

CRESSI

**CRESSI PC
INTERFACE**

VERSION 2.0

**Instructions
Manual**

cressi.com

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1. INTRODUCTION

1.1. Overview

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The software is designed to enable the user to download all dive data from the following Cressi devices:



Leonardo



Giotto



Newton

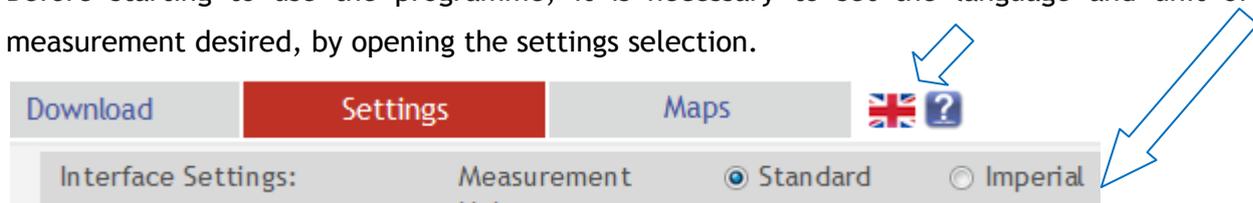


Drake

The downloaded dives are shown in a chart representing relevant information on the depth, dive time, the possible need for decompression, the ascent speed, and the surface intervals between one dive and another. Mathematical logarithms built into the software calculate the absorption and release rates of nitrogen and the saturation/desaturation levels in body tissue during dives. The display of each device is accurately reproduced alongside the depth chart and it is also possible to review all useful stored dive data.

1.2. General Settings

Before starting to use the programme, it is necessary to set the language and unit of measurement desired, by opening the settings selection.



Both Imperial and Metric units of measurement are available. These settings will influence the display measurements of depth (metres/feet) and temperature (Celsius/Fahrenheit).

The icon:  shows which version of “Cressi PC Interface” is currently in use.

2. “ARCHIVE” MAIN PANEL

The main panel opens with Archive dive data and shows the latest logbook selected. Utilizing the 3 option buttons at the top of the panel, it is possible to:

-  shrink the application to an icon on the application menu bar at the bottom of the screen
-  enlarge the application to full-screen size
-  close the application

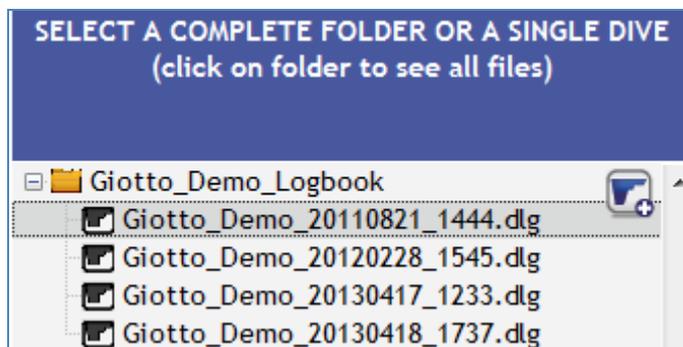
The main panel is sub-divided into the following sections:



2.1. The Menu Bar in Archive Panel

The menu bar buttons in the archive panel allow you to interact with the logbook selected from the current database (2.2).

- + The icon adds a single dive or a folder of completed dives to the logbook selected. A selection window allows you to choose which dive to add from those currently stored on the device, as shown in the following figure.



- + By pressing the button the selected dive will be added to the current logbook. Selecting the entire folder (eg. “Giotto_Demo_Logbook”) means all the dive files contained will be added to the logbook.
- + creates an empty logbook folder to add to the current database
- x permanently deletes the selected dive from the logbook
- x permanently deletes the selected logbook folder
- exports the dive data of the selected dive in a textfile format “txt”
- 🖨 sends the selected dive data to print



2.2. Archive Path

In this section it is possible to define the path of the database where the folders will be loaded from with dive files containing previously stored dives and also to determine where to save new ones.

Following on from the programme installation, the default folder is the one which contains the application programme itself.



Database selection:

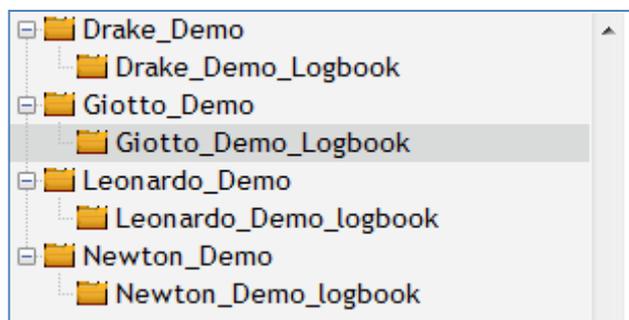
It is possible to utilize a **previously stored database**, by indicating a path to it in the same way as for creating a backup database, described opposite.

Database backup:

It is possible to backup the current database by selecting a path by which to store it.

The current folders in the selected database will be listed according to their archive path. If more than one device is registered, the application sorts the combined list into alphabetical order, as shown in the figure below.

The folders containing dives are listed in relation to their respective devices, with the same names as were used for their initial registration. (see Download Panel chapter)



2.3. Dives

The list will contain all the previously stored dives in the selected folder in the section titled “Archive Path”. A scrollbar will allow you to view the complete list and by selecting a dive, it will be possible to find further details of the following sections:

- A graph showing depth reached on the dive (5)
- The watch display (6)
- A graph showing tissue saturation and a table relating dive duration / depth (7)
- Dive data (8)

Dives:						
	3	17/04/2013 12:33	60.5 m	01h04'	22 °C	▲
	6	18/04/2013 17:37	59.9 m	01h13'	23 °C	
	24	21/08/2011 14:44	28.2 m	00h53'	20 °C	
	38	28/02/2012 15:45	30.2 m	00h34'	14 °C	

Each dive listed will be numbered in chronological order, followed by the date and time of the dive, the maximum depth reached, the duration of the dive and the water temperature.

The dive will be labelled with a reference icon, which could indicate the following information:

- For *Leonardo, Giotto e Newton models*:

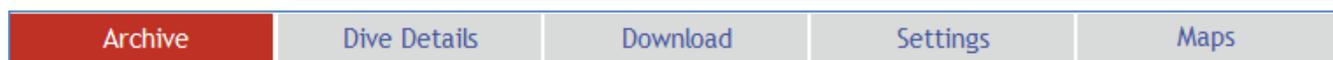
	Aria		Aria Decompressione		Aria Emergenza
	Nitrox		Nitrox Decompressione		Nitrox Emergenza
	Gage		Stop		

- For *Drake models*:

	Apnea profonda (Free, Pro)		Apnea statica (Static)		Apnea dinamica (Dynamic)
---	-------------------------------	---	---------------------------	---	-----------------------------

2.4. Menu Bar

The Menu Bar allows you to access various application panels which will be shown in the main panel section (5) :



- *Archive*: This acts as the default setting and it shows a dive graph for the latest logbook entry, while also allowing you to select other folders and dives to view (see previous notes)
- *Dive Details*: Access to this panel can only be made by dive sessions carried out with a Cressi Drake device. (see chapter 3)
- *Download*: This panel allows you to download dives into a new folder or to add them to an existing one. (see chapter 4)
- *Settings*: This is the panel which, for *Leonardo*, *Giotto* & *Newton devices*, allows you to view the current settings, while, for *Drake devices*, it also allows you to modify various settings, such as the alarms. It is also possible to choose the unit of measurement for the application. (see chapter 5)
- *Maps*: This is the panel that allows you to assign the geo-location of each dive, by inserting the GPS co-ordinates and the exact location is pinpointed on the map. (see chapter 6)

2.5. Dive Graph

The Dive Graph plots the depth reached [m/ft] versus the dive duration [hours:mins]. For the *Leonardo*, *Giotto* e *Newton* devices, other information shown will include:

The “no deco” Curve: This is the **green line** that gives an indication of a “no deco” dive. It lies at the surface to indicate that, at that moment, it is safe to get out of the water without the need for any decompression stops. The watch computer display will show the current “no deco” limits (NDL) in minutes.

The “deco” Curve: This is the **red line** that gives an indication of a “deco” dive. It lies at depths of 3m, 6m, 9m,..., to indicate that, at that moment, it is not safe to get out of the water and that it is necessary to go through the indicated decompression stops. The watch computer display will show the necessary deco stop at the relevant depth and for the length of waiting time required.

“Alarm” Points: These are the **red points** plotted along the dive graph curve which indicate, at that moment, for at least 2 seconds an alarm sounds to warn the diver of the risk of exceeding the max ascending rate (10 m/min).

The buttons for navigating the graph are as follows:



When these buttons are used, the cursor moves automatically to the corresponding data point in the graph and respective line in the dive depth versus dive duration table (see paragraph 2.7) The depth values (on the Y axis) and dive duration values (on the X axis), corresponding to the selected points in the graph based on the the current position of the cursor, can be seen on the right of the navigation menu. It is also possible to move the cursor independently, by clicking and dragging it using the mouse.

	Initial value : this moves the cursor to the 1st point on the graph
	Preceding value : this moves the cursor to the previous point on the graph
	Play : starts the visual presentation of the graph with varying speed options : 1x=normal speed, 2x= double speed, 4x= 4 times speed and 8x= 8 times speed
	Successive value : this moves the cursor to the next point on the graph

- ▶ Last value : this moves the cursor to the final point on the graph
- Pause: stops the visual presentation of the graph

2.6. Dive Watch Display

The dive watch display section shows a copy of the dive computer watchface from which the dive data has been downloaded using the “Cressi PC Interface”. The information shown on the watchface corresponds to the information shown on the device during the dive. By using the navigation buttons, and/or the cursor on the graph (see chapter 2.5) or by selecting a line on the depth table (see chapter 2.7), the values on the watchface display will also change.



Leonardo



Giotto

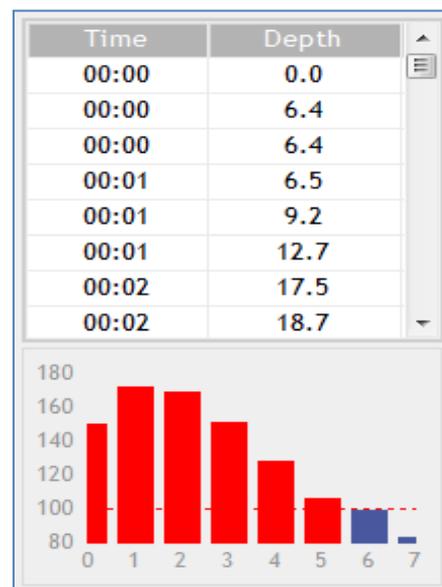


Newton

2.7. Depth Table & Tissue Saturation Graph

The depth table lists the co-ordinates of all the points plotted on the dive graph acquired at a sample rate set by the user (Drake) or at 20 second intervals (Leonardo, Giotto, Newton).

The tissue saturation graph shows the build up of nitrogen dissolved in the various tissues during the dive. With a range from 0 to 7 for the tissues ordered from the “fastest” to the “slowest”.



2.8. Dive Data

The dive data downloaded from the dive watch computer and the general profile data personalised by the user is subdivided into pages and can be selected via the relative menu.

Dive Information	Site	Weather	Images	Note
------------------	------	---------	--------	------

1 2 3 4 5

2.8.1. Dive information

The Dive Information page shows the information downloaded, in relation to the particular model of Cressi device used. The modifying of this data is not advised.

Dive Nr.:	3	Max Ascent Rate [m/min]:	>12	% CNS Violation:	NO
Date and Time:	17/04/2013 12:33	Safety Factor:	off	% Starting CNS:	0
Mode:	Nitrox	Altitude (0-3):	0	% Final CNS:	26
Max Depth:	60.5 [m]	Deco:	YES	MIX 1 %O2:	21
Lenght:	64 [min]	Deco Stop Violation:	NO	PP02:	1.6 [bar]
Min Temper.:	22 [°C]	PP02 Violation:	NO	MIX 2 %O2:	50
				PP02:	1.6 [bar]

Modelli: Leonardo, Giotto e Newton

Session Nr.:	18	Tot.Dive Nr.:	17	Aver. Dive Time [min:sec]:	00 : 43
Date and Time:	11/10/2015 11:51	Profile:	YES	Aver. Surf. Time [min:sec]:	03 : 47
Mode:	Free	Aver. Dives Nr./h:	13	Average Time Ratio:	0.6
Max Depth:	26.3 [m]	Aver. Max Depth:	13.6 [m]	Total Dive Time [hours:min]:	00 : 12
Max Dive Time [min:sec]:	01 : 10			Total Surf. Time [hours:min]:	01 : 00
Min Temper.:	19 [°C]			Total Time [hours:min]	01 : 12

Modello Drake

2.8.2. Site

The “Site” page allows you to personalise the dive by adding or modifying information such as the general dive location or exact dive point. Any new keyed-in values will be stored in a list so as to make successive inputs easier.

Location:	Genoa	Instructor:	Brown
Dive Point:	Camogli	Friends:	All
Sub:	Green		

2.8.3. Weather

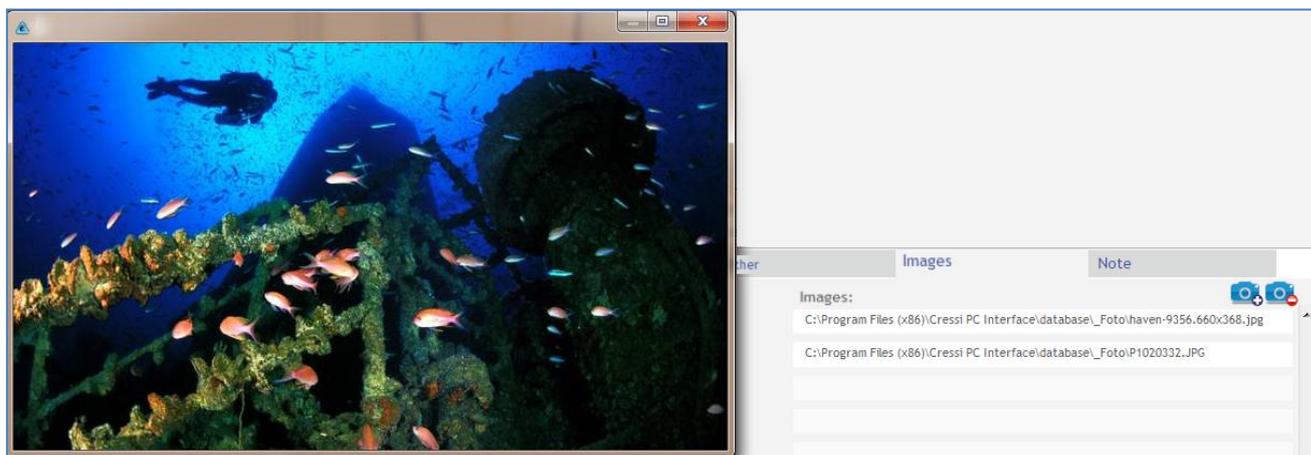
The “Weather” page allows you to personalise the dive by adding or modifying information such as weather and sea conditions. Any new keyed-in values will be stored in a list so as to make successive inputs easier.

Weather Conditions:	Cloudy	Temperature:	15 [°C]
Water Conditions:	Warm	Current:	23
Visibility:	Good visibility		
Wind:	High from North		

The input fields for the temperature and the water current start with a default value “NaN” which means ‘non defined’.

2.8.4. Images

The “Images” page allows you to add images to the current dive showing their original file path. By placing the mouse cursor over the image it will be possible to select and see a preview of it next to the list and by clicking on it the image will open to its full size.



This button links a new image to the current dive



This button deletes the selected image from the current dive

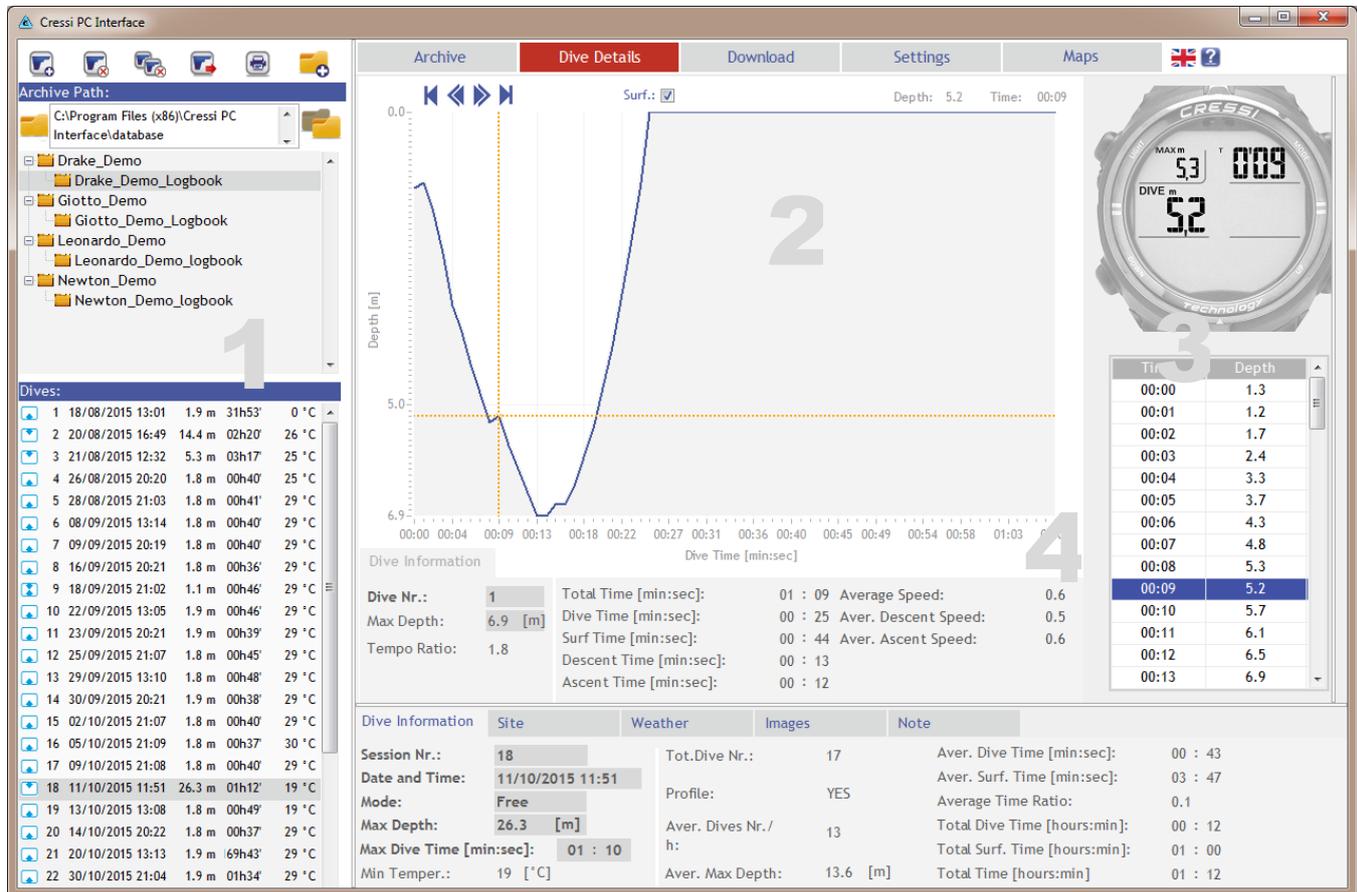
2.8.5. Notes

This page allows you to add any notes about your current dive.

Notes

3. “DIVE DETAILS” PANEL (DRAKE)

The “Dive Details” panel is an operating function exclusive to the free dive computer model “Drake”.



3.1. Choice of Dive

By moving through the diary of dives it’s possible to select a dive to view: The detailed dive will only be shown for the dives which contain a profile of time/depth for each single dive (parameter “Profile: YES/NO” of the page “Dive Information”).

3.2. Dive Graph

The dive graph shows the curve for the total time of each single dive in minutes:seconds and the depth reached in meters/feet.

The navigation buttons to move from one dive to another on the graph are as follows.



◀ Primo tuffo	◀◀ Tuffo precedente	▶▶ Tuffo successivo	▶ Ultimo tuffo
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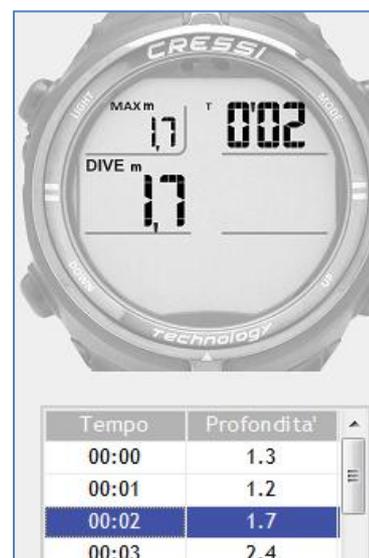
The depth value (the Y axis) and time (the X axis), corresponding to the individual points on the graph in relation to where the cursor is, are displayed on the right of the navigation menu. You have to move the cursor with the mouse for it to move through the points on the graph.

The “superf” box shows or hides the part of the curve corresponding to the recovery time at the surface before the next dive.

3.3. Watch Display

The watch display shows the time/depth data in a similar way to how “Drake” does so during a dive session. By moving the cursor of the graph or selecting a line in the depth table, the corresponding values will be displayed and updated on the watch display.

The depth table lists the co-ordinates of all the points plotted on the dive graph acquired at a sample rate set by the user. In the example figure the watch has a sample rate set at 1 second intervals.



3.4. Dive Information

The “Dive Information” page shows information for the selected dive and it is not advisable for the user to modify these values.

Dive Nr.:	1	Total Time [min:sec]:	01 : 09	Average Speed:	0.6
Max Depth:	6.9 [m]	Dive Time [min:sec]:	00 : 25	Aver. Descent Speed:	0.5
Tempo Ratio:	1.8	Surf Time [min:sec]:	00 : 44	Aver. Ascent Speed:	0.6
		Descent Time [min:sec]:	00 : 13		
		Ascent Time [min:sec]:	00 : 12		

4. “DOWNLOAD” PANEL

The “Download” panel allows for the download of dive data stored on the hard drive of the desktop and completes the analysis of the latest data not available on the dive computer device.

Before proceeding with the download, connect the interface lead to a USB port on the main computer.



Leonardo/Giotto



Newton/Drake

Once the Interface lead is connected, it’s necessary to set the dive computer to the “PC Link” mode (see your particular model manual) and place it on the interface docking base.

The “Connections” page passes from the “Inactive” (red) state of connection to “Active” (green) and a progress bar shows the current state of activity.

After the connection is completed, if the dive computer device is already registered all details pertaining to it will appear automatically. If, however, the device is not registered it will be necessary to fill in the field for “Computer Name” and a destination folder will be suggested.

Connection Status:	ACTIVE
Computer Name:	<input type="text"/>
Model:	<input type="text"/>
Serial Nr.:	<input type="text"/>
Dives:	<input type="text"/>
Max Depth:	<input type="text" value=""/> [m]
Select a destination folder:	
Add folder:	<input type="text"/>

Connection Status:	ACTIVE
DEFINE A COMPUTER NAME	
Computer Name:	<input type="text" value="Leonardo_XYZ"/>
Model:	<input type="text" value="Leonardo"/>
Serial Nr.:	<input type="text" value="0"/>
Dives:	<input type="text" value="76"/>
Max Depth:	<input type="text" value="86.4"/> [m]
Select a destination folder:	
Add folder:	<input type="text"/>

Once the name of the computer has been confirmed, the user must select/add a destination folder for the dive download. As a default, the application uses a pre-defined folder called “computer_logbook name”. It is possible to change the name of this by adding / selecting an alternative folder from the list.



By pressing this button, the folder will be added to the computer database of the device registered in the the list.

Stato connessione: **ATTIVA**

Nome Computer:

Modello:

Nr. Seriale:

Immersioni:

Profondita' Max.: [m]

Selezionare una cartella di destinazione:

Aggiungi cartella:

Leonardo_XYZ_logbook

At this point, the panel on the right shows the list of dives in the device, as follows:

Connection Status: **ACTIVE**

Computer Name:

Model:

Serial Nr.:

Dives:

Max Depth: [m]

Select a destination folder:

Add folder:

Leonardo_XYZ_logbook

Dives In The Device:

Press the download button to copy the selected dives in the chosen folder on your personal computer

Dive Nr.	Date and Time	Mode	Dive Time	Max Depth [m]	Min Temp. [°C]	Select	Down load
45	07/11/2010 12:09	Stop	5	7.7	24	<input checked="" type="checkbox"/>	
46	07/11/2010 11:21	Air	8	86.4	24	<input checked="" type="checkbox"/>	
47	07/11/2010 10:32	Stop	1	5.0	24	<input checked="" type="checkbox"/>	
48	07/11/2010 11:21	Gauge	7	20.7	24	<input checked="" type="checkbox"/>	
49	06/05/2011 10:09	Air	38	46.2	24	<input checked="" type="checkbox"/>	
50	07/11/2010 11:20	Gauge	0	10.8	24	<input checked="" type="checkbox"/>	
51	07/11/2010 11:22	Gauge	1	11.3	24	<input checked="" type="checkbox"/>	

The dives are ordered by number and include the following details: date and time of immersion, (which varies depending on the model) and duration (min), maximum depth, & minimum temperature. All dives are automatically selected, but by using "box Select" you can choose to exclude/include some, to be stored for example in a different folder.



The button initiates downloading of selected dives in the chosen folder. This folder, like any other previously created folders, will show the "Select" box off for dives already contained within itself. The store path (Section 2.2) and the dive list (section 2.3) will be updated accordingly.

5. “SETTINGS” PANEL

Il pannello “*Impostazioni*” in base al modello dell’orologio connesso, permette di visualizzare/modificare le configurazioni correnti del dispositivo.

The contents are different depending on the particular model: for the Leonardo computer, Giotto and Newton, only the consultation of the parameters is allowed while for the Drake model it is also possible to modify these parameters as well as the consultation of them. It also includes a section in which setting of the measurement units (as described in the general settings in paragraph 1.2) is also possible. As with the “Connect” panel (Chapter 4), you must first connect the device interface to a USB port, then set the instrument to the “PC Link” mode and then connect it to the interface. If it is a Leonardo, Giotto, or Newton model, it will display the current parameters of the computer, as shown below. For details on the contents users must consult their respective manuals.

If you have a Drake model, it will be possible to carry out both consultation and editing of the parameters in the following figure. For details on the operations of each parameter you need to consult your computer manual.

Connection Status: **ACTIVE** Interface Settings: Measurement Standard Imperial

Device Settings (Drake):

Computer Name: Drake_Demo Save Settings (save alarms in): current

Model:	Drake	Select Alarms Memory:	current
Serial Nr.:	9	Dive Time [min:sec]:	<input checked="" type="checkbox"/> 09 : 15 INC: -59 INT: 59
Dives:	34	Surf Time [min:sec]:	<input checked="" type="checkbox"/> 11 : 14 INC: -49 INT: 49
Max Depth:	26 [m]	Lap Time [min:sec]:	<input checked="" type="checkbox"/> 15 : 22 INC: -39
Dive Time [h]:	04	<input checked="" type="checkbox"/> Time Ratio:	3.5 <input checked="" type="checkbox"/> Repeats Nr.: 159
Max Time [min:sec]:	02 : 13	<input checked="" type="checkbox"/> Sound Alarms	<input checked="" type="checkbox"/> Enabled Tab Rep
Date and Time:	27/06/2016 08:37:46	<input type="checkbox"/> Salt Water	
Hour Format:	<input checked="" type="radio"/> 24 h <input type="radio"/> 12 h	<input checked="" type="checkbox"/> Automatic Light:	163 [ft] (Power Depth)
Measurement:	<input type="radio"/> Standard <input checked="" type="radio"/> Imperial	<input checked="" type="checkbox"/> Step Depth:	65
Mode:	Pro	<input checked="" type="checkbox"/> Max Depth 1:	297 [ft]
Frequency Time [sec]:	1	<input checked="" type="checkbox"/> Max Depth 2:	330 [ft]
		<input checked="" type="checkbox"/> Max Depth 3:	362 [ft]

5.1. Fixed general computer data

This section shows the general parameters of the device that cannot be changed such as the model serial number, number of dives and the maximum depth [m / ft]. The total immersion time is in hours [h], and the maximum dive time is in minutes and seconds [min: sec].

5.2. System Parameters

In this section some editable parameters are grouped. The date and time are derived from the PC while the time format (12h / 24h), the unit of measurement (Standard or Imperial), the mode or program (Free, Pro, Static and Dynamic) and the sampling time [sec] must be set manually. The choice of a "Mode" different from what is loaded at the time of connection to the computer, involves the upgrade of all system parameters and alarms specific to the apnea program.

5.3. Alarms

The "Drake" model for each program (Free, Pro, Static and Dynamic) chosen in Section 5.2, has 9 more alarm configuration memories at the time of alarm configuration and they are referred to as "current". It is possible to select a memory by scrolling to it in the list.

Select Alarms Memory: current ▼

The content of the alarms and the different ratings section depend on the way the program is set and so you first need to set the changes, after having already consulted your computer manual.

Dive Time [min:sec]:
 09 : 15 INC: -59 INT: 59

Each alarm can be activated via the relative selection box and, with regard to the times, you must enter data in minutes and seconds, while the values of "INC" (increase) and "INT" (interval), if available, are expressed in seconds. All other parameters can be set by directly entering the numerical values in a range between a maximum and a minimum (this applies

for example to the "Depth Max") or choosing between the elements already defined in a drop

<input checked="" type="checkbox"/> Step Depth:	65	▼
<input checked="" type="checkbox"/> Max Depth 1:	297	[ft]
<input checked="" type="checkbox"/> Max Depth 2:	330	[ft]
<input checked="" type="checkbox"/> Max Depth 3:	362	[ft]

down menu. (Such as the "Depth Step").

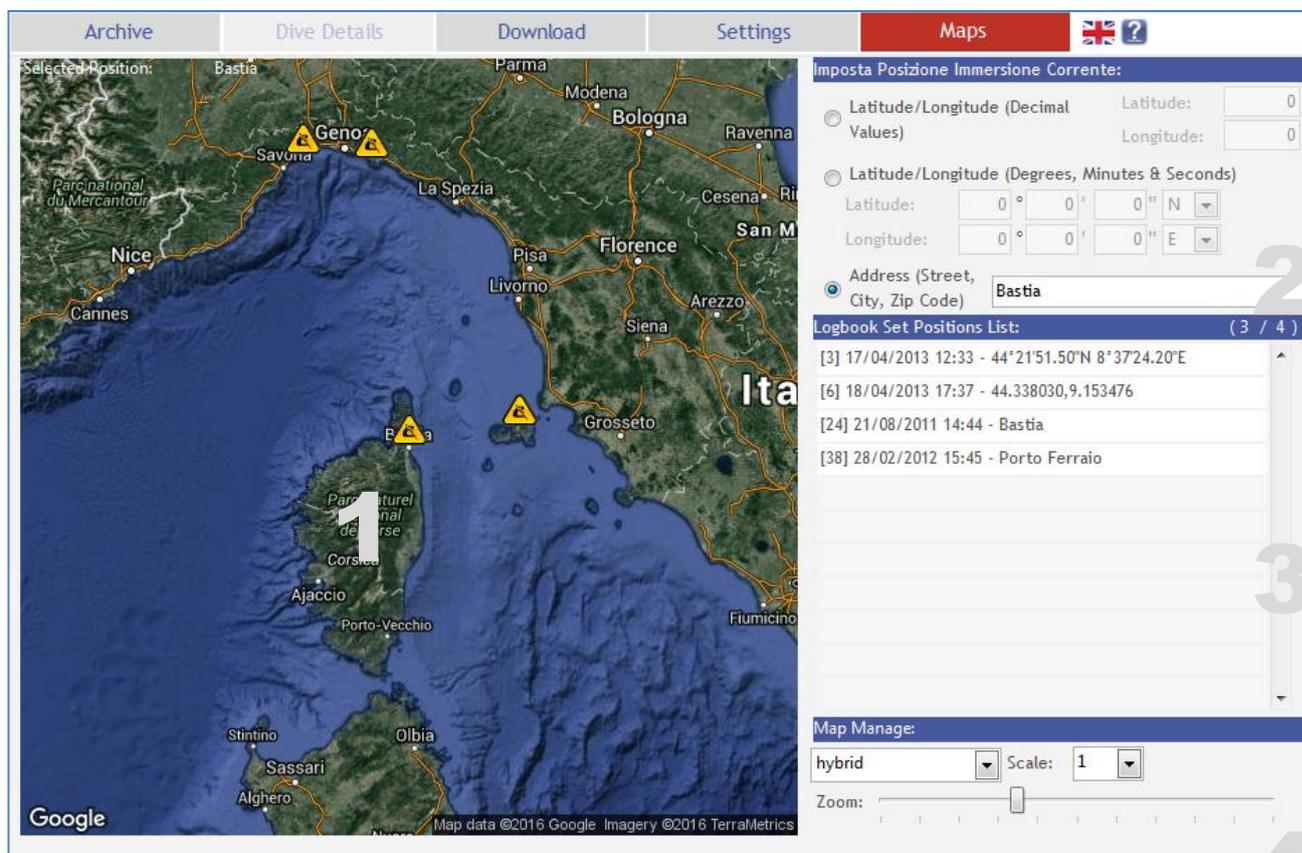
5.4. Rescue

The current configuration of the "Acquisition Parameters" (section 5.2) and configuration "Alarms" selected (section 5.3) can be saved in the device via the "Save settings" button.

Save Settings  (save alarms in): current ▼

In particular with regard to the current configuration of alarms you can store it in the desired memory, according to the choice made with the pull-down menu "(save alarms)".

6. “MAPS” PANEL



The “Maps” panel allows you to geographically plot on a map the point where the selected dive took place.

6.1. Map

This is a map produced by “Google Maps” which shows the registered positions of the dives from the current folder. By regulating the zoom function in section 6.4 it is possible to view any other dives in that area, as shown in the example.

6.2. Set Current Dive Position

The current dive can be selected from the list of dives (see chapter 2.3) or by double-clicking on an element in the registered positions list in section 6.3.

The geographical co-ordinates (GPS) can be set in any of the following ways:

- *Latitude/Longitude (decimal values)*: By inserting a set of 2 numerical values up to 6 decimal grades (DD). For example, the co-ordinates for the Cressi Sub head-offices are Latitude = 44.449028 Longitude = 8.993990. **WARNING**: It might be necessary to use a comma instead of a dot (eg. Latitude = 44,449028), depending on the settings of your pc operating system.
- *Latitude/Longitude (Degrees, Minutes, Seconds)*: By inserting a set of 3 numerical values (DMS) corresponding to the degrees (°), minutes (') e seconds (") for both Latitude and Longitude, including reference to N(north)/S(south) and E(east)/W(west). For example, the co-ordinates for the Cressi Sub head-offices are Latitude = 44°26'56.4"N e Longitude = 8°59'38.6"E" **WARNING**: It might be necessary to use a comma instead of a dot (eg. Latitude = 44°26'56,4"N), depending on the settings of your pc operating system.
- *Address (street, town/city, postcode)*: It is possible to insert a complete postal address or just a location name. For example, Cressi Sub's head-office address is "Via Gaspari Adamoli, 501 - 16133 Genova"

6.3. Registered Logbook Positions List

The Positions List allows you to view the list of dives in the current logbook and to view those which already have a registered position on the map. By double-clicking on a particular dive in the list it is possible to make changes to set new co-ordinates.

6.4. Map Settings

In this section it is possible to set:

- The type of map to view, choosing between road, satellite, terrain and hybrid maps
- The map scale: 1 = normal, 2 = enlarged
- The zoom function which allows you to reduce or enlarge the view of the map. It is also possible to apply the value 2 to the scale to enlarge it further.