



Advanced ICE
Hema 4WD Navigation Manual

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Safety Notes

Safety while Operating the Device

Failure to adhere to the following guidelines may result in potentially hazardous situations and result in serious injury or even death.

- Never operate/interact with the device while you are driving
- National road traffic regulations and local traffic conditions always take precedence over the instructions given by any navigation device.
- The route calculated by the navigation device is a suggested route and used for reference only. It is not a substitute for alert driver behaviour and common sense. Drivers must continue to pay attention to all road regulations and hazards regardless of instructions from the navigation device.

Safety While Travelling

While the Advanced ICE Hema 4WD Nav is a valuable aid for navigation, it is only that - an aid - and as such should not be used as a replacement for hard-copy maps and other traditional navigational aids while travelling, especially in remote areas. Always ensure that you have adequate backup systems in place to ensure your personal safety.

Local conditions can change rapidly, therefore it is wise to pay attention to road signs, particularly where those signs advise of serious hazards, such as local flooding etc.

Backing Up Your Data

During use, the 4WD Nav will accumulate some data automatically (such as 4WD track logs), and you may also create data yourself (such as OziExplorer waypoints).

Examples of this data could be:

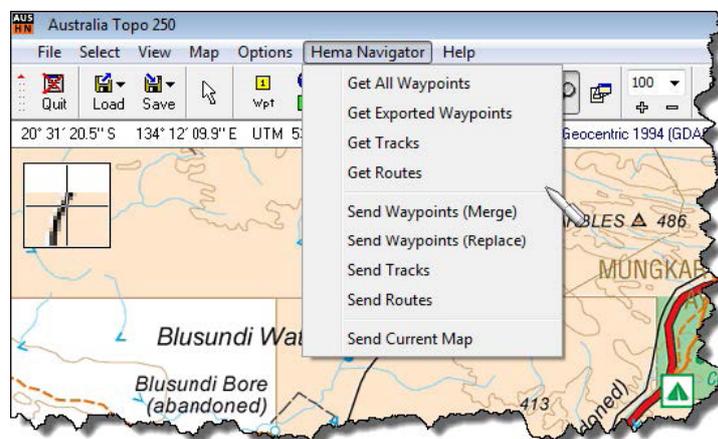
- Waypoints in OziExplorer
- Track logs in OziExplorer

Where is the data stored, and how can I make a copy of it?

OziExplorer stores user data in on the SD card

The OziExplorer program for PC, which you can install from www.ozieplorer.com (you may be required to purchase the full version), allows you to transfer OziExplorer data from your SD card to your Windows PC. The following options available from the File/Load from File menu allow transfer of data from your unit to your PC:

- Waypoints
- Tracks
- Routes



The OziExplorer application contains detailed in-built help covering these functions.

4WD Nav

Introduction

The 4WD Nav function uses the OziExplorer application to provide an exceptional user experience during offroad navigation.

The OziExplorer interface has been customised using the OziExplorer Screen Designer tool, in an effort to make the software more accessible and enjoyable during use.

To begin 4WD Nav, tap the 4WD Nav button **A** from the Navigation Menu pictured below. **Note:** Your device will automatically boot into iGo Primo (Street) mapping as this controls both the time and brightness of your device. To access the below options screen, you must exit the Street Navigation using the power button on the bottom left of the screen.



OziExplorer will display a splash screen during start-up, as shown below. Status messages are displayed in the lower left corner of the screen during start-up.



Getting to Know OziExplorer

A typical OziExplorer screen is shown here (in this case the Map View page).

It is possible that OziExplorer will display the GPS Status page prior to this screen. It will display the GPS Status screen while it is waiting to get a GPS Satellite fix.

Once OziExplorer has got a GPS fix on your position, it will show your current position indicated by the central Arrow you see in the image above. As you drive around, OziExplorer will move the map under the pointer indicating your position. This is known as "moving map" display.

As you drive, OziExplorer will leave a blue line behind the pointer. This is the Track Tail. The track tail shows you where you have been. Information such as current speed, coordinates of current location, zoom level and map title are displayed over the map. It also has buttons which you can tap to perform various functions.

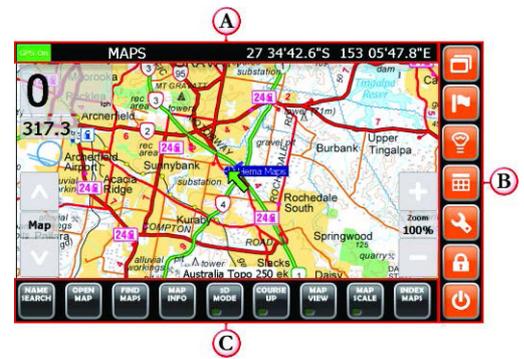
This image below shows some of the key features of the OziExplorer display.



A **Status Bar:**
Shows the current GPS status, the name of the currently displayed page, and the current latitude and longitude.

B **Standard Toolbar:**
Contains buttons for commonly used functions

C **Page Specific Toolbar:**
Contains buttons specific to the current page



Map Overlay Information & Buttons

In addition to the standard tool bar, the following buttons and information panels are displayed along with the map.

A **GPS Status Indicator:**
Shows whether the GPS is ON or OFF.

B **Page Title:**
The name of the currently displayed page

C **Latitude/Longitude:**
Current Position

D **Speed Indicator:**
The current speed (by default in Kilometres per hour)

E **Heading Indicator:**
The current heading (by default in true degrees)

F **Map Select Up Button:**
Select next map up in found maps list (generally, change to more detailed map)

G **Map Select Button:**
Open the Maps Found window, showing maps loaded on device for the current location

H **Map Select Down Button:**
Select next map down in found maps list (generally, change to less detailed map)

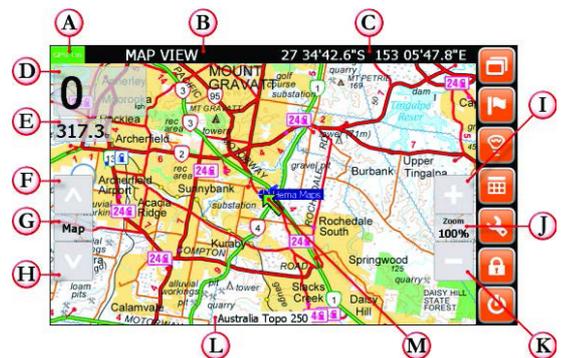
I **Zoom + Button:**
Increase zoom (magnification) of current map

J **Current Zoom Level:**
Current zoom (or magnification) level of displayed map

K **Zoom - Button:**
The map name of currently loaded / displayed map

L **Map Name:**
Select next map down in found maps list (generally, change to less detailed map)

M **Position Pointer / Cursor:**
The current GPS position or cursor position (pointer changes to cursor when GPS is OFF).



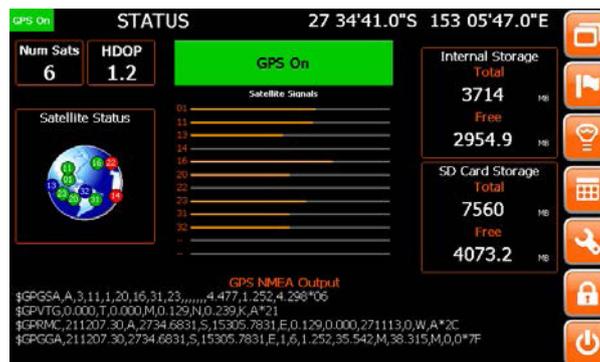
Standard Toolbar

The OziExplorer Standard Toolbar consists of the following elements:

-  **Select Page Button:**
Used to change pages within OziExplorer.
-  **Add Waypoint Button**
Add a waypoint at the current location on any map display page
-  **Home Button:**
Press this button to go straight to the Map View page.
-  **Popup Toolbar Button:**
Alternately shows / hides the popup toolbar
-  **Settings Button**
Opens the Settings page allowing modification of program settings
-  **GPS OFF/ON Button:**
Alternately turns OFF and ON GPS tracking
-  **Exit Button:**
Exits the program back to the Navigator Main Menu

As well as the Standard Toolbar, the program may display a toolbar located along the bottom of the screen. The contents of these toolbars will vary depending on the currently selected / displayed page.

Acquiring a GPS Satellite Fix



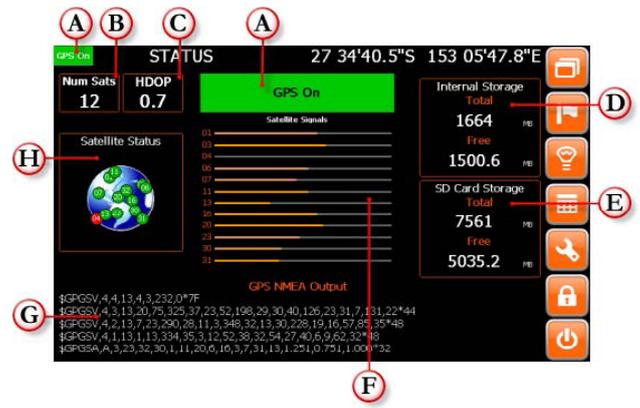
In order for the Navigator to find your current location, it requires a GPS satellite fix. To acquire a GPS fix, it is important that you are in area open to the sky (not inside an enclosed building) and away from tall buildings and trees. The initial fix may take anywhere from 2 to 5 minutes.

The length of time to obtain a fix will be reduced the next time the navigation software is started in a similar location. The screen above shows the Status Page when there is no satellite fix present.

When OziExplorer starts, the Status page will appear, displaying the GPS status and the number of currently visible satellites. Once a fix is acquired, OziExplorer will bring up a map of your location. It is then possible to select a more or less detailed map as required.

GPS

- A** **GPS Status Indicator:**
Shows whether the internal GPS is currently active.
- B** **Num Stats:**
The name of the currently displayed page
- C** **HDOP:**
Horizontal Dilution of Precision - An indication of horizontal positioning accuracy
- D** **Internal Storage:**
As the Advanced ICE Hema 4WD Nav uses only the SD card, this will also show the total / free space on the SD card
- E** **SD Card Storage:**
Shows total / free space on the SD card
- F** **Satellite Signals:**
Shows numbered satellites and relative signal strengths for visible satellites
- G** **NMEA Output:**
Shows raw NMEA GPS data coming directly from the GPS
- H** **Satellite Status:**
Shows sky map with visible satellites



Page Selection

Within OziExplorer, there are multiple pages (or screens) which you can access which 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.

 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.



NOTE:The buttons shown 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.

Pages and Their Functions

Map View

The main view within OziExplorer which gives the most amount of screen real estate to the actual map.

Maps

Display similar to MapView, but has a bottom toolbar allowing access to functions related to Maps.

Waypoints

Similar to MapView, but has a bottom toolbar allowing access to functions related to Waypoints.

Waypoint Nav

Similar to MapView, but has information about the next Waypoint at the bottom of the screen for use during Waypoint navigation.

Tracks

Similar to MapView, but has a bottom toolbar allowing access to functions related to Tracks.

Routes

Similar to MapView, but has a bottom toolbar allowing access to functions related to Routes.

Route Nav

Similar to MapView, but has Next Waypoint data fields at the lower border of the map panel for use during Route navigation.

Altitude

Similar to MapView page, but contains Altitude data fields at the lower border of the map panel.

Meters

Contains trip meter, multiple odometers, and altitude information.

Note: This page is turned off in the default configuration.

Statistics

Contains some additional parameters related to Time, Speed and Acceleration.

Note: This page is turned off in the default configuration.

Profiles

Contains graphs showing Speed and Altitude over time.

Note: This page is turned off in the default configuration.

Status

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

Settings

Contains buttons allowing the customisation of OziExplorer.

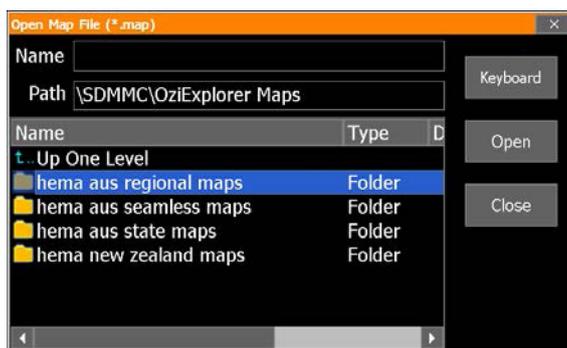
Opening a Map

 **NOTE:** Before attempting to open a map, it is necessary to switch off GPS reception by tapping the GPS Lock button on the right-hand toolbar.

 To switch to the **Maps** page, tap Select **Page**

 Tap **Maps**

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



The **Open Map File window** will appear. Drill down to the required map by navigating the directory/file structure until the required map is found. Double-tap to open the required folder or alternatively, tap the folder and tap the Open button.

Note: Some folders may contain sub-folders with maps.

OziExplorer Menus feature the following "finger control" buttons:

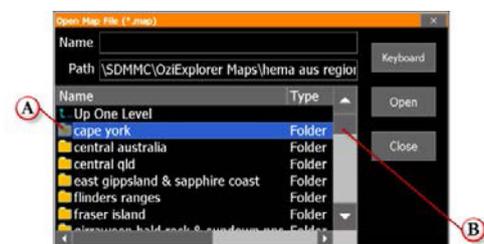


Close: Tap to **X** exit a menu.

Keyboard: Tap to launch the keyboard and tap to close the Keyboard. Used to name waypoints, routes and tracks and for name search.

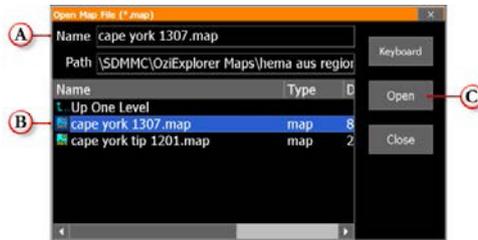
Open: Tap to Open a map or data such as waypoints, routes and tracks.

Close: Tap to exit a menu (the same function as **X**)



A - Double-tap to open the sub-folder:

B - Scroll up and down the list of maps using the scrollbar.



- A** - Name of currently selected map.
- B** - Double-tap to open the selected map file. *Alternatively,* single-tap to highlight the map, then tap the Open button **C**.

The view you see in the Open Map File window will depend on which maps you have installed on your 4WD Nav. You may see files, folders or a combination of both.

Adding Waypoints



The **Add Waypoint button** is accessible from any page within OziExplorer. The Add Waypoint button will instantly add a waypoint at the current cursor position on the map. Note that the Add Waypoint button will not have any effect when the current page does not contain the map panel. The cursor position is either the arrow showing your current position if you have a GPS fix, or the crosshair cursor if either GPS tracking is switched off or you do not have a GPS fix.

Exiting 4WD Nav

Tap the **Exit button** on the Standard Toolbar

- A** To Exit OziExplorer and return to the Advanced ICE Navigation Option Menu.



Important Information

One of the goals of the Advanced ICE Hema 4WD Nav is to provide customers with the most complete and accurate cartography that is available to us at reasonable cost. Along with Hema's extensive field work, Hema uses a combination of governmental and private data sources, which we identify in product literature and copyright messages displayed to the consumer. Virtually all data sources contain some inaccurate or incomplete data. In some areas, complete and accurate map information is either not available or is prohibitively expensive.

How to Add Your Own Maps

Important Information

- **Please ensure that any maps that are added are *OZICE compatible*.**
- **Please note:- Advanced ICE cannot provide any technical support or advice as to how to ensure compatibility of third party maps.**
- ***If you add maps that are not compatible, this will void all warranty for the MicroSD Card. In the event that adding third party maps affects other hardware which then needs to be returned to Advanced ICE for assessment, testing, repair or replacement, this will not be covered under warranty and services charges will apply.***
- **Each Navigation license is tied to a specific MicroSD card. Please do not attempt to modify or add anything to the Street Navigation content on the MicroSD card. Modified MicroSD cards may be unrecoverable, in which case a replacement MicroSD card with a new navigation license will need to be purchased by the end user.**

What You Need

- **PC or Notebook** with Windows XP (Service Pack 2) or higher and equipped with an SD Card Port or an SD to USB adapter (*for more information on adapter, see page 100*).

Instructions

- Read "Important Information" at the top of this page before proceeding.
- Follow the instructions on page 100 for locating the NAV card and connecting it to your computer.
- Once connected to your computer, open Windows Explorer and locate the MicroSD Card folder in the root directory.
- All the provided Hema Maps are located in the "OziExplorer Maps" folder on the root directory of the MicroSD Card.
- We recommend any third party maps are added to the above folder so they can be easily found when using your device. Please note:- Extra sub-folders can be created within the "OziExplorer Maps" folder for you to add third party maps if desired.

Advanced ICE Hema 4WD Nav License Agreement

The following is the Licence Agreement for the Hema 4WD Nav Solution. Please read this agreement carefully before proceeding. The Hema 4WD Nav Solution ("Hema 4WD Nav") is licensed, not sold, to You for use only under the terms of this license. It contains warranty and liability disclaimers which you should read.

1. Scope of Licence granted

- 1.1 Subject to the usage rules and restrictions in clauses 2 and 3, we grant you a non-exclusive, non-transferable license to:
- a) Use the Hema 4WD Nav on the Advanced ICE device that You own or control for Your own fair and reasonable personal or business use;
 - b) Backup the Hema 4WD Nav and Your Data from any device that you own, to any personal computer that you use, to keep for your use. You must not give the backup or copy to anyone else and any such backup or copy is governed by the terms and conditions of this License Agreement.

2. Usage Rules

- 2.1 Always be prepared, drive carefully and travel responsibly. Location data and road conditions are constantly changing, and the Hema 4WD Nav may contain errors, omissions or inaccuracies. Location data or navigational information is provided as a general guide only and is not intended to be relied upon as a sole means of navigation or in situations where precise location information is needed, or where erroneous, inaccurate or incomplete data may lead to death, personal injury, property or environmental damage. You must make your own enquiries in relation to conditions and the availability of fuel, drinking water, supplies and services. Depiction of a road or track in the Hema 4WD Nav is not an assurance of safety or manner of passage or public right of way and information contained in the Hema 4WD Nav does not replace traffic signs, lights, road markings, speed limits and other road rules.
- 2.2 You must take care of your own personal safety, and (if applicable) obey the road rules, at all times. Do not operate the Hema 4WD Nav while driving. Do not use or operate any mode of transport or attempt any journey while under the influence of alcohol or other substances.
- 2.3 You acknowledge that the Content within the Hema 4WD Nav is for planning purposes only and you should make your own enquiries or exercise your own judgment in relation to weather conditions, construction, road closures or other events that may impact on the journey you are undertaking.
- 2.4 You acknowledge that all content within the Hema 4WD Nav is protected by applicable intellectual property and other laws, including but not limited to copyright, and that You will not use such proprietary content in any way whatsoever except for permitted use under these terms and conditions. You also acknowledge that some content may be provided under licence from third party providers and this content is subject to the same intellectual property laws.
- 2.5 The Hema 4WD Nav may enable access to Hema Maps and other third party services. If these are provided, they are done so solely as a convenience to you and may be withdrawn at any time. Access to these services may require internet access, which you will need to arrange and pay for. Internet services may not be available at your location or may be very expensive. Because of the nature of the internet, it is possible that these sites may contain computer viruses or material which you may find offensive. Hema Maps does not warrant or endorse, and disclaims liability to You or any other person, for any third-party services, third-party materials or web sites.

3. Services Provided by Hema Maps

- 3.1 Hema Maps reserves the right to outsource the provision of services to third-parties where it is necessary.
- 3.2 You agree that the form and nature of the Hema 4WD Nav may change from time to time without prior notice being given to You.
- 3.3 Hema Maps reserves the right to change, suspend, remove or disable access to any of the services contained in Hema 4WD Nav at any time without written notice.

4. License restrictions

- 4.1 This license does not permit you, and you agree that you will not (except where we give our express written consent or you are expressly permitted by law) to:
- a) commercialise, or attempt to commercialise, or derive any monetary reward or commercial benefit from the use or sale of the Hema 4WD Nav (or any Data have stored) or any part of it (including but not limited to any location data or other geographical information contained in, or copied or obtained from, the Hema 4WD Nav whether modified or not).
 - b) use the Hema 4WD Nav on any device other than an a Advanced ICE device that is owned or controlled by you. You will not distribute or make the Hema 4WD Nav available over a network where it could be used by multiple devices at the same time;
 - c) digitise or edit the Hema 4WD Nav or take a digital or analogue image, photograph or screenshot of the Hema 4WD Nav, other than for the purpose of seeking technical support from Advanced ICE;
 - d) remove, obscure or interfere with any copyright notice, trademark, warning or disclaimer contained in the Hema 4WD Nav;
 - e) transfer, give, assign, rent, lease, sell, charge, exchange, adapt, decompile, disassemble, create a derivative product or otherwise deal with the Hema 4WD Nav other than in the normal course of use, and subject to this to this Agreement.
 - f) reproduce in any way, copy or extract the Hema 4WD Nav and give, sell, rent, market or distribute it to anyone else;
 - g) copy the Hema 4WD Nav or any data stored onto another storage device other than as expressly permitted by clause 1.1(b);
 - h) without limiting any of the paragraphs (e) to (g) above, copy, or attempt to copy, the location data, names, places, symbols, road markings, layout or other geographical information 25 contained in the Hema 4WD Nav, or use such information or data as a reference to make any other product, or otherwise extract, reverse engineer, decompile, modify, disassemble, attempt to derive the source code of, modify, or create or attempt to create a new or derivative works of or from the Hema 4WD Nav;
 - i) use the Hema 4WD Nav in a manner contrary to any agreement You have with any third party;
 - j) sublicense or assign your rights under this license to anyone.
- 4.2 You acknowledge that the Hema 4WD Nav and its contents (including any data you have stored) contain valuable intellectual property. We may impose further restrictions on your use of the Hema 4WD Nav or the Data at any time, as we deem to be reasonably necessary to protect our intellectual property rights, by the giving of written notice to you.
- 4.3 The Hema 4WD Nav is protected by copyright law and international treaties. Unauthorised reproduction or distribution of this App, or any portion of it, may result in severe criminal and civil penalties and will be prosecuted to the maximum extent possible under law.

5. Ownership

- 5.1 Hema Maps expressly reserves all copyright and any other intellectual property rights to the Hema 4WD Nav and the Hema Explorer Cloud and only grants You a licence to use the Hema 4WD Nav as provided in this Agreement.
- 5.2 Other than as specified herein, You agree that Hema Maps owns the intellectual property rights to the Data, whether in its original form or as modified, printed and/or copied by you.
- 5.3 D&L Software Pty Ltd (ACN 096 504 951) is the developer of the OziExplorer Map Viewing Software and is the owner of the intellectual property rights therein, which are used in the Hema 4WD Nav under licence.
- 5.4 Commonwealth of Australia, Geoscience Australia is the publisher of the base data used under license in the Australia 250K topo map and Australia IM map and is the owner of the intellectual property rights within, which are used in the product under license.
- 5.5 Hema Maps owns the intellectual property rights of and to the additional content contained in the Australia 250K topo map

5.6 You acknowledge that Hema is the sole owner and user of the name or words Hema, Hema Maps, Hema Navigator, Hema GPS, Hema 4WD Explorer, Hema Navigator Explorer, Hema Explorer, "Hema Maps will get you there", and "Prepared to Explore." the Hema corporate logo and the Hema "H" icon and You must not use our names or trademarks without our express written permission.

6. Limited warranties

Save to the extent prohibited by law:

- a) while the Hema 4WD Nav has been produced and supplied in good faith, Hema Maps makes no warranty or representation about the availability, accuracy, completeness, reliability or currency of the Hema 4WD Nav or the location data contained therein;
- b) the Hema 4WD Nav and the Data is provided "as is" and "as available", with all faults and without warranty of any kind. Hema Maps disclaims all other warranties, either express or implied, including warranties of merchantability, fitness for purpose or for a particular purpose and non-infringement of third party rights unless such warranties cannot be excluded by law. Hema Maps does not warrant against interference with Your enjoyment of the Hema 4WD Nav, that the Hema 4WD Nav will meet your requirements or that the operations of the Hema 4WD Nav itself or in conjunction with other products will be uninterrupted or error free.
- c) you expressly acknowledge and agree that use of App is at your sole risk and that the entire risk as to suitability, satisfactory quality, reliability, performance, accuracy and effort is with you;
- d) although a third party may provide technical support, Hema Maps does not warrant that technical support will be provided for the Hema 4WD Nav;
- e) no oral or written information or advice given by Hema Maps, agents or employees shall create nor extend existing warranties. You must not rely on any such information or advice unless in writing and signed by an authorised representative of Hema Maps.

7. Limitation of liability

- 7.1 The Hema 4WD Nav displays, includes or makes available content, data, information, applications collected by or supplied by third parties, which may contain errors, omissions, inaccuracies or faults. By using the Hema 4WD Nav, you acknowledge and agree that Hema Maps is not responsible for examining or evaluating the content, quality, currency, accuracy, completeness, legality, or any other aspect of such third party data.
- 7.2 You use and rely on the Hema 4WD Nav entirely at your own risk and should not solely rely on the results or information obtained from the Hema 4WD Nav for any purpose, including navigation.
- 7.3 To the extent not prohibited by law, the liability of Hema Maps for any breach of an express, statutory or implied warranty shall be limited, at its option, to the cost of replacement of the Hema 4WD Nav or a refund of the price paid by You.
- 7.4 To the extent not prohibited by law, Hema Maps shall not be liable for any loss or damage to person or property, or any incidental, special, indirect or consequential damages whatsoever; including without limitation, loss of income, loss of revenue, trade, business, information or profits or any other loss arising from the installation or use of the Hema 4WD Nav or reliance upon any Data (irrespective of whether or not the Data is used in any navigation system or for the purposes of navigation) whether based on breach of contract, tort (including negligence), product liability or otherwise.
- 7.5 Hema Maps shall not be liable for any loss or damage caused as a result of the use of the Australia 250K topo map and Australia IM map however caused.
- 7.6 Hema Maps shall not be liable for any information, advice or technical support given by a third party unless in writing and signed by an authorised representative of Hema Maps.

8. Collection of information and privacy policy

You agree that we may collect and use technical data and related information, including information about your device, system or application software to facilitate the provision of App support, software updates and other services (if any) in connection with the Hema 4WD Nav. We may use this information so long as it is in a form that does not personally identify You, to improve our products or services and so long as our use is in accordance with our Privacy Statement, as available on our website (<http://www.hemamaps.com>) from time to time.

9. General

- 9.1 This Agreement shall be governed by and interpreted in accordance with the laws of the State of Queensland, Australia. You agree to be subject to the legal jurisdiction of the State of Queensland, Australia.
- 9.2 It otherwise contains the final, complete and exclusive agreement between You and Hema Maps and supersedes all prior or contemporaneous agreements, whether written or oral.
- 9.3 A construction of this agreement that results in all provisions being enforceable is to be preferred to a construction that does not so result. If a provision of this agreement remains illegal or unenforceable, and (i) if the provision would not be illegal or unenforceable if a word or words were omitted, that word or those words are severed; and (ii) in any other case, the whole provision is severed; and the remainder of this agreement continues in force.

10. Termination

- 10.1 This agreement remains in force until your rights under this license are terminated by You or us. We may terminate Your license at any time if you fail to comply with any term(s) of this license.
- 10.2 Upon termination of the license, You must cease to use the Hema 4WD Nav and the Data and destroy all copies of the Hema 4WD Nav and the Data.

11. Definitions

- a) "Hema Maps", "we" or "us" means Hema Maps Pty Ltd ACN 010 601 911, whose principal place of business is 25 McKechnie Drive Eight Mile Plains, Queensland, 4113 and the licensor of the Product for the purpose of this agreement.
- b) "You" or "Your" means the individual or organisation purchasing the Product, and the licensee for the purpose of this agreement.
- c) "Data" means the information and materials embodied in machine-readable media on the Hema 4WD Nav including, but not limited to, maps, location data, artwork, illustrations, photographs, images and text.