

TANITA BC-418

Tanita BC-418 Segmental Body Composition Analyser/Scale User Manual

1. INTRODUCTION

This manual provides detailed instructions for the safe and effective use of your Tanita BC-418 Segmental Body Composition Analyser/Scale. The BC-418 is designed to provide comprehensive body composition analysis, breaking down results into five segments: right arm, left arm, right leg, left leg, and trunk, in addition to overall body measurements. It is suitable for use by fitness professionals, medical experts, and researchers. Please read this manual thoroughly before operating the device and retain it for future reference.

2. SAFETY INFORMATION

Important Safety Precautions:

- Do not use this product if you are pregnant.
- Do not use this product if you have a pacemaker or any other internal medical device.
- Always consult with a healthcare professional regarding your body composition results and any health concerns.
- Keep the device away from water and extreme temperatures.
- Ensure the device is placed on a stable, flat surface during use.

3. PRODUCT FEATURES

The Tanita BC-418 offers advanced features for precise body composition analysis:

- **Segmental Body Composition:** Provides results for 5 body segments: trunk, left arm, right arm, left leg, right leg.
- **Bio-Electrical Impedance Analysis (BIA):** Utilizes 8-polar BIA technology for accurate measurements.
- **Comprehensive Printout:** Generates a detailed printout showing BMI, BMR, Fat %, Fat Mass, Fat Free Mass, Total Body Water, and desirable ranges for Fat % and Fat mass.
- **Integrated Printer:** Features an all-in-one compact column mount design with an integrated printer for immediate result documentation.

- **Advanced BMR Calculation:** Incorporates Tanita's proprietary formula that considers Fat Free Mass for a more accurate Basal Metabolic Rate (BMR) calculation compared to traditional weight-based methods.



Figure 1: Tanita BC-418 Segmental Body Composition Analyser/Scale.

4. SETUP GUIDE

Follow these steps to set up your Tanita BC-418 for first use:

1. **Unpacking:** Carefully remove all components from the packaging. Verify that all parts are present according to the packing list.
2. **Placement:** Place the analyser on a firm, flat, and level surface. Avoid carpets or uneven flooring, as this can affect accuracy. Ensure there is adequate space around the unit for safe operation.
3. **Power Connection:** Connect the power adapter to the analyser and then plug it into a suitable electrical outlet.
4. **Initial Power On:** Press the power button to turn on the device. The display should illuminate.
5. **Printer Setup:** Ensure the integrated printer has paper loaded correctly. Refer to the printer section of this manual for detailed instructions on loading paper if needed.
6. **Calibration (if required):** Some units may require initial calibration. Follow any on-screen prompts or refer to the specific calibration section in this manual if applicable.

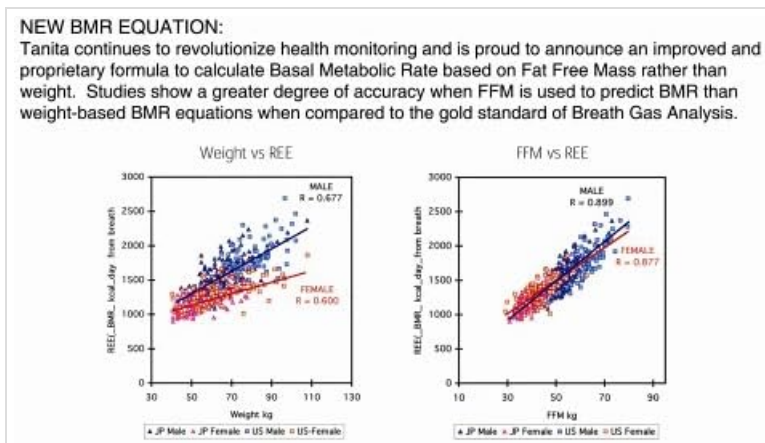


Figure 2: Tanita BC-418 showing the platform and handgrips for segmental analysis.

5. OPERATING INSTRUCTIONS

To obtain accurate body composition measurements, follow these steps:

1. **Preparation:** Ensure the user has removed shoes and socks. The soles of the feet should be clean and dry.
2. **User Data Entry:** Input the user's personal data (e.g., age, gender, height) into the analyser using the control panel. This information is crucial for accurate calculations.
3. **Step onto the Platform:** Instruct the user to step onto the analyser platform, ensuring their feet are correctly positioned on the electrodes. They should stand still and upright.
4. **Grasp Handgrips:** Have the user firmly grasp the handgrips, ensuring their hands are making good contact with the electrodes. Arms should be extended slightly away from the body.
5. **Measurement Process:** The analyser will begin the measurement. Instruct the user to remain still and silent until the measurement is complete. The process typically takes a few seconds.
6. **Results Display and Printout:** Once the measurement is complete, the results will be displayed on the screen. The integrated printer will automatically generate a detailed printout of the body composition data.
7. **Step Off:** Instruct the user to step off the platform once the measurement and printout are finished.

Understanding Basal Metabolic Rate (BMR) Calculation

The Tanita BC-418 utilizes an advanced, proprietary formula for calculating Basal Metabolic Rate (BMR). Unlike older methods that primarily rely on weight, age, and gender, Tanita's formula incorporates **Fat Free Mass (FFM)** for a significantly higher degree of accuracy.

Studies have demonstrated that using FFM to predict BMR yields more precise results compared to traditional weight-based BMR equations, aligning more closely with the gold standard of Breath Gas Analysis. This innovation ensures that the BMR provided by your BC-418 is a more reliable indicator of the calories your body burns at rest. For example, graphical analysis comparing BMR (REE) against Weight versus BMR (REE) against Fat Free Mass shows a stronger correlation (higher R-value) when FFM is used, particularly for both male and female subjects. This indicates that FFM is a superior predictor of an individual's metabolic rate.

6. MAINTENANCE AND CARE

Proper maintenance ensures the longevity and accuracy of your Tanita BC-418:

- **Cleaning:** Wipe the analyser's surface and electrodes with a soft, damp cloth. Do not use abrasive cleaners, solvents, or immerse the unit in water.
- **Storage:** Store the device in a cool, dry place, away from direct sunlight and extreme temperatures.

- **Printer Paper:** Regularly check the printer paper supply and replace it as needed. Use only recommended paper types.
- **Inspection:** Periodically inspect the power cord and connections for any signs of damage. If damage is found, discontinue use and contact customer support.

7. TROUBLESHOOTING

If you encounter issues with your Tanita BC-418, refer to the following common problems and solutions:

- **No Power:**
 - Check if the power cord is securely plugged into both the analyser and the electrical outlet.
 - Ensure the power outlet is functional by testing it with another device.
- **Inaccurate Readings:**
 - Verify the analyser is on a flat, stable surface.
 - Ensure the user's feet and hands are clean and making good contact with the electrodes.
 - Confirm that user data (age, gender, height) has been entered correctly.
 - Avoid taking measurements immediately after intense exercise, heavy meals, or excessive fluid intake.
- **Printer Not Working:**
 - Check if printer paper is loaded correctly and there is sufficient supply.
 - Ensure there are no paper jams.
 - Refer to the printer-specific section of the full manual for detailed troubleshooting.
- **Error Messages:**
 - Note down the specific error code or message displayed.
 - Consult the comprehensive troubleshooting section in the complete product manual or contact Tanita customer support with the error information.

8. SPECIFICATIONS

Specification	Detail
Model Number	BC-418
Display Type	Digital
Weigh Scale Type	Counter Scale
Measurement Type	Pounds
Unit Count	1 Count
Item Weight	50 Pounds
Package Dimensions	36.8 x 20.7 x 13.7 inches
Manufacturer	Tanita
ASIN	B000FHZGL6

Specification	Detail
UPC	742496029027

9. WARRANTY AND SUPPORT

For warranty information, technical support, or service inquiries, please contact Tanita customer service directly. Details can typically be found on the official Tanita website or through the contact information provided with your purchase documentation.

It is recommended to register your product upon purchase to facilitate any future warranty claims or support needs.

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question