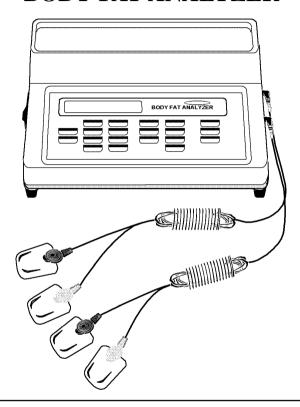


# **BODY FAT ANALYZER**



**ATTENZIONE:** Gli operatori devono leggere e capire completamente questo manuale prima di utilizzare il prodotto.

**ATTENTION:** The operators must carefully read and completely understand the present manual before using the product.

**ATENCIÓN:** Los operadores tienen que leer y entender completamente este manual antes de utilizar el producto.

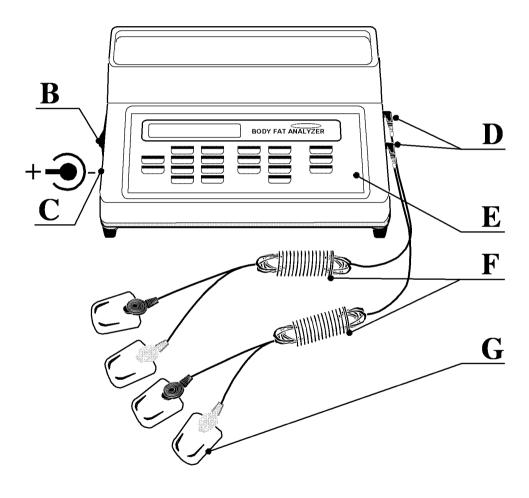


## GIMA Spa - Via Marconi 1 - 20060 Gessate (MI) - Italia

ITALIA: Tel. 199 400401 (8 linee r.a.) - Fax 199 400403 E-mail: gima@gimaitaly.com - www.gimaitaly.com

INTERNATIONAL: Tel. ++39 02 951020209 - Fax ++39 02 95304706 E-mail: export@gimaitaly.com - www.gimaitaly.com







# BODY FAT ANALYZER USE AND MAINTENANCE BOOK



#### **FEATURES**

The accepted method of measuring total body water is based on the dilution of isotopes of water (Deuterium or tritium) as it is metabolized in the human subject over time. And the traditionally estimate body composition is to use electrical impedance plethysmography. However, there is a need for a total body composition measurement technique that is rapid, safe, noninvasive and sufficiently accurate and convenient to permit its use in body composition. Recently, we used a new approach to human body composition estimation that appears to fulfill many of these requirements.

This new Technique entails measuring total body electrical resistance (impedance). The amount of water, fat free mass in man can be accurately estimated by measuring total body electrical resistance. Specifically, four electrodes are placed over metacarpals and metatarsals where a 50 KHz current is introduced. The detected signal level when corrected for subject height will be an index of total body water and fat free mass.

The body is made up of both lean and fat tissue, as well as water. Together they equal the weight you see on your weight scales. Lean tissue inclused muscle, bone, vital organs, etc; Both fat and lean tissue contain water. To have a healthy, well-functioning body, it is extremely important that the lean and fat tissue weights are properly balanced.

Now the BT-905 will help you to manage your nutrition, fitness and weight. It not only can tell if you are at the right weight but also tell you whether or not your are nutritionally healthy.

Listed below are some of the many wais BT-905 will help maximize your personal level of fitnesswhether you want to lose weight, build muscle, tone and trim, or simply be sure you are maintaining your current level of fitness:

- It allows you to check the effectiveness of your weight loss program by telling you exactly where your weight loss is coming from-fat, lean, or water.
- It establishes a baseline for your boby composition so that nutritional and fitness improvements can be monitored on a regular basis.
- It provides possible answers to weight "plateaus"-a common plague of dieters.
- It helps you monitor improvements is muscle mass as a result of exercise and/or diet, and it warns you of muscle loss caused by inactivity, the aging process, or illness.
- It helps explain "mysterious" weight gains or losses associated with periodic bloating or dehydration.

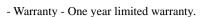
Test current: less than 1 mA. Test frequency: approximately 50 KHz

Power source: with power pack or direct power supply.

Size: 66x176x208 mm. Weight: 1500 gr.

- Results FAT per cent, LEAN per cent, WATER, BMR, Target Weight and Target FAT per cent.
- Accurate Results and instrument accuracy
- Time saving Testing and results take less than 2 minutes.
- Private You can perform the test almost anywhere.
- Portable Small size and light weight.
- Safe Operate by battery.





- Durable.

The product or its components cannot be used for usages different to the ones specified in the present manual.

#### PRESCRIPTIONS



Plug in device only into a properly installed socket.

Do not dip it into water! Before cleaning always pull out plug from the socket.

When removing lead connectors, grasping them by the plug **D**, not the cord **F**.

Don't expose to excessive amounts of moisture. Don't leave in direct sunlight for extended periods of time.

Don't drop or hit against other objects. Treat is as you would other sophisticated electronic devices such as a calculator or recorder.



Flex **F** has to be examined regularly for damages.

Do not use device if damages are detected. Go to an expert electrician. Avoid precarious repairs. Repairs shall be carried out with original spare parts only, which shall be installed according to the intended use.

#### UNPACKING



Always remember that packing elements (paper, cellophane, stitches, adhesive tape, etc.) can cut and/or hurt if they are not carefully handled.

They shall be removed with adequate means and shall not be left at the mercy of irresponsible persons; the same is valid for tools used to remove packages (scissors, knives, etc.).

After opening the packages, first of all it is necessary to check all pieces and parts composing the product. Check that they are all present and in perfect conditions.

#### GETTING YOURSELF READY FOR TESTING

To be sure your test results are accurate you must follow the guidelines listed below as exactily as possible to be sure that you will consistently obtain the most valid and reliable results possible with your BT-905 instrument.

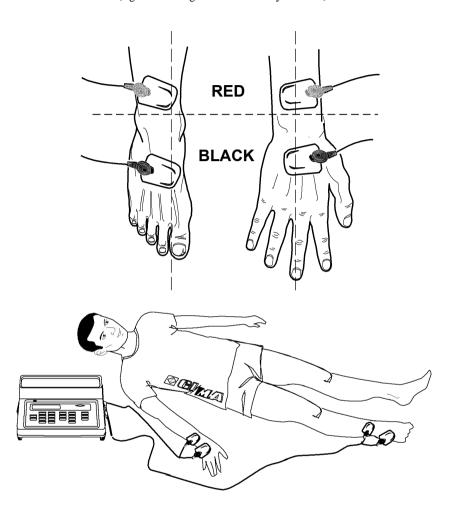
- 1. Meals. Wait at least 5 hours after a meal before performing the test.
- **2. Hydration.** Do not consume large amounts of water just prior to testing. (Some medications-particularly diuretics-may also affect test results).
- **3. Coffee.** Do not drink coffee for 4 hours before testing. Coffee is a diuretic and may affect the hydration level of your body.
- **4. Alcohol.** Do not drink alcoholic beverages for 24 hours pripor to testing. Alcohol is a diuretic. In your bloodstream, it also conducts electricity in such a way as to interfere with an accurate test.
- **5. Exercise.** Don not test your body composition for a least 12 hours after exercise. (This is becauseexercise has a significant effect on your body's water content).
- **6. Weight.** Check your weight on a reliable pair of scales immediately before testing. This is particularly important for those who tend to be quite lean. The scientific formulas used to accurately calculate your percents of lean and fat are dependent on an accurate scale weight. Even using yesterday's weight is not close enough to assure a valid test.

Just before the test cleanse your skin using a washcloth with soap and water, cleanse the areas where you will be placing the sensor pads G. Scrub the areas until the skin becomes pink but not sor or irritated. This will remove all dead skin, perspiration, and any excess oils that could prevent good contact with the sensor pads G. Dry the skin with a clean cloth.





# SENSOR PAD PLACEMENT (right foot & right hand or usually use side)



Sensor pads G should be placed on one hand and one fool, the side use usually, as shown in the accompanying diagrams.

On the back of the hand, place a sensor pad on the third knuckle of the middle finger. Place a second pad on the arm just behind the wrist at the crease observed when the hand is bent back. The edge of the sensor pad should just touch the crease.

The pad on the foot should be applied just behind the place where the big toe and the first toe join. The position for the sensor pad at the ankle is found by placing your thumb and forefinger on the two protruding bones on either side of the ankle and the bringing the fingers forward to the midway point between the two bones. Place the sensor pad  $\bf G$  at the bend of the ankle, in line with the shinbone. Refer to diagrams for proper placement, and be sure to be consistent each time you test.







#### Connect the sensor cable clips to the sensor pads.

There are two long sensor cable wires **F**.

At the ends of each of these wires **F** are two clips-a red clip and a black clip (a total of four clips).

On the foot-using either of the main wires F the black clip should be attached to the sensor pad G near the big toe; the red clip should be attached to the sensor pad **G** on the ankle.

On the hand, the black clip on the remaining wire F should be attached to the sensor G near the knuckle; the red clip should be attached to the sensor G at the wrist.

- It may help to remember that the red clips are always placd closer to your heart than the black clips. Get your body in position for the test

# For testing, lie flat on your back on a hard, flst surface (preferably uncarpeted floor or table). Don not touch your arms to your body while testing. Arms should be at your side, palms flat on the floor, a comfortable distance from your trunk. Legs should be unbent and slightly apart so that your body is perfectly symmetrical when the display counts down for your test.

#### FUNCTIONING

At machine switching on, the parameters of the system take a few minutes to become stable. For this reason a rest time of 10 minutes shall be observed. During stabilization, after a few minutes the equipment sets to STANDBY (++++). To use it, it is necessary to turn it off and turn it on again after a few seconds.

- 1. Turn machine ON B.
- 2 Warm up the unit for at least 10 minutes before testing.
- Press "C/E" key pad to select units of measure. Press 0 for the english units or 1 for the metric 3. units.
- 4. Press "Enter" key to begin.
- 5. Input your sex, 0 for male, 1 for female, then press "Enter".
- Input your height and press "Enter". 6.
- 7. Input your weight and press "Enter".
- 8. Input your age and press "Enter".
- 9. Now, getting yourself ready for testing.
- Press "Enter" key to start measure. 10.
- Wait about 5 seconds, then it will display the result datas. Then you can choose the green color 11. key pads of machine to show you the datas you want to read.

#### Note

- If you use English units, when you input your hight the units is in inches. For example: If you are 5 feet 1/2 inch tall, you would first press 6, then 0, then 5, indicating you are 60.5 inches tall. If you are an even 6 feet tall, you should entere first a 7, then a 2, and then 0 (72 inches). In the event that you are an even number of inches tall, be sure to include a zero as your final entry.
- To be sure your results are accurate, do not guess at your weight or rely on your memory. Please indicate your weight just before your test, and use the same scale each time you test, if possible.
- If you accidentally press a wrong number or letter, do not hit the "Enter" key-press the "C/E" key, then the correct response, and then the "Enter" key. If you press a wrong number of letter and "Enter" it, you must restart the entire test.
- Besides the green key pads, tou can read the result of a target percent fat by pressing the "Program" key then the 'Target Weight' key.







### Interpreting the results

Kg FAT: Kilograms of FAT, the actual weight of fat on your body. There are approximately 3500 calories stored in each kilogram of body fat.

Kg LEAN: The kilograms of lean in your body, mostly muscle and vital organs represent the amount of your weight that is not fat.

Lt. of water: A measure of the litres of water in your body can be very helpful in explaining rapid weight loss or gain. A litre of water weights about one kilogram. Most of the body's fluid is contained in the lean body mass, which normally consist of 70-75% water.

% FAT: The percent of fat weight in total body weight.

% LEAN: The percent of lean weight in total body weight.

BMR: Basal metabolic rate refers to the number of calories your body uses each day just to "stay alive"-breathing, pumping blood, thinking, and so on. It doesn't include calories you burn by exercising. Your basal metabolic rate is directly related to the amount of lean tissue in your bosy. The more lean tissue you have, the higher you metabolic rate-in other words, the more calories you will "use up" just by being alive.

TARGET WEIGHT: Target weight is simply a weight goal to aim for under optimal conditions. It is based on the assumption that all the weight you lose will be fat and that lean tissue will be neither lost nor gained. Under an ideal condition, all weight loss would be fat and a small amount of lean would be increased. This is why your target weight may change slightly as you alter your diet and exercise plan. Whit a healthy lifestyle, eventually your actual weight and target weight should match.

TARGET % FAT: Target percent fat is a valuewhich represents a "normal" percent for your sex and age. It does not necessarily represent the "best" percent fat for you. For example, very fit individuals often fall well below these target values. The importance of the target percent fat it is a worthy goal for those who tend to be overfat and is generally considered healthy. This value can be seen in the display only when "Program", "Target Weight" is entered.

#### **MAINTENANCE**

Cleaning-Periodically your BT-905 with a damp cloth.

The sensor pads G can be used for four or five times. Use the sensor pads G within 10 days after the package was opened.

N.B.: The labels applied to the equipment shall be maintained cleaned and shall not be removed or damaged.

#### TROUBLESHOOTING

#### 1. No Display:

If you turn on **B** you BT-905 and there is no display in the window, you should:

a. Check battery chargement.

If the above attempt fail, return the machine to the dealer.

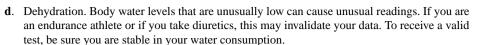
#### 2. "Invalid Data-See Manual":

This message in the display window results from one of several possibilities:

- a. The most likely cause is failure to follow protocol closely enough. Carefully re-read the sections in your manual entitled "Getting Yourself Ready for Testing" and "Operate Guide" Then retest.
- b. Recheck your exact scale weight and your haeight; then reperform the test. This is absolutely necessary for thin individuals in particular. Weight fluctuates from day to day enough to produce invalid data if not entered correctly.
- A very small percent of the extremely thin and tall population may not be possible to measure using bioresistance methods. This would be a very rare situation, and the Invalid Data message is probably due to improper testing protocol rather than to being immesurably lean. Be sure to follow protocol.







**e**. Unset device: it is advised to buy the calibration kit (cod. 27324) and to check periodically the correct setting of the device.

#### 3. "Check Probes":

This message indicates that the electrical signals from your body are not strong enough for your BT-905 to read and interpret:

- **a**. Check the sensor pads **G**. Make sure they fit snugly against your skin. (Did you remember to cleanse your skin thoroughmy before application?).
- **b**. Check to cable connector **D** to be sure it is properly inserted in the jack.
- c. Check the sensor cable clips to be sure each one is clipped firmly onto the sensor pads G.

When these checks have been completed, retake the rest.

Check to cable connector **D** to be sure it is properly inserted in the jack.

#### **GUARANTEE**

Thank you for having acquired our product.

This product meets the most stringent requirements regarding the selection of quality manufacturing materials and also the final control. The product has a 12-month warranty, valid from the date it is delivered by GIMA.

During the guarantee period free repair and/or replacement of any defective parts due to faulty manufacture will be given, labour, postal, transport and packaging charges etc. are not included. The guarantee therefore excludes components subject to wear and tear such as parts in rubber or PVC, doppler probes, SpO<sub>2</sub> sensors, lamps, batteries, electrodes, handpieces, washers and packings, resistances, etc.

No compensation will be given for loss of use of the product.

Furthermore replacement or repairs effected during the guarantee period do not lengthen the duration of the guarantee.



This guarantee is void in the event of: repairs effected by unauthorised persons or with spare parts not approved by GIMA, damage or defects caused by negligence, blows, abnormal use of the appliance or faulty installation.

The guarantee will be invalidated if the registration number has been removed, cancelled or altered. Faulty appliances must be returned only to the retailer where the item was bought. Any item dispatched directly to us will be refused.



**Smaltimento:** Il prodotto non deve essere smaltito assieme agli altri rifiuti domestici. Gli utenti devono provvedere allo smaltimento delle apparecchiature da rottamare portandole al luogo di raccolta indicato per il riciclaggio delle apparecchiature elettriche ed elettroniche.

Per ulteriori informazioni sui luoghi di raccolta, contattare il proprio comune di residenza, il servizio di smaltimento dei rifiuti locale o il negozio presso il quale è stato acquistato il prodotto. In caso di smaltimento errato potrebbero venire applicate delle penali, in base alle leggi nazionali.

**Disposal:** The product must not be disposed of along with other domestic waste. The users must dispose of this equipment by bringing it to a specific recycling point for electric and electronic equipment.

For further information on recycling points contact the local authorities, the local recycling center or the shop where the product was purchased. If the equipment is not disposed of correctly, fines or penalties may be applied in accordance with the national legislation and regulations.

Élimination des déchets d'EEE: Ce produit ne doit pas être jeté avec les ordures ménagères. Les utilisateurs doivent remettre leurs appareils usagés à un point de collecte approprié pour le traitement, la valorisation, le recyclage des déchets d'EEE. Pour obtenir plus d'informations sur les points de collecte des équipements à recycler, contactez votre mairie, le service local de collecte et de traitement des déchets ou le point de vente du produit. Toute personne contrevenant aux lois nationales en matière d'élimination des déchets est passible de sanctions administratives.

**Entsorgung:** Das Produkt darf nicht mit dem anderen Hausmüll entsorgt werden. Der Benutzer muss sich um die Entsorgung der zu vernichtenden Geräte kümmern, indem er sie zu einem gekennzeichneten Recyclinghof von elektrischen und elektronischen Geräten bring.

Für weitere Informationen bezüglich der Sammelpunkte, bitten wir Sie, Ihre zuständige Gemeinde, oder den lokalen Müllentsorgungsservice oder das Fachgeschäft, bei dem Sie das Gerät erworben haben zu kontaktieren. Bei falscher Entsorgung könnten Strafen, in Bezug auf die gültigen Landesgesetze erhoben werden.

Eliminación: El producto no ha de ser eliminado junto a otros residuos domésticos. Los usuarios tienen que ocuparse de la eliminación de los aparatos por desguazar llevándolas al lugar de recogida indicado por el reciclaje de los equipos eléctricos y electrónicos.

Para más información sobre los lugares de recogida, contactar el propio ayuntamiento de residencia, el servicio de eliminación de residuos local o la tienda en la que se compró el producto. En caso de eliminación equivocada podrían ser aplicadas multas, en base a las leyes nacionales.

ΧΩΝΕΥΣΗ: Το προιόν δεν πρέπει να πεταχτεί μαζύ με άλλα απορρύματα του σπιτιού. Οι χρήστες πρέπει να φροντίσουν για την χώνευση των συσκευών μεταφέροντάς τες σε ειδικούς τόπους διαχωρισμού για την ανακύκλωση ηλεκτροκικών αυσκευών. Για περισότερες πληροφορείες στούς χώρους συγκέντρωσης, επικοινωνήστε με την υπηρεσία του δήμου παραμονής σας, το τιμήμα χώνευσης τοπικών απορυμμάτων ή το κατάστημα απο το οποίο αγοράσατε το προιόν. Σε περίπτωση λανθασμένης χώνευσης υπάρχει κίνδυνος εφαρμογής κυρώσεων βάσει των κρατικών νόμων.

## Simbologia / Index of symbols

<u> </u>	Leggere e seguire attentamente le istruzioni per l'uso Please read instructions carefully
REF	27322 Codice prodotto Product code
LOT	Numero di lotto (vedi scatola / imballo)
	Lot number (see box / package)

*	Tenere al riparo dai raggi solari Keep away from direct sunlight
*	Custodire in luogo asciutto ed al riparo dall'umidità Store in a dry place and avoid humidity.

$\subset$	Prodotto conforme alla Direttiva Europea n. 93/42/CEE (e successive modifiche) sui dispositivi medici Product complies with European Directive no. 93/42/EEC (and following amendments) regarding medical devices



FABBRICANTE / MANUFACTURER:
SKYLARK DEVICE & SYSTEMS co Ltd
2F 8-9 N.40-2 SEC. 1 Minsheng n. Rd
Guishan Township Taoyuan Country, TAIWAN

Ritwell AB KVESARUM 4218 242 94 HORBY, SWEDEN