



Speed suite

Data acquisition and biomechanical analysis system for sports

General description

The **SPEED** suite is made of 2 elements: Speed RT and BioMovie Speed. Speed RT is a velocity meter, that is a portable device to measure the displacement and speed of an athlete, particularly in swimming. It is composed of a small winch that can be placed on the starting post, a data acquisition unit and a special software programme to visualise real time data on a PC and to perform post processing analysis. Speed RT requires no batteries: the power to the acquisition unit comes from the USB connection. Software and manuals are available in Italian and English.

BioMovie Speed is a video analysis software with tools for measuring lengths, angles, tracking points, time visualisation...

Data acquired with Speed RT can be imported into BioMovie Speed and synchronised to a video. Thus every phase of the action can be analysed: start, impact with water, underwater phase, stroke, tumbleturn.

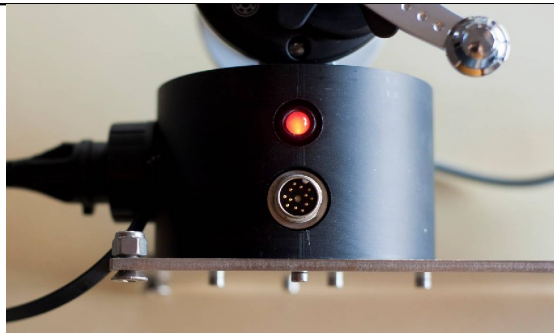
Features

- ◆ **Based on a Arduino board**
- ◆ **Plugs into PC USB port**
- ◆ **Hi-res (1000 cpr) optical encoder**
- ◆ **Max sampling frequency 100Hz**
- ◆ **Graphic User Interface for system control**
- ◆ **Real time visualisation of speed**
- ◆ **Powerful post-processing tool for filtering, analysis, data export in several formats**
- ◆ **Red light for video synchronisation**
- ◆ **IP 65 water resistant**
- ◆ **Aluminium case for safe transport**
- ◆ **Customisable to meet special user needs**
- ◆ **Compatible with Windows 7,8 and 10**

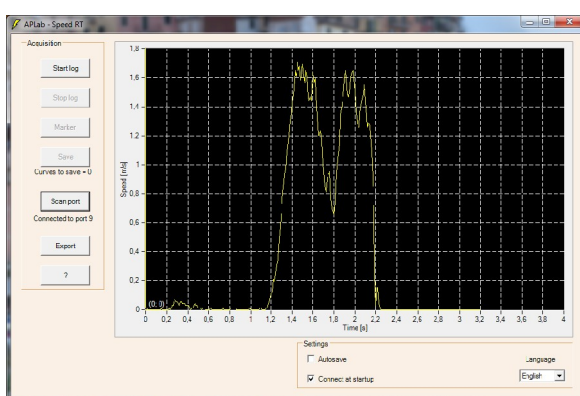
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General characteristics

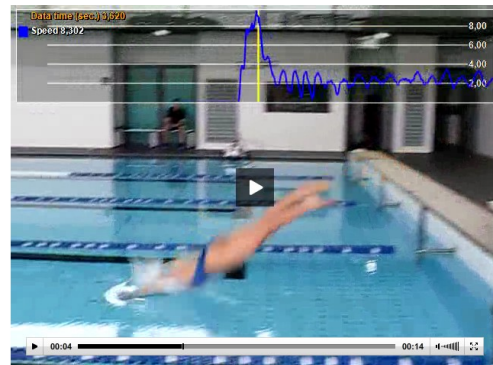
- ◆ **Size:** the whole kit is contained in a 46x33x17cm aluminium case
- ◆ **Weight:** 2kg + PC
- ◆ **2m encoder cable, 5m USB cable for safe positioning of PC**
- ◆ **Kit includes device, USB cable, belt, installation CD, manuals (PC is optional)**
- ◆ **Guarantee: 24 months**



Connector for external triggering



Real time visualisation



Synchronous video and signal

Customisation

- ◆ **2000 cpr encoder for extreme accuracy**
- ◆ **Underwater cable for video synchronisation**
- ◆ **Synchronisation of two velocity meters**
- ◆ **French version of manual and software interface**
- ◆ **Special mechanical interfaces can be designed for integration with all sorts of equipment (e.g. photoelectric cells, starting blocks, DAQ systems)**

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