Navigation System

Range Rover

LAND
-ROVER

Navigation System

Contents

H3064

SATELLITE NAVIGATION

The satellite navigation system fitted to your vehicle uses the Global Positioning System (GPS). This works in conjunction with direction and speed sensors incorporated in the vehicle's electronic systems, to continually monitor its position. The navigation computer then integrates this data with the information stored on the navigation CD, enabling you to plan and follow a route map, whether on or off-road, to your desired destination. This is particularly useful if you are travelling to or through unfamiliar territory.

There are 24 GPS satellites in orbit (at a height of 21,000 km) around the earth. The GPS navigation system will pick up and utilise any available signals to plot your position. To accurately determine the position of the vehicle, the GPS receiver needs to be able to pick up the signals from at least four satellites.

Obstacles such as tall buildings, trees, tunnels and mountains can sometimes shield a vehicle from satellite signals, which may cause a temporary interruption to the operation of the navigation system. However, the vehicle's direction and speed sensors will minimise any adverse effect on the operation of the navigation system, if this should occur. Normal operation will resume once the obstruction has been passed.

Operating Information

<div style="text-align:center">**IMPORTANT**</div>

The navigation system is designed only as a guide and does not relieve the driver of the responsibility for driving in accordance with traffic regulations.

When driving off-road, the navigation system will not supply detailed information concerning the terrain being traversed - carry out a preliminary survey on foot before negotiating difficult terrain and refer to the 'Off-road driving' section of the Owner's Handbook for helpful information.

In the interests of safety, information should only be programmed into the navigation system when the vehicle is stationary.

The navigation system can only provide information and guidance for the area covered by the navigation CD - ensure that you are using the latest version of the correct CD for your country. Some of the road maps contain areas of unattributed geometry. In these areas, the road navigation system will announce that "you are leaving the registered road network". The navigation screen will revert to a map display showing the current vehicle position and no audible instructions will be given.

NOTE: Navigation CDs are updated approximately every 6 months, and you will automatically receive the first update free, along with information on how to order further updates.

Under normal operating conditions, the navigation system requires approximately 8 seconds to confirm the vehicle's position using the satellites.

If the vehicle battery has been disconnected, or if the vehicle has been transported to a new location on another vehicle (eg. by trailer or train), the navigation system will require approximately 15 minutes to identify the new position. Entering the new location manually will reduce this delay (see 'Entering the vehicle's position').

Metallic objects interfere with satellite signal reception. For this reason, do not store any metallic objects in close proximity to the satellite antenna, located under the right hand wiper mounting at the base of the windscreen.

H4072

The navigation computer is located on the right hand side of the luggage compartment. Check that the 'ON' indicator light is illuminated; if not, press the eject button (1) to activate the system. Partially insert the navigation CD, until it is automatically drawn into the computer (the 'CD-IN' indicator light illuminates).

Once the navigation CD is loaded, it is unnecessary to remove it unless the following applies:

● You are travelling to an area not covered by the current CD (another country, for example), in which case, the correct CD for the new country must be installed.

● If you are updating the computer with the latest version of the navigation CD (the CDs are updated approximately every 6 months).

To eject the navigation CD press the eject button (1).

IMPORTANT

DO NOT insert any CD into the navigation computer, other than a genuine satellite navigation CD.

NOTE: *If road or off-road navigation is selected, and there is no navigation CD loaded, the warning 'Note: No CD in navigation computer! Please insert CD!' will appear in the display. Insert the CD and wait for a few seconds until the display reverts to the GPS display.*

H3065
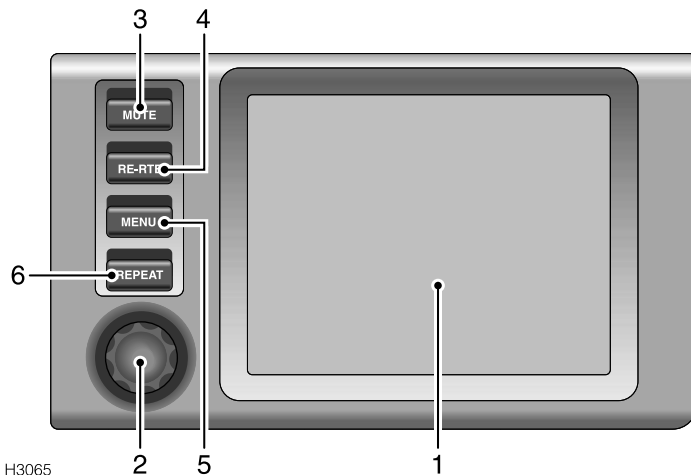
1. Navigation display

The navigation system operates using a series of menus and map screens, which appear on the liquid crystal display. Illumination for the display will dim automatically for night time viewing.

IMPORTANT

DO NOT push or rub the screen. This may damage the display.

2. Rotary select control

Use to make all selections when operating the navigation system.

Rotate the control to scroll up or down a vertical menu, or across a horizontal menu, until the chosen item is highlighted.

Press the control to select the item.

3. Mute control

Press to mute the audio navigation instructions, press again to reactivate.

4. Re-route control (RE-RTE)

Press to select the re-route function, then use the rotary select control to set and select the detour distance (to avoid roadworks or traffic queues, for example).

When the navigation computer has plotted the new route, audio and visual instructions are given.

5. Menu control

Press to return the display to the main menu.
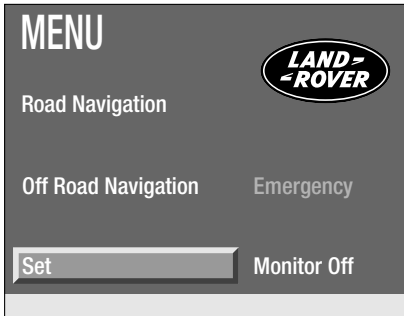
6. Repeat control

Press to listen to the last navigation instruction for a second time. The repeat function will only operate if the last instruction given is still valid.

Switching on

With the starter switch in the first or second position, press the menu control. Turn the rotary select control until either 'Road Navigation' or 'Off Road Navigation' is highlighted, then press the control to select.

To switch off the monitor, highlight and select 'Monitor off' from the main menu.

MENU

LAND-ROVER

Road Navigation

Off Road Navigation   Emergency

Set   Monitor Off

H3589

SET

Language   D   GB   Other

Units   km   miles

Volume   ▭——▮——————— - 2

Wp. radius 330ft   660ft   1650ft

H3590

Press the 'MENU' control to view the display main menu, then use the rotary select control to highlight and select 'Set'.

The display's basic settings can be adjusted to suit regional and personal requirements. There are four main settings that can be changed.

Use the rotary select control to highlight and select the setting to be changed. Turn the control to adjust the setting, then press to select.
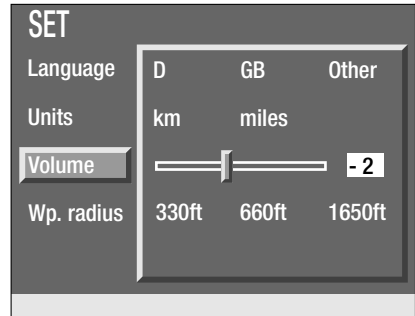
Language
There is a choice of two different languages, each represented by the appropriate letter or letters. The choice of languages is market dependent. Adjusting this setting will change the language used for all display screens and audible instructions.

NOTE: The setting listed as 'Other' is for dealer use only. Consult your dealer if a change of language options is required.

Units
This setting alters the type of unit (imperial or metric) used by the navigation system to measure distance.
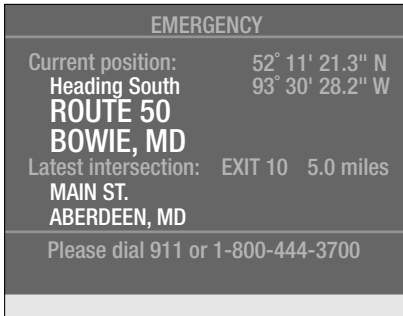
Volume
This setting alters the volume at which all audible instructions are given. The audible instruction voice will sound during adjustment, to help in finding a comfortable volume.

Waypoint radius
For more information see the 'Off-road navigation' section.

```
                EMERGENCY
Current position:        52° 11' 21.3" N
  Heading South          93° 30' 28.2" W
  ROUTE 50
  BOWIE, MD
Latest intersection:   EXIT 10   5.0 miles
  MAIN ST.
  ABERDEEN, MD
  Please dial 911 or 1-800-444-3700
```

H3596

Press the 'MENU' control to view the display main menu, then use the rotary select control to highlight and select 'Emergency' to view the above screen.

The Emergency information screen displays the details you are likely to need in the event of a breakdown, or if you become stranded for whatever reason.

Current position
The upper half of the display gives the Latitude and Longitude of your current position (see *'Navigation terminology'* later in this book). Also detailed, are the names of the current road and city district, along with the direction of travel.

Last intersection
The lower half of the display details the distance to, and the exit number of, the last intersection passed, along with the name of the road intersected and the associated city district.

Emergency numbers
Also listed at the bottom of the screen is the number for the Emergency Services and also the number for the Land Rover Road Recovery services (refer to the relevant section of the Owner's Handbook for further details).

MENU

LAND ROVER

Road Navigation

Off Road Navigation   Emergency

Set   Monitor Off
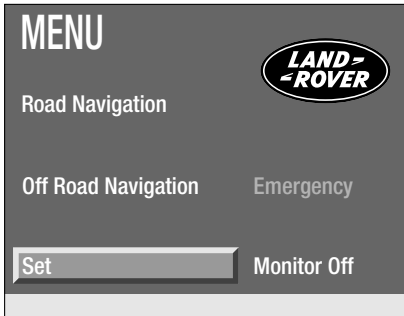
H3589

Switching on
With the starter switch in position 'I' or 'II', press the menu control. Turn the rotary select control until 'Road Navigation' is highlighted, then press to select. An information screen appears, as follows:

"Please drive safely. Wear your safety belt. The navigation system is no substitute for the observance of traffic laws and constant attention to actual traffic situations. For your safety do not enter data into the navigation system while driving. Please press the rotary knob to accept."

Read the advice and then press the rotary select control to continue.

The satellite road navigation system provides the following facilities:

● Recommended routes allowing for personal preferences (fastest route, without using motorways etc).

● Destination input using either town/road name, by selecting a point of interest or by the use of cross hairs on the destination map.

● Audio and visual destination guidance, including automatically updated instructions (in case of ignored or unheard instructions or if road works cause a diversion).

● General information on destination and present location (hotels, restaurants, parking etc).

● An address book to store frequently needed destinations.

Road Navigation

ENTERING A DESTINATION

ROMAN WAY. O. -OXFORD
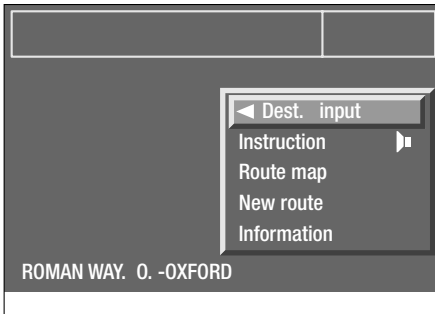
H3154

From the options menu, highlight and select 'Dest. input', the destination menu will appear and the last destination entered will be displayed as the default.

INPUT DESTINATION

UNITED KINGDOM

GLOUCESTER   Delete
                                     destination
Road:

Road:
ABCDEFGHIJKLMNOPQRSTUVWXYZ   space
1234567890.' -,   delete
◄ return   Index   enter

H3155

- Turn the rotary select control until the town or city is highlighted, then press the control to select. A 'typewriter' screen will appear at the bottom of the display.
- Turn the rotary select control until the first letter of the destination town is highlighted, then press the control to select.
- Repeat this procedure until the full name of the town has been entered, then highlight the 'enter' prompt and press to select.

As an aid to the selection process, when entering a name using the typewriter, the navigation computer will automatically display only the letters that, according to the computer, could follow the preceding letter to give a valid name. Once the navigation computer has been provided with enough information, the system may suggest the completed name and 'enter' or 'Index' is highlighted.

If the name is correct, select the enter prompt, then repeat the process to enter the road name and, if possible, the house number of your destination.

If the wrong destination has been entered, highlight and select 'Delete destination', or highlight and select 'Index' (see 'Using the index').

Using the index
If the place name of the destination is long, or if you are unsure of the spelling, use the index to speed up the process.
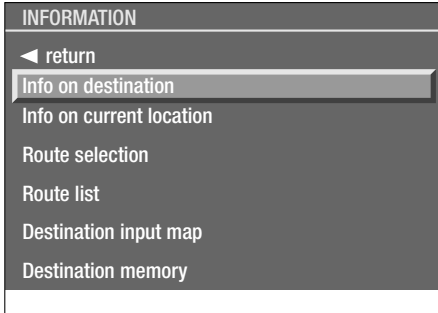
After entering the first few letters of the name, highlight and select the 'index' prompt. The relevant part of the index appears. Using the rotary select control, scroll through the list until the correct destination is highlighted, then press the control to select.

Road Navigation

Using destination information

If an exact address is not known (if you are travelling to a museum, theatre or sports centre for example), the destination information facility enables you to select a specific building or monument as your destination.

INFORMATION

◄ return
Info on destination
Info on current location
Route selection
Route list
Destination input map
Destination memory

H3599

- Enter the desired town name, then, using the rotary select control, highlight and select 'Information'.
- From the information menu, highlight and select 'Info on destination', or if your destination is in the same town or city as your current position, highlight and select 'Info on current location'.

INFO ON DESTINATION

◄ return
CAR PARK
CITY CENTRE
COMMUNITY CENTRE
HOSPITAL
MONUMENT
MUSEUM

H2878

- Scroll through the 'Info on destination' or 'Info on current location' menu until the desired category is highlighted, then press to select.

Use one of two methods to select your destination, as follows:

- Use the typewriter menu to enter the name of the chosen destination, then highlight and select 'enter'.
- Highlight and select 'Index', then scroll through the list until the chosen destination is highlighted, then press to select.

NOTE: If 'CITY CENTRE' is selected, the navigation computer will select this as your destination without the need to use the typewriter or index.

Route selection
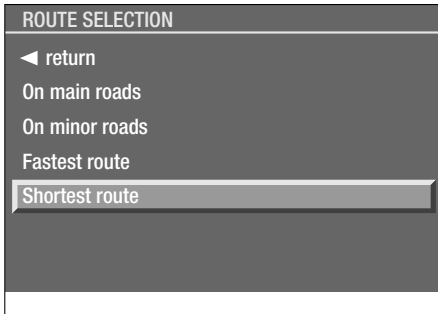
```
ROUTE SELECTION

◄ return

On main roads

On minor roads

Fastest route

Shortest route
```
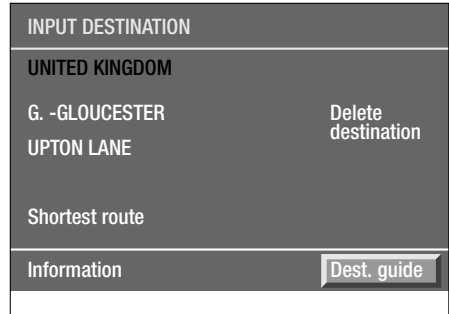H2879

After selecting the chosen destination, highlight and select the route preference prompt on the left of the display, below the destination address. The route can adopt one of four methods;

● 'On main roads' - motorways and main arterial roads are given priority.

● 'On minor roads' - motorways are avoided, wherever possible.

● 'Fastest route' - this selection plots your route using the fastest roads and avoiding town centres etc.

● 'Shortest route' - this selection plots the shortest route possible (in terms of distance).

Highlight and select your preferred choice of route.

NOTE: The navigation system plots routes according to the road information and characteristics stored on the navigation CD. Therefore, the route suggested by the navigation system may differ from the route that may be expected.

```
INPUT DESTINATION

UNITED KINGDOM

G. -GLOUCESTER              Delete
UPTON LANE                  destination


Shortest route

Information               Dest. guide
```
H3157

Once the correct destination address and all other information on the Input destination menu is displayed, highlight and select 'Dest. Guide' to return to the route guidance display.

USING THE DESTINATION INPUT MAP

Once the town or city name has been entered, the destination input map can be used to select the exact destination.
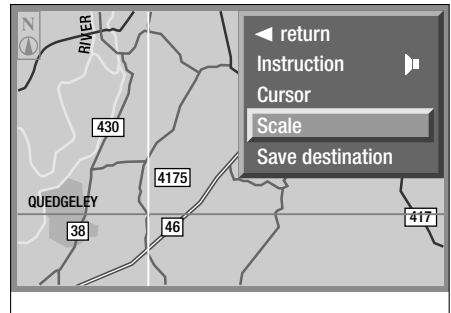
● Highlight and select 'Information'.

● From the information menu, highlight and select 'Destination input map'.
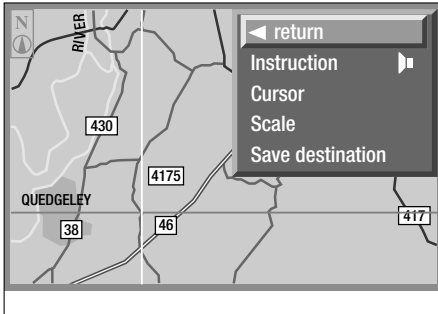
H2942

A detailed map of the destination area appears in the display, with the distance to the destination and the direction (as the crow flies) in the top right hand corner.

Map scale

H2941

It is possible to zoom in or out on the destination area, using the map scale control. To change the scale of the map, turn the rotary select control to view the menu, then highlight and select 'Scale'. The current scale appears in place of the menu; rotate the control to increase or decrease the scale (between 125 yards and 50 miles), then press to select.

It may take the display a few seconds to refresh the display with the new scale map - 'Please wait a moment...' appears in the display.

NOTE: The menu and scale displays disappear automatically, approximately 3 seconds after the last adjustment was made.
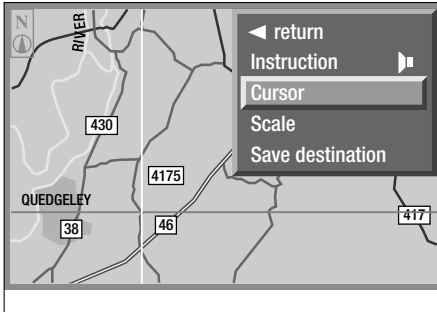
Using the cursors

H2888

When the destination input map is selected, two blue 'cross-hair' lines appear in the display, crossing each other at the current destination. These cursors can be moved to input a new destination as follows:

- Turn the rotary select control to activate the menu, highlight and select 'Cursors' - the horizontal cursor highlights.
- Turn the rotary select control to move the cursor up or down the map until it crosses the new destination.
- Press the control to enter - the vertical cursor highlights.
- Repeat the procedure with the vertical cursor, ensuring that the two cross over at the point on the map which is to be the new destination.
- The menu appears - highlight and select 'Save destination'. The navigation computer returns to the 'Input destination' menu with the new destination displayed.

The cursors can be used in conjunction with the scale facility to input a very accurate destination point.

Saving the destination
When the chosen destination has been pinpointed, using the cursors and the scale facility, highlight and select 'Save destination' on the menu.

NOTE: If 'Save destination' appears on the menu in black, a valid destination has not been selected on the input destination map.

ROUTE GUIDANCE
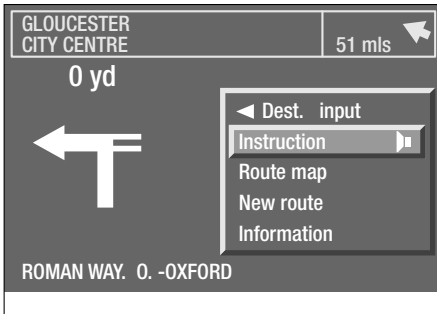
H3158

The route guidance display, provides all the navigation information, both visual and audio, needed during your journey to your destination.

Your chosen destination appears at the top left of the display, with the calculated route distance and destination direction (as the crow flies) in the top right.

When the navigation computer has calculated an appropriate route to your destination, according to your chosen route preference, an audio instruction is given and the main part of the display shows the following;

● The distance to the next relevant junction.

● The direction to be taken at the next relevant junction.

● The current position.

● The main menu.

As each junction is negotiated, the next relevant junction is displayed along with the appropriate audio instruction.

NOTE: To repeat the last audio instruction, press the 'Repeat' button to the left of the display, or highlight and select 'Instruction' - an instruction will only repeat if it is still valid.

Muting audio instruction

Press the mute button to the left of the display or, alternatively, from the main menu (illustrated), highlight, but do not select, 'Instruction'. Press and hold the rotary select control for approximately 2 seconds. The speaker symbol alongside 'Instruction' appears with a cross through it indicating that audio instruction is now muted (the indicator light on the mute button illuminates). Highlight and select 'Instruction' to reactivate audio instruction. The volume at which instructions are given can be adjusted, see 'Settings'.
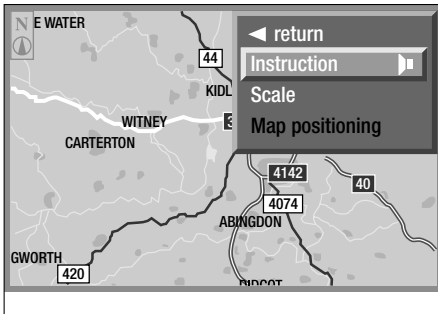
Using the route map

H2889

From the main menu, highlight and select 'Route map'. A map of the area surrounding the vehicle's current location is displayed. A blue circle and arrow represent the position of the vehicle (the tip of the arrow indicating the precise position).

The map takes the form of a conventional road map, showing road numbers, railways, urban areas etc. The map can show more or less detail depending on the scale setting. To change the scale, turn the rotary select control to view the menu, then highlight and select 'Scale'. The current scale appears in place of the menu; rotate the control to increase or decrease the scale (between 125 yards and 50 miles), then press to select.

It may take the display a few seconds to refresh the display with the new scale map - 'Please wait a moment...' appears in the display.

The route to your destination appears on the route map as a white line, terminating in a white circle at your destination (if visible on the map).

NOTE: Audio instructions will still be given when the route map is displayed.

Selecting a new route
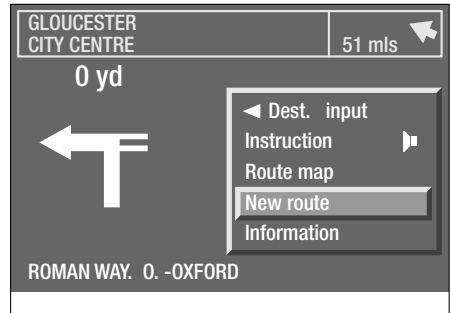
H3159

The 'new route' facility enables you to select an alternative route for a set distance, to avoid roadworks, traffic queues etc.

From the main menu, highlight and select 'New route' - the distance box, indicating the distance of the detour required appears. Turn the rotary select control to change the detour distance, then press to select.

When the navigation computer has plotted the new route, audio and visual instructions are given. The new route can also be viewed on the route map.

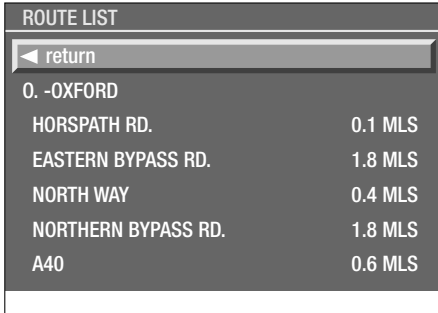*NOTE: This facility can also be accessed using the re-route button to the left of the display - see 'Controls'.*

Viewing the route list

This facility provides a list of all the roads and counties making up the route to your destination.

The route list can be viewed as follows:

● From the main menu, highlight and select 'Information'.
● From the information menu, highlight and select 'Route list'.

ROUTE LIST	
◄ return	
0. -OXFORD	
HORSPATH RD.	0.1 MLS
EASTERN BYPASS RD.	1.8 MLS
NORTH WAY	0.4 MLS
NORTHERN BYPASS RD.	1.8 MLS
A40	0.6 MLS

H2876
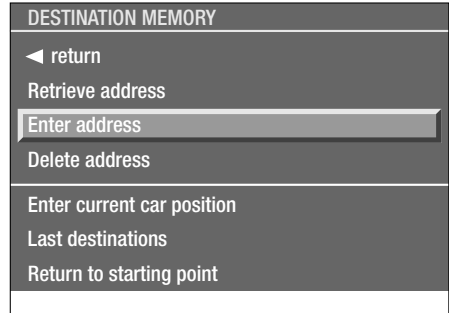
The navigation computer lists the names of roads or streets wherever applicable. It follows therefore, that a number of road or street names may be listed which are different parts of a single 'A' or 'B' category road that forms part of the route (this might apply where a route passes through a town or city, for example). Wherever a new 'A' or 'B' category road is to be used, the new number will be shown on the display.

DESTINATION MEMORY

Destination memory acts as an address book where frequently used names and addresses can be stored and recalled.

● Highlight and select 'Information'.
● From the information menu, highlight and select 'Destination memory'.

Entering an address

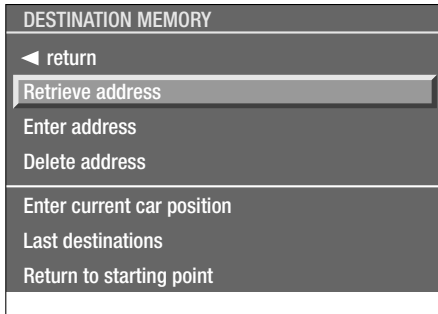| DESTINATION MEMORY |
|---|
| ◄ return |
| Retrieve address |
| Enter address |
| Delete address |
| Enter current car position |
| Last destinations |
| Return to starting point |

H2945

From the 'Destination memory' menu, highlight and select 'Enter address'. The last destination is displayed as the default address. If a name is required, highlight and select 'Name:', then use the typewriter menu to enter the name.

To enter a different address, use the same method as entering a destination.

Once the correct address is displayed, highlight and select 'enter'.

Road Navigation

Retrieving an address

DESTINATION MEMORY

◄ return

Retrieve address

Enter address

Delete address

Enter current car position
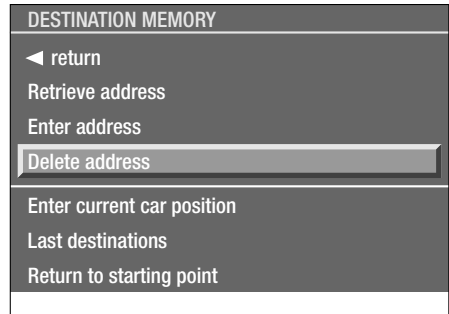
Last destinations

Return to starting point

H2946

From the 'Destination memory' menu, highlight and select 'Retrieve address'. A list of all addresses entered into the destination memory appears in the display.

Scroll through the list to highlight and select the chosen address - the display reverts to the 'Input destination' menu with the chosen address set as the new destination.
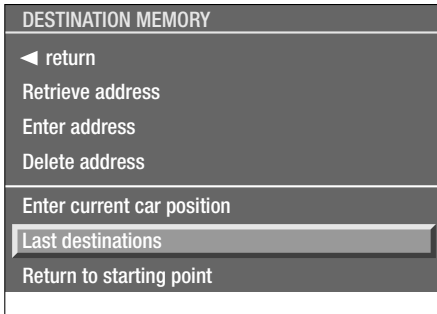
Deleting an address

DESTINATION MEMORY

◄ return

Retrieve address

Enter address

Delete address

Enter current car position

Last destinations

Return to starting point

H2947

From the 'Destination memory' menu, highlight and select 'Delete address'. A list of all addresses entered into the destination memory appears in the display.

Scroll through the list and highlight and select the address to be deleted. The navigation computer requests confirmation; if it is the correct address, highlight and select 'yes'. The display will revert to the 'Destination memory' menu.

If an incorrect address is selected, highlight and select 'no', then select the correct address to be deleted.

Last destinations

```
DESTINATION MEMORY

◄ return

Retrieve address

Enter address

Delete address

Enter current car position

Last destinations

Return to starting point
```

H2881

From the 'Destination Menu', highlight and select 'Last destinations'. The navigation computer requests whether an address is to be retrieved or deleted, highlight and select the appropriate prompt. A list of the last ten destinations appears.

To retrieve one of the addresses, scroll through the list to highlight and select the chosen address. The display reverts to the 'Input destination' menu with the chosen address set as the new destination.

To delete one of the addresses, scroll through the list to highlight and select the chosen address. The navigation computer requests confirmation; if it is the correct address, highlight and select 'yes'.

If the incorrect address is selected, highlight and select 'no', then select the correct address to be deleted.

Entering the vehicle's current position
From the 'Destination memory' menu, highlight and select 'Enter current car position'. The navigation computer calculates and displays the vehicle's current position. If a name is required, highlight and select 'Name:', then use the typewriter menu to enter the name.

Highlight and select 'enter' to store the current position in the destination memory.

Return to starting point
Highlight and select to enter the journey's starting point as the new destination, the display returns to the 'Destination input' menu. This feature is particularly useful when going on a round trip.

ENTERING THE VEHICLE'S POSITION

If the vehicle battery has been disconnected, or if the vehicle has been transported to a new location on another vehicle (by trailer or train, for example), the navigation system will require up to 15 minutes to identify the new position. Entering the vehicle's position manually as follows, reduces this delay:

● Highlight and select 'Information'.

● From the Information menu, scroll down to the next screen and highlight and select 'Vehicle position'.

NOTE: If the correct CD is in the navigation computer, the country is automatically entered. If you have travelled to a new country, a new CD may be needed.

VEHICLE POSITION

UNITED KINGDOM

OXFORD   Street
                                       Map
Road:

RO
ABCDEFGHIJKLMNOPQRSTUVWXYZ   space
1234567890.' -,   delete
◄ return   Index   enter

H2884

● From the Vehicle position menu, highlight and select 'City:' then use the typewriter menu to enter the vehicle's position (town, road etc) in the same way as you would enter a destination (see 'Entering a destination').

● Once the town and road names are entered, the navigation computer asks for a 'Junction'. This is the name of the road that forms the next junction with your chosen route.

VEHICLE POSITION

UNITED KINGDOM

O. -OXFORD   Street
ROMAN WAY   Map
HORSPATH RD.

◄ return   Crossing the junction.

H3160

● Highlight and select 'Junction', then enter the name using the typewriter (if required), or select the correct road name if a list of names is displayed - 'Crossing junction now' highlights. Press the rotary select control when you reach the junction.

NOTE: The vehicle position menu provides a 'Street Map' facility, which enables you to check your vehicle's current position and assists in identifying the name of the next road junction. For more information on how to use the street map, see 'Using the route map'.

Provided that the information entered into the computer is correct, the navigation system requires approximately one minute to position the vehicle and provide instructions on how to reach your destination (if a destination has been entered).
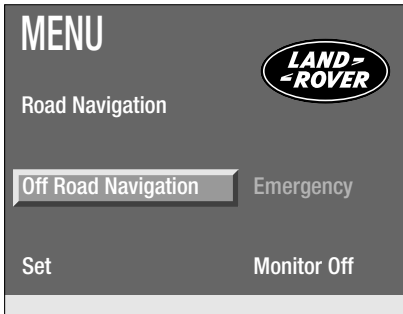
Switching on

H3591

With the starter switch in position 'I' or 'II', press the menu control. Turn the rotary select control until 'Off Road Navigation' is highlighted, then press the rotary select control. An information screen appears, as follows:

"Off road conditions may change. Always ensure it is safe to make the suggested manoeuvre before following any navigational advice. A road marked on a map does not automatically confer right of way. If in doubt, ask the appropriate authority. Refer to the off road driving section of the owner handbook."

Read the advice and then press the rotary select control to continue.

The off-road satellite navigation system provides the following facilities:

- An off-road route comprising a series of waypoints.
- 'As the crow flies' guidance using audible instructions and a map or data display.
- A compass.
- The co-ordinates of the vehicle's current location.
- The current heading and bearing to your next waypoint or destination.
- The vehicle's current altitude.
- A route list, enabling you to store favourite routes.

NOTE: When in use off-road, the Global Positioning System (GPS) can only be guaranteed accurate to within 100m. Please allow for this when plotting waypoints on the route.

Navigation status
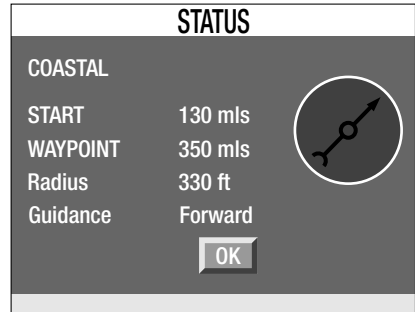
H3592

The first navigation display shows the current status of the navigation system, referring to the last entered route, including:

- Name of the last programmed route.
- Distance to the next waypoint (illustrated as 'START').
- Distance to the route destination (illustrated as 'WAYPOINT').
- Waypoint radius (see 'Waypoints').
- Direction of route guidance.

NOTE: If compass guidance mode was last selected, only the compass and the waypoint radius data will be given on the status screen.

Press the rotary select control to view the main guidance screen (either 'Map display', 'Full' or 'Reduced' guidance).

NOTE: If information on a subject is needed, the off-road navigation system provides an on-screen 'Help' facility - see 'Navigation help' later in this book.
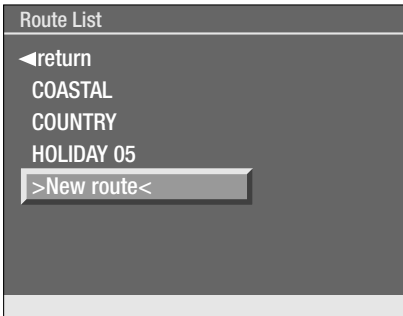
Off-road Navigation

CREATING A ROUTE
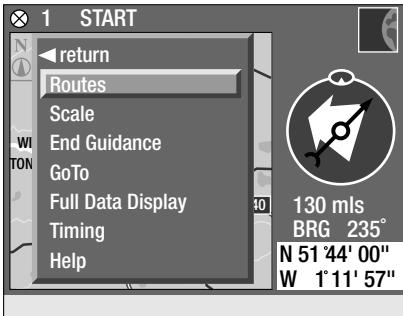
H3368

Turn the rotary select control to view the main guidance menu, then from the menu highlight and select 'Routes'. From the routes menu, highlight and select 'Route list'.

H3072

A list of routes previously entered into the system appears, along with an entry entitled 'New route' (if no routes have been entered into the computer, only the 'New route' and 'return' options are displayed).

NOTE: Arrows will appear in the display if more routes are stored in the navigation computer than can be displayed at one time. Use the rotary select control to scroll through the list to view all the stored routes.

Highlight and select 'New route' to view the 'Insert route' screen.

From the 'Insert route' screen, highlight and select 'ROUTE'. A typewriter menu will appear with the word ROUTE already entered, highlight and select 'delete', and keep the rotary select control depressed to delete the word 'ROUTE'.


H3073

Use the typewriter to enter a name for your route by using the rotary select control to highlight and select each letter in turn (a name can consist of up to 20 characters). When the name is complete, highlight and select 'enter'.

Off-road Navigation
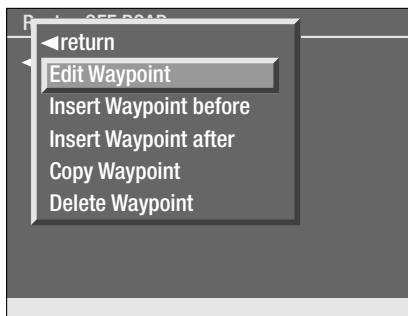
H3082

The 'Route List' screen is now displayed, with the name of the route at the top and an entry labelled 'Start'. Highlight and select 'Start' to display the waypoint edit menu, then highlight and select 'Edit Waypoint' to display the co-ordinates of the vehicle's current position.

EDIT WAYPOINT

	START		
North	51 °	44 '	00 "
West	001 °	11 '	57 "

OK   Return
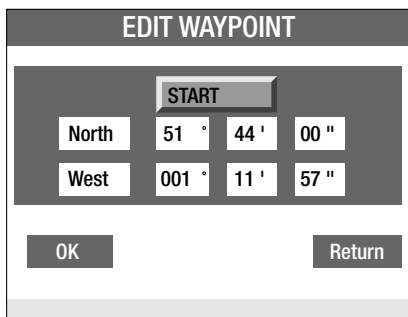
H3075

If the vehicle is already at the start of the route, these co-ordinates do not need to be changed. If a change of co-ordinates is required, highlight and select each co-ordinate element in turn, then rotate the rotary select control until the correct value is shown (see 'Co-ordinates' later in this section). Press the rotary select control to confirm the new value and move on to the next element.

When the correct co-ordinates are displayed, you can opt to name the start point. Highlight and select 'START'. A typewriter menu will appear with the word START already entered, highlight and select 'delete', and keep the rotary select control depressed to delete the word 'START'. Then, use the rotary control to highlight and select the correct letters from the typewriter menu to enter a name (of up to 10 characters). When the correct co-ordinates and start point name are displayed, highlight and select 'OK'.
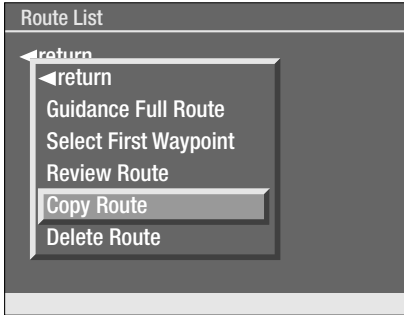
Entering a destination
Entering a destination point for a route is exactly the same procedure as adding a waypoint, for further information, see 'Waypoints'.

Copying a route
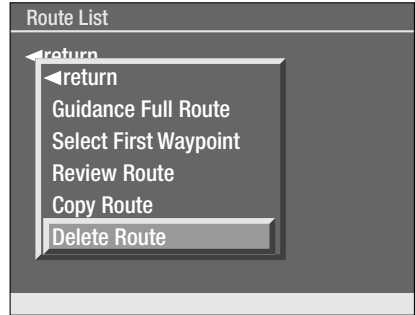From the route list, highlight and select the route to be copied, then highlight and select 'Copy Route'.

Route List
◄return
◄return
Guidance Full Route
Select First Waypoint
Review Route
Copy Route
Delete Route

H3076

Rename the route using the rotary select control to highlight and select the letters from the typewriter menu, then highlight and select 'enter'. The 'Review Route' screen is displayed - edit the required waypoints as described in 'Waypoints' later in this section, before storing in the route list.

Deleting a route
From the list of routes, highlight and select the route to be deleted, then highlight and select 'Delete Route'.

Route List
◄return
◄return
Guidance Full Route
Select First Waypoint
Review Route
Copy Route
Delete Route

H3077

The navigation computer will require confirmation - select 'Yes' to delete the route. The computer returns to the route list.

WAYPOINTS

An off-road route can consist of just a start point and destination, or it can be made up of a series of waypoints. A waypoint could be a landmark or a place of interest, or even just a place you want to stop to rest.

Adding a waypoint

If you are adding a waypoint to an existing route, highlight and select the chosen route from the list. Highlight and select 'Review Route' to display the route list, then follow the procedure below.
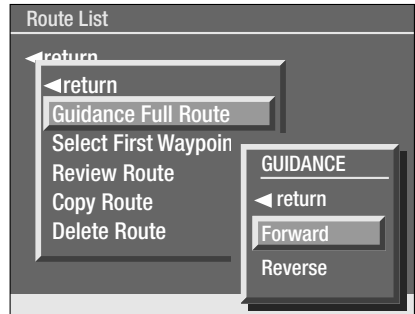

◄return
Edit Waypoint
Insert Waypoint before
Insert Waypoint after
Copy Waypoint
Delete Waypoint
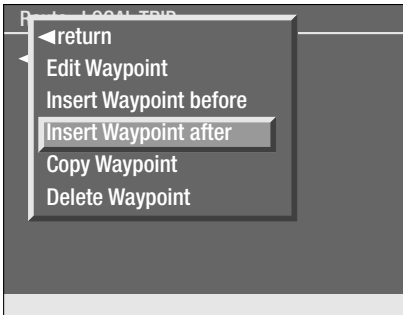
H3078

Having entered the route start point (see 'Creating a route'), highlight and select 'Start' (or the start point name) from the route list. Highlight and select 'Insert Waypoint after', then from the 'Insert' menu, highlight and select 'Manual Waypoint'.

EDIT WAYPOINT

WAYPOINT

| North | 51 ° | 44 ' | 00 " |
| West | 001 ° | 11 ' | 57 " |

OK   Return
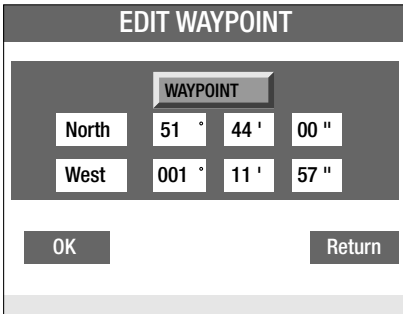
H3079

Insert the co-ordinates and name of the chosen waypoint, as described previously for the start point.

Repeat this procedure using 'Insert Waypoint after' or 'Insert Waypoint before', until all the desired waypoints are entered in the correct order, then highlight and select 'Guidance Full Route' from the route list menu.

Route List

◄return
◄return
Guidance Full Route
Select First Waypoin
Review Route
Copy Route
Delete Route

GUIDANCE
◄ return
Forward
Reverse

H3081

The navigation computer requests the desired route direction (a route can be followed in the opposite direction to which it was programmed), highlight and select the chosen direction. The navigation computer returns to the route guidance screen and audio instructions are given (see 'Route guidance').

NOTE: If the route is being followed in reverse, the arrow indicating the direction to the next waypoint on the route guidance screen is green rather than white.

Changing a waypoint
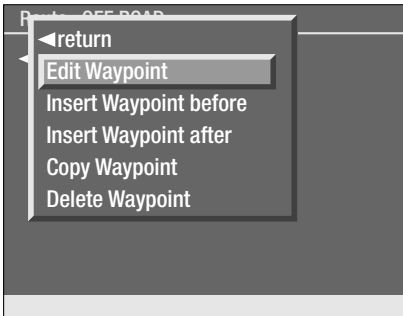
H3082

The name and co-ordinates of an existing waypoint can be changed. From the list of routes, highlight and select the chosen route, then highlight and select 'Review Route'. From the route list, highlight and select the waypoint to be changed, then highlight and select 'Edit Waypoint'. Re-enter the name or co-ordinate to be changed, as described previously.

Copying a waypoint
To use an existing waypoint in another route, and therefore avoid manually re-entering the name and co-ordinates, highlight and select the relevant waypoint from the waypoint list of the chosen route.
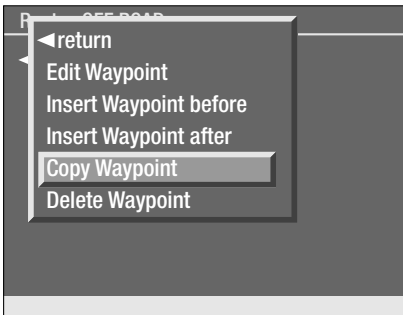
H3083

From the menu, highlight and select 'Copy Waypoint'; the waypoint is stored in the navigation computer's memory.

Access the new route list, highlight and select the waypoint that is immediately before the desired position, then highlight and select 'Insert Waypoint after'.
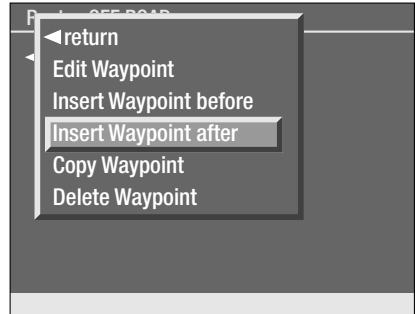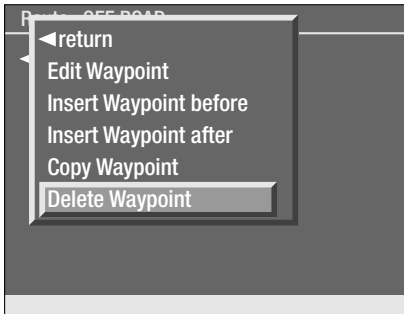

H3084

From the menu, highlight and select 'Paste Waypoint' - the 'Edit Waypoint' screen, with the copied name and co-ordinates is displayed (these can be modified, if required). Highlight and select 'OK' to enter the waypoint into the route list.
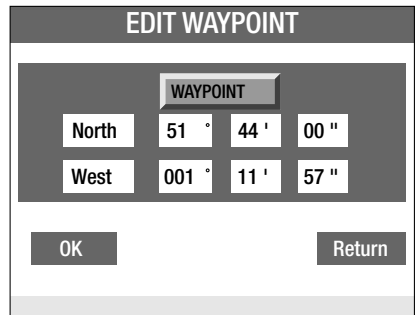

H3079

Deleting a waypoint

H3085

Highlight and select the relevant waypoint from the route list and from the menu, highlight and select 'Delete Waypoint'. The navigation computer will require confirmation, select 'Yes' to delete the waypoint. The selected waypoint will be deleted from the route list AND from the computer memory.

Waypoint radius

The waypoint radius defines the area that the vehicle has to enter to register that the waypoint has been reached (note that the radius also applies to the final destination).

The distance of the radius can be altered to suit the preferences of the driver. Press the 'Menu' control to view the main menu, then highlight and select 'Set'.
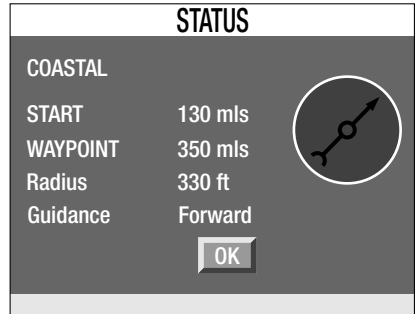
H3592

From the settings menu, highlight and select 'Wp. Radius', then highlight and select the preferred radius distance.

NOTE: The new waypoint radius distance will apply to all routes and waypoints until the setting is changed again. A different radius cannot be set for each waypoint or route destination.

To change other system settings, refer to 'Settings' earlier in this publication.

MODIFYING A ROUTE

If a route is being followed and an alteration or detour is required;

From the route guidance screen, turn the rotary select control to view the menu and highlight and select 'Routes'. From the routes menu, highlight and select 'Route List' - a list of routes previously entered into the system appears. The route you are currently following is marked with an asterisk, highlight the route, then press the rotary control to select.

Changing the direction of the route
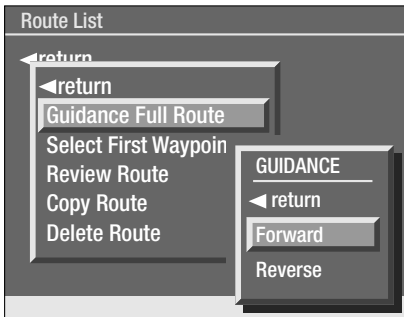
H3087

If you want to reverse the direction of the route you are following, highlight and select 'Guidance Full Route', then highlight and select 'Reverse'. The navigation computer returns to the route guidance screen while calculating the new route and new audio instructions are given.

NOTE: The destination arrow will appear green when following a route in reverse.

Backtracking
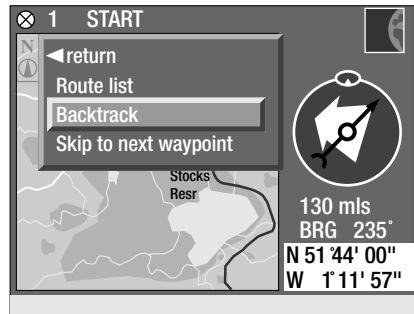
H3486

Highlight and select 'Backtrack route' - confirm this selection by selecting 'Yes'. The last achieved waypoint will now become your new destination. If no waypoints have been passed, your route start point becomes the new destination. The navigation computer returns to the route guidance screen while calculating the new route and new audio instructions are given.

NOTE: The destination arrow will appear green when backtracking a route.

Skipping waypoints
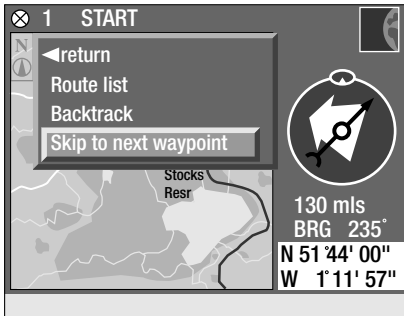
H3487

Highlight and select 'Skip to next Waypoint', then highlight and select the relevant waypoint. This waypoint becomes the next waypoint on the route (the stored route list will not be changed). When this waypoint has been achieved route guidance will be given for the rest of the route according to the original route list.

Changing waypoint co-ordinates

For information on changing waypoint co-ordinates or names, refer to 'Changing a waypoint', earlier in this section.

ROUTE GUIDANCE

Once a route and route direction have been programmed, the display will revert to the chosen route guidance screen and audible instructions will be given.

Route guidance can be displayed in two different forms - map display or data display. Data display can be viewed in 'Full' or 'Reduced' data guidance modes.

Map display
If the display is currently set to 'Full' or 'Reduced' data display, turn the rotary select control to bring up the menu, then highlight and select 'Map Display'.
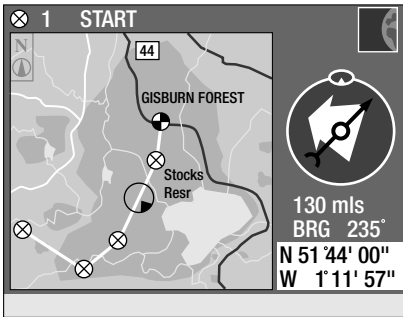
H3488

A map of the area surrounding the vehicle's current location is displayed with the route appearing as a white line. A small blue circle containing a triangle represents the position of the vehicle. The triangle indicates which direction the vehicle is pointing in relation to the map (see 'Current vehicle position'). The waypoints and final destination are also marked on the map, represented by small patterned circles (the colour of the circles depends on the status of the waypoint or destination - see 'Map icons' later in this section).

Above the map, the name and number of the next waypoint on the route are displayed.

The compass is shown to the side of the map, the red arrow indicates True North (see 'Compass'). The larger arrow represents the direction to the next waypoint (see 'Destination arrow').

Below the compass the distance (as the crow flies) and bearing to the next waypoint are shown, along with the current co-ordinates of the vehicle.

NOTE: The compass and direction to destination arrow and the readings for the current co-ordinates and bearing are updated every 2 seconds.

Map icons
The current vehicle position is depicted by a blue circle and triangle. The triangle indicates the direction that the vehicle is facing in relation to the displayed map.

The appearance of the icons representing waypoints that make up the route and the destination, change according to their status as follows:

Waypoints:

- A black cross on a red circle represents a waypoint that has been completed.

- A black cross on a white circle represents a waypoint that has not been completed.

Destination:

- Red check on white represents a destination that has been reached.

- Black check on white represents a destination that has not been reached.

Full Data Guidance Display

If the display is currently set to map display or reduced data guidance, turn the rotary select control to bring up the menu, then highlight and select 'Full Data Display'.
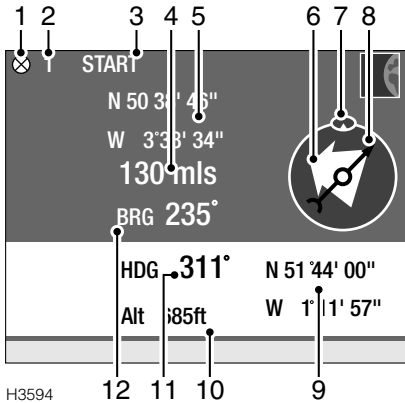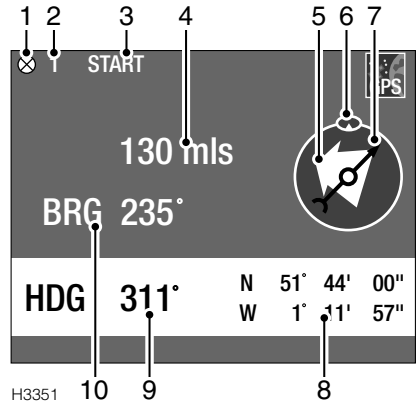

H3594

1. Waypoint icon
2. Waypoint reference number
3. Waypoint title
4. Distance to destination/waypoint
5. Destination/waypoint co-ordinates
6. Direction to destination/waypoint arrow
7. Heading up icon
8. Compass
9. Current co-ordinates
10. Altitude
11. Heading
12. Bearing

NOTE: The compass and direction to destination arrow and the readings for the current co-ordinates, heading, bearing and altitude are updated every 2 seconds.

Reduced Data Display

This display provides a simplified version of the information provided on the Full Data Display, and includes the following information.


H3351

1. Waypoint icon
2. Waypoint reference number
3. Waypoint title
4. Distance to destination/waypoint
5. Direction to destination/waypoint arrow
6. Heading up icon
7. Compass
8. Current co-ordinates
9. Heading
10. Bearing

The display uses a larger font and is therefore the information is easier to digest at a single glance. If more detailed guidance for your route is needed, use the full data guidance display.

NOTE: The compass and direction to destination arrow and the readings for the current co-ordinates, heading and bearing are updated every 2 seconds.

Compass Guidance Display

Compass Mode

HDG **311°**   N 51°44' 00"

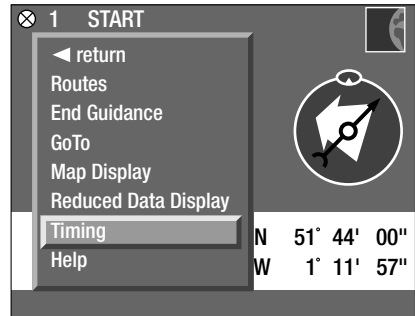Alt 685ft   W 1°11' 57"
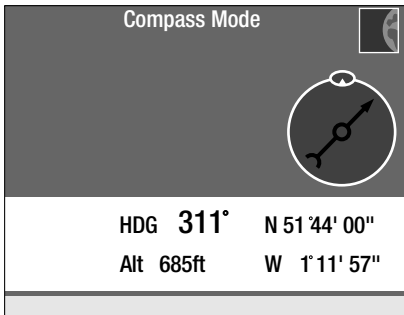
H3595

With the off-road navigation activated, but no route selected, the compass guidance screen will display the following information:

- Current co-ordinates
- Altitude
- Compass
- Heading

NOTE: The readings for the compass, current co-ordinates, heading and altitude are updated every 2 seconds.
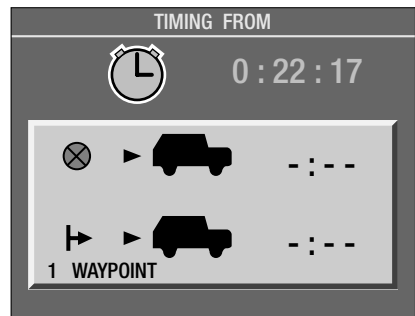
TIMING

The timing facility will keep track of the time it takes for you to travel from one waypoint to another and also to estimate the time remaining before you reach the next waypoint or destination.

1   START

◄ return
Routes
End Guidance
GoTo
Map Display
Reduced Data Display
Timing
Help

N   51° 44' 00"
W   1° 11' 57"

H3350

The timing facility can be accessed from any of the guidance screen menus. Highlight and select 'Timing' using the rotary select control.

Timing from

TIMING FROM

0 : 22 : 17

⊗ ► 🚙   - : - -
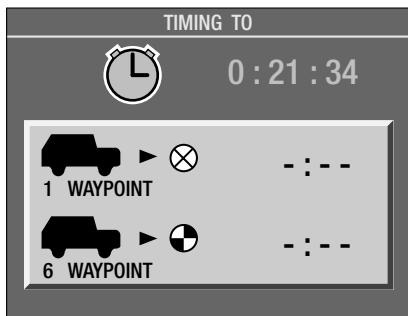
↦ ► 🚙   - : - -

1 WAYPOINT

H3354

The 'Timing from' facility enables you to keep a record of how much time has passed since:

- You left the last Waypoint.
- You left the start point of your journey.

Timing to

TIMING TO

0 : 21 : 34

1 WAYPOINT - : - -
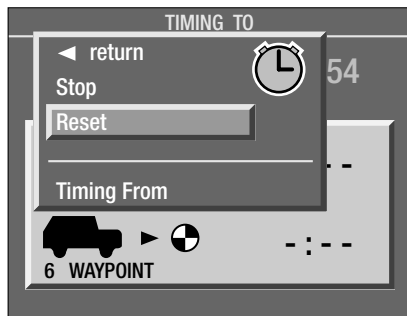
6 WAYPOINT - : - -

H3352

Select the 'Timing to' option to display the estimated time to the next Waypoint and the estimated time to your destination.

Stopwatch

Displayed at the top of the timing screen, a stopwatch function is available to time journeys/routes.

TIMING TO

◄ return
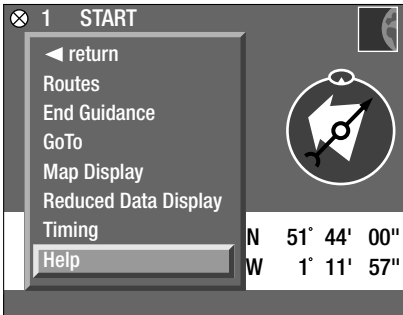
Stop

Reset

Timing From

6 WAYPOINT - : - -

H3353

To stop or start the stopwatch, turn the rotary select control to view the menu, then highlight and select 'Stop' or 'Start'.

To reset the stopwatch to zero, select 'Reset' from the menu.

NOTE: If reset is selected with the stopwatch still running, the stopwatch will reset to zero and then immediately start again. To reset the stopwatch and hold it to zero, 'Stop' must be selected before resetting the stopwatch.
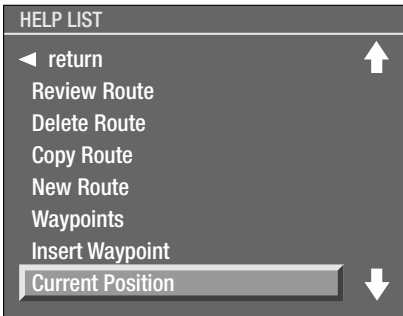
Off-road Navigation

NAVIGATION HELP

H3358

The help facility can be accessed from any of the guidance screen menus. Highlight and select 'Help' using the rotary select control, a list of help topics will be displayed.

H3355

Use the rotary select control to scroll through the list until you find the required topic. Highlight and select the topic to view a brief description of how it is used. If the description is longer than can be displayed on one screen, use the rotary select button to scroll down the text.

To change from one help topic to another, turn the rotary select control and select 'Help Index', then highlight and select the next topic.

To return to the route guidance display turn the rotary select control, then highlight and select 'return' from the menu.

NAVIGATION TERMINOLOGY

To check where the following appear on the display, refer to 'Route Guidance', earlier in this section.

Destination Arrow

The destination arrow is the larger of the two arrows in the compass part of the guidance displays. The arrow indicates the direction of the destination or next waypoint, relative to the current vehicle heading. When the arrow is pointing straight up (0°) towards the heading up icon, the vehicle is on a heading within ± 15° of the destination or next waypoint.

The arrow also indicates in which direction the route is being followed:

● If the arrow is white, the route is being followed forwards (i.e. in the order that the route was programmed).

● If the arrow is green, the route is either being followed in reverse, or it has been decided to back-track to a previous waypoint.

Co-ordinates (Latitude & Longitude)

Latitude denotes the vehicle position in degrees (°) - up to 90° North (North Pole) or 90° South (South Pole) - from the equator.

Longitude denotes the vehicle position in degrees (°) - up to 180° East or 180° West - from the Prime Meridian (0°). The Prime Meridian passes through Greenwich in England.

Each degree of Latitude or Longitude can be divided into 60 minutes (60') and each minute into 60 seconds (60'').

When entering a co-ordinate, use the following format:
    N (or S) DD° MM' SS''
    E (or W) DD° MM' SS''

(Where N, S, E and W represent the compass points, and D, M and S represent Degrees, Minutes and Seconds respectively.)

Compass

The red compass arrow always points to True North (to an accuracy of ± 15°). True North is the basis from which heading and bearing readings are calculated.

Heading

The heading is the direction in which the vehicle is pointing. The navigation computer and GPS satellite receiver work in conjunction, to calculate the difference in degrees (°) between the vehicle's direction and True North - this is the reading shown.

Heading Up Icon

This indicates the direction in which the direction arrow should be pointing to follow the shortest route (by distance) to the destination or next waypoint. The icon will remain at the top (0°) of the compass part of the guidance displays.

Bearing

The bearing is the direction (as the crow flies) to the destination or next waypoint. The bearing is calculated in degrees (°) from True North.

Altitude

The altitude reading is accurate to within 150 ft (50 m). If a valid reading is not available, the last known altitude will be shown.