LAND-ROVER **RANGE ROVER**

Audio & Navigation

RANGE ROVER

Audio & Navigation System

Introduction

For your convenience, this handbook is divided into sections, each dealing with a different aspect of the Audio and Navigation Systems and On-Board Computer. These are listed on the contents page and you will find it worthwhile to take a little time in reading each section relevant to your specification.

The specification of each vehicle and MAP CD will vary according to territorial requirements and also to personal specifications. Some of the information published in this handbook, therefore, may not apply to your particular vehicle.

*An asterisk appearing within the text identifies features or items of equipment that are fitted as options.

Contents

MENU

board computer

road navigation   Off Road Navigation

vent   Code

                Monitor off

/2001   Monday   2:10PM

7

8

H4623

On-Board Computer

H4631

CONTROL PANEL

1. **Cassette tape slot** (access behind display panel).
2. **Display**
3. **Open/close display panel**
   Press to open the display panel for access to the cassette tape slot (1).
   Press again to close the panel.
4. **Cassette track select or auxiliary ventilation control time button**
   Press the arrows to select cassette track
   Press clock icon to select auxiliary ventilation off.
5. **TONE/SELECT button**
   Press **TONE** to change bass/treble/fader/balance.
   Press **SELECT** to enter the radio search function or, in cassette mode, to change the Dolby function.
6. **Search button**
   In radio, cassette or CD modes.
7. **MENU button**
   Press to obtain the general menu and also to return to the menu from a system feature.
8. **Right rotary control**
   Turn to select a menu item, press to confirm selection.

9. **Auxiliary ventilation warning light**.
10. **Radio light**
    Indicates that the radio has been turned on.
11. **Left rotary control**
    Press to switch radio on or off.
    Turn to adjust volume.
12. **MODE button**
    Each time the mode button is pressed, the mode switches between radio, cassette and CD. The tape icon button switches the display between radio, tape or CD and the on-board computer system if it is active.
13. **FM/AM select button**
14. **Station/CD buttons**
    Press to select a pre-set radio station, or select a CD in the autochanger.
15. **INFO** button
    Activates RDS functions. A second press activates PTY functions.

On-Board Computer

ON-BOARD COMPUTER

The on-board computer must be selected from the general menu before you can carry out any of the on-board computer functions.

On-board computer functions

In addition to those functions shown, your on-board computer has the following functions:

- Speed limit notification.
- Range.
- Distance.
- Arrival time.
- Outside temperature.
- Fuel consumption.
- Stopwatch.
- Speed.
- Column stalk control.
- Code interlock.
- Auxiliary ventilation control.

WARNING

Perform all inputs while the vehicle is stationary. The vehicle and occupants could be placed in danger if the driver's concentration is not focused on the road conditions.

Speed limit notification

You can make a decision on what is your preferred top speed limit, depending on road conditions and legal requirements.

For example, you may decide that your maximum speed on a highway is 60 miles per hour and therefore want audible and visual signals when this speed is exceeded.

The following is a procedure describing how to achieve this example.
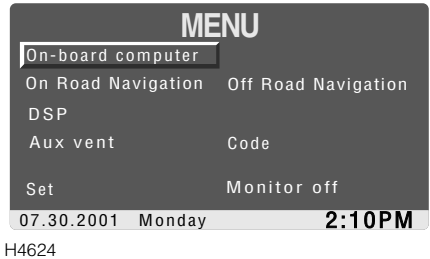
H4624

- Press the MENU button (7) to see the general menu screen.
- Turn the right rotary control (8) until 'On-board computer' is highlighted.
- Press the right rotary control (8) to select it.

To set the speed limit notification:

H4459
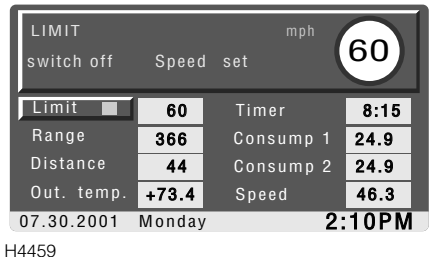
- Turn the right rotary control (8) until 'Limit' is highlighted.
- Press the right rotary control (8) to enable inputs to be made.

On-Board Computer

To enter the required speed limit:

- Turn the right rotary control (8) until 'Set' is highlighted.
- Press the right rotary control (8) to begin making inputs.
- Turn (8) until the desired speed is displayed.
- Press the right rotary control (8) to memorize this value.
  A green rectangle lights up next to the word 'Limit'.

To store the actual speed as your limit value.

- Select 'Limit'.
- Select 'Speed'.

When the limit is reached:

1. The warning signal is heard.
2. The rectangle next to the word 'Limit' turns red.
3. The selected speed limit is shown briefly on the instrument panel display.

The speed limit reminder is only repeated if the vehicle has in the meantime been driven at least 3 m.p.h. slower.

Range

RANGE

366 **mls**

Limit	■	60	Timer	8:15
Range		366	Consump 1	24.9
Distance		44	Consump 2	24.9
Out. temp.		+73.4	Speed	46.3

07.30.2001 Monday   2:10PM

H4460

Range is the distance which the vehicle should cover on the remaining fuel in the tank. It is displayed and calculated on the assumption that the average fuel consumption will be maintained.

Caution: Do not allow the range to fall below 6 miles. Running the fuel tank dry could create an engine misfire capable of damaging the catalytic converter.

NOTE: When refuelling, the on-board computer only registers amounts in excess of one gallon.

Distance

DISTANCE   ARRIVAL TIME

44 **mls**   3:26PM

Limit	■	60	Timer	8:15
Range		366	Consump 1	24.9
Distance		44	Consump 2	24.9
Out. temp.		+73.4	Speed	46.3

07.30.2001 Monday   2:10PM

H4461

If you entered a destination in the GPS navigation system before the start of your journey you can access a display showing the remaining distance to that destination .

The distance to the destination by the planned route is transferred automatically.

You can also enter a distance without first entering a destination.

Arrival time
An estimated time of arrival will be displayed, based on your average speed so far.

This pre-supposes that you have set the clock in the on-board computer to the correct time.

On-Board Computer

Outside temperature

```
OUTSIDE TEMPERATURE
                        +73.4    °F

Limit      ▪    60      Timer          8:15
Range          366      Consump 1      24.9
Distance        44      Consump 2      24.9
Out. temp.    +73.4     Speed          46.3
07.30.2001   Monday               2:10PM
```
H4462

You can view an outside (ambient) temperature display when you select the menu item 'Out. temp'.

NOTE: If the menu item Arrival is displayed, use the following procedure:

• Press the MENU button (7) to see the general menu screen.

• Turn the right rotary control (8) until 'On-board computer' is highlighted.

• Press the right rotary control (8) to select it.

• Select 'Out. temp'.

Fuel consumption

```
CONSUMPTION 1
                        24.9 mpg

Limit      ▪    60      Timer          8:15
Range          366      Consump 1      24.9
Distance        44      Consump 2      24.9
Out. temp.    +73.4     Speed          46.3
07.30.2001   Monday               2:10PM
```
H4463

You can display the average fuel consumption for two routes, e.g. for the entire journey and for a section of it. The average fuel consumption is calculated for the period since the engine was last started.

To start the fuel consumption calculation, the key must be in the ignition at position 'I' or 'II':

• Select 'Consump 1'.

• 'Recalculate? Yes'.

If, at some point during your journey, you wish to calculate fuel consumption for a particular part of that journey, select 'Consump 2'.

Select 'Recalculate? No' if you want the average fuel consumption for the entire journey to be retained.

Stopwatch (Timer)

```
TIMER        8:15 h      9:23  h
◄ return      Interim time        start

Limit      ▪    60      Timer          9:23
Range          366      Consump 1      24.9
Distance        44      Consump 2      24.9
Out. temp.    +73.4     Speed          46.3
07.30.2001   Monday               2:10PM
```
H4464

Starting and stopping:

• Select 'Timer'.

• Using the right rotary control (8), highlight 'Start'; the stopwatch will begin to run when the right rotary control (8) is pressed, and the computer switches over to the stopwatch function.

• To stop it, press the right rotary control (8) again.

Taking an interim time reading:

• Highlight 'Interim time' - the interim time appears on the display when the control is pressed.

The stopwatch will continue to run until it is stopped, even if you exit the menu via 'return' or call up any other function.

Speed

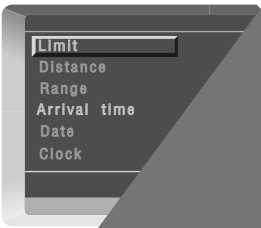| Limit ▪	**60**	Timer	8.10
Range	**366**	Consump 1	24.9
Distance	**44**	Consump 2	24.9
Out. temp.	**+73.4**	Speed	46.3
07.30.2001	Monday		**2:10PM**

H4458

You can access a display of the vehicle's average speed. The average speed is calculated for the period since the engine was last started.

To start the average speed calculation, select the following with the ignition key in position 'I' or 'II':
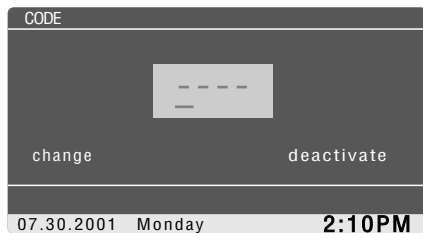
- 'Speed'.
- 'Recalculate? Yes'.

To recalculate the average speed as a continuation of the previous reading select, 'Recalculate? No'.

Limit
Distance
Range
Arrival time
Date
Clock

The on
calle
ce

On-Board Computer

Engine interlock code

```
CODE

            - - -

   change            deactivate

 07.30.2001  Monday         2:10PM
```
H4496

You can choose to enter a 4-digit code which will lock the ignition system. When the code has been activated, the engine will not start unless the code is deactivated.

NOTE: When the code is activated, the driver will need to enter the 4-digit code each time the engine is started. If the code is not available or has been forgotten, emergency deactivation is possible.

Activating the code
- Turn key to position '1'.
- Select 'Code' from the general menu.
- Turn the right rotary control (8) until the first digit of the desired number appears
- Press the control to confirm it.
- Enter the remaining three digits in the same manner.
- To activate the code, turn the ignition key to position '0'.

Correcting an input
- Select 'Change'.
- Repeat the input procedure from the beginning.

To cancel the inputting of the code, press the 'MENU' button (7). No code is set.

Deactivating the code
When you are required to enter the code (in ignition key position 'I'):
- Turn the right rotary control (8) until the first digit of the code appears.
- Press the right rotary control (8) to confirm it.
- Enter the remaining three digits in the same manner.
- Select 'Deactivate'.

To correct the input, select 'Change' and repeat the code input.

NOTE: After three incorrect code inputs or three attempts to start the engine without a code input, an alarm will sound for 30 seconds.

Interlock code - emergency deactivation
If your code is no longer available to you there is an emergency procedure that will delete the code and allow the engine to be started.

Follow the instructions in your Owners Handbook and disconnect the earth terminal of the vehicle battery.

After at least one minute, reconnect the battery. At this point the alarm will sound so be sure to have the remote handset available to turn it off.

The vehicle systems will reset. See your Owners Handbook regarding system resetting after battery disconnection.

Turn the starter switch to position 'II'. The on-board computer will display a 10 minute counter. When the 10 minute count is completed, the engine can be started and a new code activated, if required.

NOTE: The starter switch MUST remain in position 'II' throughout the 10 minute count.

On-Board Computer

Auxiliary ventilation control

The auxiliary ventilation control can attain a more comfortable temperature in the passenger compartment prior to entry through use of the Timer Preset feature, or, while inside the vehicle by use of Direct Mode. The auxiliary ventilation feature operates without running the vehicle's engine.

Initiation of this action is from the on-board computer, via Direct Mode or Timer Preset.

For your own safety, please comply with the instructions in the vehicle Owner's Handbook on the auxiliary ventilation control. The following instructions refer only to operation by way of the on-board computer.

Direct Mode

NOTE: If independent ventilation is preferred to air conditioning, the starter switch must be in position 'I'.

- Select 'Aux.ventilation' in the general menu.
- To switch on, select 'Aux. ventilation'. The green rectangle next to the function illuminates and the red auxiliary independent ventilation warning light flashes.

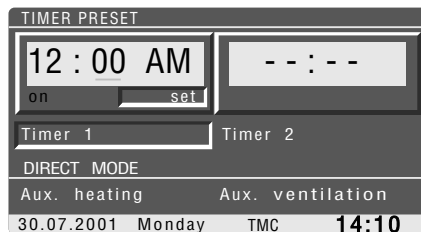The auxiliary ventilation control shuts down after 30 minutes.

To switch off before the 30 minutes timer, press the independent ventilation control time button (4), until the red fan symbol on the screen surround goes out.

Timer Preset

An electronic control unit checks for an ambient exterior temperature of 16°C before determining if ventilation is required.

If the temperature is above 16°C, the unit will activate the independent ventilation until the interior temperature matches the exterior ambient temperature.

The system will automatically shut down after 30 minutes.

```
TIMER PRESET
┌─────────────┐  ┌─────────────┐
│ 12 : 00 AM  │  │  - - : - -  │
│ on      set │  │             │
└─────────────┘  └─────────────┘
 Timer 1          Timer 2
 DIRECT  MODE
 Aux.  heating      Aux.  ventilation
 30.07.2001  Monday      TMC    14:10
```
H4120

You can program two timer settings for the auxiliary ventilation control.

- Make sure that the clock is in operation and the ignition key is in position 'I' or 'II', or with the engine running.
- Select 'Aux. ventilation'.
- Select 'Timer 1'.
- Select 'on'.
- Select 'set'.
- Enter the desired 'on' time.
- Select 'off'.
- Select 'set'.
- Enter the desired 'off' time. The green rectangle next to the timer selected and the red auxiliary ventilation warning light will illuminate.
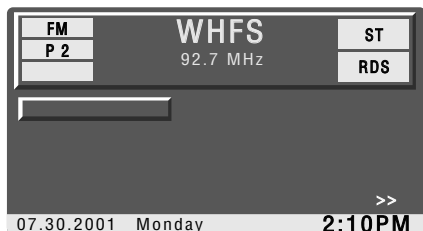
NOTE: The maximum length of ventilation is limited to 30 minutes.

- If a second timer setting is required, repeat the above process for 'Timer 2'.

NOTE: The ventilation can only be set to switch on within the next 24 hours. After this the time must be confirmed again.

Radio

RADIO CONTROLS


```
┌──────────────────────────────────────┐
│ ┌────┐    WHFS         ┌────┐         │
│ │ FM │                 │ ST │         │
│ ├────┤    92.7 MHz     ├────┤         │
│ │ P 2│                 │RDS │         │
│ └────┘                 └────┘         │
│ ┌──────────────────┐                  │
│ └──────────────────┘                  │
│                                       │
│                              >>       │
│ 07.30.2001  Monday          2:10PM    │
└──────────────────────────────────────┘
```

H4456

Press the left rotary control (11) to activate the radio and display information about current settings.

NOTE: If, when you switch on the radio, on-board computer functions appear, the 'Audio + OBC' function (OBC = on-board computer) is switched on. To switch off this function, see 'SYSTEM SETTINGS', on page 56.

Display information
WHFS
The name of the radio station currently selected.

Station frequency
92.7 MHz is shown in this example.

FM
Waveband (FM); for other wavebands see *'Waveband selection', on page 12*.

Station key
Below FM is the number of memory position if stored in memory.

ST
The current station is received in stereo quality.

RDS
Radio Data System is switched on; RDS allows the names of those stations broadcasting RDS data to appear automatically on the display.

Waveband selection
By pressing the FM or AM buttons (13) you can switch between the FM1, FM2 and FMA (AUTOSTORE) memory areas and the AM and AMA (AUTOSTORE) memory areas.

STATION SEARCH AND SELECTION

RDS - Radio Data System
To ensure the best possible reception, this radio has an RDS diversity function.

To turn RDS on or off:
- Press the INFO button (15).
- Turn the right rotary control (8) until 'RDS' is highlighted.
- Press to activate the RDS function. An '*' appears on the screen.
- To deactivate RDS, press again.

PTY (Program Type) request.
Some radio stations broadcast their program type (such as news, sports, jazz, etc.) via the RDS.

To turn PTY feature on:
- Press the INFO button (15).
- Press the right rotary control. The program type will be displayed for a few seconds.

If the specific station does not provide PTY recognition, 'NO PTY' will appear in the display.

Radio

Automatic display of PTY

With RDS already selected:

- Press the INFO button (15).
- Press the right rotary control and hold it down until 'PTY-AUTO' appears in the display.

The program type will be displayed automatically for a few seconds at every station change, or whenever the station changes its program type.

To switch PTY off:

- Press the INFO button (15).
- Press the right rotary control and hold it down until 'PTY-MAN' appears in the display.

PTY is also utilized for warnings during a catastrophic event. If the station broadcasts this program type, 'ALERT' appears in the display.

Manual station selection

Look for a specific station either by name or by frequency. Using the FM/AM button (13), select the desired waveband.

Press the SELECT button (5), then:

- Turn the right rotary control (8) until 'm Manual station choice' is highlighted.
- Press the left or right arrow button (6) until the desired station is selected.

Next station

Press the left or right arrow button (6) and the next station will be searched for.

Sampling and selecting

Press the SELECT button (5) to obtain the selection menu.

1. Automatic search (SCAN):

   Stations with a sufficiently strong signal are heard automatically for a short time, one after the other.

   - Turn the right rotary control (8) until 'SCAN Station sample' is highlighted.
   - Press to start the search.
   - Press the SELECT button (5) on the control panel to continue hearing the sampled station.

2. Manual search:

   II - Search for weaker stations.
   I - Search for more powerful stations. If none are found a second search run is made which includes the weaker stations.

   - Turn the right rotary control (8) until 'II Search sensitive' is highlighted.
   - Press to confirm your selection.
   - Turn until you hear the desired station.

If the inputs are not made within 8 seconds, the procedure will have to be repeated.

Radio

Memorizing and recalling stations

The system can memorize 18 memory positions for FM stations and 12 for AM stations.

Up to 6 stations can be stored in each of the memory areas FM1 and FM2. Using FMA (AUTOSTORE), the 6 strongest stations can be automatically stored into memory.

In the AM memory area, the system can store 6 stations of your choice.
Using AMA (AUTOSTORE), the 6 strongest can be automatically stored into memory.

First select the waveband.

- Select the station using Automatic or Manual search.
- Press and hold the desired memory key (14) until the station is heard again after a brief interruption.

If the key is already occupied by a stored station, the station you are attempting to store will briefly increase in volume.

If you release the key immediately, the memorizing process will be terminated and the previously memorized station will not be lost - otherwise its place will be taken by the new station.

Recalling a memorized station

First select the waveband, e.g. FM. Select the memorized station using one of the station buttons (14).

Tone control
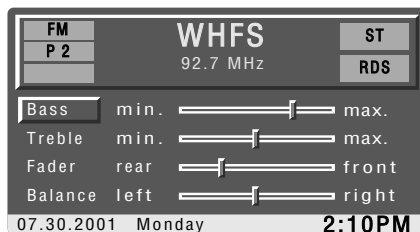
H4471

- Press the TONE button (5) on the control panel.
- Turn the right rotary control (8) until the desired tone setting is highlighted e.g. 'Balance' and then press the control knob.
- Turn the control to alter the setting.

Flat settings

To adjust all tone settings for the current audio source to flat values, hold the TONE button (5) in for longer than 2 seconds. This selects the flat value settings.
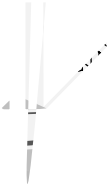
LOGIC 7 SO

The LOGIC 7 s
Digital Signal
software, dev
recording ind
surround sou

The system a
source CD, Ra
determines th
to each of the
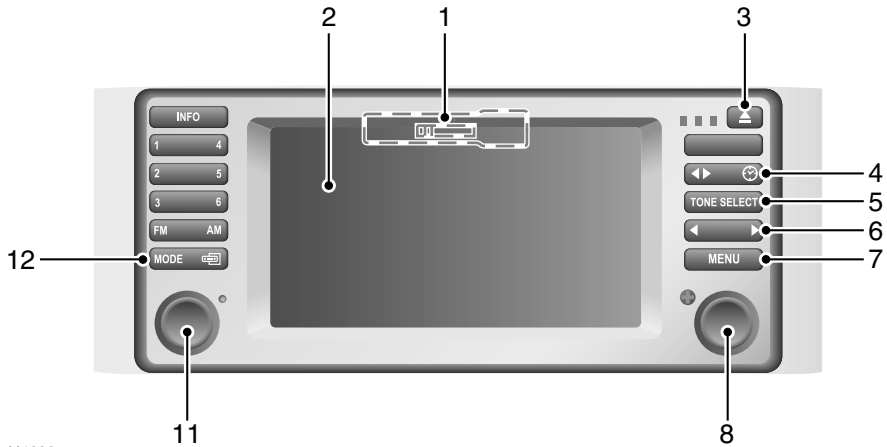thus recreatin
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tem is
d requires no set-up

moving fror

CASSETTE PLAYER CONTROLS

H4633

1. Cassette tape slot
Access behind display panel.

2. Display

3. Open/close display panel
Press to open the display panel for access to the cassette tape slot (1). Press again to close the panel.

4. Cassette track select
Press the arrows to select cassette track.

5. TONE/SELECT button
Press **TONE** to change bass/treble/fader/balance. Press **SELECT** to change the Dolby function.

6. Search button in Cassette mode

7. MENU button
Press to obtain the general menu and also to return to the menu from a system feature.

8. Right rotary control
Turn to select a menu item, press to confirm selection.

11. Left rotary control
Turn to increase or decrease the sound volume or press to turn the unit on or off.

12. MODE button
Each time the mode button is pressed, the mode switches between radio, cassette and CD. The tape icon button switches the display between radio, tape or CD and the on-board computer system if it is active.

Cassette Player

CASSETTE OPERATION

Inserting a cassette tape
- Switch on the unit by pressing the left rotary control (11).
- Press button (3), this lowers the control panel allowing access to the cassette tape slot (1).
- Push a cassette tape fully into the slot (1) with the tape openings to the right. The front panel will automatically raise.

NOTE: Do not use manual force to close the screen. It can only be closed by pressing button (3).

NOTE: The front panel has a trap protection feature. It automatically stops if it encounters an obstruction while moving back to its closed position.

If there is already a cassette tape in the slot (1), press the MODE button (12) until 'TAPE 1' or 'TAPE 2' is displayed.

Ejecting a cassette
Press button (3), the cassette will be ejected.

Stopping cassette play
Press the MODE button (12) to change to another operating mode.

Selecting a track
Press the track select button (4) to select tracks forwards or back to the previous tracks.

Fast forward/rewind
Press the search button (6) in the desired direction, twice, briefly.

The tape automatically switches to the tracks on the other side when the end of the side playing is reached.

To interrupt fast forward/rewind, press the search button (6) in the desired direction.

Track search
Only forward track search is described here but the same principle applies for locating the start of a track in reverse.

NOTE: The track search function can only operate if there are breaks of at least 4 seconds between tracks on the tape.

Press the search button (6) briefly to activate the track search.

The tape will be wound forward until the next piece of music is detected. At the end of the tape, it switches automatically to the other track.

Noise reduction**
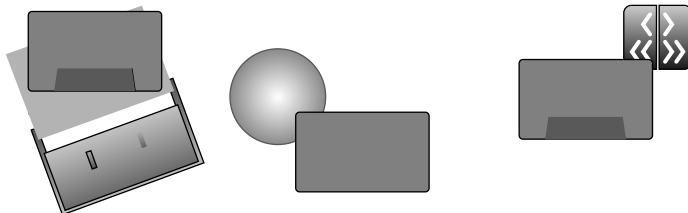Dolby B and C are noise reduction systems for cassette replay.

For the best reproduction of sound when playing pre-recorded tapes employing Dolby noise reduction, select either Dolby B or Dolby C.

Press the SELECT button (5) until the best audio reproduction is obtained. The system changes between Dolby B, Dolby C and Dolby off.

NOTE: Only switch on when playing cassettes recorded using Dolby, as reproduction will otherwise sound dull.

** Noise reduction manufactured under license. 'Dolby' and the 'DD' symbol are trade marks of Dolby Laboratories Licensing Corporation.

ICE 0054

CARE OF CASSETTE PLAYER AND TAPES

Use only good quality tapes with a maximum capacity of ninety minutes (C90). Check that both spools rotate freely and remove any loose turns at the start of the tape by winding one spool with a pen or pencil.

Cassette player

In use, the tape head accumulates dust and contamination, gradually impairing sound reproduction and, in extreme cases, reducing volume too. To combat contamination, the 'TAPE CLEAN' message appears on the display every 50 hours. Clean the tape head by passing a wet-type cleaning cassette through the player.

NOTE: Because your cassette player is fitted with auto reverse, the cleaning cassette must be played in both directions.

The tape will require more frequent cleaning in winter, as contamination is greater in conditions of low temperature and increased humidity. However, the use of good quality tapes keeps the build-up to a minimum.

Cassette tapes

- Always store cassettes in their boxes when not in use.

- Never leave cassettes in the vehicle during extremes of temperature. In particular, do not leave tapes in direct sunlight as they may warp and become unusable, or jam the tape play mechanism.

- Fast forward or rewind tapes every 8 to 10 plays to prevent them from becoming too tightly wound.

- Ensure that labels attached to the cassette are firmly glued in place.

- DO NOT leave tapes in the cassette player for more than a few hours in very cold or humid conditions - the oxides on the tape surface may contaminate the cassette player mechanism.

NOTE: After continuous playing, cassettes may become too hot to touch. This is normal and will not harm good quality tape.

Compact Disc Player

COMPACT DISC PLAYER
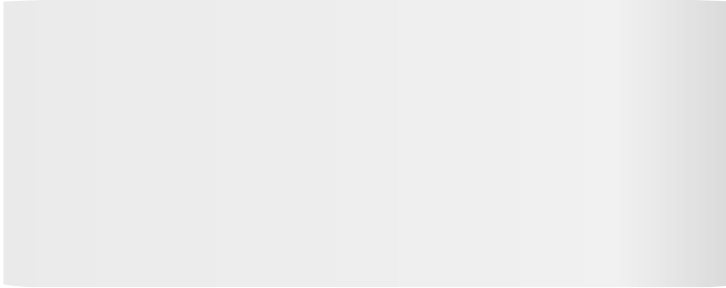
2. Display

6. Track Search button in CD mode
Press to obtain the desired track.

7. MENU button
Press to obtain the general menu and also to
return to the menu from a system feature.

8. Right rotary control
Turn to select a menu item, press to confirm
selection.

11. Left rotary control
Turn to increase or decrease the sound volume
or press to turn the unit on or off.

12. MODE button
Each time the mode button is pressed, the mode
switches between radio, cassette and CD. The
tape icon button switches the display between
radio, tape or CD and the on-board computer
system if it is active.

14. CD buttons
Press to select a CD in the autochanger.

Compact Disc Player

SEARCH VIA THE CONTROL PANEL BUTTONS

Press the left rotary control (11) to activate the unit.

Press the 'MODE' button (12) as often as necessary, until 'CD' is displayed.

Press the right rotary control (8) to select. The first CD from the magazine is played.

To stop the CD playing press the 'MODE' button (12).

Track search

Press button (6) until the desired track is obtained.

Fast forward/reverse

Keep button (6) pressed in. The tracks can be heard, but the quality is distorted. Release to continue play.

SEARCH VIA THE MENU

The general overview is faded out if no further key is pressed for approximately 8 seconds.

Track search

Press the 'SELECT' button (5) as often as necessary or turn the right rotary control (8) until '< > Music search' is highlighted.

Press the right rotary control (8) to confirm selection.

Fast forward/reverse

Press the 'SELECT' button (5) as often as necessary or turn the right rotary control (8) until '<< >> Fast forward/reverse' is highlighted.

Press the button (6) in the desired direction and hold in. The tracks can be heard but the quality is distorted. Release to continue play.

Sampling and selecting.

Press the 'SELECT' button (5) as often as necessary or turn the right rotary control (8) until 'SCAN Track sample' is highlighted.

To start/stop the search, press the right rotary control (8).

Random play

The tracks on all CDs can be played in an entirely random order.

Press the 'SELECT' button (5) or turn the right rotary control (8) until 'RANDOM Random generator' is highlighted.
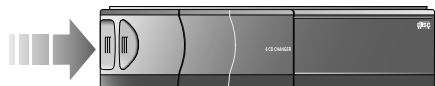
Press the right rotary control (8) to start random play.

To stop random play, select a different function or a different CD.
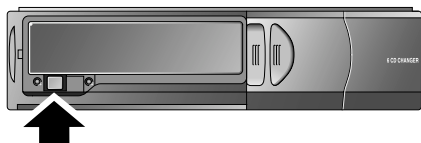
CD AUTOCHANGER
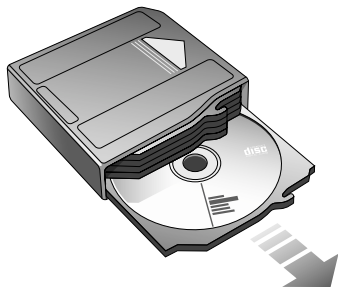## Removing/inserting the magazine

H4129

Fully open the sliding cover to insert or remove the magazine. Keep the cover closed at all other times to prevent dust and dirt from entering the changer.

H4128

Press the button to eject the magazine.

Loading and unloading the magazine

H4130

To unload the magazine, hold the magazine with the arrow uppermost, pull out each tray in turn, holding the tray securely so as not to drop the disc. Unload one disc at a time and handle only the edge and center of the disc.

Place a disc (label side uppermost) onto each tray - holding ONLY the outside edge and center hole of the disc. Load only one disc in each tray.
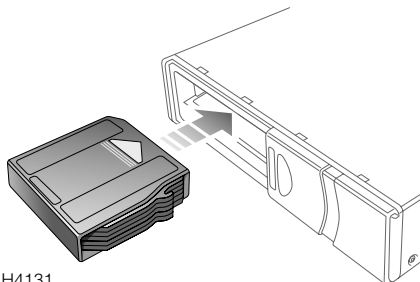
H4131

Correctly align the tray with the parallel slots on each side of the magazine and slide the tray fully into the magazine. Finally, close the sliding cover.

Important:

- Use standard 12 cm CDs only.

- DO NOT use irregularly shaped or damaged CDs - these may damage the compact disc changer unit.

- 8 cm CD singles must NOT be used, even if a CD adaptor is fitted.

- Closed session CD-R discs can be played, but CD-RW discs will not operate with the CD autochanger.

- The CD autochanger should not be used in temperatures outside the range -10 deg. C to +60 deg.C.
  NOTE: If the CD autochanger reaches temperatures higher than recommended for normal use, 'HIGH TEMP' appears in the display. If this occurs, stop using the CD player, eject the magazine and allow the autochanger to cool down. If the problem persists, consult your Retailer.

- The CD autochanger should only be used as described - any other application or method of use could result in the user being exposed to invisible laser radiation exceeding the limit of laser Class 1.

NOTE: Additional magazines can be obtained from a Landrover Retailer.

CD Autochanger

CD autochanger maintenance

In use, the laser lens of the CD autochanger may accumulate dirt and dust. This will gradually impair sound reproduction and, in extreme cases, may cause slipping and mistracking. To combat this, periodically use a CD lens cleaning disc.

X

ICE 0022

Dirt, dust, cond
discs. Always

NEVER touch
unlabelled s
holding the
hole and
thumb.

ALWAY   se   restorer polish to remove the scratches and
(dirt d   improve the performance of the disc. When
                                                                       using CD restorer polish. always follow the
NEV   ed to   manufacturer's instructions.
exc

*   acturers are using data encryption to 'copy-protect' their recordings and*
*   ate copies. These CDs differ from the internationally agreed CD audio*
*   dard that serves as the operating basis for all CD players and changers.*

*   ay not play in your Audio unit or CD changer or may be played subject to various*
*   d quality may be impaired.*

*   ce a problem, try the CD in other players before contacting the CD vendor.*

Satellite Navigation
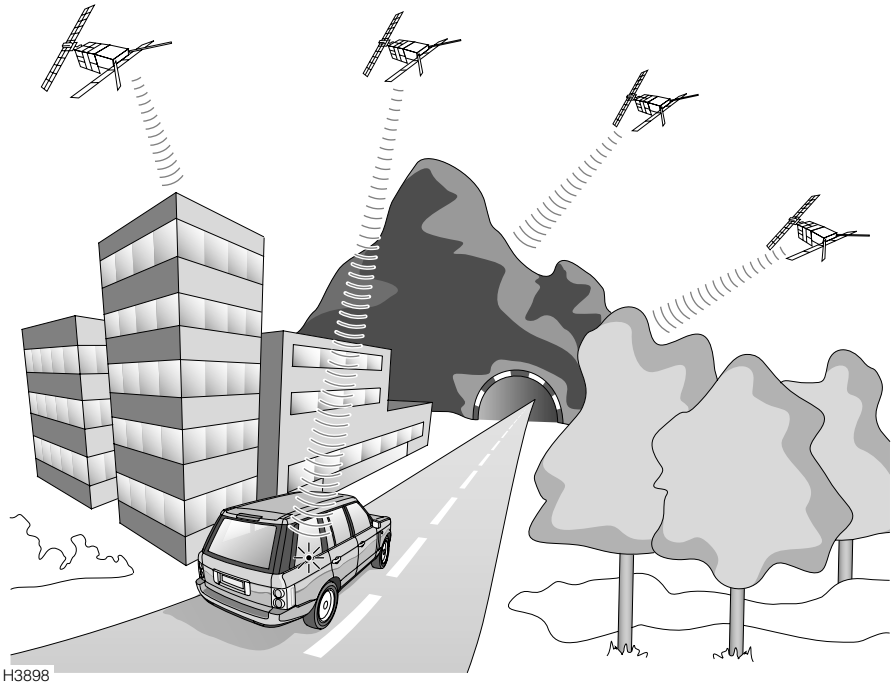
H3898

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 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, 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.

Safety instructions
Observation of traffic signs and local traffic regulations always takes priority.

Satellite Navigation

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.

Danger of accident

- *through operation of the navigation unit when driving.*
  - use of the navigation unit is advised only if traffic conditions are suitable and you are absolutely sure that no risk, obstruction or inconvenience will be incurred to you, your passengers or other road users.
  It is possible that inaccurate or incorrect instructions are given due to altered traffic routes, e.g. due to road works or deviating data. The actual road signs and traffic regulations must therefore always be observed.
- *through misuse of the unit*
  - the navigation system serves solely as an aid to navigation. In particular, the navigation system cannot be used as an aid to orientation when visibility is poor. The volume of the car radio/navigation system must be adjusted so that external noise is still audible.
  - switch off the unit immediately if a fault occurs.

Traffic guidance is restricted to passenger vehicles. Special driving recommendations and regulations for other vehicles (e.g. commercial vehicles) are not taken into account.

The destination must only be entered when the vehicle is stationary.

Digitised area

The navigation system can provide information and guidance only for the area covered by the navigation CD - ensure that you are using the latest version of the correct CD.

NOTE: Navigation CDs are updated approximately every 12 months. Your Navigation CD contains operating software. Later CD versions may update the operating software.

The navigation CD provided contains a digitised street map. Highways, national and regional roads, as well as district roads, are detailed in this street map. Larger cities and boroughs are completely covered. The regional and unclassified roads or access roads and the town center for smaller towns and boroughs are included.

One way streets, pedestrian zones, turn bans and other traffic regulations are taken into account as far as possible. There may be discrepancies between the data on the navigation CD and the actual local situation, due to permanent changes to road systems and their traffic regulations.

Under normal operating conditions, the navigation system requires approximately eight seconds to confirm the vehicle's position using the satellites. If the vehicle power supply has been interrupted, or if the vehicle has been transported to a new location on another vehicle (e.g. by trailer or train), the navigation system will require approximately one minute to identify the new position.

Satellite Navigation

Navigation CDs

Your navigation unit is supplied with one navigation CD of your choice.

There is a total of 8 CDs that cover the whole road network of the USA. Each CD contains the major routes throughout the country plus detail mapping of one zone. You should already have been given details of how to order further CDs by your Land Rover Retailer.

CHANGING THE MAP CD

Map CDs contain road maps covering one or more countries or regions. These maps are revised at regular intervals. Your Retailer can provide this information.

The navigation computer holding the map CD is located in the rear left side of the luggage compartment or load area.

If your navigation system indicates that you are about to leave the area covered by the map CD currently inserted, you should change the map CD in the navigation system.
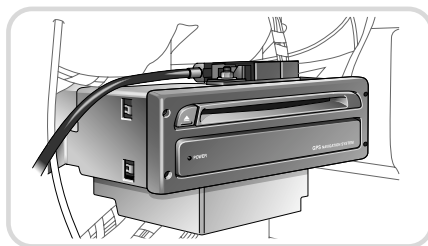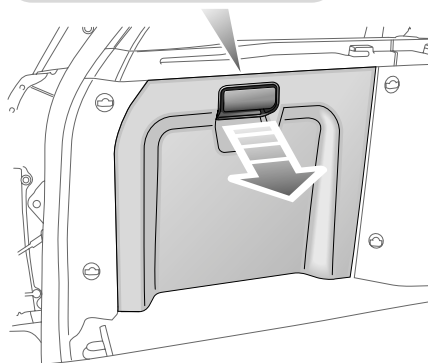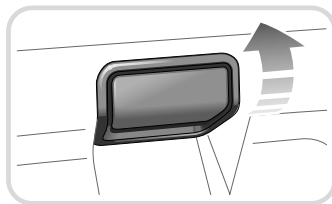
H4161

To change the map CD:

- Pull the release handle to open the cover and gain access to the navigation CD unit.
- Press the eject button to remove the current CD and insert the new one.
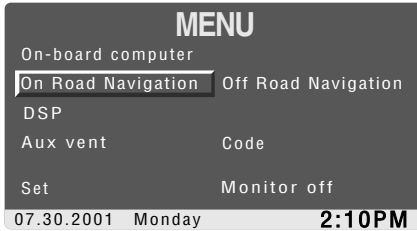- Wait for eight seconds for the new CD to start.

Satellite Navigation

NAVIGATION CONTROLS

H4635

2. Display

7. MENU button
Press to obtain the general menu and also to return to the menu from a system feature.

8. Right rotary control
Turn to select a menu item, press to confirm selection.

GETTING STARTED

Selecting on-road navigation

H4626

If the menu is not displayed, press the MENU button (7). Turn the right rotary control (8), until "On-Road Navigation" is highlighted then press to start the navigation system.

Select 'Dest. input'.

Enter destination country
If the name of more than one country appears on the display in white letters, data for more than one country is stored on the map CD.

To select the destination country, if not already selected:

- Turn the right rotary control (8), until the country currently displayed is highlighted.
- Press the control (8) to call up a list of all available countries.
- Turn the control until the desired country is highlighted.
- Press the control again, to confirm your selection as the destination input.

Note: We will use United Kingdom as the example destination country.

Entering a destination place

H4474

If a destination shown is not required, turn the right rotary control (8) to select 'Delete destination' and press the control to delete it.

NOTE: We will use 81 Austin Place, Abingdon as the example destination address.

To select Abingdon as the destination town:

H4498

- Turn the right rotary control (8) to select 'City'.
- Press the control (8) to confirm selection.
- Turn the control until letter 'A' is highlighted.
- Press the control again to confirm your selection.
- Use this procedure to select the remaining letters of the destination ABINGDON until the name of the city is recognised beyond all doubt and displayed in full.

On-Road Navigation

NOTE: *Only those letters shown in white can be selected.*

- Turn the right rotary control (8) and select "enter" to store the destination city, then press the control again.

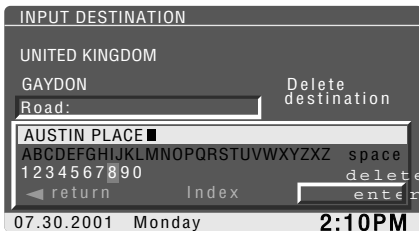## Entering a street and house number

NOTE: *We will use 81 Austin Place, Abingdon as the example destination address.*

```
INPUT DESTINATION

UNITED KINGDON

ABINGDON                    Delete
Road:                       destination

AUSTI■
ABCDEFGHIJKLMNOPQRSTUVWXYZXZ  space
1234567890                    delete
   return        Index        enter

07.30.2001  Monday          2:10PM
```
H4478

- Turn the right rotary control (8) to select 'Road'.

- Press the control (8) to confirm selection.

- Turn the control until 'A' is highlighted.

- Press the control again to confirm your selection.

In the same manner, select the remaining letters of 'AUSTIN PLACE' until the road is identified in full.

```
INPUT DESTINATION

UNITED KINGDOM

GAYDON                      Delete
Road:                       destination

AUSTIN PLACE■
ABCDEFGHIJKLMNOPQRSTUVWXYZXZ  space
1234567890                    delete
◄ return        Index         enter

07.30.2001  Monday          2:10PM
```
H4475

After entering the road you can enter a house number.

- Turn the control until '8' is highlighted.

- Press the control again to confirm your selection.

In the same manner, select all the remaining numerals making up the building or house number (in this case only the numeral '1').

- Turn the control until 'enter' is highlighted.

- Press the control again to complete the entry.

If the house or building number is not stored on the navigation CD, the nearest building number will be entered. No opportunity to enter numbers will be offered if no house numbers for the street are stored on the map CD. Destination guidance can be started straight away.

If you do not enter a street name, you will be guided to the boundary of the town, where navigation will end.

You can correct the last input by selecting "delete" and pressing the right rotary control (8). To cancel the whole entry, keep the control pressed for longer.

NAVIGATING TO YOUR DESTINATION

```
INPUT DESTINATION

UNITED KINGDOM

GAYDON                      Delete
Road:                       destination
Junction

On main roads
Information            Dest. Guide
07.30.2001  Monday          2:10PM
```
H4476

Starting destination guidance

When you have entered the complete destination address, the town/city, road and house number are displayed and "Dest. Guide" is highlighted.

Press the right rotary control (8) to start destination guidance.

On-Road Navigation

While the navigation computer is calculating a route to your destination, the distance and compass needle direction to the destination are displayed in the top right corner.
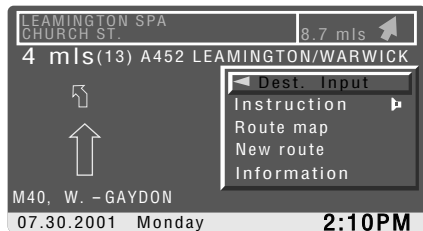
H4488

Once the route has been calculated, the name of the next road to be turned into and the distance to this junction is shown at the top of the display, below the destination address.

The direction to turn at the junction is shown by an arrow in the left of the display.

A change of direction is also indicated by spoken instruction.

Your current position is shown at the bottom left of the display.

NOTE: In areas which are not yet fully covered by the map CD, an arrow indicates the direction to be taken. This should help you decide which way to go when you reach a fork in the road or a junction.

To have the last direction instruction repeated:

Press, then turn the right rotary control (8), until 'Instruction' is highlighted. Press the control again.

A spoken instruction will be given and a visual display will appear before the next turning, informing you of any change of direction required.

NOTE: You will also be guided to your chosen destination if the 'MENU' button has been used to select a different function, e.g. radio, CD or on-board computer.

Returning to your starting point
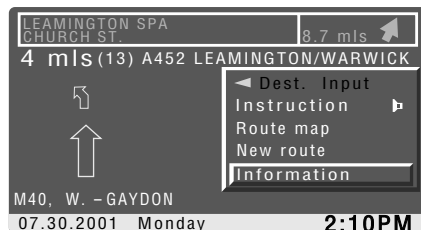
H4499

- Turn the right rotary control (8) to select 'Information'.
- Press the control (8) to confirm selection.
- Turn the control again to select 'Destination memory'.
- Press the control again to confirm your selection.
- Turn the control to select 'Return to starting point' and press to confirm. The address of the starting point is transferred to the destination guidance system.
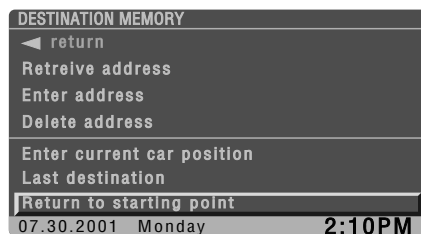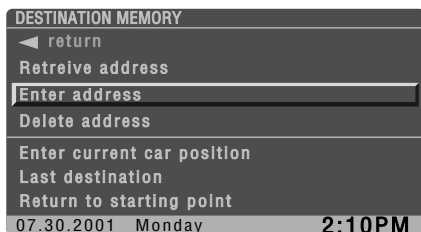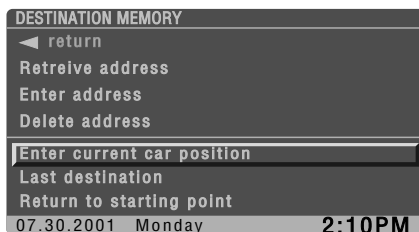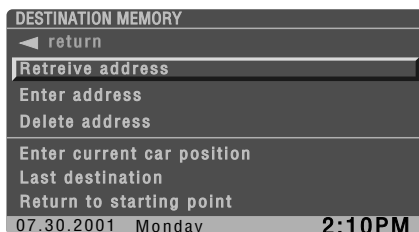

H4503

On-Road Navigation

STORING, RETRIEVING AND DELETING ADDRESSES

To make destination inputs quicker to perform, frequently used destinations can be stored in the 'Destination memory' and retrieved from there when you need navigation guidance to them.

Storing addresses

You can store over 50 addresses and transfer them directly from the address book as navigation destinations.

- Turn the right rotary control (8) to select 'Information'.
- Press the control (8) to confirm selection.
- Turn the control again to select 'Destination memory'.
- Press the control again to confirm your selection.
- Turn the control to select 'Enter address'.

```
DESTINATION MEMORY
◄ return
Retreive address
Enter address
Delete address

Enter current car position
Last destination
Return to starting point
07.30.2001  Monday              2:10PM
```
H4500

- Press the control to confirm selection.
- Use the right rotary control to enter the data by overwriting the last entry information.
- When the full address has been entered, use "enter" to store it in the address book.

Storing current location

You can transfer the vehicle's current position to the memory and add a name provided that the vehicle is within an area stored on the map CD.

- Turn the right rotary control (8) to select 'Destination memory'
- Press the control (8) to confirm selection.
- Turn the control again to select 'Enter current car position'

```
DESTINATION MEMORY
◄ return
Retreive address
Enter address
Delete address

Enter current car position
Last destination
Return to starting point
07.30.2001  Monday              2:10PM
```
H4501

- Press the control again to confirm your selection.
- Turn the control to add a name if required.
- Press the control to confirm selection.
- Select 'enter' to store it in the address book.

Retrieving addresses

```
DESTINATION MEMORY
◄ return
Retreive address
Enter address
Delete address

Enter current car position
Last destination
Return to starting point
07.30.2001  Monday              2:10PM
```
H4477

- Turn the right rotary control (8) to select 'Information'.
- Press the control (8) to confirm selection.

- Turn the control again to select 'Destination memory'.
- Press the control again to confirm your selection.
- Turn the control to select 'Retrieve address'.
- Press the control to confirm selection.
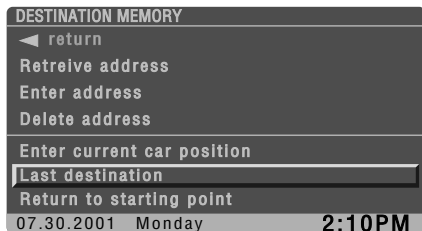- Select the desired address - it will then be transferred to the destination guidance system.
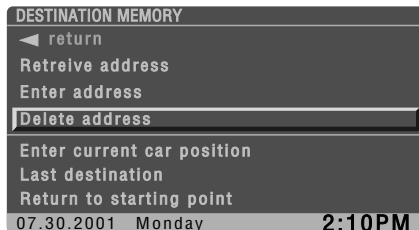
Returning to a recently chosen destination
The last ten destinations entered are memorized.

- Turn the right rotary control (8) to select 'Information'.
- Press the control (8) to confirm selection.
- Turn the control again to select 'Destination memory'.
- Press the control again to confirm your selection.
- Turn the control to select 'Last destination'.

```
DESTINATION MEMORY
◄ return
Retreive address
Enter address
Delete address
Enter current car position
Last destination
Return to starting point
07.30.2001   Monday              2:10PM
```
H4502

- Press the control to confirm selection.
- Select 'Retrieve address', select the desired address and press the right rotary control to transfer it to the destination guidance system.

Deleting addresses

- Turn the right rotary control (8) to select 'Destination memory'
- Press the control (8) to confirm selection.

- Turn the control again to select 'Delete address'.

```
DESTINATION MEMORY
◄ return
Retreive address
Enter address
Delete address
Enter current car position
Last destination
Return to starting point
07.30.2001   Monday              2:10PM
```
H4504

- Press the control again to confirm your selection.
- Turn the control to select the desired address.
- Press the control to delete the address.

You can delete all addresses by selecting 'Delete address' and pressing the right rotary control (8) for at least one second.

To delete the ten stored destination addresses:

- Turn the right rotary control (8) to select 'Information'.
- Press the control (8) to confirm selection.
- Turn the control again to select 'Destination memory'.
- Press the control again to confirm your selection.
- Turn the control to select 'Last destinations'.
- Press the control to confirm selection.
- Turn the control again to select 'Delete address'.
- Press the control again to confirm your selection.
- Turn the control to select the desired address.
- Press the control to delete the address.

You can delete all addresses in the 'Last destinations' memory by selecting 'Delete address' and pressing the right rotary control (8) for at least one second.

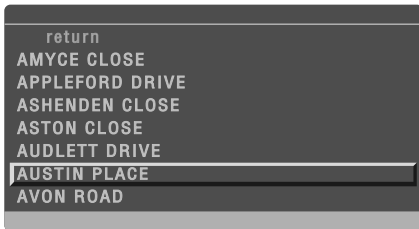## If you do not know the exact place name or street name

Turn the right rotary control (8) to select 'Index' from the display before making an entry.

NOTE: You can select from names displayed in the index by first entering one or more letters of that name and then selecting the 'Index' function by pressing the right rotary control (8).

The index will display all the places on the map of a particular country and all the streets in a specified place.

If place names are identical, 'Index' will be marked automatically.

```
          return
AMYCE CLOSE
APPLEFORD DRIVE
ASHENDEN CLOSE
ASTON CLOSE
AUDLETT DRIVE
AUSTIN PLACE
AVON ROAD
```

- Turn the right rotary control (8) to select 'Index'.
- Press the control (8) to display the index.
- Turn the control again until the desired place name is marked and press to confirm selection. The place name will then be transferred to the destination guidance system.

If you do not know the address or location of your destination

For instance, you may be looking for a hotel, restaurant, gas station, tourist attraction or a hospital. Enter the desired town, using the method described in 'Entering a destination place'.

- Turn the right rotary control (8) to select 'Information'.
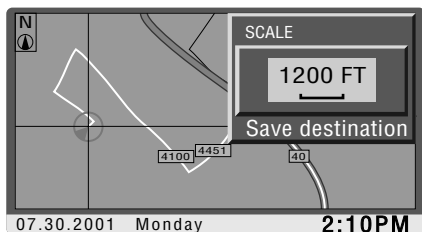- Press the control (8) to confirm selection.

- Turn the right rotary control (8) to select 'Info on destination', various types of destination are listed.
- Press the control (8) to confirm selection.

- Turn the right rotary control (8) to select the desired type of destination e.g. 'Hotel'.
- Press the control (8) to confirm selection.

The following sub-menus may be available:*****

- Turn the right rotary control (8) to select 'Index'.
- Press the control (8) to display the index.
- Turn the control again to choose one of the hotels from the alphabetical list and press to confirm selection. If you know the name of the hotel you want, you can restrict the number of names displayed by first entering one or more letters of that name before selecting 'Index'.

Information on hotels can be displayed either as text or using any one of the following symbols:

Parking

Restaurant facilities

Swimming pool

Credit cards accepted

Disabled facilities

Children's facilities

Conference facilities

No-smoking areas and/or rooms

- Turn the right rotary control (8) to select the address.
- Press the control (8) to transfer this information to the guidance system.

If you know the name of the town and the exact position of the street but not its name

```
INPUT DESTINATION

UNITED KINGDOM
ABINGDON                    Delete
Road:                       destination
Junction

On main roads

Information                 Dest. Guide
07.30.2001   Monday            2:10PM
```
H4482

The system offers you maps on which you can identify your destination with cross-hairs, then transfer this information to the guidance system.

- Enter the place name, using the method described in 'Entering a destination place'.
- Turn the right rotary control (8) to select 'Information'.
- Press the control (8) to confirm selection.
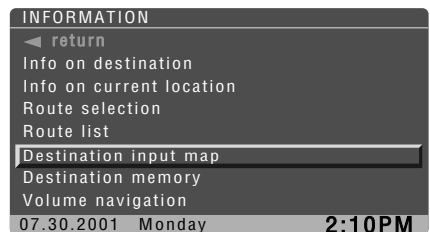
```
INFORMATION
◄ return
Info on destination
Info on current location
Route selection
Route list
Destination input map
Destination memory
Volume navigation
07.30.2001   Monday            2:10PM
```
H4508

- Turn the control again to select 'Destination input map'.
- Press the control again to confirm your selection.

If necessary change the scale.

On-Road Navigation

H4483

1. Turn the right rotary control (8) and select 'Scale'.
2. Press the control (8) to confirm selection.
3. Turn the control until the desired scale is seen.
4. Press the control to select this scale.

The visible section of the map changes after a few seconds.
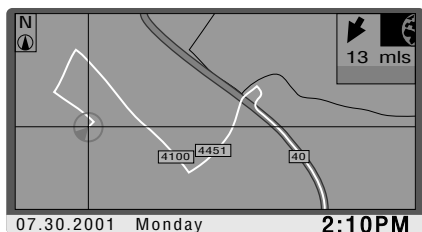
H4484

• Localise the destination with the cross-hairs:

NOTE: The map scrolls across the display (2) when the cross-hairs reach the edge.

1. Turn the right rotary control (8) to select 'Cursor'.
2. Press the control (8) to confirm selection.
3. Turn the control to choose the horizontal point of intersection.
4. Press the control to retain the selection.
5. Turn the control to choose the vertical point of intersection.

6. Press the control to retain this selection.

To transfer to the destination guidance system:

1. Turn the right rotary control (8) until 'Save destination' is highlighted.
2. Press the control to transfer the destination.

If the scale is greater than 1 mile, the function 'Save destination' cannot be selected.

NOTE: You can also use the 'Destination Input map' function without specifying a place name. This allows you to select a destination with the cursor and then transfer this information to the guidance system.

Information on current location

The map CD currently inserted also contains various places of interest in the state and region in which you are travelling relative to your current location. These are summarised by category.

You can select a destination from one of the lists and transfer it to the destination guidance system.

H4482

• Turn the right rotary control (8) to select 'Information'.
• Press the control to confirm selection.

On-Road Navigation

INFORMATION
◄ return
Info on destination
Info on current location
Route selection
Route list
Destination input map
Destination memory
Volume navigation
07.30.2001   Monday   2:10PM
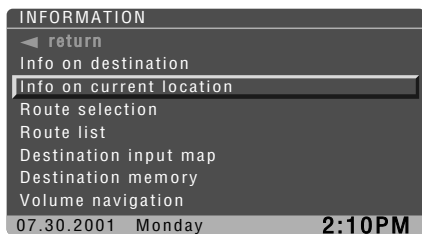
H4505

- Turn the control to select 'Info on current location'.
- Press the control to confirm selection.

INFO ON DESTINATION
◄ return
BUS STATION
SHOPPING CENTRE
COLLEGE / UNIVERSITY
GAS STATION
MONUMENT
HOTEL
07.30.2001   Monday   2:10PM
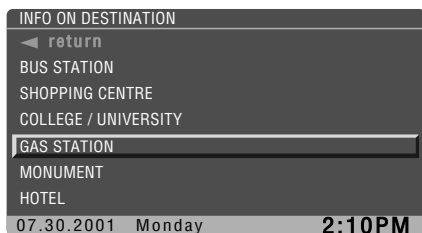
H4486

- Turn the right rotary control (8) to select the destination category, e.g. 'GAS STATION'.
- Press the control (8) to confirm selection.
- Turn the control again to select 'Index' and choose an entry from the alphabetical list. You can restrict the number of names displayed in the directory by first entering one or more letters of that name before selecting the 'Index' function.
- Press the control again to confirm selection.
- Turn the control to select the address of the destination located in this way.
- Press the control to confirm selection and to transfer it to the destination guidance system

Varying the volume

You can raise or lower the volume of navigation instructions in relation to other audio sources.

- Turn the right rotary control (8) to select 'Information'.
- Press the control (8) to confirm selection.

INFORMATION
◄ return
Info on destination
Info on current location
Route selection
Route list
Destination input map
Destination memory
Volume navigation
07.30.2001   Monday   2:10PM
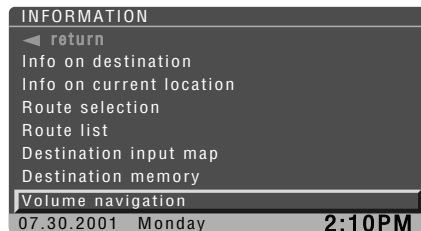
H4509

- Turn the control again to select 'Volume navigation'.
- Press the control again to confirm selection.

VOLUME NAVIGATION
+ 8

07.30.2001   Monday   2:10PM
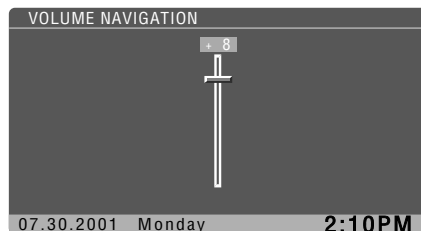
H4497

- Turn the control until the desired volume setting is obtained.
- Press the control to confirm / store this setting.

On-Road Navigation

MAP SYMBOLS

Depending on the destination entered and the map scale selected, a variety of symbols for facilities of general interest appear in the map mode. Any or all of the following symbols may be displayed for a specific location selected:

Pharmacy

Automobile club

Car rental

Station

Bank

Government office

Library

Educational facility

Embassy

Bus station

Monument

Shopping center

Ferry

Fire house

Airport

Tourist information office

Cash dispenser

Law courts

Golf course

Hotel

Business park

Marina

Cinema

Church

Hospital

Civic center

Military base

Museum

Park and recreation

Park

Parking

Police

Post office

Rest area

Restaurant

Tourist attraction

Sports center

City center

Gas station

Theater

Entertainment

Amusement park

Destination

On-Road Navigation

ROUTE SELECTION
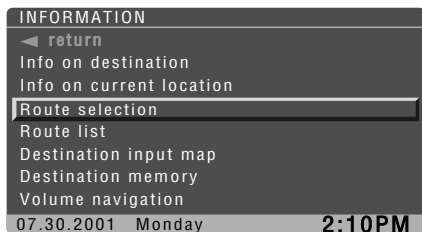
```
INFORMATION
◄ return
Info on destination
Info on current location
Route selection
Route list
Destination input map
Destination memory
Volume navigation
07.30.2001   Monday          2:10PM
```
H4506

- Turn the right rotary control (8) to select 'Information'.
- Press the control (8) to confirm selection.

Selecting a route type

You can change the type of route both when selecting a destination and as often as desired while destination guidance is in operation - the system will always adapt to your wishes.

- Turn the right rotary control (8) to select 'Route selection'.
- Press the control (8) to confirm selection.
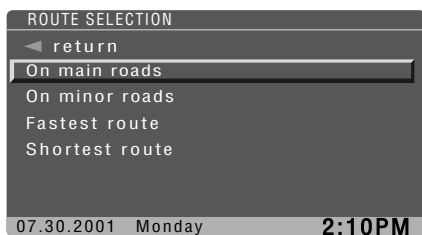
```
ROUTE SELECTION
◄ return
On main roads
On minor roads
Fastest route
Shortest route


07.30.2001   Monday          2:10PM
```
H4487

- Turn the control to select the preferred type of route.

1. Main roads
   Highways and main roads are given priority.
2. Minor roads
   Highways are avoided as far as possible.
3. Fastest route
   This is a combination of the fastest and shortest routes.

4. Shortest route
   The most direct route, irrespective of how fast or slow progress will be.

- Press the control to confirm selection.

TERMINATING DESTINATION GUIDANCE

```
INPUT DESTINATION

UNITED KINGDOM
ABINGDON               Delete
Road:                  destination
Junction

On main roads
Information              Dest. Guide
30.07.2001   Monday          14:10
```
H4485

All the functions for inputting new destinations will over-write the currently displayed destination with the new one. When the control is pushed to transfer the new destination to the guidance system. However, should you wish to discontinue guidance completely, you can delete the current destination.

From the 'Input Destination' screen, turn the right rotary control to select 'Delete destination' then press the control to confirm.

The destination will be deleted and all guidance will cease.

DISPLAYING A ROUTE
Route map
During destination guidance, the system can
display a map showing the planned route.

- Turn the right rotary control (8) to select
  'Route ml

On-Road Navigation

AVOIDING ROAD CONGESTION

You can, during destination guidance, deviate from planned sections of the route. You indicate the distance in miles after which you wish to return to the original route.
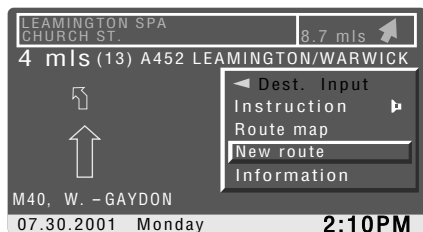
```
LEAMINGTON SPA
CHURCH ST.                    8.7 mls
4 mls (13) A452 LEAMINGTON/WARWICK
                    ◄ Dest.  Input
                    Instruction        ▶
                    Route map
                    New route
                    Information
M40, W. – GAYDON
07.30.2001  Monday              2:10PM
```
H4511

- Turn the right rotary control (8) to select 'New route'.
- Press the control (8) to confirm selection.
- Turn the control again to select the desired distance.
- Press the control again to confirm selection.

The system will return you automatically to the original route at the next opportunity, after the selected deviation distance.

VEHICLE POSITION

You can call-up the present location of your vehicle or display a road map showing your position.
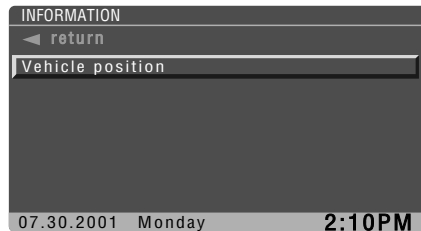
```
INFORMATION
◄ return
Vehicle position



07.30.2001  Monday              2:10PM
```
H4489

Vehicle position display

To call-up the vehicle's current position:

- Turn the right rotary control (8) to select 'Information'.
- Press the control (8) to confirm selection.
- Turn the control again to select 'Vehicle position'.
- Press the control again to confirm selection. The current location is shown on the left of the screen.
- If the map is required, turn to 'Street map' and press to select. Your current location is shown on a map of the area.

Road map

This function can also be useful if you have not input a destination. It enables you to monitor the route you have taken so far.

From any current display:

- 'Information'.
- 'Vehicle position'.
- 'Street map'.

If the scale is less than one mile, you can choose whether to align the map with North at the top, or according to the direction of your chosen route.

On-Road Navigation

Entering the vehicle position

Correcting the vehicle's current location is only recommended in exceptional circumstances. After a journey where the vehicle is not being driven but is being transported, for example, a ferry or motor rail journey, the GPS receiver requires a few minutes to find your new location. This search period can be shortened by entering the vehicle's current location.

To enter the vehicle's current location:

- Turn the right rotary control (8) to select 'Information'.
- Press the control (8) to confirm selection.
- Turn the control again to select 'Vehicle position'.
- Press the control again to confirm selection.
- Enter the address of the vehicle's current position in the same way that you enter a destination, see *'Entering a destination place', page 29.*

Off-Road Navigation

GETTING STARTED

MENU
On-board computer
On Road Navigation | Off Road Navigation
DSP
Aux vent   Code
Set   Monitor off
07.30.2001 Monday   2:10PM
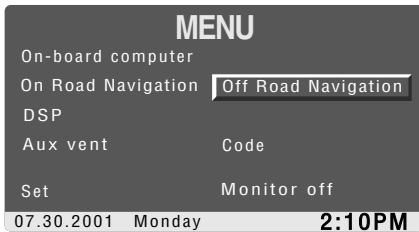
H4627

With the starter switch in position 'I' or 'II' press the MENU button (7).

Turn the right rotary control (8) until 'Off Road Navigation' is highlighted, then press the right rotary control.

An information screen appears with the following:

"Off-road conditions may change. Always ensure that it is safe to make the suggested manoeuver 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 right rotary control (8) 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 300 feet. Please allow for this when plotting waypoints on the route.

Navigation status

STATUS
COASTAL
START   130 mls
WAYPOINT   350 mls
Radius   330 ft
Guidance   Forward
              OK
07.30.2001 Monday   2:10PM
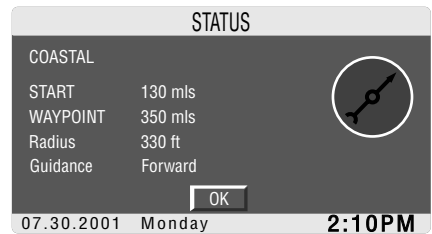
H4564

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', page 46*.
- Direction of route guidance.

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

Press the right rotary control (8) to go to the main guidance screen (either 'Map display', 'Full' or 'Reduced' guidance).

Then, by pressing the right rotary control (8) again, a drop-down main guidance menu can be obtained from which most of the system options can be accessed.

Off-Road Navigation

CREATING A ROUTE

H4565

From any guidance source, turn the right rotary control (8) to view the main guidance menu.

Then from the menu, highlight and select 'Routes'.

From the routes menu, highlight and select 'Route list'.
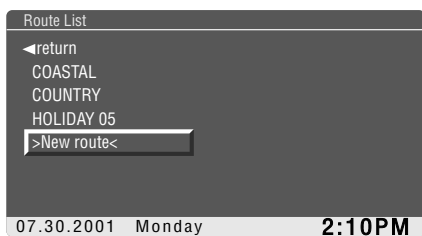
H4566

A list of routes previously entered into the system is displayed, along with an entry entitled 'New route' (if no routes have been entered into the on-board computer, only the 'New route' and 'Return' options are available).

NOTE: Arrows will be displayed if more routes are stored in the navigation computer than can be displayed at one time. Use the right rotary 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'.

An alphanumeric list will be displayed with the word 'ROUTE' already entered. Highlight and select 'delete', and keep the rotary control pressed to delete the word 'ROUTE'.
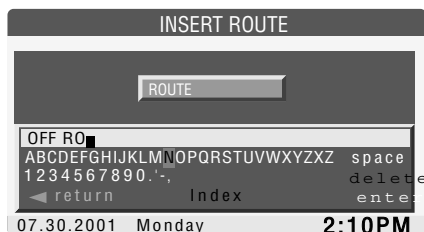
H4567

Enter a name for your route by using the right rotary 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'.
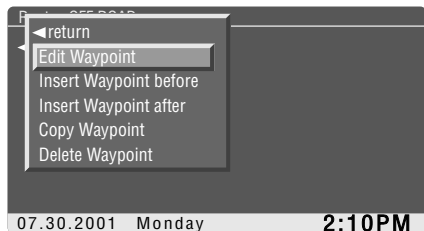
H4568

The 'Route list' screen is now displayed with the name of the route at the top and an entry labelled 'Start'.

Off-Road Navigation

Highlight and select 'Start' to display the waypoint edit menu. Now 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

07.30.2001   Monday          2:10PM
```

H4569

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 turn the rotary control until the correct value is shown, see *'Co-ordinates (Latitude and Longitude)', page 54*.

Press the rotary 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'.

An alphanumeric menu will be displayed with the word 'START' already entered. Highlight and select 'delete', and keep the rotary control pressed to delete the word 'START'. Now use the rotary control to highlight and select the correct letters from the alphanumeric list to enter a name (of up to 10 characters).

When the correct co-ordinates and start point name are displayed, highlight and select 'OK'.

The 'Route list' screen is displayed once again with your new waypoint (start of the route) highlighted.

Building a route

Press the rotary control to obtain the drop-down menu and select 'Insert waypoint after' to repeat the process and specify the next manual waypoint in the sequence of the route. This may be either the destination or an intermediate waypoint, see *'WAYPOINTS', page 46* for further information on building up your route.

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

07.30.2001   Monday          2:10PM
```

H4570

Rename the route using the right rotary control to highlight and select the letters from the alphanumeric menu, then highlight and select 'enter'.

The 'Review Route' screen is displayed - edit the required waypoints, see *'WAYPOINTS', page 46* 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'.
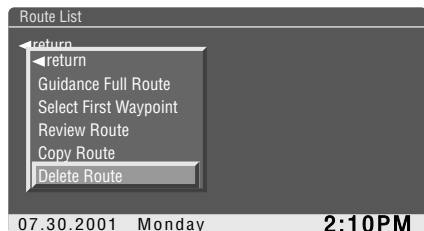
H4571

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 a destination, or it can be made up of a series of waypoints. A waypoint could be a landmark or 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 carry out the following procedure:
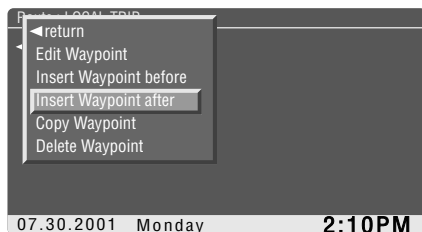
H4572

Having entered the route start point (see 'CREATING A ROUTE', page 44), 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'.
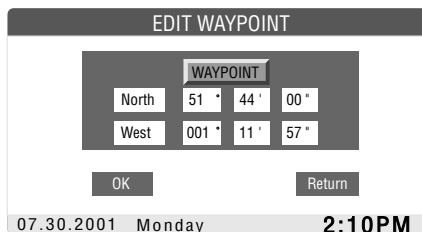
H4573

Insert the co-ordinates and name of the chosen waypoint, as described previously for the start point. Select 'OK' to save it.

Off-Road Navigation

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 menu list.
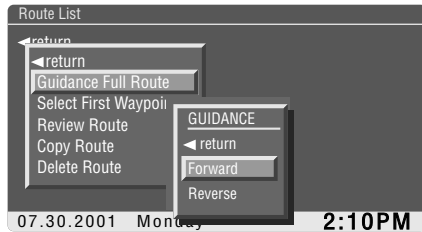
H4574

The navigation computer requests the desired route direction (a route which 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', page 50*.

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.

See *'ROUTE GUIDANCE', page 50* for a description of the guidance formats available - full, reduced or map.

Changing a waypoint
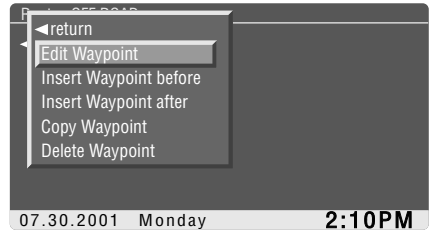
H4568

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 previously described. Select 'OK' to complete.

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.
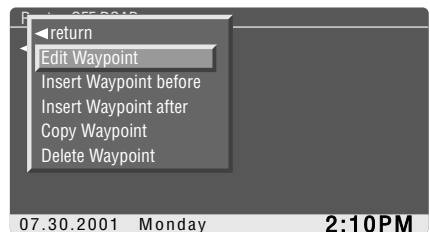
H4568

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

Off-Road Navigation

Access the new route list, highlight and select the waypoint that is immediately before the desired position, then highlight and select 'Insert Waypoint after'.
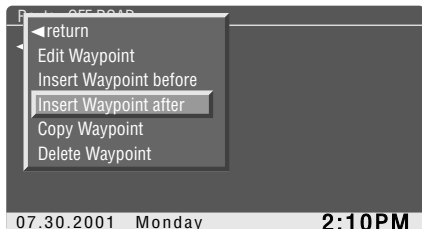
H4576

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.
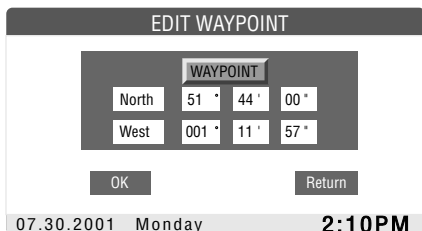
H4573

Deleting a waypoint
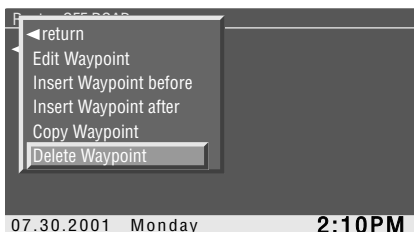
H4577

Highlight and select the relevant waypoint from the route list, and from the 'Review Route' menu highlight the desired waypoint 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 is stored in the computer memory so that it may still be copied into another route, or another position in the current route, if desired.

Off-Road Navigation

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' button (7) to view the main menu, then highlight and select 'Set'.


```
                    STATUS
 COASTAL

 START        130 mls
 WAYPOINT     350 mls
 Radius       330 ft
 Guidance     Forward
                       OK
 07.30.2001   Monday        2:10PM
```
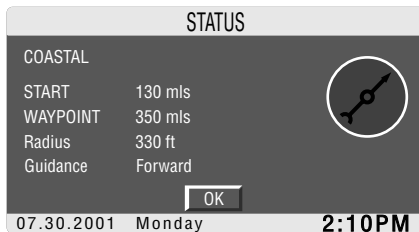
H4564

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 settings, see *'SYSTEM SETTINGS', page 56*.

MODIFYING A ROUTE

If a route is being followed and an alteration or detour is required, modify the route as follows:

- From the route guidance screen, turn the right rotary 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 will be displayed.

The route you are currently following is marked with an asterisk, highlight the route and press the rotary control to select.

Changing the direction of the route


```
 Route List
 ◄return
  ◄return
  Guidance Full Route
  Select First Waypoin
  Review Route            GUIDANCE
  Copy Route              ◄ return
  Delete Route            Forward
                          Reverse
 07.30.2001   Monday        2:10PM
```
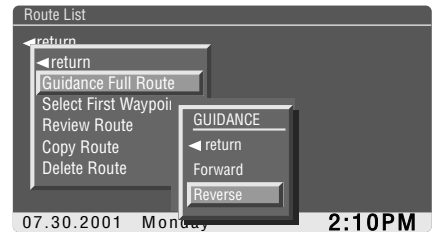
H4578

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.
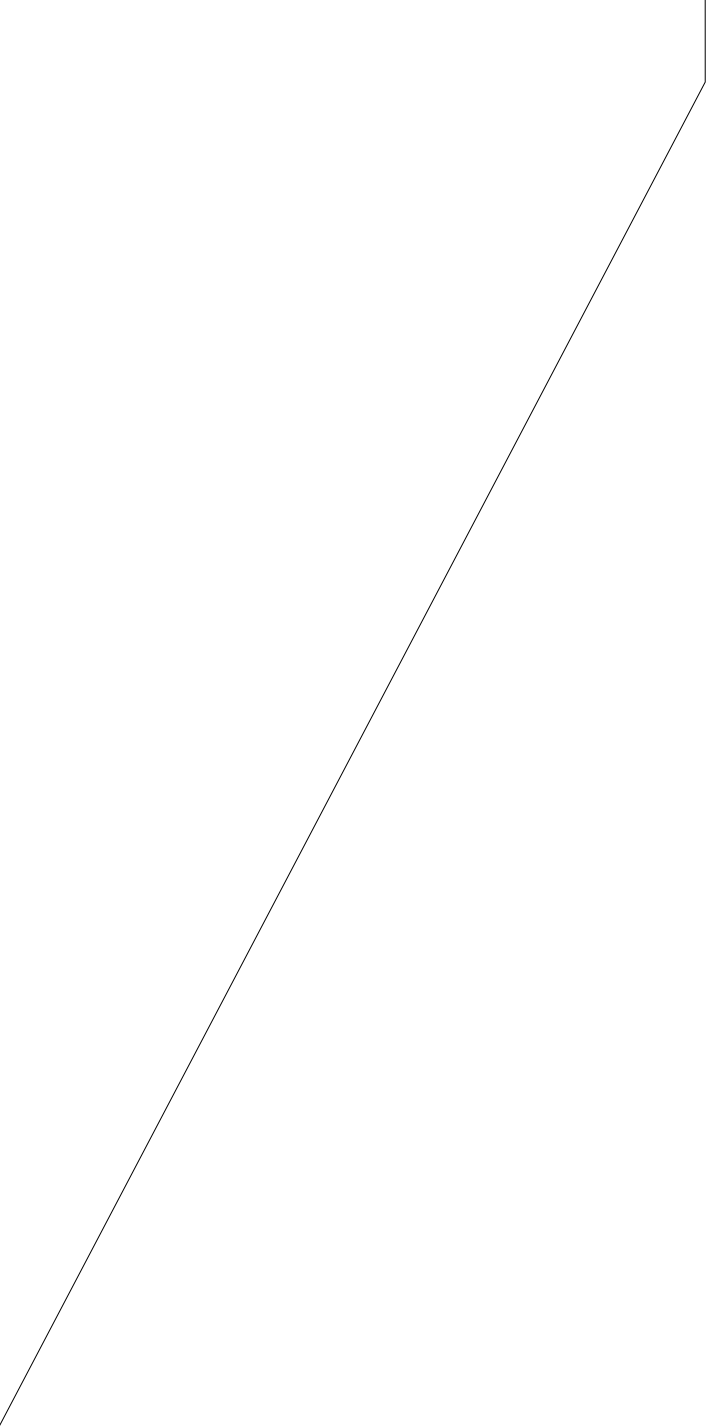
Off-Road Navigation

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', page 55*). The larger arrow represents the direction to the next waypoint (see *'Destination arrow', page 54*).

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 white circle represents a waypoint not yet achieved.
  A black cross on a red circle represents a waypoint which has been completed, or has been de-selected (skipped).

- Destination
  (The color of the check described is deemed to be the color of the bottom left and top right of the circle).
  A black check on white represents a destination not yet achieved.
  A black check on red represents a destination which has been completed.

Full data guidance display

If the display is currently set to map display or reduced data guidance, turn the rotary control (8) to display the menu, then highlight and select 'Full Data Display
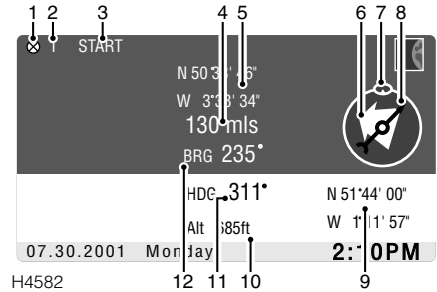
1. Waypoint icon.
2. Waypoint reference number.
3. Waypoint title.
4. Distance to destination/waypoint.
5. Destination/waypoint co-ordinates.
6. Direction to destination/waypoint arrow.
7. Heading up icon.
8. Compass.
9. Current co-ordinates.
10. Altitude.
11. Heading.
12. Bearing.

See *'NAVIGATION TERMINOLOGY', page 54*.

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.

Off-Road Navigation

## Reduced data display

This display provides a simplified version of the information provided on the Full Data Display and includes the following information:
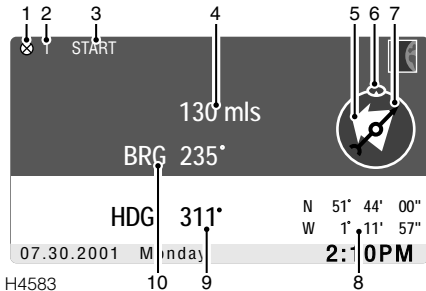
H4583

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, 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, bearing and altitude are updated every 2 seconds.*

Compass guidance display
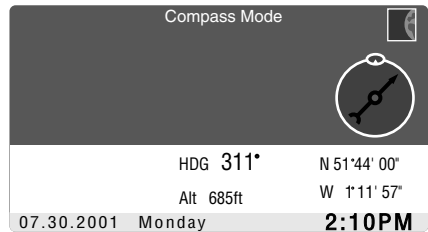
H4584

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

Off-Road Navigation

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.
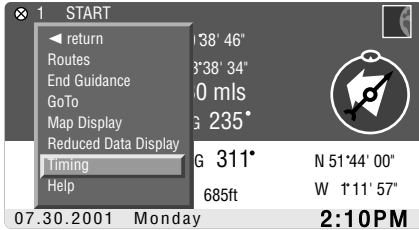
H4585

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

Timing from
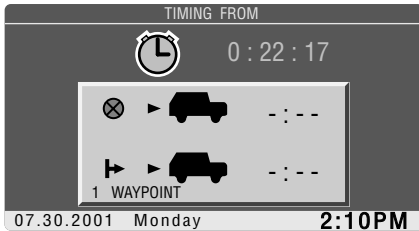
H4586

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
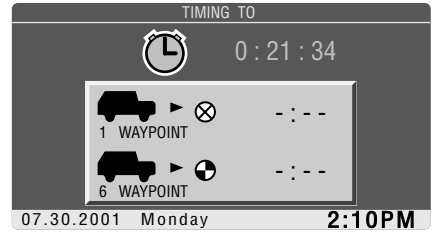
H4587

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.
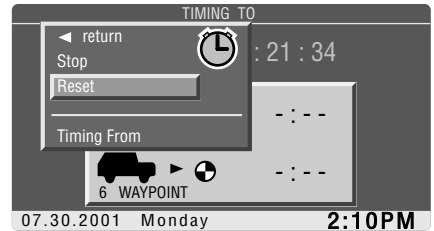
H4588

To stop or start the stopwatch, turn the rotary control to view the menu and 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
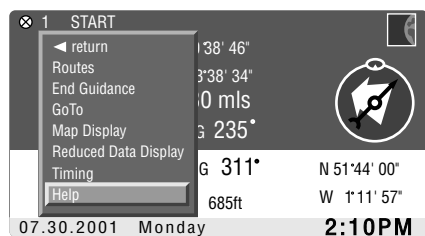
H4589

The help facility can be accessed from any of the guidance screen menus. Highlight and select 'Help' using the rotary control (8). A list of help topics will be displayed.
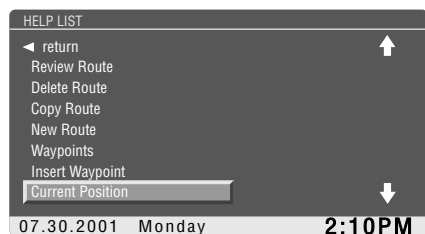
H4590

Use the rotary 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 control to scroll down the text.

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

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

NAVIGATION TERMINOLOGY
To check where the following appear on the display, see .

Destination arrow
The destination arrow is the larger of the two arrows in the compass part of the guidance display. 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 (that is, 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 backtrack to a previous waypoint.

Co-ordinates (Latitude and 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. The Prime Meridian passes through Greenwich in England.

Each degree of Latitude or Longitude can be divide 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).

Off-Road Navigation

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 displayed.

Heading Up icon

This indicates where the waypoint arrow should be pointing to follow the shortest route (by distance) to the destination or next waypoint. The icon will remain at the top of the compass guidance display.

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 feet. If a valid reading is not available, the last known altitude will be shown.

System Settings

SYSTEM SETTINGS
Altering the system settings
Your vehicle is delivered with a basic setting for all displays, which depends upon the country for which the vehicle is intended.

These settings can be altered to suit your preferences.

Press the MENU button on the control panel to display the general menu screen.

- Turn the right rotary control until 'Set' is highlighted.
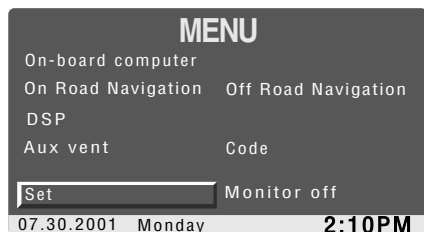
```
                MENU
On-board computer
On Road Navigation    Off Road Navigation
DSP
Aux vent              Code
Set                   Monitor off
07.30.2001  Monday              2:10PM
```
H4625

- Press the right rotary control to obtain a list of possible settings.
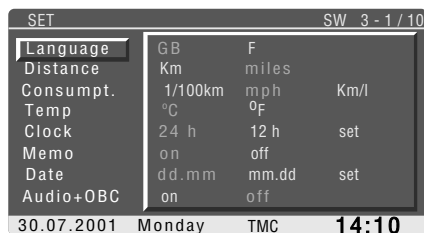
```
 SET                           SW  3 - 1 / 10
Language     GB        F
Distance     Km        miles
Consumpt.    1/100km   mph        Km/l
Temp         °C        °F
Clock        24 h      12 h       set
Memo         on        off
Date         dd.mm     mm.dd      set
Audio+OBC    on        off
30.07.2001  Monday     TMC        14:10
```
H4122

You can alter:

- The language of the display texts,
- The units of measurement for distance, fuel consumption and temperature,
- The time and date

and the way these are expressed.

The following can also be changed by turning the control further:

1. **Memo**
   Shortly before the hour, three signal tones will be emitted. If you have switched on this function, you will see a soundwave symbol at the bottom edge of the display screen, after the day.
2. **Audio + OBC**
   Means radio and on-board computer displays appear on the screen at the same time.
3. **On-board computer display**
   You can choose whether to have the outside temperature or your estimated time of arrival displayed.
4. **Color set**
   Means you select a set of colors for the display screen from the three options available.
5. **Day/night**
   Means you can switch the automatic day/night changeover function for color set on or off.

System Settings

To change a system setting
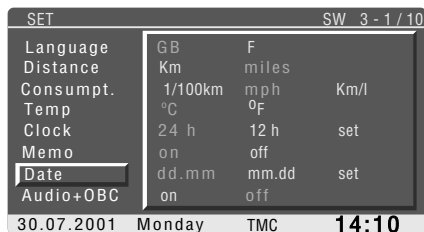
H4123

For an example, changing the date is used to illustrate how to alter a system setting.

- Turn the right rotary control until 'Date' is highlighted.
- Press the control to confirm this.
- Turn until 'set' is highlighted.
- Press to start the adjustment procedure.
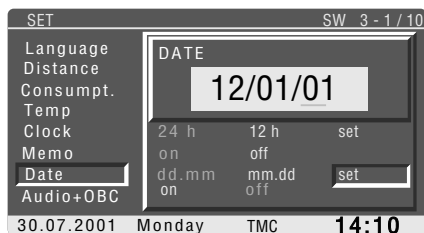
H4124

- Turn the control to adjust the year.
- Press to store.
- In the same way, set the month and weekday.

The date entry is memorized with your last save.

You can also choose the order in which you wish the date to be displayed; either the days (dd) first followed by the months (mm) or in the opposite order.

Troubleshooting

WHAT TO DO IF….

Radio
What to do if:

- The radio automatically begins a station search with RDS switched on?
  The strength of the station transmitting has decreased and no alternative frequency for this station is available.

The radio reverts to the frequency of the station previously received.

Cassette
What to do if:

- The quality of audio reproduction from cassettes deteriorates?
  The tape head may be dirty and requires cleaning.

- The display shows 'TAPE CLEAN'
  The tape head requires cleaning. This message appears twice in succession when a cassette is inserted after 50 hours of operation.

- The display shows 'TAPE ERROR'.
  The tape in the cassette player will not move or is jammed. Remove the cassette from the tape player. If you are able to identify the cause of the problem and put it right, you may put the cassette back into the tape drive and then wind it fully forwards or fully rewind. If the message is still displayed, the cassette should not be used.

CD
What to do if one of the following warnings is displayed:

- '**NO DISCS**'
  the magazine is empty.

- '**NO DISC**'
  no CD in the compartment or a CD has been inserted incorrectly.

- '**NO MAGAZINE**'
  no magazine is inserted.

- '**CD CHECK**'
  the contents of the CD are still being read into the system.

- '**HIGH TEMP**'
  operating temperature is too high. replay commences automatically when the correct operating temperature has been reached.

Navigation
What to do if:

- You call-up your vehicle current position but the display is not accurate?
  You are in a poor reception area, you are in an area not covered by the map, or the system is currently calculating your position.

- The GPS logo disappears from the screen?
  Reception is interrupted; a building or similar obstruction may be the cause.

- An address from the destination list is not transferred to the route guidance programme?
  The address is not on the map CD currently in use. Choose an address as close as possible to the original one, if necessary by the graphic destination input method.

- An address without a street is not transferred to the destination guidance programme?
  There is no defined city center on the map CD for the place that you have entered. Enter any street or a specific destination, such as the railway station, for the town or city in question. Then start destination guidance.

- You wish to input a destination address but the correct letter of the alphabet cannot be selected?
  The address is not on the map CD currently in use. In this case the system will not offer you the non-existent letters to choose from. Choose an address as close as possible to the original one, if necessary by the graphic input method.

Troubleshooting

- You attempt to input a destination address by means of the cross-hairs on the graphic destination input map but it is not transferred to the route guidance system?
  The chosen scale is too large. Destinations are only transferred up to a scale of one mile.

- Directions cease to be given during destination guidance?
  You are driving in an area for which full digital information is not yet available on the map CD. Instead of an arrow indicating a turn, you will see an arrow which indicates the general direction of your planned route:
  or
  You have deviated from the proposed route and the system requires a few seconds to calculate a new route.

- The route map is automatically called up during destination guidance?
  You are currently in an area for which full digital information is not yet available on the map CD. No destination guidance is currently possible. However, as a rough guide, the current position of your vehicle will be shown on the map.

- The battery was disconnected?
  About 15 minutes must elapse before the system is fully functional after battery reconnection.

WARNING

Perform all inputs while the vehicle is stationary. The vehicle and occupants could be placed in danger if the driver's concentration is not focused on the road conditions.

WARNING

Batteries contain acid, which is both corrosive and poisonous. If spillage occurs:

- ***On clothing or the skin - remove any contaminated clothing immediately, flush the skin with large amounts of water, and seek medical attention urgently.***

- ***In the eyes - flush with clean water immediately for at least 15 minutes. Seek medical attention urgently.***

Swallowing battery acid can be fatal unless IMMEDIATE action is taken - seek medical attention urgently.

During normal operation batteries emit explosive hydrogen gas - ensure sparks and naked lights are kept away from the engine compartment.

For your safety, remove all metal wrist bands and jewellery before working in the engine compartment and NEVER allow the battery terminals or vehicle leads to make contact with tools or metal parts of the vehicle.

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