

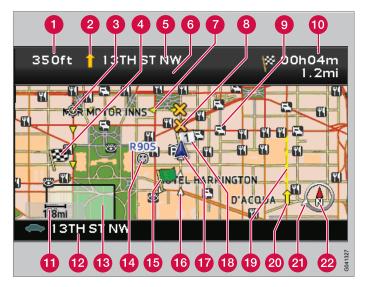
Volvo. for life





OPERATING MANUAL

VOLVO Volvo Car Corporation TP 11202 USA & Canada, AT 0920 Printed in Sweden, Göteborg 2009, Copyright © 2000-2009 Volvo Car Corporation



Types of roads	Color
Freeways	Green
Main roads	Red
Secondary main roads	Brown
Normal roads	Dark gray
Local roads	Dark green

- Text and symbols on the screen
- 1 Distance to the next guidance point
- 2 Direction to take at next guidance point
- 8 Next guidance point
- 4 Final destination
- 6 Name of next street or road
- 6 Road sign information for next street or road
- Route
- 8 Time restricted road/street
- 9 Symbol for a Point of Interest POI (Hotel)
- 10 Remaining distance and time to destination
- 🚹 Map scale
- Current road
- Selected area to be avoided
- 1 Stored location
- (5) Starting point
- Completed section of the route
- The vehicle's current location
- 18 Intermediate destination
- (Extent of street/road with traffic problem (not available in all markets)
- 20 Traffic information (not available in all markets)
- 2 Direction to destination
- 2 Compass

# **VOLVO NAVIGATION SYSTEM (VNS) WITH RTT**

VNS is a navigation system developed by Volvo, which is designed to help guide you to the destination of your choice and provide information along the way.

RTT<sup>1</sup> (Real Time Traffic) is an information system developed by Volvo, which can detect roads/streets with traffic disruptions and make it possible to select an alternative route past the problem area.

The system includes features that enable you to set itineraries, search for certain types of points of interest along your route, store special destinations, obtain traffic informaton en route, etc.

The system indicates the vehicle's current location, and shows part or all of the route to your destination, depending on the settings you have made. If at any time you should decide to deviate from the route originally set by the system, a new route to the destination will automatically be calculated.

By enabling you to reach your destination quickly and by the most direct route, Volvo's navigation system also helps contribute to improving the environment.

#### NAVTEQ DATABASE End-User License Agreement

See the information on page 72.

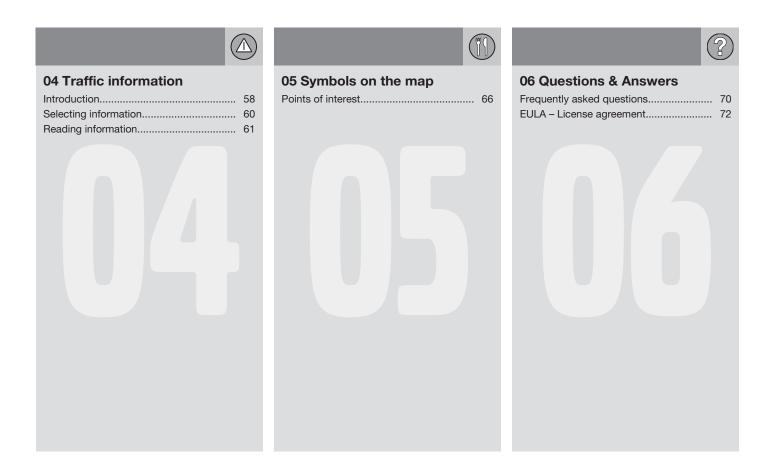
<sup>1</sup> Option. Not available in all markets.



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Getting started	navigation systemThis manual	Setting a destination

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# D1 Quick guide

#### Getting started

01

#### Navigation control/remote control

The navigation control is located on the right rear side of the steering wheel, see page 24. The buttons on the remote control have the same function as the navigation control on the steering wheel.

- Navigation control Use this (or the arrow keys on the remote control) to navigate up, down, left, or right among the various menu selections and alternatives, and to move the cross hairs on the map.
- ENTER Confirms or activates a selection.
- **BACK** Press this key to go to the previous menu or to undo a selection.

## (i) NOTE

For reasons of traffic safety, only the menu alternatives **Next destination**, **Current position** and **Shut down** are available while the vehicle is in motion.

Certain functions in the Shortcut menu are also available while the vehicle is in motion, see page 32.

#### Activating the system

The remote key must be inserted in the ignition slot<sup>1</sup>(see the vehicle's Owner's Manual).

- 1. Press the remote key into the ignition slot.
- 2. Press briefly on the **START/STOP ENGINE** button.
- 3. If the screen does not deploy, press **BACK** or **ENTER**.

#### Starting the system

Due to road conditions, some recommendations may not be accurate. Obey all traffic laws and use your own good judgment when driving. Always concentrate on your driving by keeping your eyes and mind on the road. For map update information refer to: www.volvocars.com/navi -Press ENTER to confirm your agreement.

Press BACK to decline and exit the system.

The system initially displays a text on the screen that must be confirmed by pressing **ENTER**.

It may take the system several seconds to determine the vehicle's location after the key has been inserted into the ignition slot. When this has been done, the vehicle's position will be indicated by a blue triangle.

## (i) NOTE

The system can be used even when the engine is not running. To help avoid battery drain, the system should be turned off when it is not in use.

#### **Guidance to a street address**

Set destination	Press <b>BACK</b> to display the main menu.
	Use the <b>navigation</b> <b>control</b> to go to <b>Set</b> <b>destination</b> .
	Press ENTER.
Address	Go to <b>Address</b> and press <b>ENTER</b> .

<sup>1</sup> On models with the optional Keyless Drive, press the START/STOP ENGINE button one time, so that the ignition system is at least in "Accessory" mode (mode I).

# 01 Quick guide

					Getting started
State/City	Go to <b>State</b> or <b>City</b> and press <b>ENTER</b> . Select letters in the list to specify the state and city in which the street address is located. Press <b>ENTER</b> .	<ul> <li>Navigation system options</li> <li>The navigation system contains options for adjusting map, guidance, and system settings. see page 51 for detailed information.</li> <li>Demo mode (simulated guidance)</li> <li>The system has a Demonstration Mode that can be used as a learning tool. see page 54.</li> </ul>		State/City	Go to State or City and press ENTER. Select letters in the list to specify the State or City where the point of interest is located. Press ENTER.
Street	Go to Street and press ENTER.	Guidance to Points	s of Interest (POI)	Туре	Go to Type.
Street numbers	Go to Numbers and press ENTER	mbers and Set destination Press play the play th	Press <b>BACK</b> to display the main menu. Use the <b>navigation</b>		Select the type of POI (service station, restaurant, Volvo
Set	Go to Set and press ENTER.		control to go to Set destination and		retailer, etc.). Press <b>ENTER</b> .
Start guidance	Go to Start guid-		press ENTER.	Name	Go to Name.
etai e garaarroo	ance and press ENTER.	POI	Go to <b>POI</b> and press <b>ENTER</b> .		Select <b>POI</b> and press <b>ENTER</b> .
,	alculate the route and ied destination. You will	POI by name	Select POI by name and press	Set	Go to Set and press ENTER.
be provided with guid egarding intersection	ance and instructions s, etc.		ENTER.	Start guidance	Go to Start guid- ance and press ENTER.
	ed route during the trip, atically calculate a new			<b>T</b> he second sec	coloulate the route and

route to the destination.

The system will now calculate the route and distance to the specified destination. You will

# **01** Quick guide

## Getting started

01

be provided with guidance and instructions regarding intersections, etc.

If you leave the planned route during the trip, the system will automatically calculate a new route to the destination.



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# GETTING TO KNOW YOUR NAVIGATION SYSTEM



## This manual

#### Using this manual

The manual is divided into chapters describing the various features and functions of the navigation system.

See Planning your trip on page 36 for more detailed descriptions and selections of settings for specifying a destination.

#### Menu selections/Paths

Menu selections in this manual are listed in gray text, for example:

Set destination → Address → Street

#### Quick guide

A quick guide is available to help you get started with the basic functions as quickly as possible, see page 8.

#### Changes in the manual

The specifications, design features, and illustrations in this manual are not binding. We reserve the right to make modifications without prior notice.

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## Before you begin

(-E)

02

#### **General information**

The VNS system can be used even if a destination has not be specified.

The map, with the vehicle's current location, will be displayed on the screen, with the vehicle marked as a blue triangle.

#### 

- Always use good judgment when following navigation system guidance, and do not follow guidance that seems contrary to your own best judgment.
- Never use the navigation system or any other feature in your vehicle in a way that distracts you from the task of driving safely. Distraction can lead to a serious accident.
- Set and make changes in your navigation system only with the vehicle parked.
- Be aware of the current traffic situation.
- Always comply with relevant traffic regulations.

#### Map mode

When the system starts, text is displayed on the screen that must be confirmed by pressing **ENTER.** 

The system then enters Map mode and the current map view is displayed.

- Press **ENTER** to access the Shortcut menu, see page 30.
- Press **BACK** to access the Main menu, see page 28.
- 1. Use the **navigation control** to activate Map scroll mode, for example, to see sections of the map that are outside of the screen.
- Press ENTER to activate the Map scroll menu. See also Scroll menu see page 28.

#### **Settings**

The system contains default settings, but it starts with the settings that were most recently made.

If a setting has been changed and then returned to the factory setting, only the setting in question is affected.

There is no global function to return all settings to the factory defaults.

#### On/Off

#### On

- The remote key must be inserted in the ignition slot<sup>1</sup> in order to use the system (see the vehicle's Owner's Manual).
- 2. Press ENTER or BACK to activate the system.
- 3. The screen is activated automatically.

It may take several seconds for the system to determine the vehicle's location and direction.

#### Off

The system is automatically shut off when the key is removed from the ignition slot (or when the driver's door is opened on vehicles with the optional keyless drive).

The system can also be turned off manually so that it does not start automatically the next time the remote key is inserted in the ignition slot.

- 1. Press BACK to go to the Main menu.
- 2. Go to Shut down with the navigation control.
- 3. Press ENTER.
- 4. The screen will retract automatically.

<sup>1</sup> On models with the optional Keyless Drive, press the START button one time, so that the ignition system is at least in "Accessory" mode (mode I).

## Before you begin

**i** NOTE

#### 02

The system can be used even when the engine is not running. To help avoid battery drain, the system should be turned off when it is not in use.

#### Demo (simulated guidance)

For an overview of how guidance functions, specify a destination.

If the vehicle is at a standstill, guidance can be simulated to the specified destination, see **Start demo** on page 54.



## **DVDs** and the screen

#### **Contents of DVDs**

Each set of DVDs contains at least two discs. Each disc contains information covering a greater part of the North American network of roads. However, each disc contains detailed information about addresses, points of interest, etc., in a specific geographic area.

During a trip, a message will be displayed when it is time to switch DVDs. If the DVD containing detailed information about the area in which you are currently driving is not inserted, only general information about the road network will be available.

The maps and data on the DVDs are static. They will not automatically update to reflect real-life changes to road and traffic patterns. Updated DVDs are produced periodically. Please contact your Volvo retailer for more information about availability.

#### **Changing DVDs**

When changing DVDs, the ignition must be on during the entire procedure (see the vehicle's Owner's Manual).

- 1. Turn on the navigation system.
- 2. Remove the upholstered panel that conceals the main unit under the floor on the left side of the trunk or cargo compartment.

- 3. Hook a thumb behind the upper edge and pull it out (see the overview illustrations on page 18 and onwards).
- 4. Release the catch on front of the main unit.
- 5. Press the **EJECT** button and remove the DVD.
- 6. Insert the new map DVD.
- 7. Lock the catch.

In certain cases, new functions may be added to the system when the new DVD is inserted. If the DVD also contains new system software, you will be prompted to accept a system update.

#### Confirm by selecting YES.

The text Preparing to load System Software. Please wait... will then be displayed.

The update takes approximately 15 minutes. The VNS start screen will be displayed when updating is completed and the navigation system is ready for use.

## **i** NOTE

The screen may retract or go blank while an update is underway.

#### **DVD** care

- When changing discs, make sure that they are kept free of oil, grease and other impurities.
- The discs must not be exposed to moisture.
- The discs must be kept in their packaging when not in use.
- Avoid storing discs in excessive heat, direct sunlight, or in a dusty environment.

#### Screen care

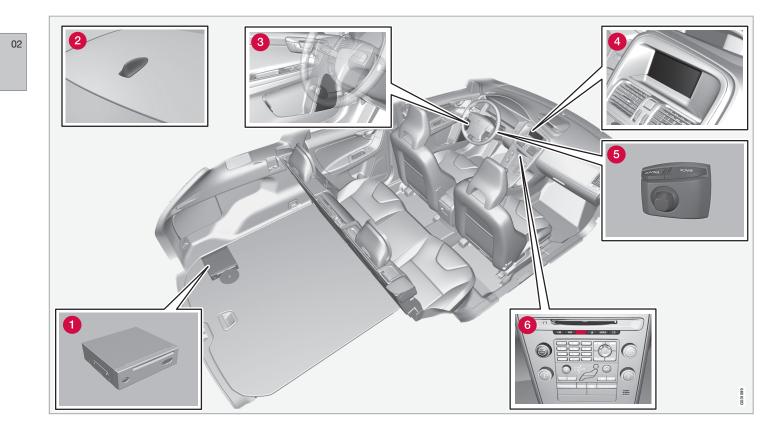
Clean the display screen with a soft, non-static cloth or a moist paper towel and a mild window cleaning agent.

Never use petroleum based solvents or abrasive substances when cleaning the screen.

#### 

Do not place any objects in front of the navigation system's screen. This could scratch its surface. Cell phones could also interfere with the screen's function. (-==)

# XC60 system overview





#### XC60 system overview

#### **1** Main VNS unit and DVD drive

The main unit and DVD drive is located on the left side of the cargo area, and includes the following functions:

- Determining the vehicle's location.
- Calculating a route to the selected destination.
- Voice guidance.
- Processes traffic information.

## **i** NOTE

- The EJECT button is located to the left and the locking catch is on the right side of the main unit.
- The DVD drive is intended for playing Volvo's map DVDs only.

#### Traffic information – TMC (option)

TMC is a standardized code system for transmitting traffic information. The receiver automatically tunes to the correct frequency and reception is handled by the audio system's FM antenna.

#### i) NOTE

TMC is not available in all areas/countries. The area covered by the system is being steadily expanded, which makes occasional updates necessary, see page 17

# **2** Global Positioning System (GPS) antenna

The antenna is integrated into the roof module.

## (i) NOTE

The GPS receiver is integrated into the main unit. Using signals from the Global Positioning System, the vehicle's speedometer, and a gyroscopic sensor, it calculates the vehicle's current location and direction.

This also helps the system calculate direction and location if the GPS signal is temporarily interrupted, such as when driving through a tunnel.

#### **3** Speakers

Sound from the navigation system comes from the vehicle's audio system front speakers.

#### 4 Screen

The screen displays the maps and provides detailed information about intersections, distances, etc.

For information about caring for the screen, see page 17.

#### **6** Navigation control

The navigation control is located in the right rear side of the steering wheel. Use it to move among menu alternatives, to confirm selections or to go back in the menu system.

For additional information, see page 24.

# **6** Volume control and infrared (IR) receiver

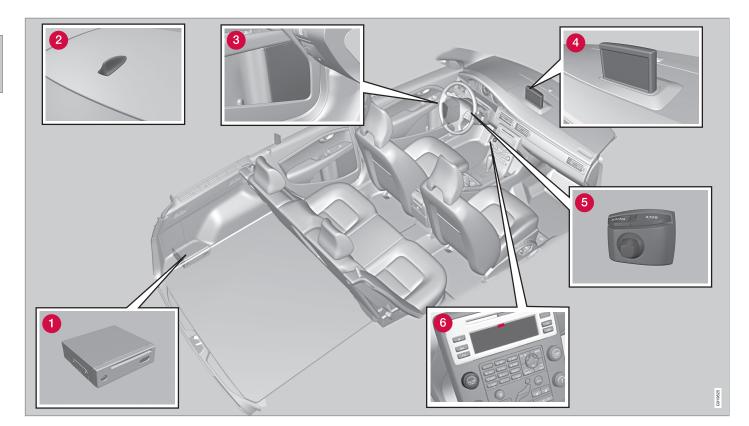
Use the vehicle's audio system volume control during voice guidance to raise or lower the volume. The volume can also be adjusted in the menu system.

The IR receiver for the VNS remote control is located above the numeric keypad on the center instrument panel.

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# V70/XC70 system overview





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#### V70/XC70 system overview

#### **1** Main VNS unit and DVD drive

The main unit and DVD drive is located on the left side of the cargo area, and includes the following functions:

- Determining the vehicle's location.
- Calculating a route to the selected destination.
- Voice guidance.
- Processes traffic information.

## **i** NOTE

- The EJECT button is located to the left and the locking catch is on the right side of the main unit.
- The DVD drive is intended for playing Volvo's map DVDs only.

#### Traffic information – TMC (option)

TMC is a standardized code system for transmitting traffic information. The receiver automatically tunes to the correct frequency and reception is handled by the audio system's FM antenna.

#### i) NOTE

TMC is not available in all areas/countries. The area covered by the system is being steadily expanded, which makes occasional updates necessary, see page 17

# **2** Global Positioning System (GPS) antenna

The antenna is integrated into the roof module.

## (i) NOTE

The GPS receiver is integrated into the main unit. Using signals from the Global Positioning System, the vehicle's speedometer, and a gyroscopic sensor, it calculates the vehicle's current location and direction.

This also helps the system calculate direction and location if the GPS signal is temporarily interrupted, such as when driving through a tunnel.

#### **3** Speakers

Sound from the navigation system comes from the vehicle's audio system front speakers.

#### 4 Screen

The screen displays the maps and provides detailed information about intersections, distances, etc.

For information about caring for the screen, see page 17.

#### **6** Navigation control

The navigation control is located in the right rear side of the steering wheel. Use it to move among menu alternatives, to confirm selections or to go back in the menu system.

For additional information, see page 24.

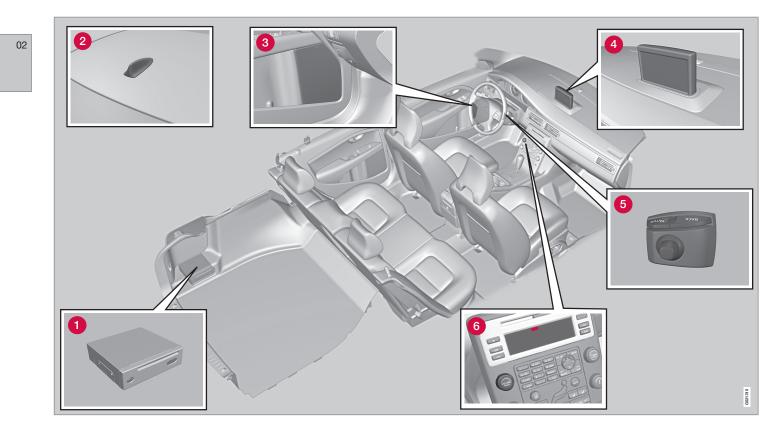
# **6** Volume control and infrared (IR) receiver

Use the vehicle's audio system volume control during voice guidance to raise or lower the volume. The volume can also be adjusted in the menu system.

The IR receiver for the VNS remote control is located above the numeric keypad on the center instrument panel.

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## S80 navigation system overview





#### S80 navigation system overview

#### **1** Main VNS unit and DVD drive

The main unit and DVD drive is located on the left side of the cargo area, and includes the following functions:

- Determining the vehicle's location.
- Calculating a route to the selected destination.
- Voice guidance.
- Processes traffic information.

## **i** NOTE

- The EJECT button is located to the left and the locking catch is on the right side of the main unit.
- The DVD drive is intended for playing Volvo's map DVDs only.

#### Traffic information – TMC (option)

TMC is a standardized code system for transmitting traffic information. The receiver automatically tunes to the correct frequency and reception is handled by the audio system's FM antenna.

#### i) NOTE

TMC is not available in all areas/countries. The area covered by the system is being steadily expanded, which makes occasional updates necessary, see page 17

# **2** Global Positioning System (GPS) antenna

The antenna is integrated into the roof module.

## (i) NOTE

The GPS receiver is integrated into the main unit. Using signals from the Global Positioning System, the vehicle's speedometer, and a gyroscopic sensor, it calculates the vehicle's current location and direction.

This also helps the system calculate direction and location if the GPS signal is temporarily interrupted, such as when driving through a tunnel.

#### **3** Speakers

Sound from the navigation system comes from the vehicle's audio system front speakers.

#### 4 Screen

The screen displays the maps and provides detailed information about intersections, distances, etc.

For information about caring for the screen, see page 17.

#### **5** Navigation control

The navigation control is located in the right rear side of the steering wheel. Use it to move among menu alternatives, to confirm selections or to go back in the menu system.

For additional information, see page 24.

# **6** Volume control and infrared (IR) receiver

Use the vehicle's audio system volume control during voice guidance to raise or lower the volume. The volume can also be adjusted in the menu system.

The IR receiver for the VNS remote control is located above the numeric keypad on the center instrument panel.

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#### Navigation system controls

# Location of the navigation control and IR (infrared) receiver



The navigation system can be operated using the navigation control on the steering wheel or with the remote control.

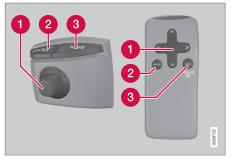
The **navigation control** is located on the right rear side of the steering wheel.

Point the remote control toward the audio system display.

# **i** NOTE

The remote control uses two AAA (also called R03) batteries. Try replacing the batteries in the remote if it does not function.

#### Navigation control/remote control



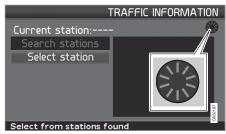
The navigation control and remote control have the same functions. Each enables you to navigate through the menus and make settings/ selections.

#### 1 Use the **navigation**

**control** to move among various menu alternatives or to move the cross hairs on the map. The buttons  $\langle, , \rangle$  and Von the **remote control** can be used for the same purpose.

- 2 ENTER Confirms or activates selections.
- **BACK** Press this key to go to the previous menu or to undo a selection.

#### "Do not disturb"



In certain situations, the system may need a few extra seconds to calculate a route. A symbol will be displayed while this is taking place.

## **i** NOTE

While the route calculation symbol is displayed, the navigation system cannot accept any commands from the **navigation control**, or the **ENTER** or **BACK** buttons.

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#### On-screen keyboard

#### Specifying an address



The on-screen keyboard is used in many situations among the menus to select specific information such as points of interest, a state/ city/street address/zip code, etc.

#### To make a selection:

- 1. Select a letter with the **navigation control** and press **ENTER**.
  - > When there are no further alternatives, the system will automatically add the remaining letters.

The list at the bottom of the screen shows the first three selections that match the letters entered.

- 2. The **V** key can be used to go directly to the list of alternatives.
- 3. Make a selection with **∧** or **∨** and press **ENTER**.

The scroll bar at the right of the screen indicates that there are additional alternatives in the list that are not currently visible in the window.

The figure (66 in the illustration) indicates the number of names on the list.

- Return to the keyboard section of the screen from the list of alternatives by pressing **BACK**.
- Erase any letters that have been entered, one at a time, by pressing **BACK**.

#### General searches

The search function is always available and works in the same way regardless of where you are in the menu system when a location is to be specified.

Pressing **ENTER** while entering letters will display all of the currently possible combinations of names for cities, streets, points of interest, etc.

For example, when searching for Newark airport, all alternatives containing the word Newark will be displayed when the letters **new** have been entered.

Entering additional letters will make the search more specific, making it easier to choose a destination.

Entering **new** will also result in alternatives such as New York since alternatives containing more than one word separated by spaces are included in the search.

02

## Maps, types of roads, and the compass

#### Map views + E <u>14TH ST</u> 😥 00h06m 13mi to Point on map 2.3mi 2.4mi SUNOCO **8.6mi** -95 N 11 🛃 💷 Image: Head of the second se EXIT **9.7mi** I-95 N HAMPTON INN EXIT **YI 400 SHOPPE** 1**0mi** 1-95 N Ψſ 🔳 🚯 W ŝ N 1/16mi 1/16mi TA T TW F 🗢 (I-95 N) NEW JERSEY TPKE BROADWAY 🖶 E 1 4TH ST 🖗 00h06m 3.4mi 🗂 4 E 36 TH COMFORTINN 2.5mi 66 240 57 КIЖ & SSRD ST 27 P 3874 55 Ν. NUMPTO RADISSON ATT PAR HOTELA **F** /w 0 E JSHD ST Ψſ E 23RD ST SEND ST TONK'S PIZZA R 1/32mi PP() BARKING MANHATTAN ISLAND 1/16mi 1.5mi me 33RD ST,NEW YORK, NY BROADWAY

02

#### Maps, types of roads, and the compass

#### Map views of the current location

The way in which the map is displayed depends on the vehicle's location and the settings that have been made in the system, such as map scale, geographic location, the symbols that have been selected for display, etc.

An explanation of the text, signs, and symbols that may be displayed on the screen can be found on the inside of the front cover of this manual.

The name of the current route can be viewed at the bottom of the screen without setting a destination.

 Along a highway. The screen shows points of interest along the highway, see page 30.

2 Detailed intersection information. The screen shows the direction in which you should turn at the next intersection. (Alternative lanes are only displayed for major roads.) Visual information is always accompanied by voice guidance.

3 Two maps. The screen shows the same map, but with two different scales, see page 30.

4 Map scroll mode, see page 28.

#### Compass



The compass can be displayed in two ways:

- The red point on the compass needle points north on the map and the white end of the needle points south

- The gray destination arrow on the outer ring of the compass points toward the specified destination.

Go to Settings  $\rightarrow$  Map options  $\rightarrow$  Compass to select how the compass is to be displayed, see page 51.

#### Voice guidance

Once a destination has been entered and the vehicle is approaching an intersection or an exit, a voice will provide guidance about distance and type of action to be taken. A detailed map of the intersection is also displayed.

The voice guidance is repeated as the vehicles approaches the intersection. Adjust the volume with the audio system's volume control (this must be done while guidance is being given).

In the menu system, go to Settings → Guiding options → Guidance voice - to choose

between a male or female voice, or no voice guidance at all, and go to **System options** to select the language to be used by the system. see page 51 for more information.

## (i) NOTE

In certain cases, voice guidance will replaced by an audible signal.

#### **Unverified roads**

A small number of roads in the system may be unverified. This means that information on signs, one-way streets, left turns, etc., may not be accurate.

An itinerary containing unverified roads will be displayed with gray arrows instead of the usual yellow ones.

The system's default setting is to avoid unverified roads, and for this reason, no itineraries are planned on them. These settings can be changed under **Settings** and **Route options**, see page 48.

The system provides information when an unverified road is added to an itinerary and when the vehicle begins to travel on one of these roads. (-==)

## Main menu, Scroll menu

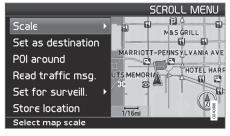
#### Main menu



The Main menu is the first one displayed on the screen when the navigation system is started.

• When the system is running, the Main menu can be reached by pressing **BACK** one or more times.

#### Scroll menu



1. Use the **navigation control** to move the cross hairs in the direction of your choice on the currently displayed map.

2. Press ENTER to activate the Scroll menu.

#### Scale

Change the scale for the currently displayed area.

#### Set as destination

Add the position of the cross hairs as a destination in an itinerary.

#### **POI** around

Search for points of interest near the vehicle.

#### Read traffic msg.

Display current traffic messages for the area of the map shown on the screen.

#### Set for surveill.<sup>1</sup>

Choose between **Surveillan. 1**, 2 or 3 and press **ENTER** to save the map area currently displayed as an area to be avoided, such as roads with heavy traffic or areas where traffic tie-ups often occur.

Activate the map. Select Map/route in the Shortcut menu and select the desired surveillance.

#### Store location

Save the location, which can later be found under Set destination  $\rightarrow$  Stored locations.

#### Following a route on the map

To make it easy to follow a set itinerary, the system has a built-in "magnet" function. This means that regardless of the number of turns or changes of direction in the route, the cross hairs will follow the route by simply holding down a button.

One of the lines in the cross hairs will be displayed darker than the other one to indicate which button should be pressed.



Use button  $\blacktriangleleft$  or  $\succ$  to follow the route automatically.

<sup>1</sup> Only areas with reception for traffic information.

Main menu, Scroll menu



Use button  $\bigwedge$  or  $\bigvee$  to follow the route automatically.

To deactivate the "magnet" function, move the cross hairs slightly away from the route until the line in the cross hairs is no longer dark. Scrolling will then function normally.

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## Shortcut menu

02

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#### Easier operation while driving

The Shortcut menu contains functions that make operating the system simpler. Press **ENTER** in Map mode and select sub-menus with  $\triangleleft$  or >.



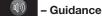
Most system settings can be made in **Settings** while others can only be accessed in the Shortcut menu.

- Map scale/Current route Change the scale of the map on the screen for a larger perspective or greater detail.

1	* 3	
0-	• 13	
60	mi	1
15	mi	
6	mi	
3	mi	
1.5	mi	
1/2	mi	1
1/4	mi	
1/3	mi	
1/16	i m	i
1/32	2 mi	Т

At the top of the menu, you can choose between seeing the rest of the route from the current location to the destination, or the entire route to the destination, see point 7 in the overview illustration on the inside of the front cover.

If the system is set to show two maps, a symbol for map scale will be displayed at each end of the Shortcut menu. This is to make it possible to adjust the respective map scales individually.



- Guidance

Press **ENTER** for current guidance or to repeat voice guidance.



#### - Route/Map/Surveillance

#### Route outline

This is a list with coming guidance points. In addition to the name of the road, the distance between guidance points is shown, and an arrow is displayed to indicate the action to be taken.

#### One map/Two maps

Choose to display one or two maps of the current area.

#### Surveillance<sup>1</sup>

Select **Surveillan. 1, 2** eller **3** to see areas previously selected for surveillance, see page 28.



#### Avoiding certain streets/roads

Select special areas or streets to be avoided when the system calculates a route, for example, to avoid driving through an area where road construction is currently underway.

- Select Avoid in the Route options menu and press ENTER. A list of streets in the current itinerary will be displayed.
- 2. Go to the street to be avoided and press **ENTER**.

<sup>1</sup> Only in areas with reception for traffic information.

## Shortcut menu

(-E)

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3. To also avoid other streets, move to the first street in the group of streets to be avoided with **V** and press **ENTER**. Then go to the last street in the group and press **ENTER**.

The system will then calculate a detour that will guide you back to the original route after you have passed the area(s) to be avoided.

## **i** NOTE

Larger, adjoining areas to be avoided must be pre-selected in **Route options**, see page 49.

#### Avoid areas from 0.5 - 50 miles

This function enables you to avoid an entire area in the original itinerary, for example to avoid a city during rush hour.

Select an alternative in the Detour menu (0.5 – 50 miles) and press **ENTER.** 

The system will then calculate a detour that will guide you back to the original route after you have passed the section of the itinerary to be avoided. – Traffic information (option)<sup>2</sup>

Use this menu to select the way in which traffic information is displayed on the screen. For a more detailed description of Traffic Information, see page 58.

Read message Navigate among the various traffic messages.

Messages on route

Messages received along the route that have not resulted in the selection of an alternative route or where there are no better alternatives are stored here.

Avoided messages

Messages received along the route that require the selection of an alternative route are stored here.

Show all messages.

Hide all

Hide all messages.

Show selected

Select the type of message to be displayed on the screen, see page 58.



#### - Points of interest

Displays a menu with different ways of searching for a point of interest.

Around the car

Pressing **ENTER** makes it possible to search for POIs around the vehicle, see page 37.

Along the route

Pressing **ENTER** makes it possible to search along the route, see page 37.

#### Along HWY

Choose to search for e.g., rest areas or filling stations that are near the highway on which you are currently driving.

If the calculated route includes more than one highway, the system will search along the highway on which the vehicle is currently traveling.

<sup>2</sup> Not available in all areas.

## Menu selections

Three levels of the menu structure are shown here. A number of the third level menus also have sub-menus, which are described in detail in their respective sections in this manual.

# Set destinationp. 36Addressp. 36State/City/Number/<br/>Street/Set/Informationp. 36Points Of Interest (POI)<br/>POI by name<br/>Around the car<br/>Along the route<br/>Around point on map<br/>Along a streetp. 37

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Add to itinerary	p. 42
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→ Route options	p. 48
Route	
Avoid highways/toll roads/ferries/traffic problems/time-restr. roads/specified areas/ unverified roads	
Avoid specified areas	
Reset to default	
Clear itinerary	p. 43
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Current position <sup>A</sup>	p. 46

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## Menu selections

ettings	p. 51	→ Map options	p. 51	→ System options	p. 53
Traffic information <sup>B</sup> Auto. notification Traffic-info. selection Search station Service provider Frequency	p. 58	POI selection Map Map view 2D map orientation Intersection map Map scroll Compass		Language Colors Screen saver Disclaimer time out Help Distance unit GPS Information	
Reset to default  Route options see Itinerary/Route options	p. 48	Current location Reset to default → Guiding options	p. 51	About Reset to default	p. 54
		Guidance voice Guidance volume Guidance volume check Time/dist. to go Time format Reset to default		Shut down <sup>A</sup> <sup>A</sup> Only these functions are available when the at speeds above approximately 5 mph (7 k <sup>B</sup> Option. Not available in all markets.	p. 15 vehicle is movin m/h).

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\_\_\_\_\_

## PLANNING YOUR TRIP



N/s

## ) 03 Planning your trip

### Setting a destination

#### Address



#### Set destination → Address → State/City

	SET DESTIN	IATION
State:	INDIANA	•
City:	<all cities=""></all>	
Number:	<all numbers="" street=""></all>	
Street:	<all streets=""></all>	
		0040388
Input stree	et	8

#### Enter State/City or select from the list

**State** may be preselected and is the state selected in the most recently entered destination. See page 25 for information on specifying an address.

 Go to State or City and press ENTER to make a new selection, or use > to choose among the most recently selected names.

### (i) NOTE

The definition of a city or area may vary from state to state, and also within the same state. It will sometimes be an entire city, or a particular section of a city.

The lists with the five most recently entered countries, cities, or street names will be erased when the destinations in **Last ten** are erased. See page 39 for more information on the last ten destinations.

#### Entering the street address

Set destination -> Address

The street address can be entered for more exact guidance.

### (i) NOTE

If the number entered does not exist for a street address, the system will provide information to this effect.

1. Go to the field for **Number** after the street name has been entered and press

**ENTER** (or go directly to **Set**). The numbers of existing street addresses will be displayed.

2. Go to **Set** after you have entered the number of the street address. If no number has been entered, the system will guide you to the mid-point of the selected street.

#### Set

Confirm the number that has been entered.

#### Cancel

Go back to the previous screen.

#### Enter a street name or select from the list

Set destination → Address → Street

A street can be selected even if no city is preselected.

The system does not contain street names for very small towns or villages. In these cases, the center of the town is used as the destination.

#### Start guidance

Set destination → Address

- 1. Go to **Set** to add the entered address to the itinerary.
- 2. Then go to **Start guidance** to begin receiving directions from the system.

### Setting a destination

#### Information

Provides information about the destination.

#### **Points of interest (POI)**

#### Enter a point of interest as a destination



Address POI by name Around the car Along the route Around point on map Along a street Select point of interest type/name Points of interest (POI) include gas stations, hotels, restaurants, Volvo retailers, hospitals, parking lots, etc.

• Press **ENTER** to access a sub-menu with different search options in order to select a point of interest.

It is also possible to search for points of interest around the car, along the route, or along the highway in the Shortcut menu.

#### POI by name

Enter the name of the point of interest, or select an alternative in the menu. The list only shows the points of interest in the selected city/area.

#### Around the car

The system will search for POIs around the car (max. 100 mile/160 km radius). The search will stop after 100 POIs have been found.

#### Along the route

If a destination has been selected, the system can search for points of interest along the route (within approx. 0.5 miles/1km from the route).

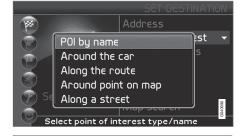
#### Around point on map

The system will perform the same type of search as for **Around the car**, but the search will be based on a point on the map.

#### Along street

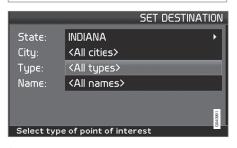
The system will search along a specified street.

## Types of points of interest/Different categories



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### Set destination $\rightarrow$ POI $\rightarrow$ POI by name



1. Go to **Name** and press **ENTER** to enter the name of a point of interest without specifying a city.

### Setting a destination

2. Go to **Type** and press **ENTER** to enter a type of point of interest,

or

Press > to choose among the most recently selected ones.

- 03
- 3. Go to Set and press ENTER.
- 4. Then go to Start guidance and press ENTER to receive guidance to the destination.

To make the search more exact,

• Select a City first and then go to Name.

### **i** NOTE

There are sub-categories of restaurants to simplify the search.

#### Information about a point of interest

Information is displayed for e.g., the address, coordinates, and the phone number to the POI. There are several ways to search for information about a POI. The simplest and quickest way is as follows:

1. With a map view on the screen, press **ENTER** to access the Shortcut menu.



- 2. Go to using < or > and press ENTER.
  - > Choose among Around the car, Along the route or Along a street and press ENTER.
- Navigate among the messages with < or</li>
   ➤.
- 4. Select a POI among the available categories and press **ENTER**.
- 5. Select **POI information** and press **ENTER**.
- Mark Map and press ENTER to see the POI on the map.

### Stored locations, Last ten

#### Searching by zip code

#### Set destination → Address

Destinations can be limited by selecting a zip code, after which a street or point of interest can be selected.

- 1. Begin by selecting a state.
- 2. Go to Zip code and press ENTER.
- Enter numbers and press ENTER or use V and choose a zip code directly from the list if the alternative exists.
- 4. The scroll bar at the right of the screen indicates that there are more alternatives in the list.
- 5. Go to **Street** to choose among the addresses with the selected zip code.
- 6. Go to Set and then to Start guidance to receive guidance to the destination.

#### **Stored locations**

#### Previously stored locations

Set destinations → Stored locations

A stored location is a previously stored destination, such as a home address, favorite restaurant, an airport, or a Volvo retailer. see page 44 for information on storing a location.

 Navigate among the stored locations and press > or ENTER to access the submenu.

Add to itinerary Place the stored location in the itinerary.

Information

Provides information about the stored location.

#### Edit

Change the name, etc., of the stored location. **Sorting** Sort the list of stored locations by distance, icon, or name.

Delete location Deletes the stored location.

Deletes all stored locations.

### Last ten

#### Previously selected destinations

Set destination → Last ten

This is a list of the ten most recently selected destinations.

Go to the desired destination and press
 or ENTER to access the sub-menu.

Add to itinerary Adds the destination to the itinerary.

Information

Provides a summary about the destination.

Delete location Remove the destination from the Last ten list.

Delete all

Removes all destinations from the Last ten list.

## () 03 Planning your trip

### **Return trip, Intersection**

#### **Return trip**

#### Back to the starting point

• Select Start guidance and press ENTER.

The system will begin guiding you back to the location at which **Start guidance** was most recently selected.

#### Intersection

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#### Specifying a destination via intersections

Set destination → Intersection

- 1. Enter Street and press ENTER.
  - > All existing intersections will be displayed under Interse. if there are streets that meet or cross the route.
- 2. Go to the intersection(s) that you would like to set as destinations.
- 3. Go to Set and press ENTER.
- 4. Go to **Start guidance** and press **ENTER** to receive guidance to the intersection.

### (i) NOTE

If the chosen combination of intersections exists in more than one city, a city must also be specified.

Searches can only be made for intersections of larger streets.

### Map search, Search by lat/long

#### Map searches

#### Searching for a location on the map

Set destination  $\rightarrow$  Map search  $\rightarrow$  Point on map

- 1. Use the **navigation control** to move the cross hairs to the desired destination and press **ENTER** to access the scroll menu.
- 2. Go to Set as destination and press ENTER.

#### Scale

Temporarily change the map scale while searching with the cross hairs.

Set as destination Select a location on the map as a final or intermediate destination.

#### **POI** around

The system searches for points of interest around a specified point on the map (max. 100 mile/160 km radius). The search will stop after 100 POIs have been found.

#### Store location Store a location on the map.

#### **i** NOTE

Searches can be made directly with the cross hairs by using the **navigation control** in Map mode.

#### Searching by latitude/longitude

Set as destination → Map search → Latitude/longitude

- 1. Select a destination by specifying its coordinates on the map.
- 2. Select a latitude with the **navigation control**: **N** for north or **S** for south.
- Go to the second row to specify a longitude: select E for east or W for west.
  - > **OK**

This shows the position with the specified coordinates on the map.

- 4. Press **ENTER** to access the map scroll menu.
- 5. Go to Set as destination and press ENTER to select the position as a destination.
- 6. Press **BACK** to resume entering coordinates.
  - > Cancel
  - Return to the previous screen.

### Itinerary

#### Making an itinerary



## Final destination/Intermediate destination

Itinerary

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### **i** NOTE

The menu selection **ltinerary** becomes accessible after a destination has been selected.

Make an itinerary with several stops to avoid selecting a number of destinations during a trip.

Up to six intermediate destinations and one final destination can be specified in an itinerary.

			ITINERARY
₩ © W	ORLD TRAI	DE CENTER S	SITE
Start guidance	Add to itinerary	Route options	Clear itinerary
Start guidar	nce to destin	nation	

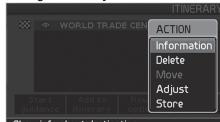
Start guidance Begin guidance to the destination.

Add to itinerary All additional destinations are added to the itinerary. Route options

Provides settings for selecting various types of roads, etc.

**Clear itinerary** Deletes the entire itinerary.

#### Editing an itinerary



Show info about destination

Itinerary

 Select a specified destination and press ENTER or ➤ to access a sub-menu.

### Information

Provides information about the destination.

#### Delete

Removes the destination from the itinerary.

#### Move

Change the destination's position in the itinerary.

#### Adjust

Select a new location on the map as a destination.

#### Store

Save the destination, which will be accessible under **Stored locations**.

### Itinerary

### Start guidance

#### Itinerary → Start guidance



When you have entered a destination and **Start guidance** has been selected, the system will begin to calculate a destination – Wait will be displayed on the screen.

If you leave the planned route during your trip, the system will automatically calculate a new route.

#### Removing destinations from an

#### itinerary

Itinerary

## To delete intermediate destinations in an itinerary:

- 1. Select one of the specified intermediate destinations and press **ENTER** or > to access a sub-menu.
- 2. Go to Delete and press ENTER.
- To delete all destinations:
- Go directly to Clear itinerary and press ENTER.

### **i** NOTE

All intermediate destinations and the final destination will be deleted.

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### Storing a location

#### Storing for re-use

Up to 250 destinations can be stored for reuse.

#### Saving a position on the map



- 1. Use the **navigation control** to go to Map mode to navigate to the area to be saved as a destination and press **ENTER**.
- 2. Select **Store** in the sub-menu and press **ENTER**.

- Use the navigation control to go to a list of symbols to select the one to be displayed on the map and press ENTER.
- 4. Use **V** to enter the desired name.

## Storing a location that is part of an itinerary

				ITINERAR	Y
88	5	TH ST NW,	WASHIN	ACTION	1
			ĺ	Information	
				Delete	
				Move	
				Adjust	
_	tart dance	Add to itinerary	Rou optid	Store	1
Stor	e curre	nt way poin	t	<u>.</u>	1

#### Itinerary

- Select the destination in the itinerary to be saved and press > − a new menu will be displayed.
- 2. Mark **Store** and press **ENTER** a new menu will be displayed.
- 3. Mark the symbol to be displayed on the map and press **ENTER**.
- 4. Continue by entering the name of the location and finish by marking **Store** and pressing **ENTER** to return to the itinerary.

#### Move the position of the stored location



Set destination → Stored locations

- Mark a stored location and press > − a new menu will be displayed.
- 2. Select Edit and press ENTER a new menu will be displayed.
- 3. Mark Adjust and press ENTER to display the map.
- 4. Place the cross hairs on the desired location and press **ENTER** to specify the new location – the map will close and a new menu will open.
- 5. Mark Store location and press ENTER a new menu will be displayed.
- 6. Mark **Store** and press **ENTER** to store the location.

### Storing a location

7. Exit the menus and return to the map by pressing **BACK**.

## Add information about the stored location

Set destination -> Stored locations

- Select a stored location and press > − a new menu will be displayed.
- 2. Select Edit and press ENTER a new menu will be displayed.
- 3. Mark Add info. and press ENTER a new menu will be displayed.

		STO	RE LOCAT	ION
lcon:	*	Alert: 4	Sound 1	•
Name:	5TH ST NW	,		
Address:	MSTNW			
City:	WASHINGT	ON, DC		
Country:	UNITED ST.	ATES OF A	MERICA	
Phone:				3040394
Alert store	location			8

Choose to add/change among the following alternatives

- Icon
- Alert: Off/Sound 1/-2/-3 An audible signal that alerts the driver when he/she

is approaching a stored location – the signal is activated within a radius of approx. 0.5 miles/700 m from the location.

- Name
- Address
- City
- Country
- Phone
- After making the adjustments, exit the menu by pressing BACK, mark Store and press ENTER – this returns you to the list of Stored locations.

## () 03 Planning your trip

### **Next destination**

#### Next destination in the itinerary

NAVIGATION

NEXT DESTINATION

Next destination

The map shows the next destination.

- 1. In the main menu, go to Next destination.
- 2. Press **ENTER** or **>** for information about the destination, such as its name, the



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remaining time or the distance from the current position to the destination.

- 3. Press **ENTER** again if several destinations have been specified for information and to see them on the map.
- 4. Go to Map for each destination and press **ENTER** to see a full-screen map of the area.

### **Current position**

#### **Current position**



GP5 0 BUTLER ST NEW YORK NEW YORK Lat: 40°41′ 5″N Long: 73°59′36″W

#### Current position

To get a map view of the vehicle's current position and information about this position, such as its name or coordinates:

 In the main menu, go to Current position and press ENTER or ➤. The number displayed after **GPS** shows the number of satellites with which the system is in contact.

#### **Traffic information**



#### Settings → Traffic information

Refer to the "Traffic information" chapter beginning on page 58.

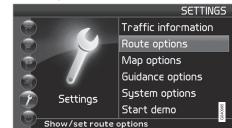
### (i) NOTE

Please be aware that traffic information may not be available in all areas.

## ) 03 Planning your trip

### Settings

## Route options



#### Settings → Route options

- Use the navigation control to move among the options, select the desired settings and press ENTER to save the settings.
- Press BACK to cancel a setting.

		RO	UTE
Route		Fast	▶
Avoid highways		No	۰U
Avoid toll roads		No	Þ
Avoid ferries		Yes	Þ
Avoid traffic problems		No	Þ
Avoid time-restr.roads		No	3040998
Select fastest or shortest ro	ute		30

#### Route

Select Fast or Short for the system to calculate a route.

Avoid highways

Set the system to avoid highways/freeways when calculating a route.

#### Avoid toll roads

Set the system to avoid toll roads when calculating a route.

Avoid ferries

Set the system to avoid ferries when calculating a route.

Avoid traffic problems Set the system to avoid areas with traffic disruptions when calculating a route.

#### Avoid time-restr. roads

Set the system to avoid time-restricted roads when calculating a route. This function requires that the vehicle's clock be correctly set for the current time zone.

Avoid unverified roads

Set the system to avoid or use unverified roads when calculating a route.

Avoid specified areas

- 1. Set the system to avoid specified areas when calculating a route and press **>**.
- Choose Selected and press ➤ again to specify an area.

See the detailed description below.

#### Reset to default

Return to the system's factory settings for route options.

• Press >, select OK and press ENTER.

### **i** NOTE

When the system calculates a route over longer distances, it is designed to select major roads (highways/freeways, etc).

If you have set the system to avoid highways and toll roads, the system will avoid guiding you to these types of roads to as great an extent as possible, and will only use such roads when no other reasonable alternative is available.

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### Avoiding an area

#### Selecting an area



#### Enter an area to be a avoided



Settings  $\rightarrow$  Route options  $\rightarrow$  Avoid specified areas

This function is designed to help you avoid being guided to areas, cities or sections of cities that you prefer not to drive through. The system always excludes these areas when calculating a route.

### (i) NOTE

Highways that are part of a calculated route that pass through an avoided area are an exception.

- 1. Press > and choose Selected.
- 2. Press > again to enter the area.

#### None

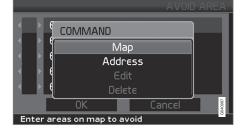
 Press ENTER to deactivate previously selected areas.

#### Selected

- 1. Press > to enter new areas.
- 2. Press **ENTER** to activate previously stored areas, which are marked with an X.

See also the following step pertaining to the "Avoid specified areas" sub-menu.

#### Sub-menu – avoiding specified areas



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Settings  $\rightarrow$  Route options  $\rightarrow$  Avoid specified areas  $\rightarrow$  Selected

Select alternatives in the sub-menu and press **ENTER**.

#### Map

Use the **navigation control** to enter the area to be avoided directly on the map.

See also the next step, "Entering areas on the map."

#### Address

Enter the address of an area to be avoided. The address will comprise the center of the area.

## 🧭 03 Planning your trip

### Avoiding an area

#### Entering areas on the map



Settings → Route options → Avoid specified areas → Selected → Map

Use the **navigation control** to move the midpoint of the cross hairs to the center of the area to be avoided.

The name of the place at which the mid-point of the cross hairs is pointing will be displayed at the bottom of the map. The rectangle shows the size of the area.

- 1. Press **ENTER** to access the sub-menu.
- 2. Select alternatives and press **ENTER**.

#### Scale

Enter the size of the map to be displayed of the area to be avoided.

Set area to avoid Save the specified area.

#### Adjust size

• Change the size of the area using the **navigation control**.

• Press **BACK** to undo a change.

Adjust area

- Move to a new area using the **navigation** control.
- Press BACK to undo a move.

#### Saved areas to be avoided

Settings  $\rightarrow$  Route options  $\rightarrow$  Avoid specified areas  $\rightarrow$  Selected  $\rightarrow$  Map

Select which of the previously saved areas are to be avoided when a route is calculated. These are marked with an X.

- 1. Select an area with  $\mathbf{\Lambda}$  or  $\mathbf{V}$ .
- 2. Mark or unmark an area using > or <.

#### OK

Activate areas marked with an X. The activated areas will be shown on the map.

Cancel

Undo any changes and return to **Route** options.

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### Map and Guidance options

#### Map options

Select the way in which the map is displayed on the screen.



Settings → Map options

- 1. Select a function to be set with the **navigation control**.
- 2. Press ENTER to open the function.

#### **POI** selection

- Press > to access a sub-menu.
- Select **Show all** to see all points of interest symbols on the map.
- Select **Hide all** if no POI symbols are to be displayed.
- Select Show selected and press > to enter the symbols that you would like to have displayed on the map. These are activated with an X.

	POINTS OF INTERES	Ū
	🛨 Airport	ſ
	🖗 Amusement Park	l
<x< td=""><td>🗉 ATM</td><td></td></x<>	🗉 ATM	
	🛲 Automobile Club	
<x< td=""><td>💩 Bank</td><td></td></x<>	💩 Bank	
۰X۲	📟 Bus Station	- AND I M
Selec	t points of interest to be shown on man	3

- 1. Navigate with **A** or **V** to choose among the symbols.
- 2. Activate/deactivate with > or <
- 3. Press ENTER to save.

#### Map

If the map is not displayed, the system provides guidance with arrows on the screen.

Map view Select to display the map in 2D or 3D.



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Selecting the elevation angle

Settings  $\rightarrow$  Map  $\rightarrow$  Map view  $\rightarrow$  3D

### After selecting 3D with > or < and ENTER,

the panel for selecting the elevation angle will be displayed. Select the desired angle with  $\mathbf{A}$  or  $\mathbf{V}$  followed by **ENTER** and **BACK**.

#### **2D map orientation** Choose to display north or the direction of

travel at the top of the map.

#### Intersection map

Choose to display the detailed map of intersections in 2D or 3D.

#### Map scroll

Choose to display the map in 2D or 3D when scrolling.

#### Compass

Select the way in which the compass is displayed on the screen.

### Map and Guidance options

**Current location** 

Select whether or not the name of the street on which you are currently driving will be displayed at the bottom of the screen Reset to default

**Guidance options** 

Return to the factory settings for Map options.

• Press >, select OK and press ENTER.

- Time format Select 12 or 24-hour intervals. **Reset to default** Return to the factory settings for Guiding options.
- Press >, select OK and press ENTER.

Settings → Guidance options

**Guidance voice** Select Female/Male

Guidance volume Select a value between 1–35 to set the volume level or Off for no voice guidance.

The volume level can also be adjusted using the audio system's volume control during voice guidance.

Guidance volume check The set volume is indicate by a chime.

Time/dist. to go Select RTA, ETA or Hide.

- **RTA** is the remaining length of time to the destination.
- ETA is the estimated time of arrival.



### System options

#### Setting system options

Settings → System options

- Move among the functions with the **navigation control**.
- Press ENTER to save settings.
- Press BACK to undo a setting.

#### Language

Select the language to be used in the system menus and for voice guidance.

#### Colors

Select **Black**, **Blue** or **Chrome** for colors that best suit the current ambient light.

#### Screen saver

If the screen saver is set to **ON**, the screen will go blank after 30 seconds.

If guidance or other information is provided, the screen is activated automatically.

#### Time limit for the disclaimer

Due to road conditions, some recommendations may not be accurate. Obey all traffic laws and use your own good judgment when driving. Always concentrate on your driving by keeping your eyes and mind on the road.

Press ENTER to confirm your agreement.

Settings  $\rightarrow$  System options  $\rightarrow$  Disclaimer time out

Select **No** if the disclaimer must be confirmed by pressing **ENTER** each time the system is started.

Selecting **Yes** means that the disclaimer will only be displayed for approximately 10 seconds and does not need to be confirmed.

#### Help

Hide or display context sensitive help texts at the bottom of the screen.

#### Distance unit

Choose to display distances in miles or kilometers.

#### **GPS** Information

 Press > to show coordinates and the address of the vehicle's current location, and to display the number of satellites with which the system has contact.

#### About

SYSTEM

Displays system and map information.

Reset to default Return to the factory setting for System options.

• Press >, select OK and press ENTER.

### Demo

03

#### Start the demo (system simulation)

Settings -> Start demo

When the vehicle is at a standstill, this function offers simulated guidance to the currently set destination.

Stop demo interrupts the simulation.

## (i) NOTE

The demonstration function can only be used if a destination has been selected.





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## 04 Traffic information

### Introduction

04

#### **Display and reception**

Broadcast traffic information is always received and presented, even if no destination is specified.

The way in which traffic information is presented can be set and changed in **Settings**, see page 32.

The way in which traffic information is presented is also affected by the way in which it is broadcast.

### **i** NOTE

Traffic information is not available in all areas/states/provinces.

The transmission range for traffic information is being increased continuously.

#### Traffic symbols on the map



Traffic information symbol.

A symbol will be displayed in the upper left corner of the map when there is at least one traffic message along the currently selected route. Use the **navigation control** to scroll to the message for information about the problem and to see its location.

Traffic problems are marked with symbols, lines and frames. These are colored red or yellow.

Red - Important information.

Yellow - General information.

<b>☆</b> ☆	Accident
<b>1</b>	Slow traffic
¢¢	Slow traffic in both directions
	Extent
• 0	Other information

### Extent



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

In addition to the symbol, a red or yellow line along the route is shown on all scales up to 3 miles. The length of the line is corresponds to the extent (distance) of the traffic problem.

#### **Avoid traffic problems**

#### Settings → Route options

Select whether or not the system should plan to bypass the traffic problem.

- 1. Go to Avoid traffic problems
- 2. Select Yes or No.

#### Yes

The system avoids roads with traffic problems when calculating a route.

## 04 Traffic information

#### Introduction

#### No The system does not avoid roads with traffic problems when calculating a route.

### **i** NOTE

When the system is started it can take up to approx. 15 minutes before all traffic information for the area is loaded.

#### **Automatic information**

Settings  $\rightarrow$  Traffic information  $\rightarrow$  Auto. notification

Select whether or not transmitted traffic information should be shown.

#### Yes

The system provides the option to select an alternative route to bypass any traffic problems.

#### No

The system provides no information on traffic problems and will plan the route through the areas with possible traffic problems.

#### New or original route

If the system calculates an alternative route in the event of a traffic obstruction, you are given the option of selecting which route that you prefer to take.



The display shows **Changed traffic situation**. **Use new route?** and shows alternatives provided, along with the fact that the new route is approximately 3 miles (5.4 km) longer.

### Yes

The system guides along the new route, around and bypassing the problem.

#### No

The system guides along the original route, up to and through the problem.

Show new route

Shows detailed information on the alternative route.

## (A) 04 Traffic information

## Selecting information

Traffic information selection TRAFFIC INFORM	2. Activate and deactivate resp ATION > or <.	Slippery road	
Accident ↓↓ ★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★	3. Confirm the settings with <b>EN</b> The scroll bar on the right side or indicates that there are more opt	of the screen Other hazard	
	than can be displayed at one tim Signs on the map		
04	Accident		
Settings → Traffic information → Tra info. selection	affic- Contraflow (two-way tra lanes in each direction)		
Select which type of traffic information be shown on the screen.	should Diversion (detour)		
Show all All traffic information is available.	Information		
Hide all No traffic information is displayed. Show selected	Narrow road		
<ol> <li>Press &gt; to enable selection from sy Select the traffic information symbol</li> </ol>	Is (traf-		
fic messages) the system should sh the map, and take consideration of calculating the route.			
	Road work		

## 04 Traffic information

### Reading information

#### **Read traffic message**



Detailed traffic information.

→ Read traffic msg. →

A traffic message is indicated by a symbol on screen. To read a traffic message:

1. Press ENTER to open the Shortcut menu:



- Scroll to by pressing < or >, then press ENTER. Continue by selecting Read message from the menu.
  - > Current messages are marked with a red or yellow frame.
- Browse between the messages using < or >.

- Press ENTER for detailed traffic information.
- 5. Press **BACK** to enable browsing between current messages again.

The traffic messages relevant to the map area are indicated on the screen.

Detailed information on the traffic problem is also shown. The extent of the problem is shown at the top.

If details are available, the following are also displayed:

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

#### Size of area for traffic information



Read traffic msg. → Map → Scale

The scale of the map determines the amount of traffic information that can be shown - the larger the map area shown on the screen, the more information can be displayed.

- 1. To change the scale or zoom in on a specific traffic message on the map: Select the scale for the area, then press **ENTER**.
- 2. Press **BACK** to return to the previous screen.

## Search/select station for traffic information

Settings  $\rightarrow$  Traffic information  $\rightarrow$  Search station

#### Search stations

• Press **ENTER** to search for existing stations broadcasting traffic information.

#### Select station

- 1. Press **ENTER** to select from among existing stations.
- 2. Select station using **∧** or **∨** and press **ENTER**.
- 3. Press **BACK** to return to the previous screen.

#### **Current station**

Shows the current station for traffic information.

 $\blacktriangleright \flat$ 

## (A) 04 Traffic information

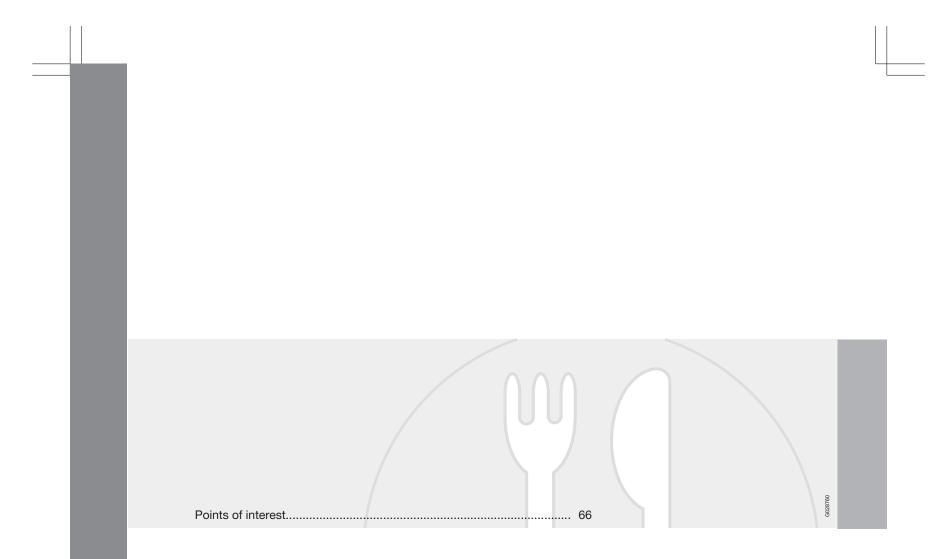
### **Reading information**

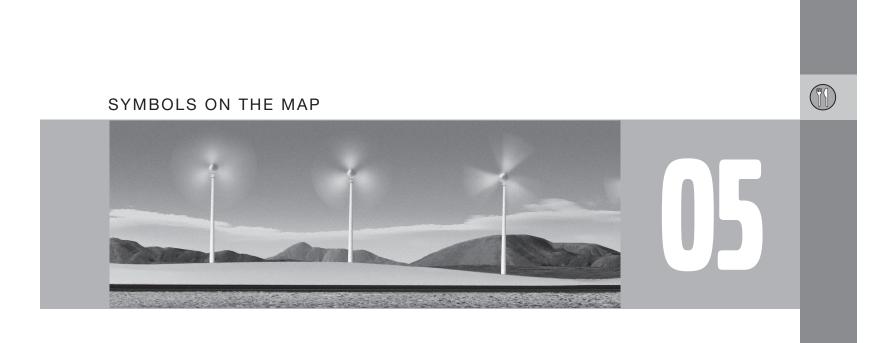
Reset to default Restore factory settings for station settings.

• Press >, select OK and press ENTER.







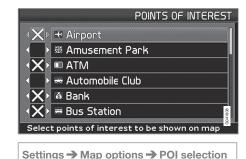


## (1) 05 Symbols on the map

### **Points of interest**

Choose to display all or no points of interest on the map, or select individual points of interest to be displayed.

		N	1AP
POI se	lection 🗸		
Мар	COMMAND	ν	
Мар у	Show all		
2D ma	Hide all	hg	
Inters	Show selected	•	Þ
Map s	icroll <	20	3041318
Show a	ll points of interest on map		8



- 1. With **POI selection** marked, press > − a new menu will be displayed.
- 2. Mark Show selected and press > a new menu will be displayed.

- Points of interest marked with an X will be displayed on the map - navigate through the list and deselect the POIs that are not to be displayed using ➤.
- After making all of your choices, finish by pressing ENTER – exit the menus by pressing BACK.

### **i** NOTE

An icon for a point of interest can vary between states and countries.

These symbols can be selected to be displayed on the map:

Æ Airport 腏 Amusement park 圓 ATM

Automobile club

Auto service & maintenance

Bank

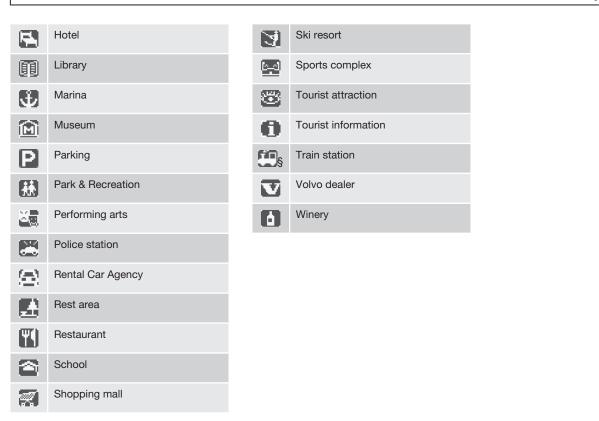
Business facility



66

## 05 Symbols on the map





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## 06 Questions & Answers

### Frequently asked questions

## The vehicle's position on the map is incorrect.

The Global Positioning System (GPS) indicates the car's position with an accuracy of about 65 feet (20 meters).

Accuracy may be even less when driving on roads lying parallel to another road, winding roads, roads on several levels, and also after driving a long distance without making any distinct turns.

Tall buildings and mountains, tunnels, viaducts, over/underpasses etc., also have a negative affect on the reception of GPS signals, which means that the estimation of the car's position may not be precise.

## VNS does not always calculate the fastest/shortest route.

Parameters such as distance, width of road, type of road, number of right or left turns, traffic circles etc., are all taken into account when calculating the best theoretical route. Experience and local knowledge may, however, lead to a better choice of route.

#### The VNS system chooses toll roads, freeways, and ferries even though I have opted to avoid them.

When calculating routes over longer distances, for technical reasons the system can only use major roads. If you select NO for toll roads and

freeways, they will be avoided as much as possible, but will be used if no other reasonable alternative is available.

## After being transported, the car's position on the map is incorrect.

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 to calculate the car's new position correctly.

# The vehicle's position on the map is incorrect after its 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 car's position to be calculated.

## The car symbol on the map moves erratically after a tire change

In addition to the GPS receiver, the vehicle's speedometer and an onboard gyro are also used to calculate the vehicle's current location and direction of travel. If the spare tire is put on the vehicle, or is a change is made from summer to winter tires (or vice versa), the navigation system must "learn" the new dimensions of the tire(s). Therefore, it may be necessary to drive for several miles, including a number of turns, for the system to make this adjustment.

## The map image does not correspond to actual conditions.

Factors such as the constant expansion and rebuilding of the road network, new traffic regulations constantly being introduced etc., mean that the digital map database is not always complete.

The maps and data on the DVDs are static. They will not automatically update to reflect real-life changes to road and traffic patterns. Updated DVDs are produced periodically. Please contact your Volvo retailer for more information about availability.

#### The map scale sometimes changes.

There is no detailed map information for certain areas. If this is the case, the system automatically changes the map scale.

#### Certain menu options are not available.

Check the settings that you have made. Select **Reset to default** for the particular option to return to the default settings.

## The car symbol on screen jumps forward or spins.

The system may need a few seconds to sense the position and movement of the car before you drive off.

1. Switch off the VNS system and the ignition.

## 06 Questions & Answers

### Frequently asked questions

2. Switch on the ignition again and restart VNS, but remain at a standstill for a short time before driving off.

I am planning a long trip but do not want to specify destinations in the cities that I will be passing through. What is the easiest way to set up an itinerary? Select the final destination directly on the map using the cross hairs. The system will automatically guide you to the final destination even if you drive past intermediate destinations.

#### How can I select a final destination/ intermediate destination that is not on the DVD that is currently being used? Begin by scrolling to the desired destination to see if the road network and detailed information are displayed normally on the screen. If so, set a normal route.

If this is not the case, this indicates that the system cannot "see" the destination outside of the area contained on the current map DVD. Set a route with a destination that is close to the boundary with the next map area.

When the route reaches the boundary for the current map DVD, switch to the DVD containing the next map area and a new route will be set.

### (i) NOTE

- If the system no longer shows the road network and detailed information normally, the vehicle has entered an area contained on another map DVD. Switch to the correct DVD.
- The various DVDs overlap with adjacent DVD map areas to different extents. For this reason, try switching to another DVD.

The navigation system contains several DVDs. How do I know which one to use? You should primarily use the DVD that contains detailed information about the area in which you live. This information is printed on the DVD's jewel case and on the disc.

If you plan to drive through several states or provinces, it is advisable to have all of the DVDs handy.

## Will my itinerary disappear when I change map DVDs?

No, the itinerary will be stored until you delete it.

## The system's map information is not up-to-date

Contact your Volvo retailer for updated map information.

### M WARNING

#### Navigating safely

Always use good judgment when following navigation system guidance, and do not follow guidance that seems contrary to your own best judgment.

## Why are no street addresses available for destinations in another state?

Each map DVD contains basic information for the entire network of roads. Detailed information such as addresses, points of interest, etc., are split up among the respective DVDs for geographic areas. Otherwise, the DVDs are identical. Check that the correct DVD for the area that your destination is in is inserted in the navigation system's DVD player.

## How can I easily check to see which DVD is activated?

See Settings → System options → About for information on the DVD's version and which geographic area it covers.

06

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## 06 Questions & Answers

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## ⑦ 06 Questions & Answers

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