WELCARE BC380

ACCUNIQ BC380 Body Composition Analyzer User Manual

Multi-Frequency Segmental Body Composition Analysis

1. INTRODUCTION

Thank you for choosing the ACCUNIQ BC380 Body Composition Analyzer. This device is designed to provide clinically accurate body composition results using multi-frequency segmental bioelectrical impedance analysis (BIA) technology. The BC380 offers a comprehensive analysis of various body components, aiding in effective health monitoring and management.

This manual provides essential information for the safe and effective operation, maintenance, and troubleshooting of your ACCUNIQ BC380. Please read it thoroughly before using the device.

Figure 1: ACCUNIQ BC380 Body Composition Analyzer

This image shows the complete ACCUNIQ BC380 device from the front, highlighting its sleek design and integrated display unit.

2. SAFETY INFORMATION

To ensure safe operation and prevent damage to the device or injury to users, please observe the following safety precautions:

- Do not use the device if you have an implanted medical electronic device such as a pacemaker or artificial lung.
- Do not use the device if you are pregnant.
- Ensure the device is placed on a stable, flat surface to prevent tipping.
- Keep the device away from water or excessive moisture.
- Do not attempt to disassemble or repair the device yourself. Contact qualified service personnel.
- Use only the power adapter supplied with the device.
- Keep children and pets away from the device during operation.
- Avoid using the device in direct sunlight or extreme temperatures.

3. PRODUCT COMPONENTS

The ACCUNIQ BC380 consists of the following main components:

- **Main Unit:** The central body of the analyzer, housing the display and processing unit.
- **Touch Panel & UI:** A 7-inch wide color touchscreen for intuitive operation and on-screen instructions.
- **Electrode Handles:** Two handles with electrodes for upper body measurement, designed for improved grip.
- **Foothold Electrodes:** Large 18"x18" platform with electrodes for lower body measurement, ensuring easy access, comfort, and stability.
- **Printer (Optional/Integrated):** For printing detailed result sheets.

Figure 2: Close-up of the Touch Panel and Electrode Handles

This image provides a detailed view of the 7-inch color touchscreen display and the ergonomic electrode handles of the ACCUNIQ BC380.

Figure 3: Top View of the Foothold Electrodes

This image shows the large platform with integrated foothold electrodes, designed for user comfort and stable measurement.

4. SETUP INSTRUCTIONS

Follow these steps to set up your ACCUNIQ BC380 for the first time:

1. **Unpacking:** Carefully remove all components from the packaging. Retain packaging for future transport or storage.
2. **Placement:** Place the main unit on a firm, level, and non-vibrating surface. Ensure there is sufficient space around the device for safe operation and user movement.
3. **Power Connection:** Connect the power adapter to the power input port on the back of the main unit, then plug the adapter into a suitable electrical outlet.
4. **Initial Power On:** Press the power button (usually located on the side or back of the main unit). The display will light up, and the system will perform a self-check.
5. **Language and Basic Settings:** Follow the on-screen prompts to select your preferred language, date, and time settings.

5. OPERATING INSTRUCTIONS

The ACCUNIQ BC380 is designed for ease of use. Follow these steps to perform a body composition analysis:

1. **Preparation:**
   - Ensure your feet are clean and dry.
   - Remove any metal objects (jewelry, watches) that might interfere with the measurement.
   - For consistent results, it is recommended to measure at the same time of day, ideally in the morning before eating or exercising.

2. **Start Measurement:**

   - Step onto the foothold electrodes barefoot. Position your feet correctly on the designated areas.
   - Grasp the electrode handles firmly with both hands. The measurement starts automatically without the need to push a button separately once you grab the handles.
   - Stand still and maintain a natural posture during the measurement. Avoid talking or moving.

Streamline Measurement Data Analysis

Figure 4: Proper Posture for Measurement

This image illustrates the correct posture for a user undergoing a body composition analysis on the ACCUNIQ BC380, showing proper hand and foot placement on the electrodes.

3. **Measurement Process:** The device uses a Tetra-polar electrode method with 8 touch electrodes and operates at multiple frequencies (5, 50, 250 kHz). The measurement takes approximately 30 seconds.

4. **Results Display:** Once the measurement is complete, your results will be displayed on the 7-inch touchscreen. Results are also printed in an easy-to-understand format with measurement comparison to healthy ranges.

6. UNDERSTANDING YOUR RESULTS

The ACCUNIQ BC380 provides a comprehensive analysis of your body composition. Key metrics include:

- **Body Composition Analysis:** Weight, Lean Body Mass, Body Fat Mass, Muscle Mass, Protein Mass, Mineral Mass, Total Body Water.

- **Skeletal Muscle** / **Fat Analysis:** Weight, Skeletal Muscle Mass, Body Fat Mass.

- **Obesity Analysis:** Body Mass Index (BMI), Body Fat Percentage, Degree of Obesity, Abdominal Circumference.

- **Abdominal Obesity Analysis:** Waist Hip Ratio, Visceral Fat Level, Visceral Fat Area, Visceral Fat Mass.

- **Cumulative Body Change Graph:** Tracks changes in Weight, Skeletal Muscle Mass, and Body Fat Percentage over time.

- **Segmental Measurement:** Provides detailed analysis for arms, legs, and trunk.

The printed report compares your measurements to healthy ranges, making analysis fast and concise. Consult with a healthcare professional for personalized interpretation of your results.

ACCUNIQ BC380

ID / NAME : 3456 / SELVA
Height : 187.5 cm   Age : 47 years   Gender : Male
Test Date/Time : 6/14/2017 15:34

❶ Body Composition Analysis

	values	Body Water	Soft Lean Mass	Fat-Free Mass	Weight
Body Water	48.4 (45.1 ~ 48.0)	48.4			
Proteins	13.6 (12.4 ~ 13.9)		62.0 (53.3 ~ 65.1)		
Minerals	4.3 (4.5 ~ 4.6)			66.2 (51.8 ~ 65.7)	
Body Fat	19.0 (10.8 ~ 15.2)				85.2 (65.7 ~ 88.9)

❷ Muscle/Fat Analysis

	Under	Normal	Over	
Weight	65 75 85 100	115 125 135	145 155 165 175 185 [%]	85.2
SMM Skeletal Muscle Mass	70 80 90 100	110 120	130 140 150 160 170 180 [%]	37.2
Fat Mass	40 60 80 100	120 170 220	270 320 370 420 470 [%]	19.0

❸ Obesity Analysis

	Under	Normal	Over	
BMI Body Mass Index kg/m²	14.50 16.50 18.50 21.75	25.00 27.21 29.42	31.64 33.85 36.07 38.28 40.50 [kg/m²]	24.2
PBF Percentage of Body Fat %	10.0 12.5 15.0 17.5	20.0 26.4 32.8	39.2 45.7 52.1 58.5 65.0 [%]	22.3

❹ Abdominal Obesity Analysis

	Under	Normal	Over	
WHR Waist to Hip Ratio		0.75 0.90		0.90

	Subcutaneous	Balanced	Boundary	Visceral Obesity Ⅰ	Visceral Obesity Ⅱ	
VFL Visceral Fat Level	1	5	9 11	16		12
VFA Visceral Fat Area cm²		50	100			114

❺ Segmental Lean and Fat Analysis

Soft Lean Mass (based on current weight)
Trunk 28.02 kg
Left Arm 3.60 kg — Right Arm 3.72 kg
Left Leg 10.17 kg — Right Leg 10.28 kg

Fat Mass
Trunk 11.12 kg
Left Arm 1.04 kg — Right Arm 0.93 kg
Left Leg 2.99 kg — Right Leg 2.88 kg

❻ Body Composition Change

Weight	81.8	83.5	85.2	85.2
SMM Skeletal Muscle Mass	37.4	37.8	37.1	37.2
PBF Percentage of Body Fat %	18.8	19.6	22.5	22.3
Test date	2017.04.17 (14:00)	2017.05.13 (12:10)	2017.06.12 (15:46)	2017.06.14 (15:34)

❼ Comprehensive Evaluation

Body Type	over fat class 1	
Biological Age	47	years
Basal Metabolic Rate(BMR)	1800	kcal
Total Daily Energy Expenditure	2772	kcal
Body Cell Mass	45.6	
Visceral Fat Mass	2.7	
Obesity Degree	+10.2 (−10.0 ~ +10.0)	%
Abdominal Circumference	114 (Less than 102cm)	cm
Total Score	78	Points

❽ Body Balance Assessment

Upper Body L/R	☑ balanced	☐ imbalanced Ⅰ	☐ imbalanced Ⅱ
Lower Body L/R	☑ balanced	☐ imbalanced Ⅰ	☐ imbalanced Ⅱ

❾ Control Guide

Target Weight	79.7	kg
Weight Control	−5.5	kg
Muscle Control	+0.0	kg
Fat Control	−5.5	kg
ECW ratio	0.386 (Optimal)	

❿ Segmental Lean Mass (Based on standard weight)

Right Arm	3.72 kg	[3.12 ~ 3.81]	/ Fit
Left Arm	3.60 kg	[3.12 ~ 3.81]	/ Fit
Trunk	28.02 kg	[23.46 ~ 28.67]	/ Fit
Right Leg	10.28 kg	[8.61 ~ 10.52]	/ Fit
Left Leg	10.17 kg	[8.61 ~ 10.52]	/ Fit

⓫ Impedance

Freq	5K	50K	250K
RA.Imp.	275	243	207
LA.Imp.	281	254	214
Trunk	36	33	28
RL.Imp.	185	163	139
LL.Imp.	189	174	144

⓬ Blood Pressure Analysis

Systolic 125 mmHg / Diastolic 85 mmHg
Pulse 76 bpm
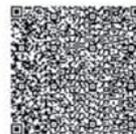
For history management please upload this results at the website using QR code scanning.

Figure 5: Sample Body Composition Analysis Report

This image displays a sample printout of the ACCUNIQ BC380's body composition analysis report, showing various metrics and their comparison to healthy ranges.

7. MAINTENANCE

Proper maintenance ensures the longevity and accuracy of your ACCUNIQ BC380.

- **Cleaning:**
  - Wipe the device surfaces, especially the electrodes, with a soft, damp cloth after each use.
  - Do not use abrasive cleaners, solvents, or harsh chemicals.
  - Ensure no liquid enters the device openings.

- **Storage:**
  - Store the device in a cool, dry place, away from direct sunlight and extreme temperatures.
  - Operating Environment Temperature: 5 - 40°C, relative humidity 15 - 93% (no condensation).
  - Storage Environment Temperature: -25 - 70°C, relative humidity less than 93% (no condensation).

- **Calibration:** Regular calibration by authorized service personnel is recommended to maintain measurement accuracy.

8. TROUBLESHOOTING

If you encounter issues with your ACCUNIQ BC380, refer to the table below for common problems and solutions.

Problem	Possible Cause	Solution
Device does not power on.	Power cable not connected properly; power outlet issue.	Check power cable connection; try a different power outlet.
Measurement error / Inaccurate readings.	Incorrect posture; electrodes not clean; user movement during measurement; environmental interference.	Ensure correct posture and firm grip; clean electrodes; remain still; avoid strong electromagnetic fields.
Printer not working.	Out of paper; paper jam; printer connection issue.	Check paper supply; clear any paper jams; ensure printer is properly connected.
Touchscreen unresponsive.	Temporary software glitch.	Restart the device. If the problem persists, contact customer support.

If the problem persists after attempting these solutions, please contact customer support. Do not attempt to repair the device yourself.

9. SPECIFICATIONS

ACCUNIQ BC380 Technical Specifications	
Model Number	BC380
Measurement Method	Tetra-polar electrode method using 8 touch electrodes
Frequency Range	5, 50, 250 kHz
Measurement Area	Whole body and Segmental measurement (arms, legs, and trunk)
Measurement Time	Approx. 30 seconds
Applicable Height	50 - 220 cm
Measurement Height	100 - 210 cm

ACCUNIQ BC380 Technical Specifications	
Measurement Weight	10 - 250 kg
Applicable Age	1 - 99 years old
Dimensions (W×D×H)	641 × 436 × 1029 mm (±10 mm)
Weight (Main Unit)	Approx. 18 kg
Power Consumption	60 VA
Operating Environment Temperature	5 - 40°C
Operating Environment Humidity	15 - 93% (no condensation)
Storage Environment Temperature	-25 - 70°C
Storage Environment Humidity	Less than 93% (no condensation)

10. WARRANTY AND SUPPORT

For warranty information and customer support, please refer to the documentation provided with your purchase or contact your local distributor.

For service or technical assistance, please contact WELCARE customer service. Do not attempt to service the device yourself.

Manufacturer: ACCUNIQ
Brand: WELCARE