



# **SPI ELITE**

## **Globally Positioning Sport**



## **Quickstart Guide**

**[www.gpsports.com](http://www.gpsports.com)**

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## **SAFETY INSTRUCTIONS**

The SPI ELITE is not a medical instrument. It is a training aid that has been designed to indicate your speed, distance and heart rate. Before you begin using the SPI ELITE visit your doctor and consult them as to your specific exercise requirements. People who have heart or circulatory problems and wearers of heart pacemakers should consult their doctor before using the SPI ELITE. Do not wear the SPI ELITE for activities where injuries are likely to occur. Consulting or changing the operating mode of the SPI ELITE while moving is unsafe and could result in collision or other injury.



## **INFORMATION**

The SPI ELITE uses Global Positioning Satellite (GPS) technology to measure speed and distance. The SPI ELITE is not intended for use where precise measurement of speed and distance are required. The GPS system is operated by the government of the United States of America, which is solely responsible for its accuracy and continued operation. The GPS system is subject to changes that may alter the accuracy of any GPS based equipment including the SPI ELITE.

## Quickstart Guide

This Quickstart Guide is an introduction to the operation of the SPI ELITE Sports Performance Indicator (SPI). For more detailed information the SPI ELITE User and GPSports Team Analysis manuals are provided on the installation CD.

The SPI ELITE captures speed, heart rate, distance and position data on a second by second basis. Maximum, minimum and average statistics can be reviewed for post session analysis. The SPI ELITE is ideally suited for performance analysis in a wide variety of outdoor sporting activities including team sports, running, rowing, cycling and orienteering. In addition the SPI ELITE collects data on “accelerations” in 3 axes @ 100 times per second. This data can be used to examine technique, impacts and body load to ensure that athletes can measure performance, plan improvement, and allocate appropriate recovery.

### How does the SPI ELITE work?

The GPSports Systems® SPI ELITE Sports Performance Indicator integrates Global Positioning Satellite (GPS), accelerometer and heart rate measurement technologies. The SPI ELITE uses information transmitted from satellites to determine an athlete's speed, position, altitude and distance traveled. **The SPI ELITE must be operated outdoors with a clear view of the sky to operate correctly.** The integrated accelerometer measures movement and impacts. A heart rate strap worn around the chest transmits heart rate information wirelessly to the SPI ELITE.

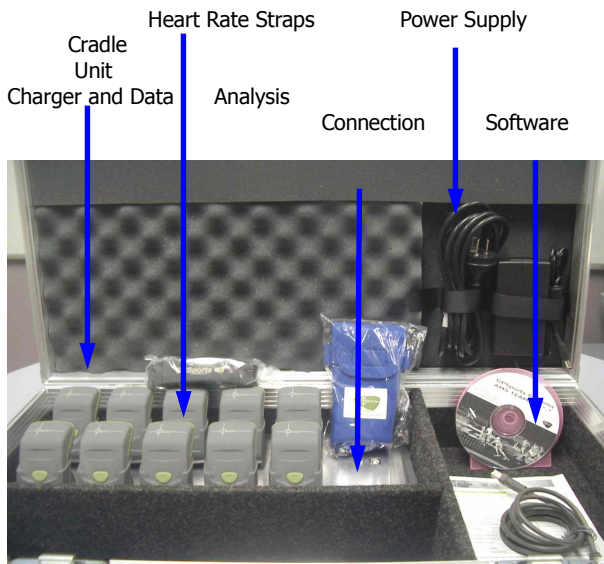
## **Using the SPI Elite Team Pack**

The SPI Elite Team pack has been designed specifically to deal with data collected during team training sessions. The Pack includes stickers to identify particular SPI Elite Units. Additionally, each unit can be given a unique electronic name to simplify identification when downloading data. This ensures that you are able to match a player with a unit when analysing data.

We recommend that you label each unit with a name or number and match that name or number with the electronic name of the SPI Elite.

Units should be assigned to individual players to minimise the potential for confusing data.

## SPI ELITE and Accessories



## Button Functions



## Charging

Before it will operate, the SPI ELITE must be charged. SPI Elites are fully charged when they leave our factory, however partial discharge of the units can be expected during shipping. To charge the SPI ELITE insert the device into the SPI Cradle located in the SPI Docking Case. The SPI Docking Case should be connected to mains power, using the supplied Power Supply. All SPI Elites housed in the SPI Docking Case will charge simultaneously.

When charging, the Red light on the right side of the SPI Elite will glow. Initial charging will take approximately 3 hours. When fully charged the red light will go out. A single charge will provide more than 4 hours of logging time.

## Turning the SPI ELITE On and Off

To turn the SPI Elite on, press and hold the on/off button. The left indicator light will flash Red and Green and the unit will sound 3 sets of beeps. The unit will self-test and then sound 2 beeps to confirm it is on and functioning correctly.

The SPI Elite will then establish its location by searching for satellites. This operation may take a few seconds or several minutes. When it has located sufficient satellites it will beep 3 times. The SPI Elite is then recording data. It will continue recording until it is turned off. When fully charged the SPI Elite will log in excess of 4 hours of continuous activity.

## The SPI ELITE can only track position outdoors

To turn the SPI Elite off press and hold the on/off button until you hear a single beep. Release the button, the unit will sound a series of tones and turn off.

## Wearing the heart rate sensor

The heart rate transmitter must be worn directly on the skin. Adjust the elastic strap so the sensor is pressed against your chest. To achieve better skin contact, moisten the sensor pads and wear the sensor for a few minutes before capturing performance data.

When the SPI Elite is recording heart rate data from the strap the right indicator light will flash yellow.



Wearing Heart Rate Strap



Wearing GPSports SPI Pak

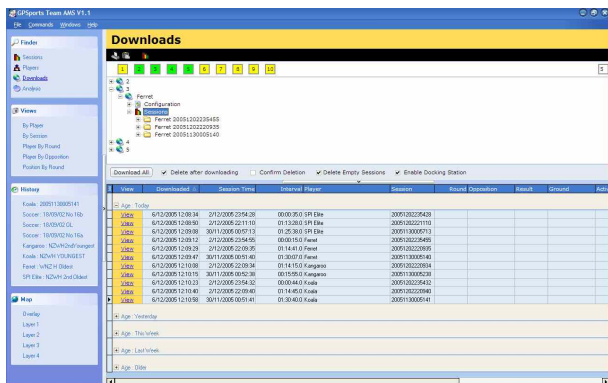
## Data Analysis

Data collected by the unit can be analysed through the TEAM AMS Analysis software.

### Downloading Data

To download data, SPI Elite Devices must be placed in the cradles inside the Elite Docking Station case. Start up the GPSports Team AMS software. Connect the SPI Elite Docking Case to your computer via the supplied USB cable. Turn on each SPI Elite.

Using the navigation buttons on the left of the Team AMS window, go to the Downloads Screen (see below).





From the Download screen you can see each SPI Elite and its location in the SPI Elite Docking Case. This might take a few seconds. In the example above you are able to see that there are units installed in locations 2, 3, 4, & 5 in the case that are ready to have session data downloaded.

To download data from units simply click on “Download All”. You have various options to delete sessions as you download them or to download sessions individually from units. Due to the size of the files, we recommend that you select the “delete after downloading” option.

Once downloaded we recommend that you use the table to record any additional information about the session e.g.: weather conditions, activity, etc

Note: as a default the name of the device will be inserted into the “Player Field” of the Downloads table.


To name or rename a SPI-Elite unit simply select the unit on the downloads page, right-hand mouse click **device** and select the rename option.

## Viewing Data

Data comparisons across sessions and players can be done simply. Each column heading can be dragged into the query region to sort the data.

Player	Session Time	Activity	Distance	Max Speed	Avg HR	Max HR	Speed Score	HR Score
Player: Brian	7/07/2004 14:05:16	speed endurance	1328.1	26.5	152	201	1548.0	3694.0
Player: Brian	7/07/2004 14:48:24	speed endurance	810.1	27.2	161	211	812.0	1949.0
Player: Brian	7/07/2004 14:15:11	speed endurance	1594.0	26.6	155	201	1516.0	3814.0
Player: Brian	7/07/2004 14:15:11	speed endurance	5528.7	26.5	161	201	6798.0	19222.0
Player: Brian	7/07/2004 14:15:11	speed endurance	13892.2 m	26.5 km/h	165 bpm	202 bpm	15236.00	42704.00
Player: Bragone P								
Player: Chase								
Player: Chapman								
Player: Chapp								
Player: Conley								
Player: Deo								
Player: Ffard								
Player: Frost								
Player: Frost Knight								
Player: Ford								
Player: Gilpin								
Player: Good Coast 9/7/05								
			228791.1 m	152.4 km/h	67 bpm	430 bpm	1502762308	34941101150

This example shows data sorted by player. Each player can be expanded or collapsed by using the “+” button to the left of the player’s name.

The columns displayed can be selected by clicking on the  button at the top left of the table.

It is possible to do more complex sorting by combining headings in the query region as shown in the example below.

[illegible]

This example shows session types completed by an athlete.

To view map data and more detailed summaries of each session simply click on the view button.  
To return to this page use the History menu to the left.

For more detailed information on examining data refer to the SPI Elite user guide located on the installation CD or visit our website at [www.gpsports.com](http://www.gpsports.com)

## **GPSports Limited Warranty**

GPSports Systems Pty Ltd warrants to the original customer that the SPI ELITE and its accessories will be free from defects in material and workmanship for a period of one year from the date of purchase. This can optionally be extended to include GPSports hardware and software support program.

### **Please keep your receipt of purchase.**

Warranty does not cover damage due to misuse, abuse, accidents or damage due to improper maintenance.

Warranty does not cover damage or consequential damage caused by servicing not authorized by GPSports Systems.

This warranty does not alter the consumer's statutory rights under the applicable national or state laws in force or consumer's rights.

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## **SPI ELITE Quickstart Guide**

P/N 2003-40-01

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## System Requirements

Operating System	<b>Windows XP SP2</b>
<b>Memory</b>	<b>512MB</b>
<b>Processor</b>	<b>Pentium IV minimum</b>
<b>Graphics card</b>	<b>An accelerated graphics card is recommended</b>
<b>Disk Space</b>	<b>64 MB free required plus space for data storage</b>

## GPSports Analysis Installation

- Insert the installation disk into the CD drive.
- The GPSports Analysis Installer will guide you through the installation process.
- If the Installation program fails to start automatically, open the CD folder and click on the Setup.exe file.

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