



Manual & Quick Start Guide

Wireless **LINK** Armband

Model AB185

Contents

Purpose of the System	2
Cautions.....	3
Get Started.....	5
Your Armband.....	5
Wearing Your Armband	6
Removing the Sensor from the Strap	8
Charging the Battery.....	8
Checking Battery & Memory Status.....	9
Using <i>Bluetooth</i> ® Wireless Technology.....	10
Troubleshooting.....	11
Care & Cleaning.....	11
Symbol Definitions	12
Accuracy.....	12
Product Specifications.....	13
Warranty.....	14
User Environment	16
Regulatory Statement.....	20
Safe Disposal	21
End User License Agreement.....	21
Copyright, Patent, and Trademark Notice	22

Purpose of the System

INTENDED USE

The weight management system records, analyzes and reports physiological parameters. These objective health metrics assist you to maintain a healthy weight and an active lifestyle, which are continually cited as the keys to combating and managing serious medical conditions including obesity, cardiovascular disease and diabetes. The information presented by the system can be used by your physician or healthcare practitioner in the assessment and treatment of medical conditions influenced by weight and activity.

RISKS & BENEFITS

The predominant benefit of the product is enabling the monitoring and management of daily metabolic and lifestyle data in order to reach your activity and weight goals. In addition to weight management, known benefits of increasing activity levels include increased life expectancy, improved sleep, and enhanced appearance and self perception.

Analysis and post market surveillance indicate that risks of using the products are extremely low. No significant health risks have been identified. The most frequently reported health risk, occurring in less than 1% of users, is a mild to severe skin irritation resulting from wearing the Armband. The issue is often resolved by following proper wear and cleaning guidelines. Skin irritation may still occur for individuals with highly sensitive skin or for those with a specific allergy to materials used in the Armband and/or strap. However, it is best to discontinue use and consult a physician regarding skin irritations.

If you have a known metal allergy, consult your physician prior to using the Armband. Read the instructions provided and review the Cautions section of this manual before using the Armband.

Cautions

Always consult a physician before starting any new diet or exercise program. This system is not to be used for diagnostic purposes and is not intended to be a substitute for the medical advice or supervision of your personal physician.

Materials in the Armband have been evaluated for skin contact. Because everyone's skin is different you may experience irritation or redness after wearing the Armband. If this occurs, discontinue use and consult your physician.

- If you have known metal allergies, consult your physician prior to wearing.
- Do not wear on an open wound, sore, or burn.
- To reduce potential for skin irritation, wear for a maximum of 23 hours per day. Be sure to leave it off one hour per day.
- To reduce the potential risk of skin irritation, be sure to dry your arm thoroughly before wearing.
- The tab at the end of the Armband strap should be aligned to avoid unintended contact with the skin which may cause scratching.
- To avoid skin burns, do not wear when it has been exposed to excessively hot temperatures including direct sun exposure.

Be careful not to over-tighten the strap while on your arm. If you feel constriction or loss of circulation at any time, loosen the adjustable strap and re-fasten it to a more comfortable setting. If you experience pain, bruising, swelling, or discoloration of the arm, discontinue use and consult a physician.

This product is not defibrillation proof.

Do not place this equipment in close proximity to other devices that can cause electromagnetic interferences of any nature.

The equipment is not suitable for use in the presence of a **FLAMMABLE ANESTHETIC MIXTURE WITH AIR OR WITH OXYGEN OR NITROUS OXIDE**.

Medical electrical equipment requires special precautions regarding electromagnetic environments (EMC) and must be installed and put into service according to the EMC information provided in the User Guide. Portable and mobile radio frequency (RF) communications equipment can effect medical electrical equipment.

Check the equipment for sharp edges or damage before each use.

Once plugged in, the armband lights will blink indicating proper connection and charge progress. If no indication is seen, disconnect the cable and consult customer service.

Cautions (continued)

If the Armband is dropped, ensure that it is working properly and not physically damaged before relying on readings.

The equipment of the system should not be used adjacent to or stacked with other equipment. If such a setup is necessary, all equipment should be checked to verify correct operation.

Keep this equipment out of reach of children. The products contain small, removable parts that may become choking hazards.

The equipment and wireless accessories should not be used in airplanes, hospitals, or any location that prohibits cellular telephones or electronic devices.

Do not use unapproved accessories.

Do not use the “reminders” feature of the Armband as a notification for any vital, life-critical events (including taking medication).

To prevent possible damage to the USB cable, grasp the plug end when disconnecting the USB cable. Replace the cable if it becomes frayed.

DO NOT IMMERSE THE ARMBAND IN WATER. The Armband is not designed to be used underwater or to come in continuous contact with water.

Though the Armband was designed for wearability and long-term use, it is a sensitive monitoring device. Rough handling can break internal components. Never drop or shock the Armband and always store it in a safe place when not in use.

Avoid exposing the equipment to extreme temperatures, direct sunlight, moisture, sand, dust, or mechanical shock.

Do not incinerate.

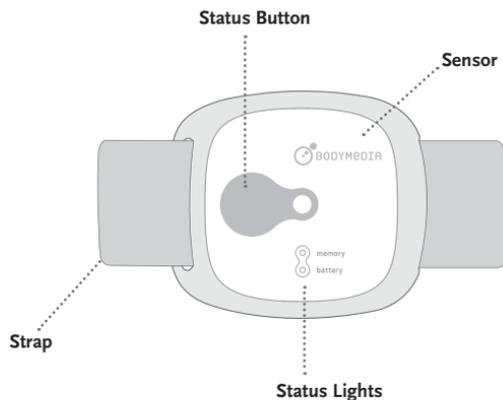
Do not attempt to open the Armband yourself. It contains no user-serviceable parts. Refer all servicing to qualified Service Personnel. Opening the Armband yourself will void the warranty.

Changes or modifications to the equipment not expressly approved by the party responsible for compliance could void the user’s authority to operate the equipment.

Get Started

Please refer to the “Get Started” instructions on our homepage to begin using the system. It only takes a few minutes to get set up and moving toward a healthier lifestyle.
www.bodymedia.com/start

Your Armband



Wearing Your Armband

Wear on the back of your left upper arm (triceps); be sure your upper left arm and the Armband are clean, dry, and free of lotion or oil.

The silver sensors on the underside should be in contact with your skin.

The logo should face upward.

Do not secure the strap too tightly. It should be snug, but you should be able to fit two fingers beneath the strap.

Secure the Velcro pull-tab once you have a comfortable fit.

Remove the Armband by stretching the elastic, not by using the Velcro tab.

The Armband should be worn no more than 23 hours a day.

Replace the strap if it has lost its elasticity.

Information on obtaining replacement parts can be found at www.bodymedia.com/shop



The Sensor will automatically turn on and begin collecting data within 10 minutes.

Activation is indicated by a series of audio tones.

There is no power button on the Armband.

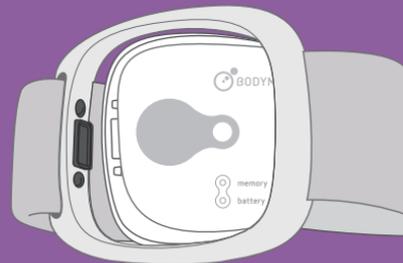
Removing the Sensor from the Strap



Press down on the right side of the Sensor until it separates from the strap.

Reattaching the Sensor

Locate the USB port on the Sensor, then align the port with the indentations on the side of the strap. Squeeze the Sensor into the strap until it snaps into place.



Charging the Battery

Charge the battery by connecting the Sensor to your computer with the USB cable.



The first charge will take about 3 hours. The LINK Armband works for 2-4 days before recharging is needed.

Once plugged in, the armband lights will blink indicating proper connection and charge progress. If no indication is seen, it is important to disconnect the cable and consult customer support.

Checking Battery and Memory Status

The Armband can store 14 days worth of data before needing to be uploaded. To check the memory or battery status press the Armband's status button.

● Green (solid) ● Amber (flashing) ● Red (flashing)

Battery	24+ hrs of battery life remain.	Less than 24 hrs of battery life remain.	Battery needs to be charged immediately. Cannot collect data.
Memory	24+ hrs of memory life remain.	Less than 24 hrs of memory life remain.	Memory is full and the sensor cannot collect additional data. Upload data via USB cable to create room.

Using *Bluetooth*[®] Wireless Technology

Once you have registered the Armband to your account, connect to a smartphone with *Bluetooth* using 'pairing.' For the latest information and instructions, please visit:

bodymedia.com/Bluetooth-iPhone

bodymedia.com/Bluetooth-Android

1. PUT THE ARMBAND IN PAIRING MODE

Hold down the Armband's status button for 5 seconds. The status lights will alternate in amber to indicate that the pairing mode is active. Pairing mode will remain active for several minutes.

2. SET YOUR SMARTPHONE TO 'DISCOVER' THE ARMBAND

First, ensure that *Bluetooth* is activated on your phone. Discover the Armband by going to a 'setup,' 'connect' or '*Bluetooth*' menu on your phone and select 'discover' or 'add' a *Bluetooth* device.

3. YOUR SMARTPHONE WILL FIND THE ARMBAND

The Armband will be named "XY's Armband" (X = first name initial and Y = last name initial of the name registered to the Armband). Accept your phone's request to pair by pressing "Yes" or "ok" and confirm with the passkey or PIN=0000 (4 zeros). Your phone will confirm when pairing is complete. If pairing is unsuccessful, go back to Step 1 and try again.

4. CONNECT AND INSTALL THE APPLICATION

Once your Armband is paired, press the status button to connect. The status lights will alternate in green while the Armband looks for the application. The phone may automatically find the Application or require you to search.

Troubleshooting

For troubleshooting information and additional resources, please refer to www.bodymedia.com/support

Care & Cleaning

Clean the Armband regularly after sweating or when it becomes noticeably moist to ensure that it works correctly. Minimize use of solvents, cleaners or other chemicals and do not sterilize any part.

WATER RESISTANCE

The Armband is not designed to be used underwater or to come into continuous contact with water. Do not immerse the Armband in water.

CLEANING THE SENSOR

Use a cloth or towel moistened with mild soap and water to wipe the side of the Sensor that touches the skin. Remove any excess soap and dry with a cloth or towel completely before wearing.

CLEANING THE STRAP

Hand wash with mild soap and warm water, rinse, then air dry. For optimal performance and lifespan of the strap, avoid machine drying.

DISINFECTING

The Sensor may be disinfected by wiping with a soft cloth dampened with 70% isopropyl alcohol. Allow 5-10 minutes for drying before wearing. Always disinfect the Sensor and replace the Armband strap prior to use by others.

Symbol Definitions



Consult instructions for use



CAUTION



Non-ionizing radiation



The Waste Electrical and Electrical Equipment Regulations indicates separate collection for electrical and electronic equipment



Type B Applied Part



Recyclable



FCC Logo



Serial Number



Bluetooth® Wireless Technology



Electrical Safety
Armband tested to applicable safety standards by MET Laboratories

Accuracy

System (Per day, adults)

Total calories/METs for free living activities: mean error < 10%

Total minutes of physical activity: mean error < 5%

Total step count: mean error < 9%

Product Specifications

Sensors:

- Accelerometer (3-axis)
- Heat Flux
- Skin Temperature
- Galvanic Skin Response (GSR)

Materials:

- Sensor: ABS, polycarbonate, thermoplastic polyurethane, 304 grade stainless steel
- Adjustable strap/wing assembly: Nylon, polyester, Lycra (no latex content) or polyisoprene, polycarbonate, thermoplastic polyurethane, silicone

Battery power: 2-4 days under steady use

Battery type: Internal lithium polymer cell battery

Radio Frequency: 2.4GHz

Contains a class 2 Bluetooth wireless technology transceiver

Transmitter output power: <2.5mW

Memory capacity: 14 days under steady use

Armband size: (l) 55mm x (w) 62mm x (h) 13mm [2.2" x 2.4" x 0.5"]

Armband weight (with adjustable strap): 45.4g (1.6oz)

Water resistance: IP classified (only when Armband is properly inserted into the Armband strap)

Operating temperature/humidity: 5°C - +40°C (40°F to 104°F) / 5 - 95% RH non-condensing

Storage temperature/humidity: -20°C - +60°C (-4°F to 140°F) / 5 - 95% RH non-condensing

Transmit Power Class 8 – Less than 10mW output power

Duty Cycle Class 4 – permitted to operate at 100% duty cycle

Receiver Class 3 – Standard reliable SRD communication media

Warranty

Unless otherwise set forth in a separate limited warranty description included with the BodyMedia Hardware (including Armband, Display with Clip and Watch strap), BodyMedia warrants that BodyMedia Hardware is free of defects in materials and workmanship under normal use and service ("Limited Warranty") for 1 year from the date the product is purchased by the original retail purchaser (the "Limited Warranty Period"). This warranty is only valid for the original retail purchaser and only from the date of initial retail purchase, and the purchaser must provide proof of purchase. The purchaser will be responsible for, and pre-pay, all return shipping charges and shall assume all risk of loss or damage to product while in transit to BodyMedia. We recommend that you use a traceable method of shipping for your protection.

If a defect covered by this Limited Warranty occurs during the Limited Warranty Period, BodyMedia will, at its option, repair or replace the entire unit or refund the original purchase price. The foregoing remedies are purchaser's sole and exclusive remedy and BodyMedia's sole and exclusive liability for breach of the Limited Warranty.

This Limited Warranty is subject to compliance with the applicable user guides for the BodyMedia Hardware and does not apply to normal wear and tear or damage caused by improper or incorrectly performed maintenance, negligence, accident, misuse or unreasonable use, modification, tampering, or any other causes not related to design, materials or workmanship. This Limited Warranty excludes replaceable batteries.

EXCEPT AS SPECIFIED IN THIS LIMITED WARRANTY SECTION, ALL EXPRESS OR IMPLIED WARRANTIES, CONDITIONS AND REPRESENTATIONS, INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTY OR CONDITION OF MERCHANTABILITY,

FITNESS FOR A PARTICULAR PURPOSE, NON-INFRINGEMENT, QUALITY, NON-INTERFERENCE, ACCURACY OR ARISING FROM A COURSE OF DEALING, PERFORMANCE, USAGE, OR TRADE PRACTICE, ARE HEREBY EXCLUDED TO THE EXTENT ALLOWED BY APPLICABLE LAW AND ARE EXPRESSLY DISCLAIMED BY BODYMEDIA. TO THE EXTENT AN IMPLIED WARRANTY CANNOT BE EXCLUDED, SUCH WARRANTY IS LIMITED IN DURATION TO THE LIMITED WARRANTY PERIOD. BECAUSE SOME STATES OR JURISDICTIONS DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, THE ABOVE LIMITATION MAY NOT APPLY. THESE WARRANTIES GIVE CUSTOMER SPECIFIC LEGAL RIGHTS, AND CUSTOMER MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM JURISDICTION TO JURISDICTION.

SUBJECT TO APPLICABLE LAW, IN NO EVENT SHALL BODYMEDIA'S LIABILITY EXCEED THE PURCHASE PRICE OF THE BODYMEDIA HARDWARE. This disclaimer and exclusion shall apply even if the Limited Warranty set forth above fails of its essential purpose.

This limited warranty does not apply to any firmware included in or software provided and associated with the product. All such firmware and software is licensed under a separate end user license agreement at www.bodymedia.com/EULA and/or in the EULA provided with the download of any such software.

User Environment

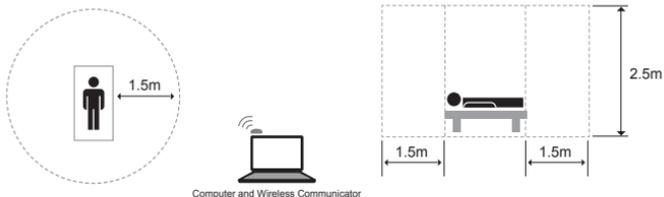


Diagram not to scale.

Guidance and Manufacturer's Declaration - Emissions

The Armband is intended for use in the electromagnetic environment specified below. The customer or user of the Armband should ensure that it is used in such an environment.

Emissions Test	Compliance	Electromagnetic Environment—Guidance
RF Emissions CISPR 11	Class B, Group 1	The Armband uses RF energy only for its internal function. Therefore, its RF emissions are very low and are not likely to cause any interference in nearby electronic equipment
Harmonics IEC 6100-3-2	N/A	The Armband is suitable for use in all establishments, including domestic, and those directly connected to the public low-voltage power supply network that supplies buildings used for domestic purposes
Flicker IEC 6100-3-3	N/A	

Guidance and Manufacturer's Declaration - Immunity

The Armband is intended for use in the electromagnetic environment specified below. The customer or user of the Armband should ensure that it is used in such an environment.

Immunity Test	IEC 60601 Test Level	Compliance Level	Electromagnetic Environment - Guidance
ESD IEC 61000-4-2	±6kV Contact ±8kV Air	±6kV Contact ±8kV Air	Floors should be wood, concrete, or ceramic tile. If floors are synthetic, they r/h should be at least 30%
EFT IEC 61000-4-4	±2kV Mains ±1kV I/Os	N/A	Mains power quality should be that of a typical commercial or hospital environment
	±1kV Differential ±2kV Common	N/A	
Voltage Dips/ Dropout IEC 61000-4-11	>95% Dip for 0.5 Cycles 60% Dip for 5 Cycles 30% Dip for 25 Cycles >95% Dip for 5 Seconds	N/A	Mains power quality should be that of a typical commercial or hospital environment. If the user of the Armband requires continued operation during power mains interruptions, it is recommended that the Armband be powered from an uninterruptible power supply or battery.
Power Frequency 50/60H Magnetic Field IEC 61000-4-8	3A/m	3A/m	Power frequency magnetic fields should be that of a typical commercial or hospital environment.

User Environment (continued)

Guidance and Manufacturer's Declaration - Emissions

The Armband is intended for use in the electromagnetic environment specified below. The customer or user of the Armband should ensure that it is used in such an environment.

Immunity Test	IEC 60601 Test Level	Compliance Level	Electromagnetic Environment - Guidance
Conducted RF IEC 61000-4-6	3 Vrms 150 kHz to 80 MHz	3 Vrms 150 kHz to 80 MHz	<p>Portable and mobile communications equipment should be separated from Armband by no less than the distances calculated/listed below:</p> <p>$D=(3.5/V1)(\text{Sqrt } P)$</p> <p>$D=(3.5/E1)(\text{Sqrt } P)$ 80 to 800 MHz</p> <p>$D=(7/E1)(\text{Sqrt } P)$ 800 MHz to 2.5 GHz</p> <p>Where P is the max power in watts and D is the recommended separation distance in meters.</p> <p>Field strengths from fixed transmitters, as determined by an electromagnetic site survey, should be less than the compliance levels (V1 and E1).</p> <p>Interference may occur in the vicinity of equipment containing a transmitter.</p>
Radiated RF IEC 61000-4-3	3 V/m 80 MHz to 2.5 GHz	3 V/m 80 MHz to 2.5 GHz	

Recommended Separation Distances for the Product

The Armband is intended for use in the electromagnetic environment specified below. The customer or user of the Armband can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF Communications Equipment and the Armband as recommended below, according to the maximum output power of the communications equipment.

Max Output Power (Watts)	Separation (m) 150kHz to 80MHz $D=(3.5/V1)(\text{Sqrt } P)$	Separation (m) 80 to 800MHz $D=(3.5/V1)(\text{Sqrt } P)$	Separation (m) 800MHz to 2.5GHz $D=(7/E1)(\text{Sqrt } P)$
0.01	0.1166	0.1166	0.2333
0.1	0.3689	0.3689	0.7378
1	1.1666	1.1666	2.3333
10	3.6893	3.6893	7.3786
100	11.6666	11.6666	23.3333

Regulatory Statement

FCC Declaration of Conformity – We, BodyMedia, Inc., One Gateway Center, 420 Fort Duquesne Boulevard, Suite 1900, Pittsburgh, PA 15222, declare under our sole responsibility that the products, BodyMedia, Inc. and BodyMedia® Armband (Model AB185) comply 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.

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.

 **CAUTION:** Changes or modifications to this equipment not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

RF Exposure information: See 2.1093 of the FCC Rules

This product is a Type B Applied Part complying with the specified requirements of the Standard to provide protection against electric shock, particularly regarding allowable Leakage Current.

This Class B digital apparatus complies with Canadian ICES-003.
Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

IEC 60601-1:1988 + A1:1991 + A2: 1995 - Medical Electrical Equipment, Part 1: General Requirements for Safety

EN 60601-1:2001 - Medical Electrical Equipment, Part 1: General Requirements for Safety
UL 60601-1 – Medical Electrical Equipment, Part 1: General Requirements for Safety, 1st Edition

CSA C22.2 No. 601-1 M90 – Medical Electrical Equipment, Part 1: General Requirements for Safety

47CFR Part 15 Subpart B & ICES-003, Issue 4 February 2004 for Class B Digital Devices

47CFR Part 15 Subpart C 15.247 & RSS-210, Issue 7, June 2007 for Intentional Radiators

ETSI EN 301 489-1 with ETSI EN 301 489-17 (Article 3.1(b) of R&TTE Directive)

RoHS requirements

Safe Disposal

If you want to dispose of the Armband, please do not use the ordinary trash. This product must not be disposed of with your other household waste. Dispose of the Armband equipment by taking it to a designated collection point for the recycling of waste electrical and electronic equipment. This will help to conserve natural resources and ensure that the Armband is recycled in a manner that protects human health and the environment. For more information on where you can drop off your waste equipment for recycling, please contact your local township, municipality, or city; your household waste disposal service; or the store where you purchased the Armband.

End User License Agreement

The firmware included in and certain software provided and associated with the product is subject to a BodyMedia Software License Agreement as set forth here:
www.bodymedia.com/Support-Help/Policies/EULA

Copyright, Patent & Trademark Notice

The products and services which include the software, firmware, algorithms, processes, and methods of BodyMedia FIT™, SenseWear® applications, and other applicable BodyMedia applications as well, all devices and components used therewith including the Armband, Display, and Wireless Communicator, are covered by one or more of the following patents: United States Patent Nos.: D439,981, D651,552, D632,396, D645,968, 6,527,711, 6,595,929, 6,605,038, 7,020,508, 7,153,262, 7,261,690, 7,285,090, 7,689,437, and 8,157,731;

European Patent Nos.: 1,292,217 and 1,292,218; Canadian Patent Nos.: 2,413,220 and 2,501,899; S. Korean Patent Nos.: KR 10-0831036, 10-0821945, 10-1107062 10-0885030, and 10-0956791; Israeli Patent Nos.: 153478, 153516, 158067,160079, and 167045; Japanese Patent Nos.: JP 1138499, JP 4,125,132, JP 4,283,672, and JP 4,813,058; Mexican Patent Nos.: MX 242292, 236870, 250153, 245862, 250156, 269421, and 271678; Brazilian Patent Nos.: PI0111918-4, and PI0111995-8; and various worldwide patents pending. This notice is accurate as of November 7, 2012. For the latest information please contact BodyMedia.

“BodyMedia,” “BodyMedia FIT,” the “Four Circle Design,” “Put On The Armband. Take Off The Pounds.,” and “SenseWear” are trademarks or registered trademarks of BodyMedia, Inc.

Manual, firmware or software on armband, display device, or mobile device, related algorithms and software, and firmware utilized by BodyMedia products, services, and/or applications © Copyright 2011-2012 BodyMedia, Inc. All rights reserved. Any copying, use, distribution or reverse engineering without a specific license from BodyMedia, Inc. or as permitted by applicable law, is strictly prohibited.

“Made for iPod” and “Made for iPhone” mean that an electronic accessory has been designed to connect specifically to iPod or iPhone, respectively, and has been certified by the developer to meet Apple performance standards. Apple is not responsible for the operation of this device or its compliance with safety and regulatory standards. Please note that the use of this accessory with iPod or iPhone may affect wireless performance.

Android is a trademark of Google, Inc.

The *Bluetooth*® word mark and logos are registered trademarks owned by *Bluetooth* SIG, Inc. and any use of such marks by BodyMedia, Inc. is under license. Other trademarks and trade names are those of their respective owners.



BodyMedia, Inc.
One Gateway Center
420 Fort Duquesne Blvd.
Suite 1900
Pittsburgh, PA 15222
USA

www.bodymedia.com

100706_REV6

© Copyright 2012 BodyMedia, Inc.