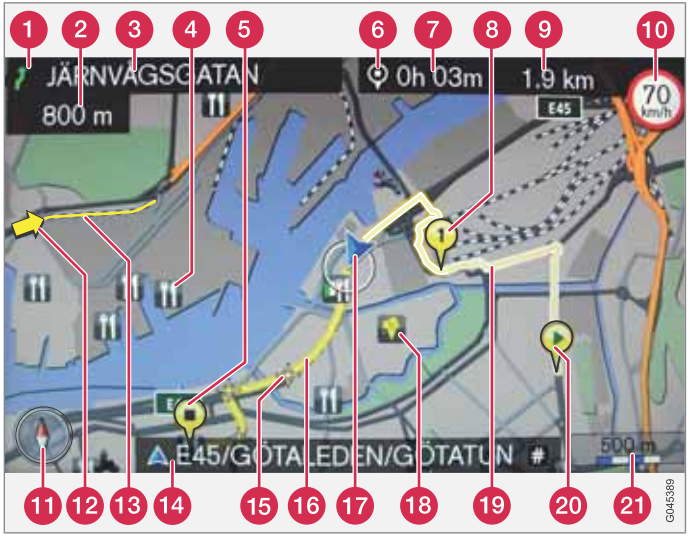
VOLVO S60, V60, XC60, V70, XC70 & S80

ROAD AND TRAFFIC INFORMATION SYSTEM (RTI)

Web Edition

OPERATING MANUAL



Road type	Colour
Motorway	Orange
Primary road	Dark grey
Smaller primary road	Grey
Ordinary road	Light grey
Local road	White

Text and symbols on screen

1. Event at next guidance point
2. Distance to next guidance point
3. Name of next road/street
4. Facility (Restaurant)
5. Planned route final destination
6. Symbol for destination/final destination
7. Calculated arrival time at final destination
8. Planned route waypoint
9. Calculated remaining distance to destination
10. Maximum permitted speed - at car's current position (17)
11. Compass
12. Traffic information
13. Section covered by traffic information
14. Current road/street name - at car's current position (17)
15. Next guidance point
16. Planned route
17. The car's current position
18. Stored location
19. Completed planned route
20. Planned route start
21. Map scale

ROAD AND TRAFFIC INFORMATION - RTI

Volvo's navigation system is a traffic information and road navigation system developed by Volvo. The system guides you to a destination and gives information along the route. It informs of situations that can affect the drive, such as accidents, road works and shows alternative routes.

It is possible to create an itinerary, search for facilities along the route, store special places etc. The system displays the car's exact position and in event of a wrong turning always corrects to guide you to the destination.

You will see just how intuitive it is to use. Try it out. In order to get along with the system we recommend that you familiarise yourself with the information in this manual.

By facilitating accessibility and shortening driving distances, Volvo's navigation system contributes to a better environment.

License agreement NAVTEQ DATABASE

For information for the end user - see page 74.

Table of contents

01 Quick Guide

Quick start..... 8

02 Get to know your navigation system

Manual..... 12
Before starting..... 13
Overview..... 14
Controls..... 17
Voice recognition..... 19
Keyboard..... 23
DVD disc, screen..... 25
Maps, road types and compass..... 28
Menus..... 30
Menu tree in three levels..... 32

03 Planning your trip

Specify a destination..... 38
Itinerary..... 45
Current position..... 48
Settings..... 49
Simulation..... 57

04 Traffic information

General..... 60
Reading information..... 62
Handling traffic problems..... 64

05 Symbols on the map

Facilities..... 68

06 Questions and answers

Frequently asked questions..... 72
EULA - License agreement..... 74
Copyright..... 76

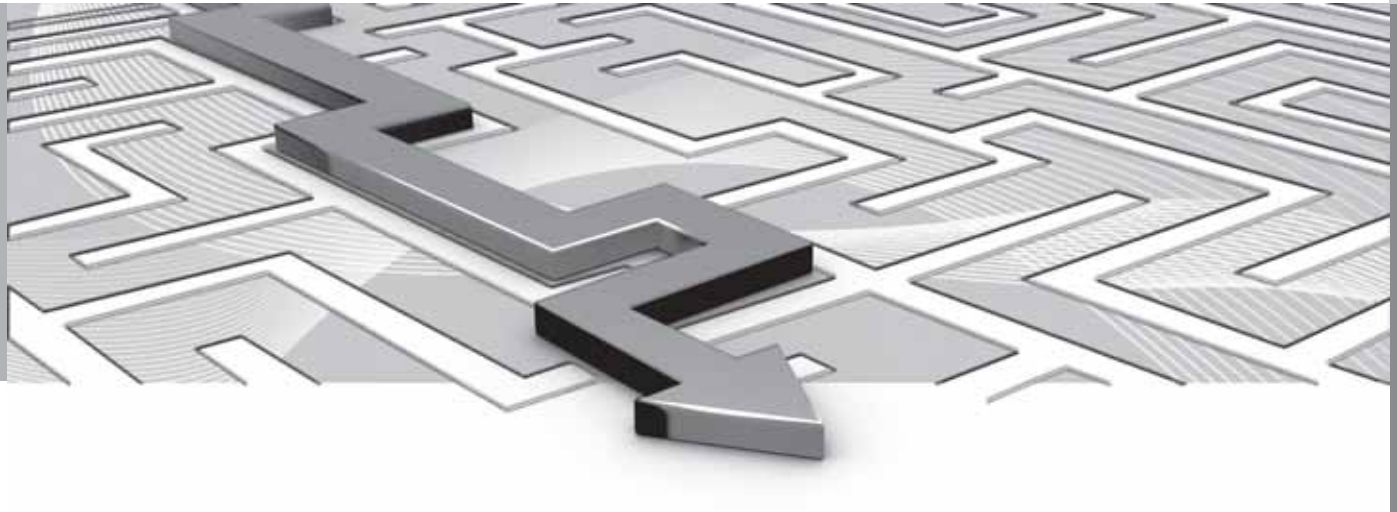
07 Alphabetical Index

Alphabetical Index..... 78

Quick start..... 8

01

QUICK GUIDE



Quick start

Activating the system

The car's electrical system must first be activated:

1. Press the remote control key into the ignition switch and activate key position **I** (see the owner's manual for the car).
2. If the navigation system does not start within a few seconds - press the centre console's **NAV** button.

Disclaimer

When the navigation system is started the display screen shows a text which must be confirmed:

- Press the **OK** button.

For more information, see page 13.

Controls

Volvo's GPS navigator can be operated in several ways:

- With the steering wheel's right-hand keypad
- With the controls in the centre console
- With a remote control
- With voice recognition.

For a functional description, see page 17.

Main commands

The steering wheel keypad is used in the following two examples to give guidance to an Address or Facility.

- Scroll/select in the menus with the **Thumbwheel** (1).
- Activate selections with a brief **press** on the **Thumbwheel** (abbreviated in the following example with "+ **OK**".
- Go back in menus and/or undo using **EXIT** (2).

Centre console controls

If the centre console keypad is used instead of the steering wheel keypad then the following applies:

Keypad in the steering wheel	Centre console
Turn the **Thumbwheel**	Turn **TUNE**
Press the **Thumbwheel**	Press **OK**
Press **EXIT**	Press **EXIT**

Guidance to a street address

Display screen/ menu	Action
If the display screen does not show a map image, proceed as follows:	Press the centre console button **NAV**.
Map	Press **OK** to bring up a menu.
Navigation menu	Mark Set destination + **OK**.
Set destination	Mark Address + **OK**.
Address:	Mark City: + **OK**.

Display screen/ menu	Action
Daisy wheel - see page 23.	Turn the **Thumb-wheel** to select characters and enter it by clicking **OK** - a list of options emerges on the display screen.
Daisy wheel	Select the appropriate district from the list + **OK**.
Navigation menu	Mark Add to itinerary + **OK**.
Itinerary	Mark Start guidance + **OK**.
Map	Guidance starts - follow the instructions.

The navigation system calculates the route, travel time and distance to the selected destination. The system provides guidance and instructions on junctions etc.

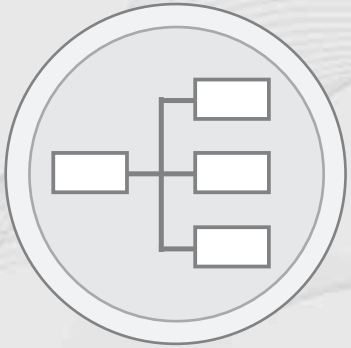
If there is a deviation from the planned route outline during the journey then the system automatically calculates a new route outline.

Guidance to a facility (POI)

Display screen/ menu	Action
If the display screen does not show a map image, proceed as follows:	Press the centre console button **NAV**.
Map	Press **OK** to bring up a menu.
Navigation menu	Mark Set destination + **OK**.
Set destination	Mark Facility (POI) + **OK**.
Facility (POI)	Select e.g. Around the car + **OK**.
Latest 5 facility types	Select e.g. All types + **OK**.
All facility types	Select e.g. Airport + **OK**.
Result list	Select the desired option from the list + **OK**.
Navigation menu	Mark Add to itinerary + **OK**.

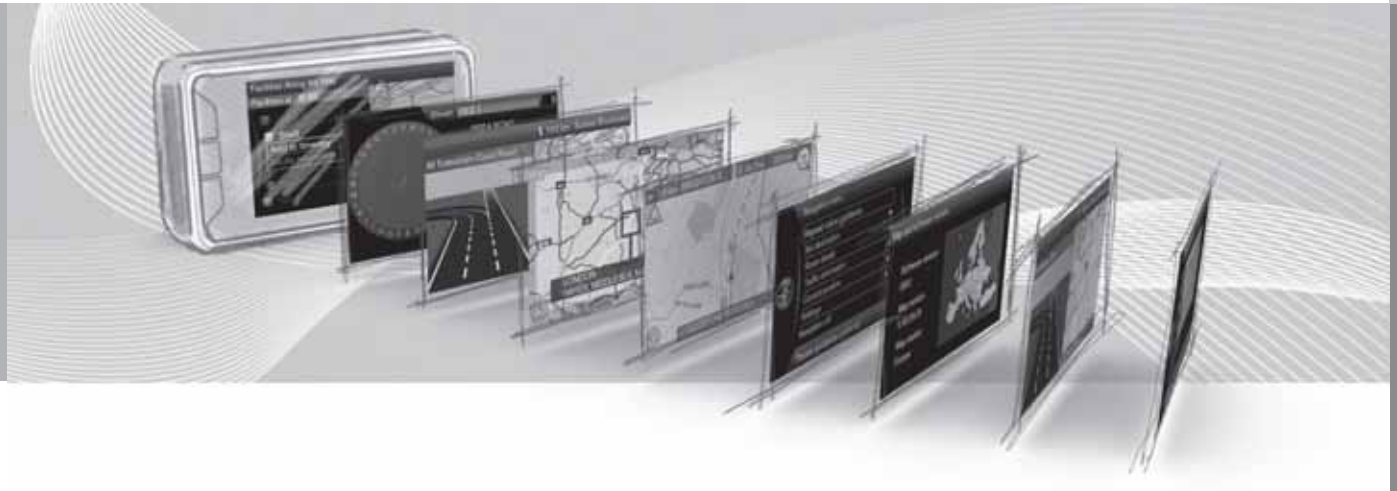
Display screen/ menu	Action
Itinerary	Mark Start guidance + **OK**.
Map	Guidance starts - follow the instructions.

Manual 12
Before starting 13
Overview 14
Controls 17
Voice recognition 19
Keyboard 23
DVD disc, screen 25
Maps, road types and compass 28
Menus 30
Menu tree in three levels 32



02

GET TO KNOW YOUR NAVIGATION SYSTEM



Manual

General information on the manual

There is a quick guide for the user who wants to get started right away - see page 8.

For a more in-depth description of the operation and options as well as the selection of settings to the destination, the recommendation is to read the manual in combination with practical use.

Menu options/Search paths

All options that can be selected on the display screen are marked in this manual with slightly larger and grey-shaded text, e.g. **Set destination**.

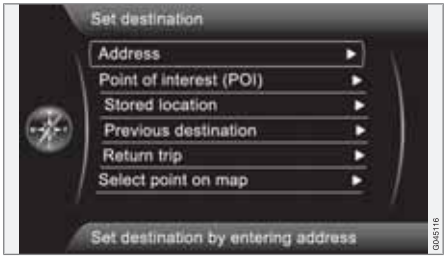
Search paths in the menu tree are stated as e.g.:

Set destination ➔ Address ➔ City:

English text

The manual's images are common to all markets and languages so where they contain text it is mainly in English.

In order to facilitate the user's understanding of the images and their menu options with search paths connected to the manual's text, the English word for the image is in brackets immediately after the intended text/phrase in the language of the manual:



Set destination ➔ Address

(Set destination > Address)[1]

Special text

NOTE

NOTE

Texts marked with NOTE provide advice or tips to facilitate use of e.g. features and functions.

Footnote

There is information in the manual that is added as a footnote at the bottom of the page or in direct association with a table. This information is a supplement to the text to which it refers via the footnote number/letter.

Options

All types of options/accessories are marked with an asterisk (*).

In addition to standard equipment, this manual also describes options (factory fitted equipment) and certain accessories (retrofitted extra equipment).

The equipment described in this owner's manual is not available in all cars - they have different equipment depending on adaptations for the needs of different markets and national or local laws and regulations.

In the event of uncertainty over what is standard or an option/accessory - contact a Volvo dealer.

Changes in the manual

The specifications, design features and illustrations in this owner's manual are not binding.

We reserve the right to make modifications without prior notice.

© Volvo Car Corporation

[1] Not in English manuals - but shown here as an example.

General

The Volvo navigation system uses reference system WGS84, which gives longitude and latitude positions.

The car's navigation system can be used without a destination being selected.

Map position

Upon start-up, the navigation system shows an on-screen text message, which must be confirmed by pressing the **OK**/**MENU** button. The text is as follows:

- **This system provides route information to help you reach your destination. Due to road conditions, some recommendations may not be accurate. Obey all traffic laws and drive based on your own good judgement. Always concentrate on your driving by keeping your eyes and mind on the road.**

Then a map of the current geographic area is shown where the car is symbolised by a blue triangle.

Settings

The system is supplied with default settings, but starts with the settings last used.

There is a function that resets all settings to default settings simultaneously, see page 55.

On/Off

On

1. Push the remote control key into the ignition switch.
2. The screen activates automatically in the key position **I** (see the car's manual).
3. Press the centre console's button **NAV** if the navigation system does not start automatically.
4. Press **OK** when the "Start up" text appears on-screen, see previous section "Map mode".

The system may need a few seconds in order to detect the position and movement of the car.

Off

The navigation system is shut down when the remote control key is removed from the ignition switch.

The Navigator cannot be switched off manually, but always works in the background after the "Start up" sequence. If the navigation system is not to be switched on:

- Press **EXIT** at the "Start up" sequence, see section "Map mode".

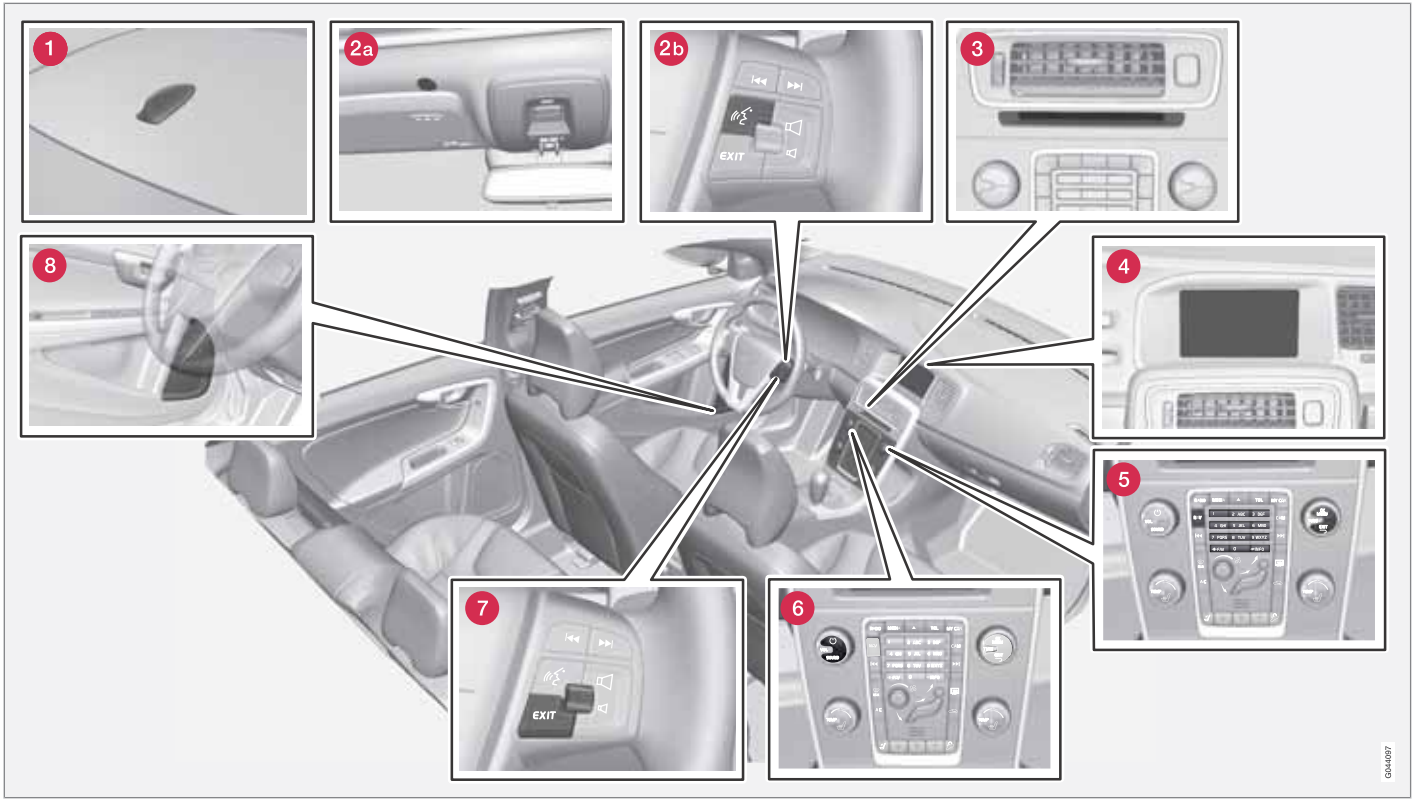
NOTE

The navigation system is also available when the engine is switched off. When the battery level gets too low the system switches off.

Demo (simulated guidance)

To see how the system works, guidance to an indicated destination can be simulated on-screen - see page 57.

Overview



NOTE: The picture is schematic - some details may vary depending on car model and market.

❶ Antenna for GPS

The antenna is integrated into the roof antenna.

❷ Voice recognition

Some procedures in the Navigation system can also be voice controlled. The microphone (2a) is fitted in the ceiling and the activation button (2b) is located on the right-hand keypad on the steering wheel. For more information, see page 19.

❸ Main unit

The main unit is fitted in and behind the centre console and includes the following functions:

- Calculating the position of the car
- Calculating the route to the specified destination
- Handling traffic information
- Voice guidance
- DVD player

Receiver for GPS and traffic information (TMC[1]) is integrated into the main unit.

Positioning

The car's speed sensor and a gyro calculate the current position and the direction of travel of the car using signals from the GPS satellite system.

The advantage of this concept is that the Navigation system registers and calculates the route outline even if the GPS signal is temporarily lost, e.g. when driving through a tunnel.

Traffic information

TMC[1] is a standardised coding system for traffic information. The receiver automatically searches for the correct frequency. Reception takes place via the FM antenna.

NOTE

TMC is not available in all areas/countries. The system's coverage area is under constant construction and updating may sometimes be necessary.

For information about updating map data and software, see page 25.

❹ Screen

The screen displays maps and provides detailed information on route type, distance, menus etc. For information screen care, see page 26.

❺ Keypad, centre console

As an alternative to the steering wheel keypad, the centre console's numeric keypad can be used in combination with buttons **OK/MENU**, **TUNE** and **EXIT** to scroll between different menu options, confirm options or go back in menus, see page 17.

❻ Volume control and IR receiver

Use the audio unit's volume control during ongoing voice messages to adjust the volume, see page 29. The volume can also be adjusted in the menu system.

Point the remote control towards the centre console during use - its IR receiver is located there.

[1] Traffic Message Channel

Overview

❼ Keypad, steering wheel

A keypad is located on the right-hand side of the steering wheel. Use it to scroll between different menu options, to confirm selections or to move back in menus, see page 17.

❽ Speakers

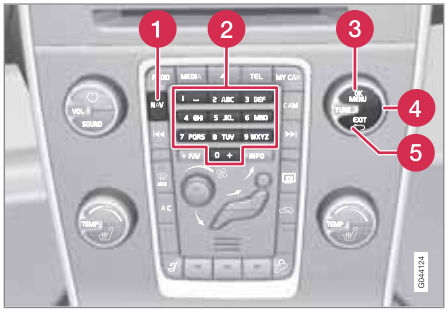
Navigation system audio uses the front loudspeakers.

General information about controls

The navigation system is operated by controls on the centre console, the steering wheel keypad or using a remote control*. The three different control unit keypads have common functions but differ in appearance and operation. The design may also vary depending on market.

The system can also be controlled by voice recognition using specific commands - see page 19.

Centre console



Centre console keypad.

1. **NAV** activates the GPS navigator on the display screen. The button also switches between On/Off to display e.g. climate system status on the top and bottom section of the display screen.
2. **Numerical keys** enter information for address and name search, and scroll on the map, see pages 23 and 30.
3. Press **OK/MENU** once to confirm or activate a selection. Described in this manual with the "**OK** button" or "+ **OK**".
4. Turn **TUNE** to scroll between different menu options. Described in this manual with the "**TUNE** knob".
5. Press **EXIT** once to go back in the menu structure or undo a selection.

Steering wheel

The steering wheel's keypad is available in several versions depending on market and selection of audio system.

Steering wheel right-hand keypad.

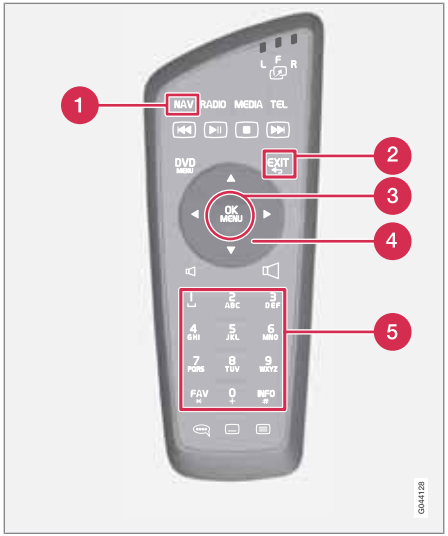
1. **Turn** the thumbwheel to scroll between different menu options.
1. **Press** the thumbwheel to confirm/activate a selection.
2. **EXIT** goes back in the menu structure or undoes a selection.

Remote control

The remote control can be used to control/operate several different functions in the car - only the related navigation system is described here.

Point the remote control at the centre console during use.

Controls



Remote control keypad.

1. **NAV** activates the GPS navigator on the display screen. The button also switches between On/Off to display e.g. climate system status on the top and bottom section of the display screen.
2. **EXIT** goes back in the menu structure or undoes a selection.
3. **OK/MENU** confirms or activates a selection. Described in this manual with the "**OK** button" or "**+ OK**".
4. **Arrow keys** move the menu cursor.
5. **Numerical keys** enter data for address and name search, and scroll on the map.

NOTE

If the remote control does not work, try replacing with new AA/LR6 batteries first of all.

WARNING

Store the remote control and other similar objects in one of the storage compartments - in event of hard braking and/or collision such objects can cause personal injury or other damage.

Voice recognition

See the next section.

Additional information

Sometimes there is more information available than can fit on the menu bar - the line then ends with the character: "**#**".

To view the rest of the information:

- Press the **INFO** button.

General about Voice control

Voice control means that certain functions in the navigation system can be activated by the spoken word.

The Voice commands offer comfort and help the driver to avoid distraction - instead the driver can concentrate on driving and focus attention on the road and traffic situation.

WARNING

The driver always holds overall responsibility for driving the vehicle in a safe manner and complying with all applicable rules of the road.

The Voice control uses the common microphone of the hands-free system - the driver receives responses to the Voice control through the vehicle's loud speakers.

The microphone is positioned in the ceiling in front of the driver for optimal take-up of the driver's speech - it can however be disturbed by/pick up loud voices from passengers.

Handling

Keypad in steering wheel.

1 Button for voice control

Activate the system

- One short press on the steering wheel button (1) activates the system - it is then ready to accept a command.

Think of the following when using the Voice control system:

- For commands - Speak after the tone with a normal voice at a normal tempo
- The car's doors, windows and sunroof must be closed
- Avoid background noise in the passenger compartment.

NOTE

If unsure of which command to use the driver can say "**Help**" - the system then responds with several different commands that can be used in the relevant situation.

The voice command can be interrupted by:

- not speaking
- saying "**Cancel**"
- holding the steering wheel button for voice control for a couple of seconds
- press **EXIT**
- press one of the centre console buttons **NAV**, **RADIO**, **MEDIA**, **MY CAR** or **CAM**.

Use the voice command

Entering information in the navigation system using the voice command is very simple because the screen lists the frequently occurring commands to be used in the relevant situation.

Start

A voice command is started as follows:

Voice recognition

1. Press the steering wheel button for Voice control - the display lists examples of possible commands.
2. Select "**Navigation**" for example and state the word clearly and in normal conversational tone.
3. The screen shifts to the option "**Repeat instruction**/**Navigation go to address**/**Itinerary**" - Select and say "**Itinerary**".
4. Etc....

Note that greyed out text and text in brackets is **not** included in the spoken command.

NOTE

For various reasons, it is not possible to select all menus and options that are visible on the screen:

- **Selectable** - menu lines/options are clear and white.
- **Not selectable** - menu lines/options are matt and grey.

The command can be given in several ways

The command "**Navigation go to address**" can be stated as:

- "**Navigation** > **Go to...** > **Address**" - Say "**Navigation**", wait for the system response in the form of suitable on-screen options. Continue by saying, for example, "**Go to...**" and conclude with "**Address**".

or

- Say the whole command in one sequence - "**Navigation go to address**".

Tips

Some good advice:

- Give a command by first pressing the voice button and then speaking naturally after the tone.
- To respond to the Voice control system - speak after the tone at the end of the question.
- To interrupt a voice session - hold the voice button in.
- The driver can obtain help during a dialogue by saying "**Help**" after a listening tone.
- The dialogue with the system can be speeded up - Interrupt the system's speech with a short press on the button's voice button, wait for a tone and then start talking.
- If the driver is concentrating on driving, there is no need to make an immediate response to the question.
- The system asks for an action a maximum of three times - if the driver does not respond the dialogue is ended.
- Avoid speaking while the system is responding - the system is not disturbed by this but the driver may miss information stated by the system

Example

Here are some normal commands:

- **Navigation go to address**
- **Navigation go to POI**
- **Navigation delete next waypoint**
- **Navigation cancel guidance**.

NOTE

A complete list of quick commands is in **MY CAR**-menu - Go to **Settings** ➔ **Voice settings** ➔ **Voice command list** ➔ **Navigation commands**.

Help functions and settings

In the menu system**MY CAR** there are programs where the driver can practice the different functions in the Voice control system. To describe the menu system **MY CAR** - see the car's normal instruction manual.

The better the driver knows the Voice control system, the more comfortable the driver will be using the functions. Practicing using the integrated practice programs is therefore recommended.

NOTE

The practice programs are only accessible when the car is stationary with the handbrake applied.

Introduction to voice control

The program **Voice tutorial** gives the driver step by step instructions in the use of the Voice control system and is a simple way of becoming familiar with the methods of giving the commands.

The program can be started in two ways:

- Press the steering wheel button for voice control and say "**Voice tutorial**".

or

- Activate the program in **MY CAR** - Go to **Settings** ➔ **Voice settings** ➔ **Voice tutorial**.

Voice training

The program **Voice training** teaches the Voice control system to recognise the driver's voice and speech pattern. It is also possible to create a second user profile - an advantage if more than one person is likely to use the car/system regularly.

- The voice training is started in **MY CAR** - Go to **Settings** ➔ **Voice settings** ➔ **Voice training** ➔ **User 1** or **User 2**.

NOTE

The menu option **Default setting** can be changed to **User 1** first after a lesson in **Voice training** has been completed.

More settings in MY CAR

- **User profile** - 2 x different user profiles can be set. Go to **Settings** ➔ **Voice settings** ➔ **Voice user setting**. Tick one of the options **Default setting**, **User 1** or **User 2**.
- **Voice volume** - Go to **Settings** ➔ **Voice settings** ➔ **Voice output volume** and select the desired level.

The system's voice volume can also be adjusted using the centre console **TUNE** knob when the system is speaking.

Language

The voice control system is under constant development and at time of printing the following languages were available:

- English (UK)
- English (US)
- French (CAN)
- French (FRA)
- Dutch
- Italian
- Spanish (EU)
- Spanish (US)
- Swedish
- German

NOTE

Voice recognition GPS navigation is only available in the countries listed here. Location names and address records have not been loaded for other languages/markets.

To change the language - Go to **Settings** ➔ **System options** ➔ **Language** and select.

Voice recognition

The languages that are included in the Voice control system have this icon in the language list.

Language dependent user profile
The voice control system only understands the language set in **System options**.

Say that user profile **User 1** is stored by a Swedish speaking driver with the system set in Swedish. If the driver changes the car language to English the user profile **User 1** will no longer be selectable because the system now only understands, and expects English speech - instead the option **Default setting** becomes active.

To improve the system's understanding of the driver's English speech the solution is to teach and store the driver's English speech in **User 2** with the system set to English (to have both variants available) or to replace the Swedish language profile in **User 1** with an English profile.

Entering and selecting options

Screen view with text field or optional text.

This navigation system uses a "daisy wheel" to enter specific information, e.g. type of facility, place/town, area/country, address, street or post code.

Activate an option

After marking a desired function/menu bar using the **thumb wheel** or the **TUNE** knob, press the **thumb wheel**/**OK** to see the next level of functions/options.

Enter as follows

The daisy wheel.

1. Mark a text field.
2. Press **OK** to call up the "daisy wheel":
3. Select the characters using the **thumb wheelTUNE** knob and enter them by pressing **thumb wheelOK**.

Numerical keyboard

Another way of entering characters is using the centre console's buttons **0**-**9**, ***** and **#**.

When **9** is pressed, a bar appears with all characters[1] under the buttons, e.g. **W**, **x**, **y**, **z** and **9**. Quick press the move/"loop" cursor through these characters.

- Stop using the cursor on the desired character to select it - the character is shown on the enter line.
- Delete/change using **EXIT**.

More options

NOTE

Muted characters cannot be selected in combination with the relevant entered characters.

In the daisy wheel's inset menu there are further options that have more characters and digits.

- **More** (More) + **OK** - alternative characters appear in the wheel.
- **123** + **OK** - digits appear in the wheel.
- **=>** + **OK** - the cursor moves to the list on the right-hand side of the screen where selections using **OK** can be made.
- **Last 5** (Last 5) + **OK** - lists the most recent searches. Mark one of them + **OK**.

[1] The character for each button may vary depending on market/state/language.

Keyboard

List of options

List that matches entered characters.

The digit **5** in the screen's top right-hand corner indicates that the list contains 5 possible options that match the entered letters **BEZ**.

No list

An empty list and the characters *** in the upper right-hand corner's digit window, mean that the available options with current entered characters are more than 1000 - when the amount is less, the current options are shown automatically.

To reduce the number of options in the list:

- Enter more characters on the text line.

DVD contents

DVDs with updated map data and related enhanced information are being developed continually. Contact a Volvo dealer for information on the latest issue.

NOTE

Map data does not have 100 percent coverage in all areas/countries.

The system's coverage area is under constant construction and updating may sometimes be necessary.

See also www.volvocars.com/navi for further information on maps etc.

Map areas

The car's map system varies depending on market. The following main maps are available:

- Australia & New Zealand (Pacific)
- Europe
- Hong Kong
- Japan
- China
- Middle East
- North America
- Russia
- South Africa
- South America
- Southeast Asia
- Turkey.

Should you need to modify the navigation system's map area - contact a Volvo dealer for information on how to proceed.

Updating the map data

When updating, DVDs are used to transfer new information to your car's navigation system. This is done using the car's regular DVD player.

NOTE

- A number of the Infotainment functions are disabled or reduced during updating.
- Before an update begins - read through the instructions first.

In the event of any questions about updating - contact a Volvo dealer.

License code

To be able to activate an update, a licence code has to be entered first. This code can be found on the Internet.

1. Open the website[1] "Activate your navigation system".
2. Enter your car's VIN number and the owner's e-mail address in the relevant entry fields, then click to close the website.
3. Note the licence code which is then displayed on screen. This licence code is also sent to the specified e-mail address.

Updating

How to update the navigation system:

1. Start the engine.
2. Insert the first disc in the DVD player and follow the instructions on screen. An update is often distributed on several discs[2] - insert the discs in the logical/numerical order.

[1] The Internet address from which the licence code is generated comes with the update DVDs.
[2] The number of discs depends on the market.

DVD disc, screen

3. The screen shows **New software found** - start the update by pressing **OK**. (Cancel by pressing **EXIT**).
4. The screen shows **Please enter license code:** - input the licence code using the numeric keypad, see page 17.
5. Follow the instructions on screen, which continuously show the progress of the update and the approximate time remaining.

- The update has to be enabled once all DVDs have been loaded. This is done by switching off the engine and waiting 5 minutes before restarting. The update is then complete and the navigation system can be used again.

NOTE

Updating of map data can in some cases also introduce new functions to the system, which are not described in this manual.

Interrupted update

If the GPS navigator needs to be used after an update has started but is not complete, it is possible to cancel the process manually. Proceed as follows:

1. If the car is in use: Park the car in a suitable location.
2. Eject the DVD.
3. Press the **START/STOP ENGINE** button - the engine stops.
4. Remove the remote key from the start lock and wait 5 minutes.
5. Restart the engine and press the centre console **NAV** button - the navigator is enabled and ready for use. Note that the navigator has not been updated yet, but has been activated using the original map data.

Continue an interrupted update

If the update is not complete when the engine is switched off, the process continues from where it left off the next time you start the engine. Proceed as follows to restart an interrupted update:

1. Perform steps 1-3 in the previous section, "Updating" - the update will continue from where it left off.
2. Follow the instructions on screen.

Care of DVD discs

Handle DVD discs with care.

When they are not in use they must be stored in their packaging. Avoid storing them in damp, high temperature, direct sunlight or dusty surroundings.

Screen care

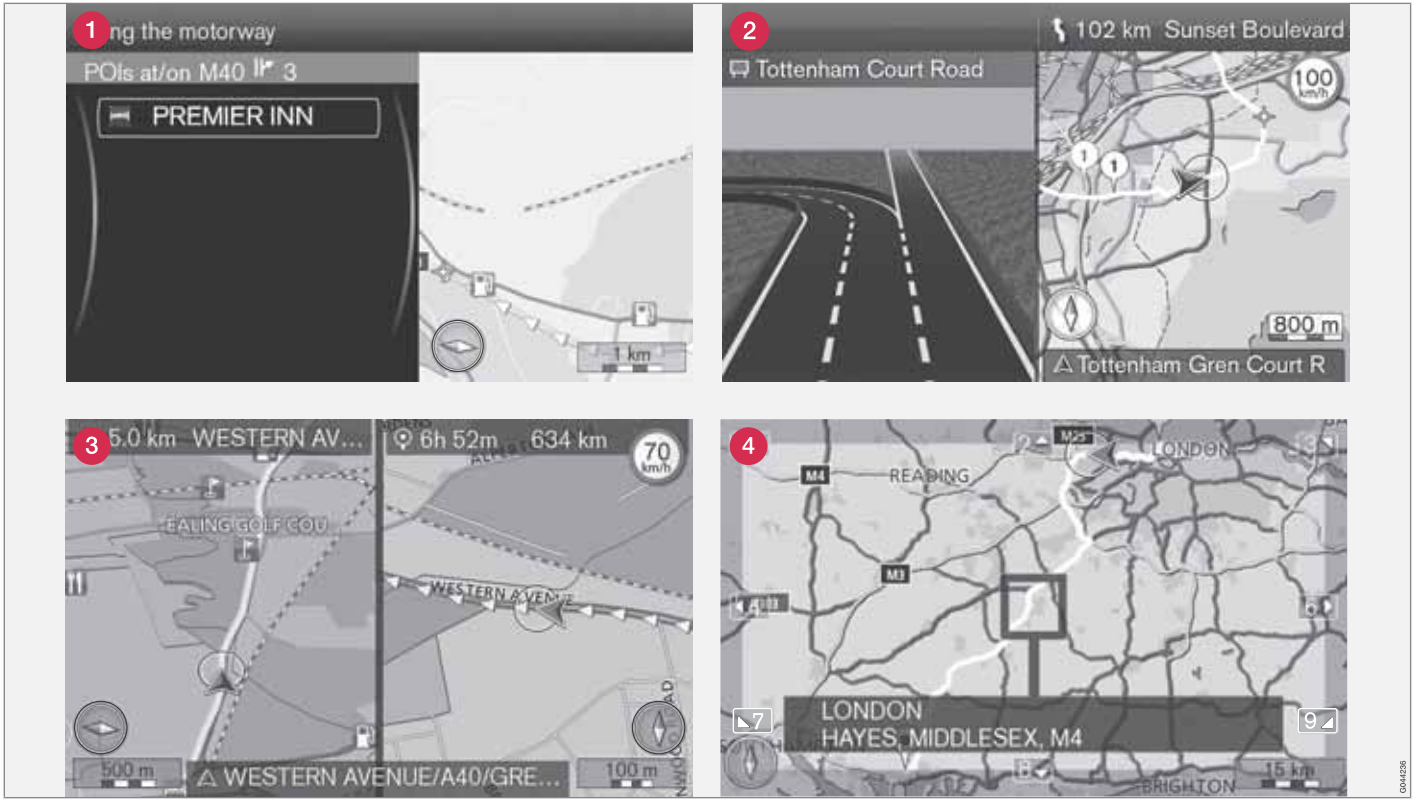
Clean the screen with a soft, lint-free rag, lightly moistened with a mild window cleaning agent.

IMPORTANT

Do not place any objects in front of the GPS navigator's display screen - the surface could then be scratched. Mobile phones can also interfere with the display screen's function.

DVD disc, screen

Maps, road types and compass



NOTE: The images are schematic - some details may vary depending on software version and market.

Map image of current position

The appearance of the screen image depends on geographic position and the settings made, e.g. map scale, facilities selected for display etc.

Explanations for the text, signs and symbols that may appear on the display are available on the front of the cover.

1. POIs along the motorway - see page 40.
2. Detailed junction map - the left-hand section of the display screen shows a detailed enlargement of the next junction[1]. The situation is always supplemented with a voice message, see next section.
3. Two maps can be selected as display mode. The screen shows the same map image but in two different scales. 2D or 3D display can also be selected - see page 51.
4. Scroll mode - see page 30.

Voice guidance

After a destination has been entered and the car approaches a junction or exit, a voice message sounds stating distance and type of the next manoeuvre. At the same time a detailed map of the junction is displayed. The voice guidance message is repeated closer to the junction.

The volume can be adjusted with the audio unit's volume button (during ongoing voice message).

To repeat a message:

- Press twice on the **OK** button.

Also see **Settings ➔ Guiding options ➔ Voice guidance** - see page 53.

NOTE

In certain cases (for example if using a Bluetooth connected mobile phone) the voice message is replaced by a ping noise.

To select male or female voice and language:

- Go to the menu system in **MY CAR** - see the car's manual. The voice volume can also be adjusted there.

Compass

The red tip of the compass needle points north and the white end points south.

Go to **Settings ➔ Map options ➔ Compass** to select a different view or so that the compass is not shown - see page 52.

[1] This function can be expanded - see page 53.

Menus

Menu system

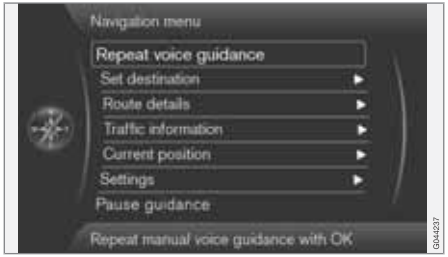
All menus and options are presented in the relevant section of the manual.

NOTE

For various reasons, it is not possible to select all menus and options that are visible on the screen:

- **Selectable** - menu lines/options are clear and white.
- **Not selectable** - menu lines/options are matt and grey.

Main menu



The main menu is at the top of the navigation system's menu tree and is the first menu to greet the user after the start-up disclaimer and map mode.

To the main menu from map mode

- Press the **OK** button.

To the main menu from another menu

- Press **NAV** and then **OK**.

or

- Press **EXIT** repeatedly until it is shown.

Back to the Main menu

Regardless of where the user is in the menu structure, the Main menu can always be accessed by pressing once or more on the **EXIT** button.

Back to the map

There is an easy way to quickly bring up the map on the screen again, no matter how deep into the menu system the user is:

- Hold in **EXIT** for a few seconds.

Scroll menu

In Scroll mode a crosshair is moved over the map image with the centre console's numerical keys.

Activating Scroll mode in normal map mode

- Press one of the numerical keys **0**-**9**.

Scrolling

- Press one of the numerical digit keys **1**-**2**-**3**-**4**-**6**-**7**-**8**-**9** - a directional arrow is shown in the margins combined with the number that will be used to scroll the map in the desired direction.

Zooming out/in

- Turn the **TUNE** knob.

Exiting from Scroll mode

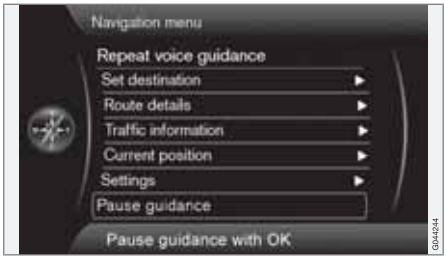
- Press **EXIT**.

Crosshair

Press **OK** once to show a menu for the point on the map, which the centre of the crosshair points to:

- **Add to itinerary** - Adds the selected point to the itinerary.
- **Facilities around** - Allows you to search/ view available facilities around the selected location.
- **Read traffic message** - Allows you to view traffic messages[1] around the selected location.
- **Information** - Shows information available about the selected location.
- **Store location** - Allows you to store the selected location in the memory. (Opens the menu **Set destination** ➔ **Stored location** ➔ **Edit** - see page 41).

Pause guidance



Pause guidance

With the cursor on **Pause guidance** + **OK** the guidance can be switched off temporarily after which neither visual nor acoustic guidance is given - at the same time the menu-bar changes to **Resume guidance**. However, the system's car symbol continues to show the car's actual position on the map.

Resuming guidance

- Select **Resume guidance** + **OK**.

[1] The service is not available for all areas/markets/states.

Menu tree in three levels

Shown here are three of the menu tree's levels. Several of the menus at level 3 have further submenus - these are described in more detail in each respective section.

Repeat voice guidance	page 29
Set destination	page 38
➔ **Address** Area: City: Street: Number: Junction: Add to itinerary Information	page 38
➔ **Facility (POI)** By name Around the car Along the route Around point on map Along the street Along the motorway MyPOI near the car MyPOI around point on map	page 39
➔ **Stored location** Add to itinerary Information Edit Sort by Delete	page 41
➔ **Previous destination** Add to itinerary Information Store Delete Delete all	page 42
➔ **Return trip** Start guidance Add to itinerary Edit itinerary	page 42
➔ **Point on map**	page 42
➔ **Latitude & Longitude**	page 43
➔ **Post code**	page 43
Route details	page 45

Menu tree in three levels

➔ **Itinerary** Start guidance Add to itinerary Edit itinerary	page 45
➔ **Avoid**	page 46
➔ **Next destination**	page 46
➔ **Route instructions**	page 47
➔ **Map of entire route**	page 47
➔ **Map of remaining route**	page 47
➔ **Start demo** or ➔ **Stop demo**	page 57
Traffic information[A]	page 60
➔ **Read traffic message**	page 62
➔ **Traffic events along route** or ➔ **Traffic events ahead**	page 64
➔ **Avoided traffic events**	page 64
Current position	page 48
Settings	page 49
➔ **Traffic information**[A] Traffic message	page 49
➔ **Route options** Route type Route proposals Customise route Route learning Reset route learning	page 49
➔ **Map options** Map colours Show dual map mode Single map settings Right map settings Left map settings Facility on map Compass Show current road name Show speed limit posting Show information fields	page 51
➔ **Guiding options** Voice guidance Voice output volume Street names in voice guidance Time of arrival format Show DIM in Other Source My POI Alert	page 53

Menu tree in three levels

➔ **System information** GPS information Map version: Map loading progress	page 53
➔**Import/Edit MyPOI**	page 54
➔ **Reset navigation settings**	page 55
➔ **Delete all user data**	page 56
Pause guidance or **Resume guidance**	page 31

A Not available in all areas/markets/states.

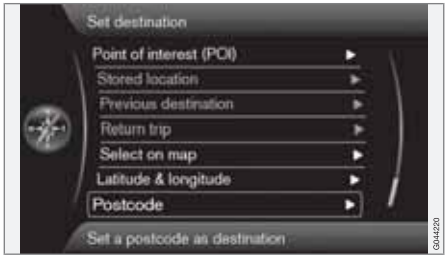
Specify a destination..... 38
Itinerary..... 45
Current position..... 48
Settings..... 49
Simulation..... 57

03

PLANNING YOUR TRIP

Specify a destination

Address



Set destination ➔ Address

There are several different ways to program a destination.

It is sufficient to simply specify a district/city and start the journey - it leads to the centre of the district/city.

If a destination's latitude and longitude are known then these can be entered.

See page 23 for information on how characters are written/entered into the system's various text fields.

NOTE

The definition of city or area can vary from country to country, and also within the same country. In some cases a metropolitan area is indicated - in others an individual suburb.

City or street

*The cursor first rests on **Street**.*

How to search and locate a destination:

1. With the previous image view on the display screen - Press **OK** to activate the preset text box.
2. Enter the street's name **Street:** with the "daisy wheel" (see page 23) and then select a desired **City:**.
3. Or **City:** + **OK** and start by entering it.

The following search criteria can be used:

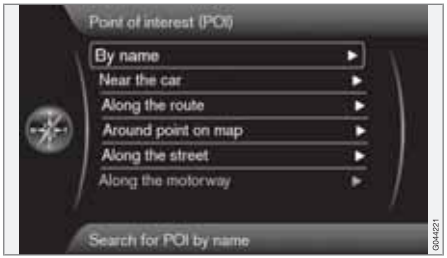
- **Area:** - Enter a country.
- **City:** - Enter a district/city.
- **Post code:** - Under **City:** the search can also be made using a post code.
- **Street:** - Enter the street address.
- **Number:** - Select one of the street's house numbers.
- **Junction:** - Select a destination based on where the two streets/roads intersect.
- **Add to itinerary** - Select + **OK** to add the address to the itinerary.
- **Information** - Select + **OK** to view information about the selected destination.

More about Information

Select an address/street + **OK** - then the following can be selected:

- **Map** - Shows where on the map the location can be found - sometimes with additional information.
- **Call**[1] - Calls the facility if a telephone number is given.
- **Related facility** - Lists the facilities associated with the current/selected facility.
- **Parking around** - Lists parking where appropriate around the selected location, with distance.

Facilities



Set destination ➔ Facility (POI)

The system contains a large number of searchable facilities which can be specified as destinations. The list of desired facilities can be shortened by specifying which facility/facilities the current search relates to:

- Select **Type:** and specify which facilities should be covered by the search (it is the same approach as described on page 52).

To select which facilities should be permanently visible on the map, go to the menu **Settings ➔ Facility on map** - see page 52.

All searches are made in the manner described in the previous section **City or street**:

1. Specify **Area:**/**City:**/**Type:**/**Name:**.
2. Then select **Add to itinerary** or **Information** + **OK**.

With name

By name

In addition to searching with main group, such as Restaurant, the company name of the facility can also be used, e.g. "Peppes Bodega". The procedure is the same as when searching with Address, see page 38.

When searching with **Name:** with e.g. "London Airport", all combinations with "London" will be shown when "Lo" is entered. The more letters you input the more specific the reply.

A search with "Lo" also produces reply alternatives such as "Restaurant **Lo**u Triva**lo**u" for

[1] Requires connected mobile phone.

Specify a destination

example, as alternatives containing several words separated by spaces are also included in the search.

NOTE

There are subcategories for restaurants in order to simplify the search.

Around the car

Around the car

Search of facility refers to the area around the car's current position.

Along the route

Along the route

Search of facility refers to the area along the set itinerary.

Around point on map

Around point on map

Search of facility is made with the Scroll function's crosshair - see page 30.

- The scroll map is shown - place the crosshair on the desired location + **OK**

Along the street

Along the street

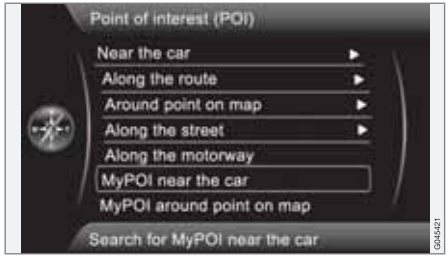
Search of facility refers to the area along a specific street/road.

Along the motorway

Along the motorway

This search lists the facilities easy to reach from the motorway, e.g. service stations along the motorway or at the exits.

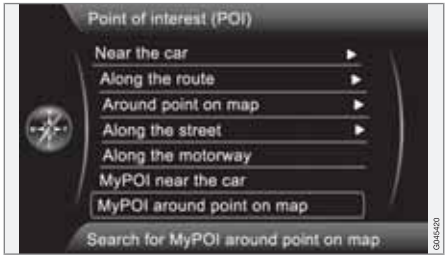
My POI around the car



MyPOI near the car

This function allows facilities that the user has entered into the system - My POI[2] - to be searched for in the area around the car's current position.

My POI around point on map



MyPOI around point on map

Facilities that the user has entered into the system - My POI[2] - are searched for here around the cursor position on the map.

The search is made with the Scroll function's crosshair - see page 30.

- The scroll map is shown - position the crosshair on the desired My POI + **OK**

Stored location

Set destination ➔ Stored location

The driver can store a large number of his/her own locations in the system. They can then be used to quickly draw up/supplement an itinerary.

Storing a location

To store a chosen location:

1. Use the Scroll function (see page 30) and select the location to be stored.
2. Press **OK** to display the "crosshair" menu.
3. Select **Store location** + **OK** - now the location is stored and is included in the list **Stored location**.

Mark a stored location in the list + **OK** and choose between the following options/headings:

Add to itinerary

Add to itinerary

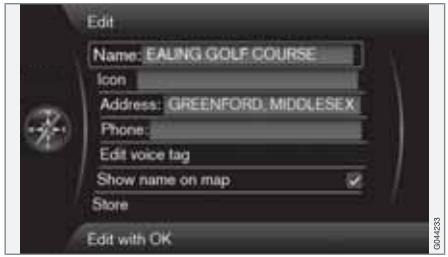
Opens the same window as for **Set destination ➔ Address ➔ Add to itinerary** - see page 45.

Information

Information

Opens the same window as for **Set destination ➔ Address ➔ Add to itinerary ➔ Information** - see page 39.

Edit



Edit

[2] For information about how individual facilities (My POI) can be added to the map database - see page 54.

Specify a destination

Opens selected "Stored location" and allows you to change/update the following:

- **Name** - Enter a name for the location.
- **Icon** - Select the symbol to represent the current location.
- **Address** - Opens the map to adjust the location's geographical position.
- **Phone:** - Enter a telephone number.
- **Edit voicetag** - Record own sound[3]. Follow the on-screen instructions.
- **Show name on map** - Untick if the location name is not to be displayed on the map.
- **Store** - Save changes with **OK**.

Sort by

Sort by

Select whether stored locations are to be sorted by:

- **Name**
- **Icon**
- **Distance**
- **Chronological**

Clear

Delete

- Delete a marked stored location.

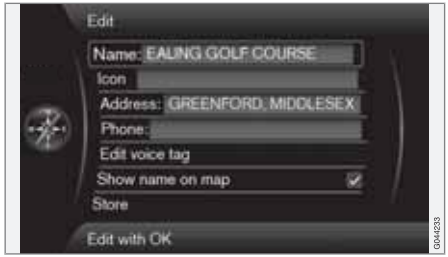
[3] Only in combination with audio system "High Performance" or "Premium".

Previous destinations

Set destination ➔ Previous destination

Previously used destinations are stored here. Mark one of them and then select between:

- **Add to itinerary**
- **Information**
- **Store** - see more about this option after the next image.
- **Delete**
- **Delete all**.



*The **Store** option presents this Edit menu.*

The **Store** menu option leads to the same Edit menu as for **Stored location ➔ Edit**.

For more information - see page 41.

- To add/change information for a destination - Select **Store** + **OK**.

Return trip

Return trip

Goes back to the itinerary starting point. Can be selected anywhere/anytime in the itinerary.

Specify a destination

Search via point on map

Set destination ➔ Point on map

Shows maps with current location pointed out by a cursor.

- Turn **TUNE** to change the scale.

1. Move the crosshair using the centre console's numerical keys: [**6 MNO**] moves to the right, [**8 TUV**] moves down, etc. - see page 30.
2. When the desired location has been found - Press **OK**.

Search via Latitude/Longitude

Set destination ➔ Latitude & Longitude

Select destination with GPS coordinates:

1. Place the cursor on the character to be changed and press **OK** - the character window becomes "active".
2. Enter a digit using the centre console's numerical keys (or turn **TUNE**) - finish with **OK** or place the cursor on the next character - the previous character window becomes "deactivated".
3. Move the cursor to the next character location to be changed and repeat.
4. With the cursor in both windows to the far right, (or turn **TUNE**) the letters for the cardinal points - **N** = **6**, **S** = **7**, **W** = **9** and **E** = **3** are entered.
5. When both coordinates are entered - select **Add to itinerary** + **OK** to add the location to the itinerary.

Add to itinerary

Add to itinerary

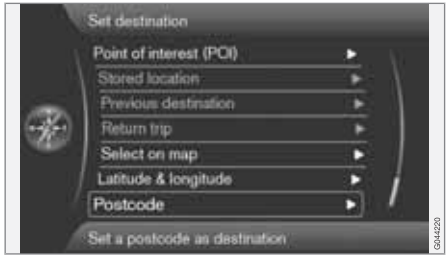
Add the location of the selected coordinates on the map to the itinerary.

Information

Information

Shows information available about the location.

Post code



Post code

Search destination by post code:

1. Select **Post code:** + **OK** to view the "daisy wheel".

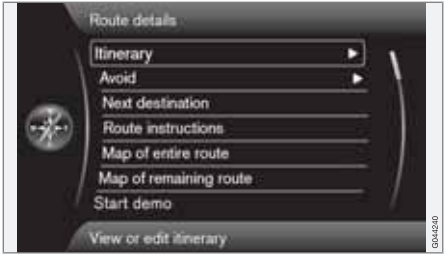
Specify a destination

2. Select characters with the **TUNE** knob and type/enter them by pressing **OK**. (Or type/enter characters using the centre console's numerical keys - see page 23).

NOTE

Presentations of post codes may differ between different markets/areas.

Menu overview



Route details

The system handles one itinerary at a time with a maximum of 8 intermediate destinations.

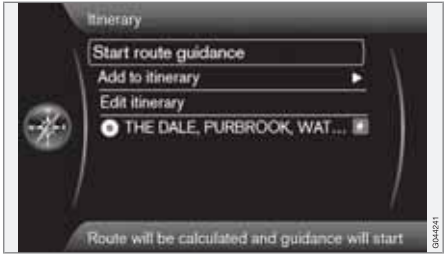
The first specified destination is the journey's Final destination - subsequent input destinations are Intermediate destinations.

NOTE

The most recently added destination is always Way point-1 - previous Way points are increased a step: "Old" Waypoint-2 becomes Waypoint-2, etc.

If a new order is required - Go to **Route details ➔ Itinerary**, **Mark a way point** and **➔ Move in list**.

Enter an itinerary



Route details ➔ Itinerary

Draw up an itinerary with several stops to avoid entering destination after destination during your trip.

One final destination with up to 8 intermediate destinations can be specified.

Start guidance

Results with "Route proposal 3" ticked.

Cursor on **Start guidance** + **OK** activates current itinerary.

If the display of 3 alternative itineraries is preset then the driver can select one of them, see the menu **Settings ➔ Route options ➔ Route proposals**, page 50.

Add to itinerary

Adds an intermediate destination. Gives the same menu as in "**Set destination**" - see page 38.

Edit itinerary

Gives the options:

Itinerary

- **Clear itinerary** - deletes the current itinerary.
- **Route options** - opens a shortcut to **Settings** ➔ **Route options** - see page 49.

Intermediate destinations in the itinerary

By selecting intermediate destination + **OK** each intermediate destination in the itinerary can be updated.

- **Information** - Full name and address, and Latitude and Longitude. In addition, a facility can be Called up and any Facilities around the location and Car parking in the vicinity can be seen.
- **Delete** - deletes the intermediate destination.
- **Move in list** - changes the order in the itinerary.
- **Adjust on map** - shows the location on the map with a crosshair. Another location there be scrolled forward and selected with **OK**, see more about the Scroll function on page 30.
- **Store** - opens the menu **Set destination** ➔ **Stored location** ➔ **Edit** - see page see page 41).

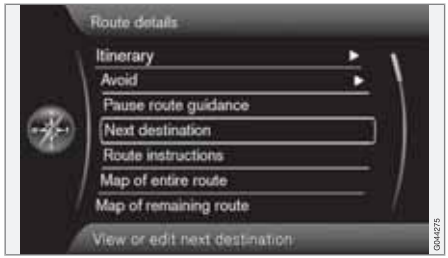
Avoid

Route details ➔ **Avoid**

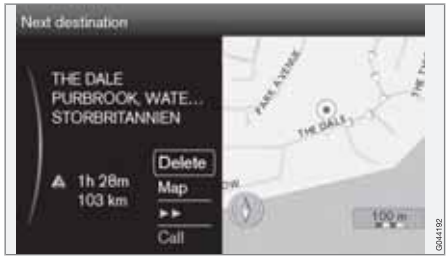
A distance in the itinerary can be deselected here. The alternative distances are calculated from the car's current position. The system then selects another route.

- Select the desired option + **OK**.

Next destination



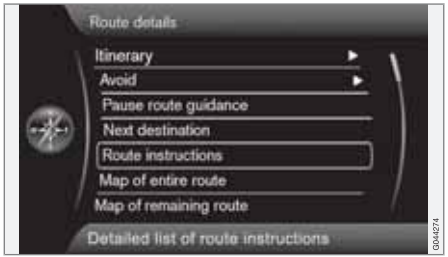
Route details ➔ **Next destination**



Shows the next intermediate destination's position on the map, name, address, estimated time of arrival and distance there. Also gives the options:

- **Delete** - deletes the current intermediate destination and shows the next one.
- **Map** - shows the position on the map in the Scroll menu, see page 30.
- **>>** - scrolls to the next intermediate destination in the itinerary, in a loop.
- **Call** - calls up the facility if possible.

Route instructions



Route details ➔ Route instructions

The itinerary's waypoints are listed here.

Map of entire route

Route details ➔ Map of entire route

The whole itinerary is shown here - scaled down to fit on the display screen.

Otherwise, the same functions as in the Scroll menu, see page 30.

Map of the remaining route

Route details ➔ Map of remaining route

Shows screen image similar to the one in the previous section, but here only with the itinerary's remaining distance from the car's current position.

Otherwise, the same functions as in the Scroll menu, see page 30.

Current position

Where am I?

Current position

Displays a map with the car's current position and information on the location, such as name and coordinates.

Traffic information

Settings ➔ Traffic information

Further settings that affect traffic information can be made, in addition to those described here - see page 64.

Traffic message

Traffic message

Certain traffic message sorting can be done here:

- **All** - all reported traffic disruptions appear.
- **Major** - indicates, for example, closed roads due to accidents or other large/long-term disruption.
- **None** - indication of traffic problem off.

NOTE

This setting does not affect the calculation of a route.

Route options

Settings ➔ Route options

Route type

Route type

Different types of itinerary can be selected here:

- **Fast** - shortest possible travel time prioritised
- **Short** - shortest possible route prioritised
- **Easy** - minimum number of junctions and similar traffic systems prioritised.

Settings

Route proposals

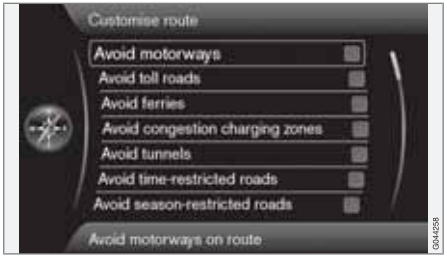
Route proposals

At the command **Start guidance** there may be several similar suitable options. Select this if the driver should be asked in case there are several options to choose from:

- Select **1** if the navigation system is to select the most suitable option.
- Select **3** if the driver is to be able to select between the maximum 3 suggestions.

See more information on page 45.

Customise route



Customise route

Here you can deselect certain traffic suggestions. Tick to avoid the following element[1] along the route:

- **Avoid motorways**
- **Avoid toll roads**
- **Avoid ferries**
- **Avoid congestion charging zones**
- **Avoid tunnels**
- **Avoid time restricted roads**
- **Avoid season restricted roads**
- **Avoid car trains**
- **Avoid unverified roads**
- **Avoid borders**

NOTE

- If an itinerary is entered when these selections are made, there may be a certain delay after an alternative has been ticked/unticked because the travel plan must be recalculated.
- If tunnels, toll roads and motorways are deselected these are avoided to the greatest possible degree and only used if there are no other suitable alternative is available.

Route learning

Route learning

The basic condition is a stored itinerary. If the driver deviates from the itinerary and take a different route to the final destination than the system recommends, the system memorizes the driver's choice.

If the same itinerary is used again 2 times and the driver repeats the route choice, the system will instead show the path that the driver selected.

Ticked window means that a route that is driven 3 times is stored as itinerary instead of the original itinerary.

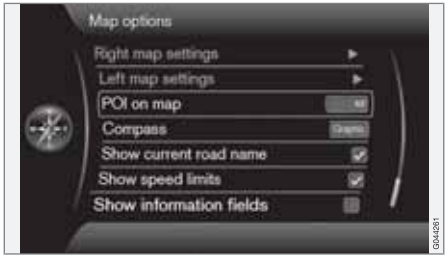
[1] Available options vary depending on market/area/state.

Reset route learning

Reset route learning

Erase driving history.

Map options



Settings ➔ Map options

Map colours

Map colours

Choose between:

- **Automatic** - a light sensor detects whether it is day or night.
- **Day** (in previous image)
- **Night**

Single map settings

Single map settings

- **Map orientation** - Select **Heading** or **North**.

North - the map always shows North at the top of the screen. The car symbol moves in the relevant direction on the screen.

Heading - the car symbol is in the centre and always points up on the screen. The map image rotates under the car symbol in relation to how the road bends.

- **Map view** - Select **2D** or **3D**.

2D - car symbol and map image seen at right angles straight from above.

3D[2] - car symbol and map image seen obliquely from the side/above.

Show dual map mode

Show dual map mode

The screen can display the map of the entire image area or the same map view in 2 different scales on each left and right half.

Select by ticking in the box by **Show dual map mode** + **OK** and **EXIT**.

[2] Only if Map orientation > Heading is selected.

Settings

Left map settings
Left map settings

- Map orientation - Select Heading or North.
- Map view - Select 2D or 3D.

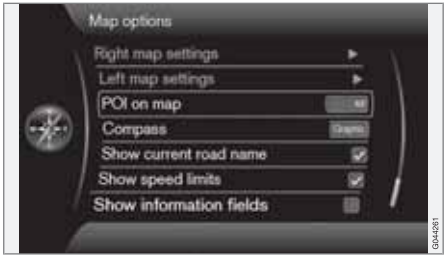
Right map settings
Right map settings

Same as for left map - see previous section.

Adjust the map scale in dual map mode
To view both maps with different map scales, they can be adjusted individually as follows:

1. Start from map view mode. Turn the **TUNE** knob to the left and right - one screen half is surrounded by a colour frame.
2. Press **OK** - selected screen half is now "active".
3. Turn the **TUNE** knob to adjust the scale.
4. Press **OK** again - done, the screen half is "deactivated".

Facility on map



Facility on map

Tick the desired option for how many facilities are to be shown on the map:

- All - all facilities appear.
- None - no facilities appear.
- Selected - A menu with all facilities appears: Tick the facilities that you want to appear on the map.

NOTE

If a POI category with many symbols on the map is deselected/switched off, more POIs from other categories can be shown/viewed on the screen.

Possible facilities are listed on page 68.

Compass
Compass

Select the type of compass you want to appear on the map image:

- Graphic
- Text - compass direction (upwards on the display screen) is indicated by a letter, e.g. N for "North".
- None.

See more information about the compass on page 29.

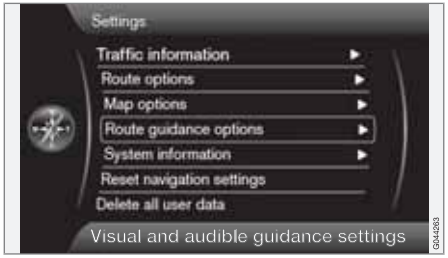
Show current road name
Cursor on Show current road name + **OK** ticks the function that shows the name of the street/road where car is located in the lower edge of the display screen.

Show speed limits
Cursor on Show speed limit posting + **OK** ticks the function that shows a traffic sign with the current speed limit in the top right-hand corner of the display screen.

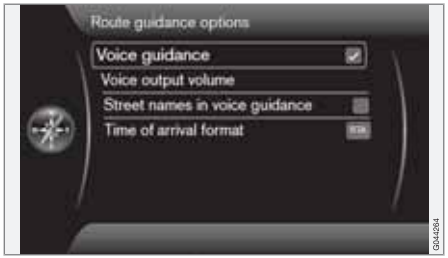
Show information fields
Cursor on Show information fields + **OK** ticks the function that shows information contained in the text files on the top and bottom of the map.

The function can also be switched on/off with the centre console's **NAV** button.

Guiding options



Settings ➔ Guiding options



Voice guidance
Voice guidance

If you want voice guidance - tick option Voice guidance. See more information on page 29.

Voice output volume
Voice output volume

The option shows a volume control on the screen that can be used to adjust the Voice guidance volume.

- Adjust using the **TUNE** knob + **OK**.

See more information on page 15.

Street names in voice guidance
Cursor on Street names in voice guidance + **OK** ticks the function that enables voice guidance information about distance and direction to be complemented with spoken names of streets and roads.

Time of arrival format
Time of arrival format

Select the time to appear on the screen:

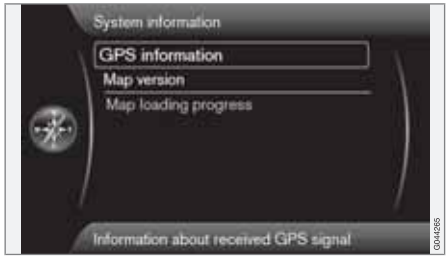
- ETA - shows the estimated arrival time
- RTA - shows the remaining time until arrival.

Show junction map in other program
The navigation system can work in the background while at the same time the display screen shows a different program source, e.g. Radio or Phone.

Cursor on Show DIM in Other Source + **OK** ticks the function that also shows detailed junction maps on half of the display screen when other sources/programs are in use - see page 29.

Alarm for My POI
Cursor on My POI Alert + **OK** ticks the function that enables a preset warning sound to alert when the car approaches a My POI position - see page 54.

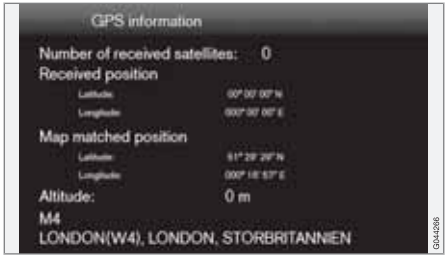
System information



Settings ➔ System information

Settings

GPS information



GPS information

The screen shows:

- **Number of received satellites:**
- **Received position**
- **Map matched position**
- **Altitude:**
- The geographic name of the current position.

Map version

Map version:

The screen shows:

- **Software version:**
- **Map version:**
- **Map market:**.

Map download status

Map loading progress

When updating the map database, the progress of the update is shown here. See more information on page 25.

Import/Edit My POI

Settings ➔ Import/Edit MyPOI

Many companies offer POI files on their Internet pages. Using this function the user can supplement Volvo's map database with facilities from other suppliers.

NOTE

- Adding POI files to the map database requires a certain amount of computer knowledge!
- File format for POI files and how the files are downloaded from the Internet are determined by the respective manufacturer/distributor. Consequently there is no standardised process for downloading the POI files from the Internet - and for this reason this owner's manual does not show an exact step-by-step description.
- If you have any questions - contact a Volvo dealer.

In order to show the principle for how to download a POI file from the Internet, a simple example follows here with the fictitious company "Department Store" and its stores:

1. Go to the company's page on the Internet and search for the location with its POI file.
2. Select a POI file with the "gpx" format and download it to the computer - if the format is not available then the POI file must be converted to the gpx format[3] after downloading.
3. Load the POI file "Department Store.gpx" onto a USB memory stick.
4. Then insert the USB memory stick into the car's USB port (under the tunnel console's armrest/hatch) and locate **Settings ➔ Import/Edit MyPOI** in the menu system.
5. Select **Import** + **OK** and follow the onscreen instructions.

When the import is complete, some settings can be made for the new My POI group "Department Store":

- the name can be changed
- the map image My POI icon can be replaced (if an icon is included in the imported POI file it automatically becomes the default)
- one of 4 sounds can be selected (to get a warning when the car approaches the My POI icon - see page 53)
- choose whether or not the My POI icon is to be shown on the map.

When all selections have been made, select **Store** + **OK** to finish, or a new POI group can be imported/edited.

All facilities added are grouped under the heading "My POI".

The map database can be complemented with 100 My POI groups or 50 000 My POI locations in GPX 1.1 format.

NOTE

In addition to all the variants of POI files that can be downloaded from the Internet, Volvo can offer supplementary files - contact your local Volvo dealer for information on possible options.

Reset navigation settings

Settings ➔ Reset navigation settings

This function resets the system to default settings.

[3] There are freeware conversion programs available for download from the Internet.

Settings

The menu option **Settings ➔ Reset navigation settings** + **OK** gives a screen image with the question **Reset all navigation settings?**, **Continue with OK Cancel with EXIT** - press **OK** to reset the settings to default settings or undo with **EXIT**.

Erase all user information

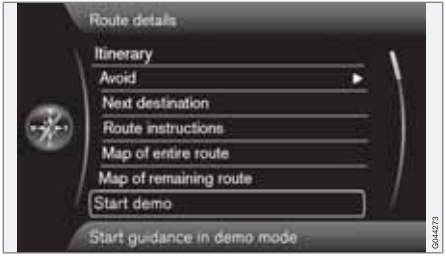
Settings ➔ Delete all user data

The menu option **Settings ➔ Delete all user data**+ **OK** gives a screen image with the question **Do you want to delete all navigation user data?**, **Continue with OK Cancel with EXIT** - press **OK** to delete or undo with **EXIT**.

The following settings are deleted with **OK**:

- all stored locations
- history for **Last 5**
- previous destinations
- route learning
- changed default settings.

Start demo



Route details ➔ Start demo

The journey specified in the itinerary is simulated here.

The system shows how the journey to the itinerary's specified destination will be carried out.

To exit the demo run:

- The previous menu option **Start demo** has switched to **Stop demo** - Select + **OK**.

NOTE

A destination must be specified for the demonstration to work.

General..... 60
Reading information..... 62
Handling traffic problems..... 64

G000000

04

TRAFFIC INFORMATION

General

Display and reception

Transmitted traffic information is always received and presented - even if no destinations are given.

How traffic information should be presented can be set and changed in **Settings**, see page 49.

The presentation of traffic information also depends on how it is transmitted.

NOTE

Traffic information is not available in all areas/countries.

The transmission range for traffic information is being increased continuously.

Traffic symbols on the map

Symbol for traffic message/problems.

When there is at least one traffic message along the itinerary route, a TMC symbol[1] appears in the map's upper left-hand corner.

The **scroll function** (see page 30) can be used to scroll through the traffic problem to see its precise position and nature.

Point on map

Traffic problems are marked with arrows, lines and frames:

	Traffic with disruption
	Traffic with disruptions in both directions
	Extent

Marking's colour

Colour of arrows, lines and frames indicates the degree of the disruption:

Black	Closed road
Red	Stationary traffic
Orange	Slow traffic
Yellow	General information

Type of traffic disruption

Shown here are examples of map symbols[2] that can mark different disruptions in the traffic:

[1] Traffic Message Channel

[2] Map symbols may vary between different markets/states.

General

Accident	
Contraflow	
Diversion	
Information	
Narrow road	
Parking information	
Congestion	
Roadwork	
Slippery road	
Other hazard	
Closed road	

Extent

Certain traffic messages also contain information on the extent of the traffic obstruction.

On all scales up to 5 km - except the traffic message symbol, a line the same colour as the direction arrow is shown along the affected route. The length of the line is corresponds to the extent (distance) of the traffic problem.

Size of area for traffic information
The scale of the map determines how great a quantity of traffic information can be shown - the larger the map area shown on the screen, the more information can be displayed.

Reading information

Message

Examples of, with arrows, selected traffic problems and their extent.

When the crosshair is placed over a traffic problem (indicated by an arrow along the road) you'll see a flashing frame with a traffic disruption symbol (e.g. slippery road) on the map.

To take advantage of the symbol's traffic information:

- Press **OK** and select **Traffic information** + **OK**.

Traffic information

Main menu.

Traffic information

Read traffic message

Read traffic message

With the cursor on **Read traffic message** + **OK** the following view is shown:

1. Scroll the crosshair to the traffic incident (coloured line/arrow parallel to the affected road section) about which information is required - a road sign with frame starts to flash out on the map.
2. Press **OK** - Following which, information like this is shown:

Detailed information on the traffic problem is linked to the symbol, and to the extent that

information is available the following is also displayed:

- duration
- restrictions on speed, vehicle width and height
- roads affected.

If there are several traffic problems in the crosshair frame, then the problem closest to the centre of the crosshair is shown first after a pressing **OK** once.

The upper section of the display screen can show e.g. "**2/5**" which means that the current information is number 2 of a total of 5 messages in the crosshair - the remaining messages can be scrolled to using short presses on **OK**.

- Return to map display with **EXIT**.

Handling traffic problems

To avoid traffic problems

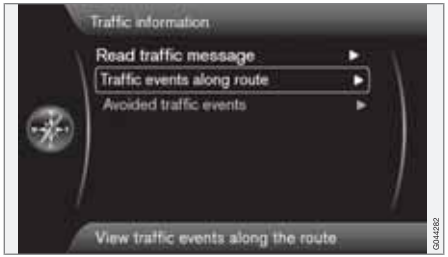
Traffic problems ahead

*Menu bar 2 **without** itinerary added.*

Traffic events ahead

Press **OK** on **Traffic events ahead** to list the current traffic problems.

Traffic problems along the route



*Menu bar 2 **with** itinerary added.*

Traffic events along route

This is the same menu bar as in the previous section, but **with** an activated itinerary - the menu bar now instead reads **Traffic events along route**. Here the system can be made to guide past the traffic disruption using a different route.

Press **OK** on the selected menu bar to list the traffic problems along the route:

List with 1 disruption on the itinerary's route.

The driver can avoid traffic problems by allowing the system to determine a different route. Proceed as follows:

1. Select/highlight the traffic obstacle to be avoided + **OK** - the traffic problem is ticked.
2. If several obstacles need to be avoided - tick these too. A maximum of 15 can be selected.
3. Then select **Calculate new route** + **OK**.

The system then calculates a route that leads past the ticked traffic disruptions.

To obtain detailed information about a listed traffic problem:

- Select/highlight a traffic problem + **# INFO** - information about the traffic problem is shown.

Avoided traffic problems

Avoided traffic events

Ticked traffic problems from the previous section are listed here.

Handling traffic problems

List with 1 editable traffic problem.

The following can be performed:

- **Clear all** - unticks all traffic problems.
- Select/highlight one of the traffic problems + **OK** - the traffic problem is unticked.
- Select/highlight one of the traffic problems + **# INFO** - detailed information with map image is shown on the display screen, see example on next page:

*Detailed information - return to the menu using **EXIT**.*

- Return to map display with **EXIT** or select **Calculate new route** + **OK** - the itinerary is adjusted with regard to the changes made.

Facilities..... 68

05

SYMBOLS ON THE MAP

Facilities

Specify which facilities are to be shown on the map or select **All** or **None** are to be shown - see page 52.

Pre-ticked facilities are shown on the map.

Settings ➔ Map options ➔ Facility on map ➔ Selected

Proceed as follows:

- Select/mark facility with the **TUNE** knob - tick/untick using **OK** and close with **EXIT**.

To avoid making the map image difficult to read, the number of facilities that can be viewed simultaneously on the screen is limited - zooming into an area provides an opportunity to view several facilities.

NOTE

- The symbol for a facility and the number of facilities may vary between different countries.
- New symbols may appear and others disappear in conjunction with updating the map data - one can scroll through all the POI symbols for the relevant map system under **Settings** in the menu system.

Shown here are examples of symbols for different facilities - they are grouped here according to their function in society:

	Petrol station
	Petrol station with CNG (biogas)
	Petrol station with LPG
	Car wash
	Car workshop
	Car hire
	Motorsport facility
	Volvo dealer
P	Parking
P	Parking garage
	Parking, large vehicles
	Tourist information
	Historical monument
	Tourist attraction
	Ice skating
	Sport facility
	Exercise facility
	Ski facility
	Cinema
	Amusement park

Facilities

	Animal park
	Opera Theatre
	Bar Nightclub
	Restaurant
	Restaurant
	Restaurant, Chinese
	Restaurant, seafood
	Fastfood
	Coffee shop
	Shopping Centre
	Dry cleaners
	Kiosk
	Hairdresser

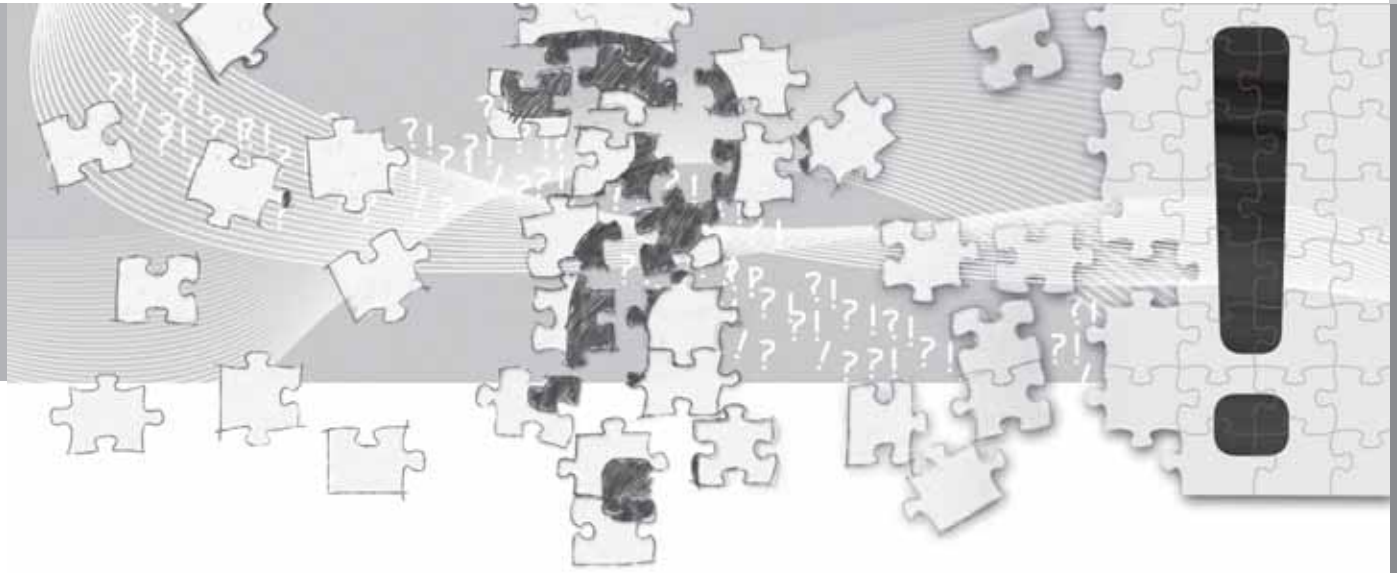
	Rest area
	Camp site
	Hotel
	Conference facility Exhibition grounds
	Train station Commuter railway station
	Airport
	Bus station
	Ferry
	Marina Marina
	Civic building Authority
	University University

	City centre City centre
	Police station
	Fire station
	Library
	Hospital
	Pharmacy
	Bank ATM
	Post office
	Kindergatan School

Frequently asked questions..... 72
EULA - License agreement..... 74
Copyright..... 76

06

QUESTIONS AND ANSWERS



Frequently asked questions

The position of the car on the map is wrong
The Navigation system shows the position of the car to an accuracy of about 20 metres.

There is a greater chance of error when driving on roads lying parallel to another road, on winding roads, on roads on several levels and after driving a long distance without making any distinctive turns.

High mountains, buildings, tunnels, viaducts, over/underpasses etc. also have a negative affect on the reception of GPS signals, which means that accuracy in calculating the position of the car may decrease.

The system does not always calculate the fastest/shortest route
When calculating a route outline, distance, width of road, type of road, number of right or left turns, roundabouts etc. are all taken into account in order to produce the best theoretical route. A more efficient selection of route may be possible based on experience and knowledge of the area.

The system uses toll roads, motorways and ferries even though I chose to avoid them
For technical reasons, the system can only use major roads when calculating a route outline extending over a long distance.

If you selected to avoid toll roads and motorways, then they are avoided to the greatest possible extent and are only used if there is no other reasonable alternative available.

The position of the car on the map is incorrect after transportation
If the car is transported, for example by ferry or train, or in such a way as to impede the reception of GPS signals, it can take up to 5 minutes before the position of the car is correctly calculated.

The position of the car on the map is incorrect after the car battery has been disconnected
If power has been cut from the GPS antenna, it can take more than 5 minutes for the GPS signals to be received correctly and the position of the car to be calculated.

The car symbol on screen behaves erratically after a tyre change

In addition to the GPS receiver, the car's speed sensor and a gyro assist in calculating the current position and direction of travel of the car. After fitting the spare wheel or changing between summer and winter tyres the system needs to "learn" the size of the new wheels.

In order for the system to work optimally it is recommended to turn the steering wheel to full lock a few times while driving, in a suitable location.

The map image does not correspond with the real situation
Factors such as the constant expansion and rebuilding of the road network, new traffic regulations constantly being introduced etc. mean that the map database is not always complete.

Continuous development and updating of map data is underway - a Volvo dealer can provide more information.

See also www.volvocars.com/navi for further information on maps etc.

The scale of the map sometimes changes
There is no detailed map information in certain areas. The system then automatically changes the degree of magnification.

The expected menu option is missing
Check the settings that have been made. Select **Reset navigation settings** to restore the original settings.

If this does not help, select **Delete all user data**.

Frequently asked questions

The car symbol on screen jumps forwards or spins
The system may need a few seconds to sense the position and movement of the car before driving off.

Switch off both the system and the engine. Start again, but remain stationary for a while before starting to drive.

I shall go on a long trip but do not want specify a particular route outline to the cities I plan to travel through - How do I most simply create an itinerary?
Specify the destination directly on the map using the hairline cross. The system automatically guides you to the final destination even though you are driving beside the intermediate destinations.

My map information is not up-to-date
Contact your nearest Volvo Dealer regarding the updating of map data.

See also www.volvocars.com/navi

How can I easily check which map version is used?
See **Settings ➔ System information ➔ Map version:** for information on version and geographic area covered.

EULA - License agreement

Notice to the user

PLEASE READ THIS END USER LICENSE AGREEMENT CAREFULLY BEFORE USING THE NAVTEQ DATABASE.

THIS IS A LICENSE AGREEMENT - AND NOT AN AGREEMENT FOR SALE – BETWEEN YOU AND NAVTEQ EUROPE B.V. FOR YOUR COPY OF THE NAVTEQ NAVIGABLE MAP DATABASE, INCLUDING ASSOCIATED COMPUTER SOFTWARE, MEDIA AND EXPLANATORY PRINTED DOCUMENTATION PUBLISHED BY NAVTEQ (JOINTLY "THE DATABASE"). BY USING THE DATABASE, YOU ACCEPT AND AGREE TO ALL TERMS AND CONDITIONS OF THIS END USER LICENSE AGREEMENT ("AGREEMENT"). IF YOU DO NOT AGREE TO THE TERMS OF THIS AGREEMENT, PROMPTLY RETURN THE DATABASE, ALONG WITH ALL OTHER ACCOMPANYING ITEMS, TO YOUR SUPPLIER FOR A REFUND.

OWNERSHIP

The Database and the copyrights and intellectual property or neighbouring rights therein are owned by NAVTEQ or its licensors. Ownership of the media on which the Database is contained is retained by NAVTEQ and/or your supplier until after you have paid in full any amounts due to NAVTEQ and/or your supplier pursuant to this Agreement or similar agreement(s) under which goods are provided to you.

LICENSE GRANT

NAVTEQ grants you a non-exclusive license to use the Database for your personal use or, if applicable, for use in your business' internal operations. This license does not include the right to grant sub-licenses.

LIMITATIONS ON USE

The Database is restricted for use in the specific system for which it was created. Except to the extent explicitly permitted by mandatory laws (e.g. national laws based on the European Software Directive (91/250) and the Database Directive (96/9)), you may not extract or reutilise substantial parts of the contents of the Database nor reproduce, copy, modify, adapt, translate, disassemble, decompile, reverse engineer any portion of the Database. If you wish to obtain interoperability information as meant in (the national laws based on) the European Software Directive, you shall grant NAVTEQ reasonable opportunity to provide said information on reasonable terms, including costs, to be determined by NAVTEQ.

TRANSFER OF LICENSE

You may not transfer the Database to third parties, except when installed in the system for which it was created or when you do not retain any copy of the Database, and provided that the transferee agrees to all terms and conditions of this Agreement and confirms this in writing to NAVTEQ. Multi-disc sets may only be transferred or sold as a complete set as provided by NAVTEQ and not as subset thereof.

LIMITED WARRANTY

NAVTEQ warrants that, subject to the warnings set out below, for a period of 12 months after acquisition of your copy of the Database, it will perform substantially in accordance with NAVTEQ's Criteria for Accuracy and Completeness existing on the date you acquired the Database; these criteria are available from NAVTEQ at your request. If the Database does not perform in accordance with this limited warranty, NAVTEQ will use reasonable efforts to repair or replace your non-conforming copy of the Database. If these efforts do not lead to performance of the Database in accordance with the warranties set out herein, you will have the option to either receive a reasonable refund of the price you paid for the Database or to rescind this Agreement. This shall be NAVTEQ's entire liability and your sole remedy against NAVTEQ. Except as expressly provided in this section, NAVTEQ does not warrant nor make any representations regarding the use of results of the use of the Database in terms of its correctness, accuracy, reliability, or otherwise. NAVTEQ does not warrant that the Database is or will be error free. No oral or written information or advice provided by NAVTEQ, your supplier or any other person shall

create a warranty or in any way increase the scope of the limited warranty described above. The limited warranty set forth in this Agreement does not affect or prejudice any statutory legal rights that you may have under the legal warranty against hidden defects.

If you did not acquire the Database from NAVTEQ directly, you may have statutory rights against the person from whom you have acquired the Database in addition to the rights granted by NAVTEQ hereunder according to the law of your jurisdiction. The above warranty of NAVTEQ shall not affect such statutory rights and you may assert such rights in addition to the warranty rights granted herein.

LIMITATION OF LIABILITY

The price of the Database does not include any consideration for assumption of risk of consequential, indirect or unlimited direct damages which may arise in connection with your use of the Database. Accordingly, in no event shall NAVTEQ be liable for any consequential or indirect damages, including without limitation, loss of revenue, data, or use, incurred by you or any third party arising out of your use of the Database, whether in an action in contract or tort or based on a warranty, even if NAVTEQ has been advised of the possibility of such damages. In any event NAVTEQ's liability for direct damages is limited to the price of your copy of the Database.

THE LIMITED WARRANTY AND LIMITATION OF LIABILITY, SET FORTH IN THIS AGREEMENT, DO NOT AFFECT OR PREJUDICE YOUR STATUTORY RIGHTS WHERE YOU HAVE ACQUIRED THE DATABASE OTHERWISE THAN IN THE COURSE OF A BUSINESS.

WARNINGS

The Database may contain inaccurate or incomplete information due to the passage of time, changing circumstances, sources used and the nature of collecting comprehensive geographic data, any of which may lead to incorrect results. The Database does not include or reflect information on - inter alia - neighbourhood safety; law enforcement; emergency assistance; construction work; road or lane closures; vehicle or speed restrictions; road slope or grade; bridge height, weight or other limits; road or traffic conditions; special events; traffic congestion; or travel time.

GOVERNING LAW

This Agreement shall be governed by the laws of the jurisdiction, in which you reside at the date of acquisition of the Database. Should you at that moment reside outside the European Union or Switzerland, the law of the jurisdiction within the European Union or Switzerland where you acquired the Database shall apply. In all other cases, or if the jurisdiction where you acquired the Database cannot be defined, the laws of the Netherlands shall apply. The courts competent at your place of residence at the time you acquired the Database shall have jurisdiction over any dispute arising out of, or relating to this Agreement, without prejudice to NAVTEQ's right to bring claims at your then current place of residence.

Copyright

Austria
© Bundesamt für Eich- und Vermessungswesen.

France
Source Géoroute® IGN France & BD Carto® IGN France.

Germany
Die Grundlagendaten wurden mit Genehmigung der zuständigen Behörden entnommen.

Great Britain
© Based upon Crown Copyright material.

Greece
Copyright Geomatics Ltd.

Hungary
Copyright © 2003; Top-Map Ltd.

Italy
La Banca Dati Italiana è stata prodotta usando quale riferimento anche cartografia numerica ed al tratto prodotta e fornita dalla Regione Toscana.

Norway
Copyright © 2000; Norwegian Mapping Authority.

Poland
© EuroGeographics.

Portugal
Source: IgeoE - Portugal.

Spain
Información geográfica propiedad del CNIG.

Sweden
Based upon electronic data © National Land Survey Sweden.

Switzerland
Topografische Grundlage: © Bundesamt für Landestopographie.

NOTE

Australia is not covered by this Agreement, see special information.

© 2005 - 2012 NAVTEQ All rights reserved.

Denso
Hereby, DENSO CORPORATION declares that this DN-NS-020 is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.

A

About
information on the map disc..... 54
Acoustic signal
Stored location..... 41
Activating the system..... 8
Additional information..... 18
Address
enter..... 38
Antenna
location..... 15
Arrow keys..... 17
Audible signal
stored location..... 41
Auto. notification..... 49
Avoid
ferries..... 50
motorways..... 50
toll roads..... 50
Avoid stretch of road..... 46

B

Back to starting point..... 42
Basic functions..... 17
Basic settings..... 13
Battery
remote control..... 17
Brackets with English text..... 12

C

Change scale of traffic information..... 61
Changes in the manual..... 12
Compass..... 29
Component positioning, overview..... 14
Crosshair..... 30
Current position on the map..... 48

D

Delete itinerary..... 46
Demo..... 57
Destination
set..... 38
Distance unit
ETA..... 53
RTA..... 53
DVD disc
care..... 26
changing..... 25

E

English text in brackets..... 12
Enter an itinerary..... 45
Erase user information..... 56
ETA, distance unit..... 53
Extent..... 61

F

Facilities
Symbols..... 68
Facilities as destination..... 39
Factory settings..... 13

Functions
keypad and remote control..... 17

G

GPS information..... 54
GPS receiver..... 15
Guidance..... 45
quick guide..... 8
Guiding options..... 49

I

IR receiver and remote control..... 17

J

Junction..... 38

K

Keypad..... 17
location..... 15, 16

L

Licence code..... 25

M

Main unit
location..... 15
Map
point on..... 43
Map areas..... 25
Map colour..... 51
Map image..... 28
Map mode..... 13
Map options..... 51
Map scroll..... 30
Map version..... 54
Map view..... 51
Menus/Functions..... 32
My POI..... 40, 41, 53, 54

N

Next destination in itinerary..... 46

O

On/Off..... 13
Overview component location..... 14

P

Pause route guidance..... 31
POIs on the map..... 52
Post code
search..... 43

R

Read traffic message..... 49, 62
Reset navigation settings..... 55
Return to default settings..... 55
Return trip..... 42
Route options..... 50, 53

RTA, distance unit..... 53

S

Save a location..... 41
Saved destinations..... 42
Scale
change..... 43, 61
Scrolling..... 30
Search
post code..... 43
via point on map..... 43
Search paths described in the manual..... 12
Set destination..... 38
Simulation..... 57
Speakers
location..... 16
Start guidance..... 45
Store a location..... 41
Stored location
Acoustic signal..... 41
add information..... 41
Stored locations..... 41
Symbols
facilities..... 68
System options..... 53
System settings..... 13

T

TMC receiver..... 15
Traffic-info. selection..... 49
Traffic information..... 15, 49
transmission..... 60
Traffic symbols on the map..... 60
Transport of car..... 72
TV screen
care..... 26

V

Voice commands (Voice control)..... 19
Voice control..... 19
Voice guidance..... 29
Volume control for voice messages..... 15

W

Waypoint..... 46

Volvo. for life

VOLVO

Volvo Car Corporation TP 14368 (English) AT 1146, Printed in Sweden, Göteborg 2011, Copyright © 2000-2011 Volvo Car Corporation