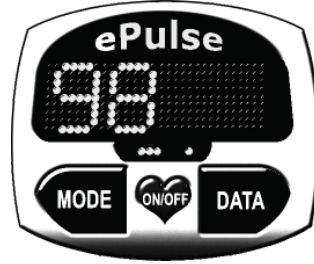


You can record a log, similar to the one below of your daily calories burned and consumed using data from your ePulse Personal Fitness Assistant to support your exercise or calorie counting program.

DATE	Calories Burned	Calories Consumed	Net Calorie Loss / Gain

ePulse® Personal Fitness Assistant (PFA)®



Impact Sports Technologies, Inc.



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comparing these feedback numbers against calories consumed will assist you in managing your program. This log can also help you implement your exercise activities by permitting you to "mix and match" calorie burning exercises of different intensities and time lengths around your personal schedule or meal plans. On one day you schedule a two-mile run to burn your target calories, while on another day you may only have time for a 10-minute exercise bike ride. By knowing the typical calories you personally burn for each of these activities, you may now plan your meals and activities accordingly.

Note: Consult your doctor before beginning any exercise routine using the ePulse.

Visit <http://caloriecount.about.com> to find out how many calories are in each of the foods you consume.





Muscle Strengthening Exercises such as calisthenics, weightlifting or any activity that makes you flex muscles repeatedly makes the body burn more calories. This type of activity improves bone density, builds muscle and reduces body fat. The ePulse feedback permits you to monitor your heart rate between repetitions and to monitor progress in terms of shorter recovery time. The convenience and ease of use of the ePulse makes it an ideal complement to in-home or fitness center activities for muscle strengthening activities.

Calorie Counting

The ePulse is a powerful feedback tool to assist you in planning and sustaining an effective calorie counting and complementary exercise management program. Use the chart below to log daily calories burned and the calories you burn during various types of exercises as you use your ePulse. Doing this and

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Contact
www.impactsports.com
support@impactsports.com
1-888-537-9763

WARNING!
The ePulse is not a medical device. The ePulse is intended for recreational use only and no claims are made or implied in the results obtained by the use of our equipment. Consult your doctor before undertaking any exercise using the ePulse.

Do not submerge the ePulse in water (see "Cleaning and Maintenance" section of this manual for washing instructions). The ePulse is not intended for children under the age of 8.





**ePulse User Manual
Table of Contents**

Introduction to the ePulse	1
Getting Started	3
Controls	3
Batteries	3
Wearing the ePulse	5
On / Off	6
Heart Rate, Exercise Time, and Calories Burned	7
Reset	8
Personal Data	8
Continuous & On-Demand Modes	10
Fat Burn Target Zone	11
Cardio Target Zone	11
Advanced Features	13
Basal Metabolic Rate	14
Average Heart Rate	14
Min Heart Rate	14
Max Heart Rate	14
Target Heart Rates	15
Calorie Summary	15

involved in a number of different exercise activities. Since your heart rate will generally remain elevated as you move from one activity to another, the dynamic monitoring of the ePulse will provide you with a more complete and accurate picture of the benefits of your fitness activity.

By using the ePulse during exercise activity you can set and monitor goals for duration, intensity and frequency of activity to achieve desired results. The ePulse feedback takes the guesswork out of the benefits being achieved. You will now be able to increase or decrease activity levels to accomplish specific goals for conditioning or calorie counting. The ePulse allows you to monitor and achieve optional caloric burn by extending the length of a walk or run or by taking a few extra trips up and down the stairs during the course of daily activities.





system to process oxygen more efficiently. It also burns fat and increases metabolism. While the American College of Sports Medicine recommends that to achieve maximum aerobic exercise benefit you elevate your heart rate to 60-90% of its maximum, increased benefits can also be achieved by elevating the heart rate above its normal resting rate.

For optimal exercise, the ePulse provides target heart zone (cardio and fat burning) information, while for less intense exercise, the ePulse shows calories burned based on heart rate activity and your personal data. By simply slipping on the ePulse you will have immediate and continuous access to information on how much you are exercising your heart and how much that exercise is burning calories.

The advantage of the ePulse is that you do not have to remove it if you are

Menu System Key	16
Care and Maintenance	17
Frequently Asked Questions	17
Troubleshooting	26
Money Back Guarantee & Warranty	29
Appendix 1: Mp3 Mount	30
Appendix 2: Importance of Monitoring	30
Fitness Activity and Hints for Use	
Example Calorie Log	35





**Introduction to the ePulse®
Personal Fitness Assistant (PFA)**
Congratulations! You have purchased the Impact Sports Technologies ePulse Personal Fitness Assistant, the world's first armband continuous Heart Rate Monitor. ePulse is one of the most innovative, convenient and useful fitness tools available today. This guide provides information on how to achieve the most benefit from your ePulse.

The ePulse provides immediate, continuous, and convenient feedback during nearly all forms of exercise using the same technology found in hospital heart rate monitors. You will be able to immediately view your HEART RATE, and EXERCISE TIME. By inputting a few elements of essential personal data you will also be able to view EXERCISE CALORIES BURNED, total daily calories burned, and total daily exercise

You may email us at the address below if you purchased your product directly from ImpactSports.com.

To Receive a Return Materials Authorization (RMA) Number please email: support@impactsports.com or Call: 1-888-537-9763.

Appendix 1 - Mp3 Mount

Trim and adhere the velcro strip to your Mp3 player. Attach it in the area between the buckle and the display as shown on the right for use with the ePulse.



Appendix 2 - Importance of Monitoring Fitness Activity and Hints for Using your ePulse Personal Fitness Assistant

Aerobic Activity (running, aerobics, dance, kickboxing, treadmill, stair climber, stationary bike, walking) exercises your heart, lungs and circulatory



Unconditional 30-Day Money Back Guarantee

Your ePulse comes with a thirty (30) day money back guarantee from the date of purchase if bought directly from Impact Sports. Please save your receipt as proof of purchase.

90-Day Limited Warranty

Your ePulse comes with a ninety (90) day limited replacement warranty from the date of purchase. Impact Sports Technologies, Inc. ("IST") warrants to the original end user ("Customer") that new IST branded products will be free from defects in workmanship and materials, under normal use, for ninety (90) days. We will provide a replacement free of charge for any defective products. Please save your receipt as proof of purchase.

For a product return, please contact the retailer you purchased your ePulse from.

calories burned based on your heart rate. Since the ePulse calculates information based on your personal data, it will also calculate and display appropriate TARGET HEART RATE LEVELS for fat burning and heart strengthening activity. This feature also sets a green indicator light to alert you when you are exercising in these zones. ePulse features an easily seen Light Emitting Diode (LED) display that can be read day or night. The display is bright enough that it also provides a degree of extra visibility during nighttime activities such as running or walking.


See Appendix A of this User Manual for more information on the importance of monitoring your heart rate, aerobic activities, muscle strengthening exercises, and hints on how to use the ePulse to support a weight monitoring or weight loss program.

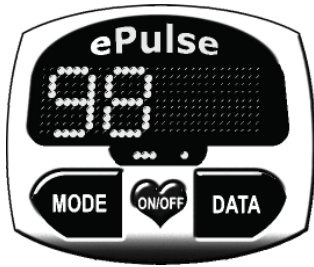


Step 1: Getting Started

Open the battery case by pressing down and sliding the cover back to insert the AAA batteries exactly as shown by the diagram inside the case.

Control Functions

-  **Middle Heart Button:**
- Click once for ON.
 - Click again for OFF.



your ePulse, like all heart rate monitors will sometimes have your pulse masked by a slippage of the sensor, extreme motion or physical pressure on the sensor. Try slightly tightening the armband or slightly repositioning the sensor. Also, during running, briefly slow your pace. These excursions are temporary and typically will not exceed 10% error. Once these conditions are corrected or cease, your ePulse will quickly recover and display a normal reading. These occasional excursions will not significantly affect your caloric burn results since they are averaged over time. Also, see the previous answer regarding light leaks.



about 25 seconds of resting activity to lock onto to your actual heart rate.

Symptom: *Sometimes my ePulse loses my heart rate. Is this normal?*

This is normal. The ePulse is always looking for your pulse and if it loses it for a moment, don't worry, it will reacquire automatically. Sometimes a minor repositioning or tightening of the armband is necessary. Temporary loss of signal will have a negligible effect on the caloric calculation. Also it is important to ensure that the armband fits snugly so that no light leaks into the sensor area, especially when using ePulse outdoors in direct sunlight. If there are light leaks the readings will not be accurate.

Symptom: *During certain exercises my heart rate seems to be too high or too low.* Your ePulse has been designed to operate in an exercise environment and under most circumstances and during most activities the ePulse is extremely accurate. However,



Left Button:

- Click to access display options (Heart Rate, Current Exercise Time, Current Training Calories),
- Hold down for 3 seconds Daily Reset
- Scrolling for Personal Data Entry



Right Button:

- Click to access all other ePulse fitness monitoring features including Personal Data Entry





Step 1. Wearing your ePulse

Armband Placement: Loop the strap through the buckle, around your arm and back on itself. Tighten the strap snugly. For smaller arms the strap may be folded back on itself. *Note: when participating in high motion activities such as running or tennis, ensure that the strap is extra snug to prevent slippage.*



ePulse is designed to be worn on either forearm, with the display toward the top of forearm for easy viewing as shown in upper right. For proper performance adjust ePulse so that the sensor lies within the area of the upper forearm as shown to right. Place ePulse high on the forearm without touching the bend in the elbow. **This is essential for proper performance!**

5

if you are power lifting you may want to see your heart rate move back to resting level between sets, while if you are moving quickly from station to station for aerobic or endurance training (circuit) the ePulse will help you keep your heart rate elevated with constant feedback. Due to physical disruption of the sensor while actually lifting you may occasionally note some loss of the heart rate signal but the ePulse will quickly recover once you rest or are between sets.

Troubleshooting

Symptom: *My ePulse will not turn on.*
Your ePulse may need to be reset. Simply click the on/off button twice to reset. If this does not work, replace the AAA batteries.

Symptom: *My heart rate does not appear or it takes a long time for it to appear.*
Ensure that the sensor is placed correctly on the **upper outer forearm** and that it is not too loose. The heart rate display should appear almost instantly although it takes

26





of your exercise session.

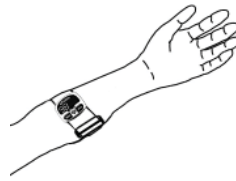
Third, the ePulse adds value to any exercise equipment you use or may have purchased since it is always available to give you feedback on the effectiveness of that equipment.

Q. Can the ePulse tell me if I am over training?

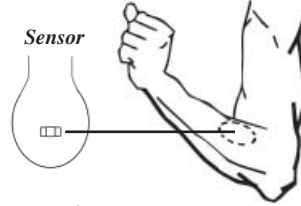
A. Since the ePulse will allow you to become familiar with your heart rate during all types of activity, including your resting heart rate, you will be able to see a typical sign of over training if your resting heart rate remains 5-10 beats higher than normal for an extended period of time.

Q. Can I use the ePulse during weight training?

A. Yes. Since it is worn on the forearm, the ePulse is very convenient for weight training. It can be particularly useful if you are monitoring your heart rate between sets or when circuit training. For instance




Display Placement on Inner Forearm



Sensor Placement Area on Outer Forearm



Step 2. Click the  Button to turn your ePulse on





Within seconds a display as depicted below will appear showing your Battery Status and Heart Rate. "Replace Batt" indicates that you have 2-4 hours of battery life remaining.



Heart Rate Display

Sit quietly for about 15-20 seconds until a blue light comes on at the bottom of the display. This indicates that ePulse has locked onto your heart rate and you may begin exercise activity.



Click the MODE Button to Access Basic Display Options Suited to Your Personal Usage

- Heart Rate
- Current Exercise Time
- Current Exercise Calories

muscle burn.

Q. What is the advantage of the ePulse over the heart rate monitors that are on the handgrips of most exercise equipment at my fitness club?

A. The ePulse offers several unique advantages over heart rate monitors found on exercise equipment, which offer just an estimated snapshot of your caloric burn while you are using them.

First, the calculations from the ePulse are personally tailored to you and your physiology, making the caloric burn calculations more accurate.

Second, the convenience of the ePulse permits you to wear it during your entire workout as you move from warm-up to each station or exercise to exercise and during cool down when your heart rate and caloric burn remain elevated. This gives you a more dynamic and comprehensive picture of the total end-to-end effectiveness






70 – 80%: Fat Burning / Base Fitness
Goal: Maximized stored fat as calorie / energy source during workout and to improve base cardio respiratory health.
Exertion Level: Moderate, sustainable intensity; Full sweat; some difficulty to converse; Breathing is somewhat labored and HR is strong



80 – 90%: Cardio Conditioning
Goal: Improve fitness & cardio condition.
Exertion Level: High, not sustainable over long duration; Heavy sweat; Difficulty to converse; Breathing is labored and HR is fast, strong and evident.

90 – 100%: Anaerobic / Interval Training
Goal: Push Anaerobic Threshold up toward max HR.
Improve cardio conditioning and recovery time; minimize fatigue & muscular lactic acid build up.
Exertion Level: Max – All-out, sustainable in only limited durations or short bursts. Breathing and HR are close to or at max;

Daily Reset

- Press and hold the  button for 3 seconds and release to reset all exercise calorie counts, *avHr*, *mnHr*, and *mxHr*, to zero.

Step 3: Enter Personal Data menu

by double clicking the   Button. Gndr will appear on the screen.







You will now access or enter the following items:

- Gndr = Gender
- Age = Age
- lbs = Weight in Pounds
- Hgt = Height in Inches
- RHr = Resting Heart Rate
- View = Continuous or Demand Display Mode
- Zone = Target Heart Zone Alert





(green LED at bottom right of display)
• Rvw = Review Personal Data Input

1. Click the  button to choose **Male or Female**.
2. Click the  button to select your entry. The ePulse will automatically move you to the next menu item (**Age**).
3. When **Age** appears on the screen, press the  button and numbers will appear. To increase the number press the  button again. (To  *reverse* scroll direction, hold the button down for 3 seconds and release)
4. Click the  button to select

A. The great news is that the benefits of cardio exercise begin with any elevation of one's heart rate. However, there are different benefits with different levels of heart rate (or exercise intensity). Below, find a brief summary outlining some of these benefits.

50 – 60%: Start Up, Basic Wellness and Daily Activities
Goal: Maintain current state of health and to begin the "getting fit" process.
Exertion Level: Warm-up / Easy pace; Slight sweating; No difficulty to converse; Increase heart rate slightly above normal for a sustained duration.

60 – 70%: Health Enhancement
Goal: Gradually improve upon current health condition.
Exertion Level: Moderate and comfortable pace; Mild Sweating; little difficulty to converse, but breathing becomes more rapid and HR obviously faster and stronger.





Q. What are the benefits of activity that elevates my heart rate?

A. The benefits are many to include: increased and calorie burning and a more efficient cardio vascular system (better physical endurance). It has also been proven that regular cardio exercise will reduce your chance of coronary artery disease, lower blood pressure, increase good cholesterol (HDL) and decrease the risk of diabetes. Many people report that a marked decrease in anxiety and depression is experienced with exercise, especially those activities associated with cardio fitness.

A lack of physical activity has many serious consequences. People who don't exercise often have higher rate of strokes, type 2 diabetes, osteoporosis, colon and breast cancers and most seriously, death from coronary artery disease.

Q. How high should my heart rate be to begin achieving benefits?

21

your **Age** entry. The ePulse will automatically move you to the next menu item after data entry (**lbs**).

5. Repeat this process until you have entered all of your personal data.

6. After the last menu item (**rvw**) the display will automatically return to Heart Rate.

View Display Modes

These modes permit you to see either:

- 'Continuous' display of heart rate and calories burned
- 'On Demand' display of heart rate and calories burned to extend battery life.

Regardless of which display mode you use, the ePulse is continuously collecting your heart rate and calculating your calories burned.

Continuous Display Mode

This is the default mode on your ePulse.


10





Demand Display Mode (Power Conservation Mode)

The ePulse will sparkle until you click

the  button. The tap will result in a 15 second display of current heart rate before returning to the sparkle mode. This mode of operation will double normal battery life.

Review Personal Data Input (rvw)

This allows you to see a summary of your personal data inputs.

• Fat Burning Zone (fatB)

Provided as a low and high range for your heart rate to optimize fat burning during exercise or other activity that elevates your heart rate into this zone which is approximately 60-70% of your maximum heart rate.

• Cardio Conditioning (crdi)



Q. How often do I have to replace the batteries?

A. The ePulse is designed to operate for over 20 hours in the Continuous Mode using two standard alkaline AAA batteries. It will run twice that long in the Demand Mode. A 'Replace Batt' indication will appear on the display when you need to replace the batteries. The ePulse will automatically turn off when the battery is too low to provide an accurate heart rate reading. Hint: Use Energizer lithium batteries for over 70 continuous hours.

Q. Why is it useful to know my heart rate?

A. Your heart rate provides a useful measure of the intensity of your exercise and can be used to calculate your calories burned. By monitoring your heart rate with the ePulse you will receive immediate feedback on the quality of your effort, allowing you to regulate the activity intensity to better achieve your specific fitness goals.





A. Yes. The ePulse calculates and displays current exercise time and saves and displays total exercise time over all exercise sessions (reset of the data also resets the exercise time). However, the ePulse is not designed to be a timepiece or stopwatch. Its easily read day/night display is designed to complement your watch or sports watch. When you look at your watch, you will be able to simultaneously see your ePulse readout.

Q. Can the ePulse be worn on either arm?

A. The ePulse is designed to accommodate both right and left handed people and may be worn on either arm to accommodate racquet sports and to provide the least interference with hand functions.

Q. Can I clean my ePulse?

A. Yes, it is water resistant. Your ePulse is designed to be superficially cleaned with soap and water. It can be rinsed under running water and laid flat to dry. However, it is not designed to be immersed in water.

This exercise intensity optimizes cardio-respiratory conditioning which improves your fitness level while burning significant calories and elevates your heart rate into this zone. The optimal range for cardio condition to occur is between 70-80% of your max heart rate.

Resting Heart Rate Instructions:

The resting heart rate is preset based on averages for men and women. Unless you know your resting heart rate it is recommended that you use the preset value until you use your ePulse for a while and become familiar with your resting heart rate. At that time you can re-enter the Personal Data function and modify your Resting Heart Rate.


Resting Heart Rate (the number of beats per minute) should be taken after a good night's sleep, and before you get out of bed. Your ePulse





allows you to conveniently accomplish this measurement.

Advanced Features

Fitness Data: Click the  Button to Scroll through other Features

- **BMR:** Basal Metabolic Rate (estimated daily caloric burn based on input of personal data)
- **avHr:** Average Heart Rate
- **mnHr:** Minimum Heart Rate
- **mxHr:** Maximum Heart Rate
- **cal:** Summary of Basal Metabolic Rate plus exercise calories as Daily Calories Burned

To return to the heart rate scroll through the end of the feature list using the

 button.

A. The difference is ease of use and convenience! The accuracy of the ePulse is similar to other monitors. Impact Sports Technologies has used proprietary technology to place the sensor that captures heart rate on the arm instead of requiring a chest strap and special watch. The ePulse is self-contained and displays your fitness data conveniently right on the armband when and where you need it.

Q. Is the ePulse only for athletes?

A. Absolutely not! The ePulse has been designed to monitor heart rate and calories burned for all types of activity ranging from intense aerobics such as running or dancing, to golf and racquet sports such as tennis and everyday activity such as walking around the block or simply going up and down the stairs. The ePulse makes it possible for anyone to conveniently monitor their activity levels and obtain instant feedback on the benefits.

Q. Does the ePulse have a time function?





be taken to avoid striking the display since it could damage the electronic components. Under normal use the ePulse requires no regular maintenance beyond superficial cleansing.

The ePulse is water resistant and may be rinsed under running water or wiped with a damp cloth and cleansed with a gentle detergent such as Woolite. Do not use abrasive cloths or cleaners as these may damage the display. Simply allow the ePulse to air-dry.

Do not fully immerse the ePulse in water. It contains electronic components and this will void your warranty. The ePulse is not intended for children under the age of 8.

Frequently Asked Questions

Q. How does the ePulse differ from the chest strap heart rate monitors that are on the market today?

17



Basal Metabolic Rate (BMR)

Your BMR is an estimate of the total calories you will burn in a day without exercise based on your personal data.

Average Heart Rate (avHR)

This feature permits you to see what your average heart rate is between daily resets. Average heart rate can be an overall indicator of fitness. One measure of effectiveness of an exercise program is to see a drop in average heart rate as fitness improves.

Minimum Heart Rate (mnHR)

The mode shows your minimum heart rate between daily resets as measured and stored by the ePulse. Typically your heart rate drops during sleep and periods of physical and mental relaxation.

Maximum Heart Rate (mxHR)

This mode shows your maximum heart rate between daily resets as measured

14





and stored by the ePulse.

Target Heart Rates

Based on your personal data, using your resting heart rate as a variable, your ePulse will automatically calculate and display optimal heart rate exercise zones for you to achieve maximum benefit from your activities. You can also select a feature that illuminates a green LED on the lower right side of the display to provide a visual indicator that you are exercising within your target heart rate zone.

Calorie Summary (Cals)

This function displays your total calories (tCal) and stored daily exercise calories (dCal) data.

Care and Maintenance

While your ePulse is designed for most types of vigorous activity, care should

15

Menu System Key

tCal: Displays your daily total calories.

dCal: Displays your daily exercise calories.

Gndr: Your gender.

Age: Your age.

lbs: Your weight in pounds.

Hgt: Your height in inches.

rHr: Your resting heart rate in beats per minute.

view: Your display mode, either Continuous or On-Demand.

BMR: Shows your Basal Metabolic Rate (estimated Daily Caloric Burn).

NoSig: Sensor is out of position

avHr: Displays your average heart rate since last reset.

mxHr: Displays your maximum heart rate since last reset.

mnHr: Displays your minimum heart rate since last reset.

fatb: Displays your fat burning zone.

crdi: Displays your cardio training zone.

Cals: Displays dCal and tCal since the last reset.

ver: Displays ePulse software version.



16