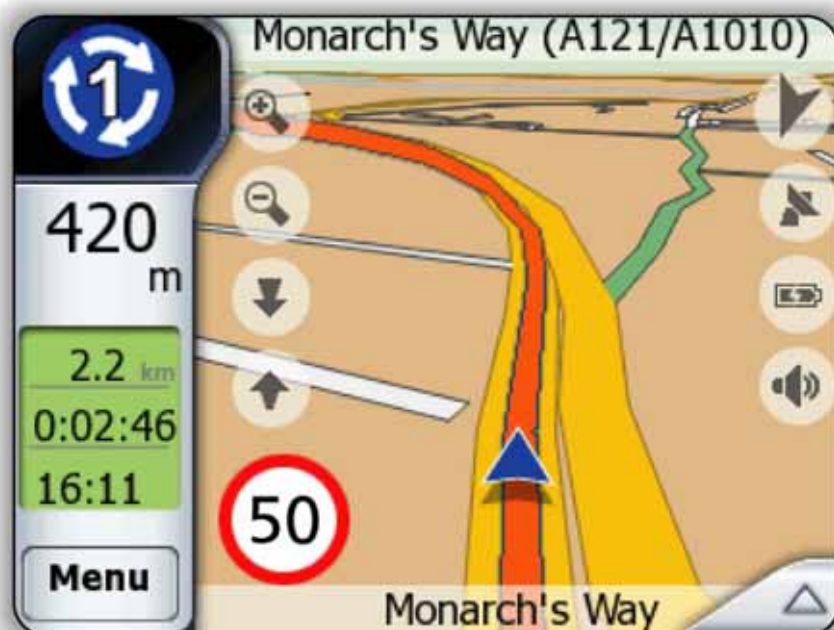


NOVOGO

a GPS that really works.



User Manual

UK English

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www.novogo.com

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Plug & Go – as simple as that

Thank you for choosing NOVOGO as your door-to-door in-car navigator. This document is the detailed description of the software. Although NOVOGO can easily be discovered by experience, it is still recommended that you read through this manual to clearly understand the exact function of each button and icon.

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1 Warnings and safety information

NOVOGO is a navigation system that helps you find your way to your selected destination. The position information obtained from the GPS receiver will not be transmitted anywhere, so others will not be able to track you by the help of this program.

If you are the driver of the vehicle, we recommend that you operate NOVOGO before beginning your journey. The driver's attention should be on the road. Plan your route before departure and pull over if you need to change route parameters. NOVOGO has a built-in (optional) Safety Mode that will prevent you from using the screen functions if your car is in motion. Unless a passenger will be the only one to operate NOVOGO, we strongly encourage you to turn on the Safety Mode.

It is also important that you look at the display only if it is absolutely safe to do so.

You should always observe traffic signs and road geometry before you obey any instruction from NOVOGO. If you need to deviate from the recommended direction, NOVOGO will suggest a modified route according to the new situation.

Never place the PND where it can obstruct the view of the driver, is within the deployment zone of airbags, or where it can cause injuries in case of an accident.

2 General information


NOVOGO is a navigation system optimised for in-car use. It provides door-to-door navigation for both single and multi-point routes using adaptable route parameters. NOVOGO is capable of planning routes throughout the whole map region installed on the memory card. Unlike some other products, NOVOGO does not require that you change maps or switch to a poorly detailed general map to navigate between map segments or countries. You always have complete freedom to go wherever you wish. Just insert the memory card and go.

You do not need a stylus to use NOVOGO. All screen buttons and controls are designed so that you can operate them with your fingertips.

NOVOGO does not contain pop-up or pull-down menus. You can access all functions of the program by using hardware and screen buttons. With the help of these buttons you can travel through all the screens of the program. Most of the screens (especially menu functions and settings) can be accessed from several other screens, minimising the number of actions needed to reach the desired function.

When using NOVOGO, you do not need to 'double tap' or 'tap & hold' the touch screen as these functions cannot be used reliably in a moving vehicle. A single tap triggers most of the screen controls. The only exceptions are 'drag & drop' for moving the map, or scaling it in Map mode (4.4.6).

Most of the screens have a Return () button in the top left corner. This arrow returns to the previous screen or directly to one of the map screens.

Settings screens also have a Help () button in the top right corner. This will show a detailed description of the current settings screen.

3 Operating NOVOGO (Controls)

NOVOGO is designed for easy operation. All controls are operable by fingertips. Wherever possible, pushbuttons and lists are provided to make accessing functions or changing settings as easy as possible.

3.1 *Hardware buttons (Please refer to Hardware User Manual)*

3.1.1 Tilt up and down

This function modifies the vertical view angle of the map in 3D mode. NOVOGO offers a wide range of view angles starting from a top down view (a seamlessly integrated 2D view) down to a flat view that lets you see far ahead.

The automatic Smart Zoom function will do the necessary tilting for you when navigating (gives a flat view if the next turn is at a distance to let you see far ahead and raises the angle when approaching a turn to give you a better view of the upcoming manoeuvre). If you manually change the view angle, Smart Zoom will no longer tilt the map by itself (automatic zooming and rotating remains active). Tap the Lock button (4.4.4) to return the tilt control to Smart Zoom. You can also set NOVOGO to do this automatically after a few seconds (5.6.3.3).

3.1.2 Zoom in and out

Zoom will change the scale of the map. If you zoom out, you will see a larger part of the map, while zooming in shows a smaller part of the map in more detail.

The automatic Smart Zoom function will do the necessary zooming for you when navigating (zooms out if the next turn is at a distance to let you see far ahead and zooms in when approaching a turn to give you a better view of the upcoming manoeuvre). If you manually change the zoom level, Smart Zoom will no longer scale the map by itself (automatic tilting and rotating remains active). Tap the Lock button (4.4.4) to return the zoom control to Smart Zoom. You can also set NOVOGO to do this automatically after a few seconds (5.6.3.3).

3.1.3 Voice instruction announcement

When using either the Map or the Cockpit screen, you can repeat the latest voice instruction by pressing the speak button

Tip: Use this button any time during your journey if you need the distance and type of the next route event.

Note: In order to receive voice instructions, sound should not be muted (4.4.11), voice guidance must be enabled (5.3.2), and a route must be active.

Note: If you have disabled Smart Zoom by using the functions above or moved the map during navigation (i.e. the Lock button appears on the screen), Enter will first re-enable normal navigation (Lock-to-Position and Smart Zoom), and will say the instruction only after being pushed again.

3.1.4 The Route Information screen

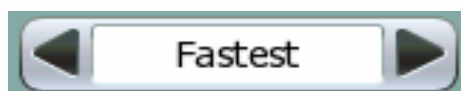
To give easy access to the most important data screen during navigation, tap the bottom section of the Cockpit screen (4.4.14) or the Info button (4.6.3.6) in the Route menu) to display this screen.



3.2 **Screen buttons and controls**



The primary input channel of NOVOGO is the touch screen. If you read on, you will realise that most parts of the screen are not only used to display information but also to initiate functions by tapping. Below you will find a list of the most frequently used controls in the program.

3.2.1 List selectors

When the values in the list need to be named, only the current value is shown (sometimes together with a short description) in a horizontal stripe with arrows at both ends.



The arrows are buttons. Tap  to move left in the list or tap  to move right. You need not confirm your selection. As soon as you leave the screen, the selected value becomes effective.

Note: The only exception for this is the Manual GPS Configuration screen where you can confirm your new set of selections by tapping the  button, or leave the previous settings untouched by exiting with the  button in the top left corner.

3.2.2 Sliders

When a feature has several different unnamed (numeric) values, NOVOGO will show sliders that look like analogue potentiometers to set the desired value.

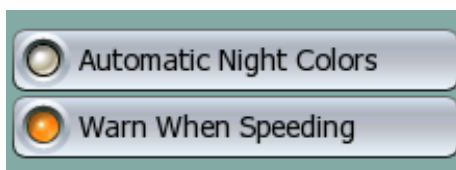




If the value limits are not displayed at the ends of the slider, the leftmost position means the minimum value, while the rightmost position represents the maximum value.

This control can be operated in two ways. Either drag the handle to move the slider to its new position, or tap the slider where you want the handle to appear (the thumb jumps there immediately). As with the list selectors, there is no need to confirm your selection. As soon as you leave the screen, the selected value becomes effective.

3.2.3 Switches

When a function can only have two values (mainly Enabled and Disabled), a switch is used. Unlike with list selectors, the horizontal line contains the name of the function and not the actual status. There is a lamp on the left to show whether the function is active or not.



When the lamp is dark () , the function is not selected. When it is lit () , the function is enabled. The whole strip works as a button. Tap anywhere to toggle between the enabled and disabled status.

3.2.4 Switches in the Quick menu

The switches of the Quick menu (4.6.2) behave as normal switches but they look different in order to fit in with the other menu buttons.



Tap the button to toggle between the enabled and disabled states.


3.2.5 Virtual keyboards




NOVOGO is designed in a way that you only need to enter letters or numbers when it is inevitable. In these cases a full screen keyboard pops up that can easily be operated with your fingertips. You can choose between a separate ABC and numeric keypad, or a set of QWERTY-type keyboards that contain both letters and numbers. NOVOGO will remember your last choice and offer it the next time you need to enter data.

The alphabetic keyboards in NOVOGO do not contain special characters, because you do not need to enter accents when searching for a destination. Type only the base letters (the letter most similar to the accented one) and NOVOGO will search for all their combinations in the database (e.g. for the Hungarian street 'Révász' you only need to type 'Revasz', and the rest is done by the program).

When you type in POI or track log names, NOVOGO will automatically turn all initials into capitals to create names that look pleasant.

3.2.5.1 ABC-type keyboards

These keyboards contain only letters (Latin, Hebraic, Greek or Cyrillic). If you wish to enter numbers, you need to tap the Keys () button to switch to the numeric keyboard.

Use Backspace () to delete the last letter you have entered if you have made a mistake, tap Space () to enter more words, and hit Done () to finish entering the text.



This type of keyboard has large, finger-friendly buttons.

If you are used to computer keyboards, you may consider trying one of the QWERTY-type keypads.

3.2.5.2 QWERTY-type keyboards

QWERTY-type keyboards have both letters and numbers on them. Their layout is the same as of the standard QWERTY, QWERTZ (German) and AZERTY (French) keyboards. To switch to your desired QWERTY-type keyboard, press the Keys button repeatedly until the appropriate keyboard appears.

Due to the high number of buttons to be displayed in one line, in portrait and square modes these keyboards have narrow buttons. Still, with some practice they can be easily fingertip operated.



The special keys described in the previous section are also available here.

3.2.5.3 The numeric keyboard

The numeric keyboard only contains numbers, on huge buttons. The special keys you find on the other keyboards (except Space) are available here as well.



Although QWERTY-type keyboards also contain number keys, when entering a house number, the program offers the more convenient numeric keypad.

4 Discovering the program through the screens

The best way to discover NOVOGO is to explore each screen in detail, and to find out how to move from one to another. Read this chapter for a guided tour.

If you have already discovered some basic functions of the program, you may choose to jump to Chapter 7 to read real-life examples that touch as many of the basic features as possible (for advanced functions you should still consult Chapter 5). Should any of the functions mentioned there look unfamiliar, use the references to get to the specific part of this manual describing the concerned feature.

NOVOGO starts by displaying the Main menu. This is the root of the screen hierarchy, but you only need to return here in a few cases. Many of the screens are also accessible from each other to reduce the number of actions needed to initiate a function or change a setting.

4.1 *Main menu*

The Main menu is the first screen of NOVOGO. Most parts of the program are directly accessible from here by using the buttons described below.



4.2 GPS Data screen

The GPS Data screen is a collection of information received from the GPS device and it also serves as the entry point to the GPS Setup and Time Sync screens.



4.2.1 GPS data displayed

The virtual sky on the left represents the currently visible part of the sky above you, with your position as the centre. The satellites are shown at their current positions. The GPS receives data from the green and grey satellites but not from the red ones. Signals from the grey satellites are only received, while green ones are used by the GPS to calculate your current location. On the right you can see the satellite signal strength bars. Grey bars are for the grey and black bars are for the green satellites. To identify satellites use their numbers also shown in the virtual sky. The more satellites your GPS tracks (the green ones), the better your calculated position will be.




Additional pieces of information on this screen are: current position in latitude/longitude format, elevation, speed, date, time and calculated accuracy.


Note: Accuracy can be affected by several factors the GPS cannot take into account. Use this accuracy information only as estimation.

There are two icons on the left to show the status of the GPS connection and the quality of reception.

4.2.2 GPS connection indicator





In the middle to the left there is a lamp similar to the ones used for switches. This one has more colours and represents more values:

-  - dark lamp means there is no communication on the selected port,
-  - red lamp means connection to any GPS receiver has not been established yet, so you need to set it up by using the Detect or Config. buttons,
-  - a slowly blinking yellow lamp means that there is no connection to the GPS receiver, but NOVOGO is trying to connect,

-  - a fast blinking green lamp means that there is communication with the GPS and data is being received.

4.2.3 GPS data quality indicator

In the top left corner there is a satellite dish to show the quality of the GPS position. Different colours represent different signal quality:


-  - black with a red cross means there is no connection with the GPS device,
-  - red means the GPS is connected but no GPS position is available,
-  - yellow means 2D reception. A GPS position has been acquired, NOVOGO is ready for navigation, but the GPS is using enough satellites for calculating the horizontal position only. Elevation data is not provided, and the position error may be significant.
-  - green means 3D reception. The GPS receiver has enough satellites to calculate altitude. Position is generally correct (yet it can still be inaccurate due to different environmental factors). NOVOGO is ready for navigation.



4.2.4 Time synchronization

In the top right corner of the screen you have another button that leads to a new screen where you can synchronize the clock of your PND to the very accurate time provided by the connected GPS.



Turn on the Auto Correction switch to let NOVOGO frequently check and correct the PND time with the GPS time.

Below that button you will see the current values of the GPS and the PND clocks. You can check here whether any correction is needed. Tap the  button to manually synchronize the time.

Below the PND time you have  and  controls to manually correct the time with or without a valid GPS time. It also gives you the chance to correct the time after synchronization if your PND does not support time zones or daylight saving time.

You can also use these buttons if you prefer to set the PND time from this screen instead of using the time setup features of the operating system.

4.3 The map

The most important and most frequently used screens of NOVOGO are the two screens with the map (Map screen and Cockpit screen). They are similar in look and in possible controls but are optimised for different uses. The map they display is common. The elements of the map are described here. For the controls and special functions of the two map screens see 4.4.

The current version of NOVOGO is primarily intended for land navigation. That is why maps in NOVOGO look similar to paper roadmaps (when using daytime colours and 2D map mode). However, NOVOGO provides much more than regular paper maps can. The look and the contents can be changed.

4.3.1 2D and 3D map views

Besides the classical top down view of the map (called 2D mode), you have the possibility to tilt the map to have a perspective view (3D mode) that gives a view similar to that seen through the windscreen with the possibility to see far ahead.



It is easy to change between 2D and 3D modes. You have two options. You can use hardware buttons (3.1.1) or the semi-transparent screen icons (4.4.3) to tilt the map seamlessly between 2D and all 3D angles, or you can use the switch in the Quick menu (4.6.2.1) to quickly switch between the two modes.

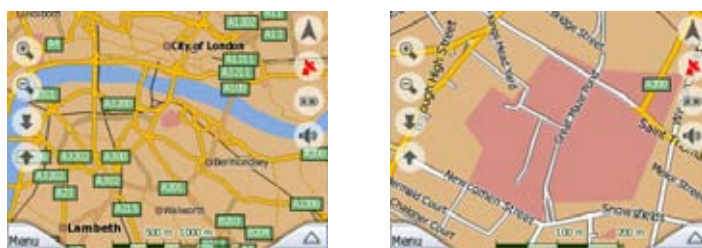
Note: You may find that 2D mode is more useful in North-up Map mode when looking for a certain part of the map or an object to select as destination. On the other hand, 3D mode in Track-up Cockpit mode with Smart Zoom makes navigation very comfortable. The description of these modes will come later in this manual.

Note: Using the Advanced settings, you can force Map mode to always start in 2D North-up view and/or Cockpit mode to always start in 3D Track-up view (5.6.1). You

can still rotate and tilt the maps in either mode, but the next time you enter this screen, the preset look will reappear.

4.3.2 Zoom levels

NOVOGO uses high quality vector maps that let you see the map at various zoom levels, always with optimised content (the density of the map details can be independently set for Map and Cockpit screens in Map settings (5.2.2)). Street names and other text objects are always displayed with the same font size, never upside down, and you only see as many streets and objects as needed to find your way around the map. Zoom in and out to see how the map changes in either the 2D or 3D view.



Changing the scale of the map is very easy. You can drag and stretch the scale (4.4.6) at the bottom of the Map screen, use hardware buttons (3.1.2) or semi-transparent screen icons (4.4.2) on both Map and Cockpit screens.

Note: If you need to zoom out briefly to locate your position on the map, use the Overview mode instead of zooming out and back in. The Overview mode is a 2D North-up view that can be started by tapping the compass button on the right (see 4.4.8).

Note: NOVOGO has a special Smart Zoom function for navigation that automatically rotates, scales and tilts the map in 3D map mode to always give you the optimal view in your current situation. When approaching a turn, it will zoom in and raise the view angle to let you easily recognise your manoeuvre at the next junction. If the next turn is at a distance, it will zoom out and lower the view angle to flat in order to let you see the road in front of you.

4.3.3 Daylight and night colour schemes

The different colour schemes let you adjust NOVOGO to the brightness of the environment. Use the daylight and night colour schemes accordingly. Daylight colours are similar to paper roadmaps, while the night colour schemes use dark tints for large objects to keep the average brightness of the screen low, with carefully selected colours to still keep you informed about all the necessary information on the screen.



You can change between day and night views manually in the Quick Menu (4.6.2.3) or let NOVOGO do it automatically (5.1.3) for you.

Note: The automatic day/night mode is based upon the current date and GPS position by which NOVOGO calculates the exact sunrise and sunset times on the particular day at the particular location. Using that information NOVOGO can automatically switch between the colour schemes a few minutes before sunrise, when the sky has already turned bright, and a few minutes after sunset before it gets dark.

Tip: There are several daytime and night colour schemes included with NOVOGO. To select the one that suits your needs the best, make your selection in Settings (5.2.1).

Note: The colours mentioned and screenshots included in this manual refer to the default daytime and night colour schemes. They may not look the same in the schemes you have chosen.

Tip: If you use NOVOGO after sunrise or before sunset, look for the sun in the sky in the map background using a flat 3D view. It is displayed at its actual position to give you another way to orientate, and also to provide some eye candy.



4.3.4 Streets and roads

The similarity of NOVOGO to paper roadmaps is also convenient when it comes to streets, the most important elements of the map concerning navigation. NOVOGO uses similar colour codes to those you are accustomed to, and the width of the streets also refers to their importance, so it will not be difficult to tell a highway from a small street.

Streets and roads have names or numbers for identification. Of course, this information can be displayed on the map. NOVOGO uses two different ways to show street labels. The conventional way is the same as a roadmap – it displays the name of the street aligned with the street. The alternative is a kind of virtual signpost stuck into the street itself.



You need not choose between the two modes. NOVOGO will use the one best for the current tilt and zoom level. Zoom in to have only a few streets on the map, and start tilting up and down to see how NOVOGO switches between the two modes in an instant.

Note: The automatic switching is on even when using Smart Zoom. At first you may find it odd, but later you will discover how it adjusts the displayed information to the current view of the map. It is important, as the driver must be able to read the map at a glance.

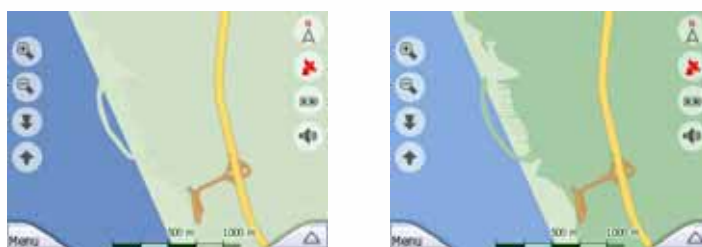
Tip: If you do not want to be bothered by street names during navigation, turn them off on the Map Settings screen (5.2.4).

Tip: Major roads usually have alternative names (numbering) besides the primary name. You can choose whether to display these alternative names or not. You can set this in Map settings (5.2.3).

4.3.5 Other objects

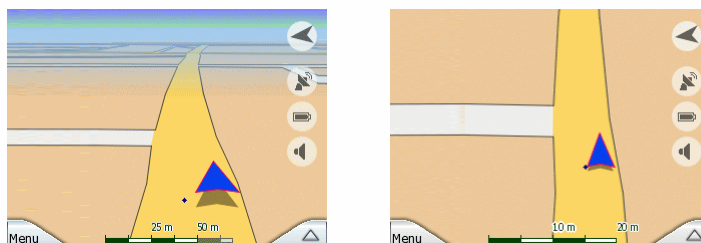
To help orientate you, the map also contains objects that have no other navigating function than to help you recognise your location on the map. These are surface-waters, large buildings, forests, etc.

Tip: These objects are normally displayed using textured polygons that look natural to the eye. You may wish to switch the textured display off (5.2.5) to free some of the resources of your PND by replacing textures with plain coloured surfaces.



4.3.6 Current position and Lock-on-Road

When your GPS position is available, a blue arrow (yellow when using night colours) shows your location on the map. The direction of the arrow represents your heading. The arrow is sized and vertically rotated with the zoom and tilt levels to always look realistic.

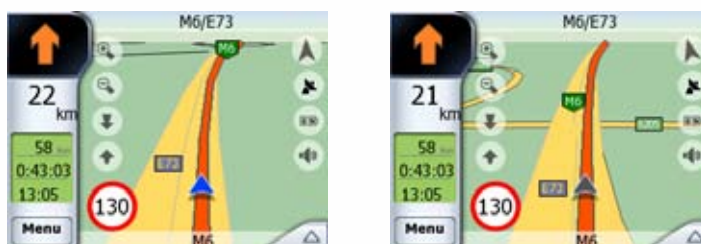


NOVOGO has a built-in Lock-on-Road feature that always puts the position arrow on the road, on the axis of the street in case of one-way streets, or on the side of the road where you drive (e.g. on the right in Germany and on the left in the U.K.) on two-way roads.

The location received from the GPS receiver is shown as a blue dot on the map. This can help you locate your position if the GPS accuracy is poor, and the Lock-on-Road system puts you on the wrong street. It is also the location saved in the track log (4.6.2.6).

Note: the Lock-on-Road feature can be turned off in Advanced settings (5.6.4.4) for pedestrian use. When switched off, the arrow is displayed where the blue dot would be with active Lock-on-Road.

When the GPS position is lost, the arrow turns grey and jumps to the last known position, disabling Lock-on-Road (the last position before losing the reception is usually inaccurate, and there is a chance that Lock-on-Road may choose the wrong street).



4.3.7 Selected map point, also known as the Cursor

If you tap the map somewhere or select a specific item in Find, it will become the selected point on the map, marked with a small red dot and permanently radiating red circles to make it conspicuous at all zoom levels, even when it is in the background of a 3D map view. You can use this point as starting point, via point, or destination of your route, you can search for a POI near to it, mark it with a drawing-

pin, or save it as a POI. The cursor, when visible, is also the reference point for map scaling.



Note: When your GPS position is available, and Lock-to-Position is active, the cursor is always the current GPS position. When you select another point by tapping the map, or using Find, the new Cursor is shown on the display, Lock-to-Position becomes disabled, and the Lock button appears on the screen. Now the Cursor is the newly selected point. As soon as you tap the Lock button, or after the given timeout NOVOGO restores Lock-to-Position (5.6.3.3), and the Cursor jumps back to the current GPS position.

4.3.8 Marked map points (Pin)

The Cursor can be marked with a pin. Pins are shown as being stuck in the map. A pin is visible at all zoom levels and remains in its position until you unpin it, or delete all pins in Advanced settings (5.6.5.1).



The colour of the pin is automatically selected by NOVOGO. Different colours help you identify a pin in the History list (6.3.2) later. There they are shown together with their address and GPS coordinates.

Tip: There is a quick way to save the current GPS position as a pin. Press the Record button (hardware button with an audio cassette icon on it) to save the pin instantly.

Tip: A quick way to tell the coordinates of a location you found on the map is to pin it, and then look for the coordinates in the History list (6.3.2). This way you also save the coordinates with the pin for later reference. If you do not need the coordinates later, just select the point and start Find Coordinates (6.3.3).

4.3.9 Visible POIs (Points of Interest)


NOVOGO comes with thousands of built-in POIs, and you can create your own POI database as well. Having all of them displayed on the map would make the map too crowded. To avoid this, NOVOGO lets you select which POIs to show and which ones to hide (4.6.2.4) using their categories and subcategories.

POIs are represented by icons on the map. For a built-in POI it is the icon of the subcategory of the actual POI. For points you create, it is the icon you had chosen when you created the POI (it can be changed later).

These icons are large enough to recognise the symbol, and semi-transparent so as not to cover the streets and junctions behind them.



When the map is zoomed out, the icons are not shown. As you zoom in, small dots appear at the locations of visible POIs. Zooming in further makes the full icons appear.

If two points are too close to each other so that icons overlap, a multi-POI icon  is shown instead of individual ones. Zoom in more to see them separately. (Should the two POIs have the same icon, this icon will be displayed instead of the multi-POI icon.)



Note: When navigating, POI icons can be disabled together with street names (5.2.4). If you still need this information during your journey, just drag the map to disable Lock-to-Position (4.4.4). This will restore street names and POI icons immediately. Now press Enter or tap Lock to reactivate Lock-to-Position.

Tip: Tap the map on or near a POI item to see the list of the names of the nearest POIs in a popup list, if it is enabled (4.6.2.5). To see the details of a particular POI in the list, tap the blue 'i' icon on the right. If you have too many POIs nearby, this list may not be complete. In the Cursor menu (4.4.13) there is a button called POI that leads you to the screen of all nearby POI items. There you can open them one by one to see their details, and select any of them as a route point.



4.3.10 Elements of the Active Route

NOVOGO uses a multi-destination routing system in which you have a start point (your current location if GPS position is available), a destination, the line of the active leg of the route, and optionally via points and inactive legs. They are all shown on the map.

4.3.10.1 The start point, via points and the destination

These points are represented by flags.



4.3.10.2 Animated turn guidance

Animated arrows represent all route events other than the above-mentioned special points. These arrows show the direction in which you need to continue your journey.



4.3.10.3 The active leg of the route

The active leg is the section of the route you are currently driving. If you have not added any via points, the whole route will be the active leg. When via points are present, the active leg is the part leading from your location to the next via point.

The active section is displayed in light green when the sun is up, and in red during the night. In both cases it is the most conspicuous part of the map even when in the background of a 3D map view.



The line of the route is displayed on the driving side of the road for two-way and on the axis in case of one-way streets. When the map is zoomed in and the line is wide enough, small arrows show the direction of the route. This can be useful if you preview the route before starting the journey or when entering a complex junction.



4.3.10.4 Inactive legs of the route

Future sections of a route are inactive. They are also shown on the map with the same colour but a darker tint than the active one. An inactive route section becomes active as soon as you reach its starting via point.



4.3.10.5 Roads in the route excluded by your preferences

Although you can choose whether to include or avoid some road types in Route parameter settings (5.4.4), sometimes they are impossible to avoid near the starting point, via points or the destination. If so, NOVOGO will display those segments of the route with an alternate colour. They are shown in red with daylight colours, and yellow with the night colour scheme, both in active and inactive legs of the route.

4.4 Screens with map

Having explained the contents of the map, the description of the other parts of the map screens follows. There are two map screens: the Map screen and the Cockpit screen. The way they show the map is the same but their look and controls are optimised for different purposes.

The Map screen is to be used mainly without a GPS, to browse the map, create user POI items, or to plan your route based on map points. The Map screen is designed to give you the maximum map area. This screen is usually used in 2D North-up mode (you can set NOVOGO so it always opens the Map screen like that – see 5.6.1.1).

The Cockpit screen is for driving purposes. Besides showing the map, it contains some additional travel information if you are just cruising (speed, current street you are driving in, speed limit for the current street), and some more route data if you are navigating (e.g. next street in your route, distance to travel, type of the next route event). This screen is typically used in 3D Track-up mode (you can make NOVOGO always open the Cockpit screen like that – see 5.6.1.2).

There are several controls that function in a similar fashion on the two screens. They are described on the following pages.

Map screen contents:



Cockpit screen contents:



No.	Display	Control
1	(Cockpit only) Turn preview*	Opens Route menu*

2	n/a	Zooms in (optional)
3	n/a	Zooms out (optional)
4	n/a	Tilts down (optional)
5	n/a	Tilts up (optional)
6	Indicates that Lock to GPS position and heading is inactive	Re-enables Lock-to-Position / Smart Zoom
7	Selected map point (Cursor)	Opens Popup Info and Cursor menu
8	(Map only) Map scale	Zooms in/out by dragging
9	n/a	Menu (Find, Quick, Route, Main)
10	Map orientation and Overview	Switches North-up, Track-up and Overview
11	GPS position quality	Opens GPS Data screen
12	Battery status	Opens settings
13	Sound on or muted	Enables/disables muting
14	Track Log recording or playback	Opens Track Log screen
15	n/a	Opens Cursor menu
16	(Cockpit only) Current street	Opens Route Information screen
17	(Cockpit only) Travel and Route data**	Opens Route Information screen
18	(Cockpit only) Distance to next turn***	n/a
19	(Cockpit only) Next street***	n/a

* On Map screen only when a route is active

** Contents differ when a route is active

*** Only appears when a route is active

**** Only appears when a route is active and the next turn is near

4.4.1 Turn preview (No. 1)

On the Cockpit screen this field shows a graphic illustration of the next manoeuvre. For example when you approach a turn, an arrow will show whether it is a slight, normal or sharp turn. When showing a roundabout, the number of the exit is also given in the picture.



This field also serves as a button. Tap it to get to the Route menu (4.6.3). The Map screen will show a button called Route here if there is an active route. This also leads to the Route menu.

4.4.2 Zoom in and out (No. 2 & 3)

These semi-transparent buttons are only displayed if 'Zoom & Tilt' is enabled in the Quick menu (4.6.2.2).



As already described in 3.1.2, zoom will change the scale of the map. Zoom out shows a larger part of the map, while Zoom in shows a smaller part of the map in more detail.

The automatic Smart Zoom function will do the necessary zooming for you when navigating (zooms out if the next turn is at a distance to let you see far ahead and zooms in when approaching a turn to give you a better view of the upcoming manoeuvre). If you manually change the zoom level, Smart Zoom will no longer scale the map by itself (automatic tilting and rotating remains active). You need to tap the Lock button (4.4.4) to return the zoom control to Smart Zoom. You can also set NOVOGO to do this automatically after a few seconds (5.6.3.3).

4.4.3 Tilt up and down (No. 4 & 5)

These semi-transparent buttons are only displayed if 'Zoom & Tilt' is enabled in the Quick menu (4.6.2.2).



As already described in 3.1.1, this function modifies the vertical viewing angle of the map in 3D mode. You can change the angle in a wide range starting from a top down view (2D view is seamlessly integrated) all the way to a flat view that lets you see far ahead.

The automatic Smart Zoom function will do the necessary tilting for you when navigating (gives a flat view if the next turn is at a distance to let you see far ahead and raises the angle when approaching a turn to give you a better view of the upcoming manoeuvre). If you manually change the view angle, Smart Zoom will no longer tilt the map by itself (automatic zooming and rotating remains active). You need to tap the Lock button (4.4.4) to return the tilt control to Smart Zoom. You can also set NOVOGO to do this automatically after a few seconds (5.6.3.3).

4.4.4 Lock to GPS position and heading (No. 6)

This semi-transparent icon is displayed if GPS position is available, and the map has been moved or rotated. It also appears when you scale or tilt the map while Smart Zoom is enabled.



Normally NOVOGO positions the map to keep the GPS position visible somewhere on the map (when North-up orientation is selected), or always at the bottom centre of the map (when Track-up orientation is selected).

If you manually move the map, it will freeze the map in the new position. To return to the GPS position, use this Lock button. Rotating the map in any direction will only freeze the orientation of the map, but it keeps on moving to keep the GPS position visible. Use Lock to return to North-up or Track-up orientation (the one previously selected).

When Smart Zoom is enabled, scaling or tilting the map also stops the automatic zooming or automatic tilting respectively. To reactivate Smart Zoom, tap this button.

Tip: In Advanced settings you can set a delay time after which NOVOGO pushes the Lock button for you automatically (5.6.3.3). This can be turned on for re-enabling both Lock-to-Position and Smart Zoom.

4.4.5 Cursor (No. 7)

As described in 4.3.7, if you tap the map somewhere or select one specific item in Find, it will become the selected point on the map, marked with a small red dot and radiating red circles to make it conspicuous. You can use this point as starting point, via point or destination for your route, you can search for a POI near it, mark it with a pin, or save it as a POI.

Note: When GPS position is available, the Lock button will appear indicating that you have disabled Lock-to-Position. Tapping the Lock button will re-enable the position lock and move the cursor back to the current GPS position. The same happens when NOVOGO restores Lock-to-Position automatically, if it is set in Advanced settings (5.6.3.3).

4.4.6 Map scale (No. 8)

The scale indicator is only available on the Map screen. In 2D map view it represents the scale of the map. In 3D view it is the scale of the nearest part of the map only.



You can use it in both 2D and 3D modes to scale the map. Drag and pull it right to zoom in, or left to zoom out.

4.4.7 Menu (No. 9)

This button opens the Menu with the Find engine, the Quick menu, the Route menu and the exit button that takes you to the Main menu screen. The Menu will be described in detail later in 4.6.

4.4.8 Map orientation and Overview (No. 10)

You can view the map screens in three different presentation modes. This switch will cycle through them in the following order.

The usual map orientation for navigation is Track-up. It means NOVOGO rotates the map during navigation to always face the direction of your travel. In this mode an arrow (compass) points towards North.



Tap this icon to switch to North-up mode. Now the map is fixed to keep facing North. The icon changes to show the new rotation mode.



Tap the icon again to enter Overview mode. This mode looks similar to the North-up mode with one difference: the zoom level in this mode has a fixed default to give you a better look of where you are on the map. You can change the zoom level at any time, this will not cause the Lock button to appear, but when entering Overview mode later, the default zoom level will be restored.

The arrow representing your position will be fixed in the middle of the screen. When you move the map in Overview mode, the Lock button will appear, and when pushed, it will move the map to have your current position in the middle of the map again.

You cannot rotate the map in Overview mode. This mode is strictly north-up.





You can set up NOVOGO so that it will switch to Overview mode during navigation when the next turn is far away. You can specify this distance and the fixed zoom level of Overview in Advanced settings (5.6.3.2). An airplane icon indicates Overview mode.



Tap the icon again to return to Track-up (automatic rotation) mode.





4.4.9 GPS position quality (No. 11)

Similarly to the icon found on the GPS Data screen (4.2.3), the map screens also inform you about the GPS signal. They can show the same four values:

-  The black satellite dish with the red exclamation mark shows there is no connection with the GPS receiver. GPS navigation is not possible.
-  Red shows there is a connection, but the signal is too weak to give a position. GPS navigation is not possible.
-  Black shows there is a GPS position, and navigation is possible. When only one arc is shown, the position is 2D (no altitude available), and position error may be significant, yet NOVOGO is ready to navigate.
-  A black dish and two arcs represent a 3D GPS position. NOVOGO is ready to navigate.

4.4.10 Battery status (No. 12)

The status of the PND battery is also shown by NOVOGO. You can estimate the available power reserve from the length of the bar inside. Some examples:

-  The thunderbolt in the battery shows the battery is being charged.
-  Battery is not charging, but it is at full capacity.
-  Battery is not full, but there is sufficient reserve capacity.
-  When the inside of the battery turns red, the battery needs recharging.

4.4.11 Sound muting (No. 13)

By tapping this button you can quickly mute all sounds of the PND. This will not modify the volume level and the enabled or disabled status of the voice guidance or the key sounds (all to be set on the Sound Settings screen: 5.3), just mutes the sound output. When muting is enabled, the speaker icon is crossed out.



Tap again to re-enable sounds.



Note: Sound can be muted in Sound settings (5.3), too. There you have a Master switch that works together with the switch described above. There is also a Master slider on that screen. That you can use to fully turn down the volume of the device. Setting the volume low is different from muting, therefore it will not show up on the mute indicator.

4.4.12 Track Log recording/playback indicator (No. 14)

When a track log is being recorded, a red icon is displayed on the map screens. This icon also functions as a button leading to the Track Log screen (4.6.2.6) where you can stop the recording or make the track log visible on the map.



During track log playback a green icon will blink. Tapping this icon (in fact, tapping the screen anywhere) stops the simulation.



4.4.13 Cursor menu (No. 15)

The Cursor is the selected point on the map (marked by a red dot and radiating red circles around it), or the current GPS position when it is available and Lock-to-Position is enabled. When you tap the screen to place the Cursor, the Cursor menu pops up automatically to give you the list of possible functions you can use the Cursor for. At the same time Popup Info (street name, house number and the list of POIs nearby) appears near the selected map point if Popup Info is enabled in the Quick menu (4.6.2.4).

If you do not use the Cursor menu in a few seconds, it will automatically vanish back to the bottom of the screen, and Popup Info disappears, too. You can have them reappear by reopening the Cursor menu using the arrow in the bottom right corner. When you open the menu manually, it will stay on until you close it or switch to another screen.

Tip: If you want to see the map around the Cursor, close the Cursor menu and reopen it. When this menu is opened manually, the map is always moved to have the cursor in the centre.



The content of the Cursor menu depends on the screen (Map or Cockpit) and it is slightly different if there is an active route already planned. You have the following options:

- **Start:** use the Cursor as the departure point for your route. This menu point is available only in Map mode and when there is no active route. In Cockpit mode the departure point of the route is always the GPS position or if it is not available, the last known GPS position.
- **Route To:** use the Cursor as the destination of your route. This button is to start a new route. The previous route (if it exists) will be deleted and replaced. If a multi-point route is active, NOVOGO will ask you whether you really want to delete it together with all its via points.
- **Add Via:** by inserting the selected map point as a via, you instruct NOVOGO to cross this location before the destination of the route. This is the way to build a multi-point route in reverse order (when you wish to insert a stopover 'go to A but first get some fuel at B' or want to influence the direction of the route). This menu point works only if a route is already active.
- **Remove Via:** removes the 'via point' near or at the Cursor. The route will be recalculated immediately excluding the deleted point. This menu point replaces Add Via and is available only if the Cursor is near or at a via point.
- **Continue:** add a new destination to be reached after the previous destination. The new destination replaces the old one, which is now demoted to a via point. This is the way to build your multi-point route in straight order (when you wish to visit several destinations 'go to A then to B'). This menu point is available only if a route is already active.
- **Pin:** push a coloured pin in the map at the selected point for later use. This pin is visible at all zoom levels and also appears in the History list together with its exact position. The colour of the pin is automatically selected by NOVOGO.
- **Unpin:** remove the pin near or at the Cursor. This menu point replaces Pin and is available only if the selected point is near or at a pin.
- **Add POI:** opens the new POI capture window to let you add the selected map point to the list of your user points. This menu point is only available on the

Map screen and if there are no POIs near the cursor (i.e. only the address is shown in the Popup Info window).

- **POI:** opens the list of POIs near the selected point. These are the POIs shown in the Popup Info window. If you want to add a new POI at the cursor, you can do so by tapping New in the bottom left corner. This menu point replaces Add POI and it is only available in the Map screen and if there is at least one POI item near the Cursor.



4.4.14 Current street (No. 16)

This field of the Cockpit screen shows the name or number (as available) of the current street or road you are driving on.

Tip: Some roads have an alternative name (or number). This is normally shown together with the primary name in this field. You can hide these alternative names in Map settings (5.2.3).

4.4.15 Travel and Route data (No. 17)

The contents of these three fields are different when cruising (without an active route) or navigating (following an active route).

While cruising, the fields show the present speed, the current speed limit and the time of day.

You can choose what to display in these three fields during navigation, by going to Advanced settings / Display Options (5.6.1.5). See the following list for your options. The only restriction is that you cannot select a value that already appears in another field. The possible field contents are:

- Distance to destination (default value for the left field)
- Time to destination (estimated time en route, default value for the middle field)
- Distance to next via point
- Time to next via point
- Time to next manoeuvre (next route event)
- Speed
- Speed limit
- Arrival at next via point
- Arrival at destination (default value for the right field)

4.4.16 Distance to next turn (No. 18)

This field shows the distance to go before reaching the next route event (turn, roundabout, exit, etc.)

This field is only displayed when navigating a route.

4.4.17 Next street / Next settlement (No. 19)

This field shows the road or street that comes next in the route itinerary.

If you are not yet in the settlement where this next street is, NOVOGO will display the name of the settlement instead of the name of the road or street. A bullet symbol will appear next to the name of settlements to help you tell them apart from street names.



This field is only displayed when navigating a route.

4.5 *Route Information screen*

The Route Information screen has all the data and some of the functions you need while you navigate. Some additional functions can be found in the Route menu (4.6.3). Without an active route one of the buttons is inactive and route data cannot be displayed.

As a reminder, you can open this screen 2 ways: tapping the Info button in the Route menu (4.6.3.6), tapping one of the Route Data fields on the Cockpit screen.



4.5.1 Route data displayed (for destination and via points)

In the top section of the screen you see information about the current route. These fields are continuously updated while you keep this screen open.

When you open the screen, all fields contain information on reaching your final destination. Tap any of the fields to see data on the via points starting from the first one through the final destination again.



4.5.1.1 Route line

The upper part of this screen shows your planned route as a horizontal line. Its leftmost point is the start of the route, the rightmost one is the final destination, and you can see your via point flags along the line, spaced in proportion to their distance.

The blue (yellow at night) arrow representing your position will travel from the left to the right, giving you visual feedback of your journey.

When you reach a via point, it becomes the starting point of the route, the past will be deleted, the line with all the other via points will be modified instantly, and the arrow jumps back to the left.

When NOVOGO needs to recalculate the route, the arrow will not jump back to the left as when reaching a via point, but it may drift a bit as the length of the new route may be different from the previous one.

When the data corresponding to the entire route is displayed in the fields below, the line is coloured the same way as the route line shown on the map. When you see data that belongs to a via point, the route is coloured only up to that via point. The rest of the line remains grey.

4.5.1.2 Distance Left

This value can also be displayed in one of the Route data fields on the Cockpit screen as 'Distance to destination'. This is the distance you need to travel on the route before reaching your final destination.

If via points exist, tap and tap again any of the fields to see the distance to reach the first, second, etc. via point.

4.5.1.3 Method

This field shows how the route was calculated. It either displays the 'Route' or the 'Vehicle' field from the Route parameter settings. If you have chosen Car, Taxi, Bus or Lorry, the type of the route (Fastest, Shortest or Economical) will be displayed here; if you have selected Emergency, Bicycle or Pedestrian, this information will be displayed here.

4.5.1.4 Time Left

This is an estimated value that can also be displayed in one of the Route data fields on the Cockpit screen as 'Time to destination'. It shows the time needed to reach the final destination of the route based on information available for the remaining segments of the route. The calculation cannot take into account traffic jams and other possible delays.

If via points exist, tap and tap again any of the fields to see the time needed to reach the first, second, etc. via point.

4.5.1.5 Estimated Arrival

This is an estimated value that can also be displayed in one of the Route data fields on the Cockpit screen as 'ETA to destination'. It shows the time needed to reach the final destination of the route based on information available for the remaining segments of the route. The calculation cannot take into account traffic jams and other possible delays.

If via points exist, tap and tap again any of the fields to see the estimated arrival at the first, second, etc. via point.

4.5.1.6 Destination / Via point

This field shows the exact address (or its coordinates if the address is not available) of the final destination.



If via points exist, tap and tap again any of the fields to see the address or coordinates of the first, second, etc. via point.











4.5.2 Warning icons

The following 5 squares are normally grey. Some of them turn red and show a graphical symbol in case warning(s) are attached to the planned route. These are warnings, so icons always show information for the whole route, even if the data fields display values from your current position to a via point only.

Click on any of the icons to show its description.

A few samples of the available icons:

-  - This icon shows that you need to pay toll on the recommended route.
-  - This icon shows that the route contains motorways. Tap the icon to see the total length of the motorways in the recommended route.

-  - This icon shows that toll roads are included in the recommended route.
-  - This icon shows that you need to board a ferry along the recommended route.
-  - This icon shows that you need to pay for the ferry.
-  - This icon is displayed when NOVOGO could not plan a route with all your road type preferences respected. Sometimes it is impossible to find a suitable route near the start or the destination.
-  - This icon warns you that NOVOGO had to recommend a route that does not match all your preferences given at the Route Parameters settings.
-  - The recommended route contains areas only accessible to pedestrians.
-  - The recommended route contains unpaved roads.
-  - The recommended route contains roads that require a permit or permission to enter.
-  - Information – any other piece of relevant but not categorised information. Tap the icon to see the content.
-  - Next page – displayed when more than 5 warnings apply for the recommended route.

4.5.3 Fit to screen

Tap this button to display an overview of the whole recommended route. You will jump to the Map screen with a 2D North-up view so that you can check where the route takes you.

4.5.4 Parameters

This button opens the Route parameter settings screen (5.4) otherwise opened from the Route menu (4.6.3).

4.6 *Menu*

The Menu button can be found in the top right corner of the portrait and square map screens and in the bottom left corner of the landscape map screens. Tapping this button brings up a menu that allows you to access some of the most frequently used functions of NOVOGO.

4.6.1 Find tab

The first page of the Menu is Find. It lets you select a destination without first having to locate it on the map. The Find menu will be described in detail later in 6.3.



4.6.2 Quick tab

This provides quick access to some configurable options.



4.6.2.1 3D Map

When the green light is on, the map shows a perspective view. You can use hardware buttons 1 and 2 to change the angle of the view. When the green light is off, the map is displayed in a conventional top-down view. This 2D view is also the end of the tilt range, so it can also be accessed by tilting the map up. Conversely, 3D mode can be switched on by tilting down in 2D mode. Map view modes are described in 4.3.1.



Note: When you reach 2D view by tilting the map, Smart Zoom will tilt the map as you press the Lock button or it disappears after the timeout (set in Advanced settings) expires. Use the 3D Map toggle to permanently switch to 2D view.

4.6.2.2 Zoom & Tilt

When the green light is on, additional transparent buttons (4.4.2 and 4.4.3) appear on the left side of the map screens for zooming and tilting without the use of hardware buttons.



4.6.2.3 Night Mode

Turn on or off the night colours to override the automatic colour scheme switching.



Note: Using this option turns off the Automatic Night Colours feature. You need to re-enable it at the General settings screen (5.1) to have the colours change automatically again.

4.6.2.4 Manage POI (Points of Interest)

Here you can set all the parameters of POIs that you have created and the visibility of the built-in POIs that come with the map.

Manage built-in POI visibility

The maps in NOVOGO come with a huge number of POIs. Displaying all of them would make the maps too crowded (to see how POI items are shown on the map see 4.3.9). In order to avoid that, you can decide which POI groups to show and which ones to hide on the map. NOVOGO has a multi-level POI category system. You can set the visibility of the top two levels. All levels below that will be shown or hidden according to their respective category (i.e. you can set the visibility of Petrol Stations in the Services category, but all brands listed under that will either be shown or suppressed together).



Groups shown with a grey icon (🚌) are hidden; blue icons (🏠) are visible on the map, while the ones shown in two colours (📧) have some of their subcategories shown and some others hidden.

If you highlight any of the POI groups by tapping them, the button in the bottom left corner will become Show if the POI group is hidden, or Hide if the group is shown or partly shown.

Tip: To make a partly shown group fully shown, tap this button twice. First you will hide the whole group, and then you will have it displayed with all its subgroups.

Tapping again the highlighted POI group (except for My POI – described later) opens the list of subcategories of that group. Here you cannot see bicolour subgroups, as visibility can only be set for the top two levels of categories. Showing and hiding a subgroup is done the same way as for the main groups.



Manage My POI

By highlighting then tapping again the My POI switch on the Manage POI main screen you can manage the POI groups and items that you have created.



Note: The group Unnamed only appears if you have previously saved a POI item without creating a new POI group for it.

Tapping any of the group names will open a list of POIs saved in that group. This list is similar to the list of POI results in Find. The POIs are ordered based on their distance from your current position. If GPS position is not available or you have disabled Lock-to-Position by tapping the map, the POIs will be ordered by their distance from the Cursor.



When the My POI Groups are displayed, you have the following options:

- Show/Hide: similarly to built-in POIs, you have the possibility to show or hide all POIs of the selected category on the map. Groups with a blue icon are displayed; groups with a grey icon are hidden.
- New: you can create a new My POI group by tapping this button. You need to select an icon, a name, and the maximum zoom level at which the POI is still visible on the map (provided you let the POI group be displayed at all). You do not necessarily need to create POI groups in advance. You can do it while saving a new POI.
- Delete: you can delete any of your previously saved My POI groups. This will delete all POIs in that group. NOVOGO will ask you to confirm this action.
- Edit: you can edit the attributes (name, icon, visibility level) of a previously created My POI group.



- Previous/Next: if your groups fill several pages, these buttons will let you browse through them. The green field left of these buttons shows the current page number and the number of pages.

When the list of My POIs is displayed, you have the following options:

- Filter: you can shorten the list of matching POI items by filtering. Just like in Find, enter a few letters of the desired POI name. When the number of matching items can fit in one page, NOVOGO will automatically display the list. If you tap Done any time before this happens, you receive the list of matches on multiple pages.
- ABC/Distance: by tapping this button you can have the POIs sorted in an alphabetical order. Tapping again will return to the distance-based order.

When you tap on any of your POIs in the list, you will open a new window with the details of the selected POI.



Here you have the following options:

- Delete: you can delete any of your previously saved POIs. NOVOGO will ask you to confirm this action.
- Edit: you can edit the attributes (name, icon and group) of a previously created POI.



- OK: if you tap this button, the map screen returns with the selected POI in the middle.

4.6.2.5 Popup Info

When this feature is enabled, tapping the screen (activating the Cursor, a radiating red dot) on either of the map screens also opens a pop-up box with the selected street name, house number and the name of the nearby POIs, if any.



Tip: Tapping one of the blue Information icons behind the POI names shows the details of the appropriate POI item.

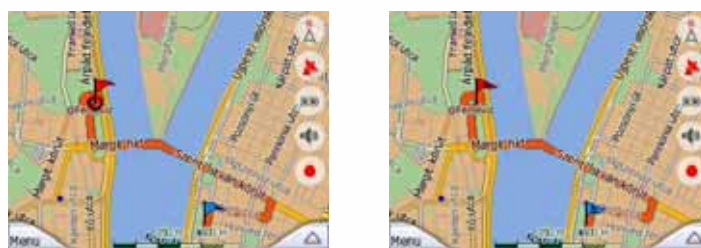
4.6.2.6 Manage Track Logs

Using NOVOGO it is also possible to save the track logs of your journeys. This screen lets you manage all your track logs. When it comes up, it shows a list of all track logs already saved.



The original name of a track log is the date and time when it was recorded. You can change their name to something more meaningful if you wish.

Each track log has a colour, shown to the left of its name when the track log is visible on the map. If the track is not visible, an underscore character is shown here. Tapping the line of the highlighted track log will toggle between showing and hiding that log. The track log will be drawn on the map using the colour next to its name.



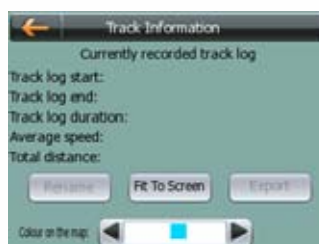
When a track log is being recorded, a new line appears in this list with an underscore, as newly recorded track logs are not shown in the map normally.

Tip: If you wish to see the track log currently being recorded, tap on it twice to make it visible.



In this screen you have the following options:

- Record: this will initiate track log recording. A new line appears in the list, and GPS position data will be saved until you stop the recording or exit NOVOGO. A red icon (4.4.12) is shown on the map screens to let you know that a recording is in progress. Tapping that icon opens this Track Log screen.
- Stop recording: if recording is in progress, this buttons stops it.
- Info: this button opens a screen that shows the track log details, and lets you:
 - change the name of the track log (Rename button),
 - change the colour of the track log (Colour on the map selector),
 - have it displayed on the map (Fit to screen button), or
 - export the data to the SD card in GPX format (Export button).



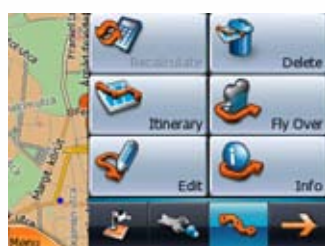
- Replay: push this button to see a simulation of the saved track log on the map. A green icon (4.4.12) will appear on the map screens to let you know it is not a fly over but a simulation based on a real saved log.
- Delete: you can delete a track log if it is not needed any more. NOVOGO will ask you to confirm this action.
- Track log options: this button in the upper right corner leads to a settings screen where you can set up the track logging parameters:
 - Update interval is how often track points will be saved. Position information is normally received once a second from the GPS. If you do not need such a detailed log, you can increase this number to save track log space.
 - Current autosave track size: this figure shows how much memory is used by the automatically saved track logs.

- Enable auto-saving: when auto-saving is enabled, you do not need to turn track log saving on and off manually. NOVOGO will automatically start recording the track log as soon as GPS position is available.
- Limit track DB size: here you can set whether or not to maximise the size of the database where the automatically saved track logs are kept.
- Maximum track database size: here you can set the maximum database size if the track database size limit is enabled using the previous switch.
- Create NMEA/SIRF log: independently of the normal track log, you can instruct NOVOGO to record the native GPS data received from the GPS device. NOVOGO is capable of working with GPS devices using either the NMEA or the SiRF protocol, so the saved data will be in one of these formats. These logs are saved as separate text files on the SD card, and they cannot be shown or replayed in NOVOGO. They are for post-processing needs, should you have any. Be careful when saving native GPS data, as it can soon eat up available memory.



4.6.3 Route tab

This menu contains options to manage different settings in the program.



4.6.3.1 **Recalculate**

This menu point is only available if an active route exists and GPS position is present.

It brings up a menu with four options. Using one of these functions you can modify the current route.



Recalculate

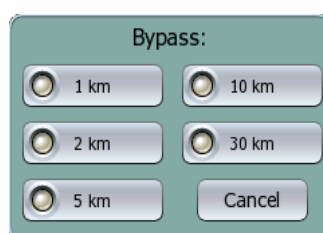
This function repeats the route calculation based on the same settings as used to calculate previously. This possibility is typically used when automatic off-route recalculation is disabled. However you may consider using it when you travel on a road parallel to that recommended by the route. In this case NOVOGO may not recalculate the route for some time, but you can force recalculation here. This is also the button you will most frequently use when the window appears automatically, provided that the manual route recalculation is set in 5.1.5.2.

Drop Next Via Point / Delete Route

You can modify the route to skip the next via point if you decide it is no longer needed. For example, you may have added the via point only to influence the route but you do not want to actually reach it; or you have already almost reached it, and NOVOGO still keeps on navigating towards that point. When there are no via points left (only the destination), the name of this button turns to Delete Route, and it cancels the navigation.

Bypass

When you run into a traffic jam or roadblock, you may want to have NOVOGO calculate a route that departs the original route as soon as it can. You will need to select the minimum distance along the original route where your new route is allowed to rejoin the original route. Select the one you feel appropriate for the traffic difficulty you face.



Note: This function is to give you an alternative for the next section of the recommended route. To change later parts of the route or to avoid specific streets or turns, use the Avoid function in Itinerary instead (4.6.3.3).

Note: When you use this feature, NOVOGO will keep on excluding the same part of the map from later routes until you manually delete the route (4.6.3.2), or restart NOVOGO.

Cancel

This option returns directly to the map screen without recalculating the active route. If you choose this option when manual route recalculation is configured in 5.1.5.2, navigation stops and will be activated again when you are back on your original route.

4.6.3.2 Delete

Tap Delete to erase the active route along with all its route points (start, via points and destination). If you later decide that you need the same route again, you will have to rebuild it from scratch. NOVOGO will warn you before deleting route data.

This function has a special role if you have used the Avoid feature during your journey. When you arrive at your destination, the route line disappears on the map and navigation stops. The route is now practically deleted, but if you plan a new route, the roads, manoeuvres and areas excluded from your route will also be avoided when planning the new route. Tap Delete to completely delete your previous route together with its Avoid restrictions.

Note: When a POI item is used as a route waypoint, deleting the route will not delete the POI item itself, just its role in the route.

4.6.3.3 Itinerary

This function opens the itinerary (route event list) of the active route. The Itinerary has three different display modes and two functions.

Display modes

Display modes are different only in the number of events displayed in the list. List items are always shown with all information available including pictograms of the needed action and distance of the event from the previous list item.

The Itinerary is live and constantly updated when navigating a route. The list item coming next in navigation is the highlighted one until you highlight another one by tapping. After that, the highlight remains on the item you have selected.

- Detailed Instructions: this is the list displayed when Itinerary is opened. It is the list of events in full detail. All significant junctions are shown in the list, even ones to be passed.
- Instructions: by tapping the Mode button once you will see the list of events that need your attention, i.e. the list of manoeuvres during the route. These are the events shown in the Turn preview field and announced by the voice instructions.
- Route summary: tapping the Mode button again will show an overview of the route that contains only the significant roads and intersections.



Show

Tap this button to see the highlighted list item on the map. This will help you identify route events in the list.

Avoid

Tap this button to show a list of possibilities for modifying the route. They let you recalculate the route avoiding the highlighted event and sometimes also some of the subsequent ones.



- Manoeuvre: this option avoids the highlighted action. For example if you find a turn too difficult during rush hour traffic, NOVOGO will recalculate the route excluding that turn. If the next street is important in the route, it is likely that NOVOGO will replace the turn with several easier ones to get to the same street.
- Road: when you exclude a road, NOVOGO will calculate a route that does not use that road. It is useful when you anticipate a traffic jam in a street used in your route, or a roadblock is announced on the radio, and you find that road in your Itinerary.
- Distances: you can also find some distance buttons in this list. They are similar to the ones in the Bypass list of the Recalculation menu (4.6.3.1), but these can also be used for distant parts of the route.

Note: You need not open Itinerary if you run into a roadblock or traffic jam. To get an immediate alternative route use the Bypass function of Recalculate (4.6.3.1).

Note: When you use this feature, NOVOGO will keep on excluding the same part of the map from later routes until you manually delete the route (4.6.3.2), or restart NOVOGO.

4.6.3.4 Fly Over

This feature has no navigation function, it merely provides a quick view of the route. It will present a simulation of the route showing what you will see later when navigating. There are two possibilities for running the simulation.

Fast Fly Over

Tap Fly Over to quickly run through the route. NOVOGO will fly the route in Cockpit mode at high speed to give you a rough overview of the route events. NOVOGO is tweaked to give you a smooth and easy-to-follow playback even at this speed.

This mode is useful if you want to have a look at the route before you start your journey. Tap anywhere on the screen to stop the simulation.

This mode is mainly useful for demonstrating NOVOGO, or to learn the way it works before your start your first journey.

4.6.3.5 Edit

Tap Edit to see the list of all points used in the route. The first item in the list is the departure point of the route without a valid GPS position, the last reached via point if you open the list during navigation, or the point where NOVOGO most recently recalculated the route. This means the list is permanently updated, and via points drop out during the journey. The last item in the list is your final destination.



Use the arrows on the right to browse through the list and tap any line to highlight it. You can perform the following operations:

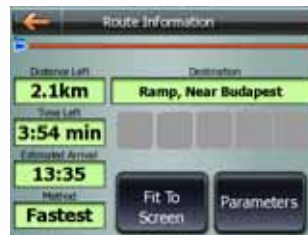
- Add: you can add a new route point (or a new final destination if the highlighted item is the last one in the list) after the selected point. The Find menu opens automatically to let you search for an address, POI, coordinates, one of your favourite destinations, or select a point from the History list. As soon as you select any of these, NOVOGO returns to the Edit screen and your selection appears right under the highlighted line.
- Delete: you can delete the selected point from the list. If the highlighted item is the last one in the list, the previous via point will be promoted to be the final destination.
- Optimise: you can optimise the order in which you will drive through the via points, if there is no specific order you would like to keep. When tapping this button, NOVOGO reorders the list instantly to save you time and fuel.

Optimisation is for via points only. Your starting point and destination remain in their positions, of course.

- Up and Down: using these buttons you can reorder the list by moving the highlighted item up or down in the list.

4.6.3.6 Info

This button opens the Route Information screen described in 4.5. This screen shows information about the current route and has a few additional options to check and modify your active route.



4.6.4 Main button

The Main button at the bottom right corner leads to the Main menu screen described in 4.1.

5 Settings

NOVOGO provides several settings in order to let you customise the functions of the program. The Settings screen can be accessed directly from the Main menu screen (4.1) and from the map screens by using the battery icon (4.4.10), while some of its sub-screens are accessible from other parts of the program.



5.1 General settings

These are the basic settings of NOVOGO.



5.1.1 Safety Mode

Safety mode will disable the touch-screen above 10 km/h (6 mph) to keep your attention on the road. You are still able to use the hardware buttons to change the zoom and tilt levels or to open the Route Information screen but you cannot set a new destination or change the settings.

When you disable Safety Mode, NOVOGO will warn you.

5.1.2 Set Favourite Destinations

You can select two of your most frequent destinations to be your favourites (6.3.5). You can start navigating to either of them by only two taps on the screen. The original names of these points are Home and Work.



You can rename them and specify their locations. To determine the location you can use the same Find menu options (6.3) as for a route destination, and depending on that choice and the information available, the location will be shown here as a street address, a latitude/longitude position, or both.



Note: If you tap either of your favourite destinations in the Find menu (6.3.5) before defining it, NOVOGO will offer to take you to this screen to set it up.

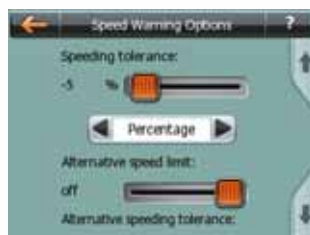
5.1.3 Automatic Night Colours

Using the automatic night mode, NOVOGO will change between the daylight and night colour schemes a few minutes before sunrise and a few minutes after sunset based on the time and location information provided by your GPS. Once you set a permanent colour scheme in the Quick menu (4.6.2.3), this automatic mode turns off. If you need NOVOGO to switch between colours for you again, you need to re-enable this feature.

5.1.4 Warn When Speeding

Maps may contain information about the speed limits of the road segments. NOVOGO is able to warn you if you exceed the current limit. This information may not be available for your region (ask your local dealer) or may not be fully correct for all roads in the map. This setting lets you decide whether you want to receive the warnings or not.

If you turn on this switch, NOVOGO will open a new screen to let you customise the parameters used by the speed warning.



You can set two different kinds of behavior for the warning: one is applied up to a certain speed limit and the other one is used above that.

5.1.4.1 Speeding tolerance

NOVOGO will warn you when you exceed the speed limit by the amount specified here. Select whether you want to specify the tolerance as a Fixed value (offset to the speed limit) or as a Percentage.

The slider will change depending on which mode you have chosen.

Both positive and negative values can be given in either offset or percentage mode.

5.1.4.2 Alternative speed limit

If the speed limit of the current road segment equals or is above this limit, the speed warning will use the alternative tolerance instead of the previous one.

Move the slider to its rightmost position to turn off the alternative speed warning. Then the settings of the upper slider will determine the warning for all roads.

5.1.4.3 Alternative speeding tolerance

If the speed limit of the current road reaches the value set at Alternative speed limit, this setting will replace the basic one set at the top of this screen. The slider and the selector work exactly as the basic ones described in 5.1.4.1.

Example: to let you better understand how this feature works, here is an example. If you use the setting on the left (portrait) screen example (+10 km/h – 100 km/h – +5%), NOVOGO will warn you when driving at the following speeds:

<u>Speed limit</u>	<u>Warning at</u>	
40 km/h	50 km/h	(=40 km/h + 10 km/h)
60 km/h	70 km/h	(=60 km/h + 10 km/h)
90 km/h	100 km/h	(=90 km/h + 10 km/h)
100 km/h	105 km/h	(=100 km/h + 5%)
120 km/h	126 km/h	(=120 km/h + 5%)
160 km/h	168 km/h	(=160 km/h + 5%)

5.1.5 Off-route Recalculation

Once a route is planned, this setting will tell NOVOGO what to do when you deviate from that route.

5.1.5.1 Automatic

The route will be recalculated automatically a few seconds after you go astray.

5.1.5.2 Ask First

NOVOGO can also ask your preference each time you leave the planned route. The route will not be recalculated until you make your choice from the menu that automatically appears (also explained in 4.5.2).



Your options are:

- Recalculate: NOVOGO will recalculate the route with the previous settings. The result is the same as if Automatic recalculation was selected.
- Drop Next Via Point / Delete Route: NOVOGO will remove the next via point from the list and recalculate the route without it. If you have only one target left, the label of the button will be Delete Route, and it will end navigation.
- Bypass: if you have deviated from the original route because of a traffic jam or roadworks, you can instruct NOVOGO to avoid the original route for a specified distance.
- Cancel: you can exit without recalculating the route. Navigation stops and will be activated again when you find your way back to the original route.

5.1.5.3 Disabled

If you stick to the original route, and you wish to get back to it on your own, you can disable recalculation. This way guidance will stop until you return to the recommended route.

5.2 Map settings

You can set a few parameters determining the appearance of the maps in NOVOGO.



5.2.1 Daylight / Night colour profile

NOVOGO comes with different colour schemes for both daylight and night use. There is always one selected daytime scheme and one selected night-time scheme. NOVOGO uses these when switching from day to night and back.

Tap the appropriate button and select a new scheme from the list.

5.2.2 Cockpit / Map mode map details

The less detailed the map, the faster NOVOGO can draw and move it. You will find that NOVOGO has a very fast graphic engine that is capable of moving even detailed maps at high speed.

This setting has three values: More detailed, Normal, Less detailed (fast). They influence when NOVOGO hides and shows certain map features when zooming in or out. Setting a higher detail level will result in objects appearing sooner when zooming in.

Although the map visualisation of NOVOGO is basically the same in Map and Cockpit modes, you can set a different map detail for each one, so the map is better suited for the purposes of that screen.

5.2.3 Alternative Road Names

Some highways have an international name or number for foreign travelers. You can decide whether to show only the local name or both.

5.2.4 Show Street Labels

You can set whether or not to see the names of the streets and the POI icons on the map when driving. Based on the current zoom and tilt levels, street names are displayed either aligned with the street or on signposts stuck into the streets (4.3.4). If you switch these signs on, it will be easier to recognise your location on the map, if you turn them off, it will be easier to see the road geometry.

Note: You can only disable street names and POI icons if NOVOGO follows your position. As soon as you move the map and Lock-to-Position (4.4.4) is disabled,

street names and icons become visible again. Press Enter or tap Lock to re-enable Lock-to-Position and have the labels and icons disappear again.

5.2.5 Textured Polygons

Enable textured polygons, and have rivers, lakes, forests and other large objects displayed in a more realistic and attractive way on the map. Disabling it will lead to uniform areas but better performance. See 4.3.5.

5.3 **Sound settings**

Settings on this page determine the way NOVOGO sounds.



5.3.1 Master sound volume/switch

The left part of this control works as a mute button. Tap to mute all NOVOGO sounds. This works in tandem with the Mute button (4.4.11) on the map screens. Switching one of them will change the status of the other.

5.3.2 Voice guidance volume/switch

The switch on the left can turn on or mute NOVOGO's audible guidance. When turned on, the slider on the right will adjust the loudness of voice prompts. In its leftmost position the voice guidance is suppressed, in its rightmost position the master volume applies.

5.3.3 Key sound volume/switch

The switch on the left can turn the key sounds on or off. Key sounds are audible confirmations of either pressing hardware buttons or tapping the touch screen. When key sounds are turned on, the slider on the right will adjust their loudness. In its leftmost position the key sounds are suppressed, in its rightmost position they are played at the master volume level.

Note: The sound effects of NOVOGO are context sensitive. They will be different if, for example you open or close a window, or you enable or disable a setting. They will even let you know if you have entered enough letters of a street name to have a short list of matches on the screen.

5.3.4 Dynamic Volume

When driving at high speed, the noise in the car may be too loud to clearly understand the voice guidance messages and to perceive the key sounds. Using Dynamic Volume you can instruct NOVOGO to increase the volume when your speed exceeds a certain minimum, and reach its highest volume (determined by the Master volume slider in Sound settings) at the given maximum speed.

Tap the Dynamic Volume button to turn on the feature. This will also open the screen where you can set the minimum and maximum speeds.



5.3.5 Attention Tone

If this is set to Disabled, the voice guidance will sound without a preceding attention tone. Setting it to Single Tone will initiate a single attention tone before the instructions, while Double Tone will use a double tone.

Note: The Mute function (4.4.11) accessible from the map screens overrides the settings on this screen. When NOVOGO is muted, all sounds disappear. These settings will not be changed; only the output will be muted temporarily.

5.4 **Route parameter settings**

This is a very important page. Settings here determine how routes will be calculated. This screen is directly accessible from the Route Information screen (4.5).



5.4.1 Method

Use the handle to set the speed of the route calculation. In the leftmost position the route may not be optimal but the calculation will be very fast. Sliding it to the right will result in more accurate routing in an increased amount of time.

Note: Since NOVOGO calculates routes very quickly, the position of this slide is only used for long routes. Short routes are always calculated to give you the optimal result independent of the slider.

5.4.2 Route

Here you can choose from three different route types.

5.4.2.1 Shortest

Choosing Shortest will result in a route that has the smallest total distance of all possible routes between the given points. This is usually preferred by pedestrians, cyclists or slow vehicles.

5.4.2.2 Fastest

Choosing Fastest will result in the quickest possible route, given that you can travel at or near the speed limits on all included roads. This is usually preferred for fast and normal cars.

5.4.2.3 Economical

This setting is a wise combination of the previous two. Although basically going for the fastest solution, if there is another route taking a bit more time but a lot less distance compared to the fastest one, NOVOGO will choose this one instead to save fuel.

5.4.3 Vehicle

You can set the type of the vehicle that you will use to navigate the route. Based upon this setting, some of the road types will be excluded from the route (e.g.

motorways for pedestrians), or some of the restrictions may not be taken into account (e.g. emergency vehicles have no restrictions). Available values:

- Car
- Taxi
- Bus
- Lorry
- Emergency
- Bicycle
- Pedestrian

5.4.4 Road types to include/exclude

To let the route fit your needs you can also set which road types are to be considered for or to be excluded from the route if possible. When a road type is selected, its lamp is green, if not, it turns red and is crossed-out.

Note: Excluding a route is a preference. It does not necessarily mean total prohibition. If your destination can only be accessed using some of the excluded road types, NOVOGO will use them but only as much as necessary. In this case a warning icon will be shown on the Route Information screen (4.5), and the road not matching your preference will be displayed in red (yellow at night) on the map.

5.4.4.1 Unpaved Roads

Unpaved roads are excluded by default, as they can be in a bad condition and you usually cannot reach the speed limit on them.

5.4.4.2 Motorways

When driving a slow car or towing another vehicle, you may prefer not to take motorways. In this case change the default green to red.

5.4.4.3 Ferries

The accessibility of temporary ferries is not necessarily included in the map data. Furthermore you may need to pay fare, so you may consider disabling them from the preset enabled status.

5.4.4.4 U-turns

Although displayed amongst road types, this is a type of action. Most drivers prefer to replace them with a few normal left and/or right turns in the next few junctions, so it is disabled by default.

Turning back on dual carriageways is not considered as a u-turn.

Note: If you are not totally against u-turns, leave them on here, and add a certain penalty (equivalent extra distance to travel) in Advanced settings Route options (5.6.4.2).

Note: Via points are handled as stopovers with regards to u-turns. It means disabling u-turns on this page will avoid u-turns during the entire route if possible, but when reaching a via point, the following part of the route may be planned starting in the opposite direction.

5.4.4.5 Permit needed

To use some roads or enter some areas you may need special permit or permission from the owners. These roads are excluded from your routes by default. Use this switch if your vehicle is authorised to enter.

5.4.4.6 Toll Roads

Toll roads are included in your routes by default. If you wish to travel more to avoid paying a toll, disabling them will make NOVOGO plan the best toll-free route for you.

Note: You have a few more ways to influence routing and route recalculation in Advanced settings Route options (5.6.4).

5.5 Language & Units

Here you can set the languages, measurement units, and date and time formats used by NOVOGO.



5.5.1 Program language

This button displays the current written language of the program. By tapping the button you can select from a list of available languages. NOVOGO will have to be restarted if you change this setting. NOVOGO will ask for confirmation before it restarts.

5.5.2 Voice language

This button shows the current language of the voice guidance. By tapping the button you can select from a list of available languages and speakers. Tap any of these to hear a sample voice prompt. Just tap OK when you have selected the new spoken language.

5.5.3 Units

You can set the distance units to be used by the program. NOVOGO may not support all of the listed units in some voice guidance languages. If you select a measurement unit that is not supported by the chosen voice guidance language, you will see a red warning message under the selector.

5.5.4 Set Date & Time Format

You can set the date and time format displayed by NOVOGO. Various international formats are available.



5.6 *Advanced settings*

These screens let you set a large number of different advanced settings and initiate some special functions. These settings and functions are divided into six groups.



Tap on any button to set the corresponding parameters. They all open new windows where you can make your desired changes.

5.6.1 Display options

These settings determine how NOVOGO displays different content elements or how it presents the screens.



5.6.1.1 2D in Map mode (and north-up orientation)

The normal use of the Map mode is to browse the map and look for different places on it. It is usually done in a top down view having north towards the top of the map. By default NOVOGO uses the same look for the map in both Map and Cockpit modes. Use this switch to instruct NOVOGO to always open the Map mode in 2D with North-up orientation for map browsing purposes.

Note: You will still have the possibility to rotate and tilt the map, but the map will return to 2D mode whenever Map mode is started.

5.6.1.2 3D in Cockpit mode (and track-up orientation)

The normal use of the Cockpit mode is cruising or navigating, when the road lying in front of the driver is the most important part of the map. It is usually done in a 3D view with the current direction towards the top of the map. By default NOVOGO uses the same look of the map in both Map and Cockpit modes. Use this switch to instruct NOVOGO to always open the Cockpit mode in 3D with Track-up (heading up) orientation for driving purposes.

Note: you will still have the possibility to switch the map to 2D view or north-up orientation, but the map will return to 2D mode whenever Cockpit mode is started.

5.6.1.3 Zoom in after find

When this switch is turned off, NOVOGO will centre the map to the location selected in Find but will not change the zoom level. If you turn this switch on, NOVOGO will also zoom in to the selected point.

The zoom level in this case depends on the type of object you have searched for. For example in the case of a city search, the zoom level will show you the whole settlement or at least a significant part of it around its centre. Selecting a POI, a junction or an exact address will give you a closer look with only a few streets on the display.

5.6.1.4 Coordinate display format

Positions are sometimes displayed with their addresses, and sometimes with their coordinates. This setting lets you choose between displaying coordinates in degrees (dd.dddddd); degrees and minutes (dd mm.mmm); or degrees, minutes and seconds (dd mm ss.s).

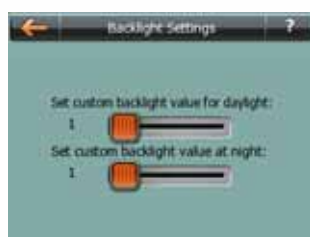
Note: the coordinate display mode is independent from the coordinate input in Find menu. You can use all three formats freely on the coordinate input screen.

5.6.1.5 Left / Middle / Right field

There are three route data fields at the bottom of the Cockpit screen. Their content is fixed in Cruise mode (when there is no active route), but for Navigation mode you can change their content here. The available values are listed in 4.4.15.

5.6.2 Backlight settings

Here you can set how the PND backlight behaves when using NOVOGO.



5.6.2.1 Brightness

With this switch you can instruct NOVOGO to use the original settings of the PND device, or you can set the backlight level separately for both daylight and night modes, thus enhancing the effect of the night colour scheme.

5.6.3 Smart Zoom

Smart zoom is a lot more than just a usual automatic zoom.

While navigating a route: when approaching a turn, it will zoom in and raise the view angle to let you easily recognize your maneuver at the next junction. If the next turn is at a distance, it will zoom out and lower the view angle to be flat in order to let you see the road in front of you, or it can even switch to an Overview mode to let you follow your position on the map.

While cruising: if there is no active route and you are just driving, Smart Zoom will zoom in if you drive slowly and zoom out to the limit set here when you drive at high speed.

These automatic features can be personalized on this screen.



5.6.3.1 Smart Zoom settings

You can set how close Smart Zoom can zoom in when approaching the next turn (Zoom-in limit), and the maximum zoom level to zoom out when the next turn is further away (Zoom-out limit). The default values are set to be optimal in most cases.

5.6.3.2 Enable Overview mode

You can configure how the Overview mode is triggered when the next turn is at a distance.

The Route event distance will determine when NOVOGO switches to the Overview or back to the Navigation view.

The Overview zoom level will determine the fixed zoom level of the map in both automatic and manually selected (by the Map orientation icon – see in 4.4.8) Overview modes. You can change the zoom level manually at any time (the Lock button will not be displayed), but when you enter the Overview mode again, the zoom level will be reset to this value.

You can also move the map in Overview mode. Then the Lock button will appear, and when pushed, it will move the map to have your current position in the middle again.

On the other hand you are not allowed to rotate the map in Overview mode. This mode is a strictly north-up orientated mode.

Note: when this automatic feature is disabled, you can still enable the Overview mode manually as described in 4.4.8.

5.6.3.3 Restore Lock-to-Position and Smart Zoom

As described at the hardware buttons and the map screen functions, you can move, rotate, tilt and zoom the map during navigation. In these cases a Lock icon (4.4.4) appears on the screen.

When you rotate, tilt or zoom the map, that part of Smart Zoom is automatically deactivated, the map will still follow your position, but will not change the view parameter you have modified. You can return to the full Smart Zoom mode by tapping the Lock button.

If you move the map, all parts of Smart Zoom become deactivated, and the view freezes. Tapping the Lock button makes NOVOGO follow your position again (Lock-to-Position) and also re-enables Smart Zoom.

You can make NOVOGO push the Lock button for you automatically after a few seconds of inactivity.

Restore Lock-to-Position

Turn this switch on if you want NOVOGO to return to your current GPS position after you have moved the map during navigation. This is useful if you have moved the map accidentally, or if you have moved it to quickly check something near your route.

After a certain timeout set below, the Lock button disappears, and the map immediately jumps back to show your current position.

Restore Smart Zoom

Use this switch if you want NOVOGO to re-enable Smart zoom after zooming, tilting or rotating the map during navigation. This is useful if you have changed the view accidentally, or you modified it to quickly check something near your route.

After a certain timeout set below, the Lock button disappears, then Smart Zoom changes the view back for navigation. Unlike with Restore Lock-to-Position, the view changes smoothly.

Note: Smart Zoom can only be re-enabled when it is activated at the top of this page. With Smart Zoom turned off, neither does the Lock button appear, nor will the view return to its previous state if you zoom or tilt the map.

Delay before restoring

You can set the timeout for both Restore Lock-to-Position and Restore Smart Zoom here. Shorter delays are best if you tend to accidentally change the map display, but you may prefer a longer delay if you often look for things around your position while driving.

Remember to only look at the display if it is absolutely safe to do so.

Note: If you push the Lock button before the automatic Lock comes into effect, Smart Zoom and Lock-to-Position will be re-enabled instantly.

5.6.4 Route options

You can set the basic route parameters on the Route parameter settings screen described in (5.4). On this screen you have some more ways to influence route planning and route recalculation.



5.6.4.1 Off-route sensitivity and Recalculation delay

Depending on the environment you are driving in, route recalculation can behave differently. NOVOGO may think you have departed the proposed route and perform a recalculation even if you have not done so.

When the GPS reception is poor, occasional wandering (called position fluctuation) of the calculated GPS position is likely. Although NOVOGO employs a sophisticated Lock-on-Road system that will mostly suppress these position errors by aligning your position to the recommended route and the road network of the map, sometimes the errors are too large to correct.

To reduce the effect of large errors, you can increase the recalculation tolerance two ways.

Off-route sensitivity

This is a range of relative values from 0 to 10, telling NOVOGO how far the GPS position should be from the recommended route before the program decides to recalculate. Lower values make NOVOGO insensitive to position errors; higher values will result in quicker reactions.

Recalculation delay

This is a setting that helps suppress the effects of position fluctuation. With a few seconds delay in recalculation even large position jumps can be survived without a need for route recalculation.

5.6.4.2 U-turn penalty

You can fine-tune the way NOVOGO takes u-turns into account when planning a route. You can tell NOVOGO how much extra distance you would travel to avoid a u-turn.

Note: This value is taken into account only if U-turns are enabled in Route parameters (5.4.4.4).

5.6.4.3 Cross-border planning

By default NOVOGO plans routes using the border crossing points. However, if you live near the border, you can disable border crossing with this switch to remain within one country.

5.6.4.4 Keep position on road (Lock-on-Road)

NOVOGO is normally used for vehicle navigation, therefore Lock-on-Road will display the position arrow precisely over roads, seamlessly correcting small GPS errors. For pedestrian use you may consider disabling Lock-on-Road to make NOVOGO always show your exact position.

Note: By turning off Lock-on-Road you also turn off the GPS position error filtering. The position shown on the map will be subject to all position errors and position fluctuations.

5.6.5 User data management



5.6.5.1 Remove Pins

Normally pins can be deleted one by one. Since they are shown at all zoom levels, and you may end up having too many of them, this button lets you delete all of them together. NOVOGO will warn you that you are about to lose all your pins.

5.6.5.2 Clear Data

This button will delete all user data. It is a reset to factory settings. Tapping this button means you lose all your saved data and customised settings. NOVOGO will warn you about this.

5.6.5.3 Reset Advanced Settings

There are a multitude of Advanced settings in NOVOGO. Some changes may cause NOVOGO to behave in an unsatisfying manner. Tap this button to restore the default settings.

6 Find

One of the most frequently used functions of NOVOGO is selecting the destination. Once you have the destination, you can start navigating. Getting to this point should be as fast as possible. NOVOGO provides you with a versatile search engine designed to find your chosen destination after only a few taps on the screen.

Note: If you select a location in any part of the Find system, you will normally drop back to the map screen, where you will have several possible actions (set as start, set as destination, add as via, continue route with, mark with a pin, or add as a POI item). However, if you enter the Find system using the Find button, NOVOGO will immediately put you into Cockpit mode and start navigation.

6.1 Find (Main menu)

As just mentioned, the fastest way to find your destination and start navigating is to tap Find in the Main Menu (4.1). This will put you on the Find screen, and as soon as you pick a destination, NOVOGO will immediately show the Cockpit screen and start navigation. This means that if you plan your route to one of your Favourite destinations, you only need two taps to start navigating.

6.2 Selection by tapping the map

It is also very easy to set your destination using the map. Just browse to your desired destination on the map, tap it, and the Cursor menu with the possible actions will then open automatically.

Note: When appearing automatically, the Cursor menu remains open for a few seconds only. If you decide not to choose any of the actions listed, the menu closes automatically. When you open it manually, it will remain until you close it or switch to another screen.

Tip: If you want the selected point shown in the centre of the map, close and reopen the menu or wait until it closes and open it again. By opening the Cursor menu manually, the map will be moved to have the selected location in the centre.

6.3 Using the Find menu

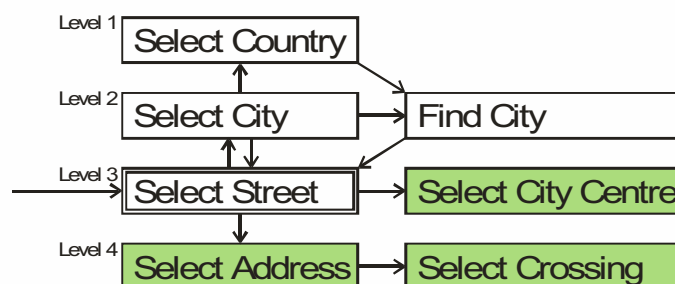
The Find menu is accessible by the Find button at the Main menu (4.1) or by the Menu buttons of the map screens (4.4.7). The Find menu gives you various possibilities for selecting a location.



6.3.1 Find an Address, Street, Intersection or City

Searching for a city, a street, an intersection, or an exact address can all be done in the Find Address module. If any part of the address is known, this is the quickest way to find the location.

The following illustration shows the structure of the address-search module. There are four levels (Country, City, Street and Address). The street input screen is the entry point of the module. The green rectangles are the exits. You can complete your search by selecting the centre of a settlement, the midpoint of a street, an intersection, or an exact address.



You enter the module at Level 3. From this point you can go forward (down) to give the house number or intersection when the street is selected, or backward (up) to change the city or the country to search.

6.3.1.1 Selecting a street or the centre of the settlement

The street name page is the first page of the address searching facility. NOVOGO will guess which settlement to search in based on the current GPS position or the location of the Cursor (4.4.5).

When GPS position is available, and Lock-to-Position (4.4.4) is active, NOVOGO will identify the city or town you are in (or your are nearest to), and presume this is where you are searching for your destination (NOVOGO also displays the name of the settlement in the top centre of the screen).

If you have no valid GPS position, or you have moved the map disabling Lock-to-Position (4.4.4), NOVOGO will search in the settlement the Cursor is in or near to.

If you are about to travel to another city, you can change this preset value in various ways.

Tip: If during navigation you need to know the name of the city, the state or the country you are currently in, just start Find/Address and check the top center of the screen. This function leads to a reliable result only if GPS position is available, and you have not disabled Lock-to-Position by moving the map.

Selecting the centre of the settlement

If you wish to navigate to the settlement displayed in the top centre of the screen, just tap Done before entering any letters. The search result will be the centre point of the city (where its name is displayed on the map).

Note: This point is not the geometrical centre but an arbitrarily selected point chosen by the creators of the map, usually the most important intersection in case of a small town or village, and for larger cities an important intersection in the city centre.

Selecting a street

If you are looking for an address or an intersection within the settlement shown at the top of the page, you need to first enter the street name you are looking for. You can accomplish this by using an alphabetic input screen (either an ABC- or a QWERTY-type). You only need to enter the first few letters, as the program only searches among the streets that exist in the given city. If the name of the street is of more than one word, the searched pattern can be any or the combination of those. You can search for multiple partial words by inserting space characters in the pattern. For example a street called Sir Winston Churchill will be found if you enter 'S W C' or even 'W S C' (any word order will do).

Tip: If you are looking for an intersection, choose the street that has a rare or unusual name first. This way you need to enter fewer letters to get the list of results. You may also choose the shorter of the two streets first. This way it will be faster to choose the second one from the list of crossing streets after the first street has been selected.



As you start typing, NOVOGO will calculate the number of streets matching your pattern(s). This number is shown at the right end of the input line. If all the matching street names can fit on one screen, the sound played when hitting the key will be

different, and NOVOGO will show you all the results in a list. You can select the one you are looking for by tapping the appropriate list item.

Note: When more than 300 matching items (a list of more than 50 pages in portrait display orientation) exist for the entered pattern(s), NOVOGO stops searching, and displays '>300' at the right end of the input line. Enter more letters to narrow the list.

Note: When the name of the street contains a character that is not available on the keyboard (e.g. apostrophe), NOVOGO considers it like a space, splitting the word. That is why you can search for 'Place d'Italie' with all the following search criteria: 'P D I', 'Pl D It', or 'Plac D'.

Tip: If you have finished entering the street name and the matching names are still on more than one page, just tap Done, and select your desired street from the list. Turn the pages with the Previous/Next buttons.

Tip: As NOVOGO provides a list to choose from as soon as they fit on one page, in case of a street name of more than one word you can reduce the list of matches faster if you enter a few letters from each word thus reducing the number of actions needed to get to the street you want.

Tip: You can search for both the type and the name of a road. If you have the same name appear as Street, Avenue, Boulevard, Road, Place and Court, you can get the result faster by giving the first letter of this, too. For example searching for 'Pi A' will result in Pine Avenue skipping all Pine Streets and Pine Roads.

Tip: Should the name of the street be a prefix for several other street names, just enter the whole name, press Done, and the exact match will be the first in the list. This way you can easily find even very short street names.

As soon as you select a street, you are automatically taken to the House Number Input screen (6.3.1.3).

6.3.1.2 How to change the city or the country if needed

If you need to find an address in another city or are looking for a settlement, first tap Change City in the top right corner of the street name input screen. This will show a list of recently used city names and postcodes. Here you have the following options:

Selecting one of the recently used settlements

Should the settlement you are looking for appear on the list, just tap it and you will immediately return to the Street Name Input screen with the selected city name or postcode shown at the top of the screen.



Tip: if you find that the list of recently used cities contains settlements you will not visit frequently, you can choose to empty the list by the Clear history button in the bottom left corner.

Selecting a new settlement to search in

If you are looking for a city or town you have not visited recently (even in another country), tap Other Cities in the top right corner. This will take you to the city name or postcode input screen, where you can select the desired city the same way you can select the name of the street: enter a few letters of its name or some digits of its postcode, then select from the list of results.



Note: If any of the settlements listed has named or numbered districts that also appear separately in the map, a Show districts button will appear in the bottom left corner. Tap this button to list the suburbs together with the main settlements. Now the button turns to Hide districts, and tapping it will return to the original, shorter result list.



Once you have selected the city, you can continue by entering the street name as described in (6.3.1.1).

Changing the country

If the settlement you are looking for is in another country, from the list of recently used cities tap Other City then Change Country, and select one from the list of available countries.



6.3.1.3 Selecting a house number or the midpoint of the street

Once the country, the city and the street name are selected, you are asked to give the house number using the numeric keypad. The range of available house numbers for the chosen street is shown in the input field before you begin entering the figures.



Enter the number, tap Done, and NOVOGO will show you the selected location on the map (or will start navigating immediately if you have selected Find at the Main menu).

Note: House numbers may not be available on the map of your region. Ask your local dealer for details.

Tip: If you do not know the house number, just press Done, and the midpoint of the street will be used as the selected location.

6.3.1.4 How to select an intersection instead of a house number

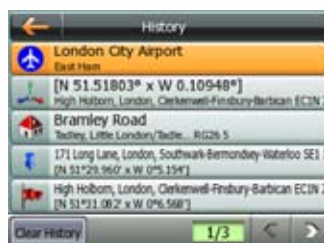
If you do not know the house number or it is easier to pinpoint the location with an intersection, press the Find intersection button in the top right corner and select the desired street name from the list of available intersections of the previously selected street (displayed in the top centre of the screen). The crossing of the two streets will be the selected point.



6.3.2 Find in History

If you have used Find before, or saved map points as POIs, marked points with a pin, or picked and used points of the map before, they all appear in the History list.

This list is ordered by the time the points were last used. The most recently used locations are always at the beginning of the list.



Just pick any of the recent locations as your destination. Here you have no possibility to reorder the list or filter it by name, but the Next and Previous buttons let you browse through the complete list to find your preferred point.

Tip: If you will need a location later but you do not want to save it as a POI, just mark it with a pin, and remember its colour to find it easily in the History list.

6.3.3 Find Coordinates

NOVOGO also lets you enter your destination by map coordinates. The coordinates need to be in latitude/longitude format and, based on the WGS84 earth model (the one used by most GPS devices).



When you enter this page, the coordinates of the current GPS position (or the selected map point (Cursor) if Lock-to-Position is inactive) are shown at the top of the display.

The coordinates are always shown in the format configured in Advanced settings Display options (5.6.1.4), but you can enter the coordinates in any of the three formats. You can even enter the latitude and longitude in different formats.

Entering a latitude/longitude pair is easy. The left field contains the latitude. It starts with an 'N' (North) or 'S' (South) letter. This tells NOVOGO whether the point is in the Northern or the Southern hemisphere. Use the **N/S** button to change the hemisphere. Enter numbers for the latitude. Use the decimal point if the degrees, minutes or seconds are not integers. Use the **°/′/″** button (the label depends on the

current cursor position inside the latitude) to start entering minutes after degrees or seconds after minutes.

When finished, tap the longitude on the right, and enter it as you did latitude. This time the hemisphere-changing button **E/W** tells NOVOGO whether the point is located East or West from the meridian crossing Greenwich, UK.

Once you have entered both numbers, press Done to make the selection.

Tip: The quickest way to tell the coordinates of a point is to select it by tapping on the map or by using Find, and then come to this page and read the coordinates.

Tip: If you need to reformat coordinates to the format selected in NOVOGO at 5.6.1.4, enter the coordinates in the format you have, press Done to show it in the map, then come back here to see the same location in the chosen coordinate display format.

6.3.4 Find a POI

You can select your destination from the thousands of POIs included with NOVOGO or from the ones you have previously created. This screen helps you find the one you are looking for. POI items are categorised to let you locate them more easily. On this screen you can see the first page of the top level POI categories. There are three levels altogether.



The search will be carried out around a certain reference point. Always look at the current reference point shown in the green field above the POI category buttons and confirm that it matches what you want. To change the reference, tap the Change ref. button in the top right corner.



Once you tap the Change ref. button, you are presented with these choices:

- **Address:** you can specify an address to be searched around, or a settlement to search in. The centre of this settlement will be used as the reference point.

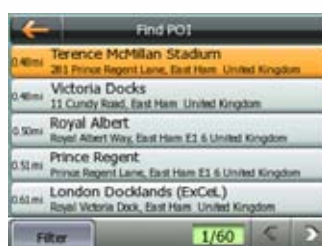
- History: the reference for the search can be selected from the History list.
- Coordinates: you can specify a latitude/longitude pair to be the centre of the search.
- GPS Position: the search will be carried out around the current location given by the GPS if it is available. If no GPS position is available, the last known GPS position (grey arrow on the map) will be used.
- Cursor: the search will be carried out around the previously selected map point.
- Destination: the search will be carried out around the destination of your current route.

The current selection is always shown in the green field at the top of the page.

Note: The default reference point for POI search is the current GPS position, if it is available, or the Cursor, when there is no reliable GPS position.

Once you have set the reference point, you have the following options on the Find POI screen:

- Search in POI subgroups: highlight one of the POI groups by tapping or using the direction buttons, then press Enter or tap it again to see the list of subgroups. Using the same action you can move deeper into subgroups.
- Filter from all the POIs of that level: tapping the Filter button will bring up a text input screen to let you narrow the list of POIs. If you tap Filter in the list of subgroups, you will only search in the group you are already in.
- See all POIs of the current group in a list: tapping the All button opens the list of all points in the group or subgroup you are already in. Use the Next and Previous buttons to browse through the list.



Search results are ordered by their distance from the given reference point (nearest first).

Note: In the case of POI items that you have created, you can also see the results in alphabetical order. Push the button with the label ABC that appears between Filter and the page number.

Once the desired POI item is selected, NOVOGO will show its details.



Tapping OK will return to the map with the selected POI in the centre (or starts navigating to it if Find was selected). Tapping the arrow in the top left corner returns to the search results.

Tip: If you want to find the nearest POIs, or if you are close to one of them but do not know exactly where it is or what its name is, tap the All button on the very first screen of POI search, and get a list of the nearest POIs. Use the Next button in the bottom right corner to turn the page if you cannot see the desired place on the first page of the list.

6.3.5 Find one of the Favourites (Home/Work)

If you have already set up your favourite destinations in General settings (5.1.2), you can select either of them by simply tapping the button with the name on it. Using the Find function at the Main menu it is only two taps to start navigating to one of your Favourites.

Note: If you try to access a favourite destination that you have not yet set up, NOVOGO will lead you to the setup page.

7 Examples of using NOVOGO

Now that you are familiar with the screens and functions of NOVOGO, this chapter will guide you through some sample situations similar to the ones you will face when using the program. These will give you a better understanding of NOVOGO's features, and you will also see how easy it is to use the program. If any part of the explanation is unclear, you can read more in the related chapter indicated in parentheses.

The following two examples show how to create routes, and in the first one you can even check how to navigate the route with different interruptions underway.

7.1 *Navigated route (2 destinations, reverse order)*

Situation: you are in a big city where you are a stranger, and you need to get to a given address, but before that you want to fill your car up. You do not even know in which direction to start driving.

The first thing you see after inserting the SD card is the Main menu (4.1). After a few seconds, the satellite dish in the bottom left corner turns white. This shows NOVOGO has found your GPS that you have set up earlier (see the Quick Start Guide and in this manual), it is now connected and since you are in your car on the road, it has already determined your position.

The fastest way to find your first destination is the Find button in the middle (6.1). Tap it to go to the Find menu (6.3) where you need to tap Address, as your destination is given as an address.

The next screen asks you to enter the name of the street. If last time you used one of the QWERTY-type keyboards for entering words, this will reappear, otherwise you get the ABC keyboard (3.2.5). The city or town you are in is used as the preset location of your destination. It (Budapest) is displayed above. It is the one we need now, but if you need to change it, just tap the Change City button next to it.



The address you need to get to is 'Szilágyi Erzsébet fasor 41'. Remember you need not enter accents in Find. You may also remember that NOVOGO can search for multiple patterns so a street name of more than one word you can reduce the list of matches faster if you enter a few letters from each word. In this particular case if you type 'SZILAGYI', there are still 10 matches. If you only enter 'SZ' from this word and after adding a space you enter the 'E' from 'ERZSEBET', you only have 9 matches (this number is displayed on the right), and adding 'R' will result in 6 matches, so now the sound when tapping 'R' will be different and you will immediately get the list of results. Red letters show the letters you were searching for.

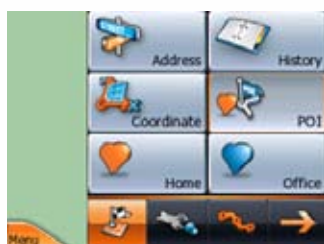
Tapping the list item you need leads to another keyboard screen. Now it is time to give the house number (6.3.1.3), so the numeric keyboard appears. If you do not know the actual house number or suspect the street to be short, just push Done and the midpoint of the street will be used as your destination. The range of available house numbers is shown in the input field. With its number range of 1-131 this street seems long, so giving the house number is advised to get the optimal route.



Now key in 41 and press Done. As you have chosen Find in the Main menu, the address will automatically be used as your destination, so you will get to the Cockpit screen with the green line of the already calculated route to show which way you need to go.



You may start driving but you have decided to get some fuel before reaching your destination. Tap the Menu button (4.4.7) to reach the Find menu (6.3). Fuel stations are among the thousands of POIs that come with your map. Press POI to get to the list of POI categories (6.3.4). Filling stations must be in Services, so tap that button, then Petrol Stations.



There is a third level of categories for this kind of POI. The brands are listed. There are several pages of them (the number of pages is shown below the list), so if for example you like Shell, you need to press the right direction hardware button a few times, or tap the Next button in the bottom right corner twice to reach the third page of the list, then select Shell. (If you have no preference, just tap All to see the full list of nearby petrol stations or tap Filter to search by name.)

Right after tapping Shell you have the list of stations ordered by their distance from the reference point displayed above the list.

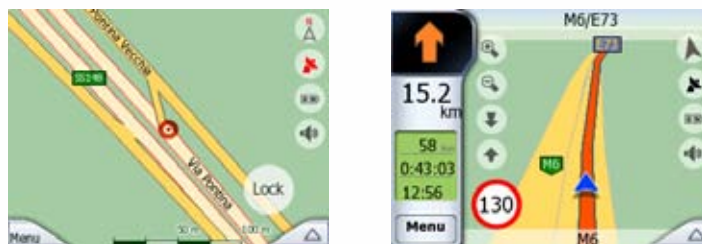


You may want to fill up later, when you are already closer to your destination. Tap Change ref. to get to the list of possible reference points, and choose Destination. Now the list has changed. You can see the list of Shell stations near the destination of the route. Choose the one you like and get its details on the next screen.



When you tap OK, the point will be shown on the map and the Cursor menu (4.4.13) opens automatically. Here you have different options. You have chosen to visit this point before you reach your destination so tap Add Via to insert it between your position and the destination of the route.

Now you are taken back to the Cockpit screen and you can see the route has already been automatically recalculated as now the green line instructs you to turn back.



You are ready to start your journey. Note that the green line will turn you back only at the second possibility. It is because this map in NOVOGO also contains the turn rules (ask your local dealer about the maps of your region).

Note that although this turn shows up as two consecutive left turns, as it is a dual carriageway, NOVOGO will tell you to turn back instead of instructing you to turn left and then turn left again. Check the turn preview (4.4.1) in the top left corner and listen to the voice instructions.

As you approach the turn, Smart Zoom will zoom in and tilt the map to let you clearly see what to do. Note the small dot on the opposite carriageway. That shows the position given by the GPS. The fact your position is still displayed on the appropriate side of the road is due to the Lock-on-Road system (4.3.6) that puts you on the nearest street where you are allowed to drive in the current direction.



As soon as you turn back, Smart Zoom will zoom out and tilt to a flat view, so you can see far ahead. Now you can see that the next junction will be something like a roundabout, and you need to go straight on. Despite that NOVOGO shows a left turn in the top left corner as your next action. As you approach, you see it is not a roundabout, but a complex junction in which your street is first merged with traffic from the left (no decision is needed from the driver so it is not announced as a turn), then you need to turn left, and then slightly right to reach the next street. Both actions will be announced by NOVOGO to help you.



Just follow the instructions and stay on the green line. As you leave the junction, the view becomes flat and the map is now zoomed out. The next route event is far away that you have some time to observe the information given by the program (4.4).

You have already seen the turn preview. The upper part of the screen also shows other information about your next turn: the distance of the next turn as a number and as a graphic indicator when you get close to it. You can also see the name or number of the next street or road you reach after the next manoeuvre.

At the bottom of the screen you have data about the current situation. The street you are driving on, the distance and time you need to travel to reach the destination, and the estimated time of arrival (ETA). The content of these fields can be modified in Advanced settings Display options (5.6.1.5).

On the right side of the screen you see semi-transparent icons. One shows the direction of North, and can also be used to switch among North-up, Track-up and Overview display modes; a satellite dish represents the quality of the GPS signal and leads to the GPS Data screen when tapped; you can see the battery status that also leads to the Settings screen; and finally a speaker icon that is used to mute and re-enable the sound output while showing its actual status.



Press the third hardware button to open the Route Information screen (4.5). Here you have some more route data. Note that you have two stops left, the Via Point and the Final Destination.



Now you break the speed limit. The speed display in the bottom left corner changes its colour and if it is enabled, an audible warning (5.1.4) is also announced: 'You are over the speed limit'.



You look at the 'turn' preview, and oddly enough, the arrow points straight up. You only need to pass across that junction, but due to its complexity, NOVOGO takes it as a route event. This is shown by the straight arrow in the top left corner. The same happens if you cross a road with a higher traffic importance than the one you are

driving on. These are just to confirm you that you only need to pass through. Passing small streets is not announced by NOVOGO. They only appear in the fully detailed list of the Itinerary (4.6.3.3).

When you stop at the next red sign, due to the heavy coverage by the surrounding buildings and a flyover above you, the GPS loses its position fix (4.3.6). The satellite dish on the right turns red to show that the position lock has been lost. The blue arrow becomes semi-transparent grey, jumps to the last known GPS position (Lock-On-Road becomes disabled), and navigation is suspended. As you start driving again, and the position returns, the blue arrow jumps back on the street, and navigation resumes.



Before reaching the fuel station, you hear on the radio that a left turn that may be on your route is congested. You try to check immediately, but earlier you turned Safety mode (5.1.1) on, so NOVOGO will not let you use the touch screen when the car is in motion.

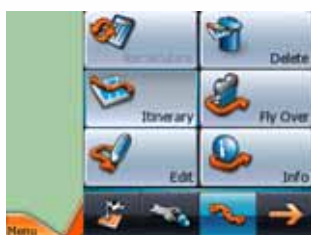


You decide not to stop as you will stop soon (the yellow flag shows your via point is the next event in your route). As you approach the filling station, you see the next leg of the route in dark green (4.3.10.4), but as soon as you reach it, it becomes active, the line becomes light green: ready to navigate the next section of the route. Note the turn preview that shows you will need to keep right at the next junction.



Now that the car is stopped, you can open the Itinerary (4.6.3.3) from the Route menu. There in the list you see the congested left turn. You tap that manoeuvre to highlight it. Tap Show if you want to see it on the map to be sure it is the right one, or Avoid at once if you are sure you have picked the right one. On the next screen you need to select what to avoid. As selecting Road would bypass the whole street after

the turn, it is better to avoid the manoeuvre to remove only that particular turn from the list.

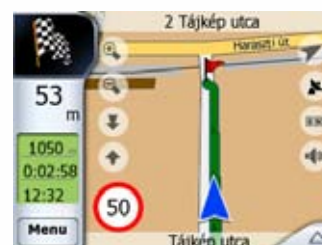


Tap the Manoeuvre button to return to the Route Information screen with the recalculated route. As you can see NOVOGO has reconsidered the whole route, not only the part starting from the manoeuvre you banned. The first route event leads left and not right as it did before.



As you start driving along the newly planned part of the route, you can zoom out (3.1.2) using a hardware button, that Safety Mode leaves operational, to see the whole remaining part of the route (the Lock button automatically appears on the screen). As you concentrate on the destination and the map, you miss the next turn and go straight on to the next junction. There is no need to worry, NOVOGO waits for a few seconds to be sure you have really left the route, and recalculates it in an instant replacing the missed right turn with three left turns. You just need to keep on following the instructions. NOVOGO will remember the previously avoided turn for the whole journey, so it will not be considered as a route event even if recalculation becomes necessary. These restrictions will be remembered even after arriving at your destination. To make NOVOGO forget them, delete the route manually (4.6.3.2), or exit NOVOGO.

After the third left turn you approach the junction where you made the mistake. On the left you can see the point from which the route has been recalculated.



Now the destination is near but as you stop at a red light, you see a nice shop on the right. As the car is stopped, you are allowed to use the touch screen. Just tap the map where the shop is. The cursor (red dot with radiating red circles) appears, and if Popup Info (4.6.2.5) is enabled in the Quick Menu, you can also see the name of the street and the house number. If you tap Pin in the Cursor menu (4.4.13) that

appeared automatically as you selected the point on the map, a drawing-pin will appear there. Remember the color that NOVOGO selected for the pin, and later you can easily find it in the History list.



Now the checkered flag shows the next event is your destination. Smart Zoom will zoom and tilt as with any other route event, and when you reach the given point, the route will be deleted.



The only thing left is to create the POI item later when you are not driving. Now tap MAP in the Main menu then History (6.3.2) in the Menu screen. You will find the drawing-pin on the list. Tap it to have it displayed on the map.



The Cursor menu appears automatically. Tap the Add POI button. You are asked to give a name for the newly created point first. Then you can see its details.



If you wish to put the new point in a Group, tap Unnamed to see the list of available My POI groups. Choose one or tap New and create a new POI group for your new point.



Coming back to the POI details now change the icon to be displayed on the map by tapping the icon and select another one from the newly opened list.



Now all details of the new POI item are ready, and if you tap OK, the name and the icon of the point appears on the map.



7.2 Off-line route planning (4 destinations, mixed order, optimised)

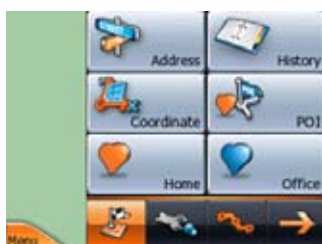
***Situation:** you are at home, planning a future route. You plan to depart from a small village, visit a friend in another town, revisit a place you have recently been to, and then drive home. You wish to know in advance which way to go, and how long it will take.*

For off-line routing without a GPS, as the map is all you need on the screen, you choose the Map mode (4.4) from the Main menu. Without a valid GPS position, normally NOVOGO will start all routes from the last known GPS position. This time you have a specific departure point, so you first select it from the map database.

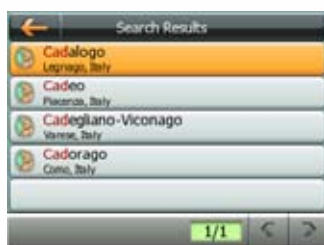
The village your route starts from is a small one, so you decide not to give an exact address. The centre of the village will now be the starting point of the route. As soon as you are there and turn on your GPS, NOVOGO will recalculate the route from your GPS position.

Open Menu, and select Find Address (6.3.1). To select a new settlement, first tap Change City, then if Páty is not in the list of recently used settlements, tap Other city.

Start to key in the letters of Páty. Remember you only need to type the base letters, there is no need for accents in Find.



When all the matches fit on one page, the last key hit results in a different key sound (5.3.3), and the list of matches for your pattern will be shown in a list. Tap the appropriate one. Now the street input screen returns, where you only need to tap Done as the centre of the city is needed. The map returns showing the centre of this village. The Cursor menu (4.4.13) opens automatically. Tap Start to mark Páty as the first route point.

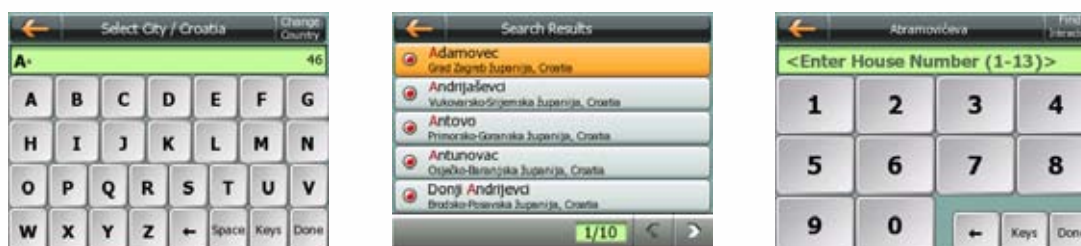


To visit a friend whose address you have, reopen Menu and select Find Address (6.3.1) again. Now that the Cursor is in Páty, NOVOGO offers this village as destination (see the title of the screen). Your next route point is out of Páty, so tap Change City in the top right corner to select the town your friend lives in. You cannot find this town in the list of recently used city names, so tap Other Cities in the top right corner.

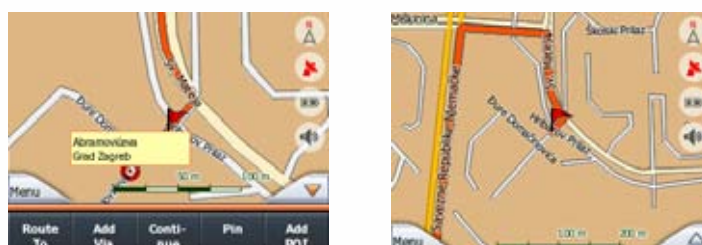
The name of this town, Piliscsaba, is long and you know a lot of towns and villages that starts with 'Pilis'. It is faster to give the postcode to specify this town. Change to either the QWERTY or the numeric keyboard using the Keys button, start entering the postcode, then select from the list of matches as you did before.



As the town is selected, you are asked to give the name of the street, but now in the town you have just chosen (check the title of the window). Start typing the letters, and then choose from the list. Continue with entering the house number, then tap Done.



Now that the full address is given, the map appears again with your destination in the centre. Tap Route To from the Cursor menu to create the route from Páty to this address. The green line will appear instantly, showing the route to take to arrive at the destination.



The next destination is a place you have visited recently, so choose History (6.3.2) from the Menu, and select Nefelejcs köz in the village Telki from the list. The map appears again with the search result in the centre. Tap Continue to add it as a new destination after the previous one (forward routing).

Note: Tapping Route To again would result in having the previous route replaced with a new one from Páty to Telki. To create multipoint routes use the Add Via and Continue buttons only.

The route is now modified, and the dark green line of the future route leg leads to the new destination. Notice the light green line (first route leg) near this route point.



Your next destination is your home address. It should have already been programmed on the left Favourite button (6.3.5) called Home. To select it, tap Menu then Home. The map jumps to show your home. Select Continue again from the Cursor menu to place this destination to follow the previous one.

As you zoom out, you discover that NOVOGO has planned the route using the Petőfi bridge. As it is subject to traffic jams, you decide to take the Lágymányosi bridge instead.



In NOVOGO you need not select it from the Menu. Just tap the map on that bridge and the cursor appears there. This bridge is a dual carriageway, so you need to be careful to select the side of your direction. Zoom in to be sure you have picked the right one. Tap again to correct the position of the cursor if necessary. Finally tap Add Via from the Cursor menu, as this time you place the new destination before and not after the final destination (reverse routing).

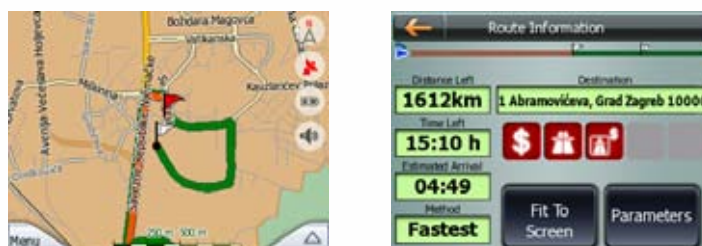
The dark green line (future route legs use dark colours) is now crossing this bridge, and when you zoom out, you see the redrawn route now leading across the bridge you have selected.



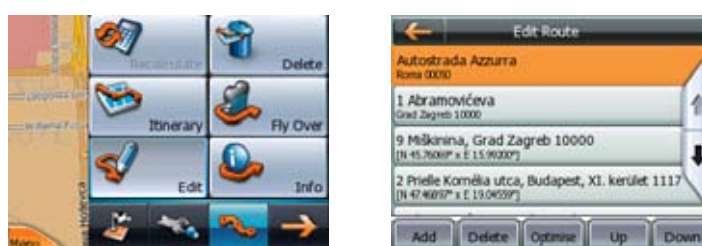
Now to check the light green line near the second destination. Move the map back to this route point. You can do it by dragging and moving the map; selecting the same point from the History list again; using the Itinerary (4.6.3.3), from where you can jump to any event point of the route; or Fit to Screen (4.5.3) from Route Information screen, and zoom to the needed point.

As soon as the map shows the desired area, zoom out to see the surrounding part of the route. Now you see that Telki lies between Páty and Piliscsaba, so the route goes back and forth between the two destinations.

First press the 3rd hardware button to see the Route Information screen and check the length (75 km) and time (1 hour and 30 minutes) of the route.



To correct the route, return to the map, then open the Route menu using the Route button, and select Edit (4.6.3.5). The next screen shows the list of the route points in their current order. You can easily reorder them by using the Up and Down buttons, but if you tap Optimise, NOVOGO changes the order to provide the shortest route.



As you have guessed, NOVOGO changes the order of the first two destinations. Tap the arrow in the top left corner to return to the map, then the 3rd hardware button to check the Route Information screen, where you can see that both the length of the route (58 km) and the approximate travel-time (1 hour and 11 minutes) have decreased.

Return to the map using the arrow in the top left corner to see the new route. The first leg now leads from Páty to Telki (light green).



Move the map again to see the final destination. This time do it with the help of the Itinerary. Open the Route menu then tap Itinerary. Move to the end of the list and highlight the destination with the checkered flag. Tap Show to have it displayed on the map.

Zooming out you see that the new route arrives from the North, and using the Lágymányosi bridge is an unnecessary detour.



You decide to remove the last via point, the bridge. Tap the map near this route point. This time you need not zoom in as tapping even near to a via point will change the menu point from Add Via to Remove Via, to be able to delete the point from the route (if you need to add another via close to an existing one, zoom in to have the Add Via button again, or use the Add function in Edit).

Tap the Remove Via button and see that NOVOGO now takes a bridge in the North, and the route looks different. To check to see if it is really better, open Route Information again to see that you have saved another few kilometers and minutes, and now you only have 3 destinations left.



Now if you wish to navigate the route, just turn on your GPS, and as soon as your position is available, NOVOGO starts to navigate to Telki from your current location. If you need to use NOVOGO for other journeys before this one, you can recreate the above route in just seconds using the History. All these selected points appear in the History list for later use. You should also consider saving the address of your friend as a personal POI (4.6.2.4) by using the Add POI button from the Cursor menu.

8 Troubleshooting guide

Thank you again for purchasing our product. We hope you will enjoy every minute of using it. However you may face difficulties before you get really accustomed to NOVOGO. In such cases, please, refer to this table of frequently encountered problematic situations and the FAQ on the NOVOGO International web site (www.novogo.com).

The GPS is connected, sending valid position data, yet I cannot see the blue (yellow at night) arrow that would show my position.	You should see a large semi-transparent 'Lock' icon (4.4.4) on the screen. Tap this to re-enable the Lock-to-Position feature that moves the map back to your actual location.
The blue (yellow at night) arrow shows my location, but I cannot see the route (orange or red line), and no voice instructions are announced.	It is likely that you have no active route. Check the upper left corner of the Cockpit screen (4.4.1) if you can see the indication for the next turn or not. If this field is blank, you have no route planned, so you need to create one first. It is a common mistake to find a destination, show it on the map, but forget to tap the 'Route To' button in the Cursor menu (4.4.13) to create the route. Be sure to follow these steps, or always plan your routes with the 'Find' button (6.1) that will ensure your route is calculated automatically as soon as the destination has been selected.
I cannot see the Lock button on the screen, yet the map is not rotated during driving.	Look for a small, red 'N' letter on the compass icon (4.4.8) or an aeroplane icon instead of it. It is likely that you had initiated the North-up map orientation or the Overview mode unintentionally. Tap this icon to revert to Track-up mode with automatic map rotation.
Creating a multi-point route I have tapped	The 'Route To' button is for starting a

<p>the 'Route To' button once for each destination but only the last one appears in the list, all previous points have disappeared.</p>	<p>new route only. For a single route you tap this when the destination is selected. Multi-point routes can be created after you have established a single route. Add points to the single route by using the 'Add Via' and 'Continue' buttons. Applying 'Route To' again will delete the whole route. In your case only single routes existed before, so they were deleted without a warning message. If you already have a multi-point route, NOVOGO warns you before deleting the whole route.</p>
<p>The speaker icon shows NOVOGO is not muted yet I hear no voice guidance.</p>	<p>The muting available from both map screens is just a quick silencer that cancels the sound output. Voice guidance and key sounds need to be enabled and volume must be set at the Sound Settings screen (5.3).</p>
<p>I enabled the speed warning as soon as I bought the product but I have just been fined for speeding because NOVOGO failed to warn me.</p>	<p>For an accurate speed warning the actual speed limits of each street and road must be present correctly on the map. This is a relatively new feature of digital maps, so it may not be available in some countries, and its accuracy still has much room for improvement (ask your local dealer for the details in your region). This feature can help you in several cases but it cannot be considered as serious speed control. That is why it can be turned on and off separately from the reliable voice guidance (5.1.4).</p>
<p>I would like to create a new POI during navigation (Cockpit screen) but there is no Add POI button in the Cursor menu.</p>	<p>For driving safety reasons the Add POI function is only available on the Map screen. Mark the point with a Pin, and save it as a POI later, when you reach your destination.</p>
<p>I would like to create a new POI but there are others near its location, and the new menu point (POI) opens the list of POI instead of creating a new one.</p>	<p>Look for the New button in the bottom left corner of the newly opened list. Using that button you can add your new POI as if it was opened from the Cursor menu.</p>

9 Glossary

The manual may contain many technical terms. Please look below for an explanation if you are unfamiliar with some of them.

- **2D/3D GPS reception:** The GPS receiver uses satellite signals to calculate its (your) position. Depending on the current positions of the ever moving satellites in the sky, and the objects in your environment, the signal that your GPS device receives may be weaker or stronger. Your GPS needs strong signal from at least four satellites to give a three dimensional position including elevation. If fewer satellites are available, it may still be possible to calculate the position but the accuracy will be lower and the GPS device will not calculate elevation. This is called 2D reception. NOVOGO shows the quality of reception on the Main menu (4.1), the GPS Data screen (4.2.3) and both map screens (4.4.9). Note that 2D and 3D GPS receptions have nothing to do with the 2D and 3D display modes of the map. That is a way of representing the map on the screen independently from the GPS reception.
- **Accuracy:** The difference between your real position and the one given by the GPS device is affected by several different factors. The GPS is capable of providing a guess of its current error based on the number of satellites it can receive a signal from, and their position in the sky. This information is shown in NOVOGO on the GPS Data screen (4.2). Lower numbers indicate better accuracy, where 1.0 is near-perfection. Use it as a general reference only. Note that several other factors affect the real accuracy, some of which the GPS is incapable of estimating (e.g. signal delay in the ionosphere, reflecting objects near the GPS device, etc.).
- **Active route:** A route is an itinerary planned to reach your chosen destinations. A route is active when it is used for navigation. NOVOGO has only one route at a time, and it is always active until you delete it, reach the final destination or exit NOVOGO. When there is more than one destination to reach, the route is cut into different legs (from one via point to another). Only one of these legs can be active at one particular time (4.3.10.3). The rest of them are unused and shown in a different colour on the map (4.3.10.4).
- **Automatic route planning (Autorouting):** You only need to set up your destination, and based on its map, the software will automatically figure out which roads you need to take, and the turns you need to make to get there. NOVOGO will let you select multiple destinations, and customise some important routing parameters (5.4).

- **Automatic route recalculation:** If this function is enabled (5.1.5.1), NOVOGO recalculates your route if you deviate from it. When you miss a turn or avoid a roadblock, NOVOGO waits for a few seconds to be sure you do not follow the route any more (you can fine-tune it in Advanced settings: 5.6.4.1), then recalculates the route based upon your new position and heading.
- **Automatic day/night colours:** Based on the time and position given by the GPS device, NOVOGO is able to calculate when the sun rises and sets at your current location on this particular day. Using that information NOVOGO can change between the day and the night colour schemes a few minutes before sunrise and a few minutes after sunset (5.1.3). As additional information to help your orientation, the sun is shown in the sky when you display the map in 3D mode with a low viewing angle, and the sun is near the horizon.
- **Elevation:** When the GPS receiver can see at least four GPS satellites, it can determine its current position in three dimensions. In this case the elevation is calculated together with the latitude/longitude position. Note that some older GPS units may provide incorrect elevation data because they use a simple ellipsoidal earth model rather than a database that contains local sea levels. You should also be aware that the elevation value is generally less accurate (by at least a factor of 2) than the horizontal position. See also 2D/3D GPS Reception.
- **ETA (Estimated Time of Arrival):** A frequently used expression in navigation. It represents the time when you will reach your destination based upon calculations using the remaining part of the route and available information of the roads used. This estimation can only be used as a general reference. It will not be able to take into account your future speed or the traffic delays. In NOVOGO this value is shown as 'Estimated Arrival' on the Route Information screen (4.5.1.5).
- **ETE (Estimated Time Enroute):** Another frequently used expression in navigation. It represents the time needed to reach your destination based upon calculations using the remaining part of the route and available information of the roads used. This estimation can be used only as a general reference. It will not be able to take into account your future speed or the traffic delays. In NOVOGO this value is shown as 'Time left' on the Route Information screen (4.5.1.4).
- **GPS:** Abbreviation of Global Positioning System. This system is operated by the DoD (the Department of Defense of the United States Government). It consists of 24 satellites orbiting Earth, and several ground stations to keep the satellites in sync. To calculate your position, your GPS device uses the signals received from those GPS satellites that are currently visible at your location. You can use this service free of charge.
- **Lock-on-Road:** This function of NOVOGO will always keep the blue (yellow at night) arrow representing your actual position on the nearest road. This automatic feature is necessary as the position given by the GPS receiver is not perfectly accurate. Under normal circumstances Lock-on-Road will

eliminate the occasional position error. If the corridor of error is too large, your position may be shown over a different street on the map. You can only avoid that by using good quality GPS equipment positioned so that it has a direct view to as large a portion of the sky as possible. Normally Lock-on-Road is always active in NOVOGO when GPS position is available. See also 4.3.6. However for pedestrian use it can be permanently turned off in Advanced settings (5.6.4.4).

- **Lock-to-Position:** When GPS position is available, NOVOGO will automatically keep moving the map to always have the blue (yellow at night) arrow, representing your actual position, on the screen. You can move or rotate the map to lose this position. Then the Lock button appears on the screen. Tapping that or pressing the Enter button will re-enable Lock-to-Position. See also 4.4.4.
- **Map Orientation:** NOVOGO is able to rotate the map for your convenience. If you choose Track-up mode, the map will be rotated to look in the direction of your heading. Selecting North-up, the map remains oriented to have North toward the top. Use the left and right hardware buttons to turn your map in the direction you wish. This will immediately turn off the automatic rotation. A small compass in the top right section of the map screens (4.4.8) will always show the current direction of the map. Map orientation should not be mixed up with Screen orientation that affects the appearance of all NOVOGO screens.
- **NMEA (National Marine Electronics Association):** This is the name of a communication protocol format. This association issues standards for interfacing marine electronic devices. One of their standards is NMEA-0183 that defines electrical signal requirements and a data transmission protocol for time and position data. This is today's standard for not only marine but also all other GPS devices. NOVOGO, as well as most GPS devices, will default to using this protocol out of the box.
- **North-up:** A kind of map orientation having the map rotated to have North toward the top of the screen. See also Track-up and Map Orientation.
- **POI:** Points Of Interest, exact map locations of important points saved in a database together with their name, category and subcategories (e.g. Service/Fuel/Autogas), address, phone and fax number, and other important information. Use the versatile search system in NOVOGO to find the appropriate POI near you, your destination or any other given location on the map (6.3.4). You can also have your favourite places saved as 'My POI' in NOVOGO.
- **Screen Orientation:** Depending on how you prefer to hold the PDA in your hand or how you have it installed in your car, you may want NOVOGO to display all its screens in a portrait, landscape, or left-handed landscape mode. This setting is independent from the corresponding setting in the operating system. Screen rotation in NOVOGO can even be used with PDAs originally not capable of displaying landscape orientation. Screen orientation should not be mixed up with Map orientation that does not affect the appearance of NOVOGO, only the map itself.

- **SiRF:** This is the name of a popular GPS chipset manufacturer. Their specific communication protocol can be processed by NOVOGO. SiRF based GPS devices are also capable of NMEA communication, the factory setting of communication protocol in NOVOGO.
- **Track log:** In NOVOGO you have the possibility to record your journeys using the position data your GPS provides in every second or every few seconds (depending on your GPS settings). When you start the recording, position data are saved in the database until you stop recording it. This set of sequential GPS positions is called track log. Each set of consecutive positions has a name (originally it is the time of recording but you can change it to any name you like) and a colour in which it can be displayed on the map. Later you can replay the journey on the screen of NOVOGO as if it were happening again. This is good for demonstration purposes or for analysing your manoeuvres during the trip. See also 4.6.2.6.
- **Track-up:** A kind of map orientation when the map is rotated to look always in the direction of your heading. See also North-up and Map Orientation.
- **Via point:** Routes in NOVOGO can have several (as many as you want) different destinations to reach in a specific order. All these points except the final destination are called via points, as the route goes 'via' (through) them. The destinations can be seen in the Route Information screen on the Route line (4.5.1.1), and each via point is announced by the voice instructions as you approach and when you reach it. Should your via point serve as a stopover, navigation continues automatically as you depart. Navigation will resume even if you turn off and on your PDA or restart NOVOGO.
- **Zoom In and Out:** The Zoom function is used to change the scale of the map. Use Zoom In to scale down the map to see less of it but in more detail, and use Zoom Out to scale the map up to have a broader view of that part of the map with fewer details. See also 3.1.2, 4.3.2 and 4.4.2.

Federal Communication Commission Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

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