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fitness sensor user guide



**TIMEX**<sup>®</sup>

# Fitness Sensor User Guide

**Timex®**

## **Fitness Sensors**

**Heart Rate Sensor**

**Speed + Distance Sensor**

Watches are for more than keeping time. Digital technology gives your watch the ability to display your heart rate or measure your speed and distance traveled. These functions require the use of external modules that transmit information wirelessly to your watch. This booklet provides instructions for properly setting up, operating and maintaining these devices. Look for the section that is appropriate for the type of device you have.

For information on using your watch, consult the watch instruction booklet.

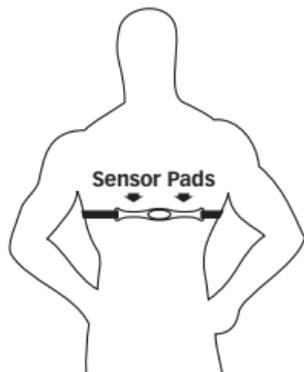
## Heart Rate Monitor

### How the Digital Heart Rate Monitor Works

The Heart Rate Monitor is a combination of a Heart Rate Sensor and a sport watch. The Heart Rate Sensor attaches to your chest and measures the electrical signals generated by the heart as it is beating. Using this information, it then calculates your heart rate and transmits it to your watch. You simply glance at the watch during exercise/training to make sure you are in the appropriate heart rate range to maintain or improve your fitness level.

### How to Use the Digital Heart Rate Monitor

1. Wet the Heart Rate Sensor pads. **THIS IS ESSENTIAL** for proper operation of the Heart Rate Monitor.
2. Put on the chest strap. Fasten the strap snugly around your chest, just below the breasts. Be sure the transmitter is centered on the chest and is right side up so the logo can be read by someone facing you.
3. Start the Heart Rate Monitor: Refer to the user manual for your watch for detailed instructions on viewing heart rate data.



### Warning

**This is not a medical device and is not recommended for use by persons with serious heart conditions. You should always consult your physician before beginning or modifying an exercise program.**

Interference with the radio signal, poor contact between your skin and the chest strap, and other factors may prevent accurate transmission of heart rate data.

### Maintenance

Rinse Heart Rate Sensor and strap in fresh water to avoid build up of materials that can interfere with the measurement of your heart rate.

### Transmitter Battery Life and Replacement

Battery life of the transmitter should exceed two years, based upon using it an hour a day. Greater usage will shorten the battery life. Replace transmitter battery when any of the following occur:

- The watch no longer receives heart rate information from the chest transmitter when properly worn on the chest.
- Error messages (COMM ERR, SIGNAL LOST) appear with increased frequency on the display.

### Battery Replacement

**NOTE: You'll need to have a device (such as a watch) capable of displaying heart rate information to verify that the new**

**battery has been inserted correctly. Use a coin to open the battery compartment cover (back of transmitter).**

- Insert new battery (CR2032 or equivalent) with “+” facing you.
- Push the reset button next to the battery. Use a toothpick or straightened paper clip.
- Reinstall battery cover.
- Perform quick test of the unit:
  1. Move away from sources of electrical or radio interference.
  2. Liberally moisten the Heart Rate Sensor pads and put the chest strap around your chest, securely against your skin.
  3. Activate the heart rate monitor function on the watch.
  4. Within a few seconds, the heart symbol on the watch display should begin flashing, indicating that the transmitter is active. This confirms that the battery was installed correctly.  
NOTE: A heart rate value does not need to appear on the display during this test.

IF FLASHING HEART DOES NOT APPEAR ON WATCH:

- Press the reset switch in the battery compartment again and replace the battery cover.
- Reinstall the battery, and repeat test procedure above.

## Water Resistance

The Heart Rate Sensor withstands water pressure to 60 p.s.i. See chart at end of booklet for equivalents. **WARNING:** The Heart Rate Sensor will not display heart rate when operated under water.

## Speed + Distance Sensor

### How the Speed and Distance System Works

The Speed + Distance (S+D) Sensor acquires signals from orbiting GPS (Global Positioning System) satellites to determine your position and changes in position anywhere on the globe. This information is transmitted wirelessly to your watch so that it can compute your speed, pace and distance traveled. For additional information on determining your speed and distance, see the instructions for your watch.

### About GPS Lock Times

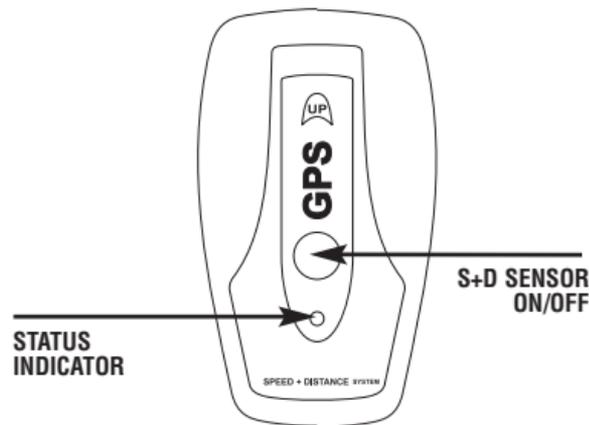
- On first use, the S+D Sensor can take up to 5 minutes or even longer to establish a link with the satellites. After that, the unit typically needs only 15-45 seconds.
- If you move hundreds of miles from the location where you last used the S+D Sensor or if you leave the S+D Sensor powered up indoors for long periods of time before going outdoors, the search may take longer than expected.
- For shortest GPS lock times, try to minimize movement while the indicator light is flashing red.

## Operating the S+D Sensor

For best results, the Sensor needs a clear view of the sky.

- Press and hold the **S+D SENSOR ON/OFF** button to turn on the receiver. You should be outdoors in an open area. If the status indicator light glows red immediately (continuously, not flashing), the batteries are exhausted to the point where GPS operation is not possible and the batteries must be replaced. The status indicator light on the S+D Sensor will initially flash red while the S+D Sensor calculates its position relative to the GPS satellites. The text "SEARCHING" may appear on the watch display if using a compatible Timex® watch.
- The status indicator light will flash green when the S+D Sensor has successfully acquired signals from the satellites. Speed and distance information is now being transmitted to the watch (or other device).
- To turn off the S+D Sensor, press and hold the **S+D SENSOR ON/OFF** button for one second. The indicator light will glow red while you are holding the button and then go out, indicating that the S+D Sensor has shut down.
- The S+D Sensor will shut itself off automatically if any of the following events occur:

- The batteries become exhausted.
- No motion is detected for 15 consecutive minutes.
- No GPS signals are detected for 15 consecutive minutes.

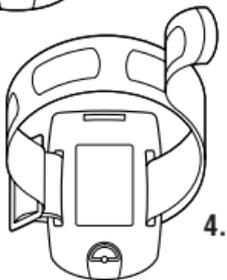
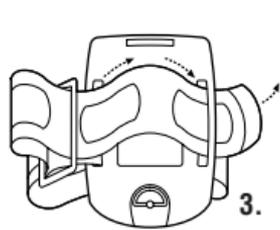
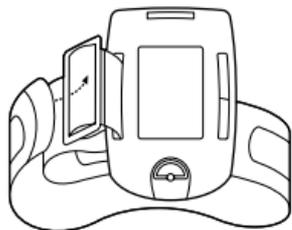
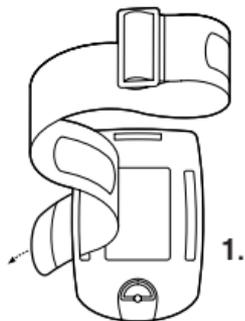


## Wearing the Speed and Distance S+D Sensor

For best results, strap the S+D Sensor to your upper arm. You may also clip it to your waist. Wear your watch so it is always within 1 meter (about 3 feet) of the S+D Sensor; for best results it should be worn on the same arm as the Transceiver. Any clothing worn over the S+D Sensor must be dry and free of metal.

## Wearing the S+D Sensor on your upper arm

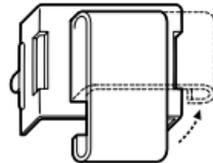
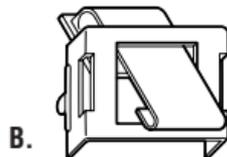
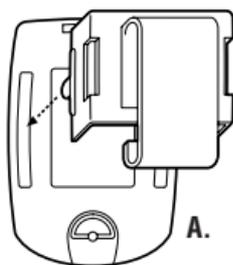
- Loosen adjustable armband and wrap the Sensor around your upper arm.
- Pull armband so that it fits snugly around your arm and fasten with the hook and loop closure.
- If the armband is not attached to the Sensor, rethread with the back of the case removed from the unit (see diagrams at right and below) Make sure the smooth side faces out (hook closure faces back of the case).



## Wearing the S+D Sensor on your belt

- On the back of the case, lift and turn latch ring a quarter-turn counterclockwise.
- Remove the back of the case.
- Remove armband from back of S+D Sensor.
- Insert clip into slot on mounting bracket (B). Orient clip horizontally or vertically as indicated.

Attach mounting bracket to the back of the case. Insert tabs on bottom part of the bracket into vertical slots on either side of the case. (A) Be sure the clip is properly installed.



## Resolving S+D Sensor Errors and Error Messages

### **PROBLEM**

- The S+D Sensor cannot lock onto GPS satellites (Indicator light never changes to flashing green).
- The GPS S+D Sensor loses signals from the satellites during use. The watch may display a message that the GPS signal is weak.

### **SOLUTION**

- Move to a more open outdoor area.
- Move away from metal objects.
- Replace the batteries in the S+D Sensor.

NOTE: The system can maintain accuracy for short periods when GPS signals are lost.

### **PROBLEM**

- Watch displays FATAL GPS ERROR message.

### **SOLUTION**

- The S+D Sensor is damaged; contact Timex Customer Service.

## S+D Sensor Battery Life and Replacement

The batteries in the S+D Sensor will last approximately 12 hours. The S+D Sensor itself does not indicate the condition of its batteries, except if the batteries are completely exhausted (as noted in the section “Operating the S+D Sensor”). Instead, this information is broadcast to your watch along with your performance data. Refer to the user manual for your watch for the procedure to check the S+D Sensor’s battery level.

### **Replace batteries**

- Remove the back cover of the S+D Sensor case. Lift and rotate the latch ring a 1/4-turn counterclockwise to release cover.
- Remove old batteries and insert three new AAA batteries. Observe the +/- markings inside the battery compartment to ensure the new batteries are properly aligned.
- Replace S+D Sensor cover.

### **Maintenance**

Rinse the S+D Sensor and its strap in fresh water periodically to avoid buildup of materials that can interfere with the measurement of your speed and distance.

## All Sensors

### Water-Resistance

The level of water-resistance (if any) is marked on the case. See the chart below for equivalents.

The S+D Sensor is splash-resistant. If it becomes submerged, remove the back of the case and batteries to let compartment dry.

Water-Resistance Depth	p.s.i.a. * Water Pressure Below Surface
<b>30m/98ft</b>	<b>60</b>
<b>50m/164ft</b>	<b>86</b>
<b>100m/328ft</b>	<b>160</b>
<b>200m/656ft</b>	<b>284</b>

\*pounds per square inch absolute

**WARNING: TO MAINTAIN WATER-RESISTANCE, DO NOT PRESS ANY BUTTONS UNDER WATER.**

**WARNING: SENSORS WILL NOT DISPLAY DATA WHEN OPERATED UNDER WATER.**

## INTERNATIONAL WARRANTY

(U.S. LIMITED WARRANTY)

Your product is warranted against manufacturing defects by Timex Corporation for a period of ONE YEAR from the original purchase date. Timex and its worldwide affiliates will honor this International Warranty.

Please note that Timex may, at its option, repair your product by installing new or thoroughly reconditioned and inspected components or replace it with an identical or similar model. **IMPORTANT: PLEASE NOTE THAT THIS WARRANTY DOES NOT COVER DEFECTS OR DAMAGES TO YOUR PRODUCT:**

- 1) after the warranty period expires;
- 2) if the product was not originally purchased from an authorized retailer;
- 3) from repair services not performed by the manufacturer;
- 4) from accidents, tampering or abuse; and
- 5) Case, attachments or battery. You may be charged for replacing any of these parts.

THIS WARRANTY AND THE REMEDIES CONTAINED HEREIN ARE EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR PARTICULAR PURPOSE. TIMEX IS NOT LIABLE FOR ANY SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES.

Some countries and states do not allow limitations on implied warranties and do not allow exclusions or limitations on damages, so these limitations may not apply to you. This warranty gives you specific legal rights and you may also have other rights which vary from country to country and state to state.

To obtain warranty service, please return your watch and Transceiver to the manufacturer, one of its affiliates or the retailer where the product was purchased, together with a completed original Product Repair Coupon or, in the U.S. and Canada only, the completed original Product Repair Coupon or a written statement identifying your name, address, telephone number and date and place of purchase. Please include the following with your watch and Transceiver to cover postage and handling (this is not a repair charge): a US\$ 7.00 check or money order in the U.S.; a CAN\$6.00 cheque or money order in Canada; and a UK£ 2.50 cheque or money order in the U.K. In other countries, you will be charged for postage and handling. NEVER INCLUDE ANY ARTICLE OF PERSONAL VALUE IN YOUR SHIPMENT.

For the U.S., please call 1-800-448-4639 for additional warranty information. For Canada, call 1-800-263-0981. For Brazil, call 0800-168787. For Mexico, call 01-800-01-060-00. For Central America, the Caribbean, Bermuda and the Bahamas, call (501) 370-5775 (U.S.). For Asia, call 852-2815-0091. For the U.K., call 44 208 687 9620. For Portugal, call 351 212 946 017. For France, call 33 3 81 63 42 00. For Germany, call +43 662 88 92130. For the Middle East and Africa, call 971-4-310850. For other areas, please contact your local Timex retailer or Timex distributor for warranty information.

**TIMEX INTERNATIONAL WARRANTY — WATCH REPAIR COUPON**

Original Purchase Date: \_\_\_\_\_

(Attach copy of sales receipt, if available)

Purchased by: \_\_\_\_\_

(Name, address and telephone number)

Place of Purchase: \_\_\_\_\_

(Name and address)

Reason for Return: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

**THIS IS YOUR WATCH REPAIR COUPON. PLEASE KEEP IT IN A SECURE PLACE.**

## Service

If your Sensor should ever need servicing, send it to Timex as set forth in the Timex International Warranty or addressed to:

HotLine Watch Service  
P.O. Box 2740  
Little Rock, AR 72203.

Street address:

HotLine Watch Service  
1302 Pike Ave.  
North Little Rock, AR 72114

For your convenience in obtaining factory service, participating Timex retailers can provide you with a pre-addressed Watch Repair Mailer. See the Timex International Warranty for specific instructions on the care and service of your watch module.

**For service questions, call 1-800-448-4639.**

**Should you need a replacement strap or band, call 1-800-448-4639.**

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## FCC Notice (U.S.) / IC Notice (Canada)

Timex Corporation declares that the following products, which include all components of the Timex® Bodylink™ System, are compliant to the relevant FCC Part 15 and Industry Canada rules for Class B devices as follows:

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### **Product Name:**

Speed + Distance System - GPS Transceiver Series M8xx/M5xx  
Heart Rate Monitor System – HRM Transmitter Series M8xx/M5xx

### **Product Type:** Intentional Radiator

Model	FCC ID No.	IC Certification No.
M821 Heart Rate Monitor	EP9TMXHRM	33481021492A
M515 Heart Rate Monitor	EP9TMXM515	3348A-M515
M850 Speed + Distance Monitor	EP9TMXM850	3348A-12181

*These devices comply with Part 15 of the FCC rules. Operation is subject to the following two conditions: (1) The device may not cause harmful interference, and (2) the device must accept any interference received, including interference that may cause undesired operation.*

**Product Name:**

Watch Receivers – HRM/Speed+Distance Series M8xx/M5xx

Data Recorders – HRM/Speed+Distance Series M5xx

**Product Type:** *Unintentional Radiator*

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 environment. This equipment generates, uses, and can radiate radio frequency energy and, if not used in accordance with the instruction manual, may cause harmful interference to radio communications. 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 reorienting or relocating the receiving antenna; or by increasing the separation between the equipment and receiver.

**Caution:** Any changes or modifications to the equipment listed above, not expressly approved by Timex Corporation, could void the user's authority to operate this equipment.

**Industry Canada Notice:** 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.