OziExplorer User Guide

Table of Contents

Introduction

OziExplorerCE is a mobile version of **OziExplorer** designed to run on mobile devices such as the **Hema Navigator HN7**.

A PC version of **OziExplorer** is also available (for Windows PCs only) from OziExplorer (http://www.oziexplorer.com)which has slightly more functionality than the mobile version.

There is also a custom version of OziExplorer for Windows PCs called Hema Explorer. This software is available for existing owners of HN5 and newer **Navigator** models, and allows easy transfer of waypoints, tracks, and routes between the **Navigator** and the PC. This software is available on the **Tech Support Knowledegbase** (http://hema.helpserve.com).

The **OziExplorer** software operates in a different fashion to that installed on a typical "street only" vehicle GPS unit.

OziExplorer can be described as moving-map software using raster maps.

Typical street navigation systems and/or software are turn-by-turn systems utilising vector graphics.

A key difference between the two systems is that vector based systems are "scalable". i.e. As you zoom into the map, it is redrawn at the new scale, whereas the raster system simply "magnifies" the map image as you zoom in. Another side effect of this is that the raster map has fixed colours (set when the map image is created), whereas the vector based map can be recoloured during drawing of the map, so often vector based software will give you the option of multiple colour choices for your maps.

Starting OziExplorer

To begin 4WD Navigation, select the **4WD button** from the Main Menu.

The **OziExplorer** application is used primarily for off-road navigation.

OziExplorer will display a splash screen with status messages appearing in the lower left of the screen during startup, as shown below

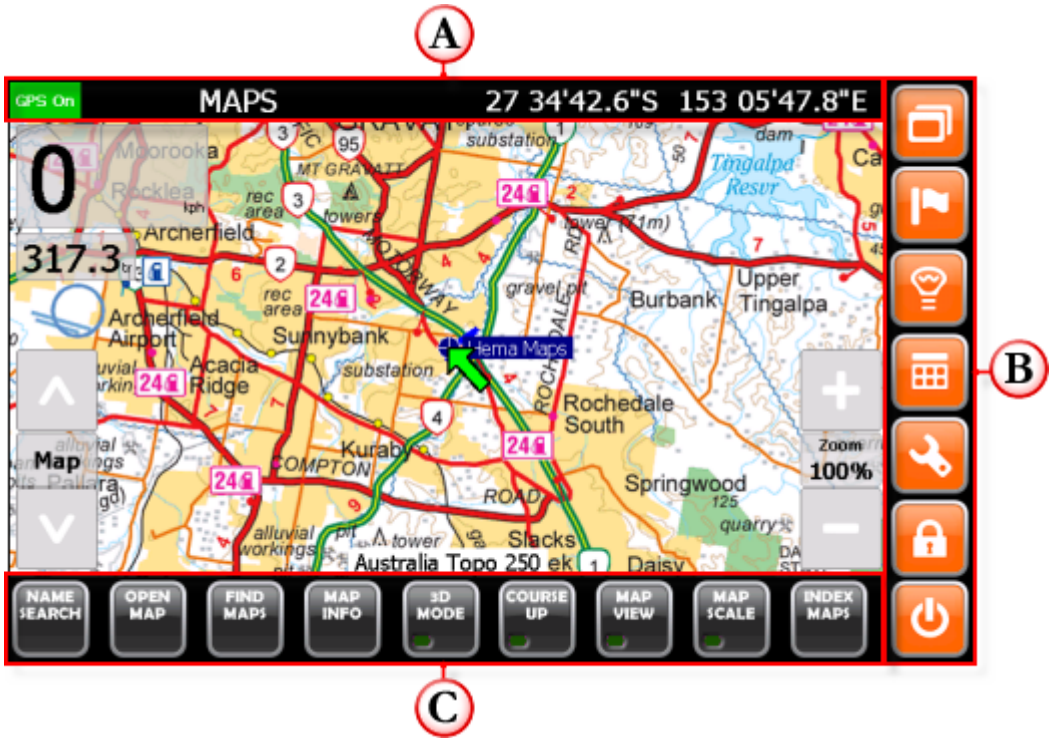
Please note that the interface used for OziExplorer on the **Hema Navigator HN7** has been customised using the **OziExplorer** Screen Designer software.

The interface layout is known as **Hema EziOzi2**.

It is designed to make **OziExplorer** easier to use on the **Navigator** by grouping related functions together on screens (or **pages**), For example, operations relating to waypoints are all together in one place on the Waypoints page.

Screen Layout

This is a typical screen layout within the **OziExplorer** program.



All pages have some standard features, such as:

A **Status Bar:** This shows the following indicators:

- GPS Status
- Current Page Name
- Current Position (in the format specified in the Settings)

B **Standard Toolbar** located along the right-hand border of the page. See the section on the Standard Program Toolbar for a complete description.

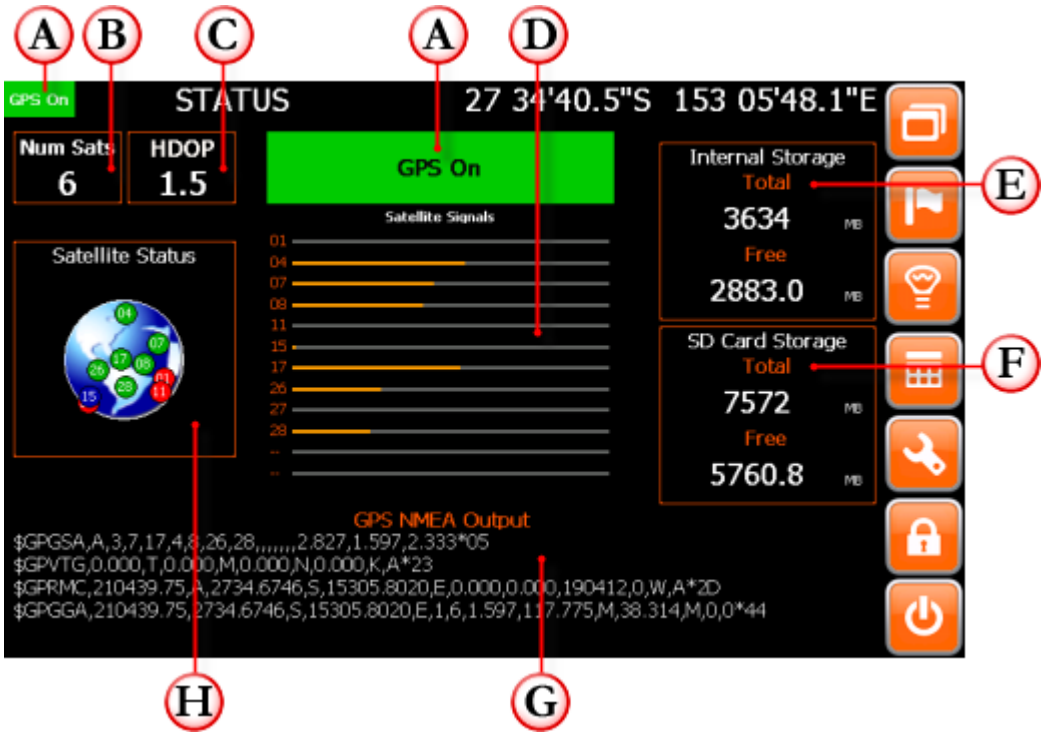
Pages may also have a **Page Specific Toolbar** located along the lower edge of the page as shown at **C**

The Page Specific Toolbar will contain buttons which perform functions related directly to the page that they are on.

Acquiring a GPS Satellite Fix

In order for the **Navigator** to find your current location, it requires a GPS satellite fix. To acquire a GPS fix, it is important that you are in an area open to the sky, (not inside an enclosed building) and away from tall buildings and trees. The initial fix may take anywhere from 2 to 5 minutes. The length of time to obtain a fix will be reduced the next time the navigation software is started in a similar location.

When **OziExplorer** starts, the **STATUS page** will appear, and remain until a satellite fix is obtained. The STATUS page displays the GPS status and the number of currently visible satellites and their relative signal strengths. Once a fix is acquired, **OziExplorer** will switch to the MAP VIEW page showing your location plotted on the most recently used map. It is then possible to select a more or less detailed map as required.



The information displayed on the STATUS page includes:

Ⓐ**GPS Status** Indicator (ON / OFF). Shows the current GPS status. The small indicator in the top-left corner of the screen is visible on all pages of the EziOzi display.

Ⓑ**Num Sats** - The Number of satellites currently visible by the GPS receiver

Ⓒ**HDOP** - An indicator of the positional accuracy of the GPS receiver.

Ⓓ**Signal strength** indicators of individual numbered satellites

Ⓔ**Total / Free internal storage capacity**

Ⓕ**Total / Free SD Card storage capacity**

Ⓖ**Log of NMEA output** direct from GPS receiver

Ⓗ**Basic sky map** showing relative positions of individual numbered satellites

Standard Program Toolbar

The standard toolbar appears on every page within **OziExplorer** on your **Navigator**.

The functions contained on the toolbar are described in the following sections.

Click the links to jump to the section describing that function.

Ⓐ Page Selection

Ⓑ Add Waypoint button

Ⓒ Dim Button

Ⓓ Show/Hide Main Toolbar

Ⓔ Settings

Ⓕ Toggle GPS Suspend

Ⓖ Exit OziExplorer

Page Selection

Within **OziExplorer**, there are multiple screens (referred to as **pages**) which you can access. These pages provide specific views and /or functions while using **OziExplorer**.

Every page has the standard toolbar located on the right-hand side of the screen, but different pages may have a page-specific toolbar located at the bottom of the screen.

Tapping the **Select Page button** on the right-hand toolbar will pop up the **Select Page window**.

NOTE
The buttons showing selectable pages in the Select Page window will vary depending on your particular configuration.
Pages can be turned on or off using the Display Pages option on the Settings page.
The idea is that you can show only the specific pages that interest you, and turn off the ones you do not need.

 The currently selected page is indicated by a red border on the current page on the Select Page window.

Add Waypoint button

The **Add Waypoint** allows you to quickly add a waypoint at the current pointer or cursor position.

Waypoints and their associated functions are described in full in the Waypoints section of this manual

---

Dim button

The **Dim button** allows you to dim the screen for night driving.

GPS OFF / ON button

The GPS OFF / ON button will toggle GPS tracking on and off.

There are times in **OziExplorer** where it is necessary to stop tracking your current position, such as loading a map for a location other than where you are currently located.

eg. you are in Cape York, but wish to open a map showing the Kimberley region.

Exiting OziExplorer

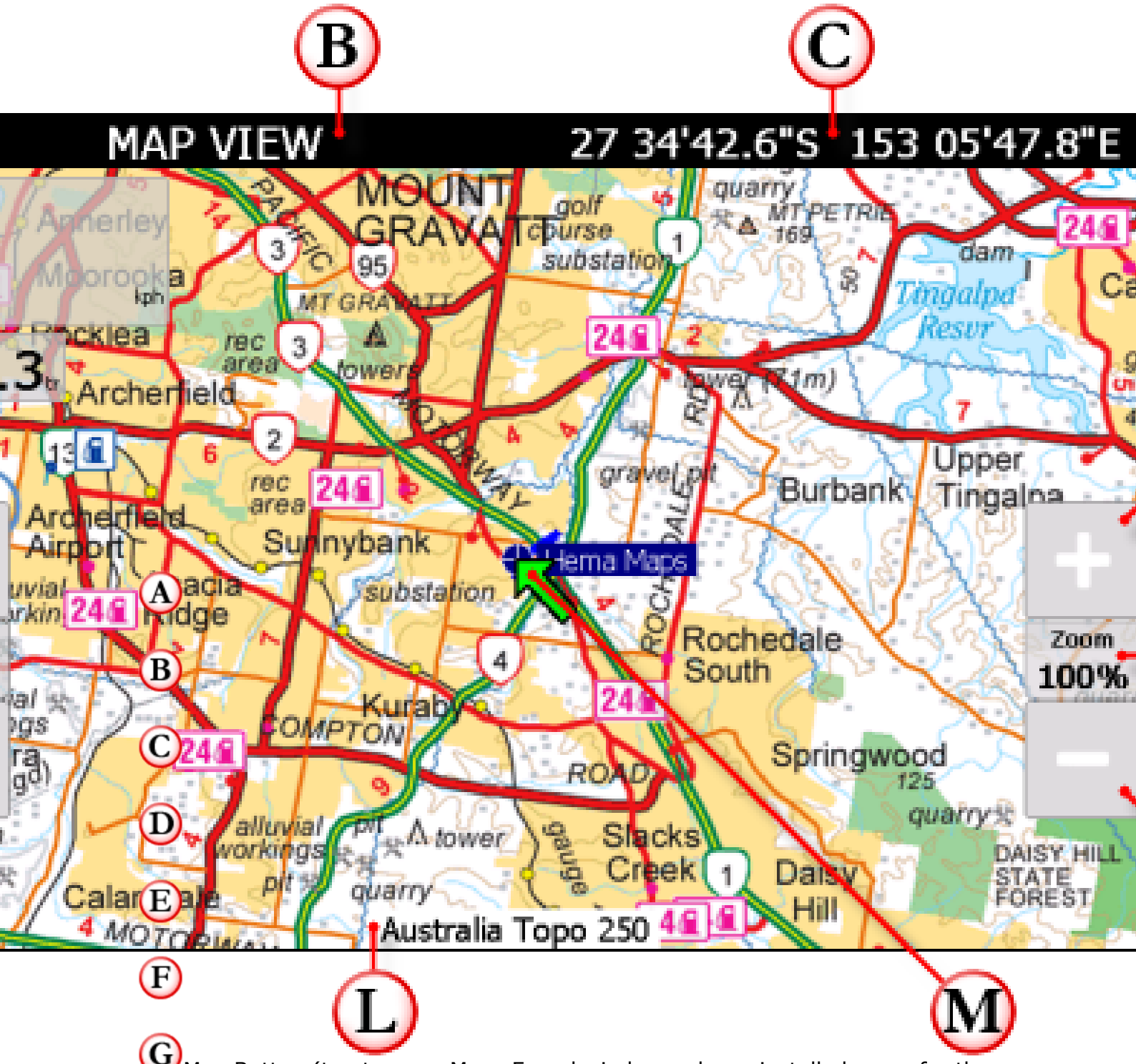
The **Exit button**  is accessible from all pages within **OziExplorer**.

It is located at the bottom of the Standard Program Toolbar.

Tapping the Exit button will prompt for confirmation before exiting the program.

Map Overlay information / buttons

In addition to the standard tool bar on the right-hand side of the screen, the following information and buttons are accessible on all pages containing the map display panel.



G Map Button (tap to open Maps Found window - shows installed maps for the current location)

H Map Down button (go to next lower scale map)


Zoom + button - Increase magnification level


Current Magnification Level


Zoom - button - Decrease magnification level


Current Map Name


Vehicle Position / Cursor Indicator

Page Selection

Within **OziExplorer**, there are multiple screens (referred to as **pages**) which you can access. These pages provide specific views and/or functions while using **OziExplorer**.

Every page has the standard toolbar located on the right-hand side of the screen, but each page will have a page-specific toolbar located at the bottom of the screen.

Tapping the **Select Page button** on the right-hand toolbar will pop up the **Select Page window**.

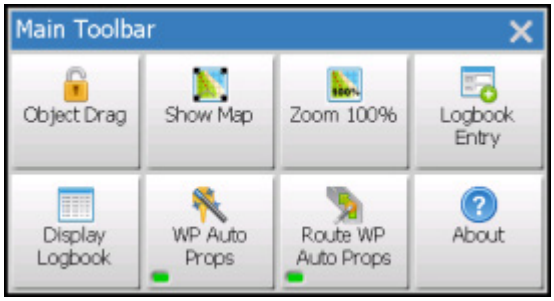
Ⓐ The currently selected page is indicated by a red border on the current page on the Select Page window.

Main Toolbar button

Tapping the **Main Toolbar button** will display the **Main Toolbar window.**

The Main Toolbar is designed to allow quick access to some commonly used functions within **OziExplorer**. The button is located on the standard toolbar located at the right-hand side of all pages.

The Main Toolbar window looks like this:



Active items are shown with a small green light displayed when active

Each function is described in the following sections. You can click the buttons on the image above to jump to the relevant section.

Object Dragging button

This option is **OFF** by default

The **Object Dragging button** activates Object Drag mode. This allows you to drag objects such as waypoints around the display.

Normally (when object dragging mode is switched **OFF**), tapping and dragging on an object such as a waypoint does nothing. That is; dragging the stylus around on a map will drag the map around.

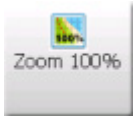
Show Full Map button

The **Show Full Map button** will instantly shrink the currently loaded map so that it fits vertically within the map display.

It is a quick way to get an overview of the currently selected map in its entirety.

The scale which the map is set to will vary according to the absolute dimensions of the map itself.

Zoom 100% button



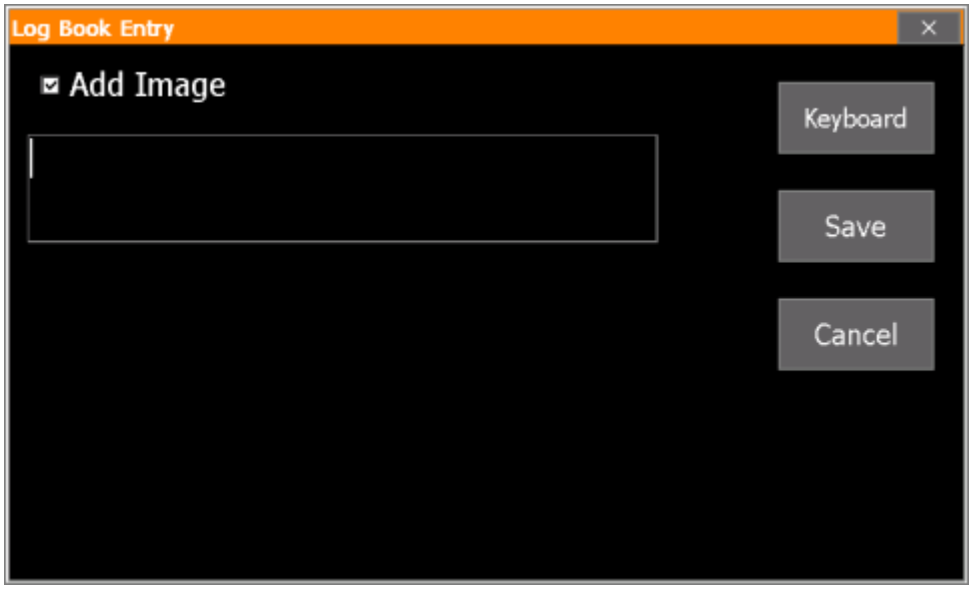
The **Zoom 100% button** will instantly set the current map to 100% zoom.

It is a quick way to zoom your map back to a readable form after using the Show Full Map function.

Logbook Entry button

The **Logbook Entry button** will add an File Entry to the logbook. The logbook files are stored on the SD card, under the **"OziExplorer Log Book"** folder.

The logbook file is a "snapshot" of where you are currently, and allows you to add comments about the location you are adding to the logbook.



The image above shows the process of adding an entry to the logbook. The "Add Image" checkbox, when ticked, inserts a small thumbnail image of the current map location into the logbook entry.

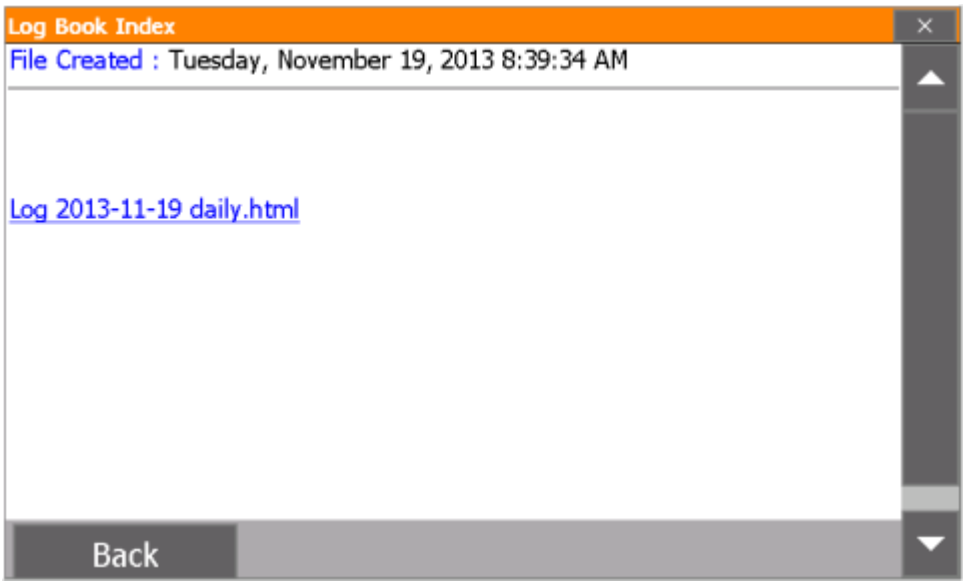
Text is inserted using the Onscreen Keyboard, by tapping the **Keyboard button**.

Tap the **Save button** when you have finished entering your text.

The logbook is stored in HTML format, so could be uploaded to a website, if desired.

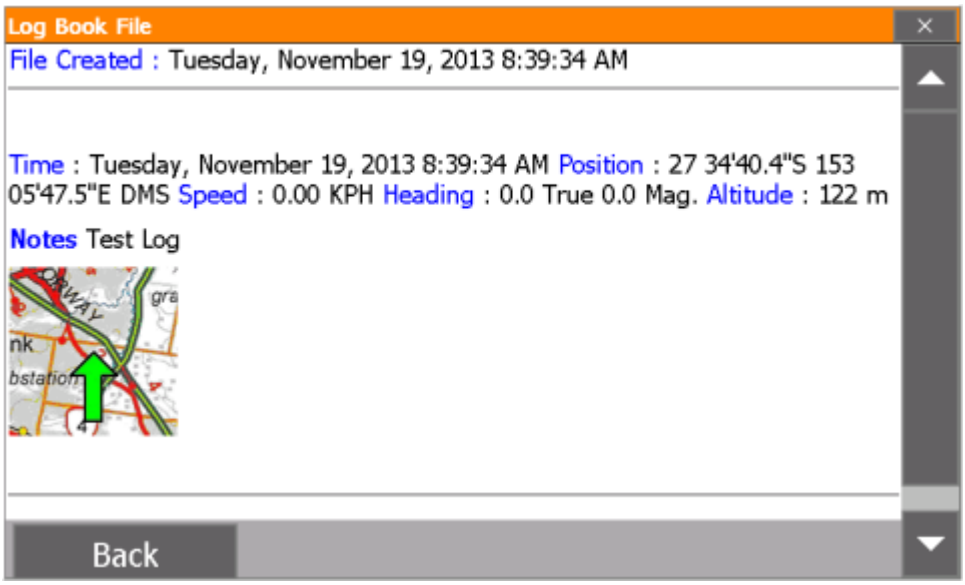
Display Logbook button

The Display Logbook button will open a window with an index of all logbook entries, as shown below.



The Log Book Index shows a clickable link with the date and time for each Log Book Entry present.

Tap the link for the entry to display it onscreen. The image below shows the example entry we created earlier.



Settings related to the Log Book function are accessible from the Log Book Settings window.

Waypoint Auto Properties button

This option is **ON** by default.

The **WP Auto Props button** will switch on the Waypoint Auto Properties feature.

When this feature is active, it means that **OziExplorer** will automatically open the Waypoint Properties window whenever a waypoint is created.

The WP Auto Props button provides the same function as the Auto Show Waypoint Properties button on the Waypoints Toolbar.

Route Waypoint Auto Properties button

This option is **OFF** by default.

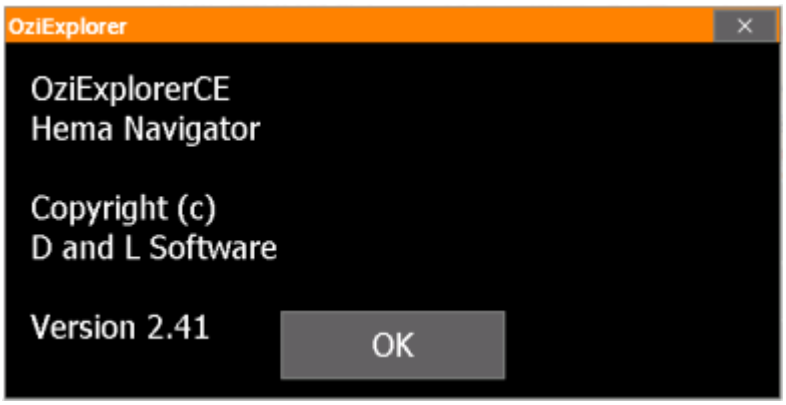
The **Route WP Auto Props button** will switch on the Route Waypoint Auto Properties feature.

When this feature is active, it means that **OziExplorer** will automatically open the Route Waypoint Properties window whenever a route waypoint is created.

About button

The **About button** will open a popup window showing the version number of the **OziExplorer** software currently installed on the **Navigator**.

Note that the version number is also displayed in the lower-right region of the Settings window.


OziExplorer
OziExplorerCE
Hema Navigator
Copyright (c)
D and L Software
Version 2.41
OK

Pages and their Functions

Tap the headings to jump to that topic in this User Guide

Map View

The main view within **OziExplorer** which gives the largest amount of screen real estate to the display of the currently selected map.

Maps

Similar to Map View page, but has a toolbar allowing access to functions related to Maps.

Waypoints

Similar to Map View page, but has a toolbar allowing access to functions related to Waypoints

Waypoint Nav

Similar to Map View page, but has information about the next Waypoint at the bottom of the screen for use during Waypoint navigation

Tracks

Similar to Map View page, but has a toolbar allowing access to functions related to Tracks.

Routes

Similar to Map View page, but has a toolbar allowing access to functions related to Routes.

Route Nav

Similar to Map View page, but has information about the next Waypoint at the bottom of the screen for use during Route navigation.

Altitude

Similar to Map View page, but has a number of altitude related parameters at the bottom of the screen.

Note: This page is turned off in the default configuration

Meters

Displays include a trip meter, multiple odometers, and altitude information.

Note: This page is turned off in the default configuration

Statistics

Displays some additional parameters related to Time, Speed and Acceleration

Note: This page is turned off in the default configuration

Profiles

Displays graphs showing Speed and Altitude over time

Note: This page is turned off in the default configuration

GPS Status

Displays the current status of the GPS and satellites, along with information on internal and SD card storage usage

Settings

Contains icons and functions allowing the customisation of **OziExplorer**

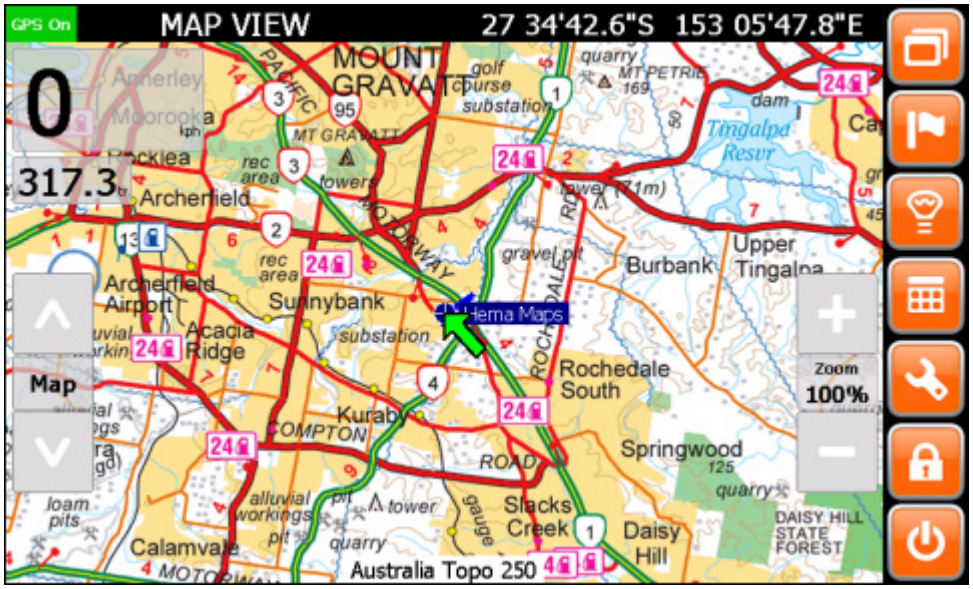
MAP VIEW Page

The **Map View page** is designed to give you the largest map view of the pages within **OziExplorer**.

This page has no additional toolbars, or other items to obscure your view of the current map.

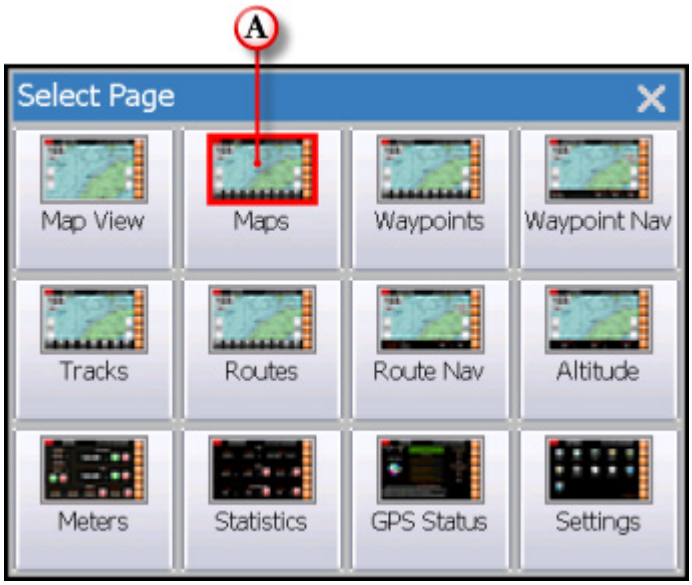
To change to the Map View page, tap the **Map View button** 

on the Select Page window



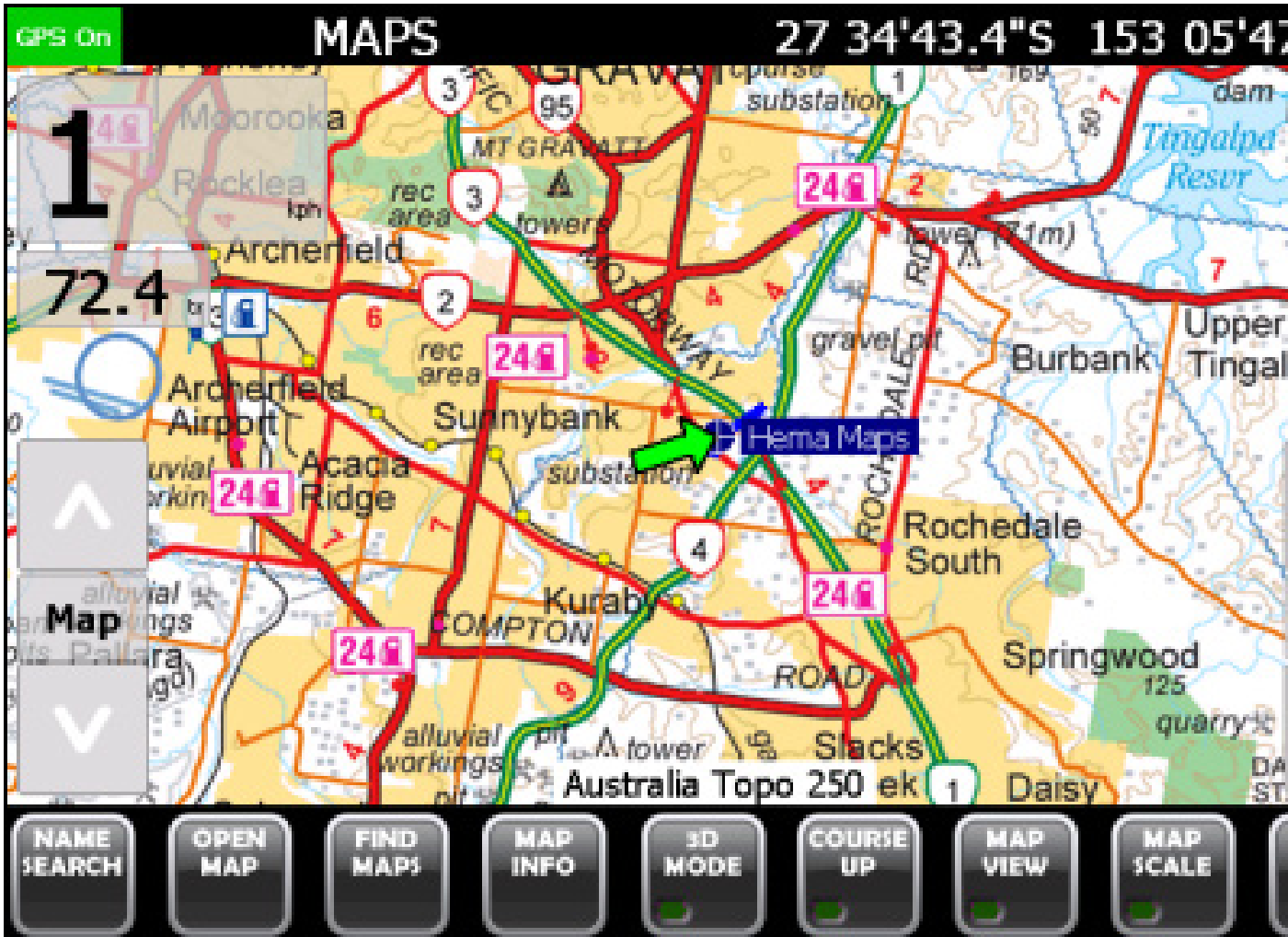
MAPS page

The **Maps page** is designed to group all the functions you require related to maps on the same page.



To change to the Maps page, tap the **Maps button** (A) on the Select Page window

The image below shows the MAPS page, with the Maps Page specific toolbar located along the bottom of the screen.



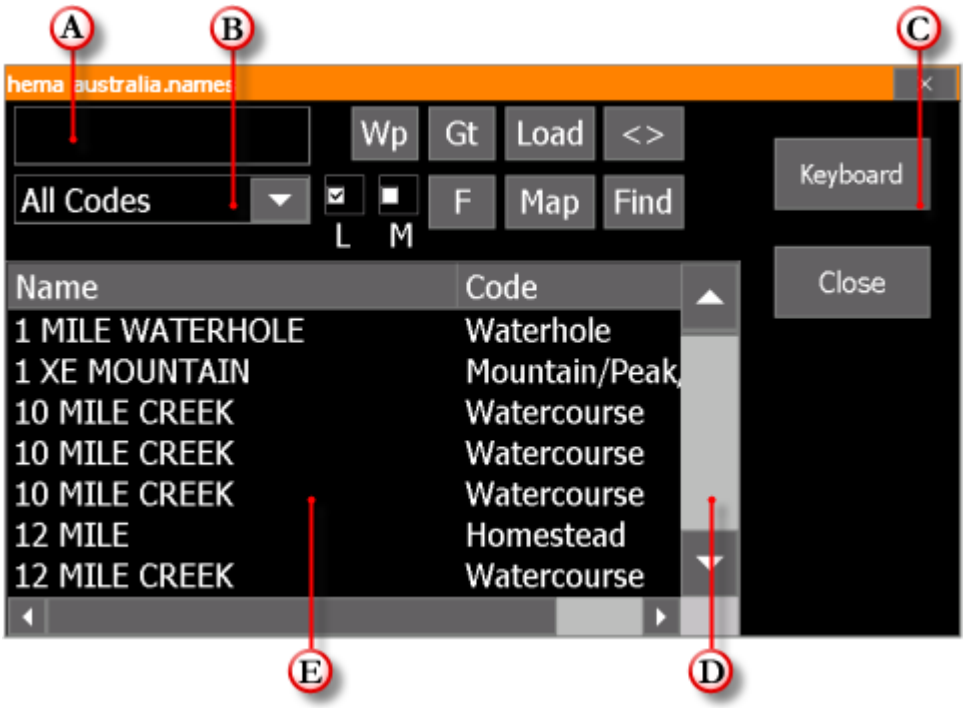
The **Maps page toolbar** allows you to access functions related to map operations within **OziExplorer**.

Each function is described in the following sections. You can click the buttons on the image above to jump to the relevant section.

NAME SEARCH button

The **NAME SEARCH button** allows you to locate places contained within the supplied names database ("**hema australia.names**").

When you tap this button, the **Name Search window** will pop up. The Name Search window initially looks a bit daunting, but after a read of this manual, and a bit of practice, it is quite easy to use.



Ⓐ**Search Entry** box. Tap in this box and open the on screen keyboard to enter your search item

Ⓑ**Code Selector** dropdown list

C **Keyboard button** - toggles the on screen keyboard

D **Scrollbar** - allows you to move up and down the list of search results

E **Search Results** panel

Below, each of the controls on the Name Search window are explained.

A 

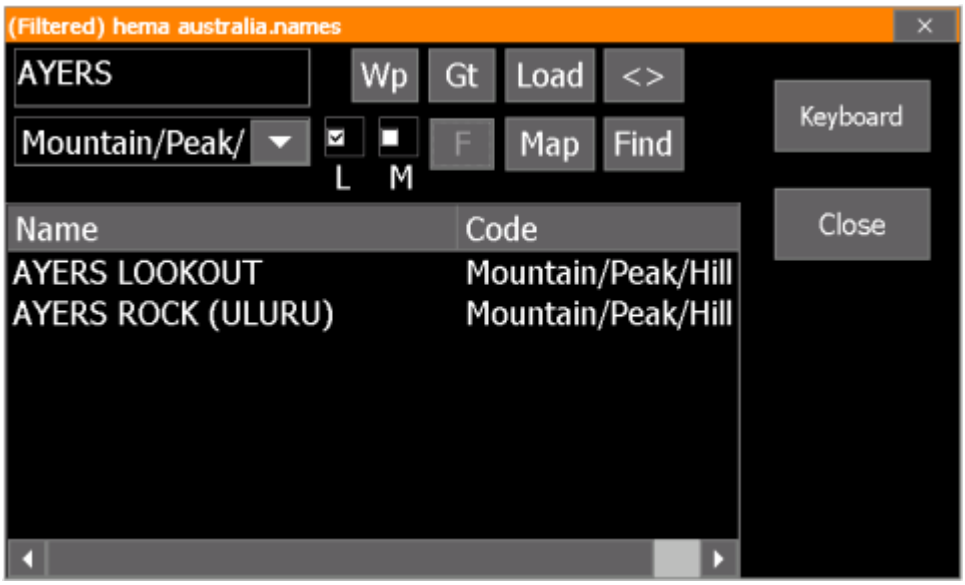
The white area at the top-left of the Name Search window is the **Search Entry** box, and is where you enter what it is you are searching for. Any number of characters can be entered into this field.

To enter text this field, tap inside the box, then tap the **Keyboard** button C on the Name Search window titlebar. This will open the on screen keyboard.

B 

The **Code Selector dropdown list** allows you to increase the speed of the search by specifying a category to search in.

i.e. You might type “AYERS” in the search field, then change the Code Selector to “Mountain/Peak/Hill” When you search, you will only find names which are Mountain’s, Peaks, or Hills, which have a name matching “AYERS”.



The search results panel shows the complete list of known names, or the results of any searching / filtering done on the name list.

The list can be scrolled up and down using the scroll bar to the right of the panel.

The **WP button** will create a waypoint at the location of the item currently selected in the search results panel.

To select an item in the search results panel, simply tap the required item.

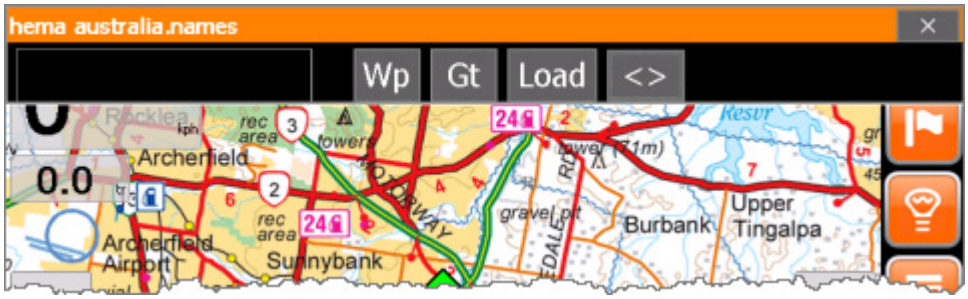
The waypoint name will be automatically set to the first 6 characters of the selected item.

The **GT (GoTo) button** will start navigation to the item selected in the search results panel.

The **Load button** allows you to load an alternate names file. This function is generally not used on the Navigator, as the default names file is used.

If third-party map packages are purchased for use on the Navigator, they may come supplied with their own names database file, which can be copied to the Navigator for use with that product.

The **Window Rollup button** will roll up the Name Search window to allow you to view the map visible underneath. Tapping the button again rolls the window back down.



The **L Checkbox** (which is switched **ON** by default), forces the searching / filtering function to be performed on the **left-most text** in the Search Entry box.

i.e. If you have the **L** option on, and you search for the word "Mile", it will match things such as

- **Mile** Creek
- **Mile** End
- **Mile**eyarra Hill

If you switch off the **L** option, and search for "Mile", you might instead find things such as

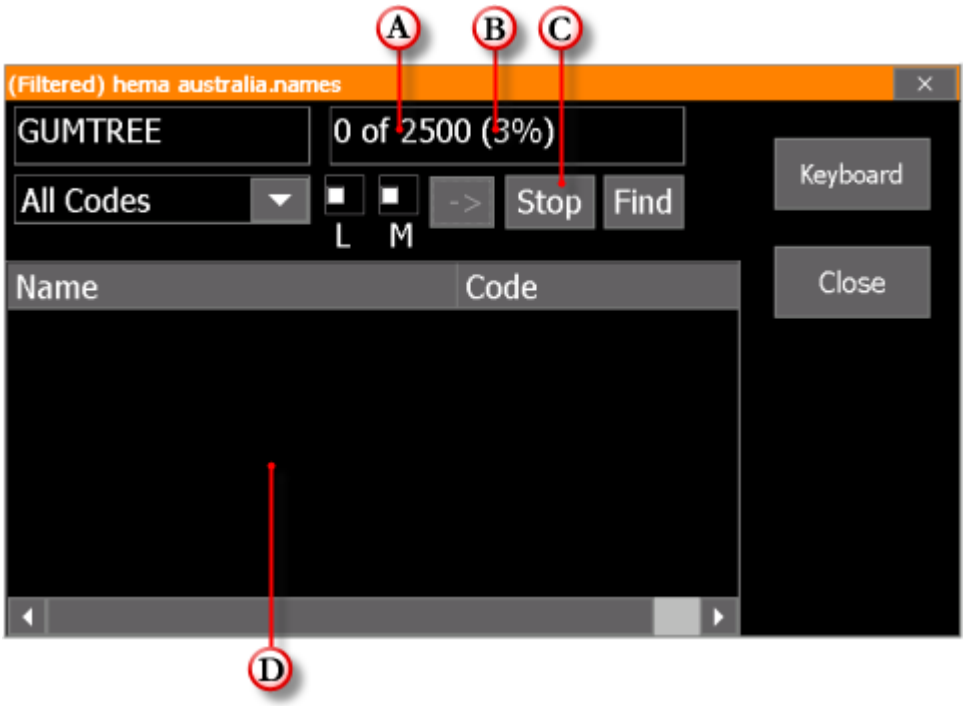
- 92 **Mile** Creek
- Big Seven **Mile** Creek
- Camo**mile** Creek

The **M checkbox** (which is **OFF** by default) will restrict your searching / filtering operations to items which are located on the currently displayed map

---

The **F (Filter) button**, tells the Name Search window to actually perform the search. The search function is called filtering because what you are actually doing is filtering, or limiting the display of the names database to the entries which match your specifications. Once you have selected your options using the other controls on the Name Search window, you tap the F button to perform your search.

While the search is being performed, the Name Search window will appear as shown here:



Ⓐ**Number of matches** out of total searched

Ⓑ**% of search** performed

Ⓒ**Stop button** - allows you to interrupt the search function

Search Results pane - shows names matched so far

Map

The **Map button** displays the position on a map of the item currently selected in the search results panel. Double-tapping an item in the search results panel will perform the same function.

Note that if the currently selected item in the search results panel is NOT on the currently displayed map, the active Map File Paths (as set in the **OziExplorer** configuration) will be searched for a map to display which DOES contain the selected item.

Notes about the Name Search function

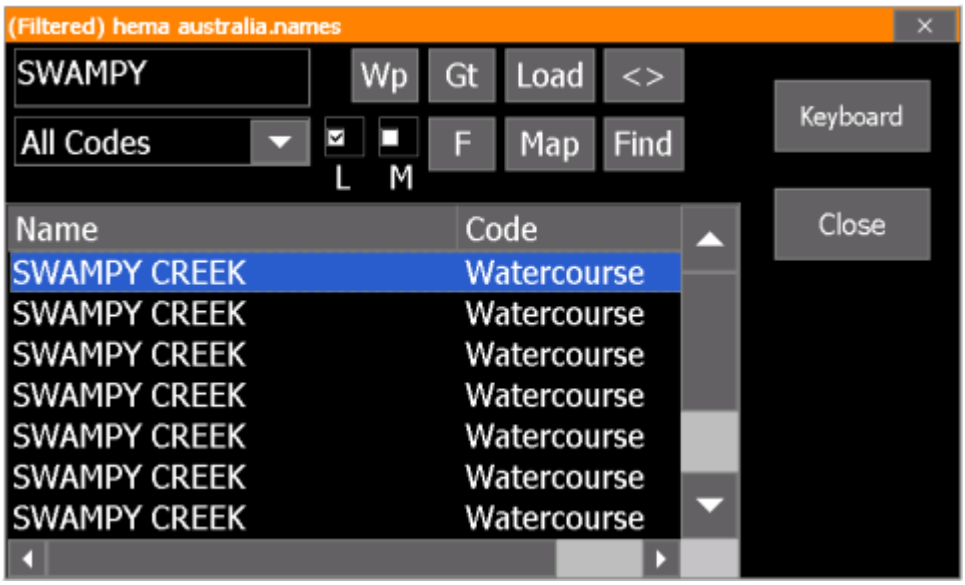
It is not possible to apply new filter conditions to a current filter; once a filter operation is complete, any new filter selections will turn off the current filter before applying the new filter selections.

The Name Search window will automatically "roll up" when an option is tapped where it is necessary to improve the view of the underlying map.

TIP
Certain third party **OziExplorer** format map products may come with their own predefined names database files. The databases supplied usually contain entries which are related to that specific map set. These can be loaded for use with the map sets using the **Load button** on the Name Search window.

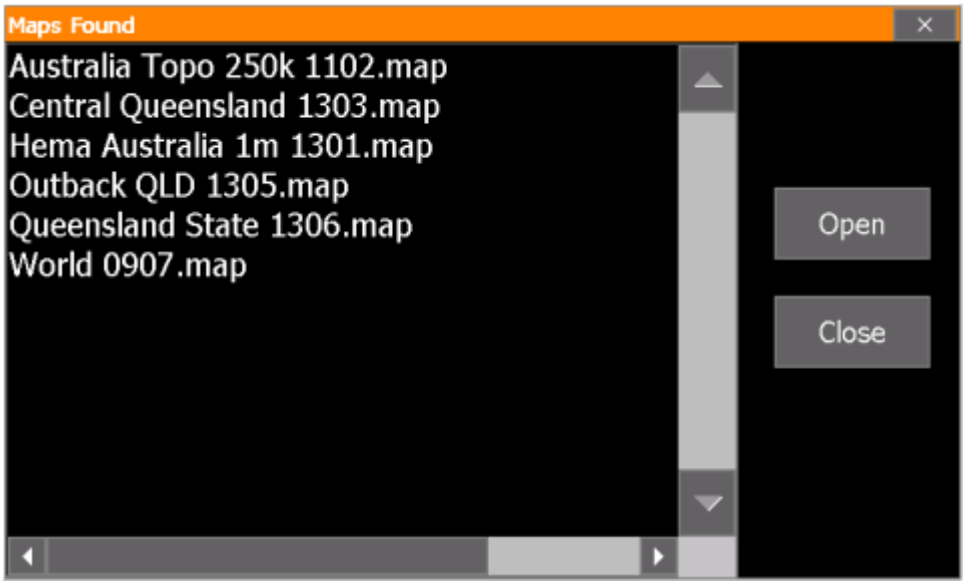
Find

The **Find button** allows you to find maps installed on your **Navigator** which contain the currently selected item in the Search Results pane.



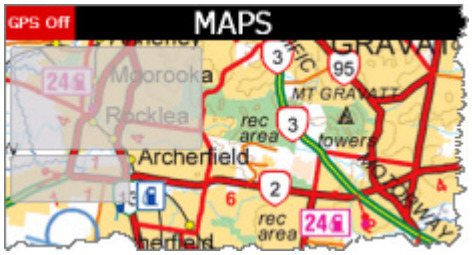
1. Tap the required item in the search results pane
2. Tap the **Find button**

OziExplorer will display a list of maps which contain the location you selected. You can open the map by double-tapping the name of the map you wish to load, or tapping once, then selecting the **Open button**.



Opening a map

NOTE
When GPS tracking is switched on, OziExplorer will always try to show your position on a map. If you want to manually open a map for a location ***OTHER*** than your current location, it is necessary to stop GPS tracking by tapping the GPS OFF/ON button on the right-hand toolbar. For example, if you are in Brisbane, and you wish to open the Cape York map, suspend GPS tracking before opening the Cape York map.
If you do not stop GPS tracking first, when you open the map for the other location, **OziExplorer** will open the map, but then re-display the original map showing your position. This can lead to the belief that the other map will not open.

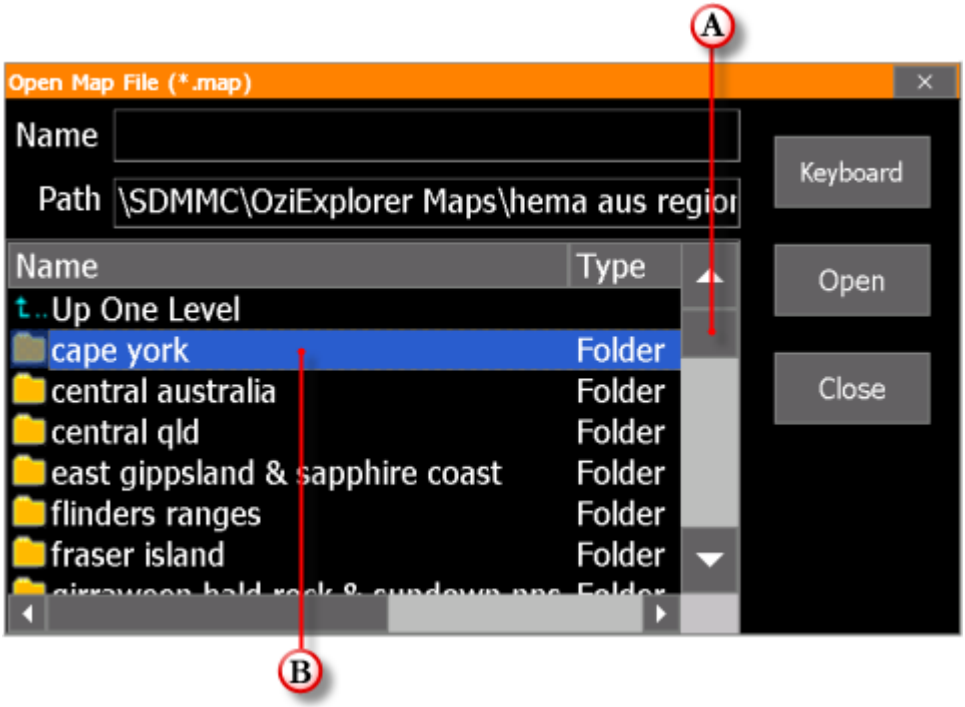


The **GPS Indicator** in the top-left of the screen will turn red, and display "GPS Off" when GPS tracking has been switched off. The speed and other GPS dependent indicators will not display any data while the GPS is off.

OPEN MAP button

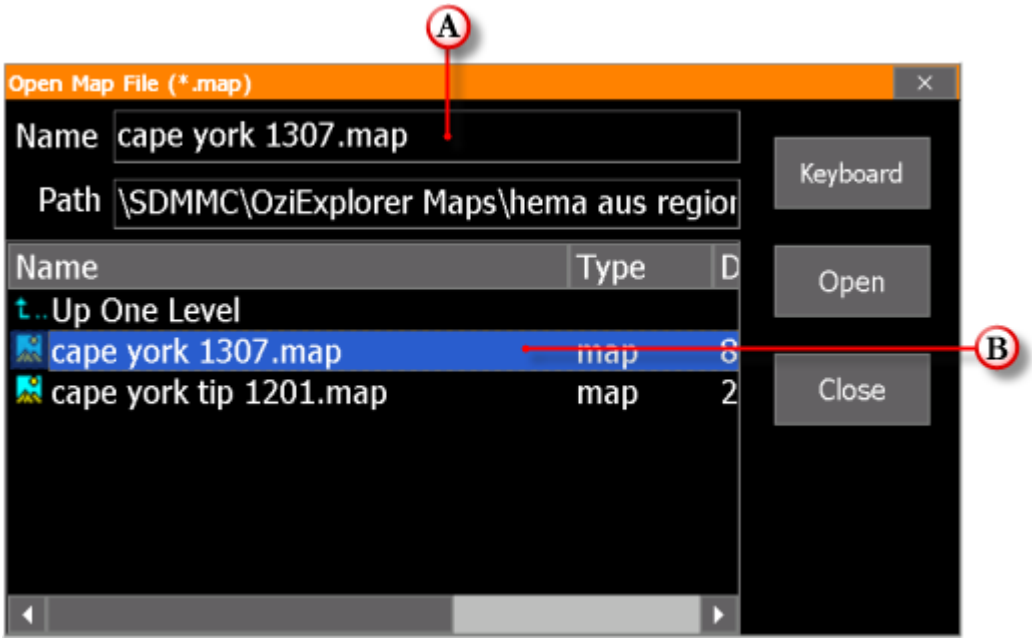
Map files may be opened by tapping the **Open Map** button on the bottom toolbar from the Maps page

The **Open Map File** window will appear. Browse to the required map by navigating the directory/file structure with the stylus until the required map is found.



Ⓐ Tap-and-drag to scroll up and down the list of map file names

Ⓑ Double-tap the required folder to open

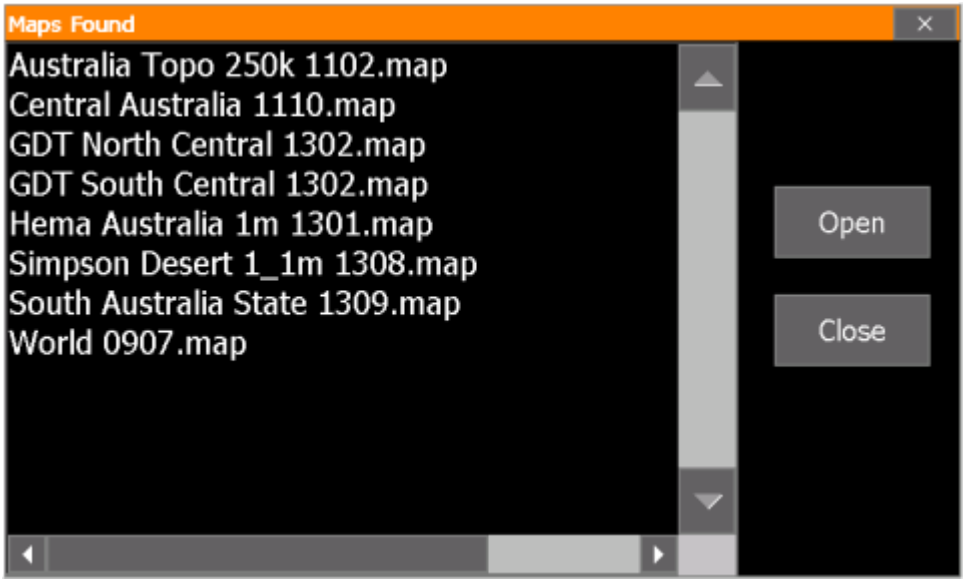


Ⓐ Selected map file name

Ⓑ Double-tap to open the selected map file, or single-tap the filename and then tap the **Open button** to load the desired map

FIND MAPS button

When you tap the **FIND MAPS** button, **OziExplorer** scans the configured **Map File Paths**, and displays the **Maps Found window**.



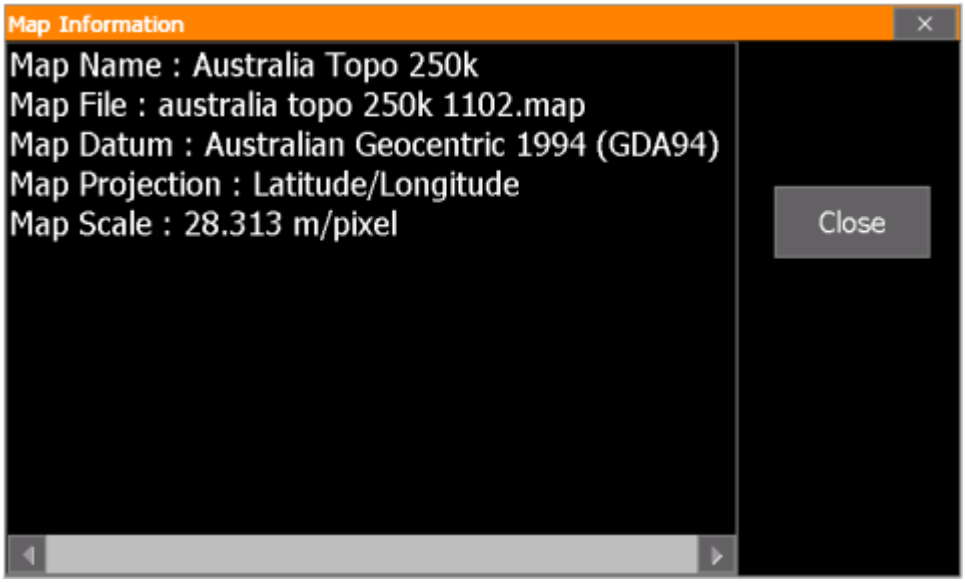
This window shows the names of indexed maps which cover the current cursor position.

You can open any of the found maps by double-tapping on the required map name, or single-tapping, and then tapping the **Open button**.

Note: This button performs the same function as the Map button located between the Map Up & Down buttons on the lower-left of the map panel.

MAP INFO button

The MAP INFO button will pop up the **Map Information window**.



This window shows some technical details about the current map.

Tap the **Close button** when you are done.

3D MODE button

When this option is active, a green indicator lights on the button.

When this option is turned on, the top of the map is rotated down using a true perspective view and provides for more map view ahead.

Note the following points in relation to the use of 3D Mode:

- This is just a display feature; the map cannot be dragged etc. in this mode.
- 3D mode is only displayed when the GPS is connected and tracking is enabled. If the GPS tracking is turned off, the view mode switches back to 2D mode. It switches back to 3D when GPS Tracking is re-enabled.
- **OziExplorer** must also have Course Up Mode enabled. Switching OFF Course Up Mode instantly switches off 3D mode.
- The Zoom Level must be set to 70% or higher.

COURSE UP button

When this option is active, a green indicator lights on the button.

When this option is turned on, and GPS tracking is currently on, the displayed map will rotate so that the direction of travel will be within roughly 45 degrees of vertical.

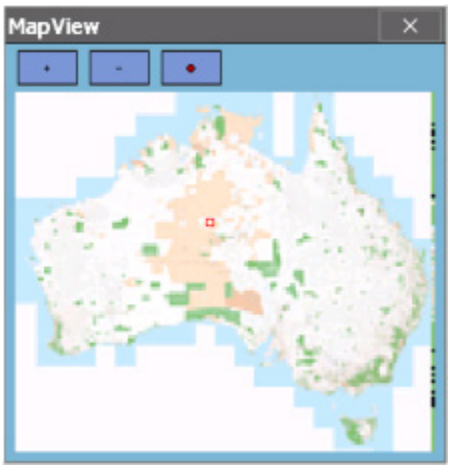
The map is only rotated in 90 degree increments to keep performance reasonable on mobile devices.

NOTE
Due to the fact that raster maps are an image of a map, rotating a map results in the entire image rotating, including text etc.

If you have modified the Look Ahead settings, the Cursor position will respect the Look Ahead value.

MAP VIEW button

When this option is active, a green indicator lights on the button.



This option will alternately show / hide the **Map View window**. The Map View window shows the currently loaded map in its entirety.

The section of the map which is currently displayed is highlighted with a small red box.

Tapping on the map within the Map View window will jump the main map view to that location (therefore it is a quick way to move around the currently loaded map). The location currently displayed by the main map view is shown in the Map View window as a red box.

NOTE
You can only tap away from your current position on the Map View window by suspending GPS tracking.

Use the **Plus and Minus buttons** to change the Map View window size. You cannot make the Map View window taller than the screen size allows.

Use the **Show / Hide Objects button** to alternately show and hide objects in the Map View window (such as Waypoints, Tracks and Routes)

MAP SCALE button

When this option is active, a green indicator lights on the button.

This button will alternately show and hide the **Map Scale Indicator**

The Map Scale Indicator itself can be moved around the screen, and placed where it is most convenient (i.e. Where it doesn't obscure other information you wish to view on screen).

To move the Map Scale Indicator, tap-and-drag while holding down the stylus on the screen.

INDEX MAPS button

The **INDEX MAPS button** will force **OziExplorer** to re-index the maps.

If the contents of the Map File Paths have changed (i.e. You have added some new maps) **OziExplorer** will generally automatically initiate a re-index of the map folders specified in the configuration, but it is occasionally necessary to force a manual re-index.

Waypoints

Introduction

A Waypoint is a co-ordinate representing a significant (to you) location on a map. Waypoints can be used to signify anything from course deviations, points of interest or anything else of personal significance to the user. Waypoints can also be linked together to create a Route. When waypoints are part of a Route, they are known as *Route Waypoints*.

OziExplorer stores all waypoints in a file (called **ceWaypoints.wpb**) on the internal memory of your **Navigator**.

It is possible to delete individual waypoints, or delete ALL waypoints from within this file, but it is not possible to delete the file itself completely from within **OziExplorer**.

To delete the actual waypoint file, you need to directly delete the file with your **Navigator** connected to your PC with the USB cable.

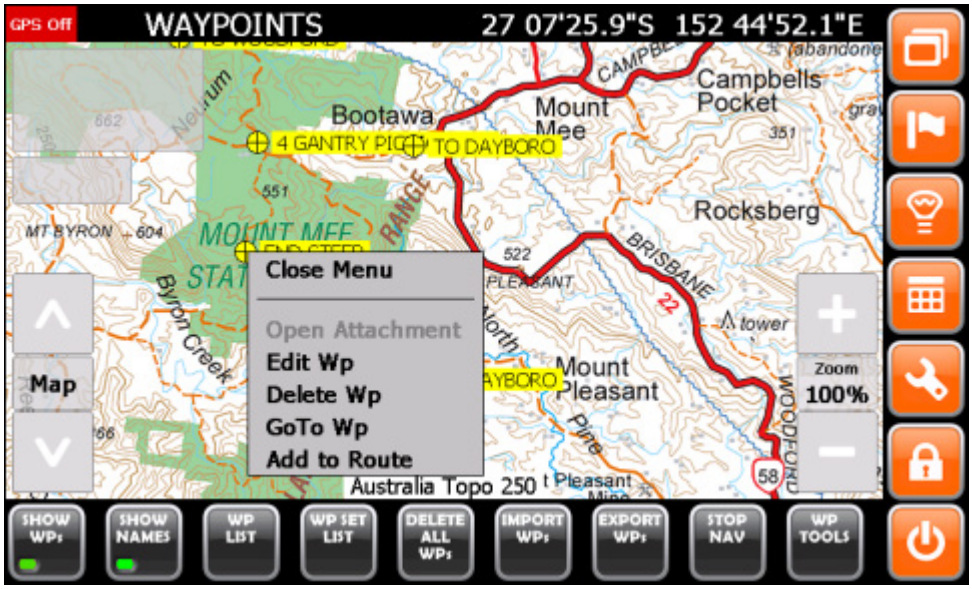
Similarly, when you export waypoints, they are copied from the internal waypoint file to a separate .WPT file in the **OziExplorer Data** folder on the SD card.

Once these files are on the SD card, it is not possible to completely delete them from within **OziExplorer**.

This must be done directly on the SD card using a card reader connected to your PC.

Waypoints which are visible on a map can be modified using the waypoint pop-up menu.

Access the waypoint pop-up menu by tapping on the waypoint, and holding the stylus down for a short period. The pop-up menu will then appear.



Tap-and-hold the stylus on the desired waypoint to access the waypoint pop-up menu.

From the menu, you can perform the following actions:

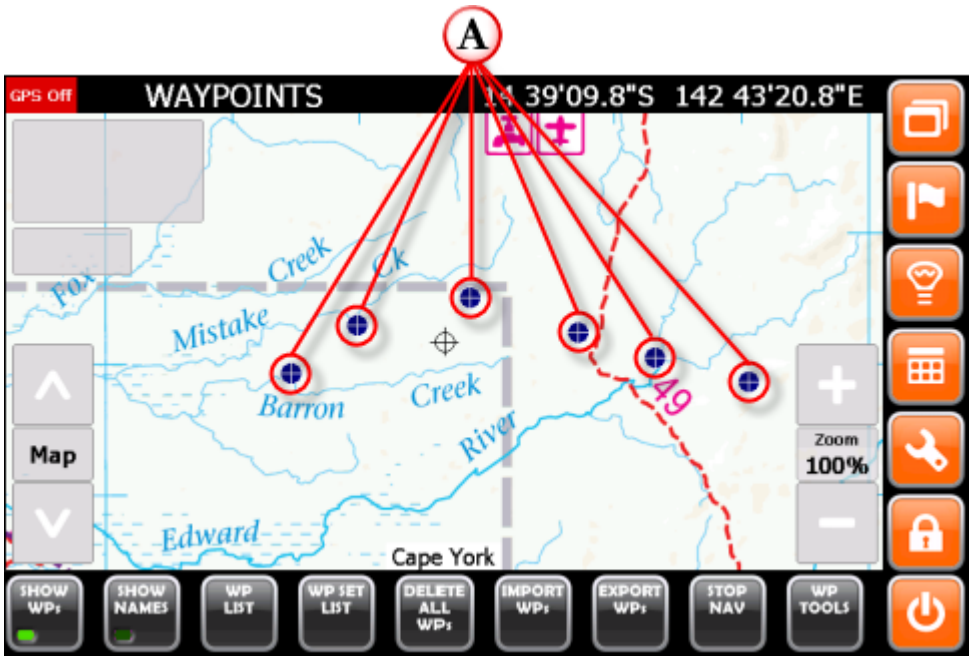
1. **Close menu** - closes the tap-and-hold popup menu without performing any actions
2. **Edit Wp** - Allows you to Edit the waypoint properties
3. **Delete Wp** - Deletes the selected waypoint
4. **GoTo Wp** - Starts Navigating to the selected waypoint
5. **Add to Route** - Convert the selected waypoint to a Route Waypoint, and add it to the current route if you have a route loaded. This function will create a new route if there is no route currently loaded.

Adding Waypoints

A waypoint can be added at ANY time while on a page displaying a map in **OziExplorer**.

Tap the **Add Waypoint** button on the right-hand tool bar, and a waypoint will be created at the current cursor location.

NOTE
This button is only active when on a page containing a map.
When you are on a page which contains no map display, the button changes to inactive mode, and will NOT create a waypoint when tapped.

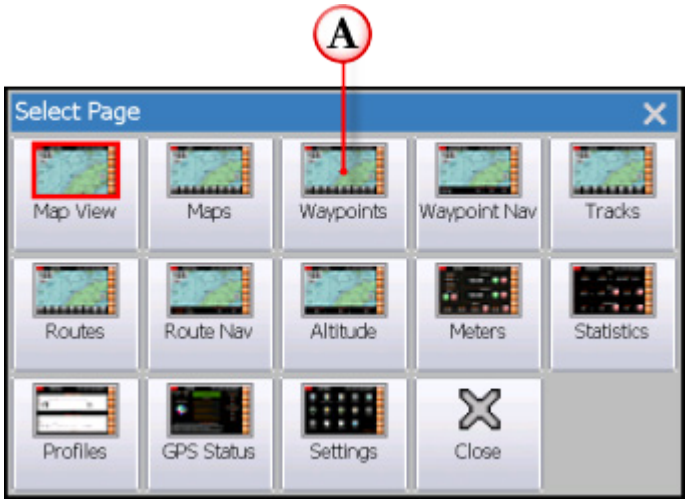


The image above shows a group of waypoints Ⓐ which have been added using the Add Waypoint button.

Note in this example that the SHOW NAMES option is currently switched OFF, so no waypoint names are visible.

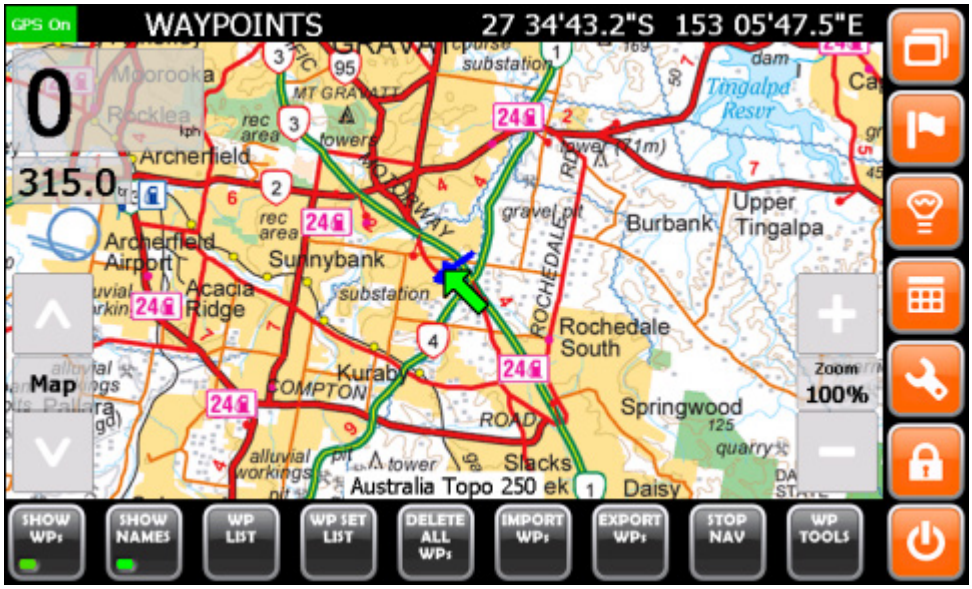
Waypoints page

You can perform most Waypoint related functions by going to the **Waypoints** page, using the Page Select menu button. The Waypoints page toolbar is located along the bottom of the screen.



To change to the Waypoints page, tap the **Waypoints** button (A) on the Select Page window

---



Waypoints Page toolbar

The Waypoints page toolbar allows access to functions related to waypoints within **OziExplorer**.

Each function is described in the following sections. You can click the buttons on the image above to jump to the relevant section.

SHOW WPs button

When this option is active, a green indicator lights on the button.

This option is switched ON in the default configuration

Tapping the **Show WPs button** will alternately show or hide waypoints overlaid on the current map.

Note that any waypoints in the Waypoint List are not removed by hiding them. This function merely removes them temporarily from view to help keep the map display clear and easy to read.

SHOW NAMES button

When this option is active, a green indicator lights on the button.

Tapping the **SHOW NAMES button** will alternately show or hide the Waypoint Names associated with waypoints overlaid on the current map.

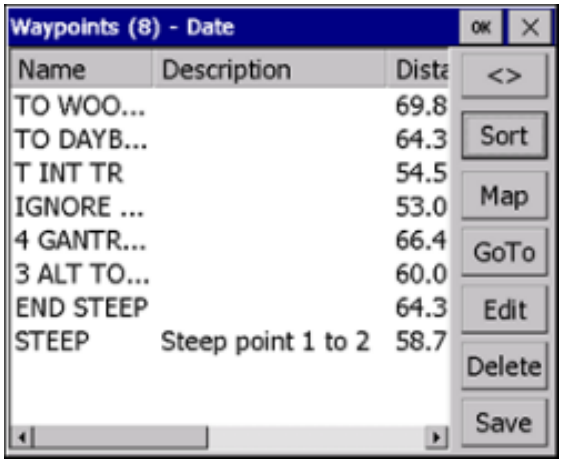
Every waypoint has a name field associated with it. Obviously, if there are a large number of waypoints displayed, the display can get cluttered. This is a way of minimising display cluttering by only showing the waypoint symbols themselves.

WP LIST button

Tapping the **WP LIST button** will open the **Waypoints window**.

The Waypoint List allows you to

- Locate a waypoint on a map
- Display information about the waypoint (description, position etc.)
- Delete a waypoint
- Edit waypoint properties
- Navigate to a specified waypoint



When you first see the waypoint list, if any waypoints are present, the waypoints are sorted in Date order (ie. the date of the waypoints were created).

The waypoint list can contain up to 20000 waypoints.

Other buttons on the Waypoint List window

The **Window Rollup button** will roll up the Waypoint List window to allow you to view more of the current map visible underneath.

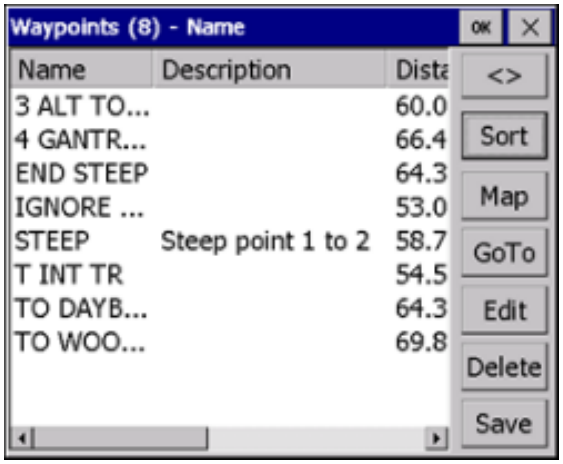
Tapping the button again rolls the window back down.

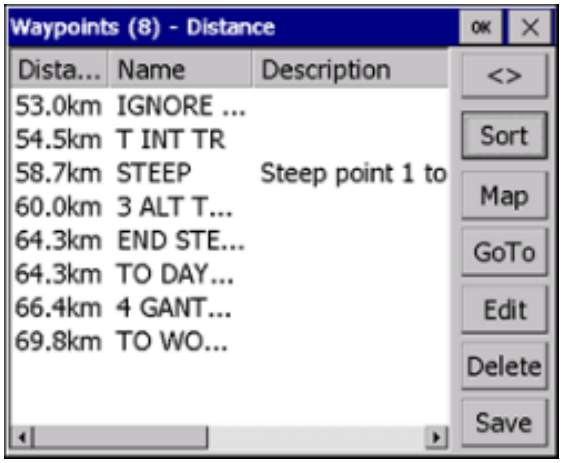
This is an example of how the Waypoint List window looks when rolled up.

The **Sort button** cycles the waypoint list between being sorted in the following order

1. Waypoint Created Date
2. Waypoint Name
3. Waypoint Distance (from your current position)

This is an example of what the Waypoint List window looks like when sorted into Name and Distance order. Note that the window title bar shows the current sort order.





The **Map button** will locate the selected waypoint on a map. If the waypoint is NOT positioned within the boundaries of the current map, **OziExplorer** will load a map which can be used to display the selected waypoint.

First, highlight the waypoint in the Waypoint List window that you wish to locate by tapping it once.

Then, when you tap the Map button, the Waypoint List window will roll up, and the map will jump to the location of the waypoint, which will be shown centred on the screen.

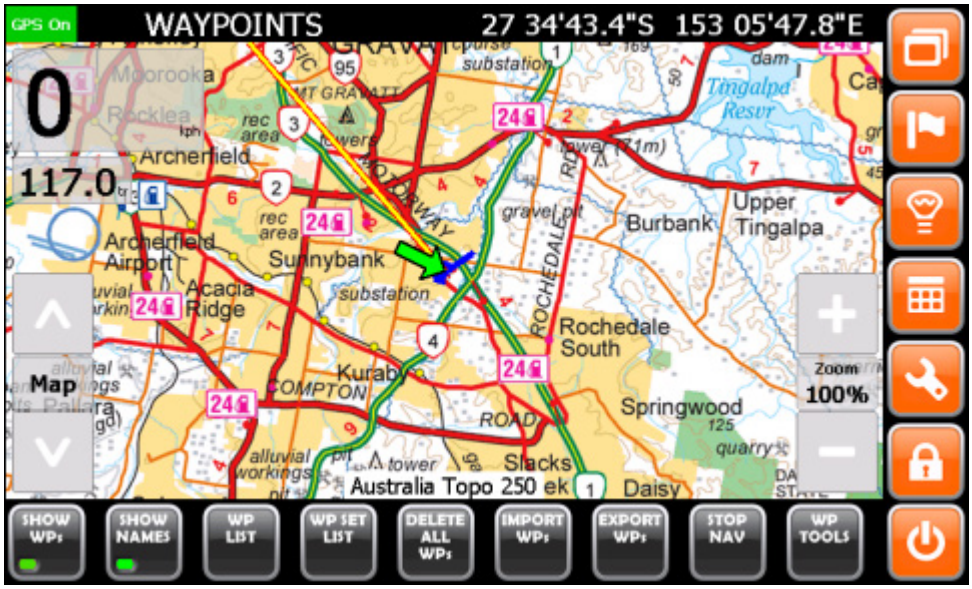
GPS Tracking will be suspended when **OziExplorer** jumps to the waypoint location. Tapping the GPS ON/OFF button will restart GPS tracking.

GoTo

The **GoTo button** will start navigating to the selected waypoint.

First tap the waypoint in the Waypoint List window that you wish to navigate to, and then tap the Goto button.

When you close the Waypoint List window, you will see a straight line drawn between your current location and that of the selected waypoint. The line colours can be set in the Settings > Navigation window. The default colour is a yellow line, with red outline.



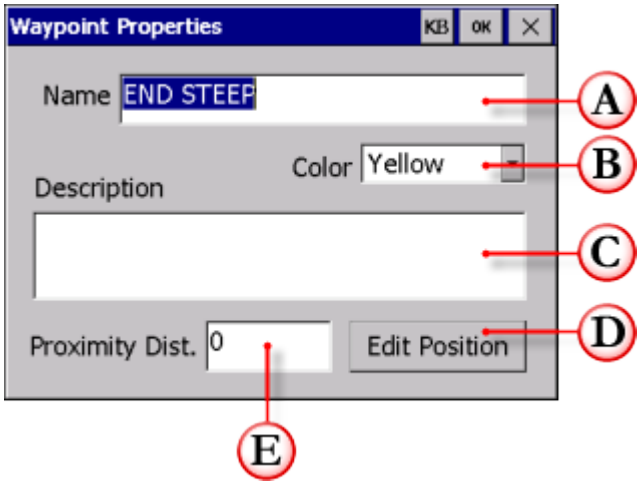
Edit

The **Edit button** allows you to modify properties of an individual waypoint.

1. Tap once on the required waypoint to select it
2. Tap the **Edit** button

Waypoint Properties window

The **Waypoint Properties** window will open, allowing you to modify the following waypoint properties:



A Name

B Symbol Colour

C Description

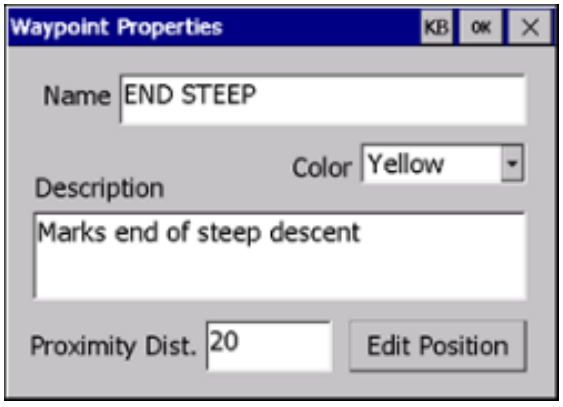
D Edit Position button

E Proximity Distance

The proximity warning alarm is used to signal your arrival at or near a waypoint. By default **OziExplorer** activates the Check Proximity configuration setting.

This setting will cause an alarm to be triggered when you are within the specified distance of a waypoint (specified in metres). This distance can be specified for each individual waypoint using the Waypoint Properties window.

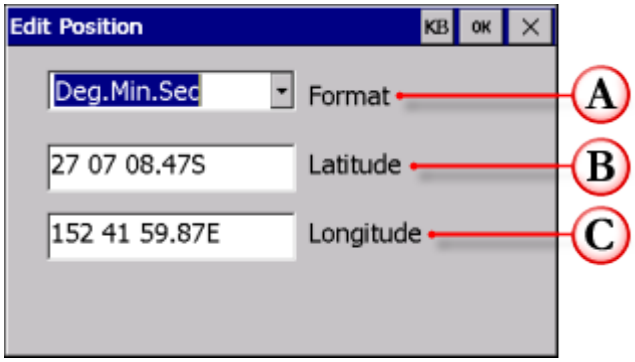
In the example below, we have specified that we wish to trigger an audible alarm when we are within 20 metres of the waypoint called END STEEP. We have also added a description to this waypoint.



Individual waypoint properties can be modified by tapping on the required field and using the on screen keyboard to enter the required data.

Edit Position

Tapping the **Edit Position** button allows you to modify the actual location data of the selected waypoint using the Edit Position window.



You can modify the following properties:

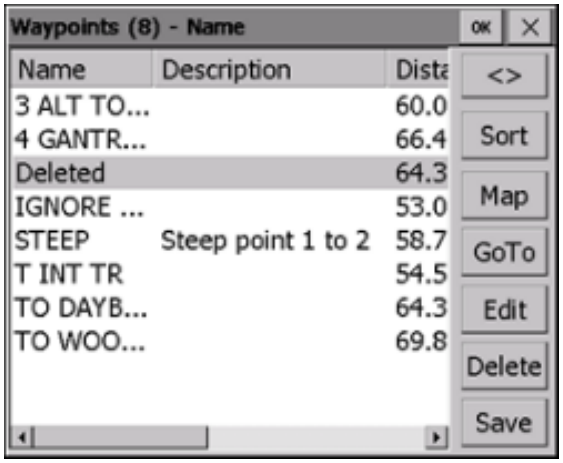
Ⓐ **Position Format (Degrees / Degrees.Minutes / Degrees.Minutes.Seconds / UTM)**

Ⓑ **Latitude**

Ⓒ **Longitude**

Delete

The **Delete button** allows you to remove individual waypoints from within the Waypoints list window.



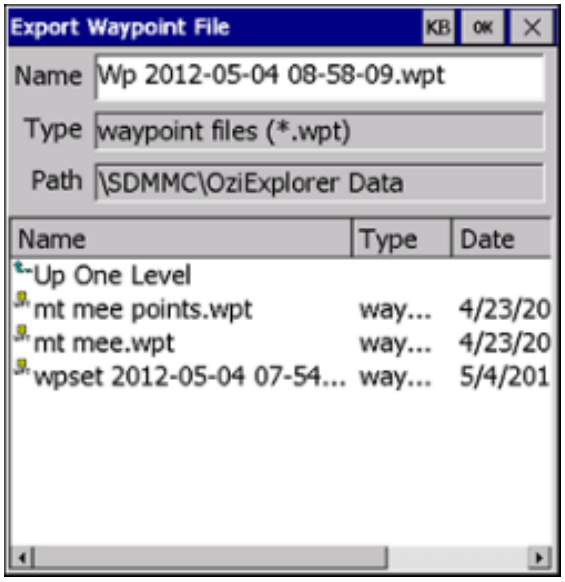
1. Highlight the required waypoint in the Waypoint list window by tapping it once.
2. Tap the Delete button. The selected waypoint will be ***marked*** as deleted.

NOTE
If you accidently mark the wrong waypoint for deletion, you can undo it by tapping the Delete button again BEFORE you close the Waypoint List window by tapping the OK button. If you close the Waypoint List window using the X button, any waypoints marked for deletion will NOT be deleted.

After closing the Waypoint List window using the **OK button**, any waypoints which are marked as deleted will be permanently removed from the Waypoint List.

The **Save button** will export the selected **individual waypoint** into a file. You can then do things such as copy your exported waypoint to a PC, and email it to a friend etc.

1. Highlight the required waypoint in the Waypoint list window by tapping it once.
2. Tap the Save button, you will see the Export Waypoint File window as shown below.

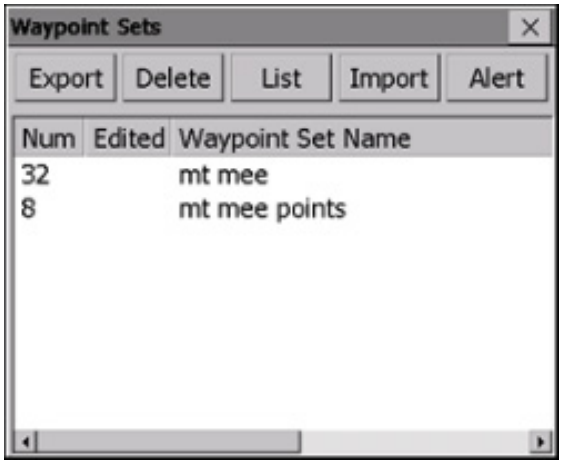


By default, the filename will be "Wp" followed by the current date and time. You can give the file your own name using the on screen keyboard.

The Path will contain the default setting for Data File Path as specified in the **OziExplorer** Settings. By default, this is the **OziExplorer Data** folder on the SD card.

WP SET LIST button

Tapping the **WP SET LIST button** will open the **Waypoint Sets window**.



Multiple waypoint files containing sets of waypoints can be imported for overlaying on the map.

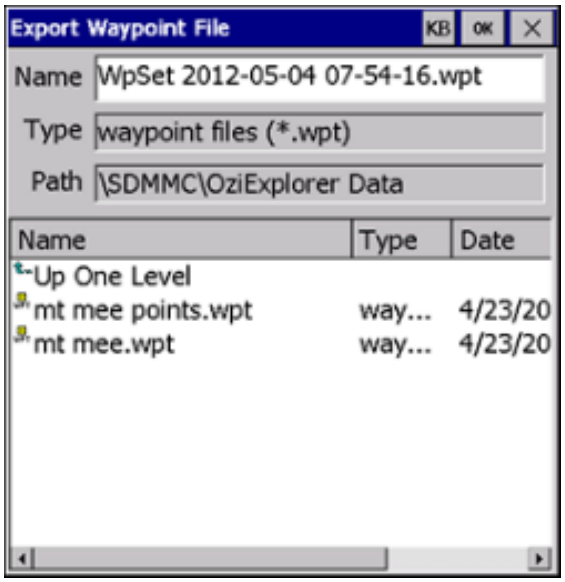
In the example above, you can see that there are two sets of waypoints currently loaded (via **Import** button). One has 32 waypoints in it, the other has 8.

The number of sets is not limited; however, there is a limit to the total number of waypoints which can be loaded. The waypoint list can contain up to 20000 waypoints.

Other buttons on the Waypoint Sets window

With the **Export button**, you can export an individual Waypoint Set to a file.

When you tap this button, you will see the Export Waypoint File window as shown below

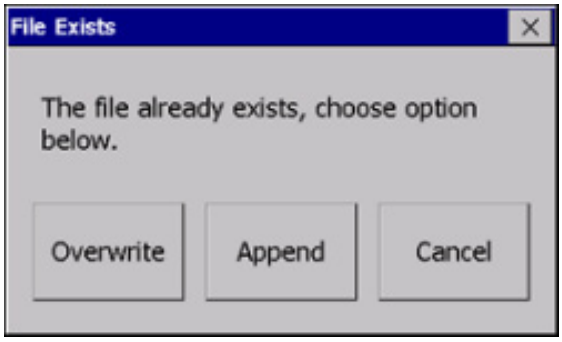


By default, the file name will be "WpSet" followed by the current date and time.

You can give the file your own name using the on screen keyboard button.

If you wish, you can tap on an already existing file in the file list in the bottom section of this window.

If you tap on a pre-existing file, you will be prompted to determine how to handle this operation.



Your choices consist of

Overwrite

This option will overwrite the preexisting file with your new data. This means that any data which was previously stored in this file will be completely overwritten, and therefore lost.

Append

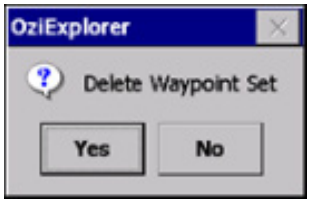
This option will append or add your newly saved data to the data already in the selected file.

Cancel

This option will cancel the current save operation. Therefore, if you change your mind about overwriting or appending to a preexisting file, use the Cancel button to go back and choose a new file name.

The **Delete button** will delete the selected Waypoint Set from the set list.

When you tap the Delete button, you will be prompted to confirm your action as shown below.



Tap the **Yes button** to continue and delete the selected Waypoint Set, or tap the **No button** to leave it as it is.

Waypoints which are in the selected waypoint set will be removed from display on the map.

NOTE This does not delete the waypoint file which is saved on the SD card, it simply removes the imported set from the current waypoint sets.

The **List button** will display the list of waypoints contained within the selected Waypoint Set.

Note that the Waypoint List window which is displayed using this option is identical to the "standard" Waypoint List window, and the buttons etc. perform the exact same functions.

See Waypoint List window for details of those functions

The **Import button** allows you to choose a previously exported waypoint file (containing one or more waypoints) to import into a set.

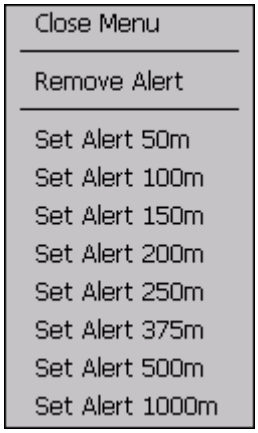
The Waypoint Set will inherit the same name as the file you choose to import, so it is a wise move to give your exported waypoint files a sensible name, which clearly identifies the contents (i.e. Cape-York-WPs)

To perform the import, you can one of the following:

1. Highlight the filename which you wish to import by tapping it, then tap the OK button on the window title bar
2. Double-tap on the selected filename

The **Alert button** will set a global proximity alert when any of the waypoints in the currently selected set are approached.

When you tap the Alert button, a popup menu will appear which allows you to choose the alert proximity distance, or remove an existing alert.

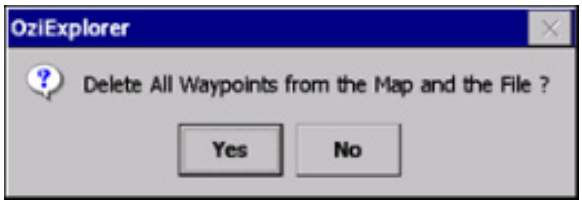


If you change your mind, simply tap the **Close Menu** item.

DELETE ALL Waypoints button

Tapping the **DELETE ALL WPs button** will delete all waypoints from the internal waypoints file in **OziExplorer**.

It will not remove the waypoint file completely; it will simply clear the file. Note that if the current waypoint list has been populated by loading (importing) Waypoint SETS, the effect of the DELETE ALL WPs button is to remove all currently loaded waypoint sets.



When you use this option you will be prompted to confirm that you do, indeed, wish to delete all your waypoints.

Be sure that this is what you want to do ***BEFORE*** tapping the **Yes button** to confirm the deletion

If you change your mind, simply tap the **No button** to cancel the waypoint deletion.

See the Waypoints introductory text for some more information on **OziExplorer** Waypoints

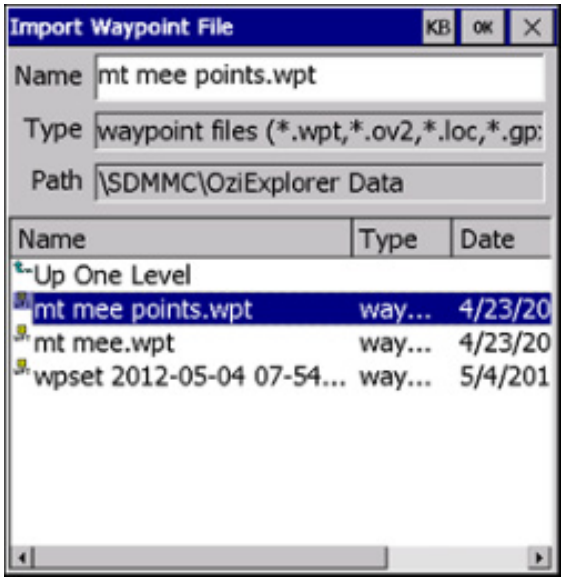
---

IMPORT WPs button

The **IMPORT WPs button** allows you to choose a previously exported waypoint file (containing one or more waypoints) to import into the current waypoint list.

OziExplorer allows you to import .WPT, .OV2, .LOC, and .GPX file types.

Note that if the files you are attempting to import do not have valid waypoint data within them, then nothing will be imported.



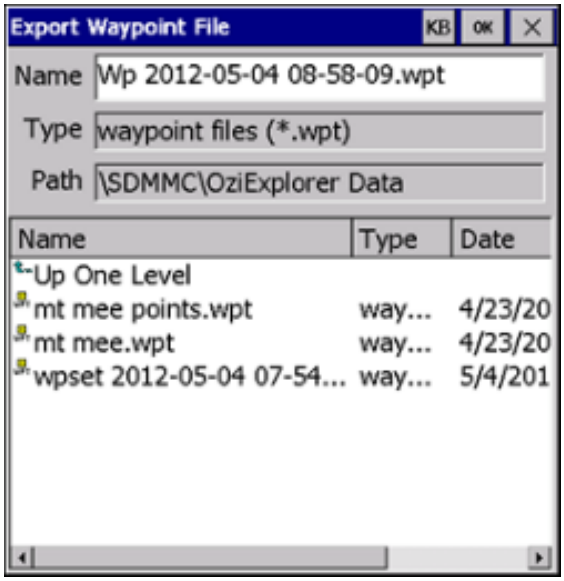
To perform the import, you can do one of the following:

1. Highlight the filename which you wish to import by tapping it, then tap the **OK** button on the window title bar
2. Double-tap on the selected filename

IMPORTANT NOTE
Repeatedly importing the same waypoint file will add the waypoints contained within the waypoint file multiple times.

EXPORT WPs button

The **EXPORT WPs button** allows you to export ALL of the waypoints in your current Waypoint List to an external file.



By default, the filename will be "Wp" followed by the current date and time. You can give the file your own name using the on screen keyboard.

The Path will contain the default setting for Data File Path as specified in the **OziExplorer** Settings. By default, this is the **OziExplorer Data** folder on the SD card.

STOP NAV button

The **STOP NAV button** cancels the current navigation, if you are currently navigating to a Waypoint or a Route Waypoint.

Waypoint toolbar

The Waypoint Toolbar can be accessed using the TOOLBAR button from the Waypoints page.

The Waypoint toolbar is a standard **OziExplorer** toolbar, and some of the functions are replicated on the Waypoints page toolbar.

Each function is described in the following sections. You can click the buttons on the image above to jump to the relevant section.

Add Waypoints button

The **Add Waypoints button** allows you to add new waypoints.

This function is similar to using the Add Waypoint button on the standard toolbar.

The main difference between the two buttons is that the Add Waypoint button on the standard toolbar will create one waypoint at the current cursor position, whereas this button switches to **Adding Waypoints** mode, and will create a waypoint each time you tap the screen while activated.

This makes it useful for adding multiple waypoints in a single session.

Delete Waypoints button

The **Delete Waypoints button** will remove all visible waypoints and also delete them from the waypoint file.

The Delete Waypoints button provides the same function as the DELETE ALL button on the Waypoints Page Toolbar.

WARNING
Using this function will remove your waypoints from the waypoints file permanently, so be sure you wish to do this before using this function. Any waypoints which have been exported are not cleared by this function.

Show Waypoint List button

The **Waypoint List button** provides the same function as the WP LIST button on the Waypoints Page Toolbar.

Load Waypoint File button

The **Load Waypoint File button** provides the same function as the Import WPs button on the Waypoints Page Toolbar.

Save Waypoint File button

The **Save Waypoint File button** provides the same function as the Export WPs button on the Waypoints Page Toolbar.

Show / Hide Waypoint Names button

The **Show / Hide Waypoint Names button** provides the same function as the SHOW NAMES button on the Waypoints Page Toolbar.

Auto Show Waypoint Properties button

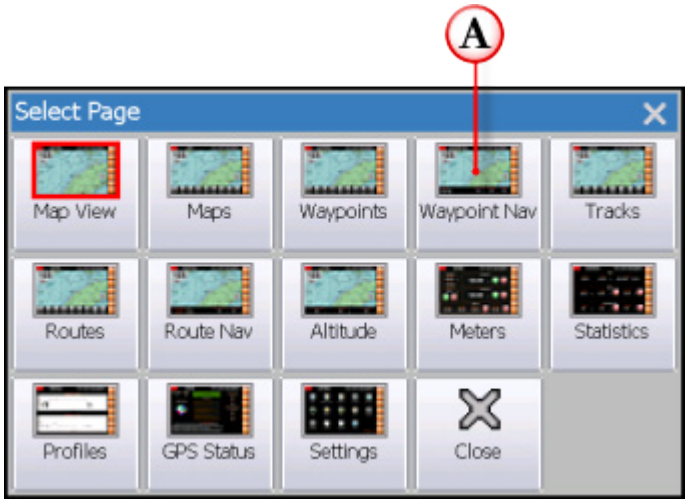
The **Auto Show Waypoint Properties button** provides the same function as the WP Auto Props button on the Main Toolbar.

Close Toolbar button

The **Close Toolbar button** will close the Waypoint Toolbar.

Waypoint Nav page

The purpose of the **Waypoint Nav page** is to give you some basic information related to the next waypoint during navigation.

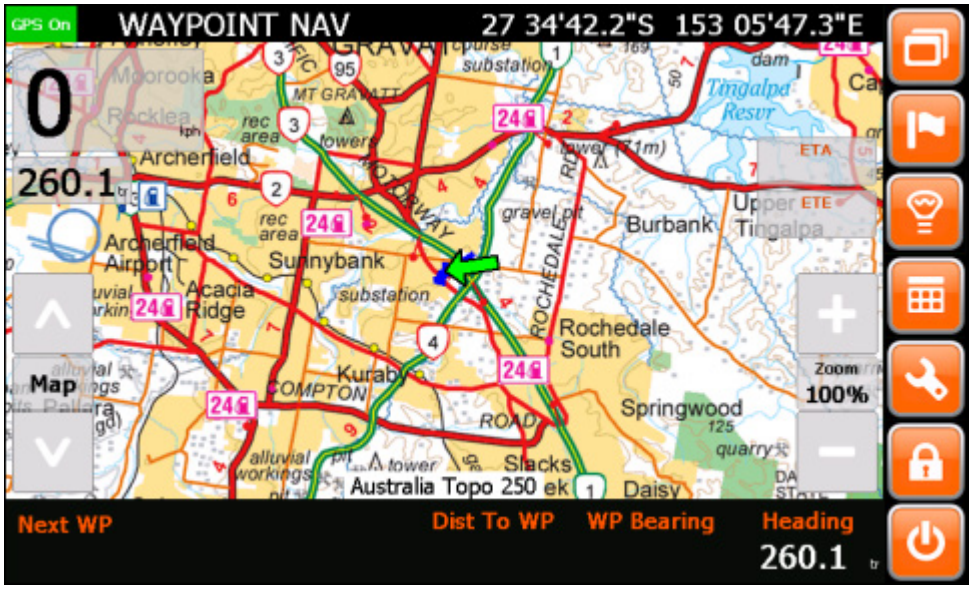


To change to the Waypoint Nav page, tap the **Waypoint Nav button** (A) on the Select Page window

---

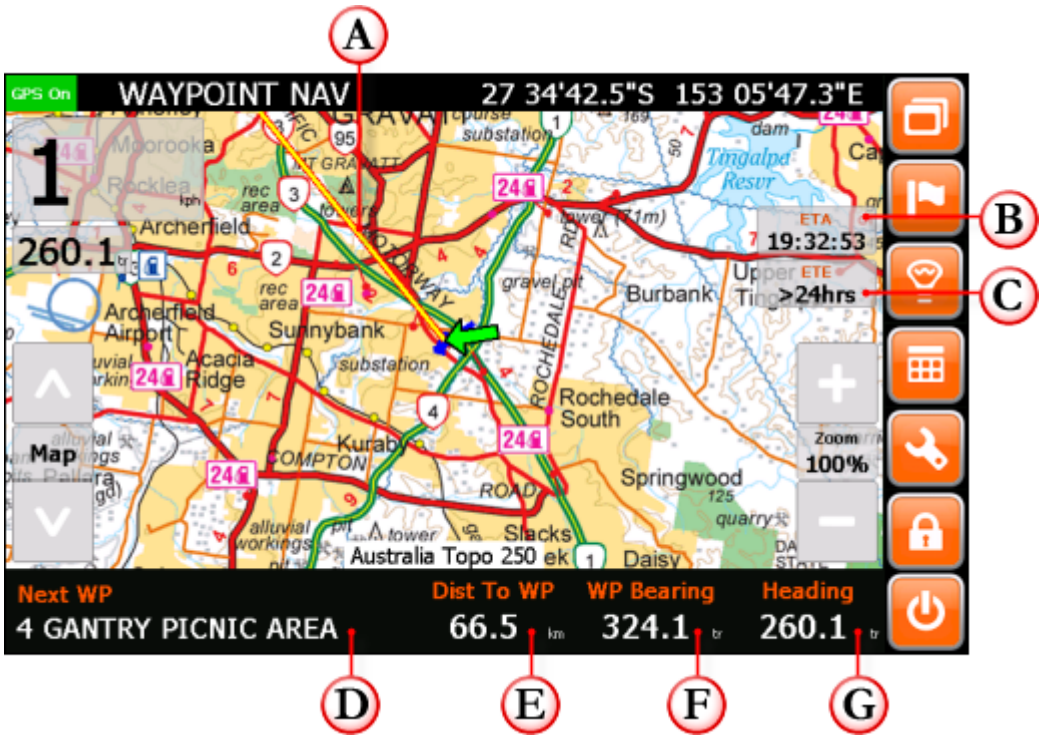
When you are NOT currently navigating to a waypoint (either a standalone Waypoint OR a Route Waypoint), the Waypoint Nav page will look as shown below.

Note that there is no information displayed except your current heading, which is available regardless of whether you are en route to a waypoint or not.



As soon as you start navigating to a waypoint, information about the waypoint is displayed in the appropriate fields on the Waypoint Nav page.

The information displayed is:



The waypoint we are currently navigating to is off-screen in this example

Ⓐ**Nav Line -** This is the direction you need to head in to get to the waypoint from your current position

Ⓑ**ETA** Estimated Time of Arrival at next waypoint (based on the current speed)

Ⓒ**ETE** Estimated Time En Route to next waypoint (based on the current speed)

Ⓓ**Name** of the next waypoint

Ⓔ**Distance** to the next waypoint ("as the crow flies")

Ⓕ**Waypoint bearing** That is the direction in degrees you need to head in to get to the waypoint from your current position

Ⓖ**Current heading** The current heading your vehicle is travelling on

If you wish to stop navigating to the current waypoint, tap the **STOP NAV** button on the Waypoints page toolbar.

Tracks

Introduction

There are two forms of track logging in **OziExplorer**.

1. Track Logging
2. Track Tail Logging

Track Logging

OziExplorer will record your travels whenever the track log option is on.

Track Logging can be turned **On** or **Off** using the **LOG ON button** on the Tracks page. Logging is on by default.

When logging is on, **OziExplorer** stores a record of your path into the **ceTrack.plt** file. This file is stored on the internal memory of the **Navigator**, in the **HNOZI\Data** folder. Settings in the Track Logging section of the Settings page control how often a track point is created.

OziExplorer creates a track point each time one of the following events occurs:

- The specified Log Distance as configured in the settings is exceeded
- The Heading changes by more than 7.5 degrees
- The speed changes by 5 KPH or 15% whichever is the greater

While logging is on, the recorded data is continually written to the ceTrack.plt file. Thus, this file can become very large.

You can clear this file at any time using the Delete Log function. If you wish to retain the data for later analysis or display, you can take a copy of the current log data using the Copy Log function prior to deleting the current log. The Copy Log function will by default export your log data to the **OziExplorer Data** folder on the SD card in the **Navigator**.

At some later point, you can reload your saved track data into one of the 5 available track slots for editing or display. See the section on Load Track File for more information.

You can also configure **OziExplorer** to automatically save or export your track log on a daily, weekly or monthly basis. See the section on Track Logging Settings for more information.

Track Tail Logging

As the logged track data grows in size, it becomes cumbersome to display in its entirety. The logged track may contain many thousands of track points. There is a threshold above which performance of moving map mode would suffer as the software tries to plot so much data in a responsive manner.

This is where the Track Tail comes in.

The Track Tail can store a maximum of 999 track points. The actual number you wish to display can be changed in the Track Tail Settings. The Track Tail will only ever display the LAST X number of track points, depending on your configuration.

Once the maximum number of Track Tail points is reached, the oldest (tail) points are removed to allow newer ones to be added to the head of the Track Tail.

Therefore the Track Tail will only ever be as long as the configuration allows.

Remember that the tail is independent of the actual track log. Your track data will always be logged to the ceTrack.plt file while logging mode is turned on, regardless of the settings etc. of the tail.

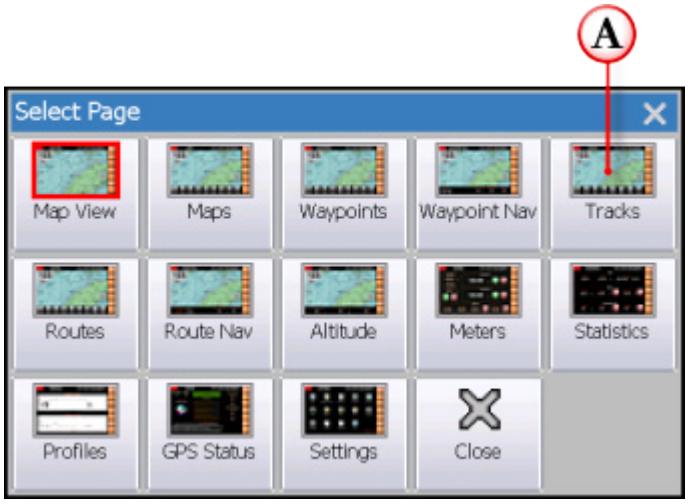
Tracks page

In **OziExplorer**, a track (sometimes referred to as a breadcrumb, or trail) is a sequential series of points which **OziExplorer** has recorded to allow you to see where you have been, and to retrace a previous path taken during travel.

Tracks can be quickly plotted and shared, to aid navigation through unfamiliar territory without creating waypoints or routes.

A Track will not, however, provide any distance or positioning details or audible cues for navigating between points. It is merely a line which you can follow.

To create or edit a track in **OziExplorer**, open the Track toolbar from the Tracks page.



Switch to the Tracks page, using the **Tracks button** (A) on the Select Page window

Tracks page toolbar

The **Tracks page toolbar** allows you to access functions related to track operations within **OziExplorer**

Each function is described in the following sections. You can click the buttons on the image above to jump to the relevant section.

LOG ON button

When this option is active, a green indicator lights on the button.

This option is switched **ON** by default

When the **LOG ON** option is switched on, the path which your vehicle takes (and thus the path which your **Navigator** takes) will be stored in a file called **ceTrack.plt**.

This file is stored internally on your **Navigator** by **OziExplorer**.

The Track Log file is automatically created when this option is switched on, and is continually appended to while the GPS is in moving map mode.

After you perform a Delete Log, **OziExplorer** will create a new (empty) track log file for you when this option is first switched on.

SHOW TRACKS button

When this option is active, a green indicator lights on the button.

This option is switched **ON** by default.

When the **SHOW TRACKS** option is switched on and off, **OziExplorer** will alternately show or hide tracks overlaid on the map display.

COPY LOG button

The **COPY LOG button** copies the internal track log file (ceTrack.plt) to an external file.

By default the file will be saved in the "**OziExplorer Data"** folder on the SD card.

The file will have a default name of the date and time of the save operation. The name can be customised using the on screen keyboard while saving.

DELETE LOG button

The **DELETE LOG button** clears the Track Log file (ceTrack.plt).

A new track log file will be created automatically when track logging resumes (i.e. When the **LOG ON option is switched on**, and the GPS starts moving)

IMPORT TAIL button

The **IMPORT TAIL button** loads a previously saved/exported track log file into the track tail

NOTE
Due to the fact that the Track Tail can only store 1000 track points, only the last 1000 points of the loaded track file will be displayed as the track tail.

EXPORT TAIL button

The **EXPORT TAIL button** saves the internal track tail log (ceTrackTail.trb) to an external file.

By default the file will be saved in the "**OziExplorer Data"** folder on the SD card.

The file will have a default name of the date and time of the save operation. The name can be customised using the on-screen keyboard while saving.

NOTE
The track tail will only contain the last 1000 track points. If you want to save a complete track log history of your trip, you should ensure the **LOG ON** option is switched ON, and then use the **COPY LOG** function to save the complete track log.

CLEAR TAIL button

The **CLEAR TAIL button** clears the currently loaded and displayed track tail.

This operation does NOT affect the track data stored in the internal track log data file (ceTrack.plt).

TOOLBAR button

The **TRACK TOOLS button** will toggle the popup of the Track Toolbar in the upper-right portion of the screen.

This standard **OziExplorer** toolbar provides access to functions related to tracks.

The buttons / functions provided by the Track toolbar are described in the Track Toolbar section of this user guide.

Track toolbar

The **TOOLBAR button** alternately displays and hides the Tracks Toolbar. The toolbar is a standard **OziExplorer** toolbar.

Functions available on the Track Toolbar are described in the following sections.

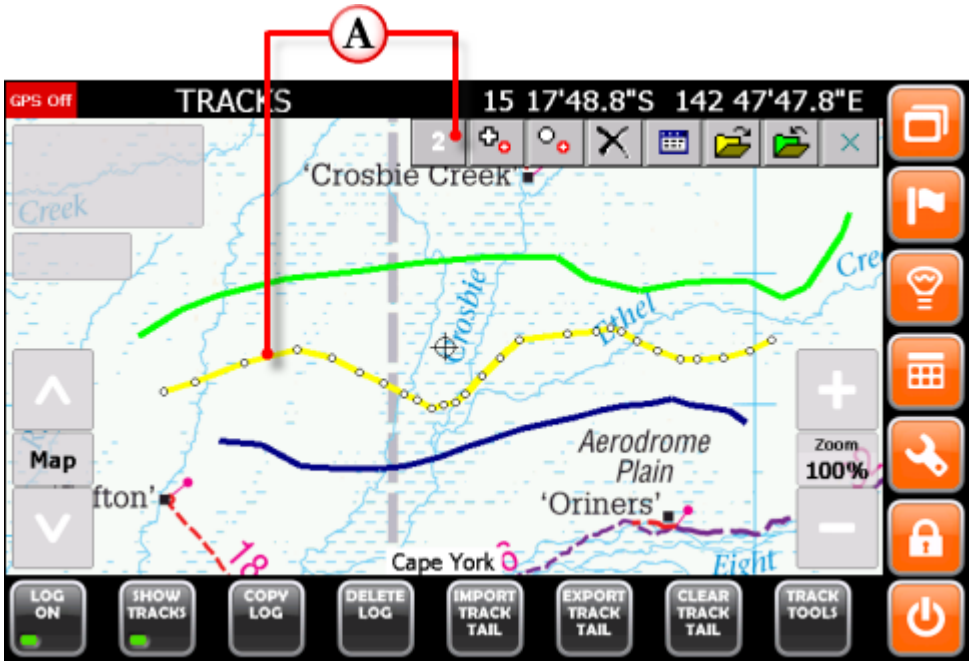
Track Selector button

OziExplorer can have up to **FIVE** separate tracks loaded at any one time. Tapping the Track Selector button cycles through each track numbered 1-5 (**ONE** to **FIVE**). When you choose one of the other functions from the Track Toolbar, these functions operate on the currently selected track, as indicated by the Track Selector button.

i.e. If the track indicator shows track 2 as being active, that means that functions such as adding track points, or deleting the track, operate on track 2.

When looking at the Track Selector button, you will see that the numeric indicator on the button will be **WHITE** if there is track data loaded in that track slot, or **DARK BLUE** if there is no track data loaded in that track slot, so it is easy to tell whether a particular track slot has data loaded in it.

The image below shows THREE tracks currently displayed, and the current track selected is track TWO. As well as the indicator showing which track is currently selected, the track itself shows it is selected by displaying each point on that track, whereas the unselected track(s) show lines with no points.



A Indicator on Track toolbar showing Track 2 as currently selected. The track loaded into slot 2 is highlighted when the corresponding indicator is selected.

When the track is in this state, it can be edited using the other functionality on the toolbar. You can do things such as add track points, or insert new track points.

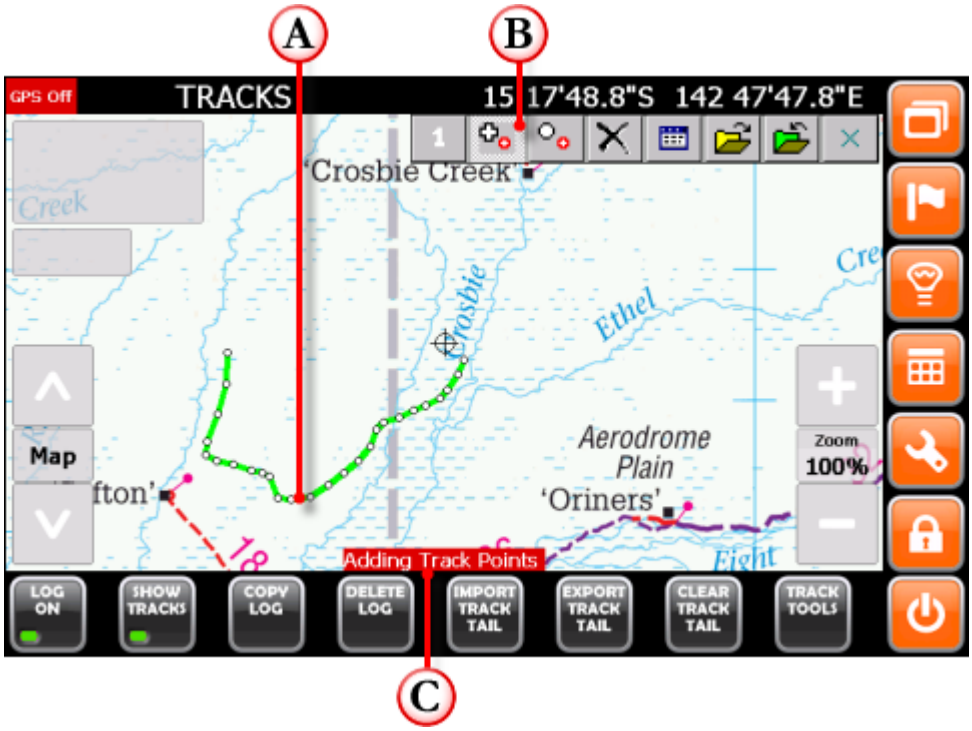
Add Track Points button

Select a track to modify using the **Track Selector** button.

NOTE When using the Add Track Points button, GPS Tracking will be suspended, until you turn the GPS OFF and ON.

1. Tap the **Add Track Point** button to enter **Adding Track Points** mode.
2. Tap the screen where you would like to add points to create the track.

The track is created as you add points.



A Track in the process of editing

B Add Track Point button selected

C Message indicating that you are in **Adding Track Points** mode

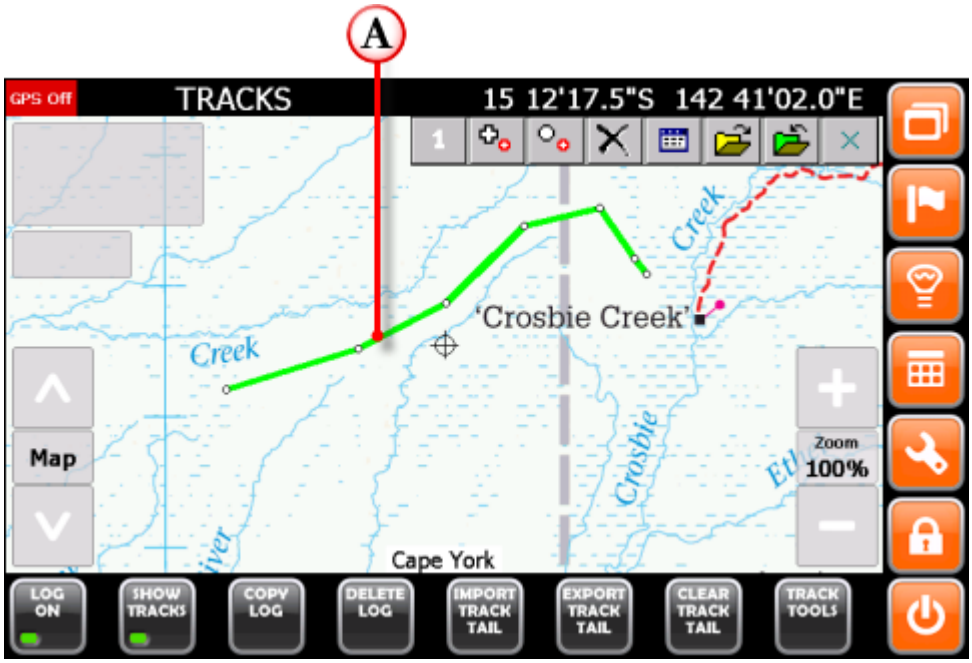
You can de-activate Adding Track Points mode by tapping the Add Track Point button again.

Insert Track Points button

You can insert additional points into an already existing track.

NOTE When using the Insert Track Points button, GPS Tracking will be suspended, until you turn the GPS OFF and ON.

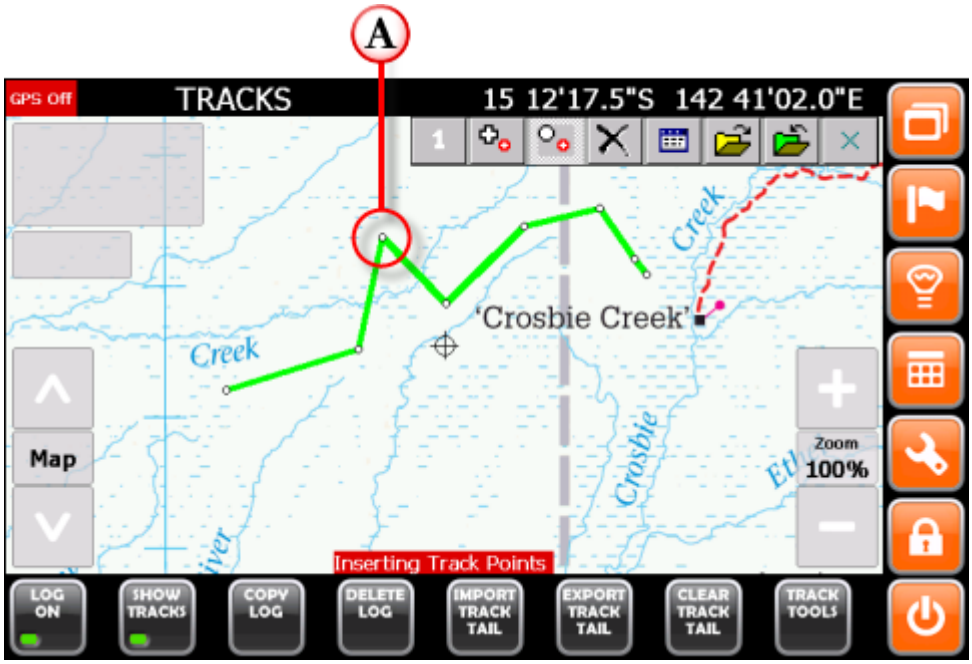
The image below shows a track log with four points



Ⓐ Existing track shown selected with highlighted track points

Tap to select the **Insert Track Point** button on the toolbar. This will put you into **Inserting Track Points** mode.

You can then tap the screen to insert a new track point between two adjacent existing track points. Depending upon the position of the new track point along the track, the lines connecting the points will be redrawn to include the new point.



Ⓐ Existing track with new track point inserted

You can de-activate Inserting Track Points mode by tapping the Insert Track Point button again.

Clear Track button

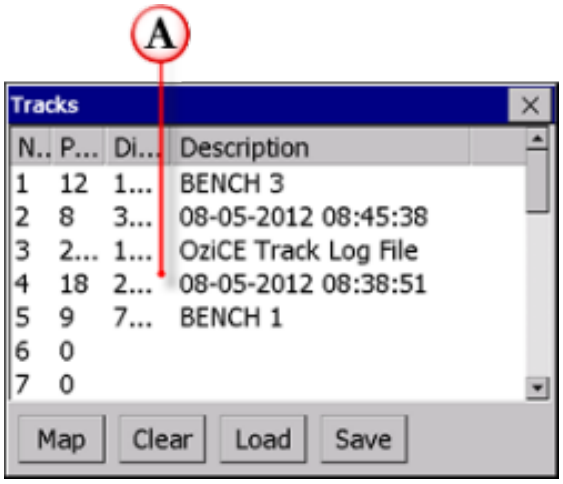
Whichever track is currently loaded in the indicated slot will be cleared from the map when the **Clear Track button** on the track toolbar is tapped.

TIP
Track files which have been exported / saved to the OziExplorer Data folder on the SD card cannot be deleted using this function. All it does is remove that track data from the map display.
i.e. You could have a saved or exported track file on your SD card, activate slot 3, load the selected track log, view it overlaid on the map, then clear it, and the displayed track log will be removed from view, leaving the saved track log file as it was on the SD card.

Track List button

Remember that **OziExplorer** can have up to **TWENTY-FIVE** tracks loaded at any given time.

Tapping the **Track List** button will display the Track List window as shown below.



This window will show any tracks which are loaded into slots 1 to 25. If you only have a track loaded into slot 1, you will only see data visible for slot 1.

Ⓐ The image above shows tracks loaded into all five slots. The data displayed for each track is

- **Num** - The Track slot number (1 – 25)
- **Points** - The number of track points in the track loaded in that slot
- **Distance** - The length of the track (displayed in the units set in the Settings > Units Configuration section)
- **Description** - A text description added when the track was created or saved. This can be edited at any time. By default, the description contains the creation date and time of the track

---

Other buttons on the Tracks List window

The **Map** button will display the track data in the selected track slot overlaid on a map.

Tap the required track slot, then tap the Map button.

NOTE
This function will only work when GPS Tracking is suspended.

The **Clear** button will remove the track data in the selected track slot.

Tap the required track slot, then tap the Clear button.

This function does not delete a saved track on the SD card, it merely removes the data from the selected slot.

This button performs the same function as the Clear Track button on the Track toolbar.

The **Load** button will allow you to load a previously saved track into the selected track slot.

Tap the required track slot, then tap the Load button.

This button performs the same function as the Load Track File button on the Track toolbar.

The **Save** button will allow you to save the track data in the selected track slot to an external file.

Tap the required track slot, then tap the Save button.

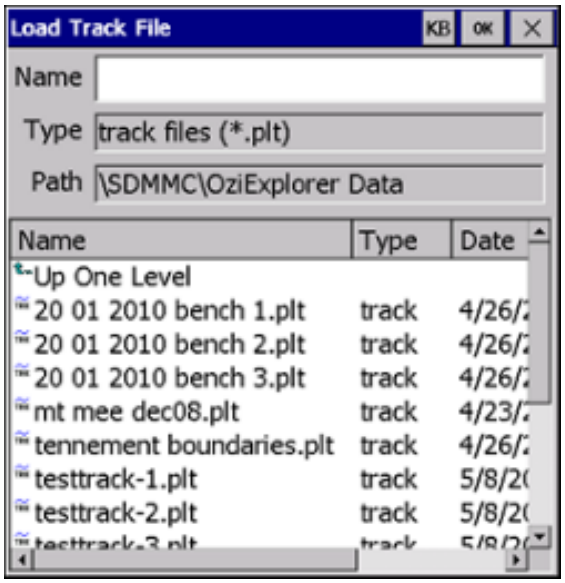
This button performs the same function as the Save Track File button on the Track toolbar.

Load Track File button

Tapping the **Load Track File** button on the tracks toolbar brings up the **Load Track File** window.

This window allows you to load or open a previously saved or exported track file.

Remember that **OziExplorer** can have up to FIVE tracks loaded at any given time. Whichever track slot is currently active on the toolbar will be the track slot which contains the track data loaded via the Load Track File window.



Note that the Load Track File window will default to showing files which are contained in the **OziExplorer Data** folder on the Navigator's SD card.

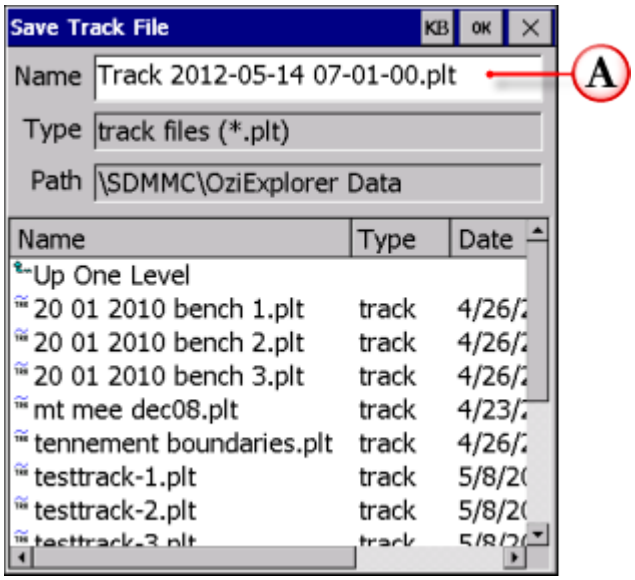
To load a track, do either of the following:

1. Double-tap on the name of the track file you wish to load

2. Single-tap on the name of the track file, and then tap on the **OK button** on the window titlebar.

Save Track File button

Tapping the **Save Track** button on the Track toolbar brings up the **Save Track File** window.



This window allows you to save the track data in the current track slot to an external file. This file will by default be saved to the **OziExplorer Data** folder on the SD card.

A The file will be assigned a default name by **OziExplorer** in the form of

Track YYYY-MM-DD HH-MM-SS.plt

Where YYYY-MM-DD HH-MM-SS is the data and time of the save operation.

Remember that **OziExplorer** can have up to FIVE tracks loaded at any given time. Whichever track slot is currently active on the toolbar will be the track slot which contains the track data saved via the Save Track File window.

To save a track, do either of the following:

1. Tap the **OK** button on the window titlebar to save the track file with the default name assigned by **OziExplorer**.
2. Tap and drag from right to left over the name to highlight it, and then use the on screen keyboard to give the file a custom name. Remember, to bring up the on screen

keyboard, tap the **KB** button on the window titlebar. Then tap the **OK** button to save the file with your custom name.

3. Double-tap on an existing file name to save over the top of that file. Be aware that this will overwrite the existing contents of the specified file.

Close Track Toolbar button

Tap the **Close Toolbar** button to close the toolbar once you have finished using it.

Routes

Introduction

In **OziExplorer**, a route is a sequential serial of points (called **Route Waypoints**) which have been previously created, which allow you to follow a set course.

There are two types of route files which **OziExplorer** on the **Navigator** can use:

.rt2

> A route file which has the **.rt2** file extension is one which has been created with **OziExplorerCE** (which is the version installed on your **Navigator**). This type of route file only contains one route.

.rte

> A route file which has the **.rte** file extension is one which has been created with the **OziExplorer** PC version. This type of route file can contain more than one route. If you load this type of route file with the **OziExplorer** version installed on your Navigator, it will ask which of the routes contained within the route file you wish to load. If you save a route you previously loaded from a multi-route **.rte** file, **OziExplorer** will only save the individual route as a **.rt2** file.

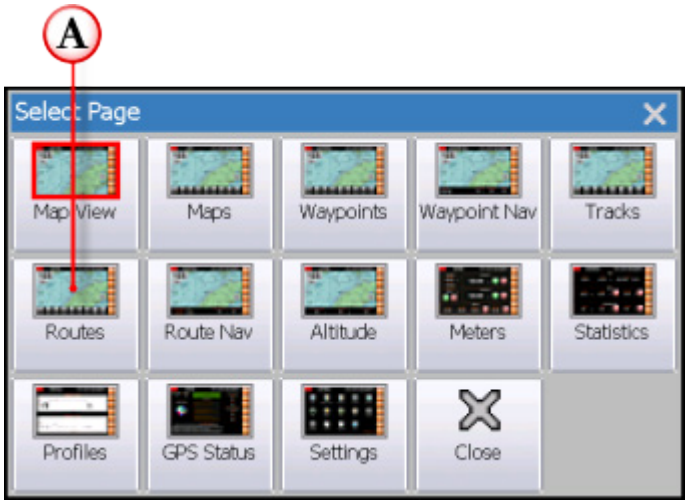
When following a route, you can follow it in forward or reverse direction.

In **OziExplorerCE** (the mobile version installed on the **Navigator**), you can only have 1 (one) route loaded at any one time.

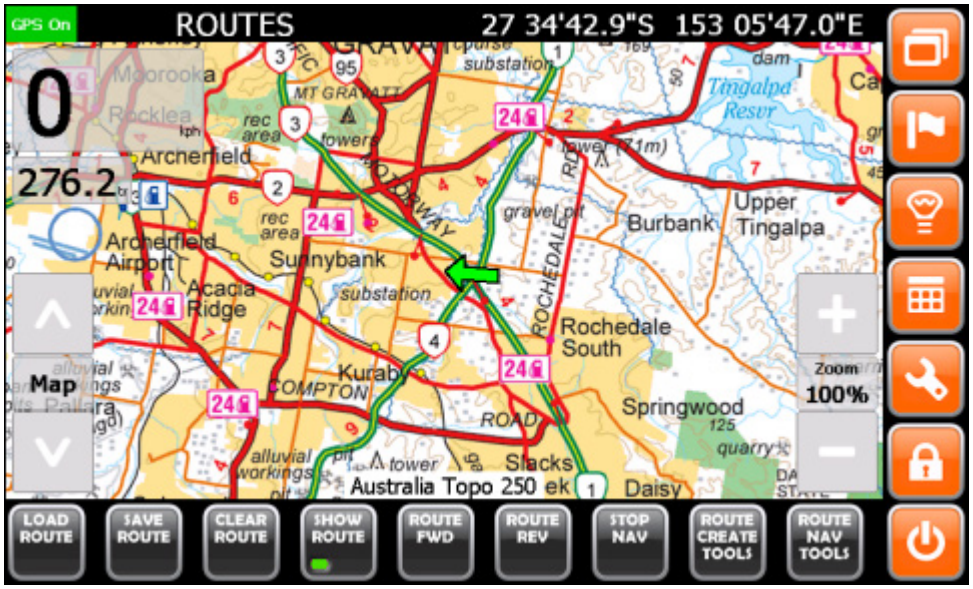
The full version of **OziExplorer** on a Windows PC can have up to 20 routes loaded at once.

ROUTES page

The **ROUTES page** groups together route related functions on one page.



Switch to the Routes page, using the **Routes button** A on the Select Page window



Shown here is a view of the Routes page, showing the Routes page toolbar at the bottom.

Routes page toolbar

The **Routes page toolbar** contains a collection of buttons allowing access to features related to routes on your Navigator.

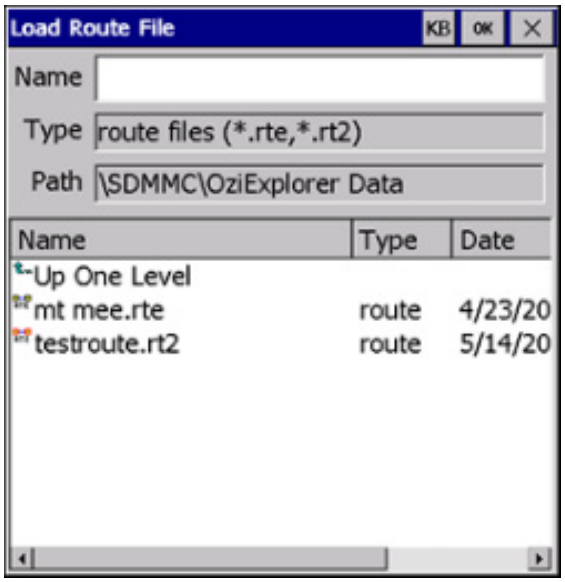
Each function is described in the following sections. You can click the buttons on the image above to jump to the relevant section.

LOAD ROUTE button

The **LOAD ROUTE button** will load a previously saved route file. The route file you are loading could have been created in **OziExplorerCE** (the version installed on your Navigator), **OziExplorer** PC version, or transferred from a friend or relative's **Navigator**.

You can only ever have one route file loaded at a time in **OziExplorer** on your **Navigator**.

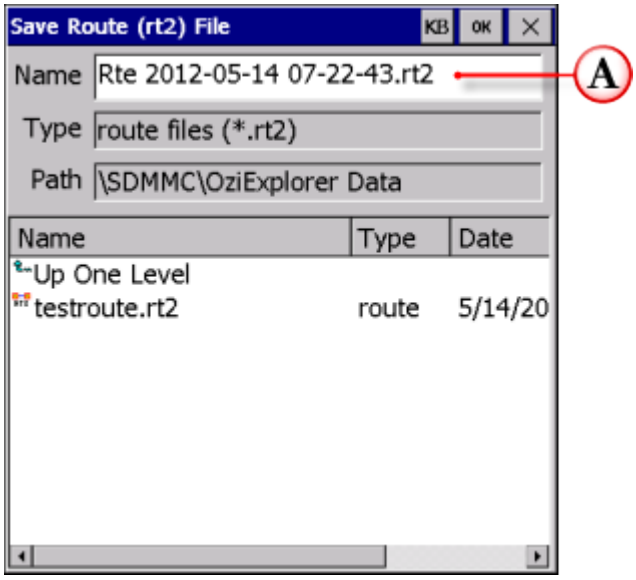
When you tap this button you will see the **Load Route window**, where you can choose the route file you wish to load



SAVE ROUTE button

The **SAVE ROUTE button** will save the currently active route. The route could have just been created, or it could be a route which was previously loaded and subsequently modified.

When you tap this button, **OziExplorer** will display the **Save Route File window**, where you can choose the filename you wish to save to, using the on screen keyboard to name your file.



Ⓐ The file will be assigned a default name by **OziExplorer** in the form of

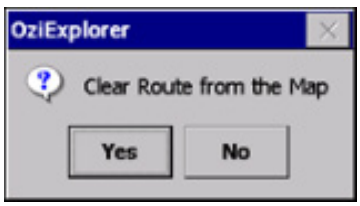
Rte YYYY-MM-DD HH-MM-SS.rt2

Where YYYY-MM-DD HH-MM-SS is the data and time of the save operation.

CLEAR ROUTE button

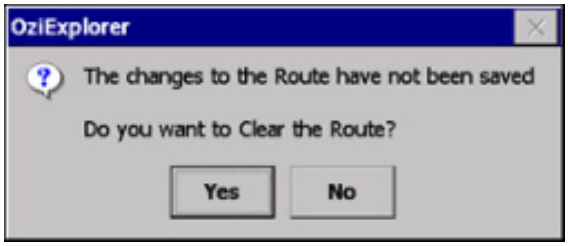
The **CLEAR ROUTE button** will clear the currently active route from the map.

OziExplorer will prompt you to confirm this action. If you do not wish to clear the route, simply tap the **NO button** on the prompt to cancel the operation.



If the route you are clearing is a newly created or modified route, and has not yet been saved, **OziExplorer** will display an additional prompt warning you of this.

If you clear a route which has not yet been saved, then the route is gone forever.



NOTE
Clearing the route simply removes the currently loaded route from the display. This does not remove the route file if it has already been exported / saved.

SHOW ROUTE button

When this option is active, a green indicator lights on the button.

This option is switched ON by default.

When the **SHOW ROUTE option** is switched on, it will display the currently loaded route overlaid on the map display.

You can switch this option of as an aid to temporarily "de-clutter" the map display, without clearing the current route.

ROUTE FWD button

The **ROUTE FWD button** will commence route navigation using the currently loaded route.

A navigation line will be drawn from your current position (or the cursor position if GPS Tracking is currently suspended) to the FIRST route waypoint within the route.

ROUTE REV button

The **ROUTE REV button** will commence route navigation of the currently loaded route in the **reverse direction**. i.e. The waypoints which make up the route are followed in reverse order.

This can be used for a return trip along the same route which you travelled earlier.

If you wish to return following a different path, you would need to create a new route, OR load the original route, reverse the order of its waypoints, save it as a new route, then edit the route waypoints to match your requirements. (See the section on editing routes later in this chapter)

A navigation line will be drawn from your current position (or the cursor position if GPS Tracking is currently suspended) to the LAST route waypoint within the route.

STOP NAV button

The **STOP NAV button** will cancel the current navigation operation.

When the current navigation is cancelled (stopped), the navigation line will be removed from the map display.

If you stop following a route, this does not mean that the route is unloaded or deleted.

ROUTE CREATE TOOLS button

The **ROUTE CREATE TOOLS button** will toggle the popup of the Route Create Toolbar in the upper-right portion of the screen.

This standard **OziExplorer** toolbar provides access to functions related to *creating* routes.

The buttons / functions provided by the Route Create Tools toolbar are described in the Route Create toolbar section of this user guide.

ROUTE NAV TOOLS button

The **NAV TOOLBAR button** will toggle the popup of the Route Navigate Toolbar in the upper-right portion of the screen.

This standard **OziExplorer** toolbar provides access to functions related to *navigating* using routes.

The buttons / functions provided by the Route Nav Tools toolbar are described in the Route Nav toolbar section of this user guide.

Route Create toolbar

The **CREATE TOOLBAR button** will toggle the popup of the Route Create Toolbar in the upper-right portion of the screen.

Each function is described in the following sections. You can click the buttons on the image above to jump to the relevant section.

Add Route Waypoint button

When active, a route waypoint will be added to the end of the route at the position on the map where you tap.

NOTE When using the Add Route Waypoint button, GPS Tracking will be suspended, until you turn the GPS OFF and ON.

Insert Route Waypoint button

When active, a route waypoint will be inserted between two waypoints or at the start or end of the route depending on a best choice algorithm, depending on where you tap on the map.

NOTE When using the Insert Route Waypoint button, GPS Tracking will be suspended, until you turn the GPS OFF and ON.

Delete Route button

Whichever route is currently loaded will be cleared from the map when the **Delete Route button** on the track toolbar is tapped.

TIP
Route files which have been exported / saved to the **OziExplorer Data** folder on the SD card cannot be deleted using this function. All it does is remove the current route data from the map display.

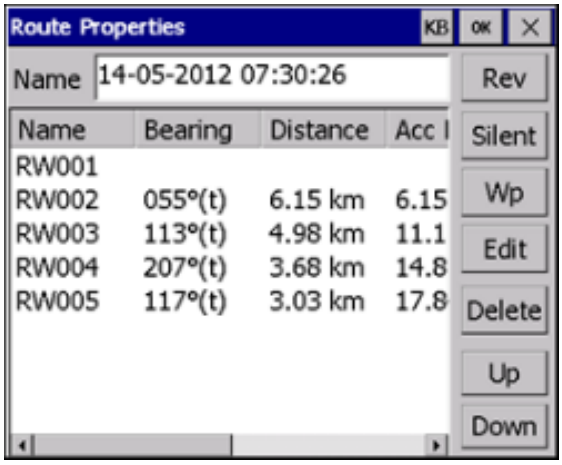
i.e. You could have a saved or exported route file on your SD card, load the selected route file, view it overlaid on the map, then clear it, and the displayed route will be removed from view, leaving the saved route file as it was on the SD card.

Route Properties button

Tapping the **Route Properties button** will pop up the Route Properties window.

This window will show some details of the currently loaded route. It also allows modification of certain parameters pertaining to the route.

The Route Properties window typically looks like this:



The information shown includes

- List of Route Waypoints which make up the route
- Route Name
- A number of option buttons which perform actions on the route as detailed in the following sections

---

Rev button

The **Rev button** will instantly reverse the order of the Route Waypoints which make up your route

---

Silent button

Selecting an individual route waypoint (tap to highlight), then tap this button. This will stop **OziExplorer** playing an audible alert when the waypoint proximity is approached.

Wp button

The Wp button allows you to add a standard waypoint from your Waypoint List into the current route as a route waypoint.

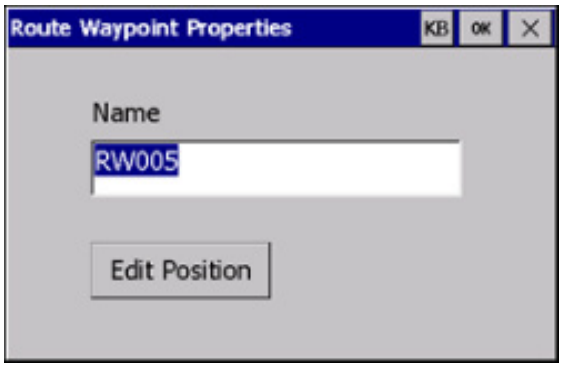
NOTE
When you add a standard waypoint to the current route, a COPY of the standard waypoint is made to use in the route. The original waypoint from your waypoint list still exists in its original form.

You need to select a route waypoint first, and when the waypoint from the standard waypoint list is added it will be added ***AFTER*** the selected route waypoint.

Of course, any waypoints can be moved up and down the list using the UP and DOWN buttons (see further down this section)

Edit button

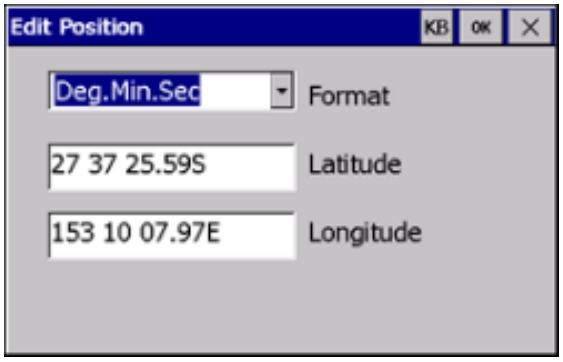
The **Edit button** allows you to make changes to the selected route waypoint.



The only property of the route waypoint which you can change here is the name of the route waypoint.

You can also tap the **Edit Position button** to open the **Edit Position window**.

The Edit Position window allow you to modify the position information which was previously set for this route waypoint.



You can modify the following attributes:

- Position Format
- Latitude
- Longitude

To modify data, simply tap in the required field, and use the on screen keyboard (toggled on and off using the **KB button**) to enter your data.

Delete button

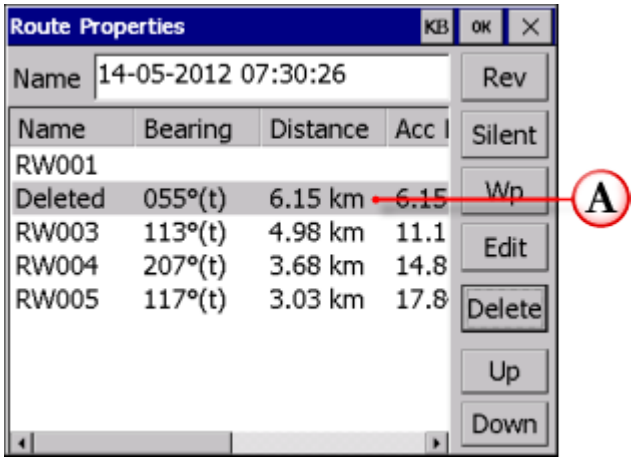
The **Delete button** allows you to remove a route waypoint from within the list on the Route Properties window.

1. Highlight the route waypoint in the list of route waypoints that you wish to delete by tapping it once.
2. Tap the Delete button, the selected route waypoint will be ***marked as Deleted***.

NOTE
If you accidently mark the wrong route waypoint, you can undo the deletion by doing the following:

1. Make sure the route waypoint is currently selected
2. Tap the Delete button again while the route waypoint is selected

This must be done BEFORE you close the Route Properties window by tapping the OK button.
This will remove the Deleted flag on the selected Route Waypoint.



Route Properties window showing the effect of deleting RW002.

After closing the Route Properties window via the **OK button**, any route waypoints which you have marked as Deleted will be permanently removed from the Route.

If you close the Route Properties window by tapping the **X button**, any route waypoints marked for deletion will NOT be deleted.

Up and Down buttons

The **Up and Down buttons** allow you to reorder the route waypoints in the current route.

First, highlight the route waypoint in the list of route waypoints that you wish to move.

Then, when you tap the Up or Down button, the selected route waypoint will move up or down in the list.

Load Route button

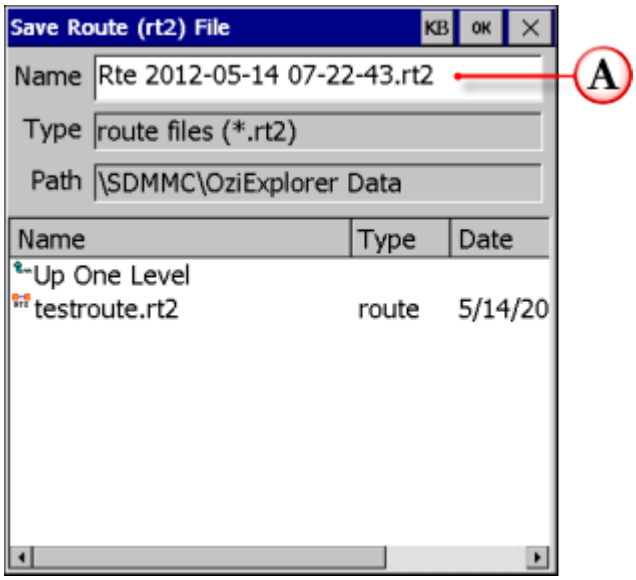
Tapping the **Load Route button** will open the Load Route File window.

This window allows you to load or open a previously saved route file.

The function performed using this button is exactly the same as that called by tapping the LOAD ROUTE button on the Routes Page toolbar.

Save Route button

Tapping the **Save Route button** will open the **Save Route (rt2) File** window.



A The file will be assigned a default name by **OziExplorer** in the form of

Rte YYYY-MM-DD HH-MM-SS.rt2

Where YYYY-MM-DD HH-MM-SS is the data and time of the save operation.

The function performed using this button is exactly the same as that called by tapping the SAVE ROUTE button on the Routes Page toolbar.

Show / Hide Route Waypoint Names button

When a route is displayed overlaid on a map in **OziExplorer**, the route has multiple text labels displayed along with it.

- Adjacent to the first route waypoint, the **route name** will be displayed.

- Next to each route waypoint, the **route waypoint name** will be displayed.

This button will toggle the route waypoint names on and off.

This can be useful if there are a lot of route waypoints in close proximity to one another, and you wish to de-clutter the display by temporarily hiding the names.

Close Toolbar button

Tap this button to close the Route Create Toolbar

Route Nav toolbar

The Route Nav Toolbar can be accessed using the NAV TOOLBAR button from the Routes page.

The Route Nav toolbar is a standard **OziExplorer** toolbar, and some of the functions are replicated on the Routes page toolbar.

Each function is described in the following sections. You can click the buttons on the image above to jump to the relevant section.

Next Waypoint button

The **Next Waypoint button** will skip *forward* to the next waypoint while navigating (following) a route.

Previous Waypoint button

The **Previous Waypoint button** will skip backwards to the previous waypoint while navigating along a route.

Start Route Forward button

The **Start Route Forward button** will commence route navigation using the currently loaded route in a forward direction (i.e. FIRST to LAST route waypoint).

A navigation line will be drawn from your current position (or the cursor position if GPS Tracking is currently suspended) to the FIRST route waypoint within the currently loaded route.

This button performs the same function as the START NAV button on the Routes page toolbar.

Start Route Reverse button

The **Start Route Reverse button** will commence route navigation using the currently loaded route in a reverse direction (i.e. LAST to FIRST route waypoint).

A navigation line will be drawn from your current position (or the cursor position if GPS Tracking is currently suspended) to the LAST route waypoint within the currently loaded route.

This button performs the same function as the START REV NAV button on the Routes page toolbar.

Stop Nav button

The **Stop Nav button** will stop all current navigation operations.

The active navigation line will be turned off.

This button performs the same function as the STOP NAV button on the Routes page toolbar.

Show Hide Nav Arrow button

The **Show Hide Nav Arrow button** toggles the display of the navigation arrow at the top left of the map screen.

NOTE
The display of the Nav Arrow is more useful in a marine or aviation environment, and has limited function during vehicle navigation.

It is NOT possible to change the location of the Nav Arrow.
It will obscure the speedometer at the top left of the map screen when active.

Load Route button

Tapping the **Load Route button** will open the Load Route window.

You can load or open a previously saved route file using this function.

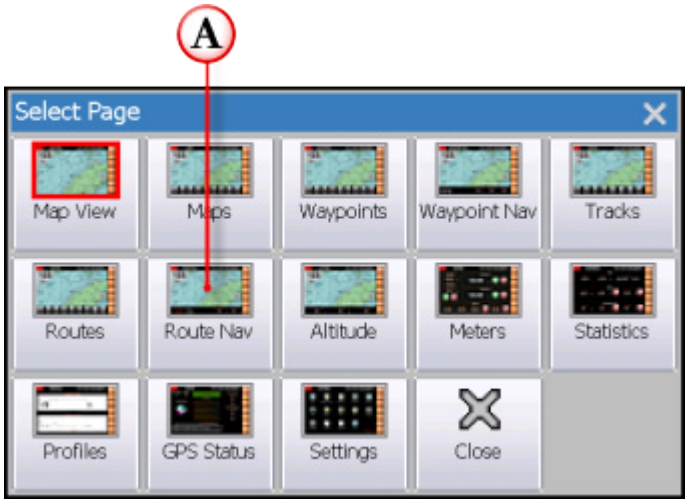
This button performs the same function as the LOAD ROUTE button on the Routes page toolbar.

Close Toolbar button

Tap the **Close Toolbar button** to close the Route Nav Toolbar

ROUTE NAV page

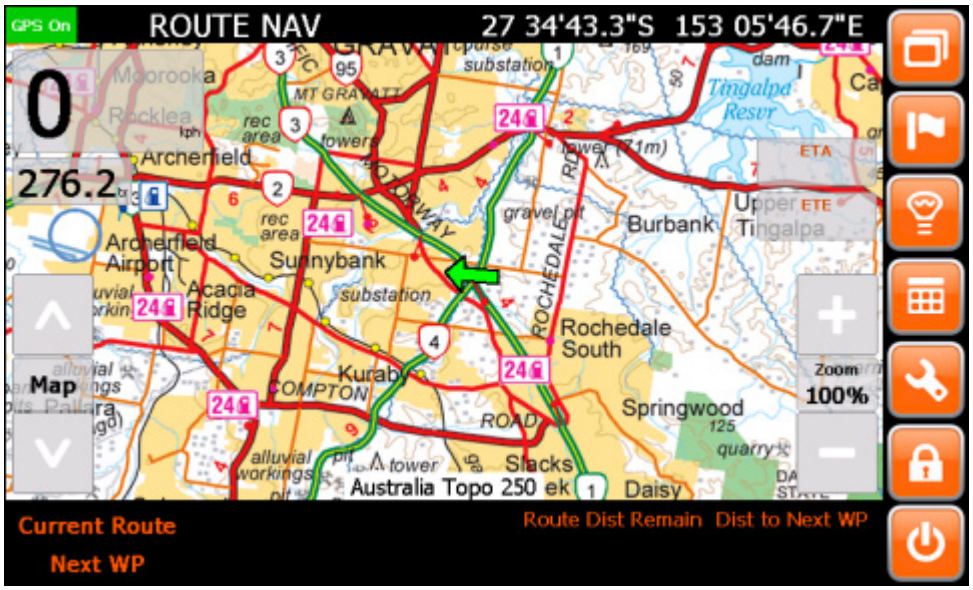
The **Route Nav page** is designed to show you information pertaining to the current Route during navigation



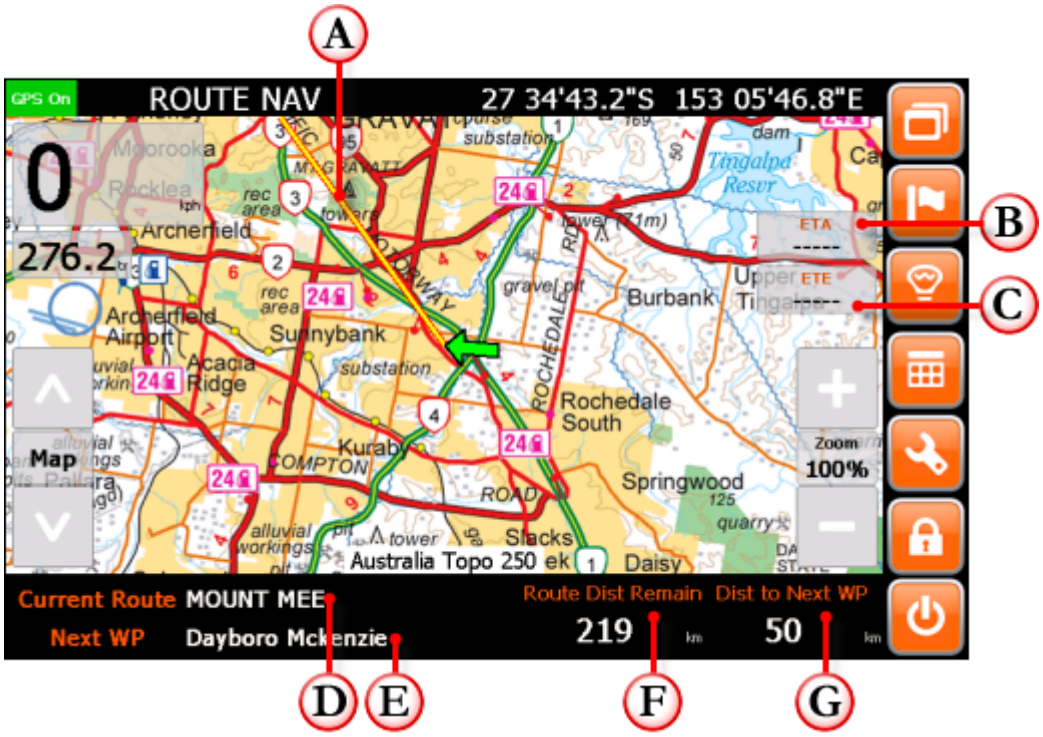
Change to the Route Nav page by tapping the **Route Nav button** (A) on the Select Page window

---

If you are NOT currently navigating to a Waypoint OR a Route Waypoint, the ROUTE NAV page will show the current map, but the fields at the bottom of the page will be empty. As you are not navigating along a route, there is no information for the page to display.



Once you load a route file, the information fields at the bottom of the page are loaded with the data as described above.



Ⓐ**Nav Line -** This is the direction you need to head in to get to the next waypoint from your current position

Ⓑ**ETA** Estimated Time of Arrival at end of current route

Ⓒ**ETE** Estimated Time En Route via the current route

Ⓓ**Current Route -** Shows the name of the route currently loaded

Ⓔ**Next WP -** Shows the name of the next route waypoint along the current route

Ⓕ**Route Dist Remain -** Shows the total distance remaining on your route

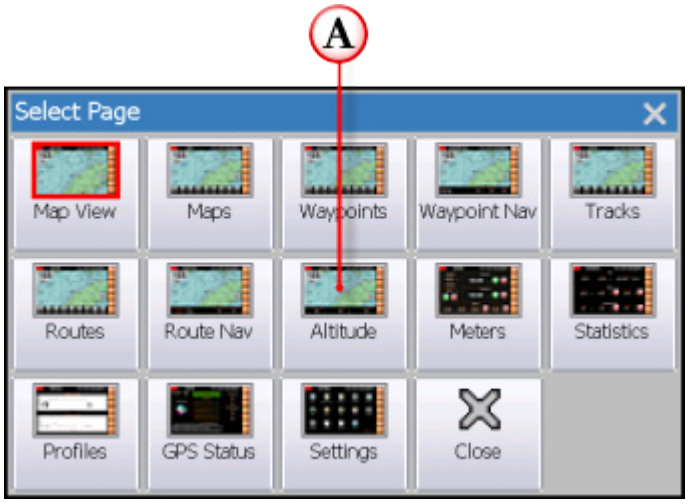
Ⓖ**Dist to Next WP -** Shows the distance remaining before you reach the next waypoint along the current route

NOTE
If you load a Waypoint (as opposed to a Route), and begin navigating to that waypoint, the information pertaining to your waypoint is also shown here. This is similar to the Waypoint Nav page. The only field which will NOT be displayed in

this case is the Current Route.
Likewise, if you are currently navigating along a route, and you switch to the Waypoint Nav page, you will see information pertaining to the *next Route Waypoint* on that page.

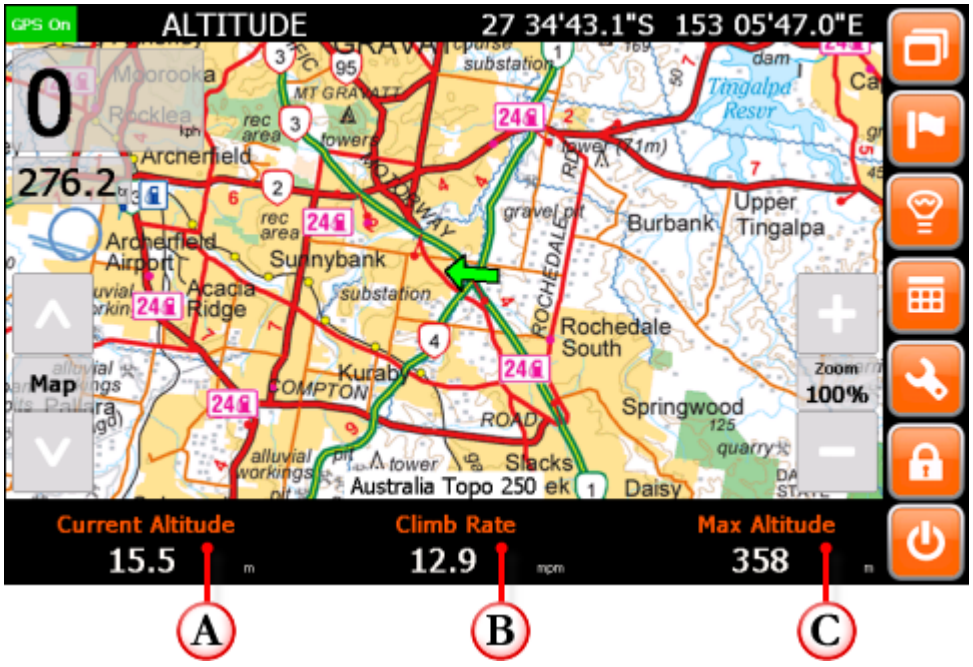
ALTITUDE Page

The **Altitude page** shows the map, but has additional altitude related parameters displayed at the bottom of the map panel.



Change to the Altitude page by tapping the **Altitude button** Ⓐ on the Select Page window

---



Ⓐ**Current Altitude:** Shows the current altitude

Ⓑ**Climb Rate:** Shows the current climb rate in units per minute

 **Max Altitude:** Shows the maximum altitude reached since the last reset of the Max Altitude parameter on the Meters Page

See Appendix 2 - Altitude Readings in Vehicle GPS Units for additional information on altitude readings.

METERS page

The **Meters page** has a number of data displays containing information gathered during moving map operations.

 Fields with a **Start / Stop button** can be started or stopped (paused) whenever desired

 Fields with a **Reset button** can be cleared back to their initial value (zero)

The following data is displayed on the Meters page:

Trip Meter

- **Odometer** - Distance since last reset
- **Timer** (run time) - Accumulated time since last reset. Paused time does not add to the accumulated time
- **Average Speed** - Average speed (distance divided by time) since last reset

Odometer 1

Distance since last reset

Odometer 2

Distance since last reset

NOTE
Odometers 1 & 2 and the Odometer within the Trip meter are completely independent of one another; effectively giving you 3 odometers for use.

Altitude

- Current
- Average
- Minimum
- Maximum

See Appendix 2 - Altitude Readings in Vehicle GPS Units for additional information on altitude readings.

STATISTICS page

The Statistics page shows a number of data fields gathered during moving map operations.

NOTE
Time displays are dependent on the time zone set in the system settings

 Fields with a **Reset button** can be cleared back to their initial value (zero)

Time

Sunrise

Shows sunrise time at current location

Sunset

Shows sunset time at current location

Current

Shows current date and time

Speed

Current

Shows current speed while moving

Average

Shows average speed recorded while moving (This is separate to the Trip Meter section on the Meters page)

Maximum

Shows maximum speed recorded while moving

Acceleration

Current

Shows current acceleration while moving

Minimum

Shows the minimum acceleration recorded while moving

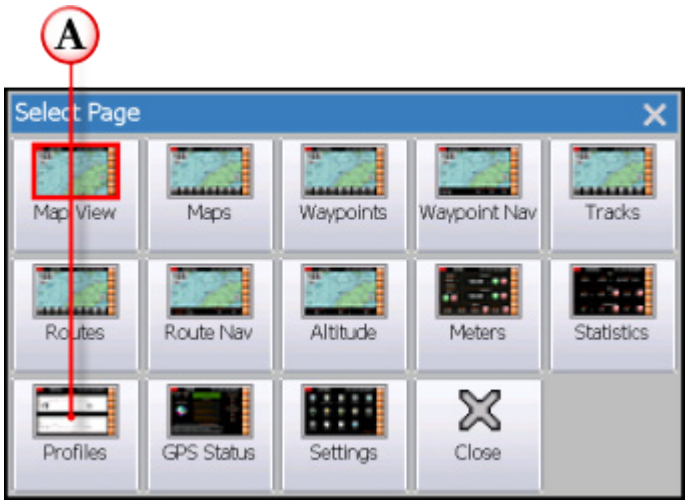
Maximum

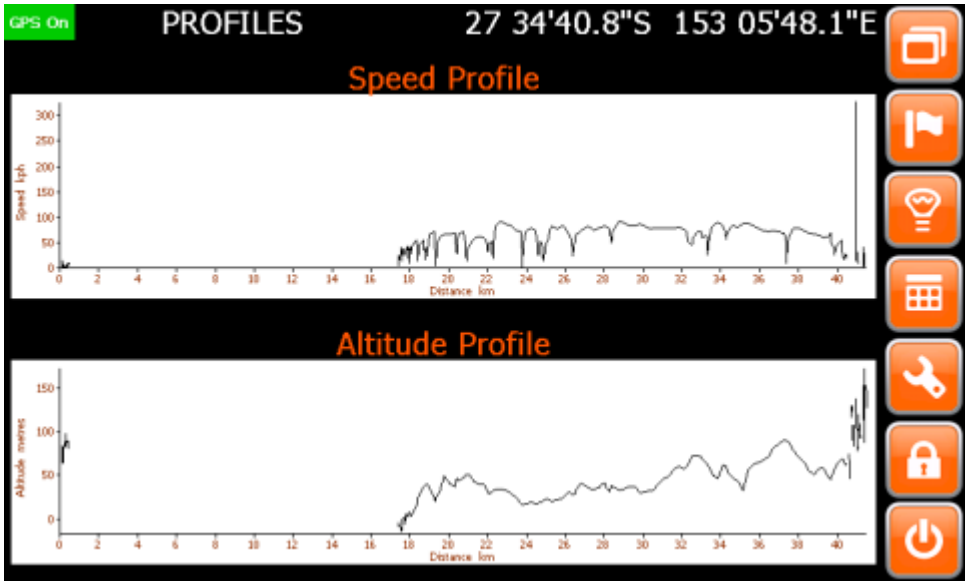
Shows the maximum acceleration recorded while moving

PROFILES page

The **Profiles page** shows two graphs, which indicate your speed over time, and altitude over time. This page is purely for information purposes.

To change to the Profiles page, tap the **Profiles** button (A) on the Select Page window





See Appendix 2 - Altitude Readings in Vehicle GPS Units for additional information on altitude readings.

Settings

SETTINGS page

Tapping the **Settings button** on the right-hand toolbar on any page will switch to the **Settings page**.

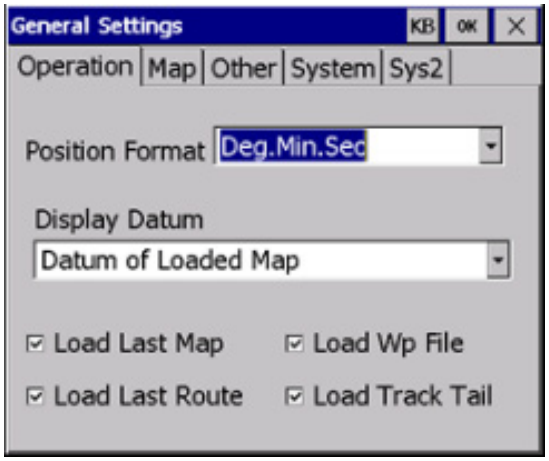
From here, you can make changes to the **OziExplorer** configuration to modify the way that **OziExplorer** functions.

In the online version of this user guide, you can click the icons shown on the screen image above to jump to the relevant section of the manual.

General Settings

The **General button** on the Settings page is used to load the **General Settings window** allowing you to configure some basic parameters used by the program.

Operation tab



Position Format

How you want the geographic position displayed on the status line and in other lists.
Deg.Min and UTM are the two most commonly used formats in Australia.

Display Datum

It is highly recommended to leave this option at the default setting

The datum used for position display and editing. This can be different to the datum of the loaded map.

Load Last Map

It is recommended to leave this option switched ON

If this option is selected, the last map used will be loaded the next time **OziExplorer** is started.

Load Wp File

It is recommended to leave this option switched ON

If this option is ON (ticked), then the waypoint file (***ceWaypoints.wpb***) will be automatically loaded when **OziExplorer** starts up

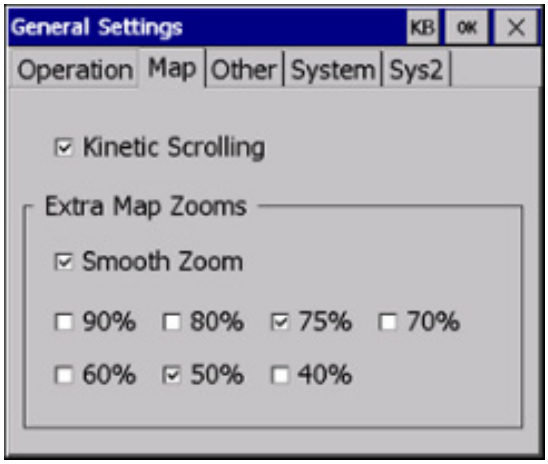
Load Last Route

If this option is selected, the last route used will be loaded the next time **OziExplorer** is started.

Load Track Tail

If this option is ON (ticked), the last track tail will be loaded automatically when **OziExplorer** starts up.

Map tab



Kinetic Scrolling

Activates kinetic scrolling of the map when dragging with the stylus.

Smooth Zoom

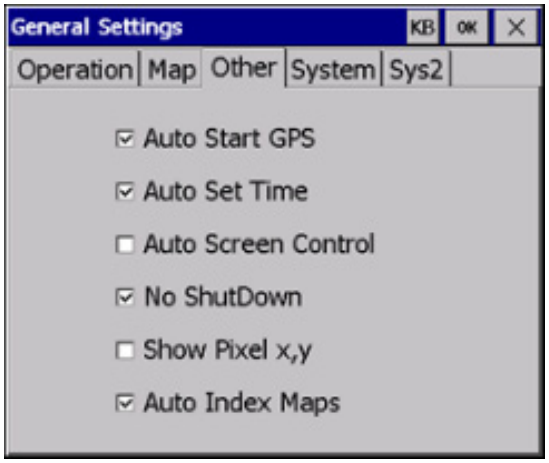
If selected, bilinear filtering is used for smoothing.

Zoom Levels

If selected, zoom levels of 90%, 80%, 75%, 70%, 60%, 50% and 40% are created dynamically (ie. These zoom levels do not have to be included within the ozfx3 map file in use)

If the 75% and 50% zoom data is included in the ozfx3 map file in use, these will be used in preference to zoom data created dynamically.

Other tab



Auto Start GPS

Communication with the internal GPS unit will be started automatically when **OziExplorer** starts up.

Auto Set Time

The PDA time is set from the NMEA data coming from the internal GPS

Auto Screen Control

It is highly recommended to leave this option switched OFF

When this option is activated, the Screen Control feature is automatically activated when GPS communication starts.

No Shutdown

Stops the device from shutting down (or suspending) when running on battery power and communicating with the GPS. This options causes **OziExplorer** to send a keystroke every 30 seconds which makes the Navigator operating system think it is being used. This does not stop the screen from auto dimming; this must be configured in the **Navigator** system configuration.

Show Pixel x,y

This option causes **OziExplorer** to display the pixel x/y location on the current map image when the stylus is pressed and released before the popup menu is displayed.

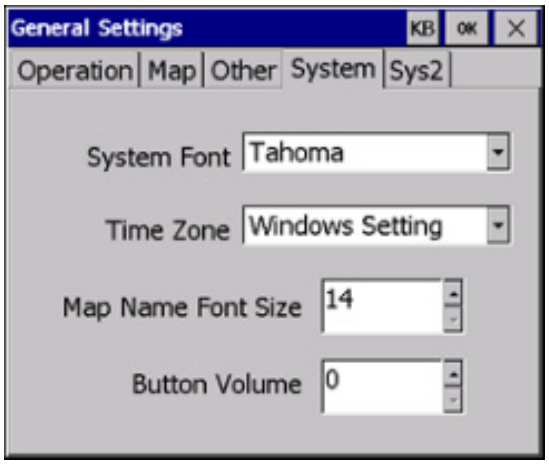
Auto Index Maps

It is recommended to leave this option switched ON

When this option is activated, maps which are added to folders under the Map File Paths will be indexed automatically. If the option is switched off, it

is important that the map index is kept up to date manually (using the Index Maps function), otherwise maps which are not in the map index will not be found during moving-map operations.

System tab



System Font

It is recommended to leave this option at the default setting

Specifies the system font used within **OziExplorer**.

Time Zone

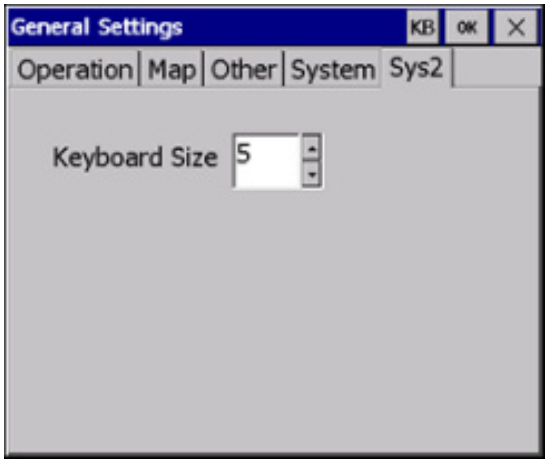
It is recommended to leave this option at the default setting

Specifies which time zone you are located in. The time offset can be specified manually, or if the default setting of Windows Settings is used, the system time zone as configured in the Navigator system configuration is used.

Map Name Font Size

This option specifies the size of the font used to display the map name at the bottom of the map. If this option is set to ZERO (0), this disables the display of the map name on the map panel.

Sys2 tab



Keyboard Size

This option specifies the size of the on screen used throughout OziExplorer.

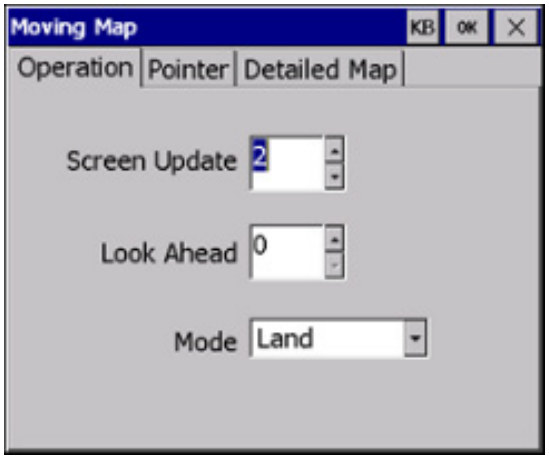
The size can be set to a number (1 - smallest to 6 - largest)

See the On Screen Keyboard section of this User Guide for further details.

Moving Map settings

The **Moving Map button** on the Settings page is used to load the **Moving Map settings window** allowing you to configure parameters associated with moving map functions.

Operations tab



Screen Update

It is recommended to leave this setting at the default value of 2 (TWO)

This setting determines how often the screen is updated. A setting of 1 (ONE) will make **OziExplorer** update the screen every time an NMEA sentence is received from the GPS. A setting of 2 (TWO) will make **OziExplorer** update the screen for every second NMEA sentence received from the GPS.

Look Ahead

This option sets the "look ahead" distance while in moving map mode. This is how much space is between the position pointer and the top of the screen. This setting can be set to 0 (ZERO) when look ahead is not required for a particular activity (such as hiking).

NOTE
This setting does not apply to Course Up and/or 3D perspective modes. These use a fixed look ahead position which is about ¾ of the way from the top of the screen.

Mode

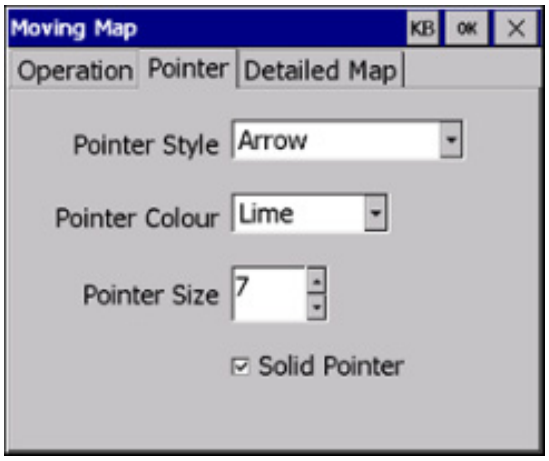
Sets the mode of operation to either

- Air
- Marine
- Land

This option changes the terminology used within **OziExplorer**, and the style and method of direction prompting when navigating along a route.

Obviously for general use in a vehicle, the default **Land** setting is the best choice.

Pointer tab



Pointer Style

This option defines the style of pointer used to indicate your position on the map. By default this is a LIME GREEN ARROW WITH BLACK OUTLINE. Choose from the predefined pointer styles using the drop-down menu.

Pointer Colour

Defines the colour of the pointer used.

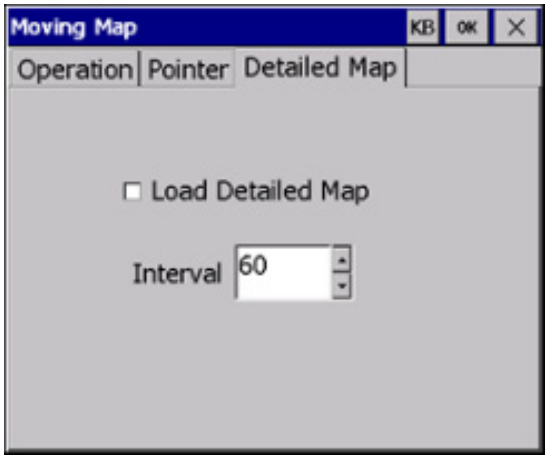
Pointer Size

Defines the size of the pointer on screen.

Solid Pointer

If this option is switched **ON** (ticked), the default ARROW pointer will be filled with the selected colour, if it is switched **OFF**, the arrow pointer **OUTLINE** will be the selected colour.

Detailed Map tab



It is recommended to leave these settings at the default values

Load Detailed Map

If this option is **ON**, a more detailed map (higher scale) will be searched for at the specified interval when running in moving map mode. If a better map is found, it will be loaded automatically.

Be aware that this option may not always produce the result you expect, due to the nature of the image files which make up the map.

Generally speaking, it is better to leave this option switched off.

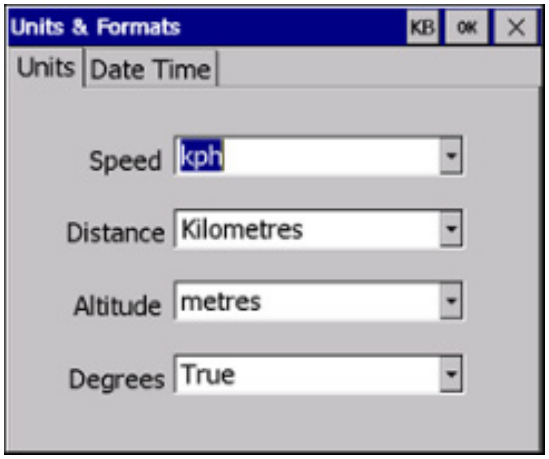
Interval

Specify the interval in seconds in which to search for a more detailed map, if that option is switched on.

Units settings

The **Units button** on the Settings page is used to load the **Units settings window** allowing you to configure the settings of the program related to its units of measure (speed display, etc.).

Units tab



Speed

Choice of

- Kph – Kilometres per hour
- Mph – Miles per hour
- Knots (Marine unit of speed)

Distance

Choice of

- Kilometres
- Miles
- Nautical Miles / metres
- Nautical Miles / feet

Altitude

Choose one of

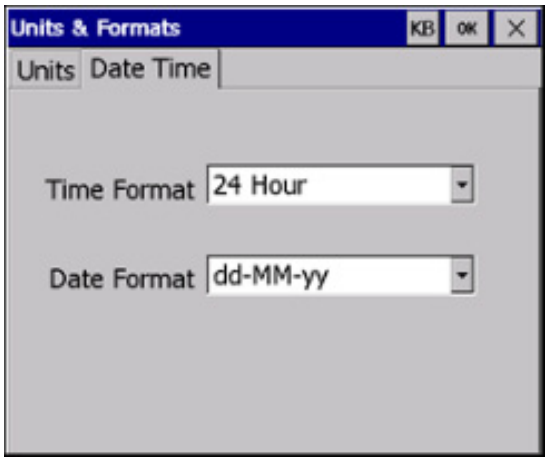
- Metres
- Feet

Degrees

Choose one of

- True
- Magnetic

Date Time tab



Time Format

Choice of

- 12 Hour
- 24 Hour

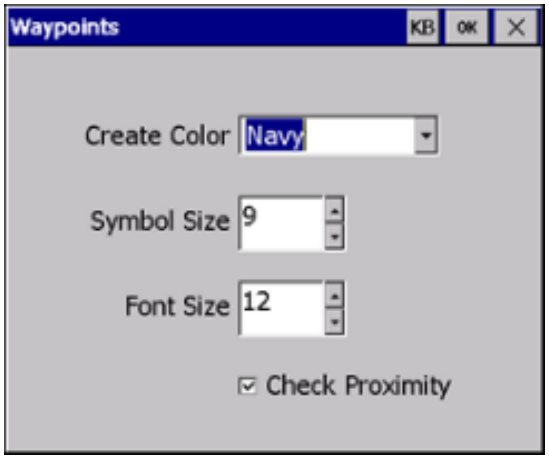
Date Format

Choose one of

- dd-MM-YY
- dd/MM/yy
- dd.MM.yy

Waypoints Settings

The **Waypoints button** on the Settings page is used to load the **Waypoints settings window** allowing you to configure parameters which affect the behaviour of waypoints.



Create Colour

Specifies the default colour used for newly created waypoints. Note that the colour of individual waypoints can be modified at any time via the Waypoint Properties window.

Symbol

Specifies the size of the symbol used to mark a waypoint.

Font Size

Specifies the size of the font used to display the waypoint name adjacent to the waypoint symbol

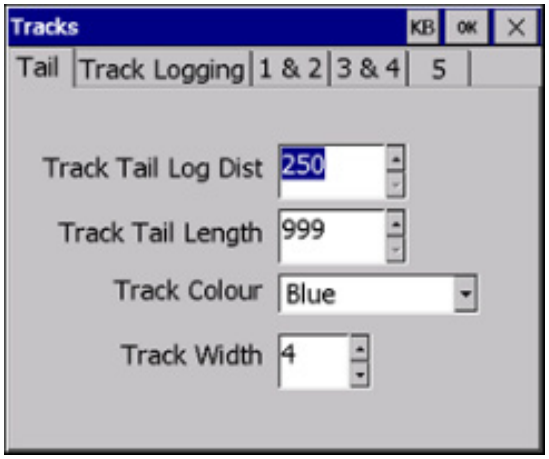
Check Proximity

This option turns on the proximity check feature for all waypoints. This means that when waypoints are created, the proximity check option is enabled for the created waypoint by default.

Tracks Settings

The **Tracks button** on the Settings page is used to load the **Tracks settings window** allowing you to configure parameters which affect the behaviour of tracks.

Track Tail



Track Tail Log Dist

This option specifies the maximum distance before a track tail point is logged.

If you have specified units as Kilometres (in Settings > Units) then this entry is in meters, otherwise it is in feet.

This should be set to a reasonably high distance, perhaps about 500M (1500ft). Setting this distance too low will cause too many track points to be collected and slow performance.

Automatic track point collection is also used for the track tail log using the same filter as above.

Track Tail Length

This is the length (number of track points) of the track logged to memory which is displayed on screen behind the position marker.

This has no effect on the track points which are logged to disk when the Log Track to File option is turned on. A track point is stored every time the Track Distance between points is exceeded and stored in a circular

buffer, a maximum of 1000 points is kept in memory so the Track Tail cannot be set above this value.

The track is then drawn on the screen each time the GPS position is processed. If you set this value too high there may not be enough time to draw the track on the screen before the next position update is received. If this happens, position updates will be lost. Keep the track tail as short as you need. The track tail is only used when in moving map mode; otherwise the full track tail log (max 1000 points) is displayed.

NOTE
Track Tail logging in OziExplorerCE will mark a track point every X metres according to the Track Tail Log Dist setting.
So the apparent maximum length of the Track Tail as per the default configuration is 999 points X 250 metres apart. This gives a maximum Track Tail length of approximately 250 kilometres.

However, that length is the maximum possible if the vehicle is travelling in a straight line. OziExplorer will mark a track point under the following conditions:

- The specified Log Distance is exceeded
- The Heading changes by more than 7.5 degrees
- The Speed changes by 5 Kph or 15% whichever is the greater

Therefore the maximum length of the track tail as displayed by OziExplorerCE may well be quite a bit less than the theoretical maximum.

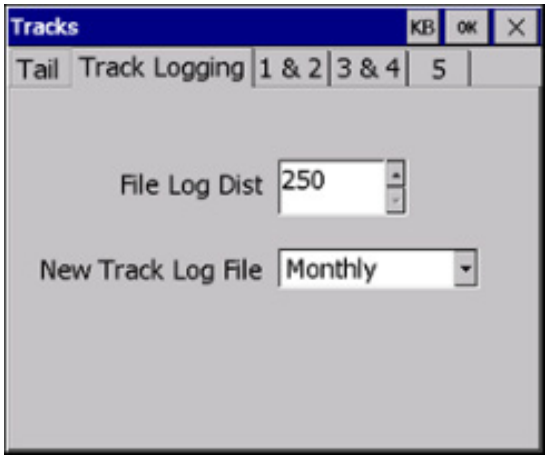
Track Color

This option specifies the colour of the track tail displayed on the map.

Track Width

Select the width (or thickness) of the track tail displayed on the map. For performance reasons do not make it too wide, a **width of 2 is optimal**.

Track Logging



File Log Dist (File Log Distance)

This option specifies the maximum distance before a track point is logged to disk.

If you have specified units as Kilometres (in Settings > Units) then this entry is in meters, otherwise it is in feet.

If set to zero the track is not logged. This should be set to a reasonably high distance, perhaps about 500M (1500ft). Setting this distance too low will cause too many track points to be collected.

New Track Log File

This option will cause the automatic export of your current track log data to a file in the **OziExplorer Data** on the SD card in the **Navigator**.

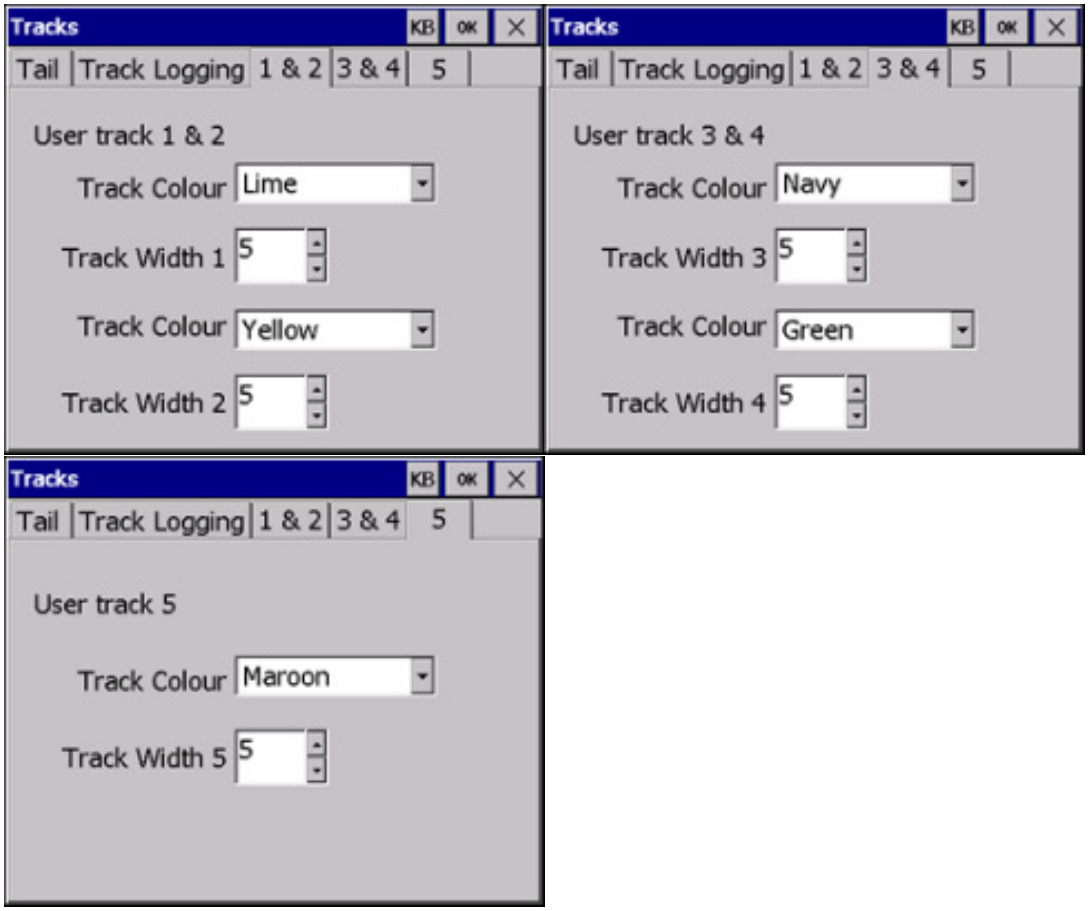
The automatic export can be done on a the following schedules:

- Daily
- Weekly
- Monthly

Track Logging can be turned **On** or **Off** using the LOG ON button on the Track page

---

Track 1 & 2, 3 & 4, and 5 settings



The remaining tabs in the Settings > Tracks dialogue window

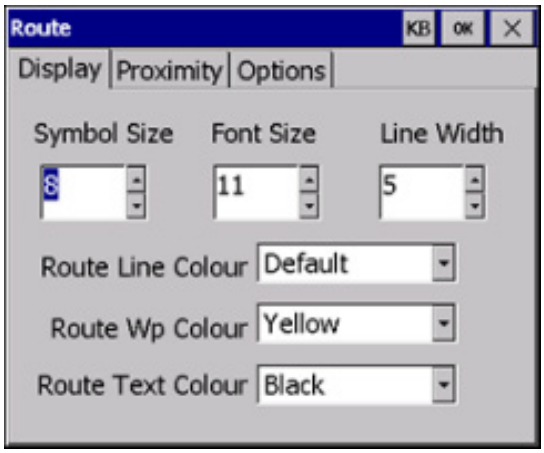
- 1 & 2
- 3 & 4
- 5

all allow you to configure the individual colour and width of the first five tracks which **OziExplorer** allows you to have loaded.

Route

The **Route button** on the Settings page is used to load the **Route settings window** allowing you to configure parameters which affect the behaviour of routes.

Display tab



These options define the display properties of Routes.

Symbol

Defines the symbol size for the Route Waypoints which make up the route

Font Size

Defines the size of the font used for the names of the Route and the Route Waypoints

Line Width

Defines the width of the lines used to join the Route Waypoints within the route

Route Line Colour

Defines the colour used to draw the lines making up the route

Route Wp Colour

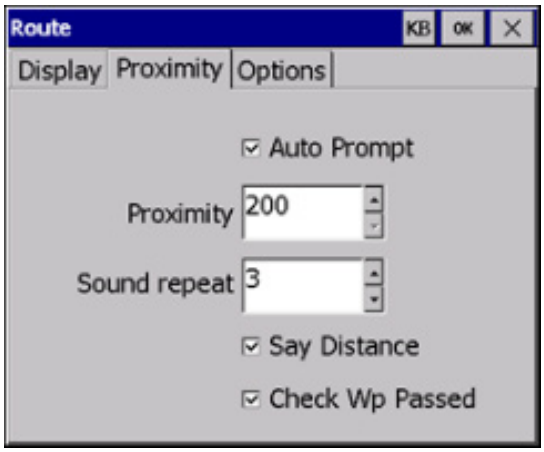
Defines the colour of the Route Waypoints within the route

Route Text Colour

Defines the colour used for the names displayed adjacent to Route Waypoints and the Route itself

---

Proximity tab



Auto Prompt

Automatically prompts on entering the route proximity. An image will be displayed and a sound played providing an indication of the direction to be taken.

Proximity

The distance from the route waypoint the auto prompt will be activated. (The proximity is a circular zone around the route waypoint.)

Sound Repeat

The number of repeats of the sound prompt.

Say Distance

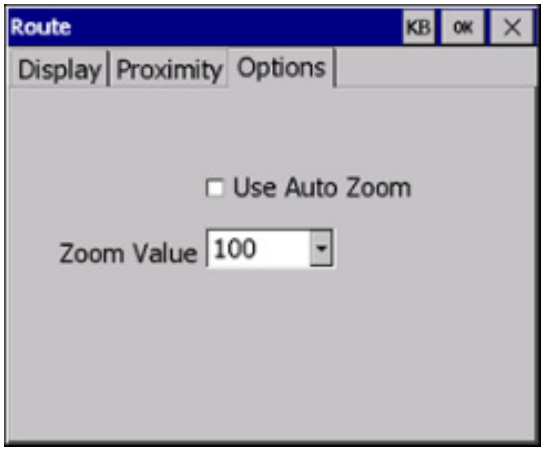
The distance from the route waypoint will be voiced.

Check Wp Passed

The proximity will be activated if the waypoint is passed without the proximity being entered.

For example, a boat may pass a waypoint without actually entering the proximity for that waypoint. If selected, this option will make sure the proximity is triggered.

Options tab



Use Auto Zoom

The map zoom will be changed to the Zoom value set below when a Route waypoint proximity is entered.

Zoom Value

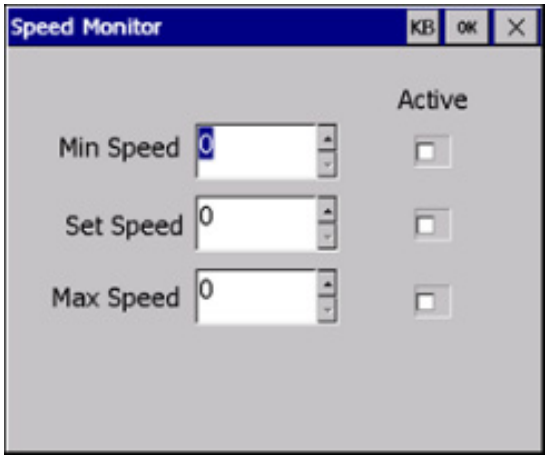
Specify the Zoom value the map changes to when the Route waypoint proximity is entered.

The map zoom will change back to the normal setting when the waypoint is reached.

Example - you can set the map to a zoom of say 50% for normal travel so you can see more of the map and specify a zoom value of 100% (or any other value) when the proximity is entered so the turn you need to make is more visible.

Speed Monitor

The **Speed Monitor button** on the Settings page is used to load the **Speed Monitor settings window** allowing you to configure the behaviour of the speed monitor function.



Min Speed

An audio alert is played when the speed goes below the specified minimum speed.
The sound will not play again until you go above the set speed and then below the minimum speed again.

Set Speed

An audio alert is played when your speed goes above the specified set speed.

Max Speed

An audio alert is played when your speed goes above the specified maximum speed.

Active

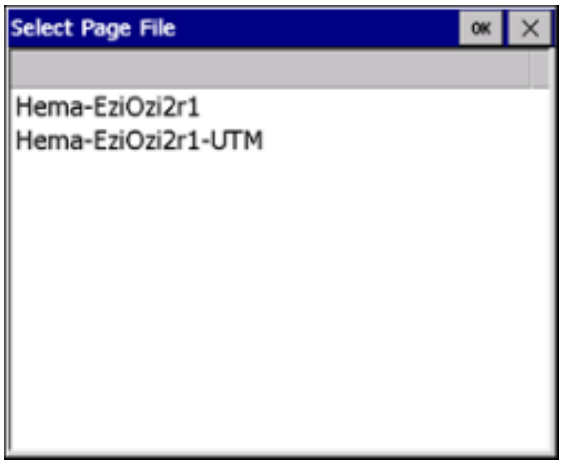
The individual speed alerts can be activated independently by ticking the adjacent Active check boxes.

WARNING
Do NOT activate these speed monitors and leave the settings at 0 (zero). If you do so, you will hear alerts sounding every time your vehicle accelerates or decelerates.

Load Layout

The **Load Layout button** on the Settings page is used to load a page file for **OziExplorer** which defines the user interface for the program.

Tapping the Load Layout button calls the Select Page File window, where you can select a page file to load into **OziExplorer**.

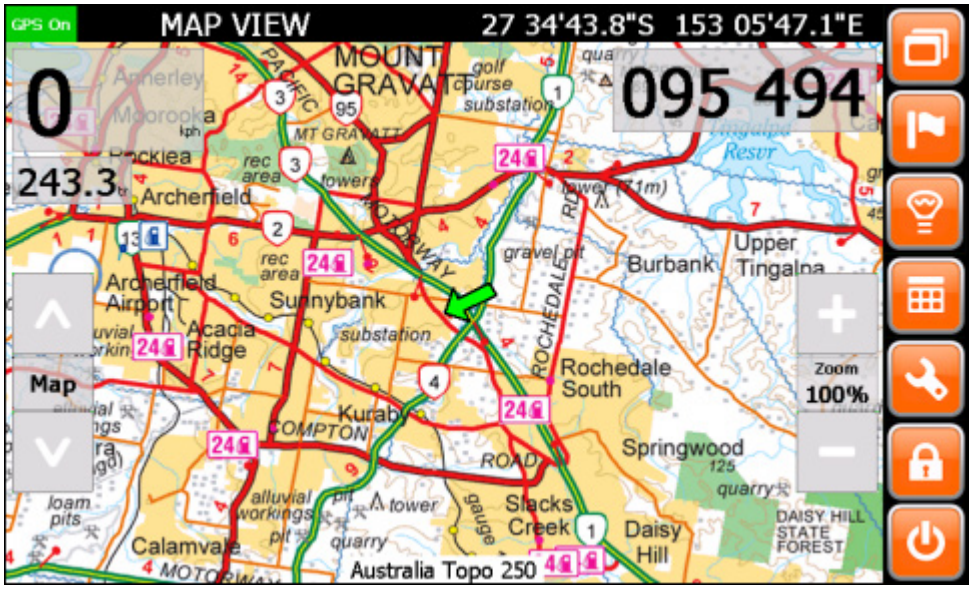


Included with the **Navigator** are two layouts:

1. HEMA-EziOzi2r1 (this is the default page layout)
2. HEMA-EziOzi2r1-UTM (an additional layout which includes the UTM 6 digit display on the map pages)

See Appendix 3 - Changing the OziExplorer interface for more information on changing the **OziExplorer** interface using page files.

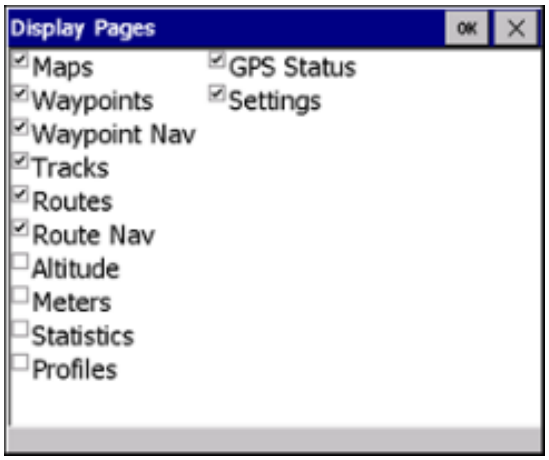
Below is an example of the UTM layout supplied with the **Navigator**. The interface is identical in all respects, except for the inclusion of the **UTM 100m Grid Reference** field at the upper right of all map panels.


GPS On
MAP VIEW
27 34'43.8"S 153 05'47.1"E
0
kph
243.3
095 494
Map
Zoom
100%
MOUNT GRAVATT
Archerfield
Archerfield Airport
Sunnybank
Acacia Ridge
Kuraby
Rochedale South
Springwood
Burbank
Upper Tingalpa
Slacks Creek
Daisy Hill
Calamvale
DAISY HILL STATE FOREST
Australia Topo 250

Display Pages

The **Display Pages button** on the Settings page is used to load the **Display Pages window** allowing you to determine which pages in the **Hema EziOzi2** configuration are available.

What you see on your device may not exactly match the image as shown in the example below. It depends which pages have been enabled or disabled using this feature.



The Display Pages window allows you to customise which of the available pages you wish to see during operation of **OziExplorer**.

Items which have a **TICK** adjacent to them are switched **ON**.

When you remove (untick) any of the pages listed here, it no longer appears when you open the Select Page window via the Select Page button on the Standard Toolbar.

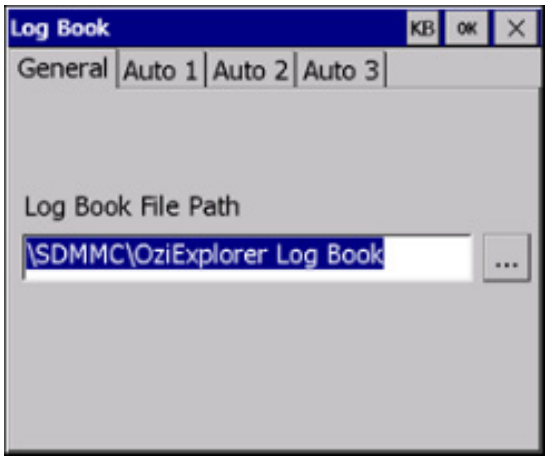
Of course, you can turn any inactive pages back on by placing a tick in the adjacent checkbox.

Log Book

The **Log Book button** on the Settings page is used to load the **Log Book settings window** allowing you to configure parameters which affect the behaviour of the log book function.

The Log Book settings window has multiple tabs allowing you to configure where the log book data is stored, and also some conditions under which **OziExplorer** will automatically create log book entries for you.

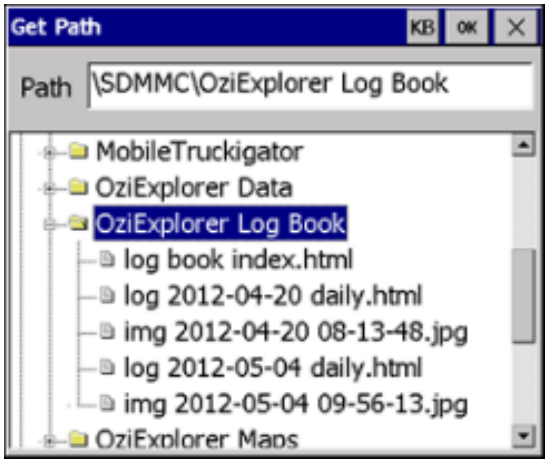
Log Book Settings General tab



It is recommended to leave this setting at the default value

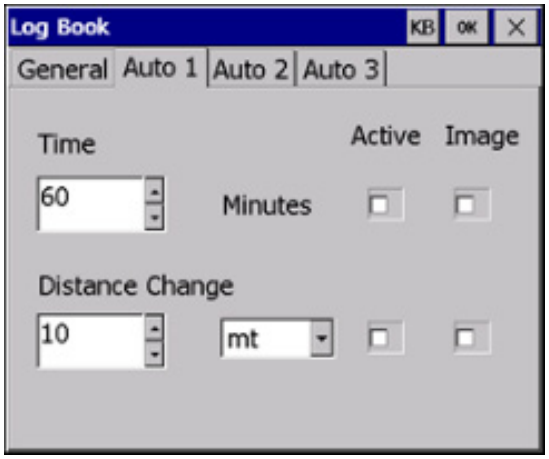
The **General tab** has only one entry for settings, that is the location of the log book data saved on the SD card.

Tap the **Get Path button**  to open the Get Path window, where you can choose the location. Browse to the folder which you wish to use, and then tape the **OK button** to save the setting.



It is recommended to leave this setting at the default value

Log Book Settings Auto 1 tab



These options will create logbook entries automatically for you when the conditions shown are met.

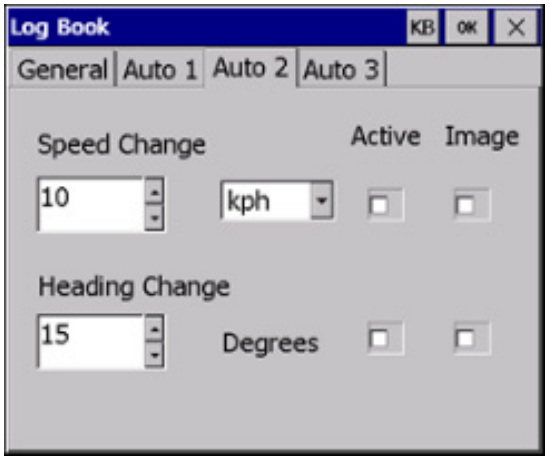
Time

- **Time** can be set to a number of minutes, which is the interval at which new log book entries are created.
- **Active** When ticked, this option is active
- **Image** When ticked, a snapshot of the map will be added to the logbook entry

Distance Change

- **Number** Define a distance at which a log book entry is automatically created. Be careful NOT to set this too low, or you will end up with a LOT of logbook entries.
- **Units** Defines the unit of measure for the distance number field
- **Active** When ticked, this option is active
- **Image** When ticked, a snapshot of the map will be added to the logbook entry

Log Book Settings Auto 2 tab



These options will create logbook entries automatically for you when the conditions shown are met.

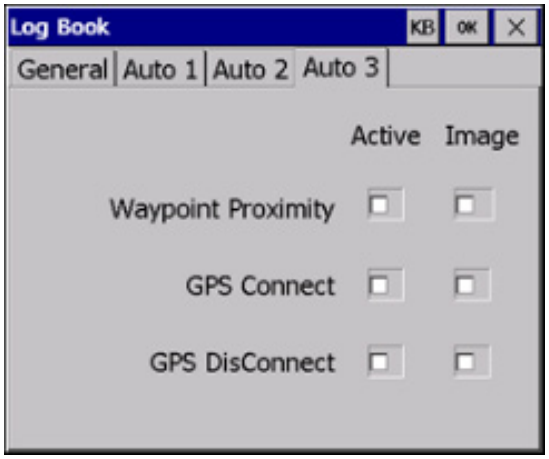
Speed Change

- **Number** Define a speed at which a log book entry is automatically created. Be careful NOT to set this too low, or you will end up with a LOT of logbook entries.
- **Units** Defines the unit of measure for the speed number field
- **Active** When ticked, this option is active
- **Image** When ticked, a snapshot of the map will be added to the logbook entry

Heading Change

- **Number** Define a number of degrees change from the current course at which a log book entry is automatically created. Be careful NOT to set this too low, or you will end up with a LOT of logbook entries.
- **Active** When ticked, this option is active
- **Image** When ticked, a snapshot of the map will be added to the logbook entry

Log Book Settings Auto 3 tab



These options will create logbook entries automatically for you when the conditions shown are met.

Waypoint Proximity

When this option is active, whenever a waypoint proximity alarm is triggered, **OziExplorer** will also trigger the creation of a log book entry.

- **Active** When ticked, this option is active
- **Image** When ticked, a snapshot of the map will be added to the logbook entry

GPS Connect

When this option is active, whenever the GPS is activated, **OziExplorer** will also trigger the creation of a log book entry.

- **Active** When ticked, this option is active
- **Image** When ticked, a snapshot of the map will be added to the logbook entry

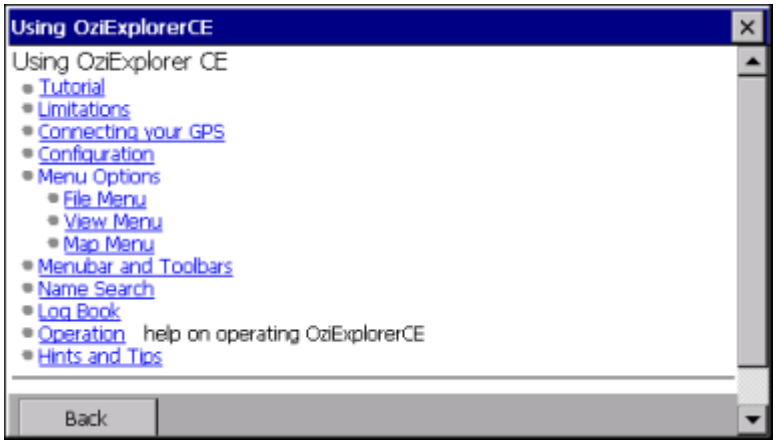
GPS Disconnect

When this option is active, whenever the GPS is de-activated, **OziExplorer** will also trigger the creation of a log book entry.

- **Active** When ticked, this option is active
- **Image** When ticked, a snapshot of the map will be added to the logbook entry

Help

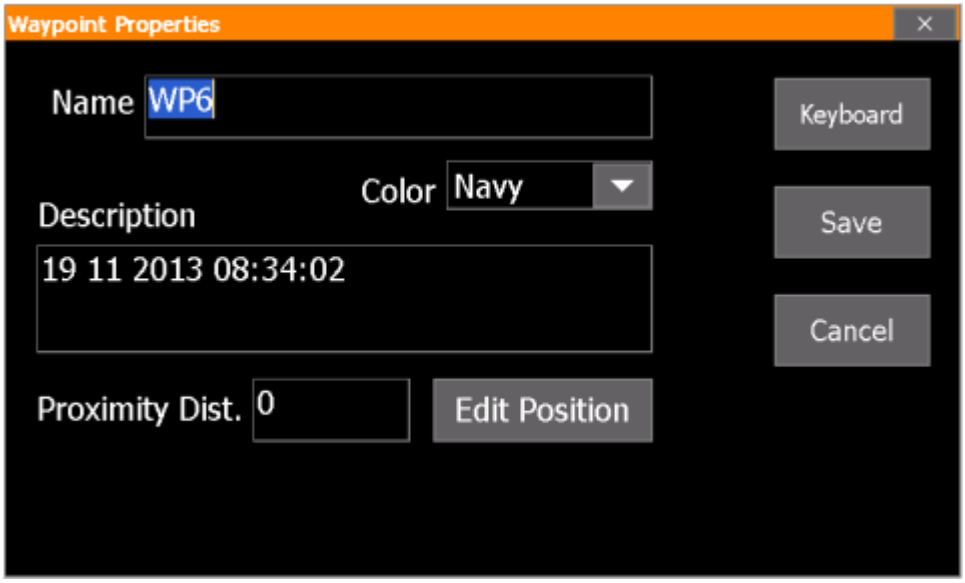
When you tap the **Help button** on the Settings page, **OziExplorer** will load the built in help file and display it on screen.



Please note that the built-in help is the standard **OziExplorerCE** help file. It describes the standard **OziExplorer** interface and functions. Hopefully, this document will provide all the detailed help you might need to use **OziExplorer** on the **Navigator**.

On Screen Keyboard (or Input Panel)

Entry of alpha-numeric characters within data fields in **OziExplorer** is done using the on screen keyboard or input panel. The example shown below is the Waypoint Properties window.



When you open a window or data entry field which allows for character input, the **Keyboard button** will appear on the screen indicating that it is possible to open the on-screen keyboard.

The input panel can be toggled on and off by repeatedly tapping the Keyboard button.

When the button is tapped, the on-screen keyboard will appear.

Enter your text in the field, then tap the Keyboard button to close the keyboard.


Keyboard
` 1 2 3 4 5 6 7 8 9 0 - = ←
q w e r t y u i o p [ ] \
a s d f g h j k l ; ' ↵
z x c v b n m , . /
Delete

Appendicies

Introduction

A number of appendices have been added here to explain some of the topics in more detail.

Appendix 1 - About OziExplorer map files

A map in **OziExplorer** is an image file which has been calibrated (or georeferenced) so that **OziExplorer** can use any pixel position on the map to determine the true geographic position.

When a map image file is calibrated in the PC version of **OziExplorer**, a corresponding **.map** file is created which contains the calibration information and a link to the image file containing the map.

A .map file contains the following information related to the map

- A link to the map image file
- The datum of the map
- The map projection used for the map
- The Calibration (georeferencing) information for the map

NOTE
Map calibration and creation of the corresponding .map file can only be performed using the PC (full) version of **OziExplorer**.

When using maps on the **Navigator** version of **OziExplorer**, the program opens the .map file (eg. World.map) of the required map, so it can access:

- The name of the corresponding map image file, which it then opens
- The map datum and projection
- The calibration information, which allows **OziExplorer** to calculate the factors necessary to convert the maps image pixel coordinates to geographical coordinates.

Therefore, a "map" in **OziExplorer** on the **Navigator** actually consists of TWO files

1. The .map file which contains the information discussed above.
2. The actual map image file

Before image files can be used as maps in **OziExplorer**, they must be in one of the supported formats **(.ozf4, .ozf3, .ozf2, .ecw, .jpg, .png or .bmp**). Any map images in other formats must be converted to the **OziExplorer** ozfx3 format using the **Img2Ozf** program.

This program is available from the **OziExplorer** website.
(http://www.oziexplorer.com)

How map image files are located

When a .map file is opened in **OziExplorer**, the program attempts to find the corresponding map image file the following way

1. The map image file name is read from the .map file and the path and file extension is removed

2. The .ozf4, .ozf3, .ozfx2, .ecw, .jpg, .png, and .bmp extensions are added to the file name to search for maps in any of these formats
3. The Image file Path 1 and Image File Path 2 as set in the **OziExplorer** configuration are searched.

If not found

1. The folder where the .map file was loaded from is searched.
2. If not found, then the name of the map file name is used for the image file name and the above search process is repeated.

If the image file which matches the .map file is still not found, the message "Image File Not Found" will be displayed.

Map Indexing

To make searching for map files faster, map files are indexed and the indexes are stored in the **System Files** folder underneath the main **OziExplorer** folder on the internal memory of the **Navigator**.

The index files are created the first time a map search is initiated. The time it takes to create the indexes will vary according to the number of map files in each of the active Map File Paths defined in the **OziExplorer** configuration.

Indexes are used to find maps when

- Looking for a map during moving map operation if the "**Load Detailed Map**" option is turned on.
- When **Find Maps At Cursor** function is used
- When **More Detailed Map** function is used
- When **Less Detailed Map** function is used

Appendix 2 - Altitude Readings in Vehicle GPS units

There are two major factors involved in elevation and GPS.

Firstly, what do you mean by elevation? And secondly, is a GPS derived elevation as good as a GPS derived horizontal position?

1. GPS primarily indicates a surface (horizontal) position based on a mathematical model representing the earth's near-spherical surface. Height or elevation is a different kettle of fish. GPS can give a distance from the centre of the earth, and then by using the radius of the surface model (see above), give you an elevation from the surface model. Let's call this the mathematical elevation. Then you have to ask, does this represent a height above sea level? The answer is no. It may do so in places, but only by accident.

   There are tables of the differences around the world, between the mathematical elevation and sea level elevation. [The spherical (more accurately ellipsoidal) models for GPS and sea level are called the spheroid, and the geoid, respectively]. These tables are the result of observations taken over the last few centuries, by surveyors, space scientists and geologists.

   Geologists get involved in these observations, because anomalies in gravity strengths often indicate mineralogy. And gravity strengths relate to the behaviour of level determination on the earth's surface.
2. Because the position solution found by GPS is a mathematical one, and the ranging from the satellites is in the order of 20000 kilometres, there is an error bias in the direction of the earth’s centre. This is due to intersecting lines that may not quite meet. This of course is the elevation solution.

   So if we have an error of 10 metres in the horizontal position, the error in the elevation will be more like 20-30 metres. Your small standard GPS unit usually displays elevation, but you must accept it knowing the above limitations. I can say that it is reasonably sensible. Around the coast of Australia, it will be somewhere around zero, give or take 50 metres. In Toowoomba, it will be about 600 metres. Elsewhere in the world, it may show greater or lesser discrepancy.

Some other reading on altitude can be found here:

http://gpsinformation.net/main/altitude.htm

Appendix 3 - Changing OziExplorer interface

We think the **Hema EziOzi2** interface will make **OziExplorer** easier for you to use.

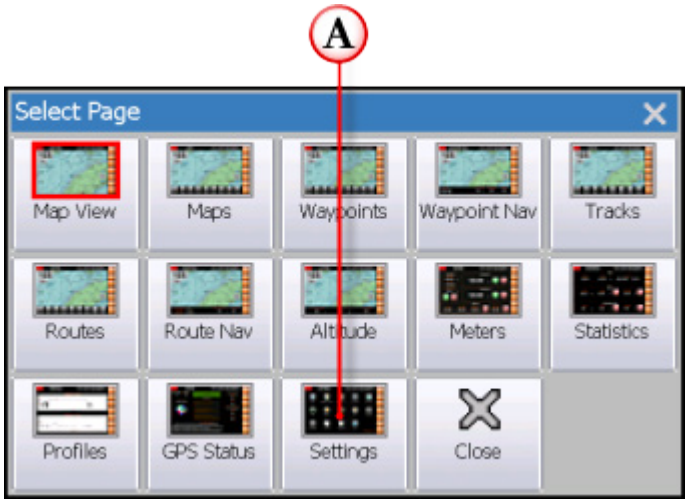
The interface layout of **OziExplorer** is defined in what is called a *page file*.

The **Navigator** comes with two page files onboard:

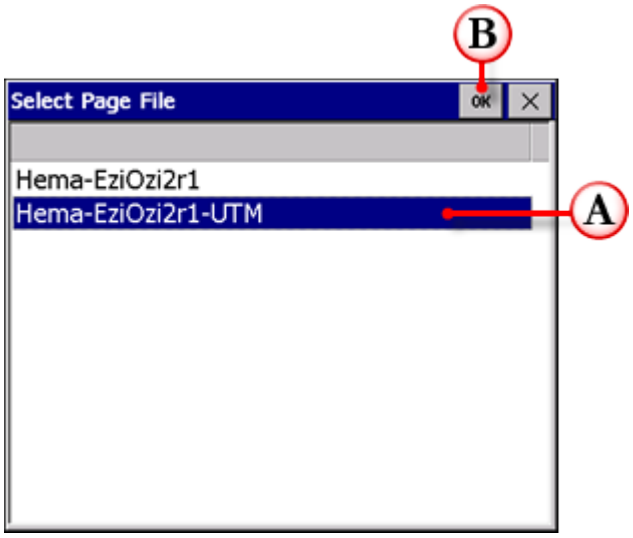
1. **HEMA-EziOzi2r1** (the **Hema EziOzi2** interface)
2. **HEMA-EziOzi2r1-UTM** (**Hema EziOzi2** interface, with the addition of UTM 6 digit Grid 100 display)

To change the layout, follow these steps

Tap the **Select Page** button to open the Select Page window, then tap the **Settings** button (A)



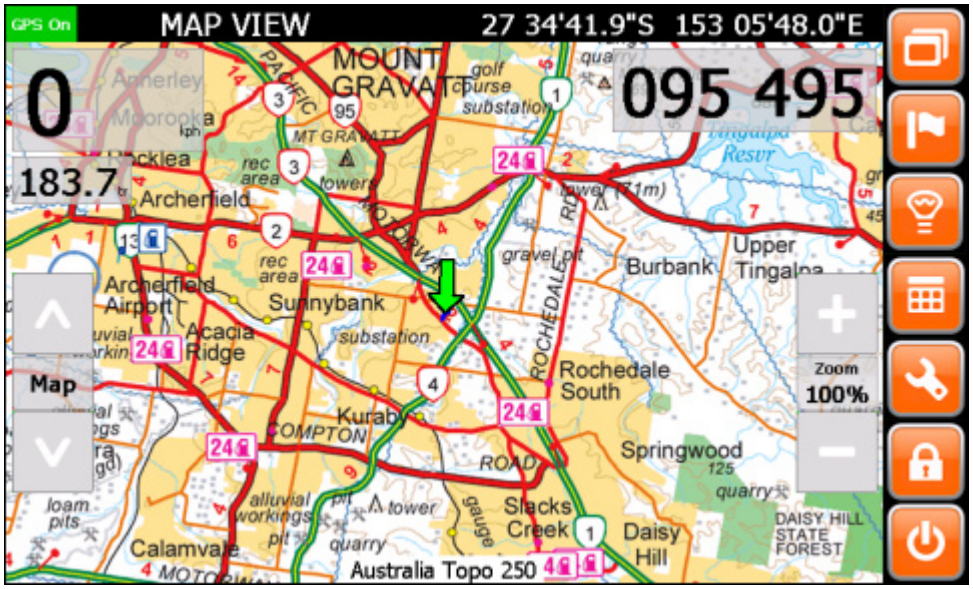
Tap the LOAD LAYOUT button (A)



Select required page file (A)

Tap the **OK** button (B) after selecting the required page file. In this example, we are loading the **Hema-EziOzi2-UTM** page file.

The selected page file then loads, and the display changes to that defined by the page file. The example shown below is the EziOzi2 UTM file, which adds the UTM 6 digit grid reference display to the upper-right of the map panel.


GPS On
MAP VIEW
27 34'41.9"S 153 05'48.0"E
0
183.7
095 495
Map
Zoom
100%
MOUNT GRAVATT
Archerfield
Archerfield Airport
Sunnybank
Acacia Ridge
Burbank
Upper Tingalpa
Rochedale South
Springwood
Kuraby
COMPTON
Slacks Creek
Daisy Hill
Calamvale
DAISY HILL STATE FOREST
Australia Topo 250

Index