

Blackwave

Dive Assistant – Pocket PC Edition

User Guide

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Table of Contents

Getting Started	4
Introduction to Dive Assistant	4
User Requirements	4
Installation	4
Upgrading	5
Registration	6
Starting the application	7
Application	9
Main Buttons & Main Menu	9
Scrolling	9
Alerts	10
Features	10
Divers	11
Current Diver	11
New Diver	11
Edit Diver	11
Delete Diver	12
Diver	13
Details	13
Settings	13
Diver Qualifications	15
Insurance	18
Dive Log	19
New	19
Edit	19
Delete	19
Clone	19
Clone To Diver	20
Dive	22
Main	22
Extra	24
Buddy	25
Notes	26
Unit	26
Plan	27
GPS	27
Profile	29
Dive Plan	31
Plan	31
Calculator	31
Nitrox	32
Nitrox Wizard	32
Dive Kit	34
New Kit	34
Edit Kit	34
Delete Kit	34
Dive Kit Item	35

Service History	35
Dive Tables	37
Import	37
Lookup Dive Table	38
Delete Dive Table	39
Synchronization	40
How it works	40
Reset Sync	41
Cancel Sync	42
Result	42
Other	44
Weight Table	44
Buddies	45
Locations	45
Dive Sites	46
Log	46
Index	47

Getting Started

Introduction to Dive Assistant

Welcome to Dive Assistant – Pocket PC Edition. Dive Assistant is the complete Pocket PC based scuba diving application and the Pocket PC companion to Dive Assistant – Desktop Edition. Dive Assistant supports multi diver, dive logging, dive planning, kit management, dive tables and many other features.

User Requirements

To use Dive Assistant – Pocket PC Edition you will need the following software to be installed on your PC.

- Pocket PC with Pocket PC 2003, Windows Mobile 5 or later
- Microsoft .NET Compact Framework 2.0 which is available from Microsoft's website:

<http://www.microsoft.com/downloads/details.aspx?familyid=9655156b-356b-4a2c-857c-e62f50ae9a55&displaylang=en>

Installation

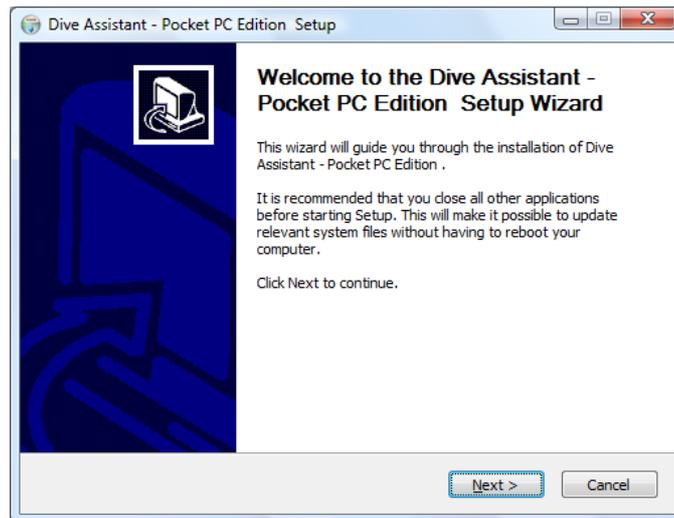
The installation of Dive Assistant – Pocket PC Edition is very easy.

The first step is to install Microsoft's Compact Framework 2.0 or later, if you do not have it installed already. Most new Pocket PCs will have the framework installed when purchased. If you have a Dive Assistant CD the .Net Framework is called NETCFSetupv2.msi and is located in the Prerequisites folder. Otherwise download the framework from Microsoft's website.

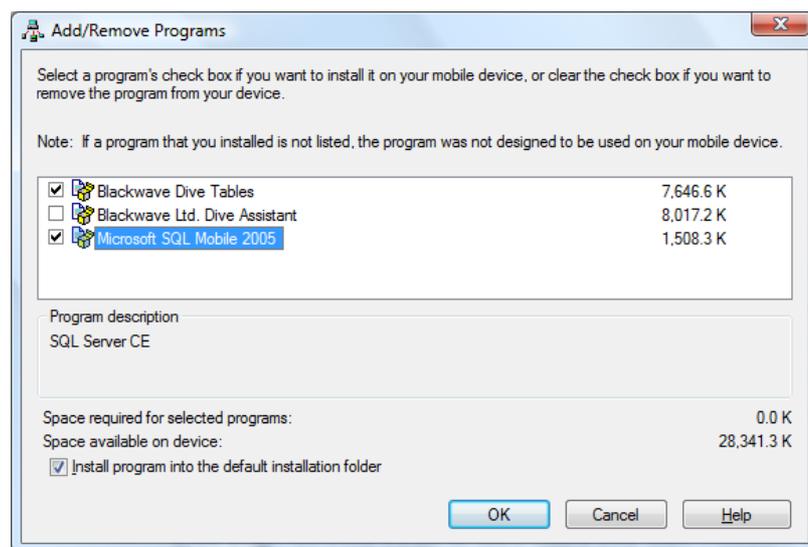
Once the framework has been installed run the Dive Assistant install. The file can be found in the Applications folder on the Dive Assistant CD, or it can be downloaded from the DiveAssistant.com website:

<http://www.diveassistant.com/Products/DiveAssistantPocketPC/download.aspx>

Select the installation file that matches your Pocket PC. If you are running Pocket PC 2003 on your device use DiveAssistant_PPC2003.exe. If you are running Windows Mobile 5, Windows Mobile 6 or a later version use DiveAssistant_WM5.exe. Run the install file on your PC and follow the instructions in the Wizard:



The install process will install files on your PC and then start the Pocket PC install if your Pocket PC is connected. If it is not connected the Pocket PC install will start the next time it is connected to the PC. The Pocket PC Install looks something like the screenshot below. You can specify if you want to install the application in the default folder or in another location. Other than that there are very few options.



Upgrading

If you are using the Desktop Edition together with the Pocket PC Edition

1. Synchronize your data with the Desktop Edition
2. Back up the data.mdb from the [Dive Assistant]\data folder on the PC and data.sdf from the [Dive Assistant] folder on the Pocket PC
3. Uninstall Dive Assistant from the PC and Pocket PC.
4. Install the current version on the PC and Pocket PC.
5. Copy the backed up data.mdb to the [Dive Assistant]\data folder.
6. Reset the sync on the Pocket PC and PC and then run a Sync

If you are upgrading from Dive Assistant – Pocket PC Edition 2007 or 2008 without the Desktop Edition

1. Make a backup of the data.sdf file in the [Dive Assistant] folder.
2. Uninstall Dive Assistant from your Pocket PC.
3. Install the current version of Dive Assistant on the Pocket PC
4. Copy the data.sdf file back to the [Dive Assistant] folder.

If you are not using the Desktop Edition you will need to send us your data.sdf and tables.sdf files. We will have to upgrade them to the latest version of Pocket SQL. Uninstall your existing Dive Assistant installation and install Dive Assistant – Pocket PC Edition. Copy the converted files into the new application folder.

The email address to send to is support@diveassistant.com.

Registration

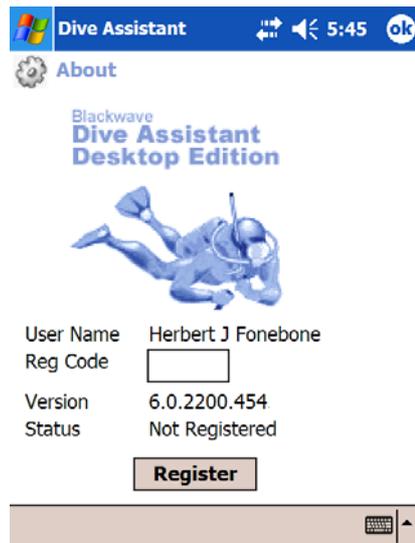
The registration code for Dive Tables is based on the **Owner Name** on your Pocket PC. In Dive Tables it is known as your **User Name**. The Owner details are set in the **Settings > Owner Information** screen on your Pocket PC.

If you purchased a CD with the Dive Assistant applications you were given an Activation Code on the back of the CD cover. If you purchased the application online you were sent or given an Activation Code. Log onto www.diveassistant.com. If you don't have an account you can create one by clicking the "New Users Click Here" link. Once you have logged in click the "Account" link. A registration wizard will appear. Enter the Activation Code you received and click **Continue**. Then enter the **owner Name** from your Pocket PC. A registration code will be created for you. The registration code will be available every time you log into your account. If you purchased the Full Pack make sure that you have the owner name from the Pocket PC and the ID from Dive Assistant – Desktop Edition and Dive Tables Creator available as all the applications will be registered at the same time.

To register your copy of Dive Assistant click **About** in the menu from the main page. The **About** window will appear. Type the registration code created by the website or sent to you from Dive Assistant into the **Reg Code** field and click the **Register** button. If the registration code is correct the textbox will disappear the status will change to Registered.

There are a few reasons why a registration code would not work:

- The registration code is not valid for this version of the application
- The Owner Name/User Name does not match that sent to Blackwave. The registration code is case sensitive as well being sensitive to punctuations and spaces.

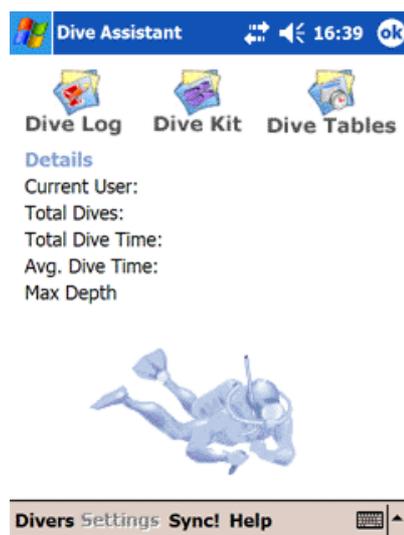


Starting the application

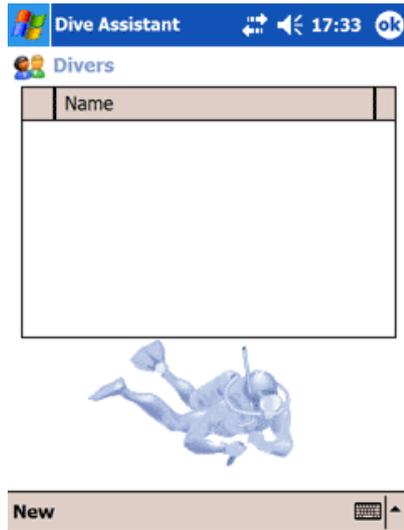
To run Dive Assistant – Pocket PC Edition go to the **Start Bar** and click **Dive Assistant**. If the application does not appear on the **Start Bar**, then click **Start Bar > Programs**. The application will appear in the Program window. Click on **Dive Assistant**. This will start the application. The first screen you will see is the Splash Screen. The Splash screen will be followed by the Main window. Dive Assistant load the details for the last diver, when it loads up.

First Time

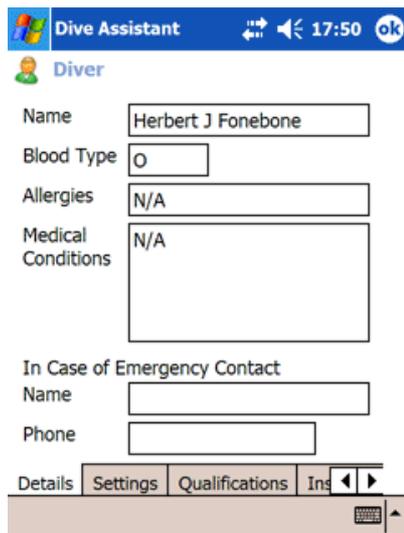
The first time you start Dive Assistant – Pocket PC Edition, you will see a blank Main window. No diver or dive details will be displayed. The Dive Log and Dive Kit buttons are disabled, and the Settings menu item is disabled. Dive Tables, Divers, Sync and Help will be enabled.



To use Dive Assistant you will need to create one or more divers. Click **Divers** on the **Main Menu**, the Divers window will load, showing a blank Divers list.



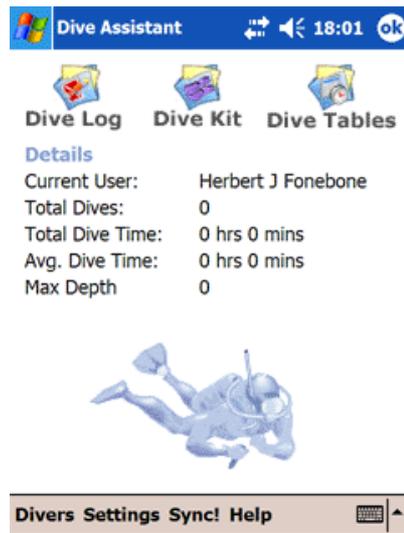
Click **New** in the Divers window, and the Diver window will load. Fill in the details for the diver and click **OK**. The new diver will be added to the Divers list, and he/she will be selected as the default diver. Click **OK** and return to the Main window.



You can also load divers from the Desktop Edition by synchronizing with the Desktop Edition. More details on synchronization and divers can be found in the matching sections.

Application

Dive Assistant is big application with many windows. It can only display one window at a time, but keeps a track of all the windows it has opened so as to decrease the loading time the next time a window is loaded. Dive Assistant is centred around the Main window. From the main window you can access the dive log, dive kit management, dive tables, synchronize with the Desktop Edition, access the diver's settings and access the divers section.



Main Buttons & Main Menu

The Main buttons in the Main window give you access the three core parts of Dive Assistant, Dive Log, Dive Kit and Dive Tables. Dive Log and Dive Kit load the dive log and dive kit for the current diver, in new windows. Dive Tables displays a small popup window, showing the list of all the dive tables installed in the application, regardless of the current diver.



The main menu allows you to access the current diver's settings, synchronize with the Desktop Edition, and access the Divers section.



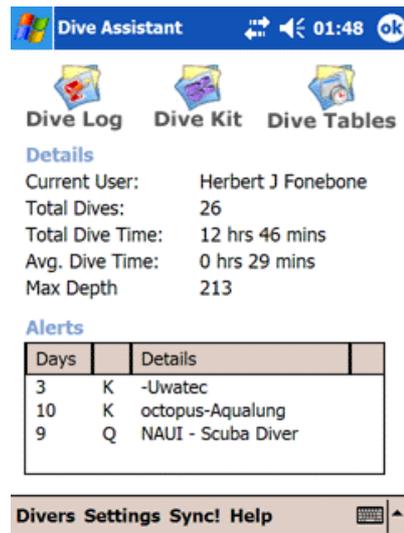
Scrolling

Most windows in the Dive Assistant have data that cover the full screen. When the keyboard appears, the lower parts of the screen becomes hidden. To resolve this issue any screen that has hidden data/fields displays a scroll bar along the right when the keyboard

appears. The scroll bar allows you to scroll from top to bottom of the screen.

Alerts

The main window may display alerts or the Dive Assistant logo. Alerts appear if you have specified in the diver settings that alerts should appear, and dive qualifications are about to expire and/or dive kit needs servicing within the specified time. If there are no alerts the Dive Assistant logo will replace the Alerts list.



Features

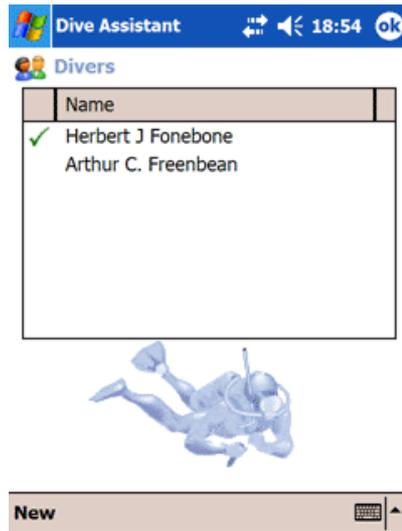
Dive Assistant –Pocket PC Edition has many features. You will find more details about them in later sections of this user guide. Here is a list of the main features:

- Dive Log
- Dive Planning
- Dive Profile
- Dive Tables Lookup
- Dive Kit Management
- Dive Qualifications Management
- Support for Multiple Divers
- GPS Support
- Statistics
- Alerting
- Weight Tables

Divers

Dive Assistant supports multiple divers. To get to the divers section click **Divers** in the main menu in the Main window. The Divers screen window will appear. The current diver has a tick next to it.

You can change the ordering of the divers by clicking on the column you want to order the divers by.



Current Diver

When Dive Assistant loads it sets the Current Diver to be the last current diver, and loads the diver's details. To change the Current Diver go to the Divers window then Click & Hold on the diver you want to set as Current Diver. Alternatively click on the Diver you want to set as the Current Diver. Select "Set as Current" from the popup menu. When you exit the Divers window the new Current Diver will be loaded.

New Diver

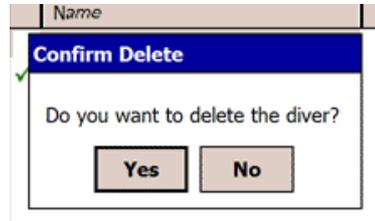
To add a new diver click **New** in the menu, or click **New** in the popup window that appears when you Click & Hold in the list. A new window called Diver will appear. When you save and close the Diver window the diver list will update itself with the new diver details.

Edit Diver

To edit an existing diver Click & Hold on the diver you want to edit, and select **Edit** from the popup menu. When you save and close the Diver window the Divers window will update itself.

Delete Diver

To delete a diver Click & Hold on the diver you want to delete, and select **Delete** from the popup menu. You will be asked to confirm the deletion of the diver.



Diver

The data within Dive Assistant is stored with reference to a diver, with exception of the Dive Tables. Each diver can record his or her own personal and/or dive related data. Look in the Divers section on how to add a new diver or update an existing diver.

The Diver window contains the personalized details for the selected diver. It is possible to update multiple divers simultaneously, but you can only access the current diver's dive details, not any other divers' dive details.

The Diver window has 4 tabs:

- Details
- Settings
- Qualifications
- Insurance

Details

Details allows you to set the diver's name, blood type, Allergies, Medical Conditions and Emergency Contact details. It's only function to store important static data.

Dive Assistant 23:45

Diver

Name

Blood Type

Allergies

Medical Conditions

In Case of Emergency Contact

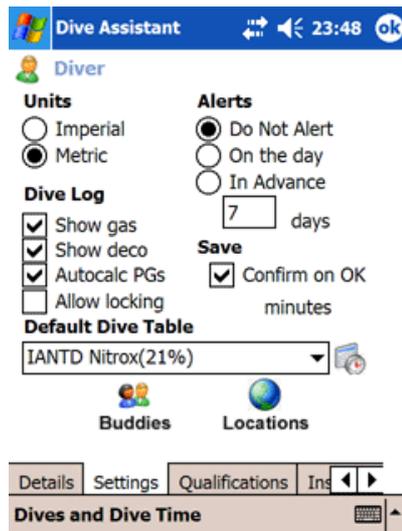
Name

Phone

Details Settings Qualifications Ins

Settings

The Settings screen is one of the most important windows in the application, as it controls how many parts of the application work. The Settings screen is split into several parts. Each part will be described in detail. The Settings window can also be accessed from the Main window by clicking Settings in the menu bar. The only difference is that the Main window Settings screen has Reset Sync!. More details can be found on



Units

The units section consists of 2 radio buttons, Imperial and Metric. The setting you choose for unit determines the available dive tables for the dive plan, as well as the unit used to calculate dive statistics. Changing the units will not change the data within the individual dive log entries, so they would have to be changed manually.

Dive Log

The Dive Log box contains 4 check boxes. Each checkbox is independent of the other check boxes.

Setting Autocalc PGs means that dive times and pressure groups are automatically calculated when you fill in the fields in the dive log entry window. Pressure groups can only be calculated if you have a dive table set up in your settings.

Show deco and Show gas are extra fields in the dive log entry window. If you use multiple cylinders or have deco stops when you are diving you should check these boxes. If they are not checked the extra fields will not be visible. More details can be found in the Dive Log section. Setting Allow locking allows you to lock individual dive logs so that they cannot be modified. The only fields that can be modified in the locked dive are ratings and notes. More details can be found in the Dive Log section.

Alert

Alert allows you to specify whether to notify when dive kit needs servicing and dive qualifications are expiring, and it also allows you to specify how long in advance to notify you. Do Not Alert will not notify you at all, On the day will only alert you on the day and In advance will alert you by the number of days set in the days before field.

Default Dive Table

The default dive table is the dive table that is used in the calculations within the dive log section. Without a default dive table, the pressure groups cannot be calculated.

You can add new dive tables in the Dive Tables part of the application. Details can be found in the Dive Tables section.

Buddies button

The Buddies button loads the Buddies window, where you can add, update and delete buddies.

Locations button

The Locations button loads the Locations window, where you can add, update and delete locations.

Dives and Dive Time menu

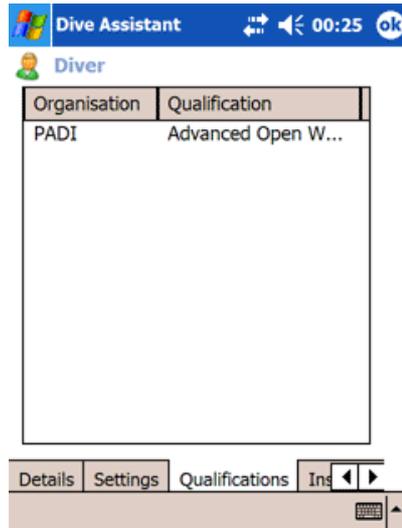
Clicking **Dives & Dive Time** in the menu loads a small popup window **Pre Dive Assistant Dives**. The popup allows you to set your total number of dives and dive time (in minutes), of the dives not included in the Dive Assistant. The data is used in the statistics part of the application, and will allow you to get a more correct representation of your total dives and dive times.

Save

In the Save section there is a checkbox called **Confirm on OK**. If the checkbox is checked, every time you close a window with editable data like dive log, dive kit etc you will be asked if you want to save the data. If the checkbox is unchecked the data is saved automatically.

Diver Qualifications

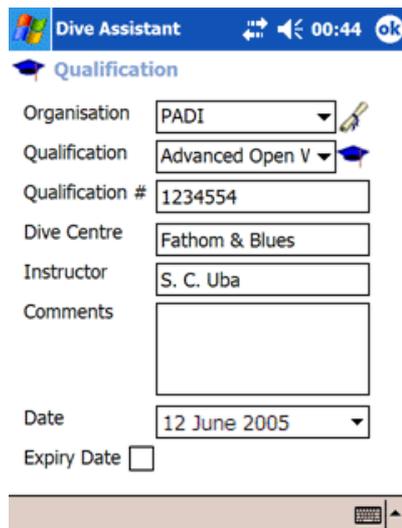
Diver Qualifications lists the qualifications for the diver. The top section contains the list, whereas the bottom section displays the qualification details for the selected qualification. Qualifications that have expiry dates set will appear in the Notification window on the main application window before they need renewal.



New Qualification

Click New in the popup menu that appears when you Click & Hold in the Qualifications list to add a new qualification . This will load the Qualification window. Select the dive organisation from the Organisation drop down. This will update the Qualification drop down with the associated qualifications. Select the qualification you want to use. If your organisation or qualification does not exist you can manually enter them in the drop downs.

If you select the **expiry date** checkbox a date selection box appears. This option should be used if your dive qualification expires and needs renewal. Dive qualification that have expiry dates will appear in the Notification window when they are about to expire. The time to expiry is set in the settings window.



Edit Qualification

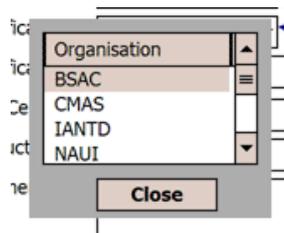
To edit a qualification click on the qualification you want to edit, or select **Edit** from popup menu that appears when you Click and Hold on the qualification you want to edit. The qualification window is exactly the same as the new qualification window.

Delete Qualification

To delete a dive qualification select Delete from the popup menu that appears when you Click & Hold on the qualification you want to delete.

Organisations

Dropdown lists on Pocket PCs are non editable. This prevents you from just entering your own dive organisation directly into the dropdown. Click on the diploma button beside the Organisation dropdown. An Organisation window appears with a list of organisations.

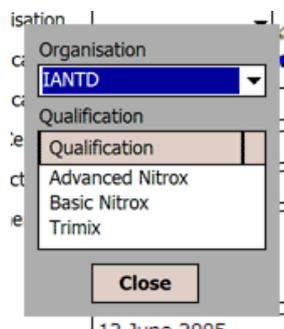


You can add, edit or delete organisations by Clicking & Holding selected items in the list and selecting from the popup menu that appears..



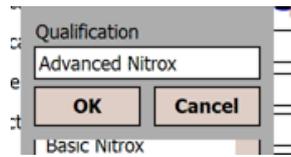
Qualifications

Dropdown lists on Pocket PCs are non editable. This prevents you from just entering your own dive qualifications directly into the dropdown. Click on the graduation hat button beside the Qualification dropdown. A Qualification window appears with a list of Organisations and Qualifications.



Select the organisation you want to work with from the dropdown list. You can add, update or delete Qualifications for the Organisation by

Clicking & Holding selected items in the list and selecting from the popup menu that appears.



Insurance

Insurance allows you to specify the Dive Insurance details. Like Personal Details, Insurance is used to record static data.

A screenshot of the "Dive Assistant" application interface. At the top, there is a blue header bar with the text "Dive Assistant", a speaker icon, a timer showing "00:33", and an "ok" button. Below the header, a "Diver" profile is shown with a person icon. The main area contains a form with the following fields:

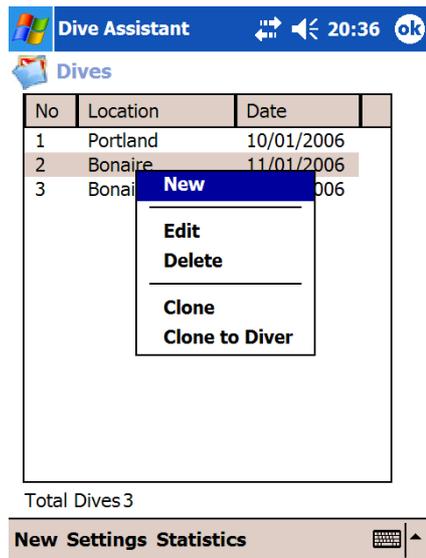
- Insurer: Divesure
- Policy: D142344
- Start Date: 13 June 2004 (dropdown menu)
- Expiry Date: 13 June 2005 (dropdown menu)
- Contact: D. Iver
- Phone: +1 713 343 0045
- Address: DiveSure, Texas

At the bottom of the form, there are three tabs: "Settings", "Qualifications", and "Insurance" (which is currently selected). To the right of the tabs are navigation arrows and a keyboard icon.

Dive Log

Dive log is the core of Dive Assistant – Pocket PC Edition. To access the dive log, click on the **Dive Log** button in the main window. The Dive log window displays a list of the dive number, dates, location and for all the dives for the current diver. The ordering of the dives can be changed by clicking on the column you want to order the dives by.

The window also displays the dive total.



New

Click the New menu item or select New from the Click & Hold popup to add a new dive. This will open the Dives window. Once you have saved and closed the dive log entry window the dives list will automatically update itself, as well the statistics.

Edit

To edit a dive log entry click on the dive or Click & Hold on the dive you want to edit and select Edit from the menu. The dive log entry window is exactly the same as the new dive window.

Delete

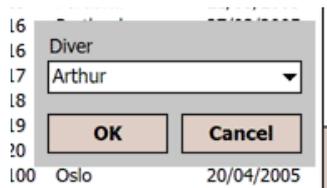
To delete a dive log entry Click & Hold on the dive you want to delete, and select Delete from the popup menu. This will remove the selected dive and update the list and statistics appropriately.

Clone

One of the more useful features of Dive Assistant is the ability to clone dives. Cloning a dive will create a new dive with most of the same details as the previous dive. You can clone a dive by Clicking & Holding a dive and selecting Clone from the popup menu.

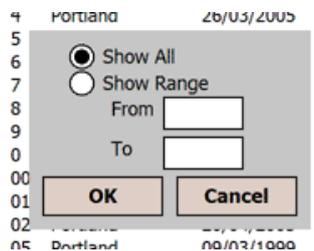
Clone To Diver

A new feature in Dive Assistant – Pocket PC Edition is the ability to clone a dive to a diver. This feature allows you to make a copy of a dive and add it to the dive log of another diver. To clone to a diver you must Click & Hold the dive you want to clone, and select Clone to Diver from the popup menu. A window will appear asking for a diver to clone to. Select the target diver and click OK. There is no verification that the dive has been cloned, so you have to change the current diver to the target diver to verify that the cloning was successful.



Settings

Clicking the Settings menu item loads the dive log Settings popup window. The window allows you to specify which dive log records to display in the dive log list. The options are to show all, or to show dive within a specified range. Clicking OK reloads the dive list with the specified dives.



Statistics

Connected with the Dives window is the Statistics window. Click Statistics on the Menu to access it. The statistics window has 2 tabs, Main and Details.

Main displays a summary of the current diver's dive details. The screen displays the total dives, last dive, total dive time, maximum dive time, average dive time, max depth and average depth. The total include the values set in the settings window for the diver. Please look in the Diver Settings section on how to add pre Dive Assistant data.

The details tab displays a detailed split of how the dives are split across different depths, buddies and dive types. The drop down lets you select which of the options you want to view. The options are:

- Dive v. Depth
- Dive v. Buddy
- Dive v. Dive Type

Statistics

Diver: Herbert J
 Unit: metric
 Total Dives: 25
 Last Dive: 668
 Max Dive Time: 20 hrs 30 mins
 Total Dive Time: 32 hrs 25 mins
 Avg. Dive Time: 1 hrs 17 mins
 Max Depth: 213
 Avg. Depth: 40

Statistics

Dive/Depth		
Dive/Depth		
Dive/Buddy		
Dive/Type		
10-20	4	16
20-30	1	4
30-40	4	16
40-50	0	0
50-60	1	4
60-70	2	8
70-80	0	0
80-90	0	0
>90	3	12

Dive

The Dive screen contains all the details for an individual dive. The window contains 4 separate tabs with different purposes as well as a number of menu options. The features in the Dive window resemble those in the Desktop Edition with the exception of the Multimedia tab, does not exist in the Pocket PC Edition. The tabs are:

- Main
- Extra
- Buddy
- Notes

Main

The main tab contains the most important details of the dive. The data that's considered to be the most important are dive number, dive location, dive site, date, time and pressure group information. Some of the fields in the main window are calculated automatically based on other data and some of the fields are hidden away from view. The diver's settings determine if the values are calculated automatically and if certain fields are displayed or hidden. Fields that are automatically calculated can be manually overridden. Should you enter a field that affects the calculation then the overridden value will be automatically calculated. When a dive log entry is loaded no calculations are done. The calculations will only occur when the user interferes with the data.

The screenshot shows the 'Dive Assistant' application window. At the top, there is a blue header bar with the text 'Dive Assistant' and a clock showing '20:36'. Below the header, the 'Dive' tab is active. The interface includes several input fields and dropdown menus: 'Dive' (value: 1), 'Date' (value: 10 January 2006), 'Location' (value: Portland), 'Site' (value: Countess of Erne), and two 'PG' (Pressure Group) dropdowns (values: empty and D). A depth profile graph is displayed, showing a blue line that descends from the surface to a depth of 23 meters, stays there for a period, and then ascends back to the surface. Below the graph, there are fields for 'SI' (empty), 'RNT' (N/A), 'ABT' (32), 'TBT' (N/A), 'Depth' (23), 'Bottom Time' (0:32), 'Time In' (10:23), and 'Time Out' (empty). A 'Safety' checkbox is checked. At the bottom, there are tabs for 'Main', 'Extra', 'Buddy', and 'Notes', and a menu bar with options 'Unit Plan GPS Profile Weather'.

All of the fields are not mentioned in this section:

Dive

Dive contains the dive number of the current dive. For a new dive it is set to the maximum dive number for the diver + 1. The dive number can be set manually, if you don't want to stick to the application's default dive number.

Location

Location is the location of the dive site. It is more of a geographical location rather than the site itself. You can select a location from the dropdown list. The button next to the location dropdown brings up the location window, where you can add your own locations to the location list. More details on the locations window can be found in the Location section.

Site

Site is the dive site itself. You have to select a site from the dropdown list. The list is populated based on the location you have selected in the location list. The button next to the Site dropdown list loads the Dive Sites window. The Dive Sites window allows you to add, edit and delete dive sites.

SI

SI or Surface interval is the interval between the last dive and the current dive. This can be manually entered, or it can be automatically calculated for you. For auto calculation the SI requires a dive date, a time in and a time out for the previous dive.

Time Out

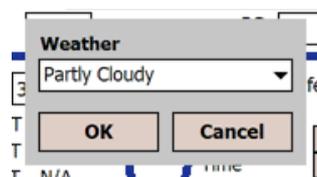
Time Out is automatically calculated based on the Dive Time and the Time In, if Autocalc is set.

PG

PG In and PG Out are automatically calculated if Autocalc is set. PG In uses the Time Out and PG Out of the previous dive, and the current dive table. PG Out is calculated based on the PG In, the Dive Time and the current dive table.

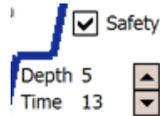
Weather

Weather is displayed as an image in the middle of the window. To modify the weather click Weather in the menu bar. A popup window will appear in the middle of the window, with a dropdown list. To change the weather select a weather description and click OK.

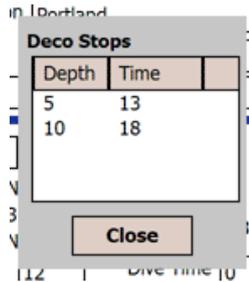


Deco Stops

Deco Stops are only visible when deco stop is enabled in the diver's settings. The deco stops appear below the safety stop check box, and can be cycled through using the up and down arrow.

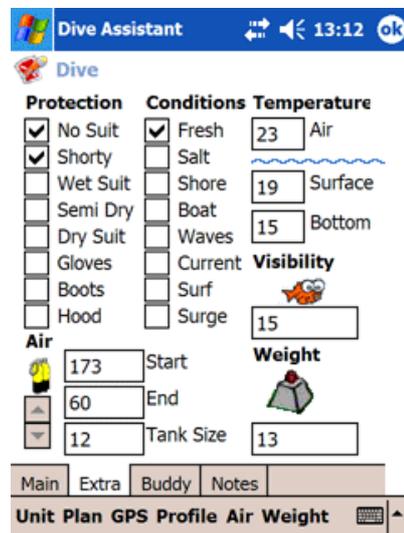


To display the deco stops window, select Stops from the menu bar or Click & Hold on within the deco stops area and select Show Deco Stops from the popup menu. A small window will appear in the middle of the dive window. You can add, edit and delete deco stops by Clicking & Holding n the deco stops list, and selecting from the popup menu.



Extra

The Extra tab contains data regarding the dive conditions and dive kit. On the far left there is the protection part. Next to it is the conditions part. Both of these consist of check boxes, which allow you to select multiple options. The temperature, visibility and weight fields are all text fields and can contain any text.



Weight

Click Weight in the menu bar to access the Weight table. The Weight table shows the weights used in different conditions. The Weight table window is not tied to the Dive Log Entry window and data will not transfer from the weight table window to the Dive window. More details about the weight tables can be found in the Weight table section.

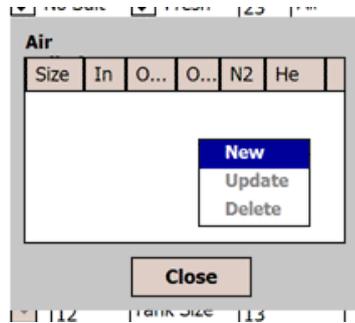
Air

The Air section contains the details regarding your dive cylinder(s). If you are only using a single cylinder you should enter data directly into the air fields. If you are using multiple cylinders you should use the multiple gas cylinders option.

Air
 Start
 End
 Tank Size

If you have set Show Gas in the user settings you can display the gas cylinders in the same way as deco stops. You can navigate through the cylinders using the up and down arrows.

Click Air in the menu bar to access to show the cylinders popup window. Click & Hold in the list to bring up the popup menu that allows you to add, edit and delete cylinders.

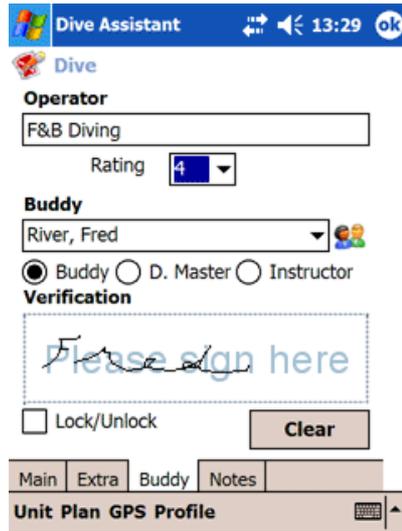


Buddy

The Buddy tab contains dive buddy as well as dive operator details. There are two fields for dive operators. The operator field, allows you to enter the name of the operator. The drop down allows you to set the rating for the operator, between 0 and 10. You can select a dive buddy from the drop down list. To edit the buddy list click on the button next to the buddy drop down. The buddy window will open. More details on the buddy window can be found in the buddy section.

Verification

The verification field can contain the signature of the dive buddy you dived with. When a dive log is unlocked, the signature disappears.

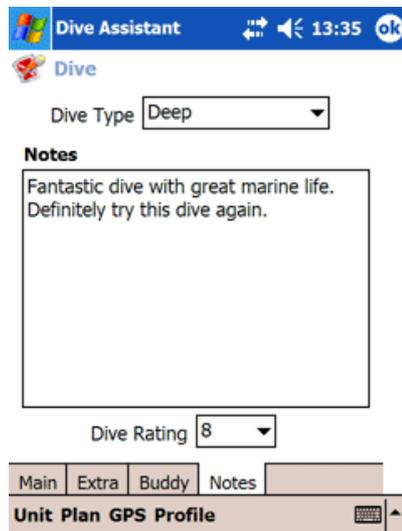


Lock/Unlock

A feature in Dive Assistant is the ability to lock and unlock dives. Locked dives prevents you from modifying dive details. The only editable fields are Operator rating, Dive Rating and Notes. All other fields are locked down. When you unlock a dive, the signature is cleared. The use of locking/unlocking is set in the diver's settings.

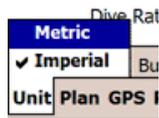
Notes

The notes tab only contains three fields, Dive Type, Notes and Dive Rating. Dive Rating and Dive Type are non editable dropdown lists. Notes is a freeform text field.



Unit

In the main menu there is a Unit menu item. Clicking Unit displays the Unit sub-menu where you can specify the unit used for the particular dive. If a unit is not specified the application will default it to the diver's default unit. The selected unit has a checkbox next to it. The unit. The unit is used allow you to see what unit the dive is in as well as being used in the dive statistics calculations.



Plan

Dive plan is an essential part of the diving. Click Plan button to access the dive planner. When you have finished using the planner you can opt to save the plan details into the current dive. Look at the Dive Plan section for more details.

GPS

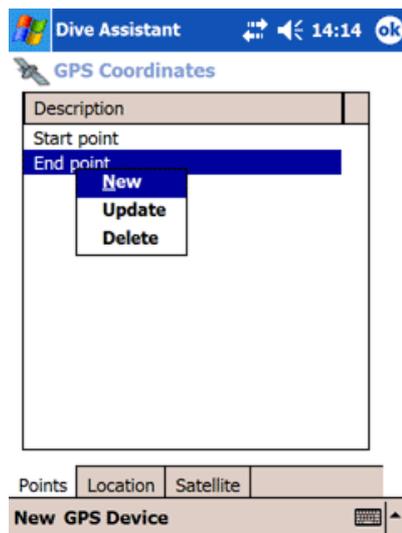
One of the features in Dive Assistant – Pocket PC Edition is the support for GPS. Within each dive log entry you may add a number of GPS coordinates with comments. You may manually enter the coordinates, or load them from a GPS device. To access the GPS Coordinates window click GPS in the Dive window's menu bar.

The GPS Coordinates window has 3 tabs:

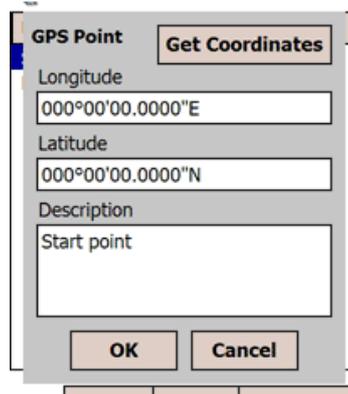
- Points
- Location
- Devices

Points

The dive points tab displays a list of all the GPS points for the current dive. Each GPS point has a coordinate and a description. To add a new GPS point click New in the menu bar, or select New from the popup menu that appears when you Click & Hold in the list.



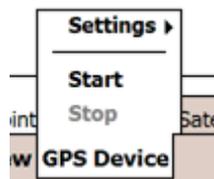
To edit or delete a GPS point Click & Hold in the list and select appropriately from the popup menu. Alternatively you can click on a GPS point to open it.



To retrieve GPS data from a GPS device you must first connect to a GPS receiver. Click GPS Device from the menu bar and then click Start to connect to the receiver. Dive Assistant will automatically locate the receiver, unless you modify the settings using the settings options in the menu bar.

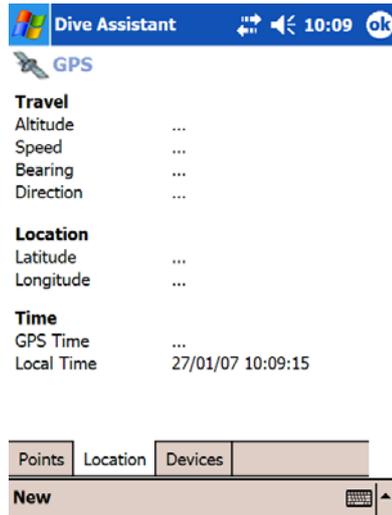
The connection will close automatically when the GPS Coordinates window is closed. Alternatively you can close the connection from the menu by clicking Stop.

When the connection with the GPS receiver is successful and the GPS receiver has located satellites click Get Coordinate from the GPS Point window to add the current GPS location to the GPS point. If there is no location the coordinates are set to 0, 0.



Location

The location tab displays the Altitude, Speed, Bearing, Direction, Latitude, Longitude and Time based on the data the application has received from the GPS receiver.



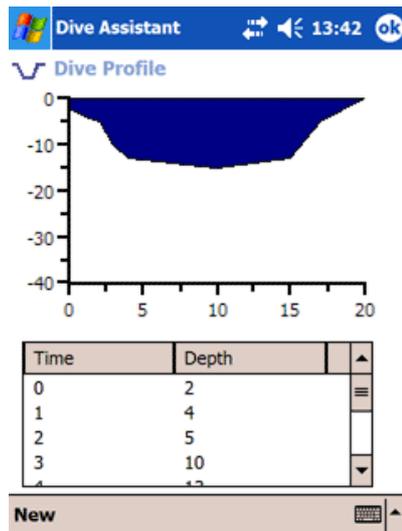
Devices

The Devices tab is used connect to your GPS unit. You can choose to use any available device, or choose from a specific device..



Profile

Dive Profile displays a profile of your dive. The profile can be loaded through Dive Computer Import in the Desktop Edition, or it can be entered manually. To access the Profile click Profile in the menu bar in the Dive window.



The Dive Profile window consists of 2 parts, the profile chart and the profile list. The chart gives a graphical representation of the dive profile. The list provides all the profile points, ie time / depth combinations for the dive.

Click & Hold in the Time/Depth list will display bring up a popup menu. The menu has Add, Edit and Delete options. Clicking Add or Edit will allow you to add/modify an individual profile entry. Alternatively you can click the New item on the menu bar to add a new profile entry or just click on a list item to edit an item.

Dive computers store profile times in second intervals, be it 1, 20 or 30 second intervals. The x or time axis can therefore easily display values in the thousands. If you manually enter profile data for a dive you can set the interval to mean minutes or other values.

Dive Plan

The dive plan has undergone a serious makeover in the current edition. Instead of being just a simple planning tool it is now a suite of tools that can help you plan you dive. To open the Dive Plan window click Plan in the menu bar in the Dive window. The Dive Plan window has 4 tabs:

- Plan
- Calculator
- Nitrox
- Wizard

Plan

The plan tab automatically loads the date, time, depth and PG (out) from your last dive. As the new Date, and Time In are populated SI is automatically populated. As the depth changes the maximum dive time is updated. Once a dive time has been entered the new PG (Out) is calculated.

Clicking OK displays a popup window confirming whether or not you want to save the plan into the current dive. Click Yes to Save and close the pan. Clicking Cancel closes the plan without transferring the details. Data from the Nitrox, Calculator and Wizard tabs is not transferred to the current dive.

Dive Assistant 15:45 OK

Dive Plan

Last Dive
Date 26/05/2005 Time Out 12:32
Depth 24 PG (Out) C

New Dive
Date 26 May 2005
Time In 12:56 PG (In) B
0 days 0 hours 24 minutes

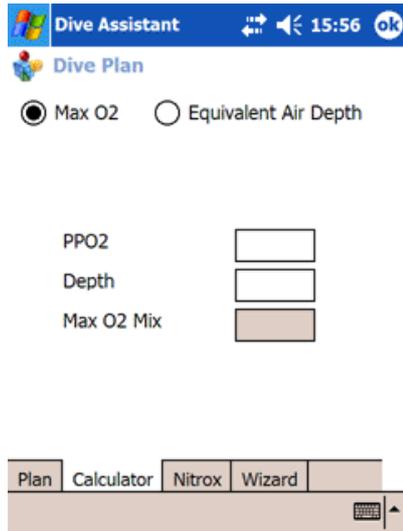
Depth/Time
Depth 16 Dive Time 21
Max Time 34 (Out) E
 Use deco

Plan Calculator Nitrox Wizard

Calculator

Calculator gives you basic Nitrox calculations. Max O2 calculates the Maximum O2 mix that can be used given a PPO2 and a Depth.

Equivalent Air Depth (EAD) calculates the EAD based on the O2 Mix and Depth entered.

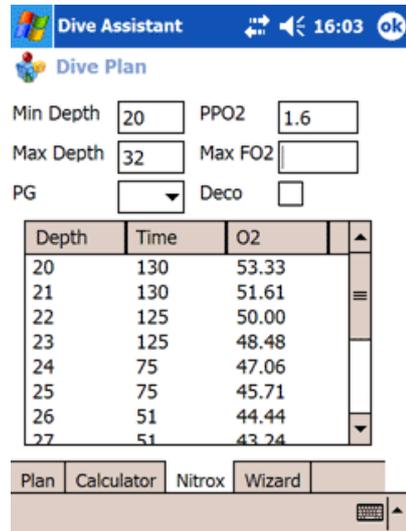


Nitrox

Nitrox calculates and displays the maximum dive time and optimal O₂ mix for each depth between the min and max depth. You can restrict the FO₂, by setting a Max FO₂. Other parameters that affect the results are PG and Deco. PG allows you to specify PG (In) for the dive, and Deco uses the decompression tables to give you the maximum decompression times.

The results automatically update themselves when you change any of the parameters.

Nitrox requires the IANTD Air dive tables to work.



Nitrox Wizard

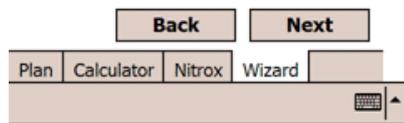
Nitrox Wizard consists of four screens. The first screen requests a PPO₂ (partial pressure of Oxygen). The recommended PPO₂ is 1.4 or 1.5. The next screen requests a depth. This is followed by the Air Mix screen. Air Mix calculates the maximum O₂ mix for the depth/PPO₂ combination and requests the actual O₂ Mix used. Finally the results

screen displays the maximum depth, and dive times given the FO₂, PPO₂ and IATND Air tables.



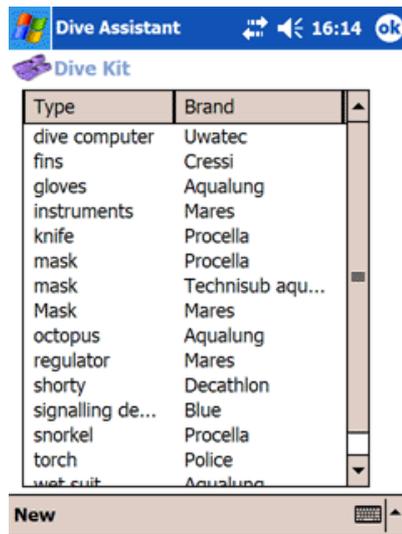
Nitrox Wizard

Welcome to the Nitrox Wizard. The wizard will help you do the calculations required to efficiently plan a nitrox dive. Click Next to continue.



Dive Kit

Dive Kit is a dive kit management system. It can keep a track of all your dive kit, including service history and next service date. If alerting is set in the diver's settings window, notifications will occur when dive kit needs servicing. To access it click the Dive Kit button in the main window.



New Kit

To add a new kit item click New in the menu bar, click New in the popup menu that appears when you Click & Hold in the list. A new window called Dive Kit will appear. When you save and close the Dive Kit Item window the kit list will update itself with the new kit details.

Edit Kit

To edit an existing kit item click on the item in the list or select Edit from the popup menu that appears when you Click & Hold the item. When you save and close the Dive Kit Item window the kit list will update itself.

Delete Kit

To delete a dive kit item Click & Hold on the item you want to delete and select the Delete option from the popup menu.

Dive Kit Item

The Dive Kit item window contains all the details for a dive kit item. The screen has fields for kit type, brand, model, serial number, purchase and service date and description. Dive Kit item can also record all dive kit services. The service history is located in the History tab.



Type

The type field is an editable dropdown list. A number of dive kit types pre-populate the dropdown box. If your kit type does not exist you can add new ones by clicking the button next to the dropdown list.



This will load up a popup window where you add, edit and delete kit types.

Service Date

The Service Date, like the Purchase Date is a date control. Click on the control to get a calendar popup. Select a date from the popup and the date is transferred to the date field. If Alert is set in the diver's settings, notifications will occur based on the Service date of the dive kit item.

Service History

Dive kit items can record multiple services. They appear in the Service History list in the History tab in the Dive Kit item window. Each service has a service date, servicer and service details.

New Service

To add a new service click New in the popup menu that appears when you Click & Hold in the services list. A popup window will appear,

allowing you to set the details of the service. Clicking OK in the window saves the history, closes the window and adds the service to the Dive Kit item service history list. Cancel closes the popup window without saving the data.



The image shows a screenshot of a software window titled "Dive Kit Service History". The window is divided into several sections. At the top, under the heading "Servicer", there is a text box containing "D. Ive Services". Below that, under "Service Date", is a dropdown menu showing "13 June 2005". A section labeled "Details" contains a text box with the text "Complete service to all parts.". At the bottom of the window are two buttons: "OK" and "Cancel".

Edit Service

To edit an existing service click on the item, or select Edit from the popup menu that appears when you Click & Hold the item. When you choose to edit a service, the Service History popup window will appear. When you save and close the Service History window the service history list will update itself

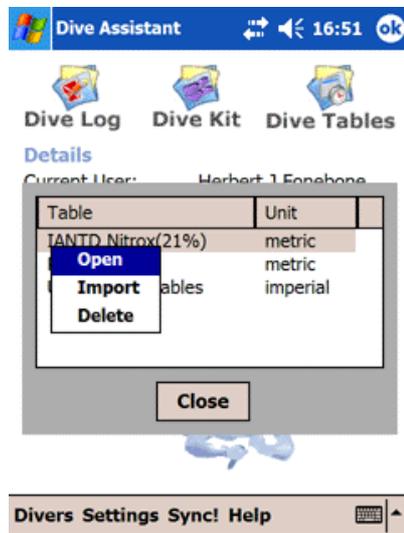
Delete Service

To delete a service select the delete from the popup menu that appears when you Click & Hold on the item you want to delete.

Dive Tables

Dive Assistant supports most dive tables on the market. It uses the dive tables in dive planning and dive logging, as well as displaying them as lookup tables. Blackwave cannot distribute PADI, BSAC or NAUI dive tables as organisations will not license their dive tables to 3rd parties. A Dive Tables Creator application is available from Blackwave to write your own dive tables.

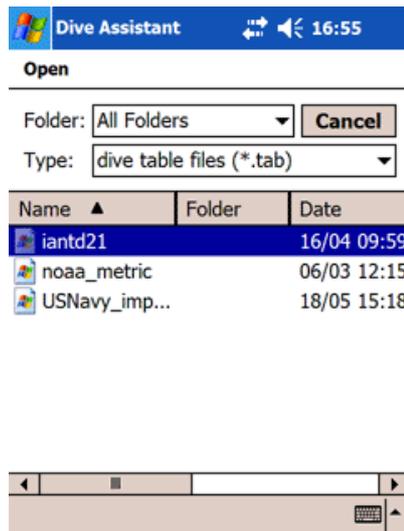
Clicking the Dive Tables button in the main window loads the Dive Tables popup window. The window lists all the dive tables currently installed in the application. The dive tables list is general to the application rather than specific to the current diver. From the Dive Tables window you can import dive tables, or view existing dive tables.



Import

To import a dive table, click the Import option from the Click & Hold popup menu. An Open dialog will appear. Click the dive table you want to import and click Open. This will load the dive table into the application. The Open dialog window will only load files from the My Documents folder on the Pocket PC, so when you copy the files from the PC to the Pocket PC make sure they go to the My Documents folder.

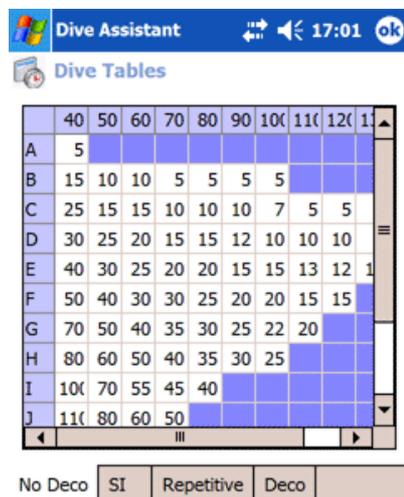
Dive tables are stored in .tab files. These files are XML documents. A number of dive tables are available from the Blackwave website. If you want to use other dive tables you can write your own dive tables using a text editor or the Dive Tables Creator from Blackwave.



Lookup Dive Table

To lookup a dive table click on the dive table you want to view. Alternatively select Open from the Click & Hold popup menu.

When you open one of the dive tables you will see the dive table window for your selected table. Each table has between 3 and 4 tabs, each tab representing one of the tables associated with that table. SSI have 3 and tabs while the IANTD and NAUI and NOAA have 4. There is always one "no decompression" table, one "surface interval" table and one "repetitive dive" table. If you are using the IANTD, NAUI or NOAA tables the 4th tab is the decompression table.



The tables are displayed in a similar way to how the respective dive organizations display them, so they should be easy to interpret. On the decompression tab you get a drop down list at the top of the screen. The drop down list allows you to select the depth you are diving to. When you select a depth, the corresponding decompression table appears. When you are finished with the dive table click on the OK button to close the window.

Delete Dive Table

Delete a dive table by Clicking & Holding the table you want to delete, and selecting Delete from the popup menu.

Synchronization

Dive Assistant – Pocket PC Edition and Dive Assistant – Desktop Edition can synchronize data between them. The synchronization process is initiated from the Pocket PC. When a user clicks Sync on the Pocket PC a synchronization window will appear in the Desktop and Pocket PC Editions. The data that is synchronized is:

- Buddies
- Diver details
- Emergency details
- Kit (including kit history)
- Locations
- Dive Sites
- Logs (including deco stops, gas mixes, signatures and GPS details)
- Profiles
- Qualifications
- Weights

To run the synchronization click **Sync!** in the application's main window.

Divers Settings Sync! Help

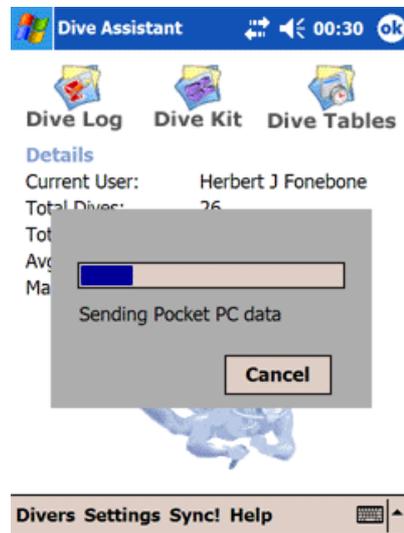
How it works

The synchronization process starts by the Pocket PC making contact with the Desktop Edition, when the user clicks Sync on the Pocket PC. This loads the Sync window on the Pocket PC and Desktop editions. The process for synchronization is then:

1. Pocket PC loads all the data that has changed on the Pocket PC since the last synchronization. This includes deleted data, new data and modified data. The data is then transfers it to the Desktop in an XML file (PocketPC.xml).
2. Desktop loads all the data that has changed on the Desktop since the last synchronization. This includes deleted data, new data and modified data. Desktop also loads transferred Pocket PC data and internal mapping tables. The mapping tables map Desktop records with Pocket PC records.
3. Desktop deletes all Pocket PC deletions. When a record is deleted the mapping record is also deleted. Desktop then adds all the new records from the Pocket PC. New data records get new mappings added. In the case when a mapping already exists Desktop compares the Pocket PC record with Desktop record. If the Pocket PC record is newer than the Desktop record, then the desktop record is overwritten by the Pocket PC record. If the Desktop record is newer than the Pocket PC

record then the Desktop record is added to a file to be sent to the Pocket PC. The file for the Pocket PC also contains all the new Desktop records and deleted Desktop data.

4. Desktop transfers data file to Pocket PC (desktop.xml) and Pocket PC loads changes into Pocket PC.
5. Synchronization completes.

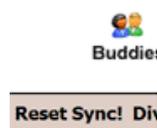


Most of the synchronization processing occurs on the Desktop. The Pocket PC loads data, to be sent to the Desktop and saves/deletes data sent from the Desktop. When new data is added to either system a new mapping is created, to map the record to a new record on the other device. The only case when this is not true is when two divers with the same name are added to both the Desktop and the Pocket PC. In this case the two records are mapped to each other.

Reset Sync

Reset Sync sets the last synchronization date to be the 1st of January 2000. This forces any synchronizable data changed after that date to be synchronized. In practice it means that all records will be resynchronized. To perform a proper reset you must reset on the Pocket PC and Desktop before running a synchronization. Synchronization will take much longer than normal if your dataset is big.

From the main window, click Settings. This will open the Settings window. Click **Reset Sync!** in the menu bar. This will reset the sync on the Pocket PC.

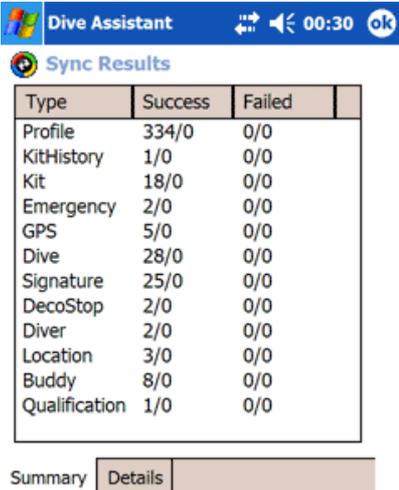


Cancel Sync

You cancel the synchronization from the Pocket PC or Desktop Editions by Clicking the Cancel button. If cancellation occurs on one system the other system recognises the event and stops it's part of the synchronization process. Cancelling the sync does not roll back the applications to their pre synchronization states. Any changes that have been committed will stay. As the cancellation occurs before the system sets it's last synchronization date stamp, all the data records that were being synced will be synced again as a precaution.

Result

When a synchronization has completed the status will say Synchronization complete. There may also be a message indicating that errors occurred. Once the synchronization has completed a Details button appears. Clicking the button loads the Sync Results window. The Summary tab displays a summary for each data type and the details tab gives you specific detail about each data record.



Type	Success	Failed
Profile	334/0	0/0
KitHistory	1/0	0/0
Kit	18/0	0/0
Emergency	2/0	0/0
GPS	5/0	0/0
Dive	28/0	0/0
Signature	25/0	0/0
DecoStop	2/0	0/0
Diver	2/0	0/0
Location	3/0	0/0
Buddy	8/0	0/0
Qualification	1/0	0/0

The list in the Summary tab contains a row for each data type that is being synchronized. For each type there is a success column and a failed column. The success column displays the successful uploads followed by the successful downloads of that type, separated by a “/”. The failed column does the same.

Successful upload means that the records were successfully loaded from the desktop and sent to the Pocket PC, but does not mean that they were successfully imported into the Pocket PC. The Summary on the Pocket PC would provide that information. If there are failures, its worth checking the Details tab for the errors. There is also a log file that's populated when events occur, and any failures will be detailed in the log.

 Sync Results

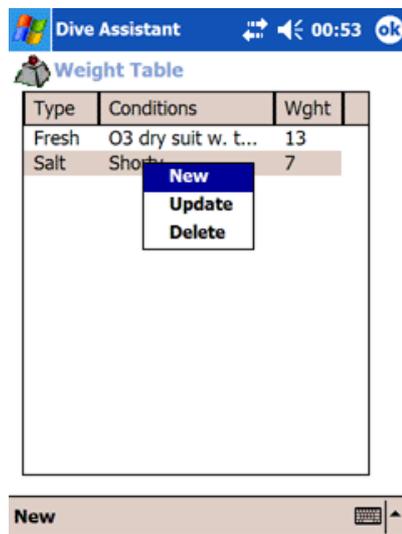
Type	ID	Success	
Dive(Upload)	12	True	
Dive(Upload)	13	True	
GPS(Upload)	3	True	
Kit(Upload)	18	True	
Diver(Upload)	2	True	
Diver(Upload)	3	True	
Emergency(U...	2	True	
Emergency(U...	3	True	
Qualification(...	1	True	
Buddy(Upload)	1	True	
Buddy(Upload)	2	True	
Buddy(Upload)	3	True	
Buddy(Upload)	4	True	

Summary Details

Other

Weight Table

Weight table only be accessed from the Extra tab in the Dive window. When the Extra tab is showing, the Weight option appears in the menu bar. Click on the Weight menu item to open the Weight window. The Weight Table lists weights, and the water type and conditions under which those weights are used. The weight tables make it easy to plan the weights required for specific dives. The type of protection worn and the water type make a big difference in the weights required.

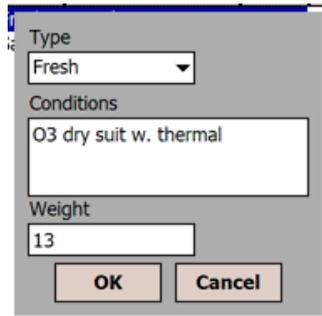


New Weight

To add a weight click New in the menu bar or select New from the popup menu that appears when you Click & Hold in the list. Once you have finished editing the Weight popup window click OK. Clicking OK in the window saves the weight, closes the window and adds the weight to the Weight Table list.

Edit Weight

To edit a weight click on the weight you want to edit. Alternatively Click & Hold on the weight you want edit, and select edit from the popup menu. When you choose to edit a weight, the Weight window will appear. When you save and close the Weight window the list will update itself

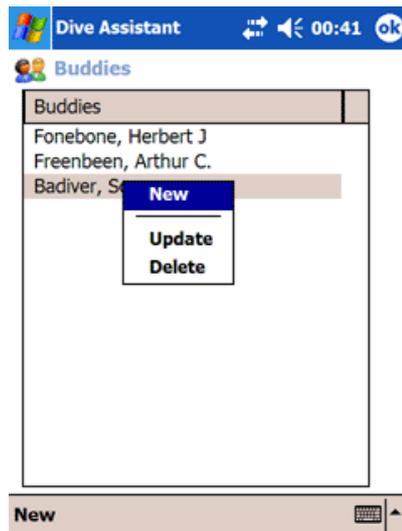


Delete Weight

To delete a weight, select Delete from the popup menu that appears when you Click & Hold on the weight you want to delete.

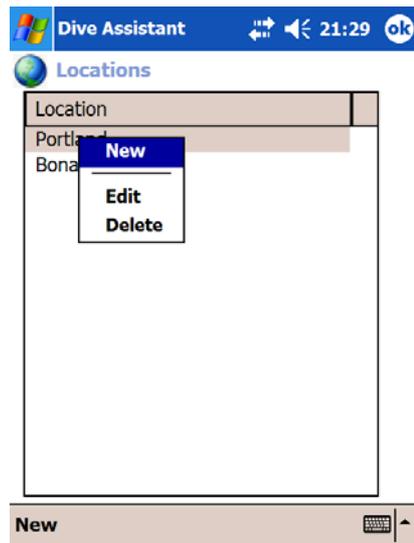
Buddies

Buddies can be accessed from either of the Settings windows or from the Dive window. The buddies in the buddy list are used to populate the buddy drop down list in the Dive window. As buddies are added, modified or deleted the buddy list is changed, as is the dropdown in the Dive window.



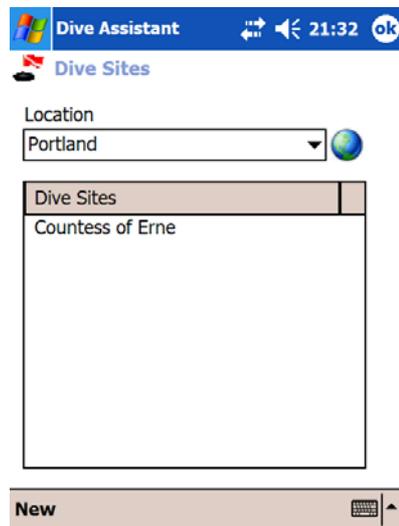
Locations

Locations can be accessed from either of the Settings windows or from the Dive window. In all three cases the locations button contains a globe. The locations in the location list are used to populate the location drop down list in the Dive window. When locations are added, modified or deleted the location list is changed, as is the dropdown in the Dive window.



Dive Sites

Dive Sites can be accessed from either of the Settings windows or from the Dive window. In all three cases the dive site button contains a floating dive flag. The dive sites in the site list are used to populate the dive site drop down list in the Dive window. When dive sites are added, edited or deleted the dive site list is changed, as is the dropdown in the Dive window.



Log

Dive Assistant populates a log file with error messages and other important events. The log file is log.txt, and is located in the application folder. The log file provides details on what's occurring in the application and can be an important aid in assisting Blackwave with solving you're the problems you are experiencing.

Index

- A**
- Air, 25
 - Autocalc PGs, 14
- B**
- brand, 35
 - Buddies, 45
- C**
- Calculator, 31
 - Cancel Sync, 42
 - Clone, 19
 - Clone To Diver, 20
 - conditions, 24
 - Copyright**, i
- D**
- Deco, 32
 - Deco Stops, 23
 - Delete Diver, 12, 34
 - Delete Qualification, 17
 - Delete Service, 36
 - description, 35
 - Dive Kit, 35
 - dive kit., 24
 - Dive Log, 14
 - Dive Log Entry, 22
 - Dive Plan, 31
 - Dive Profile, 29
 - Diver, 13
 - Diver Qualifications, 15
- E**
- EAD, 31
 - Equivalent Air Depth, 31
 - expiry date, 16
- F**
- First Time, 7
 - FO₂, 32
- G**
- GPS, 27
 - GPS receiver, 28
- I**
- IANTD, 32
 - Import, 37
 - Import dive tables, 37
 - Installation, 4, 6
 - Insurance, 18
 - Introduction, 4
- K**
- kit type, 35
- L**
- Location, 23, 28
 - Lock/Unlock, 26
 - Locked, 26
- M**
- Main Menu, 9
 - mapping, 41
 - model, 35
 - multiple divers, 11
- N**
- New Diver, 11
 - New Qualification, 16
 - New Service, 35
 - Nitrox, 32
 - Nitrox Wizard, 31, 32
 - Notes, 26
- O**
- Organisation, 16
 - Organisations, 17
- P**
- Personal Details, 13
 - PG, 23, 32
 - Plan, 27, 31
 - Points, 27
 - Profile, 29
 - profile entry, 30
 - protection, 24
- Q**
- qualification, 16
 - Qualifications, 17
- R**
- Register**, 6
 - Reset Sync, 41
 - Result, 42
- S**
- Save, 15
 - serial number, 35
 - Service History, 35
 - settings, 22
 - Settings, 26
 - Show deco, 14
 - Show gas, 14
 - SI, 23
 - Starting the application, 7
 - Summary tab, 42
 - Surface interval, 23
 - Sync, 40
 - synchronization, 40, 42
 - Synchronization, 40
- T**
- temperature, 24
 - Time Out, 23
- U**
- Units, 14
 - Update Diver, 11, 34
 - Update Qualification, 16
 - Update Service, 36
 - User Requirements, 4
- V**
- visibility, 24
- W**
- Weather, 23
 - weight, 24
 - Weight table, 24
- X**
- XML, 40