



A&D Medical

WIRELESS
BODY COMPOSITION SCALE
UC-450BLE

Instruction Manual



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Preface





Congratulations on purchasing a state-of-the-art A&D Medical connected scale, one of the most advanced health scales available today. Designed for ease of use and accuracy, this device will facilitate your daily weight management regimen. We recommend that you read through this manual carefully before using the device for the first time.

General Information

This scale is intended to be used on a flat, hard surface. If using on a soft surface, such as carpet, it may cause inaccurate measurements.

Safety Information

The warning signs and symbols are essential to ensure your correct and safe use of this product and protect you and others from injury. Please kindly find the meanings of the warning signs and symbols, which you may encounter in the label and user manual, as follows:

	Symbol for "THE OPERATION GUIDE MUST BE READ"		Symbol for "DIRECT CURRENT"
	Symbol for "TYPE BF APPLIED PARTS"		Caution: These notes must be observed to prevent any damage to the device.
SN	Symbol for "SERIAL NUMBER"	MAC	<i>Bluetooth</i> ® address
IP	International protection symbol		

CAUTION

- The body composition scale UC-450BLE offers you a seamless way to manage your health. Please be aware that this device is designed for adults self-measuring and self-monitoring body fat level. Any information provided by this device is in no way meant to treat, cure or prevent any disease or illness from happening. This device should not be used by anyone who is acutely or chronically ill, suffering from a disease or taking medications that affect your water levels. The accuracy of readings for these users has not been verified. Specific medical advice should be obtained from a physician.
- The measurement values may vary if the user is growing fast. Values are for reference only.
- The body composition scale is equipped with data transmission function. It may emit electromagnetic energy so as to perform its intended function. Nearby portable and mobile RF communications equipment can affect the performance of the device.
- Kindly note that the use of accessories, transducers or cables other than those specified, with the exception of transducers and cables sold by the manufacturer as replacement parts for internal components, may result in increased EMISSIONS or decreased IMMUNITY of the device.
- Be aware that misuse of electrical equipment can cause electric shock, burns, fire and other hazards. Please do not use the device in flammable gas environment.

Safety Information

- Warning that the body composition scale should not be used adjacent to or stacked with other equipment.
- **WARNING:** No modifications of this equipment is allowed.
- During use, the user will contact with the upper surface and the electrode of the scale. The upper surface and the electrode of the scale is type BF Applied part.
- The device doesn't need to be calibrated in five years lifetime.
- Do not touch the output of batteries when using the scale.
- The user is an intended operator. The user can perform all the operations in the manual, such as measurement, data transmitting, changing batteries.

Indications For Use

- The A&D Medical body composition scale measures weight and uses bio-electrical impedance analysis (BIA) technology to estimate body fat in generally healthy children 10-17 years old and healthy adults.
- It is intended for use in the domestic setting only.

Contraindications

This device is contraindicated for any female subject who is pregnant or is suspected of being pregnant. Besides provided inaccurate readings, the affects of this device on the fetus are unknown.

This device is contraindicated for any person who is connected to a wearable or implantable electronic device or instrument such as a pacemaker or defibrillator.

Safety Information

Your Scale and Its Environment

To ensure your safety as well as the service life of your scale, please avoid using the scale under the following circumstances:

- On a slippery floor.
- Standing on the platform with wet feet.
- Near a microwave oven.
- In an oxygen rich environment.

Avoid storage in the following locations:

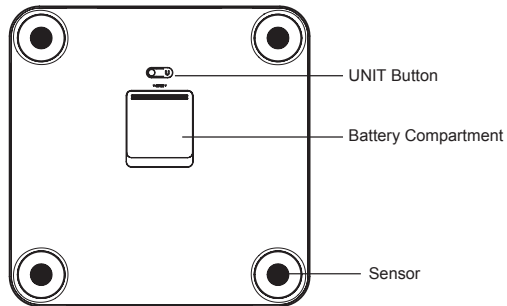
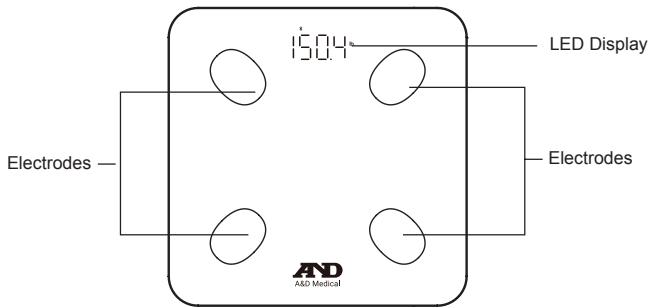
- Where there is water.
- Where the device may be exposed to extreme temperatures, humidity, moisture, direct sunlight, dust, or salt air.
- Where there is risk of shock or drop.
- Where you store chemicals or have corrosive gases.
- Within the reach of infants or children (risk of swallowing batteries).

Efficient Use of Your Scale

To ensure the accuracy of measurement, please follow below instructions when you start measurement.

- Place the scale on a flat, hard surface. Soft surfaces such as carpet will affect the performance of the scale.
- Step onto the platform with bare feet. Stand still and keep full contact with the scale until the measurement is complete.
- Start measurement at least two hours after getting up or eating.
- Avoid measurement immediately after strenuous exercise, sauna or bath, drinking or dining.
- Always start measurement at the same time and on the same scale located on the same flat, hard surface.

Parts Identification

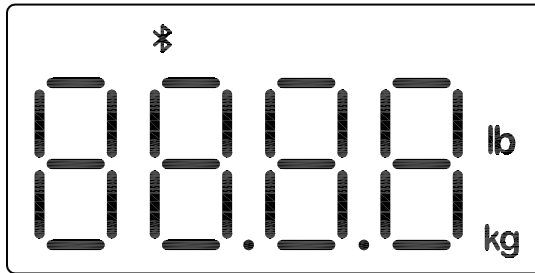


Components

1. Body Composition Scale (UC-450BLE)
2. Four AAA-size Alkaline Batteries (1.5V each)
3. Instruction Manual
4. Quick Start Guide

Parts Identification

LED Display



	Bluetooth® Connection Indication
lb	Pound
kg	Kilogram

Wireless Communication Function

This scale uses *Bluetooth®* wireless connectivity to communicate with a receiver device. At the end of measurement, the measurement data is sent from this scale to the receiver device.

Bluetooth® is communication technology that enables devices to communicate wirelessly. The *Bluetooth®* word mark and logos are registered trademarks owned by *Bluetooth®* SIG, Inc. and any use of such marks by A&D is under license. Other trademarks and trade names are those of their respective owners.

This device complies with Part 15 of FCC rules and contains the FCC ID 2A0JNGBF-2008-B. 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 operations

Scale Set Up

General Instructions

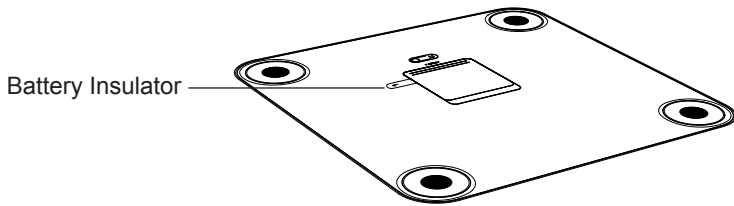
This scale applies BIA (Bio-impedance Analysis) technology. A small amount of weak current flows through the human body so as to detect the bio-impedance and estimate body fat. The electrical current is small and may not be felt.

This BIA technology is safe, non-invasive, toxic-free and harmless. It also possesses the characteristics of simple operation and abundant information.

The current mentioned above is less than 0.5mA. However, please be aware that anyone with an wearable or implantable medical electronic instrument, such as a pacemaker, must avoid using this device.

First time use

- The scale comes with batteries pre-installed, please remove the battery insulator for first use.

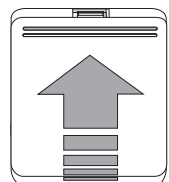
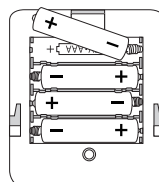
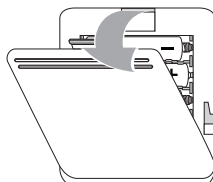
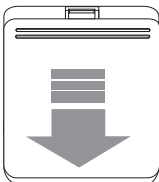
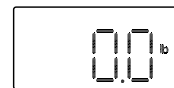
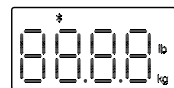


Battery Replacement

- Open the battery door on the back of the scale.
- Insert the new batteries (4 x 1.5V AAA) into the battery compartment according to the polarity indications marked inside the compartment.

*All digits will be shown on the LED.

- Close the battery door and wait until the digits "0.0 lb" are shown on the LED.



Scale Set Up

CAUTION

- When the symbol “Lo” appears, the scale is running on low batteries and will only operate for ~10 more measurements. Please replace with a new set of batteries. Please replace all four batteries at the same time. Do NOT mix the old batteries with the new ones.
- Used batteries are hazardous waste. Do NOT dispose of them together with the household garbage. Please refer to the local ordinances and recycling instructions regarding disposal of the used batteries and scrapped device.
- If you do not intend to use this unit for a prolonged period of time, it is advisable to remove the batteries before storing.
- Do not mix alkaline, standard (carbon-zinc), or rechargeable (Ni-Cd, Ni-MH, etc) batteries.
- The lifetime of the batteries is 1.5 years when used 3 times a day.

Pairing to Mobile App

This scale needs to be paired with a device in order to use *Bluetooth*[®] communication with the device. When pairing is completed, measurement data from this scale is automatically sent to the paired device each time a measurement is made when the device is in the state in which it can receive transmissions.

Note: It is only available for the devices that support *Bluetooth*[®] 5.0 technology.

Turn on *Bluetooth*[®] setting on your mobile device (smartphone or tablet).

Download the free **A&D Medical Heart Track** app from the App Store or Google Play.



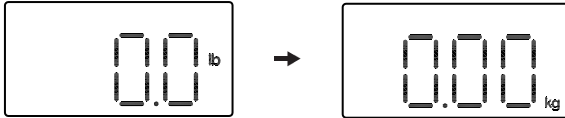
Follow the app screens to sign up and begin taking measurements.

Note: If you are enrolled in a provider / employee program using a different app than A&D Medical Heart Track, follow the instructions provided by the program.

Taking Measurements

Select Unit of Measurement

With batteries correctly installed, press “UNIT” button in the back of the scale to select measurement unit. The default measurement unit is “lb”. You may press “UNIT” button to choose between pound and kilogram.



Daily Measurement

- Open the mobile app

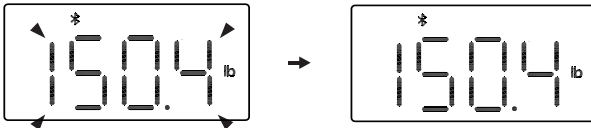
Note: Measurements can be taken without connecting to the app. The measurements will be stored in the scale and transferred to the app during the next time a measurement is taken with the app connected.

Note: For more details on using the app - please refer to the quick start guide included in the box.

- Place the scale on a flat and stable surface.
- With step on technology, the scale turns on as you step on the platform barefooted.
- Stand still and keep full contact with the electrodes until the LED stops blinking digits.




Note: Do not step off the scale until the display stops flashing. When the display is no longer flashing, the measurement is complete.



- This scale measures body weight and uses bio-electrical impedance analysis (BIA) technology to estimate body fat and other measurements.

Taking Measurements

CAUTION

- Interference may occur in the vicinity of equipment marked with the following symbol . The scale may interfere with the electrical equipment.



How to mitigate possible interference?

1. The range between the scale and the *Bluetooth*[®] end should be reasonably close, from 1 meter to 10 meters. Please ensure no obstacles between the scale and the *Bluetooth*[®] end so as to obtain quality connection.
2. To avoid interference, other electronic devices (particularly those with *Bluetooth*[®] transmission / Transmitter) should be kept at least 1 meter away from the scale.

Data Transmission

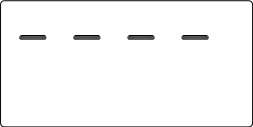

With the scale successfully paired with your smartphone, the measurement data will be transmitted to your mobile via *Bluetooth*[®].



- The symbol  will display after successful data transmission, and you may check your personal health data stored in your smartphone.
- If the data transmission fails, the symbol  doesn't display. The pending measurement data will be temporarily kept in the scale and transmitted to your smartphone when next measurement is complete.

Troubleshooting

Error Prompt

Error	Description	Solution
	Overload	Stop using this scale for measurement
	Low Battery	Replace all four batteries in the same time. Please purchase the authorized batteries for replacement

When Measuring

Problem	Root Cause	Solution
Abnormal measuring results: - Too high; - Too low; - Large difference between two recent measurement.	Incorrect posture	Please step on the platform
	The device is located on the soft ground such as a carpet or on a rugged surface	Please place the device on a flat, hard surface
	Your feet are too dry	Wipe your feet with a damp cloth, keeping them slightly damp when starting measurement

Troubleshooting

Problem	Root Cause	Solution
No display on LED when the device powers on	Batteries not yet installed	Install the batteries. (Please refer to Insert the Batteries)
	Used batteries	Replace all four batteries at the same time. Please purchase the authorized batteries for replacement.
CANNOT proceed to analyze body fat	User is wearing socks or shoes	Please keep barefooted during the measurement, and keep full contact with the electrodes as well.
Measurement data is not syncing with the app.	User is not standing on the scale until the measurement flashing stops.	Remain on the scale until the measurement is showing solid (not flashing).
The device powers off	Low battery	Replace all four batteries at the same time. Please purchase the authorized batteries for replacement.
Data transmission failed	<i>Bluetooth</i> [®] is OFF	Turn ON the <i>Bluetooth</i> [®] via settings
	The APP is OFF	Press the icon to turn ON your APP
	Out of range of <i>Bluetooth</i> [®] transmission	Place your smartphone closer to the scale

Specifications

Product name	Body Composition Scale (Model UC-450BLE)
Dimension	Scale: 11.8x11.8x1" / 300x300x25.5mm
Net weight	3.7 lbs / 1.6 kg (Not including the batteries)
Display	Digital LED
Measurement unit	Pound / Kilogram
Measurement range	11 lb to 397 lb / 5 kg to 180 kg
Division	11 - < 220 lb / 5 - <100 kg: 0.1 lb / 0.05 kg 220 - 397 lb / 100 - 180 kg: 0.2 lb / 0.1kg
Accuracy	11 - 110 lb / 5-50 kg: ± 0.4 lb / ± 0.2 kg >110 - 220 lb / >50 - 100 kg: ± 0.7 lb / ± 0.3 kg >220 - 330 lb / >100 - 150 kg: ± 0.9 lb / ± 0.4 kg; >330 - 397 lb / >150 - 180 kg: ± 1.1 lb / ± 0.5 kg;
Working environment	Temperature: 41°F to 104°F / 5° to 40°C Relative Humidity: $\leq 90\%$ RH Atmospheric pressure: 860 hPa to 1060 hPa
Storage environment	Temperature: -4°F to 140°F / -20 °C to 60 °C Relative Humidity: $\leq 90\%$ RH Atmospheric pressure: 500 hPa to 1060 hPa
Power source	6V (Four AAA-size Batteries)
Auto-on	Step on technology
Auto-off	The scale will turn off after about 15 seconds if there is no operation
Accessories	Four AAA-size batteries
Mode of operation	Continuous Operation
Protection against ingress of water	IP21
Bluetooth® version	Bluetooth® 5.0
Degree of protection	Type BF applied part

Maintenance

When carrying out usual maintenance, please ensure practice of the following Do's and Don't's:

- DO use a dry soft cloth to wipe the dust.
- DO use a wet soft cloth, dipped into water and wrung out, to wipe the dirt. Then use a dry soft cloth to dry up the device.
- DON'T wash the device with water or immerse it in water.
- DON'T use propellant, abrasive or other chemicals to wipe the dirt in avoidance of discolor or malfunction.
- DON'T disassemble this device. If you have any problems, please contact A&D Medical. (Please refer to Warranty for contact information).

Warranty

LIMITED WARRANTY

A&D Medical ("A&D")

For purchasers within the US only:

Product	Consumer Warranty Term
UC-450BLE	2 Years

Limited Warranty:

A&D Medical ("A&D") warrants to the first purchaser ("You") that the A&D product You purchased (the "Product") will be free from defects in material, workmanship and design for the applicable Warranty Term stated above from the date You purchased the Product under normal use. This Limited Warranty is personal to You and is not transferable. If the Product is defective, then You return the Product to A&D in accordance with the procedure set forth below. A&D's warranty obligation is limited to the repair or replacement, at A&D's option, of the defective Product that has been returned by You within the warranty period. Such repair or replacement will be at no charge to You. The repaired or replacement Product is warranted here-under for the longer of the remainder of the original warranty period or 90 days from the date of shipment of the repaired or replacement Product. To obtain a warranty service, please contact us in **US at 1-888-726-9966 or in Canada at 1-800-461-0991** for return address, shipping and handling fee, and other instructions for processing warranty. Please ensure you have satisfactory proof of the date of Your purchase and a description of the defect. Returns will not be accepted unless a Return Material Authorization (RMA) Number has been issued from A&D Customer Service Representative.

This Limited Warranty does not cover, and A&D will not be liable for (i) any shipment damage, (ii) any damage or defect due to misuse, abuse, failure to use reasonable care, failure to follow written instructions enclosed with the Product, accident, subjecting the Product to any voltage other than the specified voltage, improper environmental conditions, or modification, alteration or repair by anyone other than A&D or persons authorized by A&D, or (iii) expendable or consumable components.

THIS LIMITED WARRANTY IS THE ONLY WARRANTY PROVIDED BY A&D; THERE ARE NO OTHER EXPRESS WARRANTIES. If A&D cannot reasonably repair or replace the Product, A&D will refund the amount You paid for the Product (not including taxes), less a reasonable charge for usage. To receive a refund you must have returned the Product and all associated materials to A&D. The above remedy of repair, replacement or refund is your only and exclusive remedy. IN NO EVENT SHALL A&D BE LIABLE FOR ANY DAMAGES, INCLUDING, WITHOUT

Warranty

LIMITATION, LOST PROFITS, LOST INFORMATION OR REPLACEMENT COSTS, ARISING OUT OF YOUR USE OF OR INABILITY TO USE THE PRODUCT, INCLUDING, WITHOUT LIMITATION, ANY SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES, EVEN IF A&D HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. Some states do not allow the exclusion of incidental or consequential damages, so that the above exclusions may not apply to you. This warranty gives you specific legal rights, and you may also have other rights that may vary from state to state.

No distributor, dealer or other party is authorized to make any warranty on behalf of A&D or to modify this warranty, or to assume for A&D any liability with respect to its products.

Appendix

CAUTION

Warning: Don't near active HF surgical equipment and the RF shielded room of an ME system for magnetic resonance imaging, where the intensity of EM disturbances is high.

Warning: Use of this equipment adjacent to or stacked with other equipment should be avoided because it could result in improper operation. If such use is necessary, this equipment and the other equipment should be observed to verify that they are operating normally.

Warning: Use of accessories, transducers and cables other than those specified or provided by the manufacturer of this equipment could result in increased electromagnetic emissions or decreased electromagnetic immunity of this equipment and result in improper operation.

Warning: Portable RF communications equipment (including peripherals such as antenna cables and external antennas) should be used no closer than 30 cm (12 inches) to any part of the equipment UC-450BLE, including cables specified by the manufacturer. Otherwise, degradation of the performance of this equipment could result.

- CAUTION! RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE.
- DISPOSE OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS.
- Disposal of a battery into fire or a hot oven, or mechanically crushing or cutting of a battery, that can result in an explosion.
- Leaving a battery in an extremely high temperature surrounding environment that can result in an explosion or the leakage of flammable liquid or gas.
- A battery subjected to extremely low air pressure that may result in an explosion or the leakage of flammable liquid or gas.

Appendix

Guidance and manufacturer's declaration -electromagnetic emissions and Immunity

Table 1

Guidance and manufacturer's declaration - electromagnetic emissions	
Emissions test	Compliance
RF emissions- CISPR 11	Group 1
RF emissions- CISPR 11	Class B
Harmonic emissions- IEC 61000-3-2	Not applicable
Voltage fluctuations/ flicker emissions IEC 61000-3-3	Not applicable

Table 2

Guidance and manufacturer's declaration - electromagnetic Immunity		
Immunity Test	IEC 60601-1-2 Test level	Compliance level
Electrostatic discharge (ESD)IEC 61000-4-2	±8 kV contact ±2 kV, ±4 kV, ±8 kV, ±15 kV air	±8 kV contact ±2 kV, ±4 kV, ±8 kV, ±15 kV air
Electrical fast transient/ burst IEC 61000-4-4	Not applicable	Not applicable
Surge IEC 61000-4-5	Not applicable	Not applicable
Voltage dips, short interruptions and voltage variations on power supply input lines IEC 61000-4-11	Not applicable	Not applicable
Power frequency magnetic field IEC 61000-4-8	30 A/m 50 Hz/60 Hz	30 A/m 50Hz/60Hz
Conducted RF IEC61000-4-6	Not applicable	Not applicable
Radiated RF IEC61000-4-3	10 V/m 80 MHz – 2,7 GHz 80 % AM at 1 kHz	10 V/m 80 MHz – 2,7 GHz 80 % AM at 1 kHz
NOTE UT is the a. c. mains voltage prior to application of the test level.		

Appendix

Table 3

Guidance and manufacturer's declaration - electromagnetic Immunity							
	Test Frequency (MHz)	Band (MHz)	Service	Modulation	Modulation (W)	Distance (m)	IMMUNITY TEST LEVEL (V/m)
Radiated RF IEC61000 4-3 (Test specifications for ENCLOSURE PORT IMMUNITY to RF wireless communications equipment)	385	380 – 390	TETRA 400	Pulse modulation 18 Hz	1,8	0.3	27
	450	430 – 470	GMRS 460, FRS 460	FM ± 5 kHz deviation 1 kHz sine	2	0.33	28
	710	704 – 787	LTE Band 13, 17	Pulse modulation 217 Hz	0, 2	0.3	9
	745						
	780						
	810	800 – 960	GSM 800/900, TETRA 800, iDEN 820, CDMA 850, LTE Band 5	Pulse modulation 18 Hz	2	0.3	28
	870						
	930						
	1720	1700 – 1990	GSM 1800; CDMA 1900; GSM 1900; DECT; LTE Band 1, 3, 4, 25; UMTS	Pulse modulation 217 Hz	2	0.3	28
	1845						
	1970						
	2450	2400 – 2570	Bluetooth®, WLAN, 802.11 b/g/n, RFID 2450, LTE Band 7	Pulse modulation 217 Hz	2	0.3	28



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