements due to inadequate conductivity.
- Stand still and upright during the measurement.
- Wait a few hours after unaccustomed physical activity.
- Wait approx. 15 minutes after getting up in the morning to allow the water in the body to distribute.
- Remember that only long-term trends are important. Short-term changes in weight within a few days are usually caused by a loss of fluid. Body water plays an important role towards our general wellbeing.

Limitations

When measuring body fat and other values, deviating and implausible results may occur in:

- children under approx. 10 years,
- competitive athletes and body builders,
- pregnant women,
- persons with fever, undergoing dialysis treatment or with symptoms of edema or osteoporosis,
- persons taking cardiovascular medication (affecting the heart and vascular system),
- persons taking vascular dilating or vascular constricting medication,
- persons with considerable anatomic deviations of the legs in relation to total body size (length of the legs considerably shortened or lengthened).

5. Unit description

Front	
1. Electrodes = conductive ITO* coating	
2. Display	
Rear	
3. Battery compartment	
4. Unit shift button, change the unit KG/LB/ST	
*ITO (indium tin oxide): this innovative conductive coating acts as an electrode for the body measurement.	

Display	
5. Body data e.g. Body weight BMI, body fat etc.	

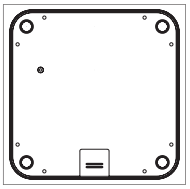
6. Initial use of the scale

Inserting batteries

Remove the batteries from the protective packaging and insert the batteries into the scale ensuring that the battery polarity is correct. If the scale does not function, remove the batteries completely and reinsert them.

Setting up the scale

Place the scale on a firm level floor; a firm floor covering is required for correct measurement.



7. Initial use with the app

Search "Smart Life" in APP store or google play for install the APP. Follow the instruction of "APP's USER MANUAL for connection or scan following QR code.

The following settings must be set or entered in the app:

User data	Parameters
Body height	100 to 220 cm (3‘ 3.5“ to 7‘ 2.5“)
Birthday	10 to 100 Years
Sex	male,female
Degree of activity	1 to 3

Degrees of activity
Selection of the degree of activity must refer to the medium and long term.

Degree of activity	Physical activity
1	None.
2	Low: A small amount of light physical effort (e.g. short walks, light garden work, gymnastic exercises).
3	Medium: Physical effort for 30 minutes at least 2 to 4 times a week.
4	High: Physical effort for 30 minutes at least 4 to 6 times a week.
5	Very high: Intensive physical effort, intensive training or hard physical work for at least one hour daily.

– **Assign the user when requested to do so by the app.**
For automatic personal recognition, the first measurement must be assigned to your personal user data. Follow the app instructions for this. Step onto the scale with bare feet and ensure that you are standing still with equal weight distribution and with both legs on the ITO electrodes.

8. Taking measurements

Place the scale on a firm level floor; a firm floor covering is required for correct measurement. When using on carpet, affix the additional feet for carpet.

Weighing, carrying out diagnostics

Step onto the scale with bare feet and ensure that you are standing still with equal weight distribution and with both legs on the ITO electrodes.

Note: There must be no skin contact between your feet, legs, calves or thighs. Otherwise the measurement cannot be performed correctly.

Note: The measurement result will be incorrect if the measurement is carried out with socks on.

The scales begin weighing immediately. First, the weight is displayed.
Whilst the further parameters are being measured an “oooo” appears.
Your measured weight is displayed shortly after this.
If a user has been assigned, the BMI, body fat, water, muscle, bone, and BMR are shown. This is the case if the initials are shown.

The following appears:
1. Weight in kg with BMI
2. Body fat in % with interpretation of Fat
3. Body water in % Water
4. Muscle percentage in % Muscle
5. Bone mass in kg Bone
6. Basal metabolic rate in kcal (BMR)
7. Visceral in number
8. Capacity:5kg-180kg

If the user is not recognised, only the weight can be shown and no initials appear "Er".

Only weight measurement

Now step on the scale wearing shoes. Stand still on the scale with your weight distributed evenly between both legs. The scale immediately begins to measure your weight.
The weight is shown and "Err" on the LCD/LED.
If a user has been assigned then the BMI, BMR and AMR are displayed.
If the user is not recognised, only the weight can be shown and no initials appear "Er".

Note: Only the measurements displayed on the scale may be used for further observations.

Switching off the scale

The scale will then switch itself off automatically.

9. Evaluation of results

Body fat percentage

The following body fat percentages are guide values (contact your physician for further information).

Man

Age	low	normal	high	very high
10–14	<11 %	11–16 %	16,1–21 %	>21,1 %
15–19	<12 %	12–17 %	17,1–22 %	>22,1 %
20–29	<13 %	13–18 %	18,1–23 %	>23,1 %
30–39	<14 %	14–19 %	19,1–24 %	>24,1 %
40–49	<15 %	15–20 %	20,1–25 %	>25,1 %
50–59	<16 %	16–21 %	21,1–26 %	>26,1 %
60–69	<17 %	17–22 %	22,1–27 %	>27,1 %
70–100	<18 %	18–23 %	23,1–28 %	>28,1 %

Woman

Age	low	normal	high	very high
10-14	<16 %	16–21 %	21,1–26 %	>26,1 %
15-19	<17 %	17–22 %	22,1–27 %	>27,1 %
20-29	<18 %	18–23 %	23,1–28 %	>28,1 %
30-39	<19 %	19–24 %	24,1–29 %	>29,1 %
40-49	<20 %	20–25 %	25,1–30 %	>30,1 %
50-59	<21 %	21–26 %	26,1–31 %	>31,1 %
60-69	<22 %	22–27 %	27,1–32 %	>32,1 %
70-100	<23 %	23–28 %	28,1–33 %	>33,1 %

A lower value is often found in athletes. Depending on the type of sports, training intensity and physical constitution, values may result which are below the recommended values stated. It should, however, be noted that there could be a danger to health in the case of extremely low values.

Body water percentage

The body water percentage is normally within the following ranges:

Man

Age	poor	good	very good
10–100	<50 %	50–65 %	>65 %

Woman

Age	poor	good	very good
10–100	<45 %	45–60 %	>60 %

Body fat contains relatively little water. Therefore persons with a high body fat percentage have body water percentages below the recommended values. With endurance athletes, however, the recommended values could be exceeded due to low fat percentages and high muscle percentage.
This scale is unsuitable for measuring body water in order to draw medical conclusions concerning age-related water retention, for example. If necessary ask your physician. Basically, a high body water percentage should be the aim.

Muscle percentage

The muscle percentage is normally within the following ranges:

Man

Age	low	normal	high
10–14	<44 %	44–57 %	>57 %
15–19	<43 %	43–56 %	>56 %
20–29	<42 %	42-54 %	>54 %
30–39	<41 %	41–52 %	>52 %
40–49	<40 %	40–50 %	>50 %
50–59	<39 %	39–48 %	>48 %
60–69	<38 %	38–47 %	>47 %
70–100	<37 %	37–46 %	>46 %

Woman

Age	low	normal	high
10–14	<36 %	36–43 %	>43 %
15–19	<35 %	35–41 %	>41 %
20–29	<34 %	34–39 %	>39 %
30–39	<33 %	33–38 %	>38 %
40–49	<31 %	31–36 %	>36 %
50–59	<29 %	29–34 %	>34 %
60–69	<28 %	28–33 %	>33 %
70–100	<27 %	27–32 %	>32 %

Bone mass

Like the rest of our body, our bones are subject to the natural development, degeneration and ageing processes. Bone mass increases rapidly in childhood and reaches its maximum between 30 and 40 years of age. Bone mass reduces slightly with increasing age. You can reduce this degeneration somewhat with healthy nutrition (particularly calcium and vitamin D) and regular exercise.
With appropriate muscle building, you can also strengthen your bone structure. Note that this scale will not show you the calcium content of your bones, but will measure the weight of all bone constituents (organic substances, inorganic substances and water). Little influence can be exerted on bone mass, but it will vary slightly within the influencing factors (weight, height, age, gender). no recognised guidelines or recommendations relating to bone mass measurement.

ATTENTION:
Please do not confuse bone mass with bone density.
Bone density can be determined only by means of a medical examination (e.g. computer tomography, ultrasound). It is therefore not possible to draw conclusions concerning changes to the bones and bone hardness (e.g. osteoporosis) using this scale.

BMR

The basal metabolic rate (BMR) is the amount of energy required by the body at complete rest to maintain its basic functions (e.g. while lying in bed for 24 hours). This value largely depends on weight, height and age. It is displayed on the diagnostic scale in kcal/day units using the scientifically recognized Harris-Benedict formula.
Your body requires this amount of energy in any case and it must be reintroduced into your body in the form of nutrition. If you take on less energy over the longer term, this can be harmful to your health.

Results in relation to time

Remember that only long-term trends are important. Short-term fluctuations in weight over a few days are usually the result of a loss of fluid.

The interpretation of the results will depend on changes in your overall weight and body fat, body water and muscle percentages, as well as on the period during which these changes take place. Sudden changes within days must be distinguished from medium term changes (over weeks) and long term changes (months).

A basic rule is that short term changes in weight almost exclusively represent changes in water content, whereas medium and long term changes may also involve the fat and muscle percentages.

- If your weight reduces over the short term, but your body fat percentage increases or remains the same, you have merely lost water – e.g. after a training session, sauna session or a diet restricted only to rapid weight loss.
- If your weight increases over the medium term and the body fat percentage falls or stays the same, then you could have built up valuable muscle mass.
- If your weight and body fat percentage fall simultaneously then your diet is working – you are losing fat mass.
- Ideally you should support your diet with physical activity, fitness or power training.
  This way you can increase your muscle percentage over the medium term.
- Body fat, body water or muscle percentages should not be added (certain elements of muscle tissue also contain body water).

10. Power off

When the scale stays at 0.0kg and no operating on it, it will turn off in 30's. If the weight on scale is not stable, the scale will turn off in 30's.

After measurement and step off the scale, the scale will turn off automatically, (even when the data is in transferring).After measurement, if the user does not step off, the scale will turn off in 120's.If the APP send command asking the scale turn off, it will turn off.

11. Other functions

Replacing batteries

Your scale is equipped with a "low battery indicator". If you operate the scale with flat batteries, "LO" will appear on the display and the scale will automatically switch off. In this case, the batteries must be replaced (3 x 1.5 V AAA).

NOTE:

- When changing batteries, always use batteries of the same type, brand and capacity.
- Do not use rechargeable batteries.
- Use batteries that are free of heavy metals.

12. Cleaning and care of the unit

The unit should be cleaned occasionally.
Clean using a damp cloth, to which you can apply a little detergent if necessary.

IMPORTANT

- Do not use aggressive solvents or cleaning agents!
- Never immerse the unit in water!
- Do not wash the unit in a dishwasher!

13. Disposal

Standard and rechargeable batteries should not be disposed of separately from the household waste. As a consumer, you are legally obliged to return used batteries for proper disposal. You can hand in your used batteries at public collection points in your district or sales outlets where batteries of this type are sold.

NOTE:

The codes below are printed on batteries containing harmful substances:
Pb = Battery contains lead,
Cd = Battery contains cadmium,
Hg = Battery contains mercury.

For environmental reasons, do not dispose of the scale with the batteries in the household waste at the end of its useful life. Dispose of the unit at a suitable local collection or recycling point.

Observe the local regulations for material disposal.
Please dispose of the device in accordance with EC Directive – WEEE (Waste Electrical and Electronic Equipment).
If you have any queries, please contact the appropriate local authorities.

14. What if there are problems?

If the scale detects and error when measuring, the following is displayed.

Display	Cause	Remedy
" Err "	Unknown measurement as it is outside the user assignment limit or a unique assignment is not possible.	Assign unknown measurement in app or repeat user assignment.
	The fat percentage is outside the measurable range (less than 3 % or greater than 65 %).	Repeat the measurement barefoot or, if necessary, moisten the soles of your feet slightly.
oL	The maximum load-bearing capacity of 180 kg was exceeded.	The load must not exceed 180 kg
Lo	The batteries in the scale are empty.	Replace the batteries of scale.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.
Changes or Modifications not expressly approved by the party responsible could void the user's authority to operate this device.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.
If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
-- Reorient or relocate the receiving antenna.
-- Increase the separation between the equipment and receiver.
– Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
-- Consult the dealer or an experienced radio/TV technician for help.