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W227 NA 632-095000



personal heart rate monitor



TIMEX®

PERSONAL HEART RATE MONITOR

Zone In On Fitness



English

Français

Español

Português

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OVERVIEW

Congratulations!

With your purchase of the Timex® Personal Heart Rate Monitor you have hired a new personal trainer. Your Personal Heart Rate Monitor offers you the ability to track, store, and analyze key indicators of your personal fitness level.

You will find your Personal Heart Rate Monitor to be a user-friendly fitness tool. But, like any new tool, you should take the time to familiarize yourself with it to optimize its usefulness.

So, take the time to check out the features and functions of your Personal Heart Rate Monitor to develop a basic understanding of this fitness tool. But most of all, enjoy your new partner on the road to increased fitness!

A Fit Heart

Recent fitness findings show that anyone can get fit and stay fit without being overzealous. It can be as simple as:

- ❖ Exercising 3 to 4 times per week
- ❖ Exercising for 30 to 45 minutes during each exercise session
- ❖ Exercising at the appropriate heart rate

Heart rate represents the effects of exercise on all parts of the body. Selecting the appropriate heart rate zone conditions the heart, lungs, and muscles to perform at optimal levels to get and keep your body in shape.

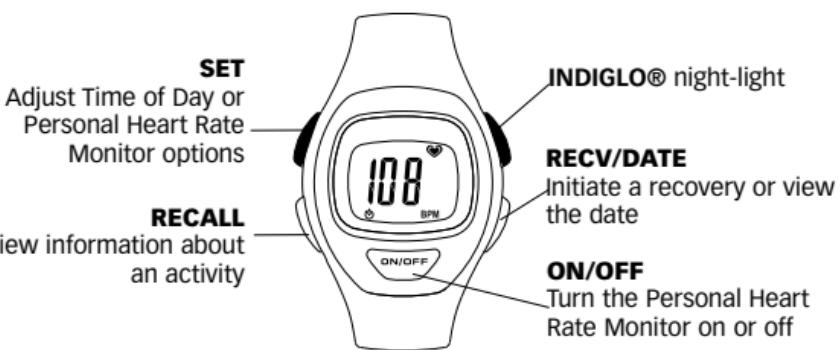
Once set up, your Personal Heart Rate Monitor can automatically show you when you are in the exercise zone you chose and signal you when you are not. It can help keep your body exercising at an intensity level that can help you achieve your desired fitness objectives without over- or under-exercising.

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 Personal Heart Rate Sensor, or other factors may prevent accurate transmission of heart rate data.

Watch Buttons



Display Icons

- ⌚ You will see the hollow heart icon as the watch searches for a signal from the Personal Heart Rate Sensor.
- ⌚ You will see the heart icon fill once the watch has located a signal from the Personal Heart Rate Sensor. This icon will continue to flash as long as the watch continually receives a signal from the Personal Heart Rate Sensor.
- ⌚ You will see the activity timer icon to indicate that the watch is timing your activity. You will only see the activity timer icon when you use the watch in conjunction with the Personal Heart Rate Sensor.
- ⌚ You will see the chime icon when you have turned on the audible target zone alert or if you have turned on the hourly chime for Time of Day Mode.

Resources

The Timex® website offers beneficial information to help you optimize your Personal Heart Rate Monitor.

- ❖ Register your product at www.timex.com.
- ❖ Visit www.timex.com/hrm/ for more information on Timex® Heart Rate Monitors, including product features and simulations.
- ❖ Visit www.timex.com/fitness/ for fitness and training tips using Timex® Heart Rate Monitors.

Determining Your Optimal Heart Rate Zone

There are five basic heart rate target zones. Simply select a zone that matches your percent of maximum (%MAX) heart rate based on the fitness goal you want to achieve during a particular exercise.

% MAX	Goal	Benefit
50% to 60%	Light exercise	Maintain a healthy heart and get fit
60% to 70%	Weight management	Lose weight and burn fat
70% to 80%	Aerobic base building	Increase stamina and aerobic endurance
80% to 90%	Optimal conditioning	Sustain excellent fitness condition
90% to 100%	Elite athletic training	Achieve superb athletic condition

Before you can set your %MAX, you first need to determine your maximum heart rate. You can use many methods to estimate your maximum heart rate. The booklet *Heart Zones® Tools For Success* included in your Personal Heart Rate Monitor packaging (U.S. customers only) provides excellent procedures and Timex recommends you use one of these methodologies.

However, if you cannot use any of the procedures described in *Heart Zones® Tools for Success* (U.S. customers only), you might consider using the following government recommended age-based method.

Begin with the number 220 and then subtract your age. For instance, a 35 year old would begin with 220 and subtract 35 (the person's age), which gives an estimated maximum heart rate of 185.

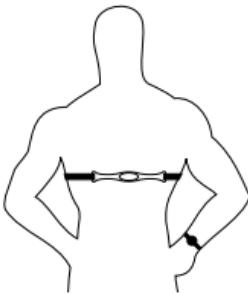
Once you know your maximum heart rate, you can set the zones described in the table on the previous page.

PERSONAL HEART RATE MONITOR

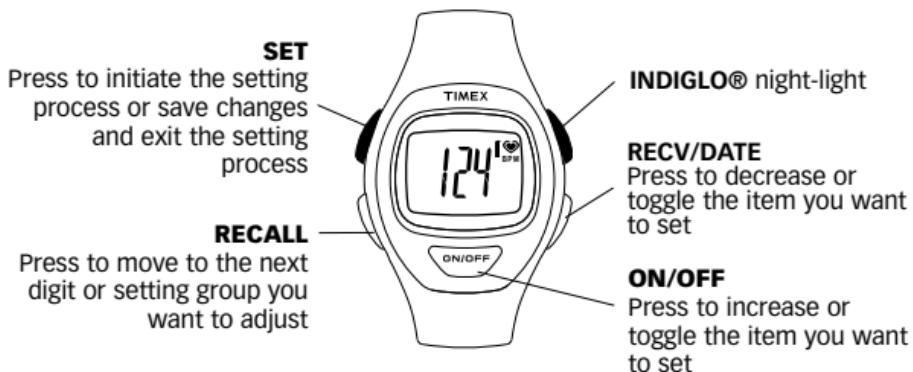
You can set up and use your watch to track heart rate and other statistical information about an activity you perform while wearing your watch and Personal Heart Rate Sensor.

To Use Your Personal Heart Rate Monitor

1. Wet the Personal Heart Rate Sensor pads.
2. Center the Sensor on your chest with the Timex® logo facing up and out and fasten it firmly, just below your sternum.
3. Press the ON/OFF button on your watch. A set of 3 dashes (- - -) and the heart rate icon will appear on the display followed by a display that shows your current heart rate. (You will also see the activity icon in the lower left corner of the display to indicate that your watch is tracking your activity time.)
4. Begin your activity. The watch automatically records your heart rate and other statistical data about your activity, including time.
5. When you have finished your activity, press and hold the ON/OFF button until the words HOLD TURN OFF briefly appear on the display one word at a time. Continue holding the ON/OFF button until you hear a beep and the current time of day appears on the display.



To Set or Adjust Your Personal Heart Rate Monitor



1. Press ON/OFF to activate the Personal Heart Rate Monitor.
2. Press and hold SET until the words HOLD TO SET briefly appear on the display one word at a time. Continue holding SET. The first setting group will appear on the display with the first value flashing.
3. Make the desired adjustment by pressing ON/OFF or RECV/DATE. In some setting groups pressing ON/OFF will increase a value and pressing RECV/DATE will decrease a value. At other times pressing ON/OFF or RECV/DATE will toggle between 2 options.
4. Press RECALL to move to the next digit you want to set or the next setting group.
5. Press SET to save your changes and exit the setting process.

For this Personal Heart Rate Monitor you can make the adjustments described in the tables that appear on this and the next page.

Setting Group	Display	Description
Lower Target Zone Limit		Your lower target zone limit setting represents the beats per minute (BPM) or percent of maximum (%MAX) below which you do not want your heart rate to go during your activity. If your heart rate goes below this number a downward facing arrow will appear on the display and the audible alert will sound if you have turned the alert on. You cannot set this number below 30 (13%).
Upper Target Zone Limit		Your upper target zone limit setting represents the beats per minute (BPM) or percent of maximum (%MAX) above which you do not want your heart rate to go during your activity. If your heart rate goes above this number an upward facing arrow will appear on the display and the audible alert will sound if you have turned the alert on. You cannot set this alert above 240 (100%).

Setting Group	Display	Description
Audible Alert		You can set the watch to alert you if your heart rate goes above or below your target zone. The watch will continue to beep until you have moved back into your selected zone. TIP: You can also turn this alert on or off during your activity by pressing the ON/OFF button.
Maximum Heart Rate		Your maximum heart rate value is used as a reference for displaying your heart rate in terms of percent of maximum (%MAX). This number cannot be below 80 or above 240.
Weight		You can enter your current weight. This number is used to help calculate how many calories you burn during your activity. Your recorded weight cannot go below 66 pounds (30 kilograms) or above 330 pounds (150 kilograms).
Heart Rate Display		You can choose whether your heart rate will display as beats per minute (BPM) or percent of maximum (%MAX).

Recall Activity Data

You can recall information about your activity both during and after the activity (unless noted below). Data groupings appear in the order listed.

- ❖ **Activity Timer:** The amount of time the Personal Heart Rate Monitor is active and receiving valid pulses during an activity. As long as you also run the Personal Heart Rate Monitor, the watch can keep the activity timer active for a period of 24 hours.
- ❖ **Time in Zone:** The amount of time during an activity when your heart rate is between the lower and upper target zone limits you set.
- ❖ **Average Heart Rate:** The average heart rate achieved during an activity.
- ❖ **Peak Heart Rate:** The highest recorded heart rate during an activity (data available only after the end of an activity).
- ❖ **Calories Burned:** The number of calories burned during an activity. This number is dependent on the weight you entered when you set your Personal Heart Rate Monitor, your heart rate during the activity, and the time you spent in the activity.
- ❖ **Recovery Heart Rate:** The result of the most recently taken recovery heart rate calculation.

To recall data during an activity

1. Press RECALL. The first time you recall information during your activity the watch will begin by displaying the Activity Timer. After that, it will begin by displaying the last data group you viewed during the activity.
2. Continue to scroll through the activity data by pressing RECALL. If you do not press RECALL for a period of five seconds or you press any button other than RECALL or INDIGLO® the recall will end and the display will return to showing your current heart rate.

To recall data after an activity

1. After you have finished your activity and turned off the Personal Heart Rate Monitor, you can review activity data by pressing RECALL. The watch will automatically scroll through all the data groups, moving to a new group every 3 seconds.
2. If you want to view the next data group more quickly than the automatic change, you can move to the next data group by pressing RECALL.
3. After the watch has scrolled through each of the data groups, the watch will automatically return to displaying the current time after a period of 3 seconds, unless you press RECALL before the 3 second time out, which will restart the automatic data viewing process.
4. If you press any button other than RECALL or INDIGLO® the recall will end and the display will return to showing the current time.

Heart Rate Recovery

Heart rate recovery provides an indicator of fitness and training level. As you become more fit, your heart rate should return more quickly to a lower heart rate value at the end of your activity, indicating a higher level of cardiovascular fitness. A slower recovery rate can also indicate a need to take a break from training due to fatigue, illness, or other factors.

Your recovery rate represents the change in your heart rate over a period of time. Your Personal Heart Rate Monitor records the change in your heart rate over a period of 1-minute.

To determine your recovery heart rate

The watch cannot record a recovery unless the Personal Heart Rate Sensor is receiving a current heart rate and a valid pulse. Without a current heart rate, the display will read ERROR at the end of the 1-minute recovery period. If the starting heart rate is lower than the ending heart rate, the display will read NO REC.

1. Press RECV/DATE. The watch will capture your current heart rate in beats per minute (BPM) and begin the 1-minute countdown.
2. After the countdown, the watch will beep indicating the end of the recovery period. The watch will capture your heart rate a second time, subtract the second value from the first value and display the difference as the recovery heart rate.
3. Once you start the recovery, you can temporarily recall data by pressing RECALL. The heart rate recovery display will appear at the end of the 1-minute countdown.

4. You can continue to initiate 1-minute recovery periods by repeating steps 1 and 2. The recovery heart rate will continue to display once the countdown has expired unless you press another button.
5. To exit the recovery display after the countdown has expired, press ON/OFF to view your current heart rate or RECALL to view accumulated data.

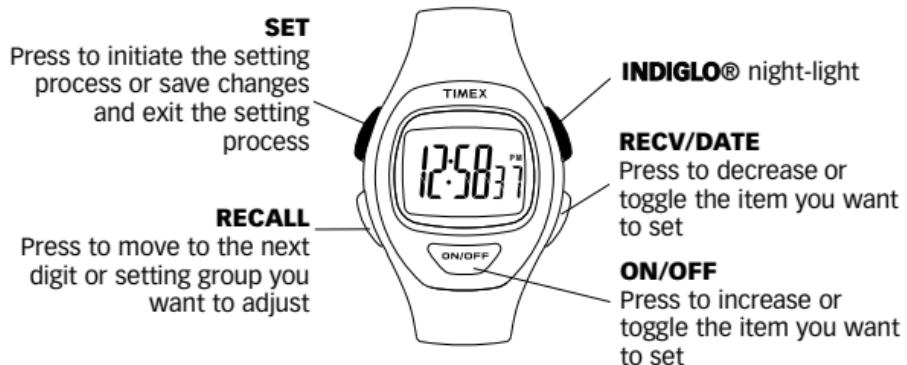
Personal Heart Rate Monitor Notes & Tips

- ❖ At any time during the setting process, you can save your changes and return to the main heart rate display by pressing SET.
- ❖ While setting the watch, if you do not press any buttons on the watch for a period of 2-3 minutes, the watch will automatically save whatever changes you have made and exit the setting process.
- ❖ During an activity, you can view the time by pressing SET.
- ❖ At any time during the setting process, press and hold ON/OFF to quickly increase the setting value or RECV/DATE to quickly decrease the setting value.
- ❖ Data accumulation will be suspended if 1) the activity timer reaches 24-hours; 2) an error occurs; 3) you turn off the Personal Heart Rate Monitor either on the watch or by taking off the Sensor.
- ❖ When you start a new activity while receiving valid heart rate data, you erase all data from a previous activity.
- ❖ The watch and the Personal Heart Rate Sensor need to be within 3 feet (1 meter) of each other to function properly. If the watch is not receiving heart rate information, try the following:

- ✓ Shorten the distance between the watch and the Personal Heart Rate Sensor.
- ✓ Adjust the position of the Personal Heart Rate Sensor and elastic chest strap.
- ✓ Make sure the Personal Heart Rate Sensor pads are wet.
- ✓ Check the battery in the Personal Heart Rate Sensor and replace it if necessary.
- ✓ Move away from other heart rate monitors or other sources of electrical or radio interference.

TIME OF DAY

Your watch can act as an ordinary timepiece that displays the time, date, and day using a 12- or 24-hour format.



To Set or Adjust the Time and Date

1. Make sure your Personal Heart Rate Monitor is turned off by pressing and holding the ON/OFF button.
2. Press and hold SET until the words HOLD TO SET briefly appear on the display one word at a time. Continue holding SET until the time appears on the display with the hour value flashing.
3. Make the desired adjustment by pressing ON/OFF or RECV/DATE. In some setting groups pressing ON/OFF will increase a value and pressing RECV/DATE will decrease a value. At other times pressing ON/OFF or RECV/DATE will toggle between 2 options.

- Press RECALL to move to the next setting option.
 - Press SET to save your changes and exit the setting process.
- For this watch, you can make the Time of Day adjustments described in the tables that appear on this and the next page.

Setting Group	Adjustment
Hour	Press ON/OFF to increase the hour value or RECV/DATE to decrease the hour value.
Minute	Press ON/OFF to increase the minute value or RECV/DATE to decrease the minute value.
Second	Press ON/OFF or RECV/DATE to reset the seconds to zero.
12- or 24-hour Format	Press ON/OFF or RECV/DATE to toggle between the 12- and 24-hour formats. In the 12-hour format the AM and PM time indicators will also appear above the seconds on the time display.
Month	Press ON/OFF to move forward through the months or RECV/DATE to move backward through the months.
Date	Press ON/OFF to increase the date value or RECV/DATE to decrease the date value.

Setting Group	Adjustment
Day of Week	Press ON/OFF to move forward through the days of the week or RECV/DATE to move backward through the days of the week.
Appearance of the Month and Day	Press ON/OFF or RECV/DATE to toggle between the appearance options for the month and the day. The options include Month Day (MM-DD) or Day Month (DD.MM). For example, March 15 can appear as 3-15 or 15.3.
Chime	Press ON/OFF or RECV/DATE to toggle between turning the chime on and turning the chime off. When you turn the chime on, you will see the chime icon and the watch will emit a beep every hour on the hour.

Time of Day Notes & Tips

- For a brief, 3-second look at the month, date, and day of the week, press RECV/DATE.
- The watch does not automatically adjust for Daylight Savings Time. When switching between Standard Time and Daylight Savings Time, you must manually adjust the hour value.
- The watch automatically moves from February 28 to March 1. To accommodate a leap year, you must manually set the date value to February 29. The watch will then automatically move from February 29 to March 1.

- ❖ At any time during the setting process, press and hold ON/OFF to quickly increase the setting value or RECV/DATE to quickly decrease the setting value.
- ❖ At any time during the setting process, you can save your changes and return to the main time display by pressing SET.
- ❖ While setting the watch, if you do not press any buttons on the watch for a period of 2-3 minutes, the watch will automatically save whatever changes you made and exit the setting process.

CARE & MAINTENANCE

Personal Heart Rate Monitor

- ❖ To avoid build up of materials that can interfere with the Personal Heart Rate Sensor's ability to receive a valid pulse, rinse the Personal Heart Rate Sensor with fresh water.
- ❖ Do not clean the Personal Heart Rate Sensor or chest strap with abrasive or corrosive materials. Abrasive cleaning agents may scratch the plastic parts and corrode the electronic circuit.
- ❖ Do not subject the Personal Heart Rate Sensor to excessive force, shock, dust, temperature, or humidity. Such treatment may result in malfunction, a shorter electronic life span, damaged batteries, or distorted parts.
- ❖ Do not tamper with the Personal Heart Rate Sensor's internal components. Doing so will terminate the Sensor's warranty and may cause damage.
- ❖ The Personal Heart Rate Sensor contains no user-serviceable parts, except batteries.

Battery

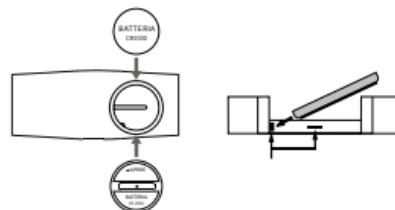
Personal Heart Rate Sensor Battery

If your heart rate readings become erratic or stop, you may need to replace the battery on your Personal Heart Rate Sensor. You can change the battery yourself without any special tools.

This product uses a CR2032 lithium battery for the Personal Heart Rate Sensor.

To change the battery:

1. Open the sensor battery lid with a coin, turning the coin counterclockwise.
2. Insert one CR2032 3V lithium battery with writing facing you, taking care not to touch the 2 contacts and discharge the battery.
3. When you have finished inserting the battery, replace the lid.



To test the new battery after you have inserted it:

1. Move away from any possible sources of electrical or radio interference.
2. Wet the Personal Heart Rate Sensor pads and securely fasten the chest strap below your sternum.
3. While wearing the watch, press the ON/OFF button. A set of 3 dashes (- - -) and the flashing heart rate icon will appear on the display.
4. If you do not see a flashing heart icon on your Watch, reinstall the sensor battery.

NOTE: It is not necessary for a heart rate value to appear on the display during this test.

Watch Battery Replacement

When the battery of the watch is running low, the display will dim. This watch uses a CR2032 lithium battery.

To avoid the possibility of permanently damaging the watch, TIMEX STRONGLY RECOMMENDS TAKING YOUR WATCH TO A LOCAL RETAILER OR JEWELER TO HAVE THE BATTERY REPLACED.

INDIGLO® Night-Light

Press the INDIGLO® button to activate the night-light. This electroluminescent technology illuminates the watch display at night and in low light conditions.

When the battery of the watch is running low, the display will dim when the INDIGLO® button is pressed. This Watch uses a CR2032 lithium battery.

To avoid the possibility of permanently damaging the Watch, TIMEX STRONGLY RECOMMENDS TAKING YOUR WATCH TO A LOCAL RETAILER OR JEWELER TO HAVE THE BATTERY REPLACED.

Water Resistance

Watch

- ❖ Your 30 meter water resistant watch withstands water pressure to 60 p.s.i. (equals immersion to 98 feet or 30 meters below sea level).
- ❖ The Watch is only water-resistant as long as the lens, pushbuttons, and case remain intact.
- ❖ Timex recommends rinsing your watch with fresh water after exposure to salt water.

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

Personal Heart Rate Sensor

- ❖ Your 30 meter water resistant Personal Heart Rate Sensor withstands water pressure to 60 p.s.i. (equals immersion to 98 feet or 30 meters below sea level).

WARNING: THIS UNIT WILL NOT DISPLAY YOUR HEART RATE WHEN OPERATED UNDER WATER.

WARRANTY & SERVICE

Timex® International Warranty (U.S. Limited Warranty)

Your Timex® Personal Heart Rate Monitor is warranted against manufacturing defects by Timex Corporation for a period of 1 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 Heart Rate Sensor 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 HEART RATE MONITOR:

1. after the warranty period expires;
2. if the Heart Rate Sensor was not originally purchased from an authorized Timex® retailer;
3. from repair services not performed by Timex;
4. from accidents, tampering or abuse; and/or
5. lens or crystal, strap or band, Heart Rate Sensor case, attachments or battery. Timex may charge you 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 Heart Rate Monitor to Timex, one of its affiliates or the Timex® retailer where the Heart Rate Monitor was purchased, together with a completed original Repair Coupon or, in the U.S. and Canada only, the completed original Repair Coupon or a written statement identifying your name, address, telephone number and date and place of purchase. Please include the following with your Heart Rate Monitor 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, Timex will charge you for postage and handling.

NEVER INCLUDE ANY ARTICLE OF PERSONAL VALUE IN YOUR SHIPMENT.

For the U.S., please call 1-800-328-2677 for additional warranty information. For Canada, call 1-800-263-0981. For Brazil, call +55 (11) 5572 9733. 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 44 020 8687 9620. For Portugal, call 351 212 946 017. For France, call 33 3 81 63 42 00. For Germany, call 49 7 231 494140. 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.

In Canada, the U.S. and in certain other locations, participating Timex® retailers can provide you with a postage-paid, pre-addressed Heart Rate Monitor Repair Mailer for your convenience in obtaining factory service.

Service

If your Timex® Personal Heart Rate Monitor 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

For service questions, call 1-800-328-2677.

See the Timex® International Warranty for specific instructions on the care and service of your Personal Heart Rate Monitor.

Should you need a replacement strap or band, call 1-800-328-2677.

TIMEX® INTERNATIONAL WARRANTY REPAIR COUPON

Original Purchase Date: _____

(attach a copy of sales receipt, if available)

Purchased By: _____

(name, address, telephone number)

Place of Purchase: _____

(name and address)

Reason for Return: _____

THIS IS YOUR REPAIR COUPON. KEEP IT IN A SAFE PLACE.

DECLARATION OF CONFORMITY

(according to ISO Guide 22 and EN 45014)

Manufacturer: Timex Corporation
555 Christian Road
Middlebury, CT 06762

declares that the product:

Product Name: Timex® Personal Heart Rate Monitor

Model Number: M593

Product Options: All

conforms to the following Product Specifications:

LVD: 73/23/EEC

Safety: IEC 60950

EMC: 89/336/EEC

Emissions: EN300-683
Radiated Emission 30 MHz to 1000 MHz E-
Field (Electric). Ref. EN55022

Immunity: EN300-683

Radiated Immunity 80 MHz to 1000 MHz. Ref.
EN61000-4-3
ESD Electrostatic discharge. Ref. EN61000-4-2
Radiated Immunity 900 MHz. Ref. ENV50204

Supplemental Information: The product herewith complies with the requirements of the Low-Voltage Directive 73/23/EEC and the EMC Directive 89/336/EEC and carries the 7 marking accordingly.

Hereby, Timex Corporation declares that this low power radio equipment is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.

Agent:



Brian J. Hudson
Director, Test Engineering and Module Development

Date: 15 July 2004, Middlebury, Connecticut, U.S.A.

CE

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