BodyMedia FIT Armband and Display Manual





Armband Model MF Display Model DD100





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

www.bodymedia.com



Emergo Europe Molenstraat 15 2513 BH, The Hague The Netherlands Asia-Pacific Authorized Representative Emergo Asia-Pacific Level 20, Tower II Darling Park 201 Sussex Street Sydney, NSW 2000 Australia

100722_REV1

CE

0086

© Copyright 2010 BodyMedia, Inc.

Table of Contents

Purpose of the System 3
Setup Instructions 4
Armband Operating Instructions4
Proper Wear and Cleaning4
Removing the Armband strap from the Armband 6
Armband Status Indicators6
Display (optional accessory) Operating Instructions
Using the Display8
Display Overview 10
Display Battery12
Energy Information (calories)13
Water Resistance 13
Care Instructions 13
Symbol Definitions
Cautions
Safe Disposal 19
End User License Agreement 19
Troubleshooting
Product Specifications20
Accuracy
Warranty

Table of Contents

User Environment	24
Regulatory Statement	28
Copyright, Patent, and Trademark Notice	30

Purpose of the System

Intended Use

The system records and analyzes physiological parameters, and uses algorithms to report daily movement, calories burned, degree of physical activity, and steps taken. These objective health metrics facilitate maintenance of a healthy weight and an active lifestyle, and in conjunction with a balanced diet can result in a favorable influence on overall health. Maintaining a healthy weight, balanced diet and active lifestyle are routinely cited as key to combating and managing serious medical conditions including obesity, cardiovascular disease and diabetes. The information presented by the system can be used by a physician or healthcare practitioner and may aid the assessment and medical management of conditions influenced by weight and activity.

Risks and Benefits

The predominant benefit of the product is the enabling of 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 or optional Display.

Setup Instructions

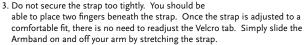
Please refer to the Quick Start included in the package for instructions on how to begin using the system. It only takes a few minutes to get set up and moving toward a healthier lifestyle.

Armband Operating Instructions

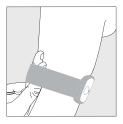
Proper Wear and Cleaning

Wear your Armband on the back of the upper left arm (the tricep). To work properly, the Armband logo must face upward towards the shoulder and the silver sensors on the underside of the Armband will be in contact with your skin.

- Be sure the upper left arm is clean, dry, and free of lotion or oil then slide the Armband onto your left arm.
- Adjust the strap so that it fits comfortably, and then secure the Velcro pull-tab. Ensure that the sensors on the underside of the Armband maintain continuous contact with your skin and that the Armband does not slide off your arm.



- 4. Wear the Armband no more than 23 hours a day. Be sure to leave it off 1 hour per day.
- Replace the strap if it has lost its elasticity. Information on obtaining replacement parts can be found in the Quick Start.



The Armband will turn on and begin collecting data within 10 minutes. Activation is indicated by a series of audio tones. Please note that there is no power button on the Armband.

If you haven't worn your Armband in a while, press the status button to activate it before wearing it again.

To clean the Armband:

- 1. Gently wipe the side of the Armband that touches the skin with a soft cloth or towel moistened with a mild soap and water.
- 2. Wipe with a clean damp cloth to remove any excess soap.
- 3. Use a dry, soft cloth or towel to completely dry before wearing it.

To clean the Armband strap:

- 1. Hand wash with mild soap and warm water, rinse, then air dry.
- 2. Machine drying may affect the performance and lifespan of the strap.

Removing the Armband strap from the Armband

You will need to remove the Armband from its strap to upload data or to clean the Armband.

 With the Armband logo facing upward, apply continuous downward pressure to the right side of the Armband until it separates from the Armband strap.



2. To reattach to the strap, locate the USB port on the Armband, then align port with the indentations on the left side of the strap. Apply upward pressure to the right side of the Armband until it snaps into place.

Armband Status Indicators

Power

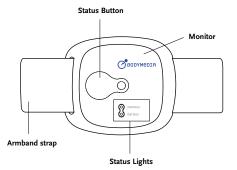
When the Armband makes contact with your body, it will automatically power on. This may take up to 10 minutes. Activation is indicated by a series of audio tones. Please note that there is no power button on the Armband.

Battery

Before first use, fully charge your Armband battery by removing the Armband strap and connecting the Armband to your computer with the included USB cable. Charging will take approximately three hours. The battery light will flash green when the Armband is fully charged. Model MF will function for 5-7 days before recharging is needed.

To check the battery power level, remove the Armband from your arm and press the Armband's Status Button. The battery light will indicate the power level as:

- Green (solid) = More than 24 hours of battery life remain.
- Amber (flashing) = Less than 24 hours of battery life remain.
- Red (flashing) = Battery needs to be charged immediately and the Armband cannot collect data. Charge the battery before continuing use.



Memory

The Model MF Armband will collect data for about 14 days under steady use. To check the memory status, remove the Armband and press the Armband's Status Button. The memory light will indicate memory level as:

- Green (solid) = More than 24 hours of memory life remain.
- Amber (flashing) = Less than 24 hours of memory life remain.
- Red (flashing) = Memory is full and the Armband cannot collect additional data. Connect the Armband to your computer via the USB cable and upload data before continuing use.

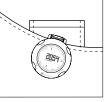
Display (optional accessory) Operating Instructions

The Display is an optional accessory intended for use with the Armband. It allows you to easily view your up-to-the-minute information including calories burned, steps taken, and physical activity duration.

Clip

The clip allows you to attach the Display firmly to material such as a t-shirt or trousers. Never slide thick materials into the clip opening as it may strain and damage the clip. To attach the clip:

- 1. Gently lift the clip lever to open the clip mouth.
- Slide the material you wish to attach to the clip between the upper and lower portions of the clip mouth.



3. Push the clip lever back down to tighten and secure the clip.

Using the Display

IMPORTANT: The Armband must be configured before the Display will function properly. Refer to the Armband setup information aforementioned.

To begin using your Display, you must initially pair it with your Armband.

- 1. Slide the Armband onto your left arm and wait for it to power on. This may take up to 10 minutes.
- 2. After the Armband powers on, hold down the Display's MODE and VIEW buttons until "Hello" is displayed on the screen.

- 3. The Display will read PRESS ARMBAND BUTTON TO SYNC. The Display must be within 3 feet of the Armband.
- Press and quickly release the Armband's Status Button. WELCOME and your first name will scroll across the Display to indicate pairing and synchronization are complete.

If the Armband is not within range of the Display or is not powered on, the Display will scroll ARMBAND NOT FOUND. In this case, try repeating the above steps.

The Armband and Display **must** be synchronized before the Display will function properly. Information is transmitted every 60 seconds from the Armband to the Display as long as they are in sync. If data is not received from the Armband for 5 minutes, the Display will revert to a NOT IN SYNC mode and display the TIME. They can also occasionally go out of sync due to environmental interference. Once the Armband and Display have been paired, you can re-sync the Armband and Display by simply pressing the button on the Armband, then pressing the MODE button on the display.

The Display is completely optional and does not need to be in sync for the Armband to work properly. Even if you are wearing the Armband and Display and the Display reads "NOT IN SYNC", the Armband is still collecting data and functioning properly.

When the Display is in sync and you achieve one of your daily targets, the Display will notify you with a series of beeps and a scrolling message stating which target has been reached. To stop the scrolling or beeping, press the RESET TRIP button once.

Display Overview

The Display has an LCD and four buttons:

MODE

B VIEW

G LIGHT

RESET TRIP



Mode Functions

The Mode button, located on the top left, allows you to toggle between different data modes being transmitted from the Armband, including CALORIES, STEPS, ACTIVITY, and TIME.

- CALORIES Mode: The CALORIES mode displays your calories burned for a time period you select from the VIEW function (TODAY, YESTERDAY, or TRIP). The calories burned number includes an estimate for periods when you did not wear the Armband.
- STEPS Mode: The STEPS mode displays how many steps you have taken for the time period selected in the VIEW function. Only steps taken while wearing the Armband are counted.
- ACTIVITY Mode: The ACTIVITY mode displays your moderate and vigorous physical activity duration while wearing the Armband for the time period selected in the VIEW function.
- **TIME Mode**: The TIME mode displays the current time. Set your time zone within the within the SenseWear software before the Armband is configured. In the TIME mode, the view button is disabled.

View Functions

The View button allows you to toggle between data collected TODAY or YESTER-DAY, or to view your TARGET or TRIP information.

- TODAY View: The TODAY view shows current values for the current day's calories burned, steps taken, and duration of physical activity.
- YESTERDAY View: The YESTERDAY view shows the previous day's total number of calories burned, steps taken, and duration of physical activity.
- TARGET View: The TARGET view shows the total daily targets for calories burned, steps taken, and physical activity duration.
- **TRIP View**: The TRIP view, like a car's trip odometer, enables you to measure your calories burned, steps, and physical activity duration over a time period that you choose. To reset the TRIP, see instructions in RESET TRIP section.

Reset Trip

To set your trip, navigate to the TRIP view then hold down the RESET TRIP button for 3 seconds. The Display will beep and reset all of the current trip values to 0.

Light

Pressing the LIGHT button will turn on the Display's backlight for a few seconds so you may view the Display information in low-light or no-light conditions.

Standardly a beep occurs when you press any button on the Display. You can mute these beeps by holding down the light button until "beep off" is displayed. However you will still receive audio notification when you achieve your targets. You can unmute by following the same process.

BodyMedia FIT Armband and Display Manual

To ensure the Armband and Display are working correctly, they should be cleaned regularly.

Clean the Armband and Display daily after sweating or when either one becomes noticeably moist or dirty. Failure to keep the Armband and Display clean, or improper cleaning, may irritate the skin and affect the sensor performance. Do not

Display Battery

If the digits on the Display are faded, and you can not establish a connection to the Armband, then the battery may require replacing. The Display comes equipped with a replaceable CR-2032 coin cell battery with an expected life of 6-12 months under normal use. When the battery needs to be replaced, it is recommended that you bring the Display to a jeweler or watch vendor. To replace the battery yourself:

- 1. Make sure you have a fresh CR-2032 coin cell battery, a #0 size Phillips head screwdriver, and a soft cloth.
- 2. Remove the Display unit from the clip.
- 3. Turn the unit over onto a soft cloth, revealing the underside, and remove the four small screws attaching the metal back plate to the Display. Only remove the screws on the metal back plate, do not remove the screws on the edge of the Display.
- 4. Remove the old battery.
- 5. Press any button on the display for 10 seconds.
- 6. Place the new battery with the (+) side facing up.
- 7. Ensure that the black o-ring gasket remains properly seated in the groove to provide a watertight seal.
- 8. Reattach the back plate, with the text facing up. Ensure that the arrow that says up (on the inside of the metal back) points towards the top of the device.
- 9. Once attached, turn the unit over and press any button to wake the Display.
- 10. Dispose of the old battery in accordance with local, state, federal, or country specific regulations.

Note: Once the battery is replaced, you will need to reset the Display. Simultaneously press all 4 buttons, "MODE" + "VIEW" + "LIGHT" + "RESET TRIP" for 5 seconds or

more. The Display will turn on and the back-light will flash. Follow the instructions for "Using the Display" on page 8 to synchronize again with the Armband.

Energy Information (calories)

Energy information on the Display is reported in kcal. You may convert between kcal and kJ as follows. 1 kcal equals 4.2 kJ. For example:

kcal	200	500	2,000	2,500
kJ	837	2,092	8,368	10,460

Water Resistance

Care Instructions

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

The Display is water resistant up to 30 meters.

use solvents, cleaners or other chemicals to clean the Armband or Display and do not sterilize either part. Avoid the use of lotions or other chemicals on the skin.

Cleaning

To clean the Armband and Display:

- Gently wipe the side of the Armband that touches the skin with a soft cloth or towel moistened with a mild soap and water. Wipe the entire Display to clean all surfaces.
- 2. Wipe with a clean damp cloth to remove any excess soap.
- 3. Use a dry, soft cloth or towel to completely dry before wearing it.

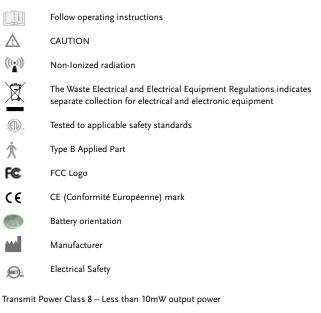
To clean the Armband strap:

- 1. Hand wash with mild soap and warm water, rinse, then air dry.
- 2. Machine drying may affect the performance and lifespan of the strap.

Disinfecting

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

Symbol Definitions



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

Receiver Class 3 - Standard reliable SRD communication media

Cautions \triangle

- ▲ CAUTION: 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.
- ▲ CAUTION: Materials in the Armband and Display 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.
 - 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.
- ▲ CAUTION: 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.
- A CAUTION: This product is not defibrillation proof.
- CAUTION: Do not place this equipment in close proximity to other devices that can cause electromagnetic interferences of any nature.

- △ CAUTION: The equipment is not suitable for use in the presence of a FLAMMABLE ANESTHETIC MIXTURE WITH AIR OR WITH OXYGEN OR NITROUS OXIDE.
- ▲ CAUTION: 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.
- ▲ CAUTION: 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.
- CAUTION: Keep this equipment out of reach of children. The products contain small, removable parts that may become choking hazards.
- \land CAUTION: The battery in the Display may present a choking hazard for small children. Keep the batteries out of the reach of children.
- ▲ CAUTION: The equipment and wireless accessories should not be used in airplanes, hospitals, or any location that prohibits cellular telephones or electronic devices.
- A CAUTION: Do not use unapproved accessories.
- CAUTION: Do not use the "reminders" feature of the Armband as a notification for any vital, life-critical events (including taking medication).
- \triangle CAUTION: To prevent possible damage to the USB cable, grasp the plug end when disconnecting the USB cable. Replace the cable if it becomes frayed.

- A CAUTION: Check the equipment for sharp edges or damage before each use.
- CAUTION: If the Display is dropped, ensure that it is working properly and not physically damaged before relying on its readings.
- ▲ CAUTION: Replace the Display battery only with CR-2032 (or equivalent) 3V lithium coin cell battery to avoid risk of personal injury or physical damage to your equipment.
- ▲ CAUTION: DO NOT IMMERSE THE ARMBAND IN WATER. The Armband is not designed to be used underwater or to come in continuous contact with water.
- ▲ CAUTION: Though the Armband and Display were designed for wearability and long-term use, they are sensitive monitoring devices. Rough handling can break internal components. Never drop or shock the Armband or Display and always store them in a safe place when not in use.
- A CAUTION: Avoid exposing the equipment to extreme temperatures, direct sunlight, moisture, sand, dust, or mechanical shock.
- AUTION: Do not incinerate.
- CAUTION: Do not attempt to open the Armband yourself. It contains no userserviceable parts. Refer all servicing to qualified Service Personnel. Opening the Armband yourself will void the warranty.
- CAUTION: 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.

Safe Disposal

If you want to dispose of the Armband or Display, please do not use the ordinary trash. These products must not be disposed of with your other household waste. Dispose of the Armband or Display equipment by taking them 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 and Display are 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 location where you obtained the Armband or Display.

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.

Troubleshooting

For troubleshooting information and additional resources, please refer to the Help section on www.bodymedia.com.

Product Specifications

Armband

- Sensors:
 - Accelerometer (3-axis)
 - Heat Flux
 - Skin Temperature
 - Galvanic Skin Response (GSR)
- Materials:
 - Armband: 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: Model MF: about 5-7 days under steady use
- Battery type: Internal lithium polymer cell battery
- Radio Frequency: 2.4GHz
- Transmitter output power: Model MF: <1mW
- Memory capacity: about 14 days under steady use for Model MF
- Armband size: (I) 55mm x (w) 62mm x (h) 13mm [2.2" x 2.4" x 0.5"]
- Armband weight (with adjustable strap): Model MF: 45g (1.6oz)
- Water resistance: IP64 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.

Display

- User-replaceable coin cell battery (CR-2032)
- RF Frequency: 2.4 GHz wireless communication interface
- Transmitter output power: <1mW
- Size: 40 mm diameter, height: 19 mm with clip
- Weight: 34g (1.2 oz) with the clip
- · Materials: Nylon, polycarbonate, ABS, polyurethane, stainless steel, no latex
- Operating temperature/humidity: 0°C to +45°C (32°F to 113°F)/100%RH non condensing
- Storage temperature/humidity: 0°C to +45°C (32°F to 113°F)/100%RH non condensing

Design and specifications are subject to change without notice.

Accuracy

Accelerometer (3-axis)

Calibrated range is +/- 1.0g

Minimum resolution is 0.01g

Two-standard-deviation error of +/-0.08g on all axes

Heat Flux

Calibrated Range is 0.0 W/m² to 300.0 W/m²

A minimum resolution of 1.0 W/m^2

Two-standard-deviation error of

+/-10.0 W/m^{2,} 0 to 30 W/m²

Two-standard-deviation error of +/-35.0% otherwise

Galvanic Skin Response

Calibrated Range is 56 kOhms to 20 MOhms (50.0 nSiemens - 17.0 μ Siemens)

Two-standard-deviation error of +/- 9.0 nSiemen, 50 to 225 nSiemens

Two-standard-deviation error of +/-4.0% otherwise

Skin Temperature

Calibrated Range is 20.0°C to 40.0°C

A minimum resolution of 0.05°C

Two standard deviation error of +/- 0.8°C

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%

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, Body-Media 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 PAR-TICULAR 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 A IIMPLIED WARRANTY CANNOT BE EXCLUDED, SUCH WARRANTY IS LIMITED IN DURATION TO THE LIMITED WARRANTY PE-RIOD. 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 licenses under a seperate end user license agreement at www.bodymedia.com/Support-Help/Policies/EULA and/or in the EULA provided with the download of any such software.

User Environment

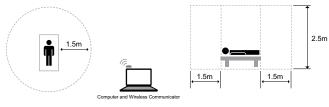


Diagram not to scale.

Guidance and Manufacturer's Declaration - Emissions

The Armband and Display are intended for use in the electromagnetic environment specified below. The customer or user of the Armband and Display 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 and Display use 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 and Display are suitable for use in all establishments, including domestic, and those directly connected to the public low-voltage power supply network
Flicker IEC 6100-3-3	N/A	that supplies buildings used for domestic purposes.

Guidance and Manufacturer's Declaration - Immunity

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

Immunity Test	IEC 60601	Compliance	Electromagnetic	
	Test Level	Level	Environment - Guidance	
ESD	±6kV Contact	±6kV Contact	Floors should be wood, concrete, or ceramic tile. If floors are synthetic, the r/h should be at least 30%.	
IEC 61000-4-2	±8kV Air	±8kV Air		
EFT	±2kV Mains	N/A	Mains power quality should be that of a typi-	
IEC 61000-4-4	±1kV I/Os		cal 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 tha Armband and Display be powered from an uninterruptible power supply or battery.	
Power Frequency 50/60Hz Magnetic Field IEC 61000-4-8	3A/m	3A/m	Power frequency magnetic fields should be that of a typical commercial or hospital environment.	

Guidance and Manufacturer's Declaration - Emissions

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

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

Recommended Separation Distances for the Product

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

Max Output Power (Watts)			Separation (m) 800MHz to 2.5GHz
	D=(3.5/V1)(Sqrt P)	D=(3.5/V1)(Sqrt P)	D=(7/E1)(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

27

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@ Armbands (Model MF) and BodyMedia@ Display (Model DD100) 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 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 separate from the receiver.
- 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 apareil numèrique de la classe B est conforme à la norme NMB-003 du Canada.

Radio Frequency: 2.4 GHz

Transmitter output power: Model MF <1mW

Models MF and DD100:

FCC 47CFR Part 15 Subpart B Unintentional Radiator Tests FCC 47CFR Part 15 Subpart C Intentional Radiator Tests FCS 47CFR Part 15 Subpart C Intentional Radiator Tests ETSI EN 301 489-1 with ETSI EN 301 489-17 (Article 3.1(b) of R&TTE Directive) 2.4GHz. ICES-003 Tests EN 60601-1-2: Medical electrical equipment – Part 1-2: General requirements for safety – Collateral standard: Electromagnetic compatibility – Requirements and tests IEC 60601-1-2 – Medical electrical equipment – Part 1-2: General requirements for safety – Collateral standard: Electromagnetic compatibility – Requirements and tests UL 60601-1- Medical Electrical Equipment; Part 1 General Requirements for Safety CSA C22.2 No. 60601-1- Medical Electrical Equipment; Part 1 General Requirements for Safety EN 60601-1- Medical Electrical Equipment; Part 1 General Requirements for Safety EN 60601-1- Medical Electrical Equipment; Part 1 General Requirements for Safety EN 60601-1- Medical Electrical Equipment; Part 1 General Requirements for Safety EN 60601-1- Medical Electrical Equipment; Part 1 General Requirements for Safety EN 60601-1- Medical Electrical Equipment; Part 1 General Requirements for Safety EN 60601-1- Medical Electrical Equipment; Part 1 General Requirements for Safety EN 60501-1- Medical Electrical Equipment; Part 1 General Requirements for Safety EN 60601-1- Medical Electrical Equipment; Part 1 General Requirements for Safety EN 60601-1- Medical Electrical Equipment; Part 1 General Requirements for Safety EN 60601-1- Medical Electrical Equipment; Part 1 General Requirements for Safety EN 60601-1- Medical Electrical Equipment; Part 1 General Requirements for Safety EN 60601-1- Medical Electrical Equipment; Part 1 General Requirements for Safety EN 60601-1- Medical Electrical Equipment; Part 1 General Requirements for Safety EN 60601-1- Medical Electrical Equipment; Part 1 General Requirements for Safety EN 60601-1- Medical Electrical Equipment; Part 1 General Requirements for Safety EN 60601-1- Medical Electrical Equipment; Part 1 Gener

ETSI EN 300 440-1 and ETSI EN 300 440-2

Copyright, Patent and Trademark Notice

The products and services which include the software, firmware, algorithms, processes, and methods of BodyMedia FIT[™], SenseWear(a) 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, 6,527,711, 6,595,929, 6,605,038, 7,020,508, 7,153,262, 7,261,690, 7,285,090 and 7,502,643; 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 10-0885030, and 10-0956791; Israeli Patent Nos. I53516 and 160079; Japanese Patent Nos. JP4,125,132 and 4,283,672; Mexican Patent Nos. MX 242292, 236870, 250153, 245862 and 250156; and various worldwide patents pending. This notice is accurate as of June 17, 2010. For the latest information please contact BodyMedia.

BodyMedia, the "Four Circle" Design, GoWear, InnerView and SenseWear are registered trademarks and BodyMedia Fit is a trademark of BodyMedia, Inc.

User Guide, Interface, software and firmware © Copyright 2000-2010 BodyMedia. Any copying, use, distribution or reverse engineering without a specific license from BodyMedia, or as permitted by applicable law, is strictly prohibited.