

OZIEXPLORER

USER GUIDE

(User Mode)



OZIEXPLOER – CONTENTS (10-09-2025)

Page.

- 3. ONIS MODES.
- 4. OZIEXPLOER OVERVIEW.
- 5. OZIEXPLOER STARTUP OPTIONS.
- 9. SCREEN PAGING SEQUENCE.
- 18. AUTO SLEEP.
- 22. SYSTEM MENU.
- 25. VOLUME & BRIGHTNESS.
- 28. WAYPOINTS.
- 36. TRACKLOGS.
- 42. ROUTING.
- 48. SPEED ALERTS.

Page.

- 60. GEOFENCE MESSAGES.
- 64. FATIGUE TIMER.
- 68. COUNT DOWN TIMERS.
- 73. TYRE PRESSURE MONITORING.
- 80. SWITCH TO iGO NAVIGATION.
- 83. FAQ, KNOWN ISSUES, FAULTS & BUGS.
- 93. ATTRIBUTIONS.

ONIS MODES

The **ONIS** can be configured as one of the following modes depending on the purchase.

1. ***Personal Mode.***

This mode includes all features with the exception of ***Geofencing, Startup Tips*** and ***Startup Message.***

2. ***Business - Owner Mode.***

This mode incorporates all features and can be used to capture ***waypoints, tracklogs*** and ***Geofence Speed Alerts & Messages*** data and then create downloads for the ***User Mode ONIS*** devices.

3. ***Business - User Mode.***

This mode can not capture any data and configuration parameters set by the ***Owner Mode.***

OZIEXPLOREDER OVERVIEW

This app provides the user with the graphical user interface (**GUT**) to be able to view the map and current position.

Even though the **OziExplorer** is fully configurable, the **Outback Navigation Information System (ONIS)** has been designed with five **GPS Integrated Solutions (GPSIS)** page screens all with side menus providing a subset of additional functions.

The **ONIS** comes with two default maps, both with information provided by open source contributors, with map files produced by **GPSIS**.

Any maps found in the /external SD card/Oziexplorer/Maps folder will be automatically indexed and be available to the user.

Typically, users would use the **Course Up** mode but as the **OziExplorer** uses raster maps, this will lead to the map descriptions being upside down when the course is not north up. In these instances, the user can select **North Up** from the map screen, or set the default to **North Up** in the setup configuration.

OZIEXPLORED STARTUP OPTIONS

When the **OziExplorer** app is started, the user can perform the following two updates:

1. Download WWW navigation data from the customer or **GPSIS** file server.

Note, this screen is only displayed when the WiFi SSID is configured and the **ONIS** in WiFi range of a hot spotted device to the Internet.

2. Set the **TPMS** low pressure alarm.

Note, the **TPMS** low pressure alarm setting is limited to either 16 PSI (sand) or 28 PSI (sealed roads) - any other setting must be set in the "SYSTEM & SETTINGS" menu.

This screen is only displayed if the **TPMS** app is enabled in the "SYSTEM & SETTINGS" menu.

Both options have a 5 second countdown timer to provide the user with an opportunity to make a selection before the startup process progresses.

OZIEXPLORER STARTUP OPTIONS

WWW DATA UPDATE

During the navigation app startup process, the user can perform a WWW data update which consists of **waypoint**, **tracklog** and **Geofence** data.

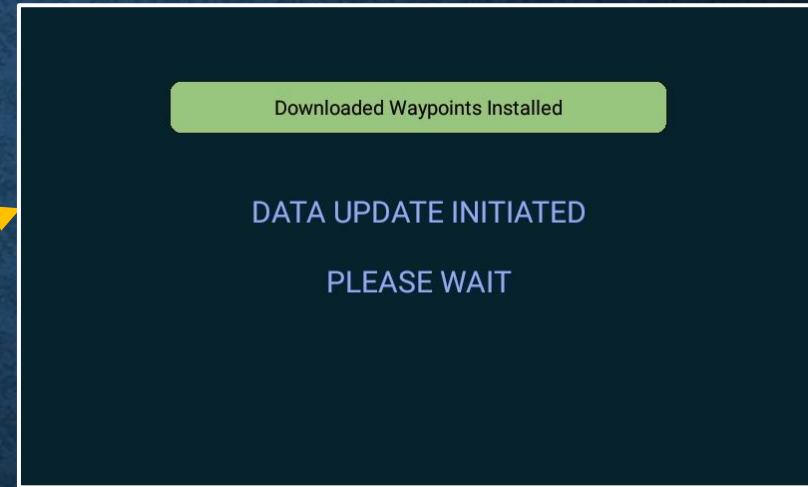
The **GPSIS** default data is provided at no cost and as is and consist of various **waypoints** & **tracklogs** that may be useful to the user such as parking bays, overtaking lanes, medical centers etc, typically for Western Australia.

Whenever WWW data is found & downloaded, the system will overwrite any existing data which ensures that the **ONIS** remains up to date with the current customer data or default **GPSIS** data.

If the WiFi has not been configured or the **ONIS** is not in WiFi range of a internet connection, the WWW update menu will NOT be displayed.

OZIEXPLORER STARTUP OPTIONS

UPDATE WWW DATA



The user has 5 seconds (20 x 250ms visual decrements) to update the data.

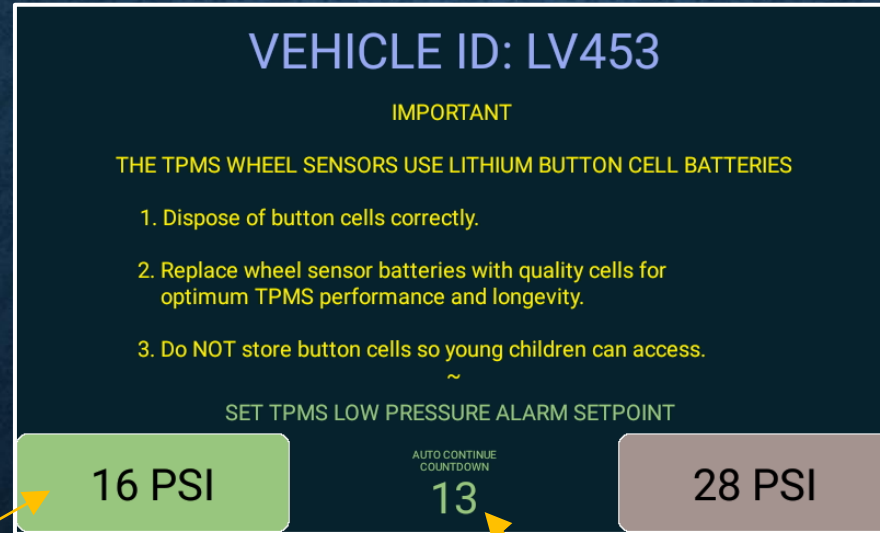
Help information.

OZIEXPLOREDR STARTUP OPTIONS

TPMS LOW PRESSURE ALARM SETTING

The user can set the **TPMS** low pressure alarm setpoint to either 16 PSI or 28 PSI, when the **OziExplorer** app startup.

Any other setting must be set in the “SYSTEM & SETTINGS” menu.



The current set low pressure alarm setpoint will be green.

The user has 5 seconds (20 x 250ms visual decrements) to change the setting.

SCREEN PAGING SEQUENCE

©GPS_Integrated_Solutions_WA.map WHERE AM I?

ROUTE MENU

GPS COURSE UP 10:01:32

45

50

Exit

Lower Resolution Map

Higher Resolution Map

GATE-102

GATE-103

GATE-105

LOOKOUT

Zoom OUT

500 meters

Zoom IN

Next Page

TIMER 1

SYSTEM MENU

VOL/BRI

TPMS 6

iGO

©GPS_Integrated_Solutions_WA.map WHERE AM I?

Page 2 - Odometers - Tracks - Waypoints

Prev Page

GPS COURSE UP 10:01:32

45

50

Exit

Max Speed 3

Reset Max Speed

Odometer 0.00 m

Start / Stop

Reset Odometer

Show/Hide Waypoints

Load Waypoints

Unload All Waypoints

Show/Hide Tracklogs

Load Tracklog

Unload All Tracklogs

Clear Track Tail

Next Page

9

SYSTEM MENU

VOL/BRI

TPMS 9

iGO

©GPS_Integrated_Solutions_WA.map WHERE AM I?

Page 3 - Waypoint List

Prev Page

GPS COURSE UP 10:01:32

45

50

Exit

Distance	Bg (tr)	Name
9.87 m	126	MEDICAL
1.29 km	086	P
1.37 km	091	LOOKOUT
1.58 km	075	P
1.70 km	079	GATE-104
1.76 km	124	GATE-102
1.81 km	113	P
1.92 km	104	GATE-103
1.95 km	128	GATE-101
2.06 km	092	GAGE-105
2.90 km	111	P
3.43 km	111	P

Next Page

9

SYSTEM MENU

VOL/BRI

TPMS 9

iGO

©GPS_Integrated_Solutions_WA.map WHERE AM I?

Page 5 - GPS System Info

Prev Page

GPS COURSE UP 10:01:32

45

50

Exit

50H 348185 6271195 UTM

Latitude	Longitude
-33.688342	115.362098

Date	Sunrise	Number GPS Sats
Feb 7, 2025	05:49:26	8

Time	Sunset
10:49:37	19:15:51

Altitude	Heading
21.5 m	154 tr

Next Page

9

SYSTEM MENU

VOL/BRI

TPMS 9

iGO

©GPS_Integrated_Solutions_WA.map WHERE AM I?

Page 4 - Waypoint Legend & Descriptions

Prev Page

GPS COURSE UP 10:01:32

45

50

Exit

Direction - Road Turn Off	Overtaking Lane - Start
Destination	Overtaking Lane - End
Road House	Significant Vehicle Incident
24 Hour Parking	Flood Way
Parking	Point Of Interest (POI)
Asset Location	Medical Facility

Next Page

9

SYSTEM MENU

VOL/BRI

TPMS 9

iGO

MAP & MENU BUTTONS (Page 1)

Display lower resolution map if available.

Select for **ROUTE** menu.

Blue = Map **Course Up**.
Grey = Map **North Up**.
Arrow displays map direction.

Displays current vehicle speed km/h. Long press to set the **Speed Alert** to the maximum & disable the adaptive mode.

Displays rolling average speed (90 sec approx.).

Displays current **Speed Alert**.
Select to display menu.

Turn GPS receiver "Off" to drag map position.

Displays location.

Display higher resolution map if available.

Select **Next Page** for **OziExplorer** screens.

Set count down timer1.

Select for System menu.
The Time & Date will toggle every 2-3 seconds

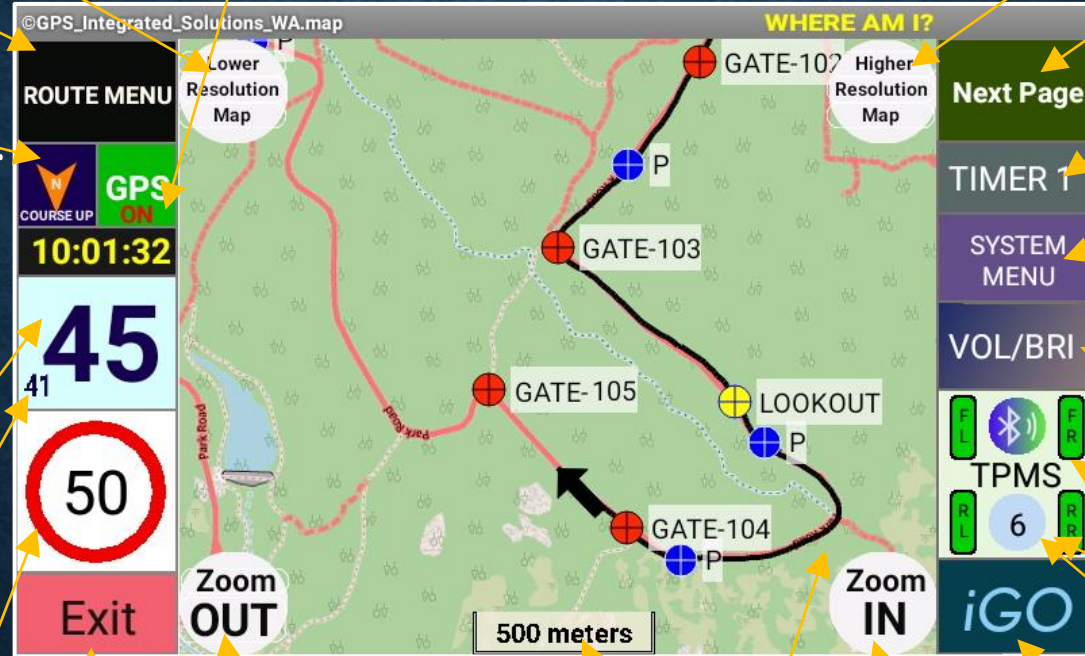
Open Volume & Brightness menu.

Select to display the **TPMS** overview screen.

TPMS sensor health.

Displays the number of visible satellites.

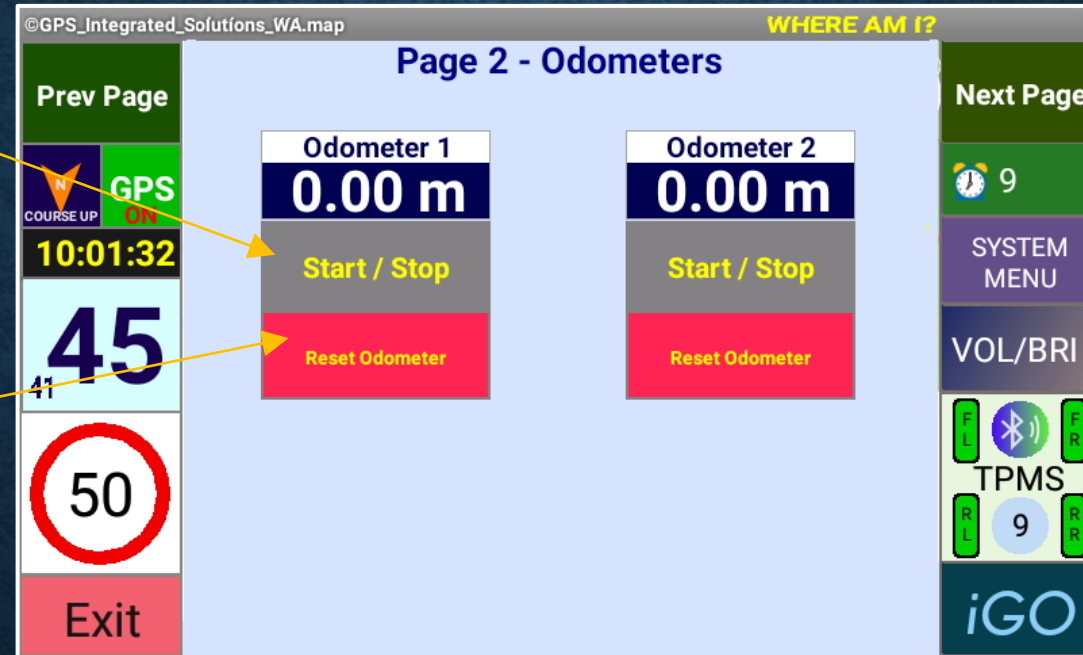
Fast switch to the **iGO** navigation app.



ODOMETER & TRACKS (Page 2)

Start and Stop the odometer. (this data will be lost after a **ONIS** reboot).

Reset the odometer back to zero.



WAYPOINT LIST (page 3)

Distance to the closest waypoint.

Name of the closest waypoint.

©GPS_Integrated_Solutions_WA.map WHERE AM I?

Page 3 - Waypoint List

Distance	Bg (tr)	Name
9.87 m	126	MEDICAL
1.29 km	086	P
1.37 km	091	LOOKOUT
1.58 km	075	P
1.70 km	079	GATE-104
1.76 km	124	GATE-102
1.81 km	113	P
1.92 km	104	GATE-103
1.95 km	128	GATE-101
2.06 km	092	GAGE-105
2.90 km	111	P
3.43 km	111	P

Prev Page

GPS ON

COURSE UP

10:01:32

45

41

50

Exit

Next Page

9

SYSTEM MENU

VOL/BRI

TPMS

9

iGO

Bearing of the closest waypoint.

If the brightness = 10 (**ONIS** minimum), Long Press to enable night filter.

WAYPOINT SYMBOLS (Page 4)

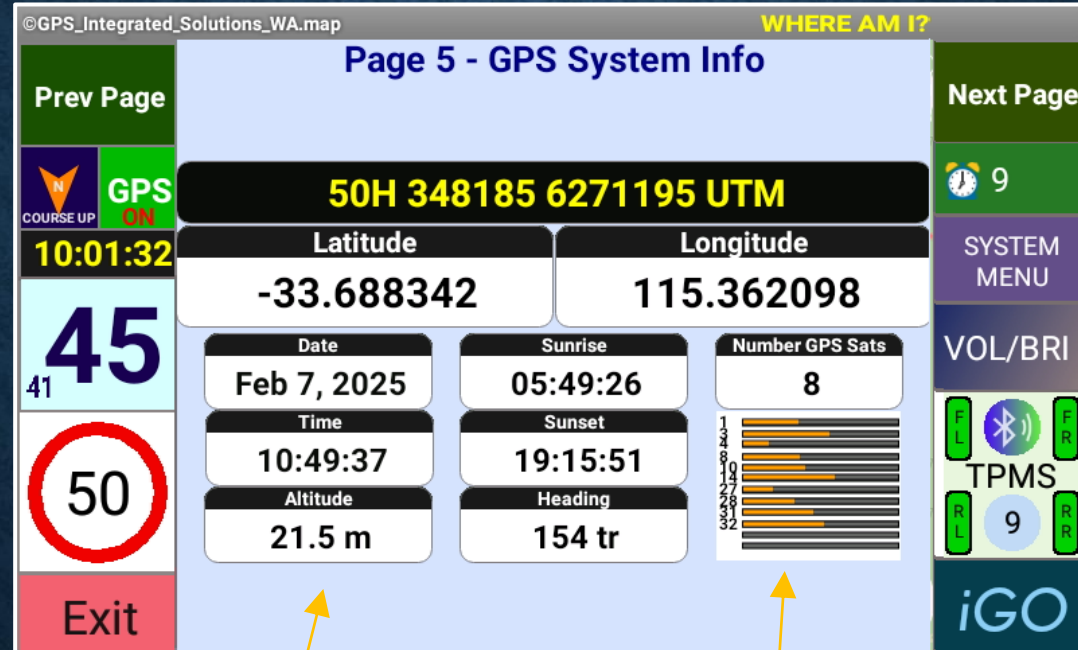
ONIS main display overview. Only available whilst the vehicle is stationary.



The "SYSTEM MENU" text will toggle and show the **ONIS** data and time, every 2-3 seconds. This toggling also indicates that the watchdog system is running in the background.

Waypoint symbol colours that will be displayed on the map page.

GPS INFORMATION (Page 5)



GPS information.

Visible satellites.
Ideally 5 or more satellites
are required for accuracy.



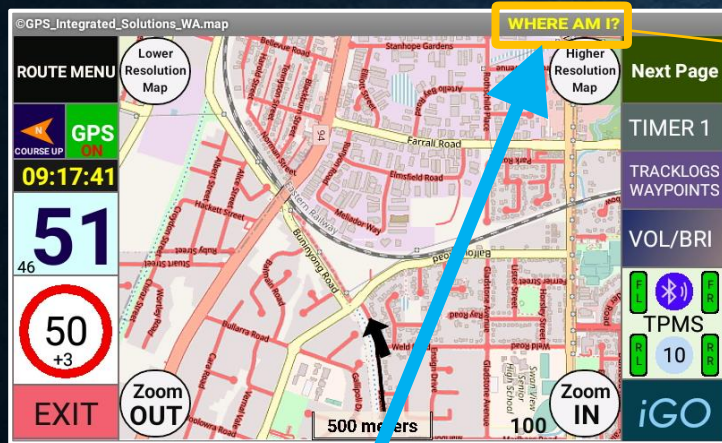
SCREEN PAGING SEQUENCE

WHERE AM I?



WHERE AM I?

The **ONIS** uses the current latitude and longitude to calculate the Geohash & MGRS location codes approximately every 5 seconds.
The Geohash messages are precision 9 providing an approximate 5 x 5 meter resolution (GPS receiver accuracy is typically not better than 5m)



Press to display location screen.





WHERE AM I?

AUTO SLEEP



AUTO SLEEP

The “Auto Sleep” function is available when the navigation app is running.

If the power is removed from the **ONIS**, the user will be prompted with a menu (displayed for 10 seconds) to allow various options.

No action by the user will result in sleep mode after 10 seconds.

The Auto Sleep menu will also be displayed when the battery is lower than 70% & there is no GPS power & the vehicle speed is lower than 10 km/h.

Auto Sleep
countdown.



AUTO SLEEP - SLEEPING

When power is removed and if the **ONIS** goes into “Sleep Mode” a message will be displayed.

CURRENT BATTERY LEVEL: 100%

SLEEPING UNTIL

POWER RESTORED

The ONIS will shutdown in 240 minutes
when sleeping to conserve battery power.

The ONIS will shutdown at midnight
or when the battery level is below 30%

(HELP TIPS CAN BE VIEWED IN THE "SYSTEM MENU")

AUTO SLEEP - SLEEPING

When power is restored, **ONIS** will wake up and display a message with the current battery capacity and the time the **ONIS** went into “Sleep Mode”.

CURRENT BATTERY LEVEL: 100%

WAKING UP FROM:

07:14 AM

PLEASEST WAIT

(HELP TIPS CAN BE VIEWED FROM THE "SYSTEM MENU")

The maximum sleep time is set to 240 minutes if the battery capacity is at 100% and will be reduced for lower battery levels.



AUTO SLEEP

SYSTEM MENU



SYSTEM MENU

The ***SYSTEM*** Menu in the navigation app allows the user to display various ***ONIS*** operating parameters, reboot the ***ONIS***, and displays the current Geofence information.

The Geofence information displayed reflects the data records (if the Geofence is active) used by the ***ONIS*** to compare the current location.

All ***ONIS*** modes can create, edit and delete ***waypoints & tracklogs***, however ONLY “Owner & Personal Mode” users can save these when exiting the ***OziExplorer*** app.

SYSTEM MENU

Display "USER GUIDES" & "HELP TIPS"

Maximum daily average and maximum speed.

ONIS battery capacity remaining. Press to display battery discharge log.

ONIS battery temperature.

Current precision 9 Geohash calculated location.

Displays (if any) the current **Geofence Message**.

Displays (if any) the current **Geofence Speed Alert**.

Displays last customer & **GPSIS** update time.

**** START HERE ****
Select this button to display the System Menu.



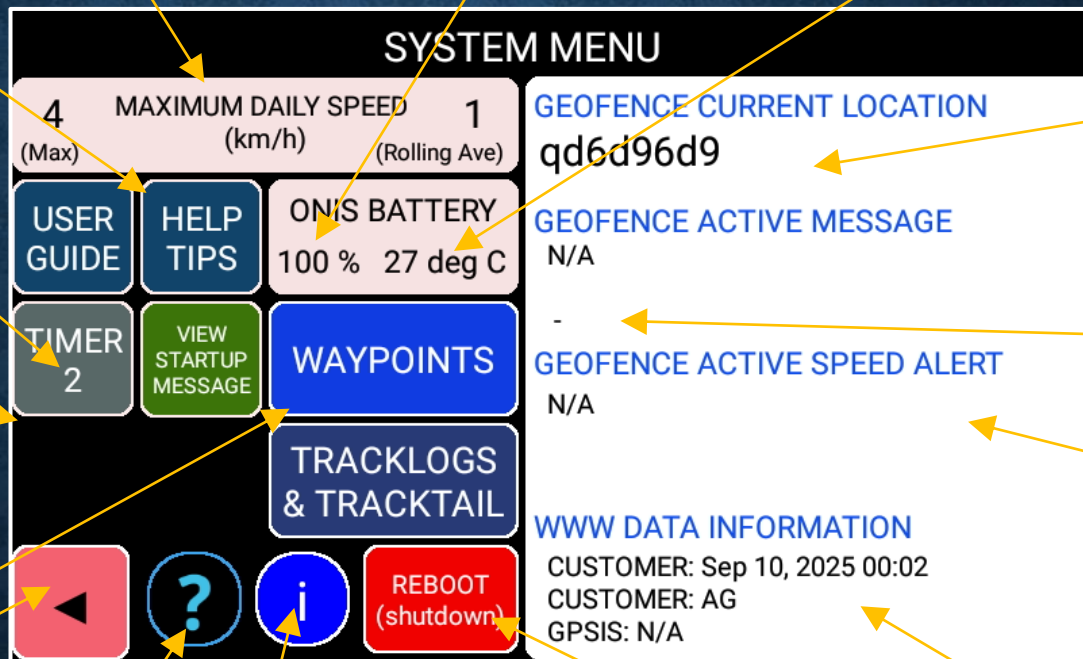
Open waypoint & tracklog menus.

Exit back to map screen.

Display the SYSTEM Help.

Displays the waypoint, tracklog and Geofence data.

Backup data & log files and reboot the **ONIS**.



Set Timer 2.



SYSTEM MENU

VOLUME / BRIGHTNESS MENU



VOLUME / BRIGHTNESS MENU

This menu allows the user to change the current volume and brightness values.

Changes in this menu is only set for the current navigation app session and the default values will be used when the ***ONIS*** or navigation app is restarted.

Changes to the default settings can be performed in the ***SYSTEM & SETTINGS*** menu available from the ***Main Menu***.

NOTE:

The “Auto” brightness mode is based on the calculated Sunrise and Sunset times for the current location and then adjusted for twilight settings.

VOLUME / BRIGHTNESS MENU

**** START HERE ****

Select this button to display the **System Menu**.



Long press to increase brightness to 50 for 5 seconds if brightness is below 50.

If enabled, the night filter will further dim the screen when brightness = 10.

Display the volume overview help.

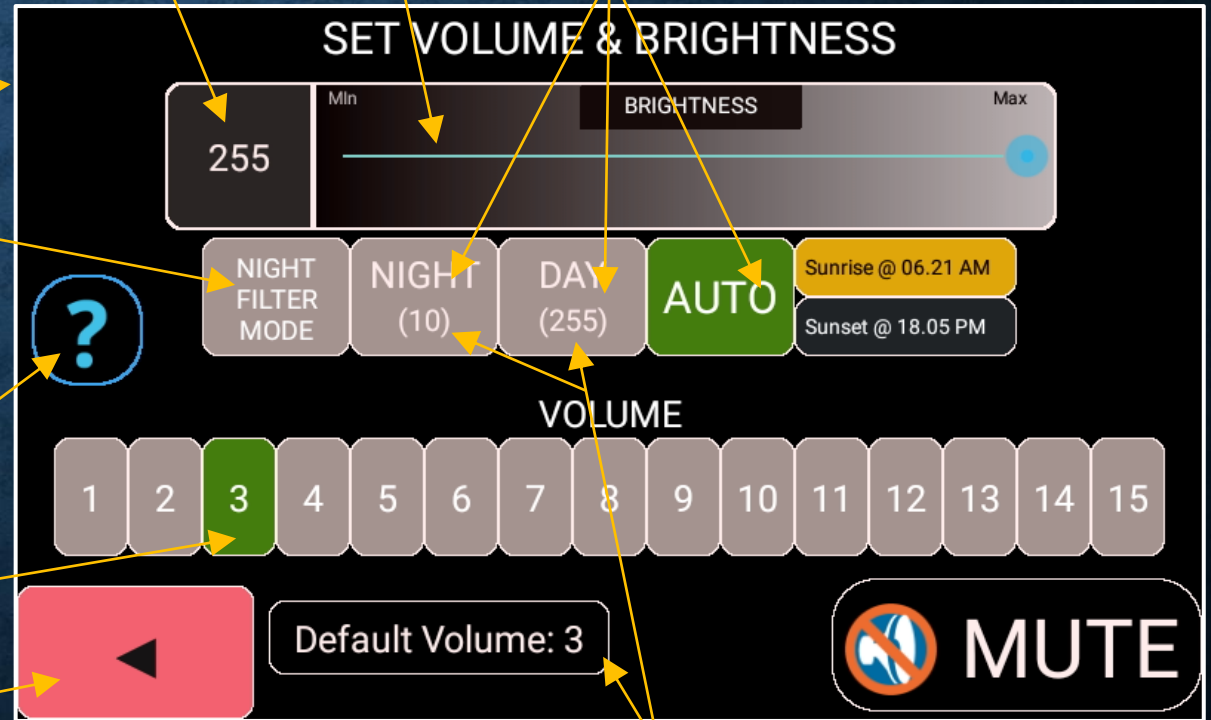
Select to set value.

Exit back to **SYSTEM** screen.

Displays current brightness (min is 10, max is 255).

Use slider bar to adjust.

Select brightness mode. Green will indicate the selected mode.



Displays the default values which can be set in the setup menu by the user.



VOLUME / BRIGHTNESS MENU

WAYPOINTS



WAYPOINT TOOL

The “OziExplorer Waypoint Tool” menu provides the user with a tool to add & manage temporary waypoints.

The owner waypoints will be restored when the user exits the navigation app

The user can choose from a number of pre-configured "quick set" icons to configure a waypoint and then load into the ***ONIS***.

If the vehicle is stationary, the "Name“ and "Coordinate" and “Geohash” options can be edited with new details, if desired.

Once a waypoint icon has been selected, the “LOAD USER WAYPOINT & EXIT” option will be available.

The bottom of the screen will display the GEOHASH and the waypoint will appear on the map page.

The user can also edit or unload waypoints.

WAYPOINT TOOL

Select one of the
“quick set” selections.

etc

After a “quick set” selection,
the name will be filled with the
default name, and the
coordinates of the current
position. e.g. “MEDICAL”

Displays the current location.
If desired, edit and display the
new coordinates that will be
saved to the waypoint .
This option is N/A if the
vehicle is in motion.

Display the help
information.

Representation of how
the waypoint will be
displayed on the map.

Load & Exit.
This will return
the user to the
map screen.

Load exiting
waypoint

USER WAYPOINT TOOL

Tap on ICONS to enter Waypoint colour & name @ current GPS location

Road Direction Destination Road House 24 Hour Parking Parking Parking With Shade Overtaking Lane Start Overtaking Lane End Asset Location

.MEDICAL Camping POI Medical Facility Floodway Danger Zone

LOAD USER WAYPOINT & EXIT

WAYPOINT EDIT MENU

UNLOAD ALL WAYPOINTS

WAYPOINT LOAD MENU

Tap on selections to edit Waypoint
(Long tap to enter "degrees minutes seconds")

-31.951020 N 115.929092 E

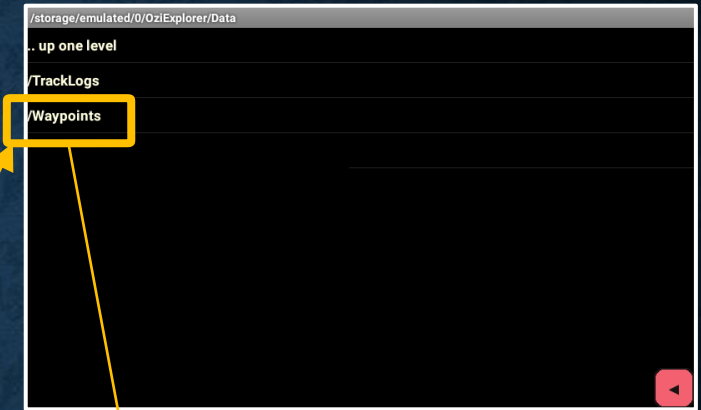
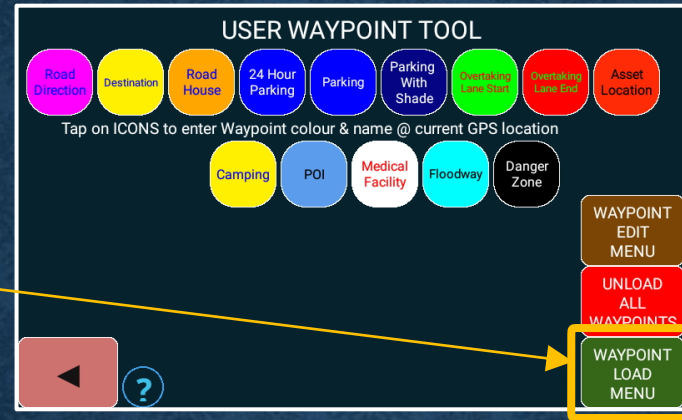
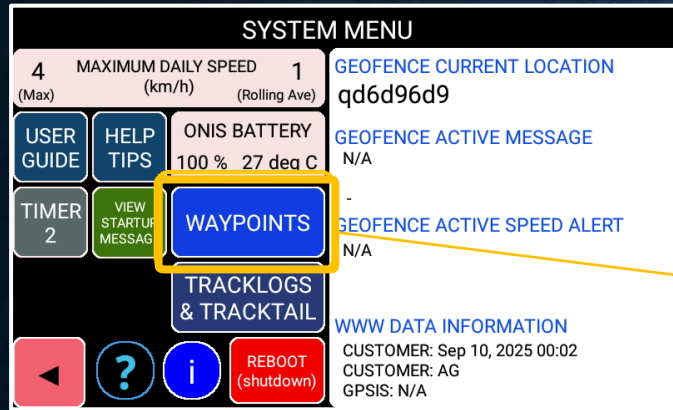
GEOHASH 9 qd66np2zz

This is what will be displayed on the map

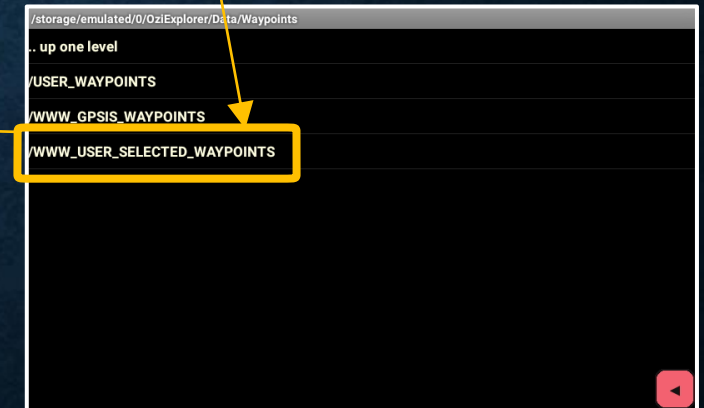
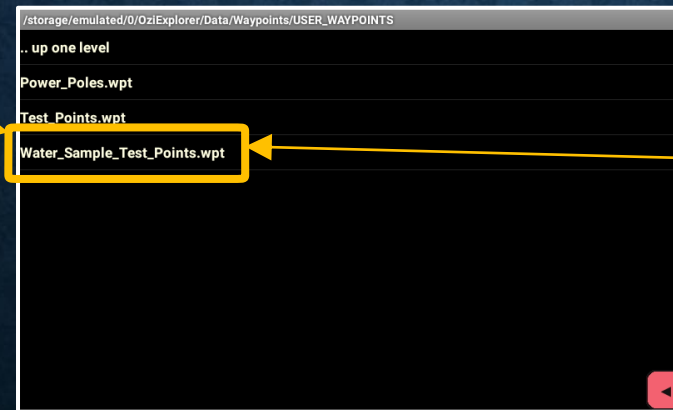
MGRS 50JLK 98790 64492

← ? [Map Icon] MEDICAL

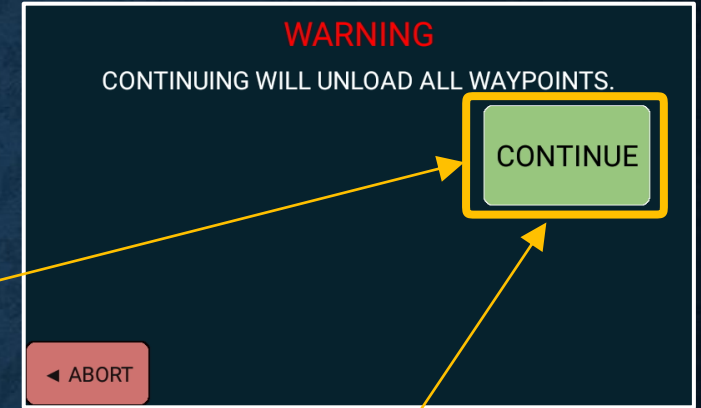
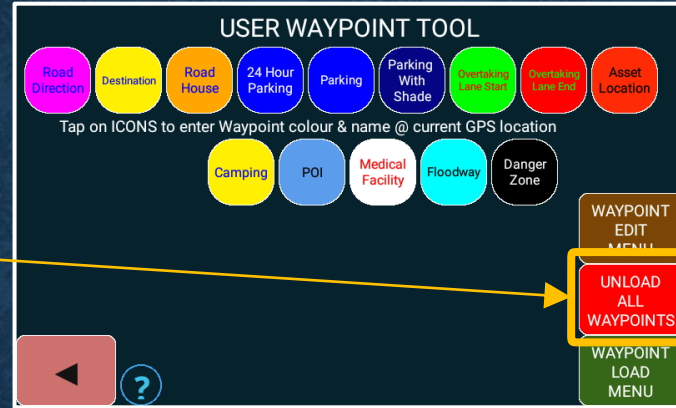
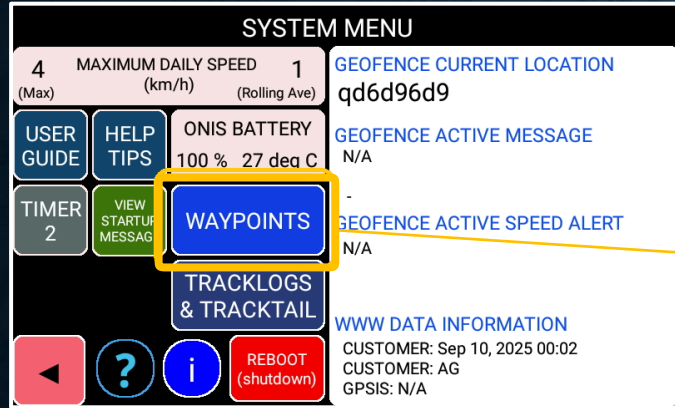
LOADING EXISTING WAYPOINTS



Press to load the waypoints which will now be displayed on the map.

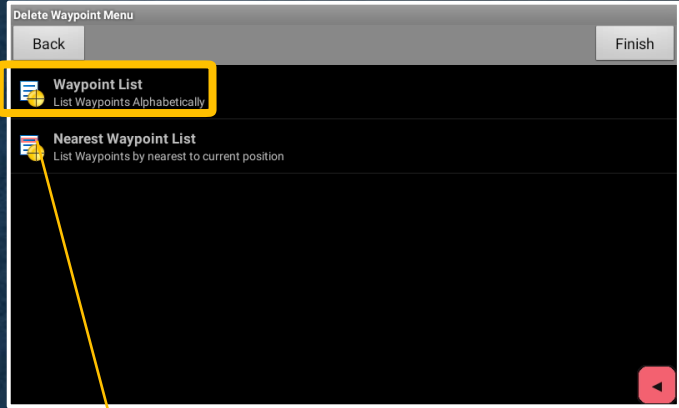
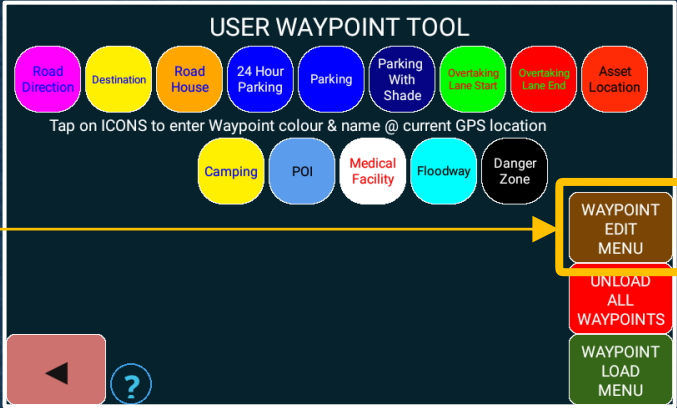
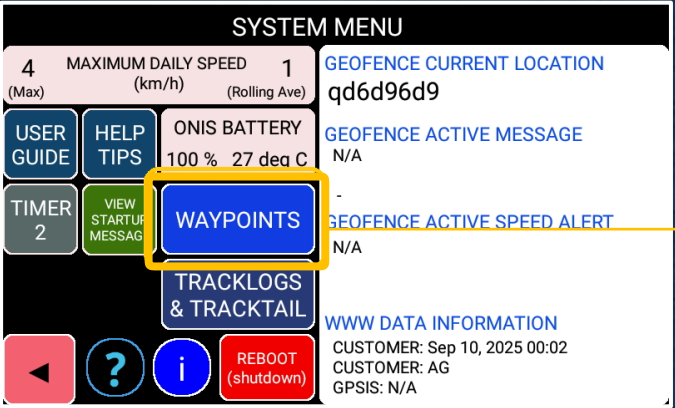


UNLOAD ALL EXISTING WAYPOINTS

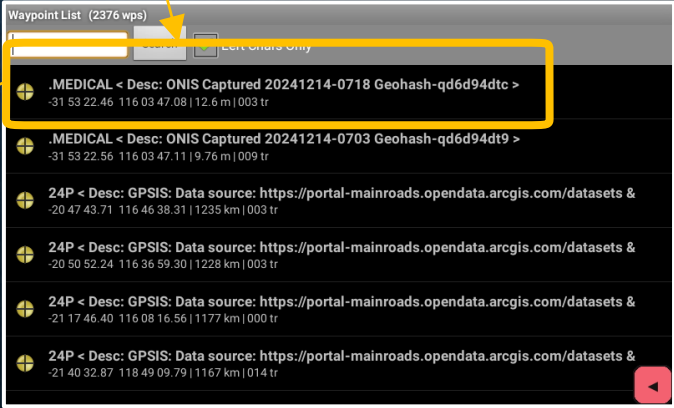
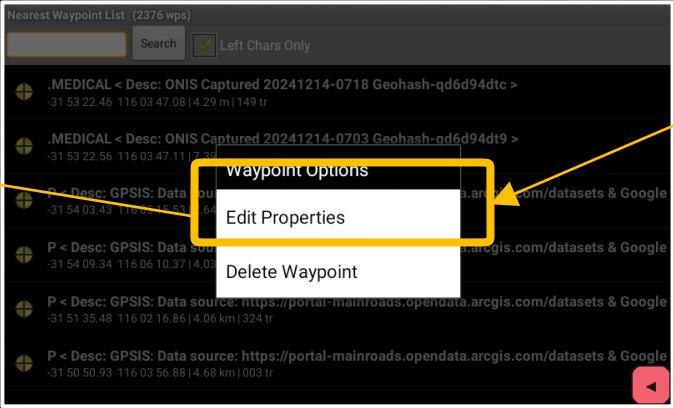
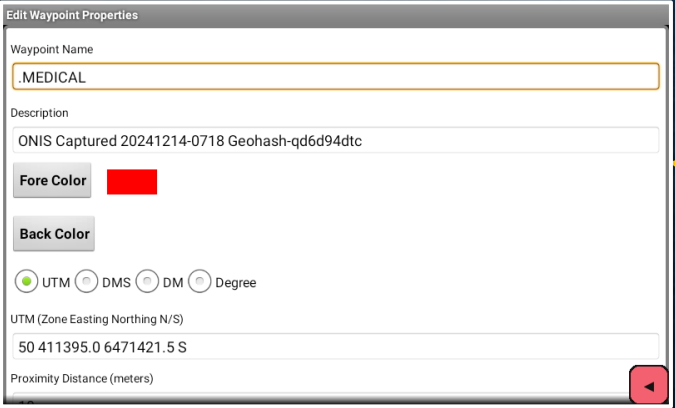


Press to unload all waypoints.

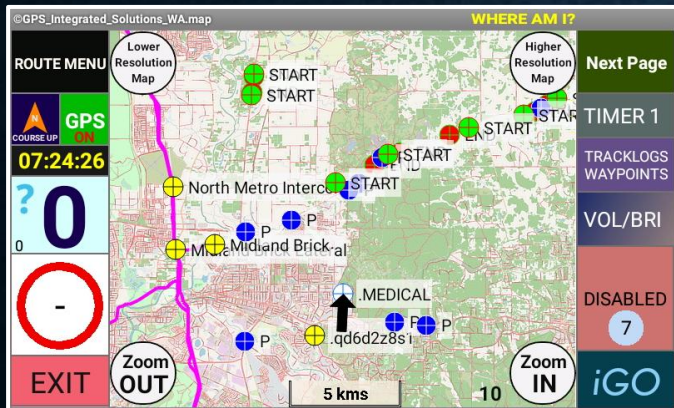
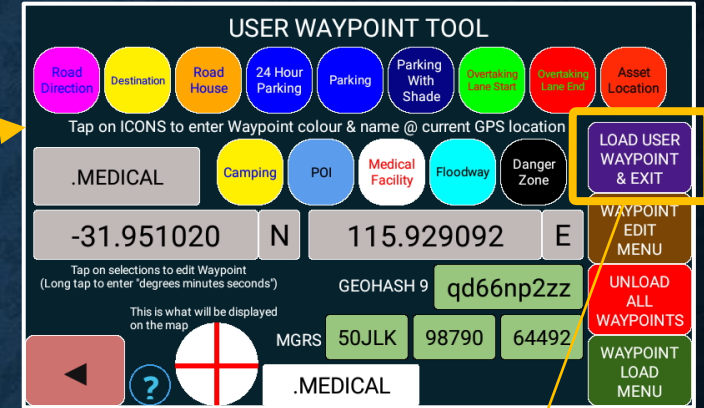
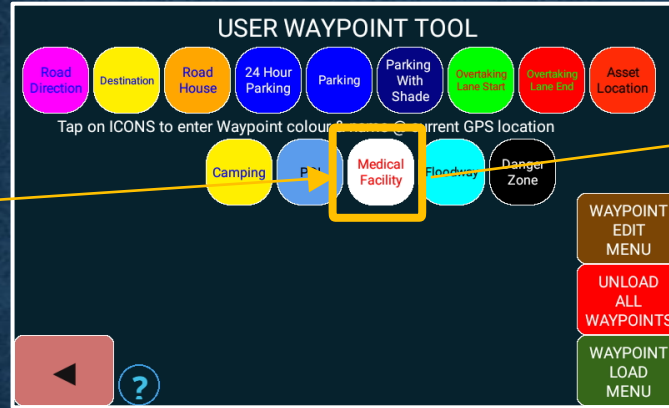
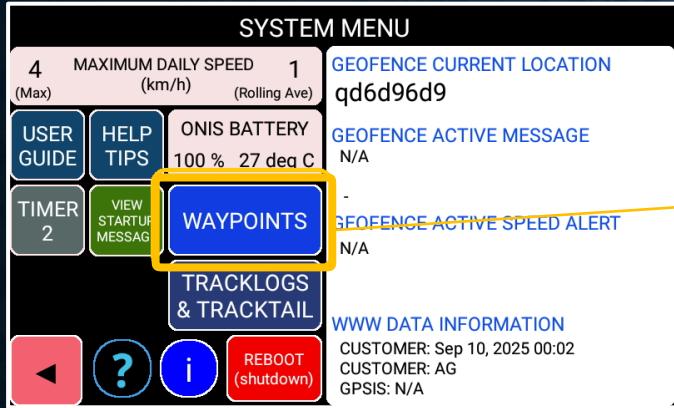
EDIT / DELETE EXISTING WAYPOINTS



Scroll to bottom after edit to save waypoint.



CREATE NEW WAYPOINTS



UPDATING LOADED WAYPOINTS - PLEASE WAIT

TESTING FOR LOADED WAYPOINT DUPLICATES

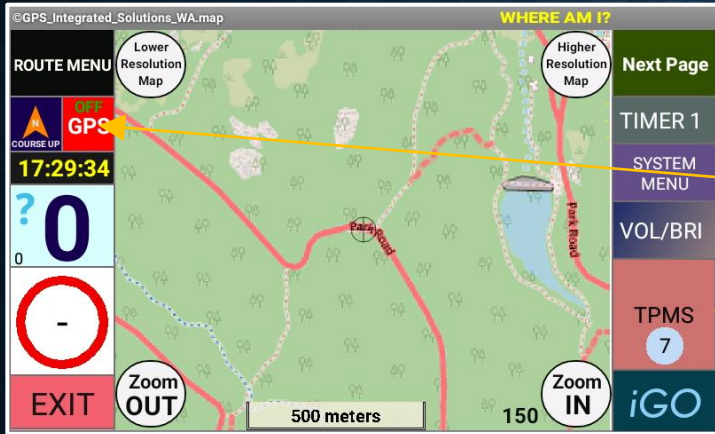
LOADING WAYPOINT

" .MEDICAL "

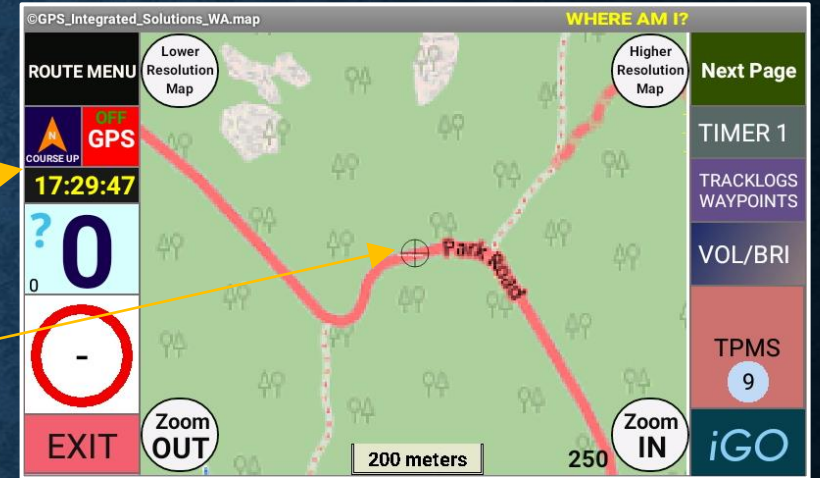
PLEASE WAIT

ADDING WAYPOINTS FROM THE MAP PAGE

(All map saved waypoints will have the Geohash location set as the waypoint name.)



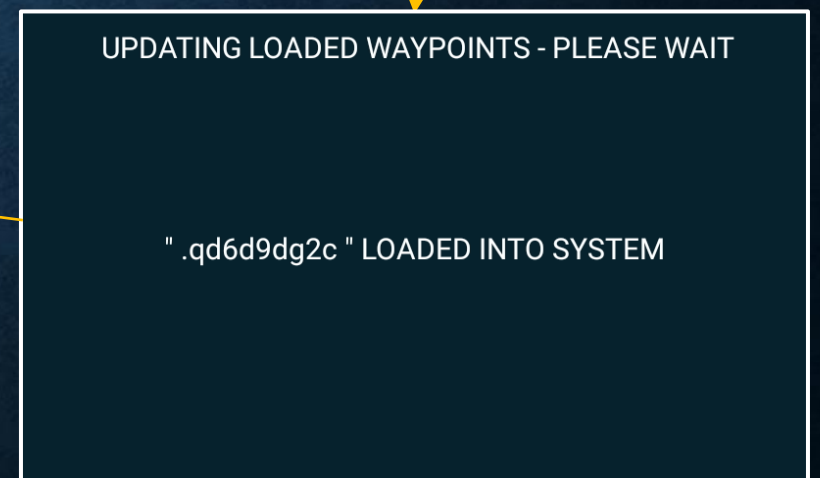
1. Turn the GPS receiver OFF & Drag the map to the desired location.



2. Press on the "Cross Hair" symbol.



3. Turn the GPS receiver ON.





WAYPOINTS

TRACKLOGS



TRACKLOGS & TRACKTAIL

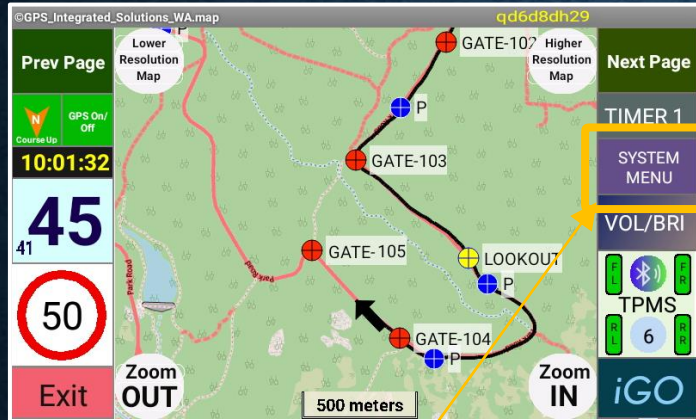
The “OziExplorer Tracklogs & Tracktail” menu provides the user with a tool to load and clear tracklogs and clear the tracktail..

NOTE:

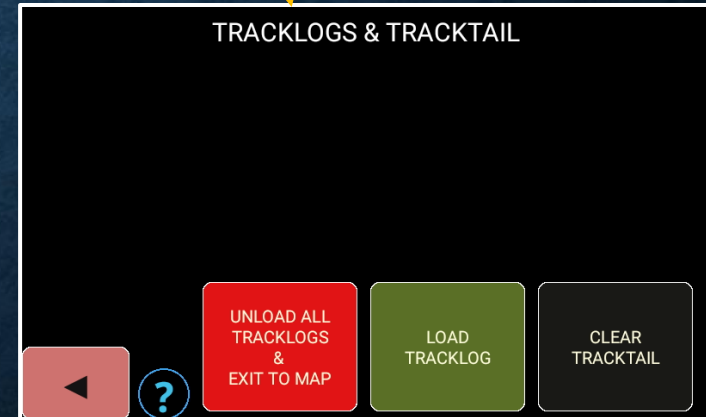
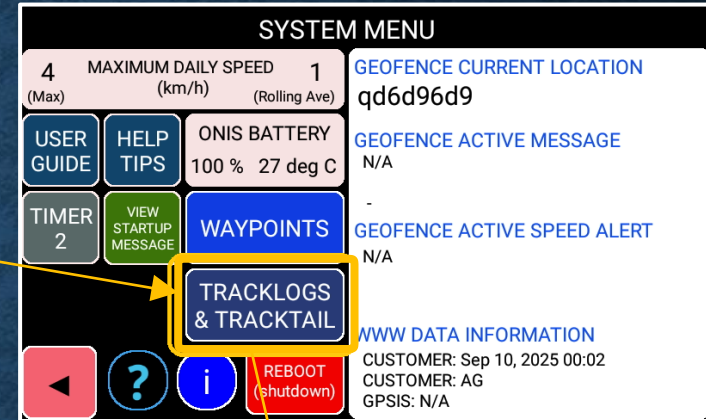
The tracktail is similar to a tracklog but automatically updates and displays the last 15 kilometers (approx.) of travel.

The user can manually import the daily tracklog for distances greater than the tracktail.

TRACKLOGS

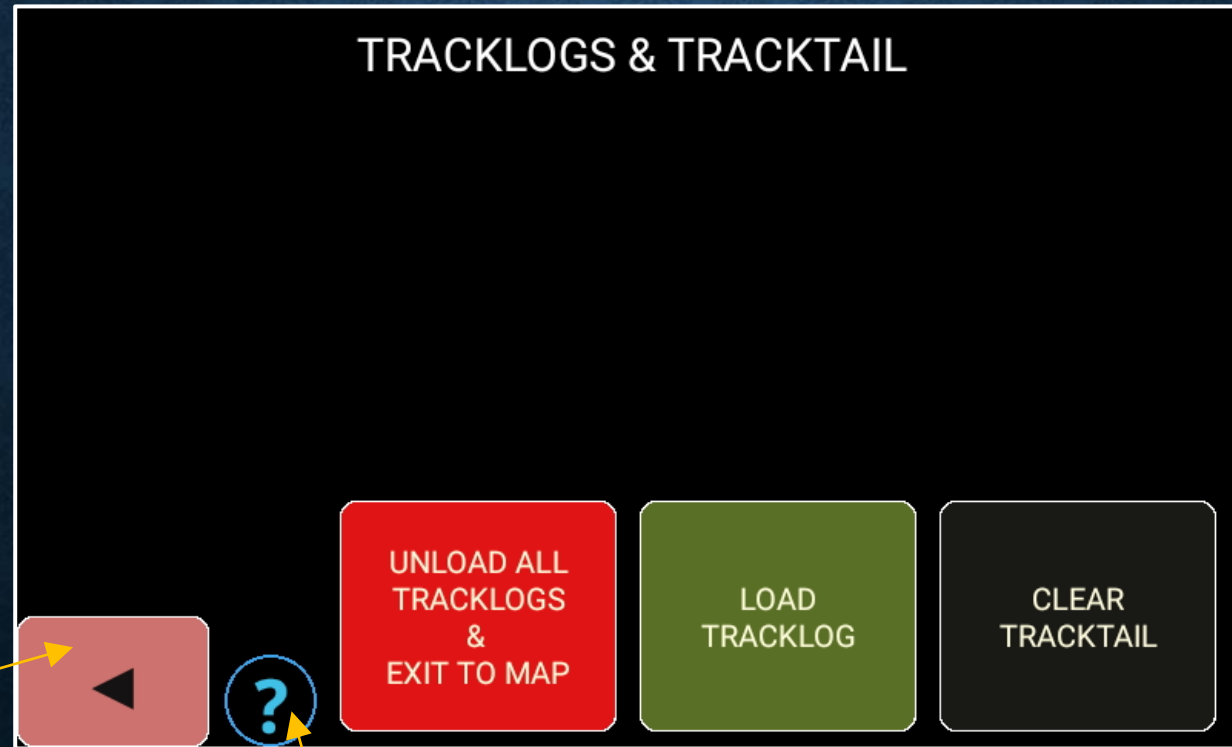


**** START HERE ****
Select this button
to display the
System Menu.



MANAGE USER TRACKLOGS

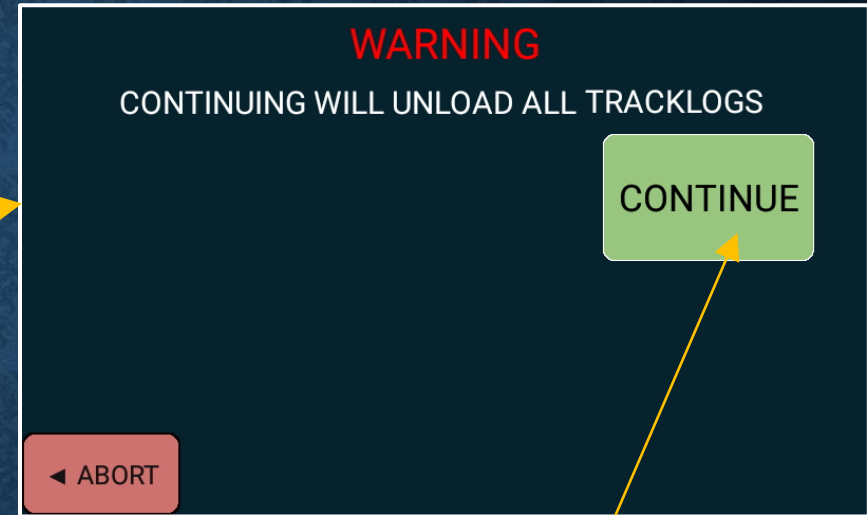
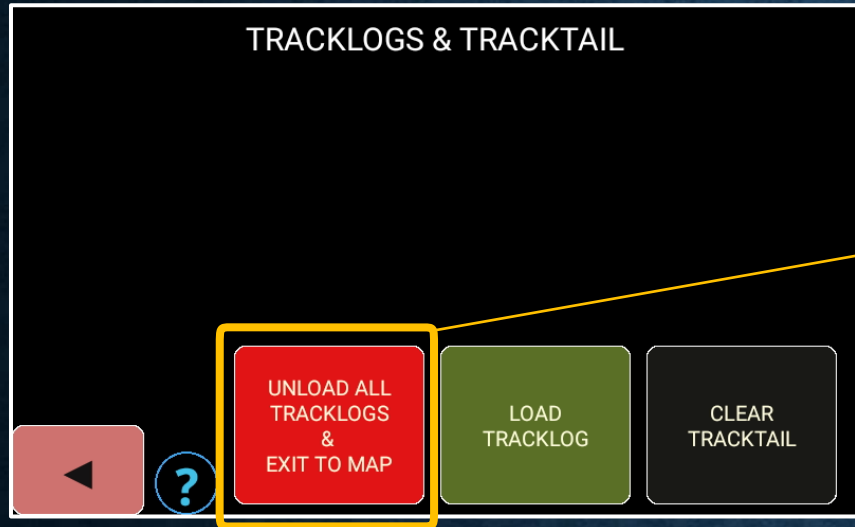
The “OziExplorer Tracklog Tools” allow all users to load & unload tracklogs.



Exit back to the
System Menu.

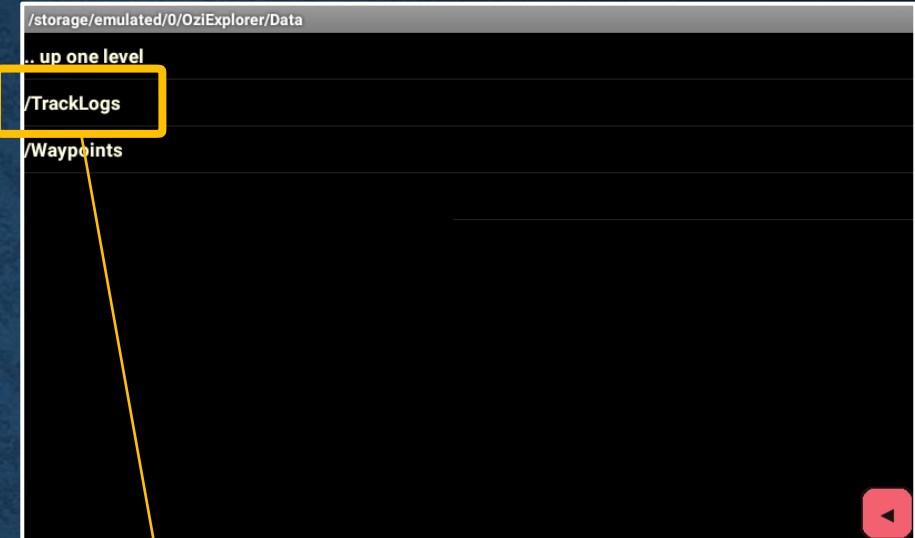
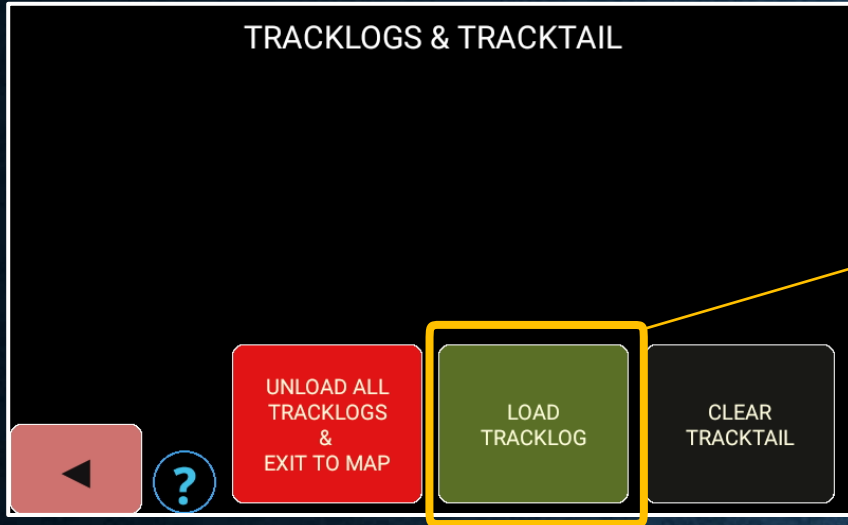
Help Information.

UNLOAD ALL TRACKLOGS

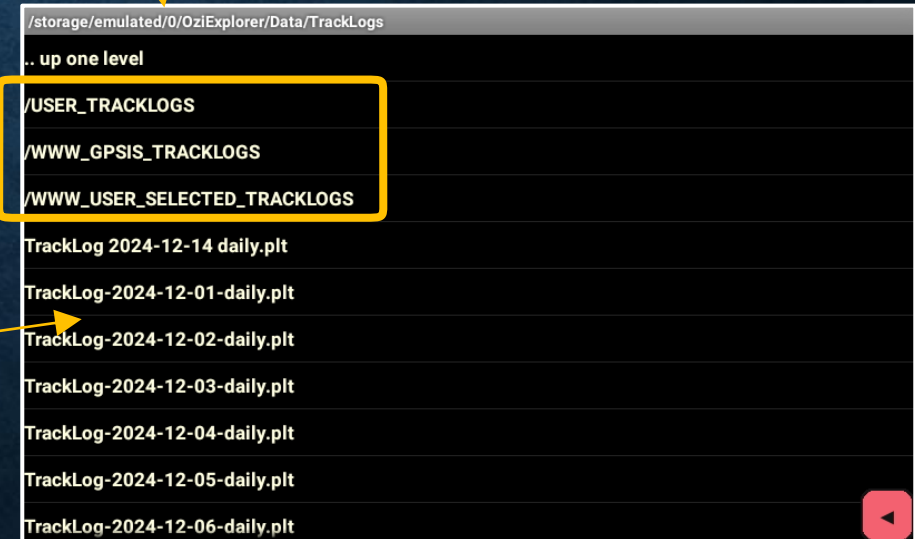


This will remove all loaded tracklogs.

LOAD TRACKLOG



Select on folder to open and then tracklog to load.



Daily 1 second sample tracklogs created by **OziExplorer**.
Select on tracklog to load.



TRACKLOGS

ROUTING



ROUTING

Even though the **OziExplorer** app can support a complex routing system, **GPSIS** has limited the **ONIS OziExplorer** routing to a simplistic “point to point” single waypoint route.

The user can easily create & load the route by adding a waypoint from the main map screen or the waypoint tools.

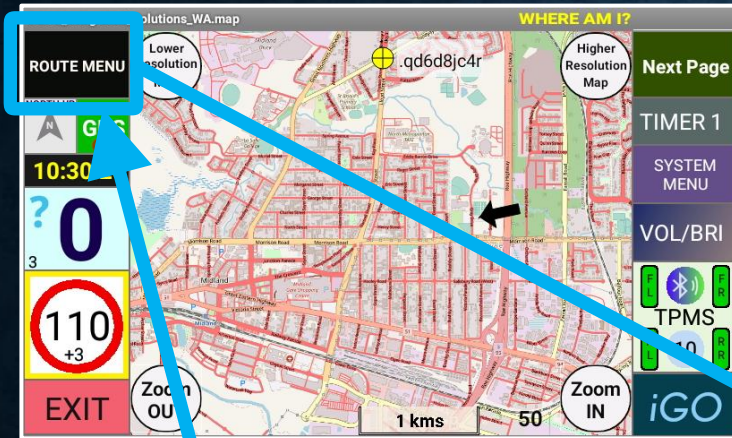
Every time a waypoint is added, the system automatically creates a simple route using the current location as the “route start” and the created waypoint as the “route end”.

NOTE:

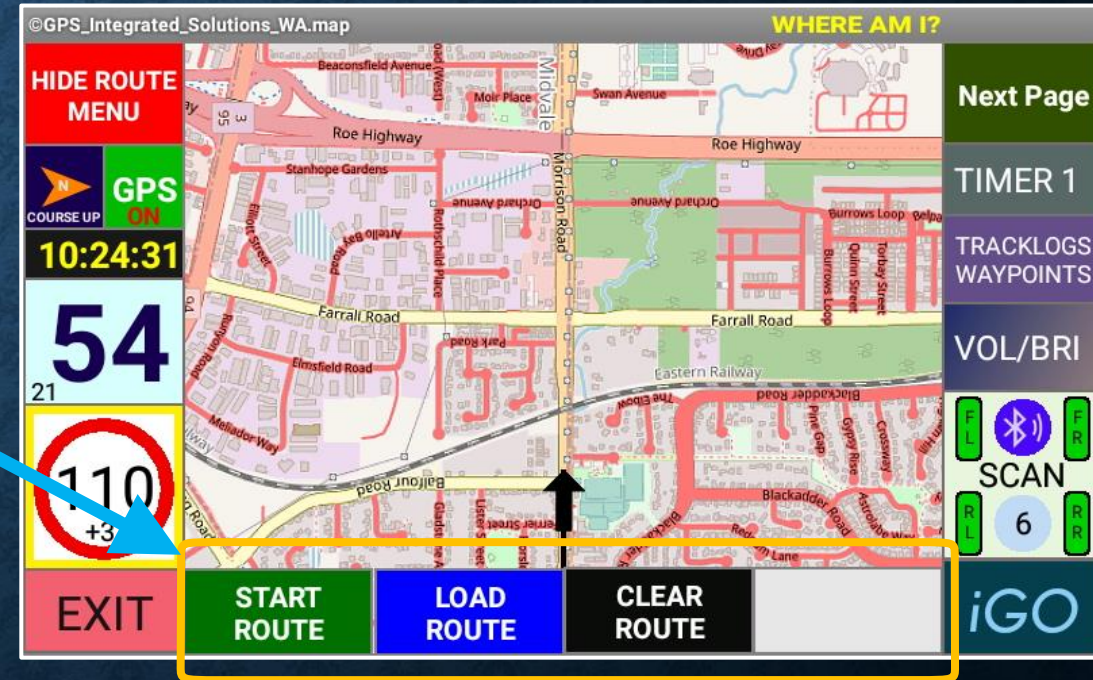
We recommend that the **iGO** routing system is used in the first instance for routing as this will provide the user with "turn by turn" directions.

If the destination route point is not in the **iGO** system, then the user can create an **OziExplorer Route**.

DISPLAY THE ROUTE MENU



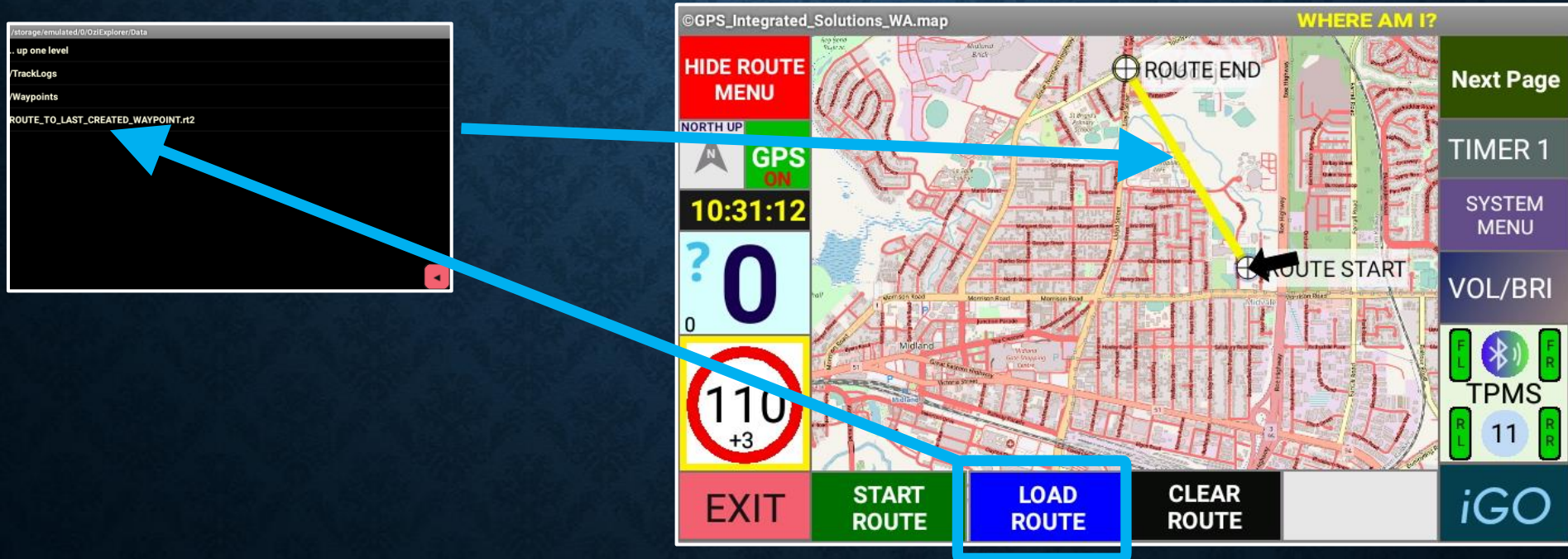
Press to display
Route Menu.



LOAD ROUTE

Use the Route Menu option to load the default saved route.
The yellow line will represent the loaded route.

Note: the default route “start’ and end points have been created automatically by the **ONIS** from the last user created waypoint.



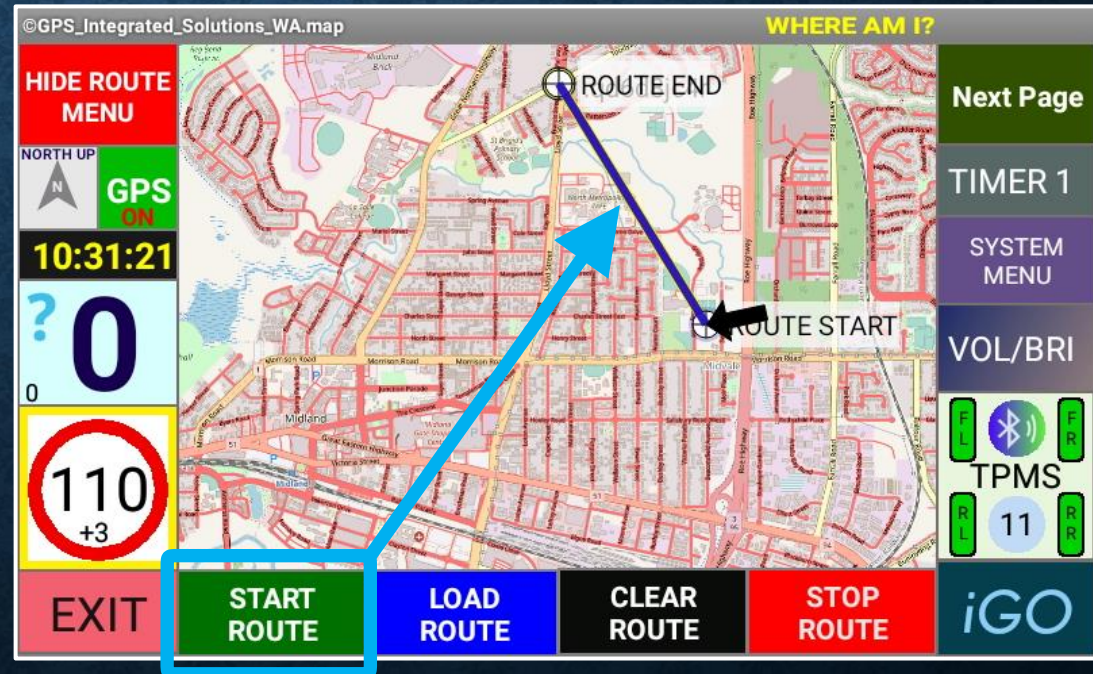
START ROUTE

Use the Route Menu options to start the route.

The purple line will now represent the started route.

Once a route has been started, the red “STOP ROUTE “ button will be displayed.

Once a Route has been started, the user can exit the Route Menu & display the full map screen.



DISPLAY ROUTE ON MAIN SCREEN

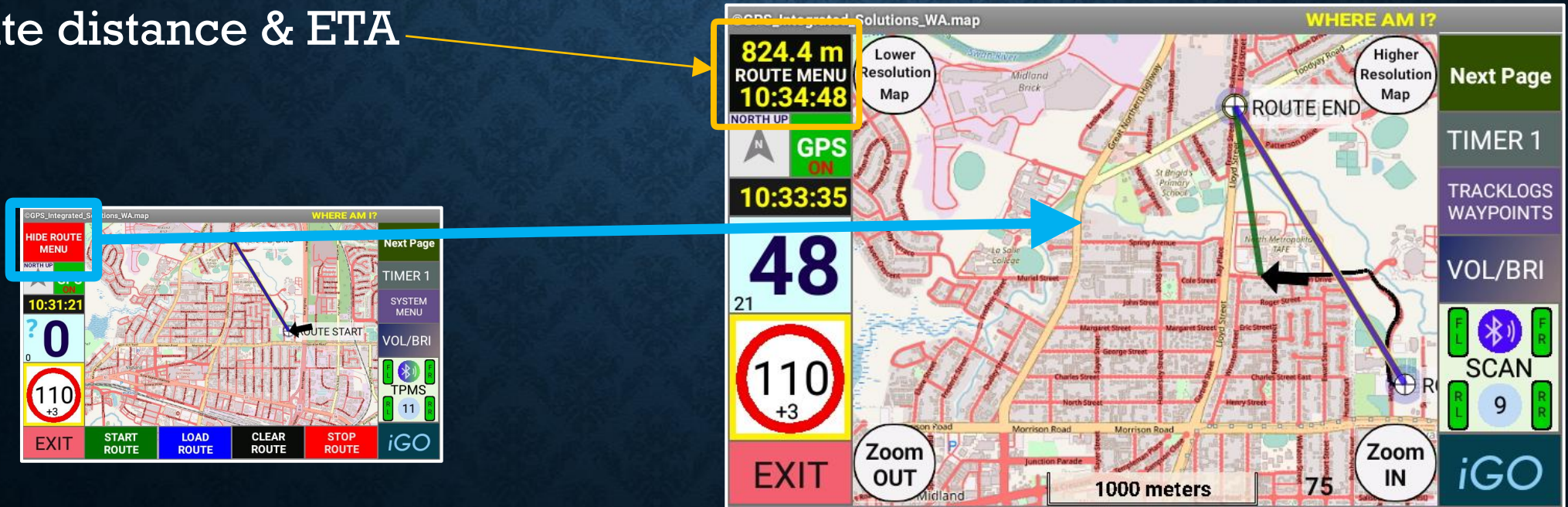
Once a Route has been loaded, the user can exit the Route Menu to display the full map screen.

Yellow line = loaded route.

Purple line = started route.

Green line = current location and deviation from the "ROUTE END" point.

Route distance & ETA





ROUTING

SPEED ALERTS & ALARMS



SPEED ALERT & SPEED ALARM MESSAGES

When the vehicle exceeds any of the pre-set speed limits, a ***Speed Alert*** or ***Speed Alarm*** message will displayed.

1. A ***Speed Alert*** advises that the vehicle is exceeding the ***ONIS*** speed limit and allows the driver to view the map and set another limit (dependant on owner options).
2. A ***Speed Alarm*** will be displayed when the ***Geofence*** system is enabled and the current location ***Geohash*** matches a pre-configured ***Geofence*** record which has been configured as “Critical” and the vehicle exceeds the ***ONIS*** speed limit. A ***Speed Alarm*** condition will block the entire screen with the exception of the current vehicle speed and prevent any ***ONIS*** user operation. The driver **MUST** slow down to view or operate the ***ONIS***.

NOTE:

A minimum of 5 visible GPS satellites is required for the ***Speed Alert System*** to operate.

SPEED ALARM

(N/A in "Personal Mode")

Displays the current
Speed Alert setting.



Displays the current
vehicle speed.

SPEED ALERTS

The **ONIS** features a Speed Alert system comprising 3 different modes of operation:

1. **User Mode** - the user can manually set a value.
2. **Adaptive Mode** – the **ONIS** uses the vehicle speed and acceleration parameters to determine the current **Speed Alert** setting.
3. **Geofence Mode** - the **ONIS** uses **Geohashing** to perform offline **Geofencing** of areas and compare to pre-configured data records.
If an existing **Geofence Speed Alert** limit is found at the current location, this value will override the manual and adaptive settings.

NOTE:

It is recommended that the driver maintains a vehicle speed just under the “Speed Alert Setting” (eg. 1-2 km/h) to minimise “Alert Messages” due to the GPS small fluctuations in speed.

The **Speed Alert** (and modes) can be enabled / disabled using in the navigation app screens, however the default startup values are set in the **Default Settings** menu (available from the **Main Menu / System**).

The **ONIS** uses consecutive GPS data records to establish excessive speed and this can be delayed by up to 3 sec.

A minimum of 5 visible GPS satellites is required for the **Speed Alert System** to operate.

SPEED ALERT

Overspeed message.

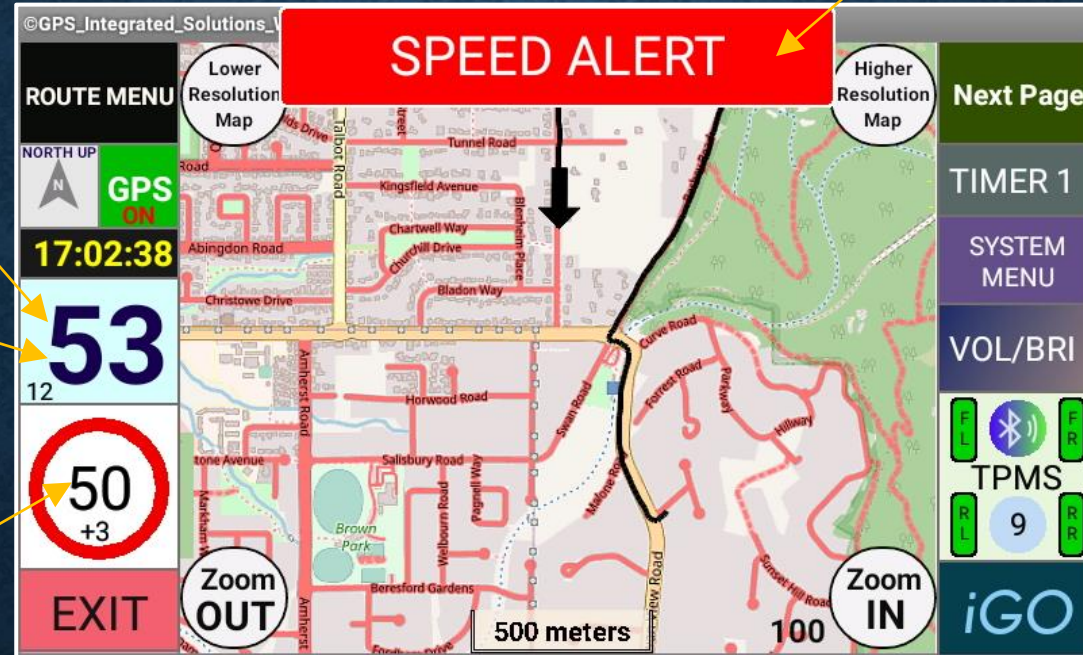
Long press to enable the **Adaptive Mode**.

Press to set the **Speed Alert** to the current vehicle speed (next higher 10 km/h increment).

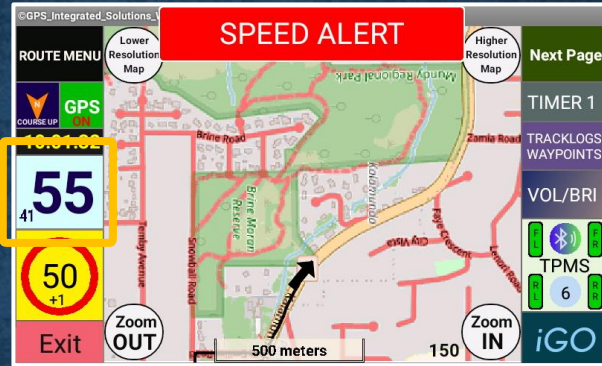
Displays current **Speed Alert** setting.

Select to display setting menu.

The background colour indicates the mode.



QUICK SET SPEED ALERT MODES

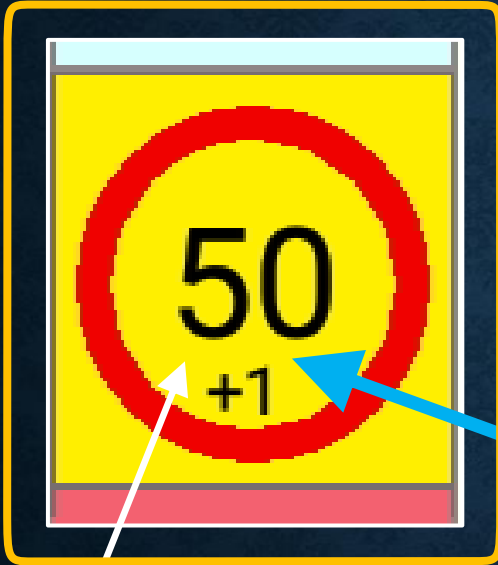


Vehicle Speed
&
Rolling 90s Ave.

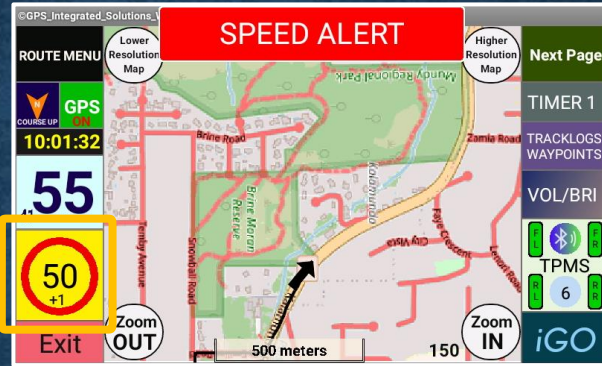
Short press to will disable the ***Adaptive Mode*** and set the ***User Mode*** to the current vehicle speed.

Long press to enable ***Adaptive*** mode.

OPEN SPEED ALERT SETTING MENU



Speed Limit
&
Tolerance.



Press to open *Speed Alert*
setting menu.

Long press to open *Speed Alert*
capture menu.

SPEED ALERT SETTING MENU

Select to display the setting menu.

Solid "light red" background indicates the current **Speed Alert**.

Select a speed button to select the **Speed Alert** setting eg 110 km/h.

Set the tolerance km/h.
(adaptive mode will default to 0)

Toggle the **Speed Alert SYSTEM** ON/OFF.

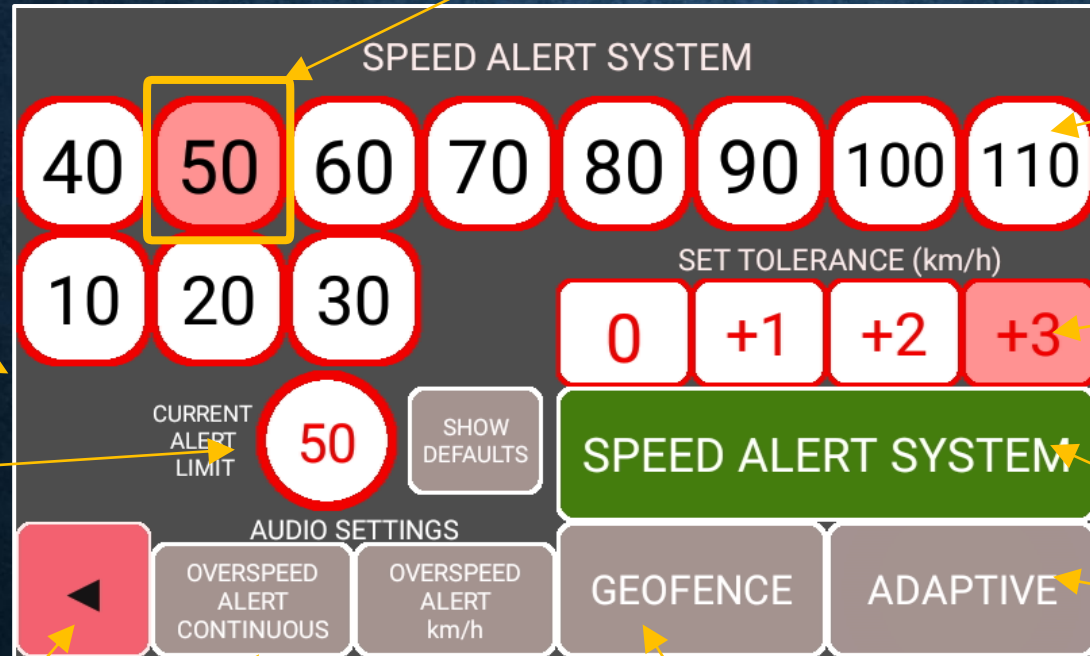
Toggle the Adaptive mode ON/OFF.
Green = enabled.
Grey = disabled

Toggle the Geofence mode ON/OFF.
Green = enabled.
Grey = disabled

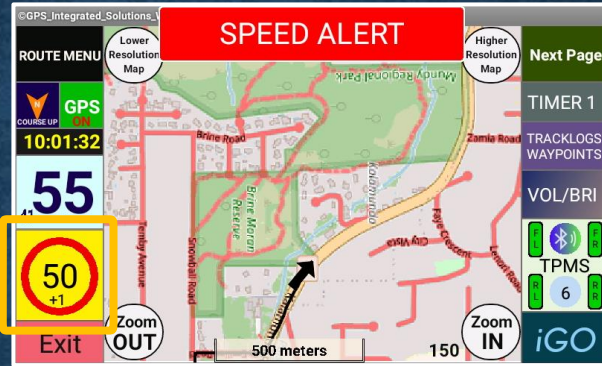
Audio mode.
Voice or **Beep**.
Once or **Contiguous**.

Exit back to the map screen.

Displays the current **Speed Alert** and mode.



SPEED ALERT MODES



BACKGROUND COLOUR

Speed Alert Mode:

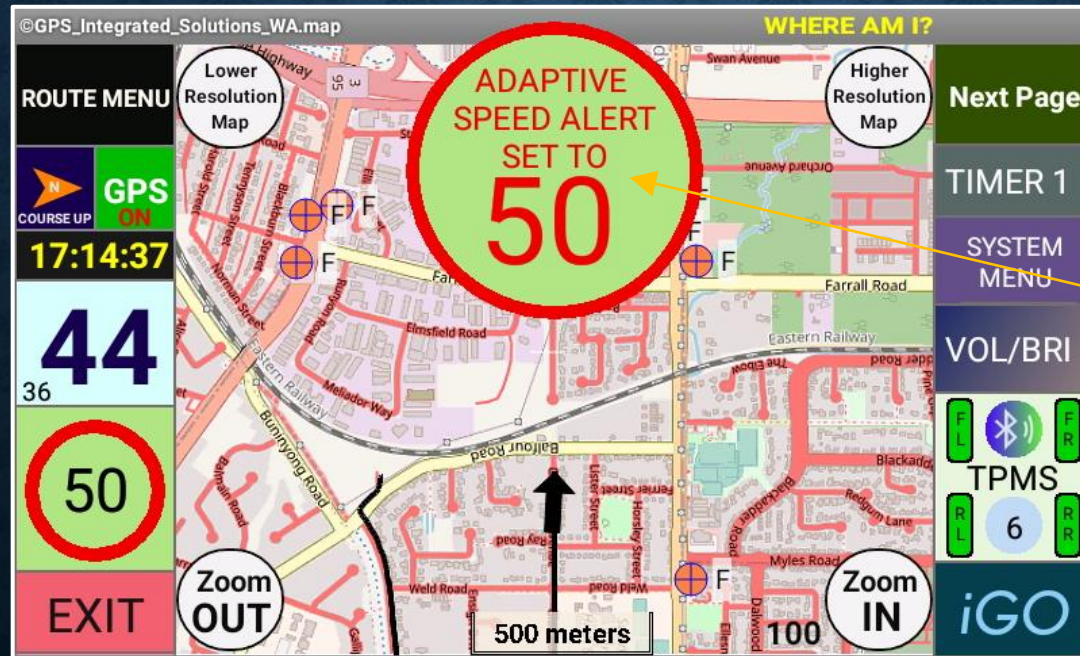
White = User

Green = Adaptive

Yellow = Geofence Active

ADAPTIVE SPEED ALERT MODE

The **Adaptive Mode** uses the vehicle speed and acceleration parameters to determine the current **Speed Alert** setting. If the vehicle is not accelerating or decelerating and the vehicle speed is ± 3 km/h of a 10 km/h increment, the adaptive mode will set the the new **Speed Alert** to the vehicle speed.



Adaptive message will be displayed when a new **Speed Alert** setting is calculated based on the vehicle speed and acceleration.

GEOFENCE SPEED ALERT MODE

(N/A in "Personal Mode")

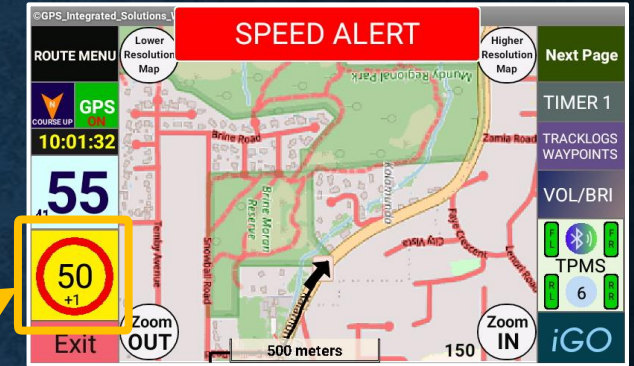
Geofence is enabled & active.



Geofence is available however the user speed alert is set lower.



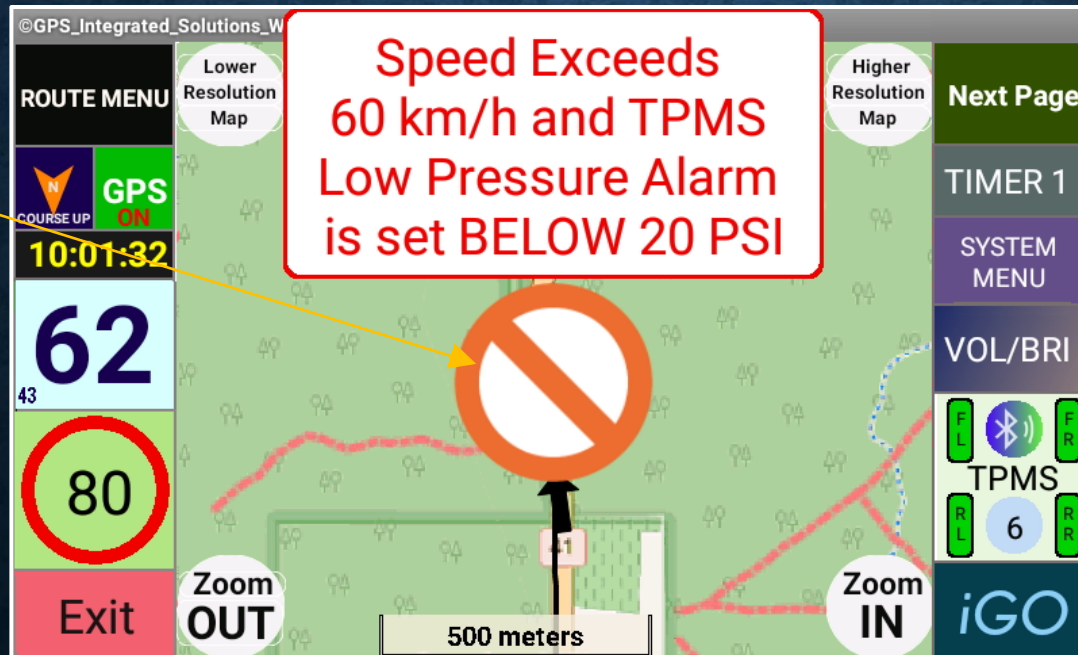
Geofence is enabled but there is no Geofence found for the current position.



LOW PRESSURE ALARM SPEED ALERT

If the **TPMS** low pressure alarm is set below 20 PSI, a continuous audio alarm message will be displayed when the speed exceeds 60 km/h.

Select to accept and ignore the low pressure alarm.





SPEED ALERTS

GEOFENCE MESSAGES



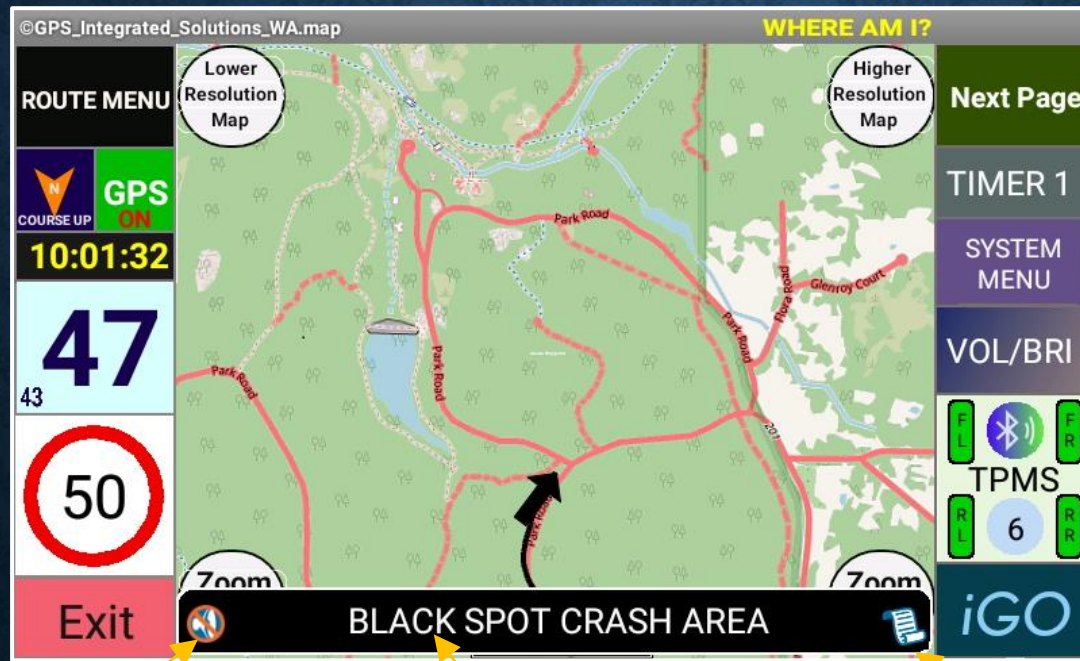
GEOFENCE MESSAGES

The ***ONIS*** calculates the current location ***Geofence*** using the ***Geohash*** algorithm (every 5 seconds) and if this ***Geofence*** match's a preconfigured data set contained in the ***ONIS***, the associated message will be displayed on the screen.

The ***Geofence*** has the capability of displaying different colours, audible sounds and a long message page screen.

GEOFENCE MESSAGE

The **ONIS** features a Geofence messaging system using the Geohash mathematical algorithm which compares the current location Geohash to pre-set data entries.



Press to mute the message.

Geofence Message.

Press on the “scroll” symbol to display Additional **Geofence Long Message** information.

GEOFENCE LONG MESSAGE

Black Spot Program - About the program
The Australian Government is providing \$110 million each year to the Black Spot Program.
Road crashes are a major cost to Australians every year. Black Spot projects target those road locations where crashes are occurring or are at risk of occurring. By funding measures such as traffic signals and roundabouts at dangerous locations



Scroll screen up & down to view information

Example of a **Geofence** long message.



GEOFENCE MESSAGES

FATIGUE TIMER



FATIGUE TIMER

The ***ONIS*** features an integrated ***Fatigue Timer*** which does not require any user input and is fully automated - simply drive the vehicle and then rest when the message is displayed.

If the ***Fatigue Timer*** is enabled, it will only start timing once the vehicle speed exceeds 75 km/h and will then continue to timeout regardless of speed.

A small flash message is displayed every 5 seconds at the top of the screen providing the driver with the driving or rest remaining time status.

Once the ***Fatigue Timer*** has finished, there are only 3 ways to reset the timer:

1. Park the vehicle and rest for 10 minutes minimum with the GPS app running
2. Park the vehicle and allow the ***ONIS*** to power down for a minimum of 10 minutes
3. Park the vehicle and toggle the enable / disable ***Fatigue Timer*** in the setup menu.

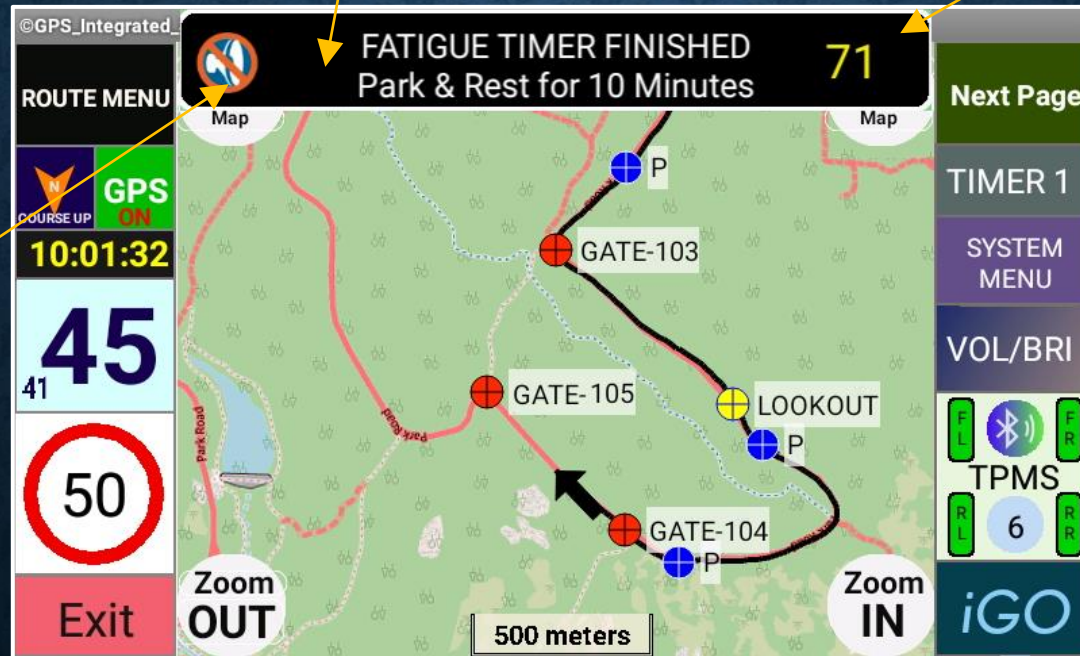
FATIGUE TIMER

The **ONIS** features a 2 hour integrated automated **Fatigue Timer** which can be enabled or disabled from the **SYSTEM & SETTINGS / Default Settings** menu.

The **Fatigue Timer** finished message will be displayed after 120 minutes has elapsed.

An overrun message will indicate the exceeded time, past the 120 minutes.

Select to mute the **Fatigue Timer**.



FATIGUE TIMER SEQUENCE MESSAGES

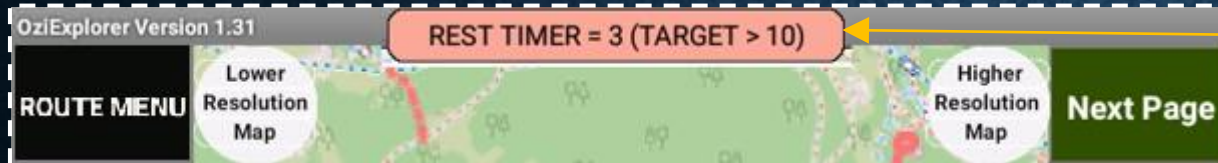
One of the following messages will be displayed every 5 seconds (approx.)



The fatigue timer will become active once the vehicle speed has exceeded 75 km/h.



Displays the remaining driving time after the timer is active.



Displays the remaining rest time required prior to resetting the timer.



Indicates that the 10 minute rest time has been completed.



FATIGUE TIMER

COUNT DOWN TIMERS



COUNT DOWN TIMERS

The ***ONIS*** features two count down timers – 120 minute and 12 hour.

The timer settings are easily accessible set using menus with large buttons and pre-set ***QUICK SET*** times, or the user can increment the manual slider bar.

Both timers retain the timer values after an ***ONIS*** or navigation app restart

The 120 minute timer also features an overrun message which provide the user with the time that has exceeded the set time.

COUNT DOWN TIMERS

Timer Overrun message will flash every 5 (seconds (approx.) until Timer 1 is cancelled or reset.



Select this button to access timer 1 settings. Timer 1 has finished.

When a timer has finished, an audio voice alert will be played every 5 seconds at the maximum volume.

120 MINUTE COUNT DOWN TIMER

Easy set Count Down timer commands.

Manually set the timer down.

Manually set the timer up.

Disable the timer.

Exit back to the map screen.

Timer overrun will display the time that has expired since the timer finished.

Cancel the timer and exit back to the map screen.

TIMER 1 SETTING MENU					
10 minutes		20 minutes		30 minutes	
60 minutes		90 minutes		120 minutes	
-	0  120			+	Disabled 
◀ Exit		Timer 1 Overrun: None		Cancel & EXIT	

12 HOUR COUNT DOWN TIMER

Easy set Count Down timer commands.

Manually set the timer down.

Manually set the timer up.

Disable the timer.

Time remaining.

Exit back to the map screen.

Cancel the timer and exit back to the map screen.

TIMER 2 SETTING MENU

1 Hour	2 Hours	3 Hours	4 Hours	5 Hours	6 Hours
7 Hours	8 Hours	9 Hours	10 Hours	11 Hours	12 Hours

- 0 360 720 +

Enabled

6:00

Exit

Cancel & EXIT



COUNT DOWN TIMERS

TPMS



TYRE PRESSURE MONITORING SYSTEM (TPMS)

The ***ONIS*** features an integrated Tyre Pressure Monitoring System (***TPMS***)

The ***TPMS*** monitors all enabled wheel sensors in real time and if an alarm condition occurs, the navigation app will close whilst displaying ***TPMS*** alarms screens with an audible alarm at maximum volume.

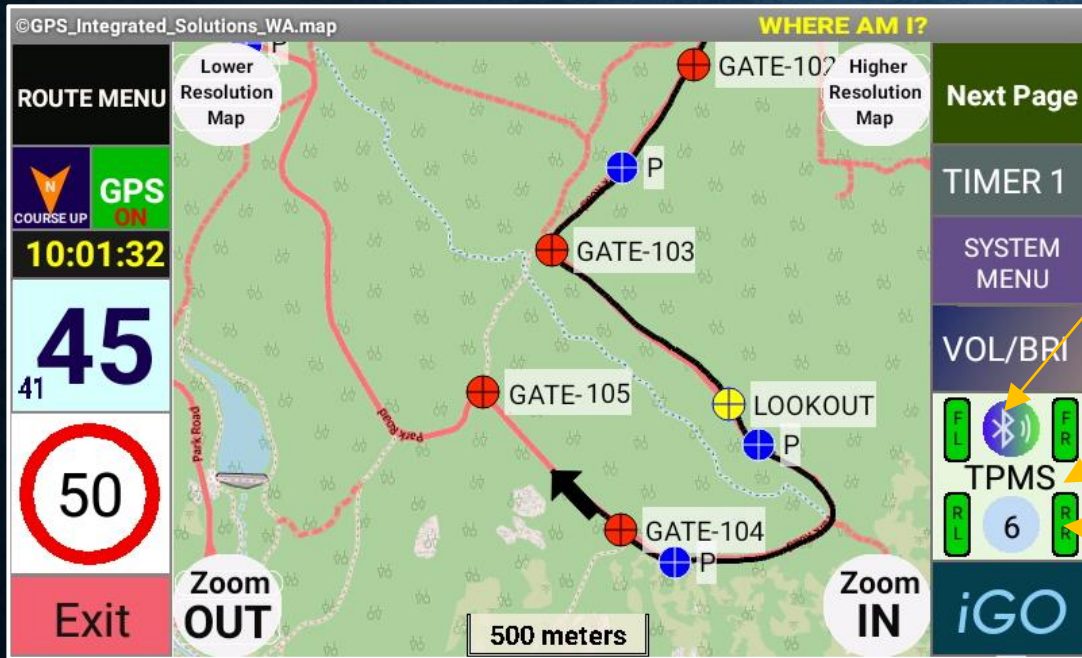
The ***TPMS*** status can be viewed (settings can only be performed from the ***TPMS Configuration*** app available in the ***ONIS System & Settings Menu***)

The ***ONIS TPMS*** system also incorporates our own bluetooth traffic monitor for the ***TPMS*** BLE wheel sensors allowing the ***ONIS*** to also determine if a sensor has failed.

All ***TPMS*** alarms are logged with the information available for viewing in the ***SYSTEM & SETTINGS*** menu, or downloadable to a PC.

TPMS

The **ONIS** integrated **TPMS** system can monitor up to 4 enabled Bluetooth wheel sensors in real time for pressure fluctuations and sensor health sensor health.



Displays the **TPMS** Bluetooth status.

Select to display the **TPMS** overview screen.

TPMS sensor health.
Green = OK.
Grey = Searching for sensors.
Red = Sensor not found.

TPMS SENSOR MONITORING

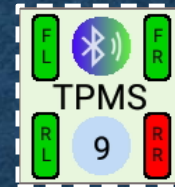
The following colours will be displayed for the **TPMS** System



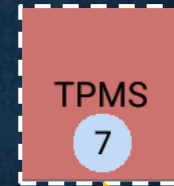
All enabled sensors are green (OK).



No sensors have been found.



The **Rear Right** sensor has not been found in the pre-set time and should be checked.



The **TPSM** is disabled. The background will be red and the TPMS / DISABLED message will toggle every 5 seconds.

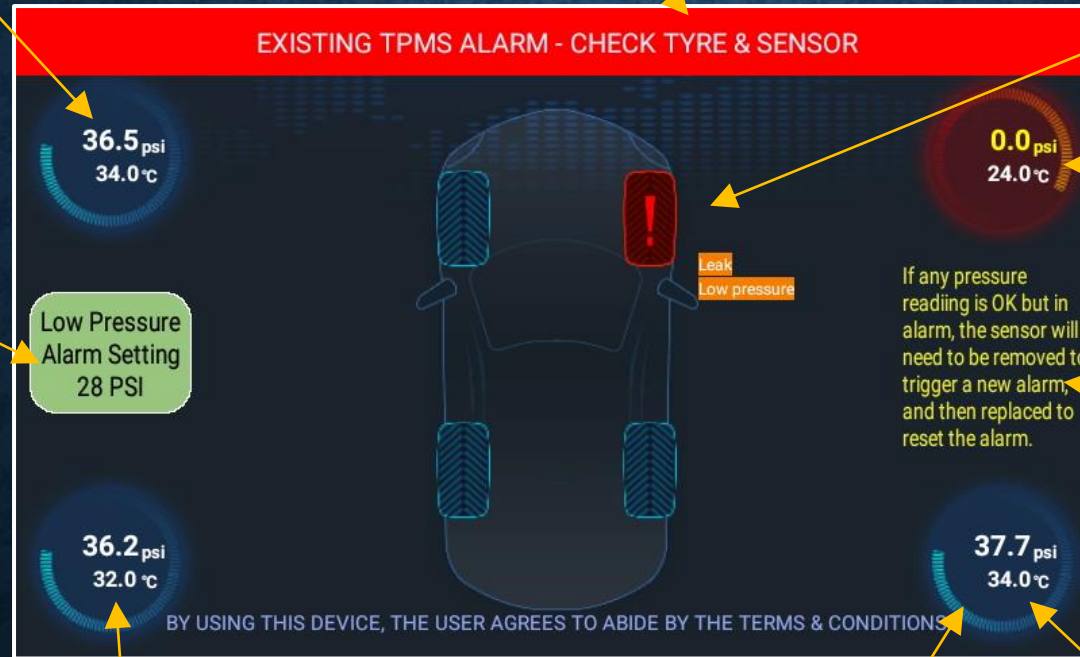
NAVIGATION APP STARTUP WITH AN EXISITNG TPMS ALARM

Front Left (Sensor 1)
Press and Temp.

Existing "Current Alarm Message" and countdown to exit.
If the alarm condition changes to OK, the startup will
continue automatically.

Right Front
(Sensor 2) in
alarm condition.

Displays the low
pressure setting.
The background
colour will be
green if the
pressure is over
25 PSI, and red if
under 25 PSI.



Front Right (Sensor 2) Press
and Temp.
Red circle indicates "Alarm"

Information message
about sensors that are
red but pressure is OK.

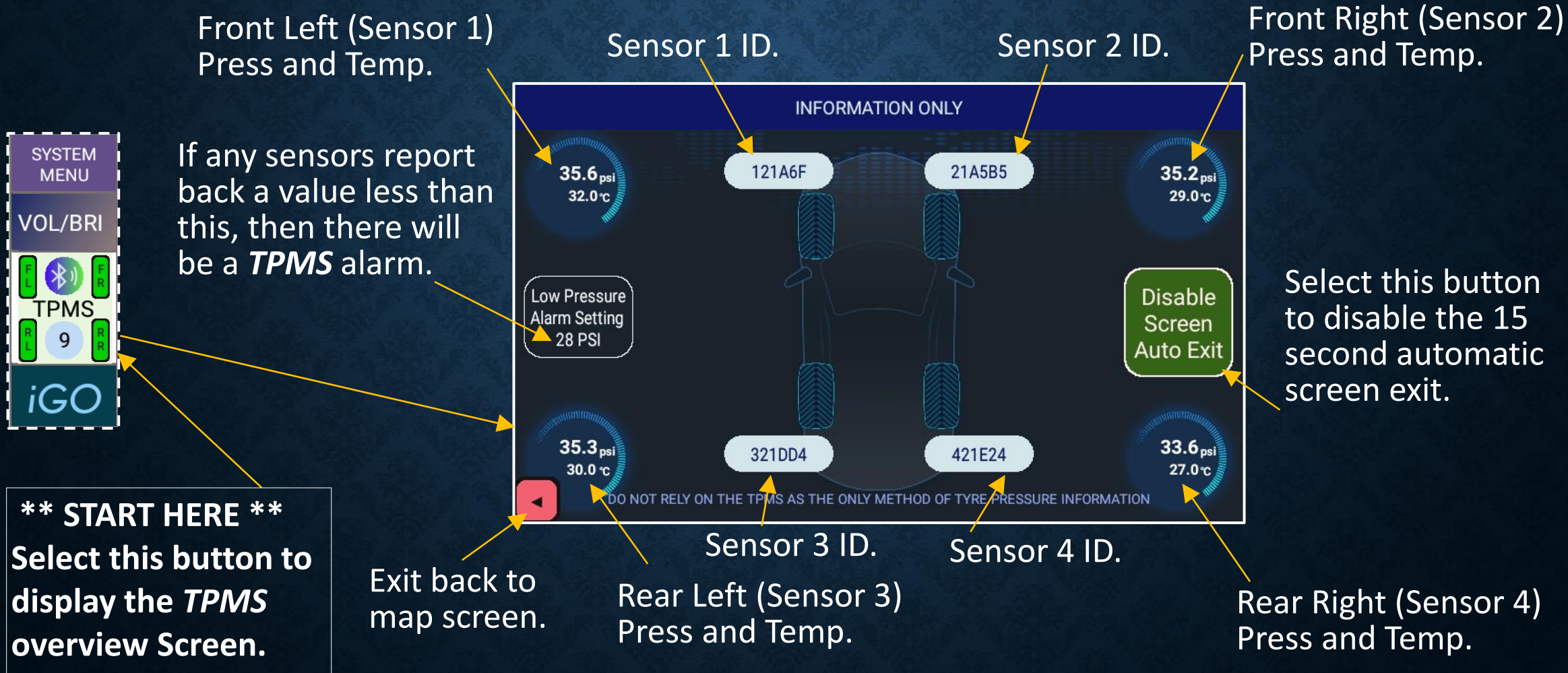
Rear Left (Sensor 3)
Press and Temp.

Blue circles
indicates "OK"

Rear Right (Sensor 4)
Press and Temp.

TPMS VIEW SCREEN

The **TPMS** view screen can be displayed whilst the navigation app is running.



TPMS ALARM

If the **ONIS** detects a **TPMS** alarm condition, the **ONIS** will automatically shutdown the navigation app, log all the data and then display the alarm screens with an associated audio beep (set at max volume and not configurable by the user).

Select to mute the **TPMS** alarm.

Wheel that initiated the **TPMS** Alarm.

Select to mute the **TPMS** alarm.



Select "Pop-up" to exit back to the main menu.



Firstly, this screen will be displayed whilst the **ONIS** is closing the navigation app.

Secondly, this screen will be displayed whilst the **ONIS** is saving the log data information.



TPMS

SWITCH TO iGO NAVIGATION



SWITCH TO iGO NAVIGATION

The **ONIS** user can fast switch to the **iGO** navigation app without having to exit the **OziExplorer** app and then restart **iGO**.

When the fast switch option is operated for the first time since the **ONIS** was powered up (or the **OziExplorer** app started), information messages will be displayed and the switch time will be approximately 20 seconds.

Once the navigation switch has been operated for the first time, subsequent switch times will be less than 5 seconds (information messages will not be displayed).

All “User” created **waypoints** will be converted to **iGO** Points of Interest (POI).

REFER TO THE iGO USER GUIDE FOR DETAILS ON LOADING CUSTOM POI.

SWITCH TO iGO NAVIGATION (first time)

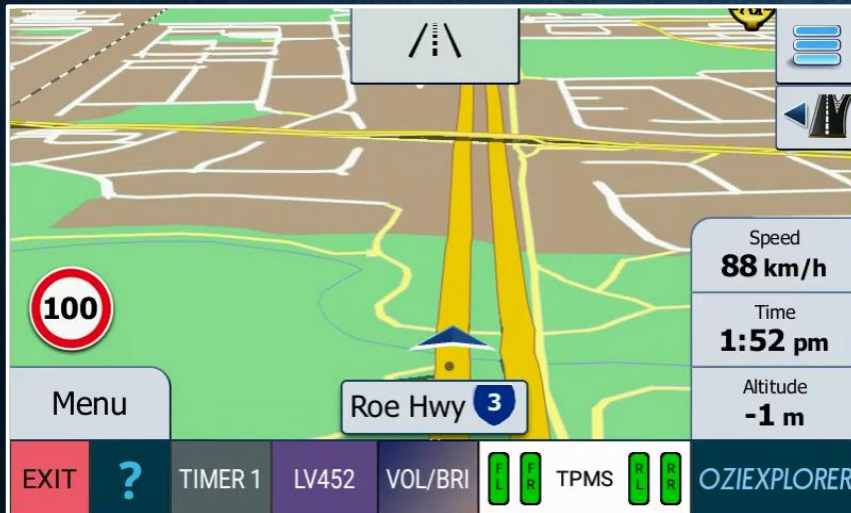


IMPORTANT NOTICES

Points of interest (POI) can be used in the iGO system and will route the driver to the final destination if the POI can be processed in the iGO app.

For instances where the iGO navigation can not route to the final destination, use the OziExplorer mapping, waypoint & tracklog navigation to assist in reaching the final destination.

IGNORE THE "GPS SIGNAL LOST" MESSAGE WHEN SWITCHING TO iGO



GPS INTEGRATED SOLUTIONS IS NOT RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF THE iGO MAPS AND/OR DATA

The driver may experience instances where the iGO displayed speed limits do NOT reflect the current regulated speed limits, or routing paths that do NOT result in the most accurate or effective routes.

The iGO maps and data (Inc speed limits, routing and other information) are contained in the iGO suite of files and can be updated using the external SD card if the hardware manufacture provides an iGO update to GPSIS.

IGNORE THE "GPS SIGNAL LOST" MESSAGE WHEN SWITCHING TO iGO



SWITCH TO iGO NAVIGATION

FAQ, KNOWN ISSUES, FAULTS & BUGS



FAQ, KNOWN ISSUES, FAULTS & BUGS

Q. Why do I sometimes get a **OziExplorer** trial message popup?

This may be a bug with the **OziExplorer** app- Exit & restart the app.

If there is NO "trial message" when starting the app, then the app is licensed.

If the license key is not valid, **OziExplorer** will display the trial mode message at every startup and then periodically when the app is running.

Contact **GPSIS** if the message is displayed at every app startup.

Q. Why does the screen (on occasion) change to the last page when I press the exit button?

This is a bug with the **OziExplorer** app.

Q. Why do I occasionally see large high speed fluctuation followed by a low speed fluctuation?

The **Personal Navigation Device (PND)** device receives GPS **National Marine Electronics Association (NMEA)** messages. Sometimes a message is missed and the calculation for speed is based on the GPS location and time. If a **NMEA** message is missed, the GPS location will be incorrect when the speed calculation is performed.

Q. Why is my position on the **ONIS** not correct when I am travelling?

Check and confirm that are at least 6 satellites visible, as fewer satellites will affect the location accuracy.

Q. Why do I see many black track tail lines around my current location even though I am stationary?

The **PND** device receives GPS **NMEA** messages. Small fluctuations are within the margin of error. Sometimes a message is inaccurate causing GPS location to be in a different position for one message scan.

Clearing the "Track Tail" will clear these track lines.

Q. Why do I get small value (eg 2.9 km's) in the "Daily Distance Travel Log" when the vehicle has been stationary?

The **PND** device receives GPS **NMEA** messages. Small fluctuations are within the margin of error. Sometimes a message is inaccurate causing the GPS speed to fluctuate.

Even though these speeds may be low, the **ONIS** performs distance calculations based on speed. Ensuring that the **ONIS** has good clear vision to find the GPS satellites will minimise the errors.

Q. Why do I get a small value (eg 7 km/h) in the "Daily Maximum speed Log" when the vehicle has been stationary?

The **PND** device receives GPS **NMEA** messages.

Sometimes a message is inaccurate or missed causing the GPS speed to fluctuate.

The **ONIS** logs the maximum speed based on the GPS **PND** information.

Ensuring that the **ONIS** has good clear vision to find the GPS satellites will minimise the errors.

Q. Why are there some parts of the **Open Street Maps (OSM)** map missing when I select the "More Detailed" **OSM** map?

Some small pieces of the map tiles downloaded are missing - typically between the individual **OSM** tiles. Use the "Less Detailed" map over this area if this becomes a problem.

Q. Why is the GPS speed, slow to update?

The **PND** device GPS receiver requires a good clear path to be able to maximise the accuracy and minimise delay update times of the **NMEA** messages.

Mounting the device in a position that reduces or obstructs a "clear sky" view, may affect the and GPS receiver performance.

Cloudy weather, tall trees and buildings can also reduce GPS receiver performance.

Q. Why are all the descriptions in my map upside down or sideways when I have selected **Course Up** in the navigation app?

OziExplorer users raster maps and these are created “north up” (same as an atlas).

When any labels or descriptions are added, they are also “north up”.

When the GPS mode is set to **Course Up**, the map image is rotated to suit the direction of the vehicle movement. If this becomes a problem, use **North Up**

Q. Why do I occasionally see a grey screen with a "Bluetooth Restarting" message?

If the **ONIS** detects that ALL enabled sensors have not received any bluetooth communication messages in a 30 minute (approx.) window, the **ONIS** will restart the bluetooth activity.

If the user routinely sees these messages every 30 minutes (Approx.), restart the GPS app.

Q. What do I do when there is no digital speed displayed but there are more than 5 satellites visible?

Close the navigation app and restart, or perform an **ONIS** reboot.

Q. On rare occasions, the **ONIS** is powered up but I can't see any visible satellites. Our experience has been, If you are in clear open space and have 0 satellites visible after 2-3 minutes after an **ONIS** restart, check the satellite visibility from the System Menu option. If the problem is consistent after every **ONIS** restart, your **PND** hardware may be faulty.

Q. On rare occasions, when I start the GPS app with the **TPMS** enabled, with **NO TPMS** previous alarm condition, why do we see a alarm (red) indicating a leak when the pressure is OK?

There is a feature in the **TPMS** software app which if the sensor is knocked / vibrated, causes the **TPMS** app to register a leak. **GPSIS** does not use this feature whilst the GPS app is running, however we do monitor any existing alarms using the red colour on startup.

NOTE:

This **DOES NOT** affect the **TPMS** alarm function whilst driving.

Q. Why do only some of the buttons on the screen have audio click sounds when I press them.

The **OziExplorer** app does not support click sounds for button press.

The click sounds from the other buttons are in other **ONIS** Apps that are running.

Q. When I start the GPS app with the **TPMS** enabled after a **TPMS** previous alarm condition, why do I see an alarm (red) when the pressure is OK?

If the **TPMS** app is shutdown with an existing alarm, the next time the app starts up it will display and alarm even if the pressure is OK.

This is due to the **BLE** sensors being "report by exception"

Remain in the GPS app for the duration of the 180 second timer. If the sensor is found (reports back to the **ONIS**) in this time, the startup will progress automatically.

OR,

Exit from the GPS app and start the "**TPMS Settings**" app. Remove and re-attach the wheel sensor to force a "**TPMS Alarm Test**" condition.

Restart the GPS app.

Q. What is the GPS accuracy of the **ONIS**?

Trees, clouds, buildings, the mounting location or any other obstruction can affect the satellite visibility leading to poorer accuracy. Typically with good visibility, the user can expect around +/- 10m.

Q. Why does a **TPMS** sensor take a long time to scan & register?

A **TPMS** sensor should register with the app (when running) using “report by exception” (ie when there is an alarm condition) or typically & approximately every 5-10 minutes.

We have noticed that one particular brand of **TPMS** sensor reports back on sensors 1,2 &3 every 5 to 10 minutes, but much longer for sensor 4 (Right Rear). This does not affect the operation and if in doubt, perform a tyre deflation test to confirm **TPMS** alarm operation.

Q. Can I remove and replace the **ONIS** from the cradle with the power applied?

Yes, however on occasion the **ONIS** may reboot when the **ONIS** is replaced back into the cradle. This rebooting is not typical and we have experienced this in approximately 1% of instances.

Q. Why does the **OziExplorer** app crash when I press a map zoom button quickly?

This is a bug with the **OziExplorer** app and **GPSIS** is unable to resolve this.

Q. Why does the **OziExplorer** app switch screens when I press a map zoom button?

This is a bug with the **OziExplorer** app and **GPSIS** is unable to resolve this.

Q. In the GPS app, why do I get continual failed “Sensor Failed” audio & screen messages at low ambient temperature?

We have experienced intermittent **TPMS** alarms when below 5 degrees Celsius & continual alarms when below 1 deg Celsius (these alarms are triggered by the wheel sensors) . We recommend disabling the **TPMS** monitoring for prolonged periods of low ambient temperature to avoid false alarms.

Q. Do I require the external SD card with **ONIS** maps to be installed?

A warning message will be displayed and the **ONIS** will startup however the **OziExplorer** GPS app will not run.

Q. Does the **ONIS** check the external SD card for correct maps?

When the **OziExplorer** app is started, the **ONIS** tests the **GPSIS** maps for validity.

A message will be displayed if the maps are not valid.

As a minimum, the **ONIS** requires the Geoscience 250k topographic map to run the **OziExplorer** app.

Q. Why do I occasionally get a message "An app wants to turn Bluetooth ON for this Device" ?
There are many apps installed on the **ONIS** and all apps compete for system resources.
Select "Allow" from the popup message.
If the problem is consistent (i.e. every instance after a reboot) , contact **GPS Integrated Solutions (GPSIS)**.

Q. The **ONIS** has locked up on a screen and I can't select any option including "Exit" - What can I do?

If user "key presses" are NOT functioning, remove the **ONIS** from the cradle / mount and let it power down.

OR

If this does not work, press the small reset button on top left, and reboot.

OR

If this does not work, press the small reset button on the rear (use a paper clip).

OR

If the device is still not functioning or will not power up, contact **GPSIS**.



FAQ, KNOWN ISSUES, FAULTS & BUGS

MAP & DATA CONTRIBUTORS



MAP & DATA ATTRIBUTIONS

OziExplorer maps & data have been sourced from:

© Commonwealth of Australia (Geoscience Australia)

www.ga.gov.au

OpenStreetMap data is available under the Open Database License

© OpenStreetMap contributors

www.openstreetmap.org/copyright

© Government of Western Australia (dataWA)

www.data.wa.gov.au

Other providers as displayed when the **ONIS** navigation app starts.

Data is available under the Creative Commons Licenses

www.creativecommons.org

GPS Integrated Solutions gratefully thanks all map & data contributors.

Note: All data produced by **GPSIS** using data from other contributors under the **Common Creative** licenses is not for sale and is included free of charge on an “as is” basis.