NAVIGATION MANUAL

XZENT

X-MAP27-SERIES

English
March 2020, ver. 1.0

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1 Getting started

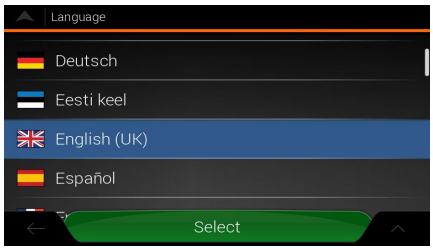
XZENT is optimised for in-car use. You can use it easily by tapping the screen buttons and the map with your fingertips.

When you start using the product, you can download new maps in the next.

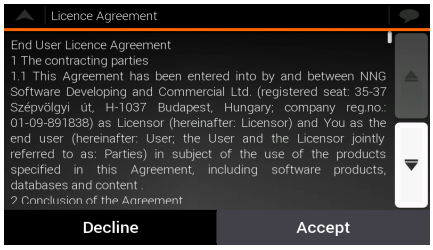
1.1 Initial set-up

When using the navigation software for the first time, an initial set-up process starts automatically.

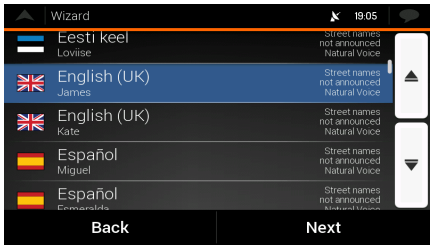
1. Select your preferred language, then tap Select to confirm your selection. Later you can change it in Regional settings (page 75).



2. Read the end-user licence agreement, and tap Accept if you agree with the terms of use.

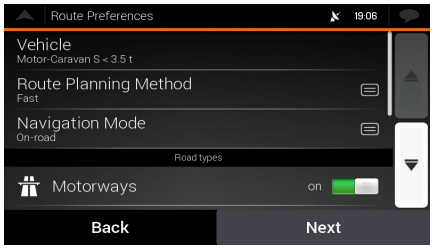


3. The Configuration Wizard starts. Tap Next to continue.
4. Select the language and speaker used for voice guidance messages. Later you can change it in Regional settings (page 70). Tap Next to continue.

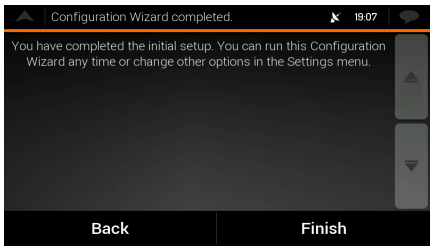


5. If needed, modify the time format and unit settings. Later you can change them in **Regional settings** (page 75). Tap Next to continue.

6. If needed, modify the default route planning options. Later you can change them in **Route Preferences** (page 68). Tap Next to continue.



7. The initial set-up is now complete, tap Finish to enter the Navigation view.



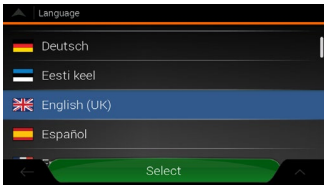
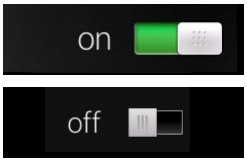
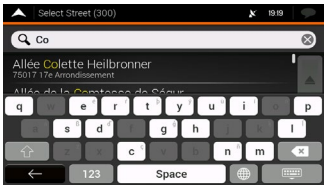
1.2 Screen controls

The following sections describe the functionality and use of buttons, sliders, and other screen controls in XZENT.

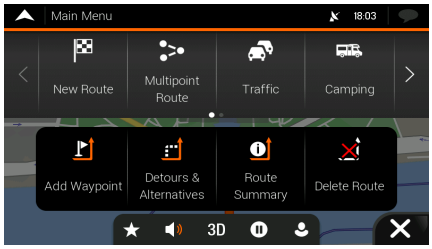
1.2.1 Using the buttons and other controls

To operate XZENT, tap the buttons on the touch screen.

Type	Example	Description	Function
Button		Opens a new screen where you can set a parameter.	Tap it once.

Type	Example	Description	Function
Button with value		Displays the current value of a field or setting where the value can be changed. After the change, the new value is shown on the button.	Tap it once.
Icon		Provides additional information, for example traffic summary or itinerary.	Tap it once to open a screen with additional information or options.
List		Shows multiple options.	Grab the list anywhere and slide your finger up or down. Depending on the speed of sliding, the list scrolls fast or slow, only a bit or till the end.
Switch		Shows whether a feature is enabled when there are only two choices.	Tap it to turn the switch on or off.
Slider		When a feature can be set to different values in a range, XZENT shows an indicator on a gauge that displays and sets the value.	Drag the handle to move the slider to its new position. Tap the slider where you want the handle to appear.
Virtual keyboard		Used to enter text and numbers.	Each key is a touch screen button.

The Navigation menu may contain several menu items on one or more pages.



You need to confirm selections or changes only if the application needs to be restarted, if it needs to perform a major reconfiguration, or if you are about to lose some of your data or settings. Otherwise XZENT will try to save your changes approximately every 60 seconds automatically – if you change important settings, avoid powering off too fast.

1.2.2 Using the cursor

You can select a map location in the following ways:

- By tapping the map when navigating
- By tapping the map when you are asked to confirm the destination at the end of a search.

When a map location is selected, the cursor ( ) appears at the selected point on the map.

The location of the cursor can be used as the destination of the route, you can search for Places around it, or you can add this location to your saved locations.

You can also select some of the objects on the map. If you tap the map at the icon of a Place, the object is selected, and you can get information about this object or you can use it as a route point.

1.2.3 Using the keyboard

You can type with your fingertips on the screen keyboards and you can switch between various keyboard layouts, for example English, Greek or numerical. Only those keyboard buttons are active that can be used to type a name that is available on the map. The other keys are greyed out.

Action	Function
Switching to another keyboard layout, for example from an English keyboard to a Greek keyboard	Tap and select the new keyboard layout from the list.
Correcting your entry on the keyboard	Tap to remove the unnecessary character(s). Tap and hold the button to delete several characters or the entire input string.
Entering a space, for example between a first name and a family name or in multi-word street names	Tap the Space button at the bottom centre of the screen.
Entering upper and lower case letters	By default, when entering a text, the first character appears in upper case while the rest of the text is in lower case. Tap to enter an upper case letter or tap it twice to turn on Caps Lock. Tap again to use lower case letters.
Entering numbers and symbols	Tap to switch to a keyboard offering numbers and symbols.
Finalising the keyboard entry	Tap .

Action	Function
Hiding the keyboard	Tap .

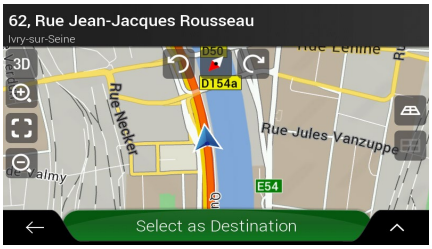
1.2.4 Using touch gestures

You usually need to tap the screen only once. However, some useful features can be accessed with other gestures. See the table below.

Action	Function
Tapping and holding the screen	Tap and keep pressing the following buttons to reach extra functions: • Tap and hold the following button on list and menu screens to show the Navigation view: . • Tap and hold any of the following buttons on the Navigation view to rotate, tilt, or scale the map continuously: , , , , , . • Tap and hold the following button on keyboard screens to quickly delete several characters: .
Dragging	Drag the screen in the following cases: • To move the handle on a slider. • To scroll a list: grab the list anywhere and slide your finger up or down. Depending on the speed of the sliding, the list scrolls faster or slower, only a bit or till the end. • To move the map in map browsing mode: grab the map, and move it in the desired direction.
Using pinch zoom	Use pinch zoom on the Navigation view to zoom in and out by moving two fingers in a pinch gesture.

1.2.5 Manipulating the map

If you tap the map anywhere during navigation, the map stops following the current position (the blue arrow is not locked in a fix position on the screen anymore) and control buttons appear to help you modify the map view.



You can perform the following actions on the map:

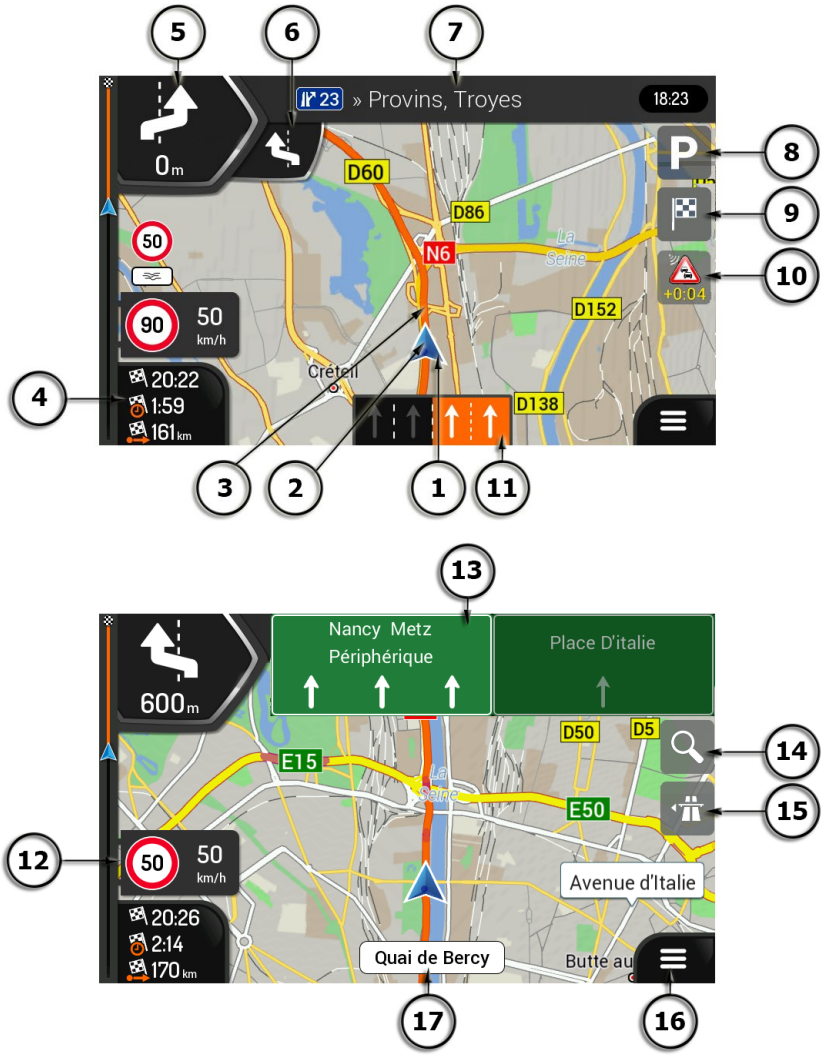
Action	Button(s)	Function
Checking location information	No buttons	The top section of the Navigation view shows information about the selected point (the cursor).
Moving the map by dragging	No buttons	Move the map in any direction: tap and hold the map and move your finger towards the direction you want to move the map.
Zooming in and out		Change how much of the map is displayed on the screen. XZENT uses maps that let you examine the locations at various zoom levels, always with optimised content. It always displays street names and other text with the same font size, never upside-down, and you only see the streets and objects that you need. Map scaling has a limit in 3D map view mode. If you zoom out further, the map switches to 2D view mode. Tap once to modify the view in a large step, or tap and hold the button to modify it continuously and smoothly.
Tilting up and down		Change the vertical view angle of the map in 3D mode. Tap once to modify the view in a large step, or tap and hold the button to modify it continuously and smoothly.
Rotating left and right		Changes the horizontal view angle of the map. Tap once to modify the view in a large step, or tap and hold the button to modify it continuously and smoothly.

Changing 2D, 3D, or 2D North up views		Switch between the 3D perspective, 2D Heading up, and 2D North up map view modes. In Heading up mode the map is rotated so its top always points in the current driving direction. This is the default orientation in 3D map view mode. In North up mode, the map faces North.
Checking the compass		The direction of the compass shows North.
Selecting additional options		Open a list of additional features like saving a location, or searching for Places around the cursor.
Selecting a destination		Select the cursor location as a new destination. The route is automatically calculated.

1.3 Navigation view

The navigation view is the main screen of XZENT that shows the planned route on a map. XZENT works with digital maps which are not simply the computerised versions of traditional paper maps. Similarly to paper road maps, the 2D mode of digital maps shows you streets and roads. Elevation is also illustrated in colour.

The navigation view displays the following screen buttons, data fields, and route information on the map during navigation:



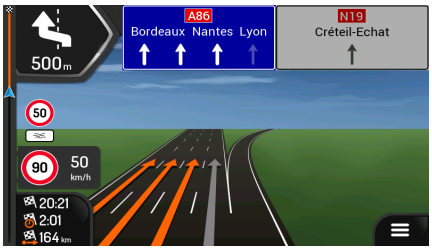
Note! Some buttons, fields, or icons may not be available in your product version.

Number	Name	Description
1	**Current position marker**	The current position is displayed as a blue arrow by default. When there is no GPS position, the current position marker is transparent and it shows your last known position. See page 14.
2	**GPS position**	The dot near the arrow shows the GPS position as perceived by the GPS receiver. See page 14.

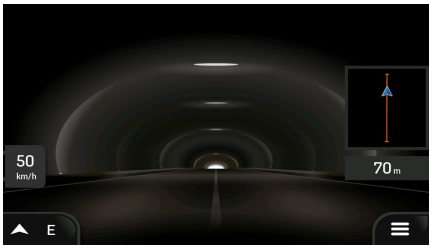
3	**Planned route**	The planned route is displayed as an orange line.
4	**Data fields**	Three data fields show the following information: • The estimated time of the arrival at the destination. • The remaining time of the trip. • The remaining distance to the destination. Tap this area to access the **Trip Computer** screen with additional information about the current trip on a dashboard. You can change the default values in **Settings** (page 72) or by tapping and holding the area where the data fields appear. If you have not selected a destination, you can see your heading instead of the three data fields.
5	**Next turn preview**	It shows the type of the next manoeuvre and its distance. See page 15.
6	**Second next turn preview**	It shows the type of the second next manoeuvre if it is near the first one. See page 15.
7	**Next street**	It displays the name of the next street. See page 15. If you have not selected a route destination, you can see nearby house numbers, if they are available.
8	**Parking around destination**	It appears near the destination. By tapping it, you can check the available parking facilities around your destination. See page 63.
9	**Destination menu**	It appears near the destination. By tapping it, you can check the trip summary, find Places around your final destination, save the current location, or suspend the navigation.
10	**Traffic**	It shows traffic-related information. See page 47.
11	**Lane information**	On multi-lane roads, it shows the lanes ahead and their directions. The highlighted arrows represent the lanes and direction you need to take. See page 17.
12	**Speed limit warning**	It shows the current speed and the speed limit when speeding. See page 72.
13	**Signpost**	It shows the available destinations and the road numbers. See page 17.
14	**Zooming**	Zoom in, zoom out.
15	**Motorway services**	By tapping it, you can check the details of the next few service stations (petrol stations, restaurants) when travelling on a motorway. See page 19.
16	**Navigation menu**	By tapping it, you can open the Navigation menu, where you can reach other parts of XZENT.

17	**Street name**	It shows the current street name. By tapping it, you can open the **Where Am I** screen. See page 65.

If you are approaching a motorway exit or a complex intersection and the needed information exists, the map is replaced with a 3D view of the junction. See page 18.



When entering a tunnel, the map is replaced with a generic tunnel image. See page 18.



1.3.1 Streets and roads

XZENT shows the streets similarly to paper road maps. Their width and colours correspond to their importance; you can easily tell a motorway from a small street.

1.3.2 GPS position markers

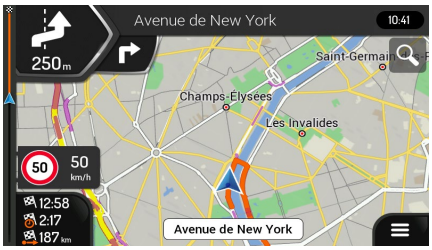
When your GPS position is available, XZENT marks your current position. By default, this marker is a blue arrow. The dot near the arrow shows the GPS position as perceived by the GPS receiver.

When on-road navigation is selected, the current position marker may not show your exact GPS position and heading. If roads are near, it is aligned to the nearest road to eliminate GPS position errors, and the direction of the icon is aligned to the direction of the road.

If you select off-road navigation, the current position marker is at your exact GPS position. The direction of the icon shows your current heading.

1.3.3 Turn preview and next street

When navigating a route, the top section of the Navigation view shows information about the next route event (manoeuvre) and the next street or the next town.



There is a field in the top left corner displaying the next manoeuvre. Both the type of the manoeuvre (turn, roundabout, exiting motorway, and so on) and its distance from the current position are displayed.

A smaller icon shows the type of the second next manoeuvre if it is near the first one. Otherwise, only the next manoeuvre is displayed. Tap the icon of the actual manoeuvre to open the Itinerary screen.

1.3.4 The planned route

The planned route is the currently navigated route. Whenever the destination is set, the route is active until you delete it, reach your destination or suspend navigation. XZENT displays the route in the following ways:

Symbol	Name	Description
	Current GPS position and starting point	It is your current position displayed on the map. • If a vehicle is selected for route calculation and roads are near, the arrow jumps to the nearest road. • Normally, if GPS position is available, the route starts from the current position. If there is no valid GPS position, XZENT uses the last known position as the starting point.
	Waypoint (intermediate destination)	It is an intermediate destination of the route before reaching the final destination.
	Destination (end point)	It is the final destination of the route.
	Route colour	The route always stands out with its colour on the map, both in daytime and night colour modes.

	Streets and roads that are excluded from the navigation	You can choose whether you want to use or avoid certain **road types** (page 68). However, when XZENT cannot avoid such roads, the route includes them and shows them in a colour that is different from the route colour.
	Streets and roads that are affected by traffic events	Road segments may be affected by traffic events. These streets and roads are displayed in a different colour, and small symbols displayed along the route show the type of the traffic event.

1.3.5 Manoeuvre icons

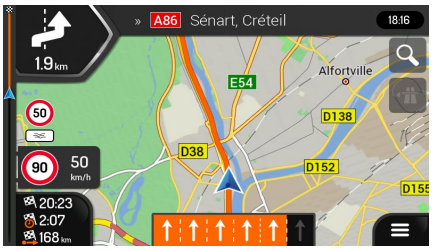
During navigation the next manoeuvre is displayed in the top left corner. Most of the manoeuvre icons are intuitive. The following table lists some of the frequently shown route events:

Icon	Function
	Turn left.
	Turn right.
	Turn back.
	Bear right.
	Turn sharp left.
	Keep left.
	Continue straight in the intersection.
	Enter the roundabout and take the first exit (next manoeuvre).
	Enter the roundabout (second next manoeuvre).
	Enter the motorway.
	Exit the motorway.

	Board the ferry.
	Leave the ferry.
	Approaching a waypoint on the right.
	Approaching the destination.

1.3.6 Lane information

When navigating on multi-lane roads, it is important to take the appropriate lane in order to follow the planned route. If lane information is available in the map data, XZENT displays the lanes and their directions using small arrows at the bottom of the map. Highlighted arrows represent the lanes and the direction you need to take.

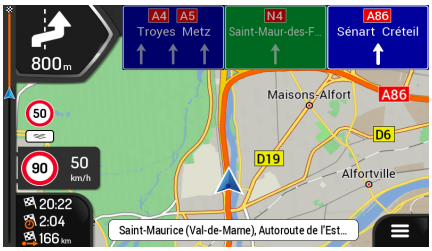


1.3.7 Signposts

If necessary information is available, XZENT displays signposts at the top of the map. The colour and style of the signposts are similar to the real ones you can see above roads or by roadsides. They show the available destinations and the road numbers.

All signposts look similar when cruising (when there is no planned route). During navigation only the signpost that points to the lane(s) to be taken is highlighted; all the others are darker.

If you want to hide the currently displayed signposts, tap any of them and the normal Navigation view returns until new signpost information is received.



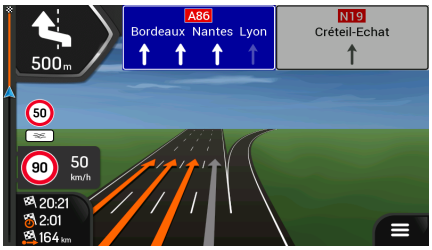
You can modify the signpost settings in

(page 72).

1.3.8 Junction view

If you are approaching a motorway exit or a complex intersection and the needed information exists, the map is replaced with a 3D view of the junction. The lanes you need to take are displayed with arrows. At the top of the screen, road signs show you additional information.

If you want to hide the currently displayed junction and return to the Navigation view, tap the picture.

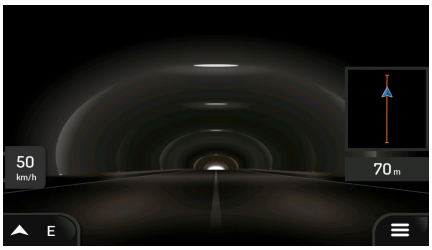


Junction view can be turned off in

. See page 72.

1.3.9 Tunnel view

When entering a tunnel, the map is replaced with a generic tunnel image so that surface roads and buildings cannot distract you.



The top-down overview of the tunnel displayed in a separate window helps you orientate yourself. The remaining distance in the tunnel is also displayed.

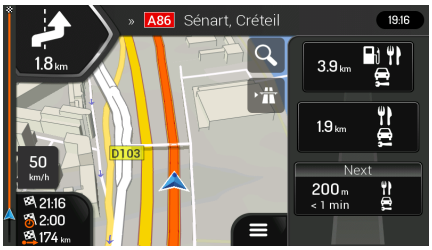
After leaving the tunnel, the original map view returns.

Tunnel view can be turned off in

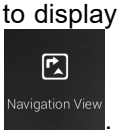
. See page 72.

1.3.10 Motorway services

When you are driving on a motorway, the button appears at the top right corner of the Navigation view. Tap it to open a panel with the details of the next few service stations (petrol stations, restaurants).



Tap any of them to display the exit area on the map. You can now easily add this service station as a waypoint to your route if necessary.

If you want to display other types of Places at the next few service stations, you can change the icons in 

. See page 72.

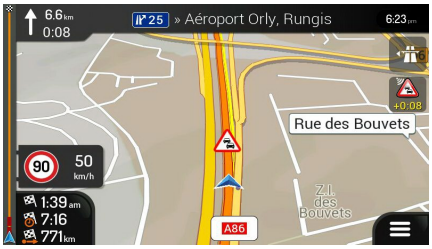
1.3.11 3D object types

XZENT supports the following 3D object types:

Type	Description
3D terrain	XZENT displays 3D hills and mountains in the Navigation view, and illustrates them by colouring and shading on the 2D map.
Elevated roads	Elevated roads are complex intersections and vertically isolated roads (such as overpasses or bridges) displayed in 3D.

1.3.12 Traffic events

Road segments affected by traffic events are displayed in a different colour on the map.



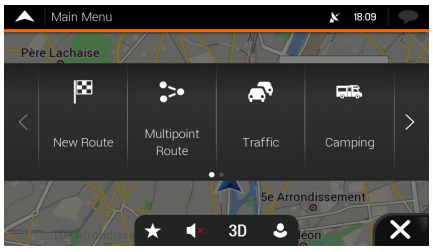
The following icons may appear at the top right corner of the screen:

Button	Description
	It is displayed when traffic events are not received.
	It is displayed when traffic events are received but they do not affect the planned route.
	It shows the type of the next traffic event with the expected delay.
	It shows the type of the next traffic event if it does not cause any delay or the delay is not known.

For more information, see page 47.

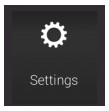
1.4 Navigation menu

On the Navigation view, tap to open the Navigation menu.



You can see the following menu options when you are navigating without a planned route:

Button	Function
	Select your destination by entering an address or its coordinates, or by selecting a Place, a **Saved Location**, or a **Saved Route**. You can also look up your recent destinations from the History.

	Build your route from one or more route points. You can also plan a route independently of your current GPS position by setting a new starting point.
	Check the traffic events affecting your route, or view historical traffic data.
	Open a list of nearby caravan-related locations from the Places of interest on your device (campings, parking for caravans, service locations, etc.)
	Access additional options and check navigation-related information.
	Customise the way the navigation software works.
	The About section provides you with product information. Read the Software and Database End User License Agreement, or check the map and other contents of the application. You can also access program usage statistics.

With a planned route, the following menu options are also available:

Button	Function
	Add an intermediate destination to your route.
	See route alternatives to avoid parts of the route, or to avoid a specific road from your planned route.
	View the route in its full length on the map and check route parameters and route alternatives. Tap to access additional options, like **Simulation or Route Preferences**.
	Delete your route.
	Delete the next waypoint or the whole route. It is displayed if there is a multipoint route.

In the navigation menu, you have the following additional options:

Button	Function
	Open the Saved Locations screen where you can save a location as a favourite destination or edit a saved location.
	Set the volume or mute the navigation.
	Switch to 2D ( ), 2D North up ( ) view or back to 3D mode.
	Suspend navigation.
	Resume navigation.
	Access the User profiles menu where you can create new profiles or edit the existing ones. If several drivers are using the navigation system, they can create their own profiles with their own settings.
	Check those notifications that contain important information but do not require immediate action from the users. If there are no notifications, this icon is not displayed.
	The Menu button appears when the Navigation view is displayed. Tap it to open the Navigation menu.
	The More button appears on the screen to display additional features. Tap it to open the list of additional features on certain screens.
	Tap the Back button to return to the previous screen. You can also press and hold this button to quickly return to the Navigation view from any other screen.

2 Warnings and safety information

The navigation system helps you find your way to your destination with the built-in GPS receiver. XZENT does not transmit your GPS position; others cannot track you.

It is important to look at the display only when it is safe to do so. If you are the driver of the vehicle, we recommend that you plan and review your route before you start your journey. Plan the route before your departure and stop if you need to change the route.

You must follow the traffic rules. If you deviate from the planned route, XZENT changes the instructions accordingly.

3 Using the navigation

By default, XZENT calculates routes using the road network of the maps provided with the product.

You can select the destination and start navigating to it right away (normal navigation) if you need a route for immediate navigation.

You can also plan a route independently of your current GPS position even without GPS reception. To achieve this, you need to set a new starting point in the Multipoint Route menu. It also suspends guidance so that the route is not recalculated when a new position is received. See Page 49.

You can plan routes with multiple destinations by selecting a first and a second destination and adding it to your route. You can add as many destinations to your route as you like. See Page 45.

You can also use XZENT for off-road navigation. See page 58.

3.1 Selecting a destination

You can choose your destination by selecting one of the following options:

- Using combined search to search among different destination types at once, see page 24
- Entering a full address or a part of an address, for example a street name without a house number, see page 27
- Selecting a Place as your destination, see page 33
- Selecting a previously saved location as your destination, see page 39
- Selecting a location from the History of previously used destinations, see page 40
- Selecting a previously saved route, see page 42
- Entering the coordinate of the destination, see page 42
- Selecting a location on the map, see page 44
- Planning a multipoint route, see page 45.

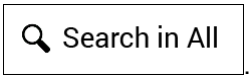
3.1.1 Using combined search

There are several ways to select your destination. You can initiate a separate search for addresses, Places, saved locations, or recent destinations, but the fastest way to search for any of these is to use combined search.

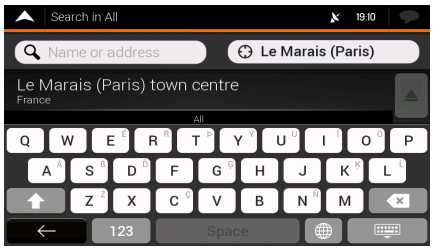
Perform the following steps to use combined search:

1. Tap on the ***Navigation view*** to access the ***Navigation menu***.
2. Tap

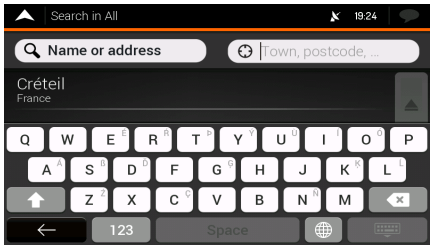
.

3. Tap 

. You can see the input field at the top of the screen. Right next to it you can see the search area, the town around which the search is carried out. The default search area is the area where you are located. For a local search, skip the next step.



4. (optional) To search in a different area, tap the input field with the search area, and start entering the name of the new search area on the keyboard.

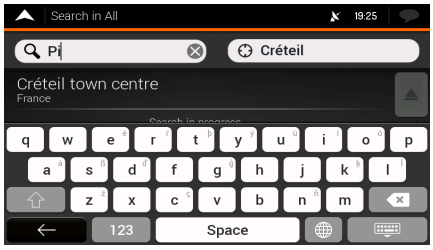


You only need to enter a few letters to get a result. The most likely result appears below the input field as you enter new letters.

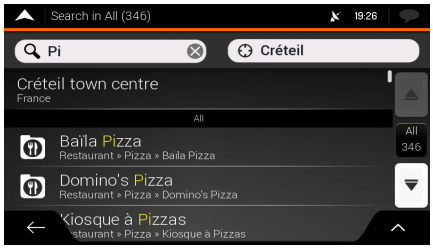
   a. If the new search area is in a different country, start entering the country and the town. It is usually enough to type the first few letters of the country or town and conventional abbreviations can also be used.

   b. Tap to see the whole list of the matching results.

5. With the proper search area displayed, start entering the name, address, or category of the destination you are looking for.



6. Tap to switch to the result screen. You can see all the results in the list, regardless of their type. Addresses, Places, Place categories, Saved locations, and recent destinations are mixed in one list. You can immediately select the result you want to use as your destination or narrow the list of results for only one type (for example, Places).



7. If necessary, tap

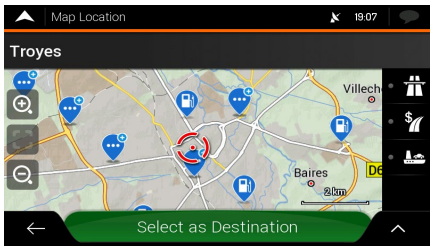
on the right side of the list and then tap the corresponding button to narrow the list of search results by type (the number on the related icon shows the number of the matching results):

   - Tap to see the list of recent destinations with a matching name or address.
   - Tap to see the list of your saved locations with a matching name.
   - Tap to see the list of matching addresses.
   - Tap to see the list of matching Place category names. Scroll the list and select one of the categories. You get the list of Places in that category ordered by their distance from your current position.
   - Tap to see the list of matching Places ordered by their distance from your current location.
   - (optional) If your product contains Places from different data providers, you can further narrow the list by showing the results from one provider only. Look for the provider logos. Tap one of them to see Places from that provider.

Tip! To search for an intersection in the combined search, enter the names of the streets connected by the '&' sign. You do not need to use spaces before and after the separator character. For example you can find the intersection of Collins Street and Douglas Avenue by entering strings, like "Collins St & Douglas Ave", "Collins & Douglas", "Col&Doug", etc. The more precise the input string is, the fewer false results are expected. If you enter "Collins St&", you get all the intersections of Collins Street and you can select the appropriate one from the result list.

---

8. Once the destination is selected, a full screen map appears with the selected point in the middle. If necessary, tap the map somewhere else to modify the destination. The cursor ( ) appears in the new location.
9. Check the settings for road types and change them if necessary.

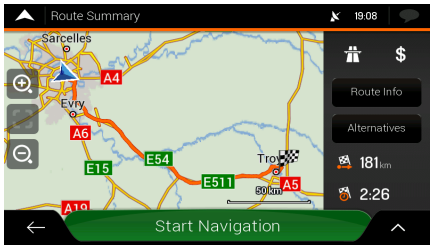


10. Tap

to confirm the destination, or tap to select a different destination.

11. The route is calculated and the map appears showing the entire route, where you can check route information and route alternatives. Tap to modify the route parameters, or tap

to start your journey.



3.1.2 Selecting an address

If you know at least a part of the address, this is the quickest way to select your destination. Using the same screen, you can find an address by entering the following information:

- The exact address, including the house number, see page 27
- The centre of a town, see page 29
- The midpoint of a street, see page 30
- An intersection, see page 31
- Any of the above, starting the search with the postal code, see page 32.

3.1.2.1 Entering an address

To enter an address as the destination, perform the following steps:

1. Tap on the ***Navigation view*** to access the ***Navigation menu***.
2. Tap

and

.
3. By default, XZENT proposes the country and town where you are (or in case there is no valid GPS position, the country and town of the last known position). If necessary, change the country, by performing the following steps:
   a. Tap the Country field.

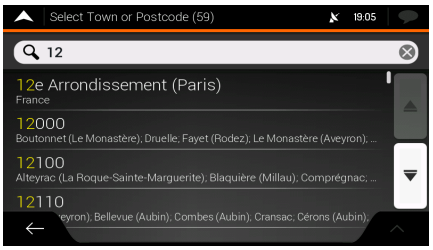
   b. In the Select Country screen, you can immediately select a country from the list below the input field or start entering the first few letters of the country on the keyboard.

c. Tap to open the list of results and select a country from the list.

4. If necessary, select a new town by performing the following steps:

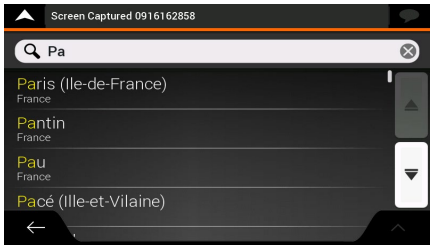
   a. Tap the Town or Postcode field.

   b. (optional) On the Town of Postcode screen, you can select a town from the list of suggestions.



   c. Otherwise, start entering the first few letters of the town. The names that match the string appear in a list.

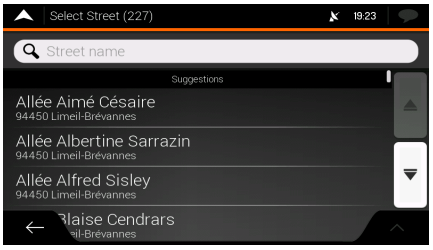
   d. To open the list, tap and select the town.



5. Enter the street name by performing the following steps:

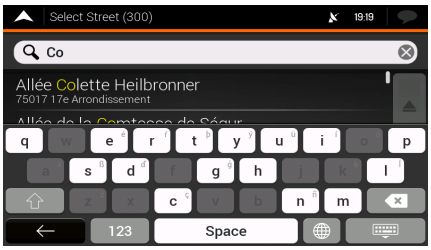
   a. Tap the Street name field.

   b. (optional) On the Select Street screen, you can immediately select a street from the list of suggestions.

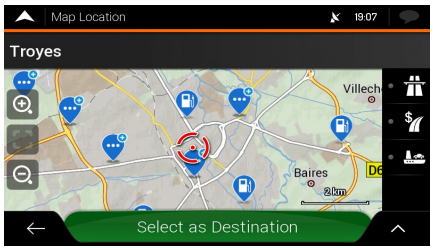


   c. Otherwise, start entering the street name on the keyboard. The names that match the string appear in a list.

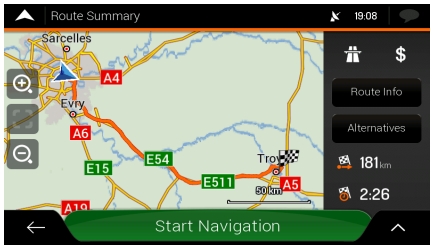
d. Tap to open the list of results. Select the street from the list.



6. A full screen map appears with the selected point in the middle. If necessary, tap the map somewhere else to modify the destination. The cursor ( ) appears at the new location.
7. Check the settings for road types and change them if necessary.



8. Tap to confirm the destination. You can also select a nearby point on the map or tap to select a different destination.
9. The route is calculated and the map appears showing the entire route, where you can check route information and route alternatives. Tap to modify the route parameters, or tap to start your journey.



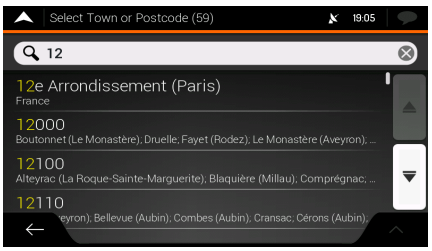
3.1.2.2 Selecting a town centre

The town centre is not the geometric centre of the town but an arbitrary point the map creators have chosen. In towns and villages, it is usually the most important intersection and in larger towns, it is one of the important intersections.

1. Go to

,

, and modify the country as described earlier (page 27), if necessary.
2. If necessary, select a new town by performing the following steps:
    a. Tap the Town or Postcode field.
    b. (optional) On the Town of Postcode screen, you can select a town from the list of suggestions.



    c. Otherwise, start entering the first few letters of the town. The names that match the string appear in a list.
    d. To open the list, tap and select the town.

3. Tap

. This way the centre of the displayed town becomes the destination of the route.

3.1.2.3 Selecting the midpoint of a street

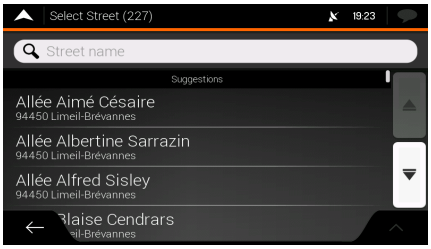
To navigate to the midpoint of a street without entering the house number, perform the following steps:

1. Go to

,

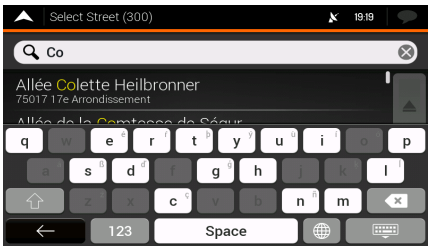
, and select the country and town as described earlier. The Select Street screen appears.
2. Enter the street name by performing the following steps:
    a. Tap the Street name field.

b. (optional) On the Select Street screen, you can immediately select a street from the list of suggestions.



c. Otherwise, start entering the street name on the keyboard. The names that match the string appear in a list.

d. Tap to open the list of results. Select the street from the list.

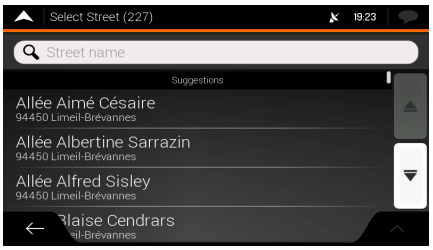


3. Instead of entering the house number, tap . The midpoint of the street is selected as the destination.

3.1.2.4 Selecting an intersection in a town

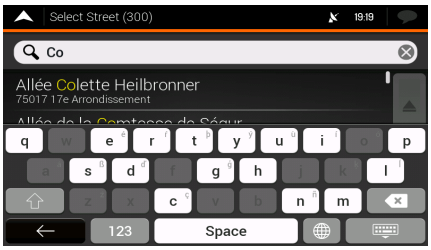
To navigate to an intersection, perform the following steps:

1. Go to , , and select the country and city as described earlier.
2. Enter the street name by performing the following steps:
   a. Tap the Street name field.
   b. (optional) On the Select Street screen, you can immediately select a street from the list of suggestions.

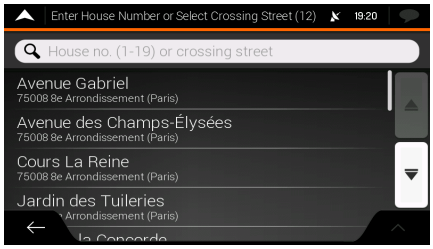


   c. Otherwise, start entering the street name on the keyboard. The names that match the string appear in a list.

d. Tap to open the list of results. Select the street from the list.



3. Tap the House number or crossing street field and browse the list of crossing streets or start entering the street name in the field. Select one from the list.



3.1.2.5 Using the postcode to select a destination

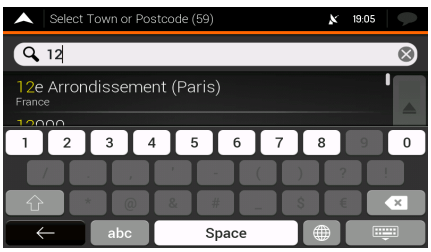
You can also select any kind of destination by entering the postal code instead of the city name. To select the postal code, perform the following steps:

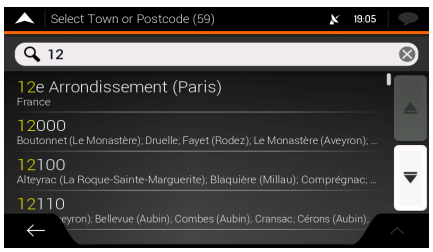
1. Go to

,

, and modify the country as described earlier (page 27), if necessary.
2. Tap the Town or Postcode field.
3. Enter the postcode by performing the following steps:
   a. Tap

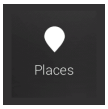
to open the numeric keypad.
   b. Start entering the postal code.
   c. Tap to open the list of results.
   d. Find the place you need.





4. Continue the search as described previously (page 27).

3.1.3 Selecting a Place of Interest

You can search for Places of Interest (Places) in the 

menu.

Using the same screen, you can find a Place by selecting one of the following options:

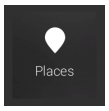
- Finding frequently searched types of Places with the Quick search categories, see page 33
- Searching for a Place by its name, see page 37
- Searching for a Place by its category, see page 35

In case of emergency, you can also find help nearby, see page 38

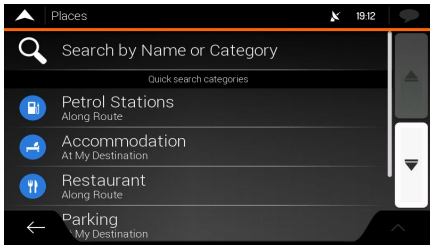
3.1.3.1 Using Quick search categories

The Quick search feature helps you quickly find the most frequently selected types of Places. Perform the following steps:

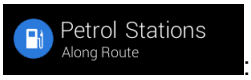
1. Tap on the ***Navigation view*** to access the ***Navigation menu***.
2. Tap

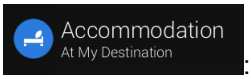
and 

.

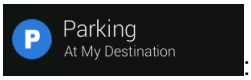


The following Quick search categories appear:

- 

: If a planned route exists, petrol stations are searched along the route.
- 

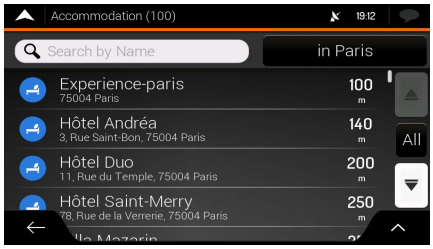
: If a planned route exists, accommodation is searched around the destination.
-

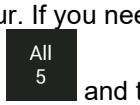
: If a planned route exists, restaurants are searched along the route.
- 

: If a planned route exists, parking lots are searched around the destination.

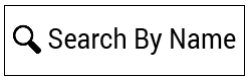
If there is no planned route (destination is not selected), the search is carried out around the current position. If the current position is not available either (no GPS signal), places are searched around the last known position.

3. Tap any of the quick search buttons to get an instant list of Places.



4. The Places in the list can be ordered by their distance from the current or last known position, from the destination, or by the length of the necessary detour. If you need to reorder the list, tap . To filter the list of results by providers, tap 

and then the provider logo on the right side of the screen.

5. (optional) If needed, tap 

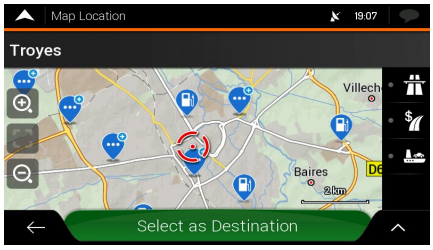
to further filter the list of results.

6. Browse the list and tap one of the list items. A full screen map appears with the selected point in the middle. The name and address of the Place is displayed at the top of the screen.

7. Tap to see the details of the selected Place, or to save the location. If there is a telephone number saved for this Place, you can make a call to that number by tapping the green button at the bottom.

8. If necessary, tap the map somewhere else to modify the destination. The cursor ( ) appears at the new location.

9. Check the settings for road types and change them if necessary.

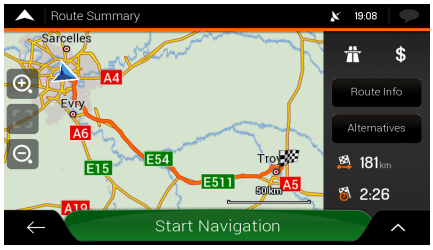


10. Tap

to confirm the destination. You can also select a nearby point on the map or tap to select a different destination.

11. The route is calculated and the map appears showing the entire route, where you can check route information and route alternatives. Tap to modify the route parameters, or tap

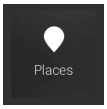
to start your journey.

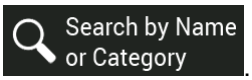


3.1.3.2 Searching by category

To search for Places by their categories and subcategories, perform the following steps:

1. Tap on the ***Navigation view*** to access the ***Navigation menu***.
2. Tap

and 

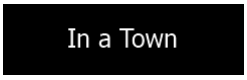
.
3. Tap 

.
4. Select the area around which you would like to search for the Place by tapping

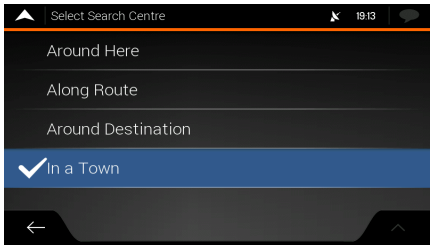
. By default, the search area is around the current position (or if it is not available, around the last known position). In this case, the following result list is ordered by the distance from this position.

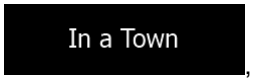
   - Tap

to search along the planned route, and not around a given point. This is useful when you search for a later stopover that results in a minimal detour only, such as searching for upcoming petrol stations or restaurants. (The result list is ordered by the length of the necessary detour.)
   - Tap

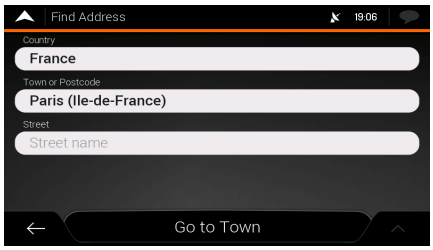
to search for a place around the destination of the planned route. (The result list is ordered by the distance from the destination.)
   - Tap 

to search for a place within a selected town. (The result list is ordered by the distance from the centre of the selected town.)

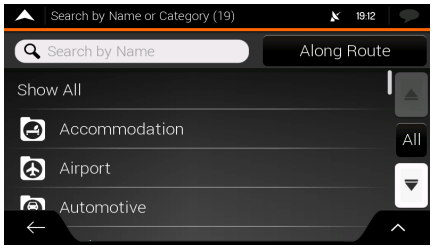


5. (optional) If you have selected 

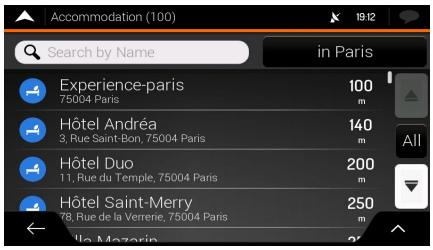
, select the town to search in.



6. Select one of the main Place categories (for example, Accommodation), then browse the subcategories (for example, Hotel or Motel) to find your destination.



7. You can turn the Category View off at any level to list all Places around the selected location or along the route.



8. (optional) The Places in the list can be ordered by the following criteria:
   - Name
   - Their distance from the current or last known position
   - Their distance from the selected town
   - Their distance from the destination
   - The length of the necessary detour.

   Tap to reorder the list.

   To filter the list of results by providers, tap

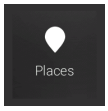
and then the provider logo on the right side of the screen.

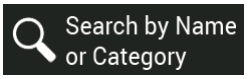
9. Browse the list and tap one of the list items. A full screen map appears with the selected point in the middle. The name and address of the Place is displayed at the top of the screen.
10. The process continues the same way as in case of any other search for Places. See page 33.

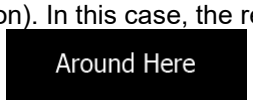
3.1.3.3 Searching by name

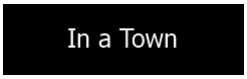
To search for a Place by name, browse the various Place categories, or use the mixture of the two search types, perform the following steps:

1. Tap on the ***Navigation view*** to access the ***Navigation menu***.
2. Tap

and 

.
3. Tap 

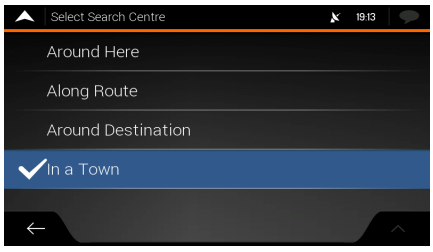
to open the Search By Name or Category window.
4. Select the area around which you would like to search for the Place. By default, the search area is around the current position (or if it is not available, around the last known position). In this case, the result list is ordered by the distance from this position. Tap 

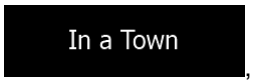
to select one of the following search areas:
   - Tap 

to search for a place within a selected town. (The result list is ordered by the distance from the centre of the selected town.)
   - Tap

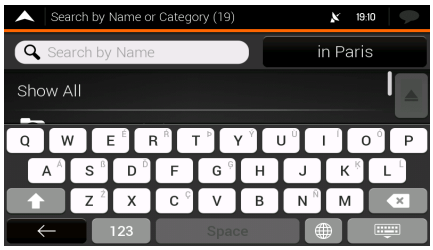
to search for a place around the destination of the planned route. (The result list is ordered by the distance from the destination.)
   - Tap

to search along the planned route, and not around a given position. This is useful when you search for a later stopover that results in a minimal detour only, such as searching for upcoming petrol stations or restaurants. (The result list is ordered by the length of the necessary detour.)

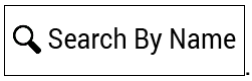


5. (optional) If you have selected 

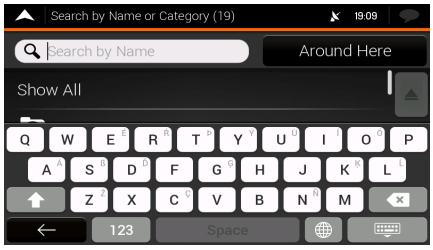
, select the town to search in.



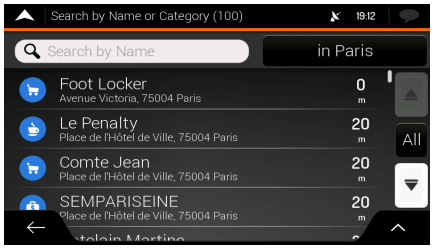
You can search for the name of a Place in all categories by performing the following steps:

1. Tap 

. Using the keyboard, start entering the name of the Place or browse in the categories.



2. After entering a few letters, tap to open the list of Places or Place categories with names containing the entered character sequence.

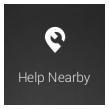


3. Browse the list, if necessary, and tap the desired list item. A full screen map appears with the selected point in the middle. The name and address of the Place is displayed at the top of the screen.
4. The process continues the same way as in case of any other Places search. See page 33.

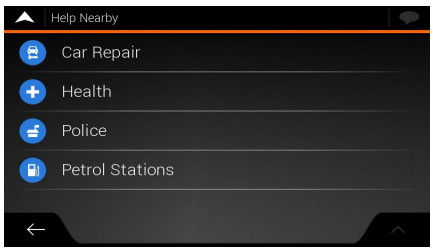
3.1.3.4 Finding help nearby

To quickly search for nearby assistance, perform the following steps:

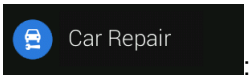
1. Tap on the ***Navigation view*** to access the ***Navigation menu***.
2. Tap

and 

.



Places in the following pre-set search categories can be searched for around the current position (or around the last known position if the current position is not available):

- 

: Car repair and roadside assistance services

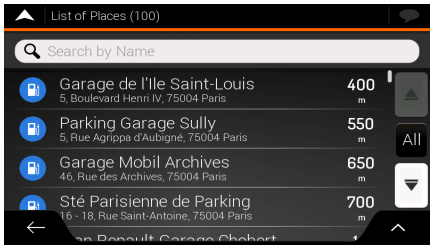
-

: Medical and emergency services
-

: Police stations
-

: Petrol stations

3. Tap any of the quick search buttons to get an instant list of those types of Places.



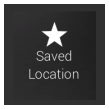
4. (optional) The Places in the list can be ordered by the following criteria:
   - By their distance from the current or last known position
   - By name.

   Tap to reorder the list.
5. Browse the list and tap one of the list items. A full screen map appears with the selected point in the middle. The name and address of the Place is displayed at the top of the screen.
6. The process continues the same way as in case of any other Places search. See page 33.

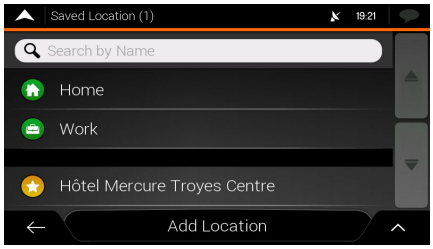
3.1.4 Selecting a Saved Location

To select a location that you have already saved (page 55), perform the following steps:

1. Tap on the ***Navigation view*** to access the ***Navigation menu***.
2. Tap

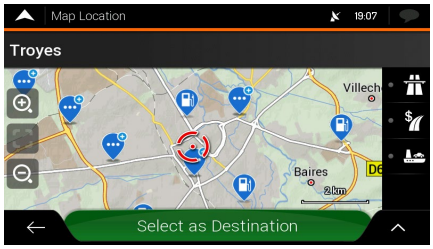
and 

.
3. The list of saved locations is displayed. It contains two pre-set categories: Home and Work.

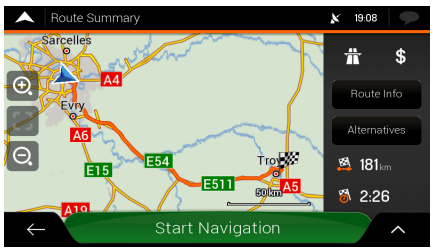


4. Tap the location that you want to set as your destination. If necessary, browse the list to see more results.

5. (optional) If needed, tap to enable the editing option so that you can rename the saved locations or delete any of them.
6. After you have selected a saved location as the destination, a full screen map appears with the selected point in the middle.
7. If necessary, tap the map somewhere else to modify the destination. The cursor ( ) appears in the new location.
8. Check the settings for road types and change them if necessary.



9. Tap Select as Destination to confirm the destination. You can also select a nearby point on the map or tap to select a different destination.
10. The route is calculated and the map appears showing the entire route, where you can check route information and route alternatives. Tap to modify the route parameters, or tap Start Navigation to start your journey.



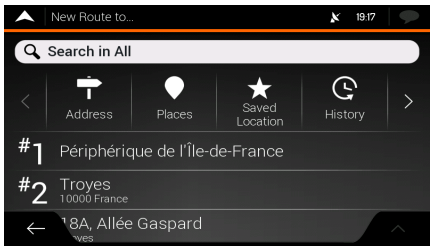
3.1.5 Selecting a History item

The destinations that you have used earlier appear in the History list. Smart History offers these locations from your previous destinations, using parameters like the current time of day, the day of week, and the current location. The more you use the navigation software, the better it can guess your desired destination. To select a History item, perform the following steps:

1. Tap on the ***Navigation view*** to access the ***Navigation menu***.

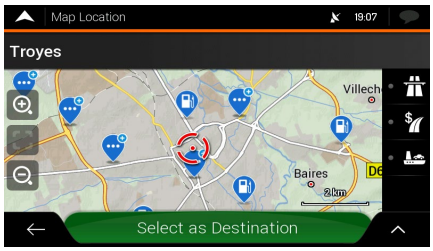
2. Tap

. Two of the Smart History Items are displayed in the New Route to... screen for easy access. You can select one of them as your destination.



3. To open all the history items, tap

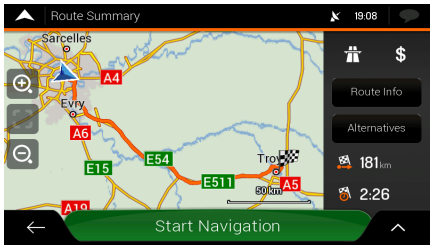
. The list of recent destinations appears. The list begins with the three most likely destinations that are selected based on your previous routes (Smart History). The rest of the destinations are ordered by the time they were last selected. If necessary, scroll the list to see earlier destinations.
4. Select a destination from the list.
5. A full screen map appears with the selected point in the middle. If necessary, tap the map somewhere else to modify the destination. The cursor ( ) appears at the new location.
6. Check the settings for road types and change them if necessary.



7. Tap

to confirm the destination. You can also select a nearby point on the map or tap to select a different destination.
8. The route is calculated and the map appears showing the entire route, where you can check route information and route alternatives. Tap to modify the route parameters, or tap

to start your journey.



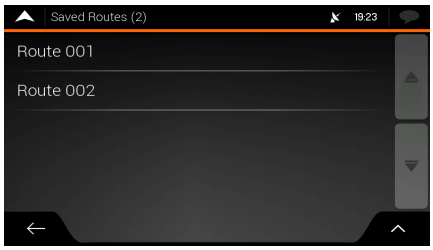
3.1.6 Selecting a saved route

The routes that you have saved earlier appear in a list. To select a previous route, perform the following steps:

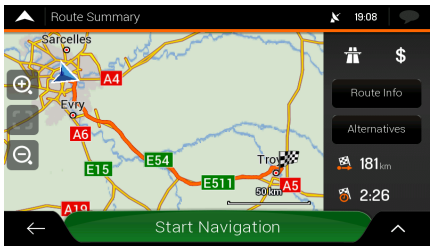
1. Tap on the ***Navigation view*** to access the ***Navigation menu***.
2. Tap

and

.



3. The list of saved routes appears. If necessary, scroll the list to see earlier routes.
4. Select a route and the Multipoint Route screen appears. If necessary, modify the saved route. Otherwise, tap Calculate Route.
5. The route is calculated and the map appears showing the entire route, where you can check route information and route alternatives. Tap to modify the route parameters, or tap Start Navigation to start your journey.



3.1.7 Entering coordinates

To select a destination by entering its coordinates, perform the following steps:

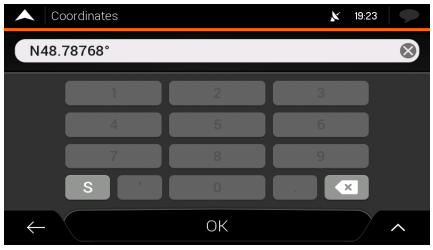
1. Tap on the ***Navigation view*** to access the ***Navigation menu***.
2. Tap

and

.

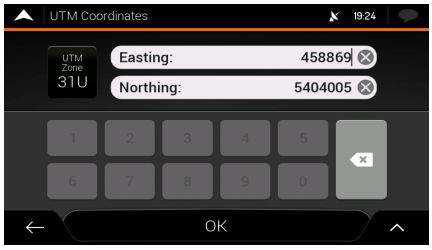
3. You can enter the latitude and longitude values in any of the following formats: decimal degrees, degrees and decimal minutes, or degrees, minutes and decimal seconds.

   Tap OK.

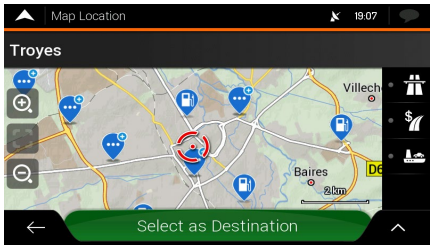


(optional) If necessary, tap ^ then UTM Coordinates and enter the coordinate in UTM format.

Tip!

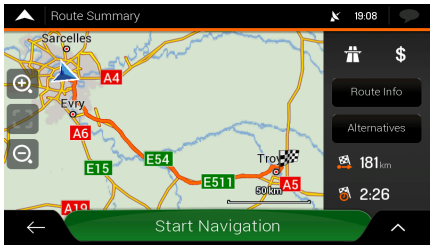


4. A full screen map appears with the selected point in the middle. If necessary, tap the map somewhere else to modify the destination. The cursor ( ) appears at the new location.
5. Check the settings for road types and change them if necessary.



6. Tap Select as Destination to confirm the destination. You can also select a nearby point on the map or tap ← to select a different destination.

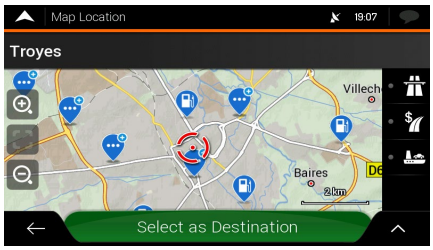
7. The route is calculated and the map appears showing the entire route, where you can check route information and route alternatives. Tap to modify the route parameters, or tap Start Navigation to start your journey.



3.1.8 Selecting a location on the map

To select a map location, perform the following steps:

1. Locate your destination on the map. Move and scale the map as necessary.



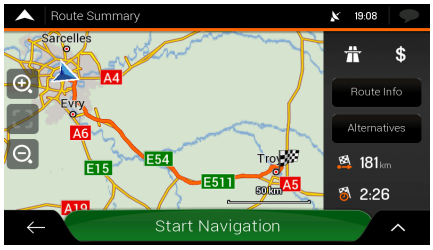
2. Tap the location that you want to select as your destination. The cursor ( ) appears there.
3. (optional) If needed, tap to list the Places near the selected point or to save this location.

Tip! If you already have a planned route, tap and Select as Waypoint to add the selected location to your route.

---

4. Tap Select as Destination to select the cursor as the destination.

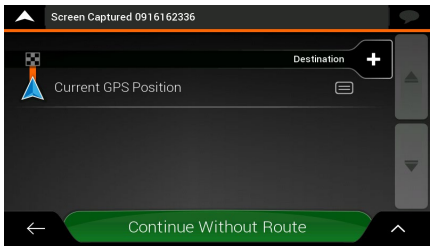
5. The route is calculated and the map appears showing the entire route, where you can check route information and route alternatives. Tap to modify the route parameters, or tap to start your journey.



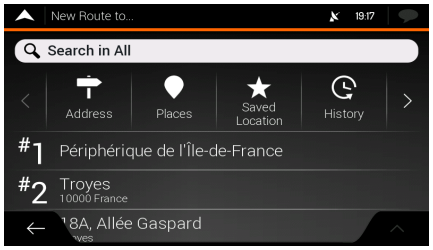
3.1.9 Planning a Multipoint Route

To build your route destination-by-destination, perform the following steps:

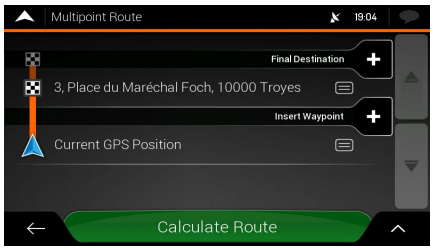
1. Tap on the ***Navigation view*** to access the ***Navigation menu***.
2. Tap .



3. There is only one line in the list of route points, the starting point of the route, which is normally the current GPS position.
4. Tap to select the destination.
5. The New Route to... screen appears, where you can select the destination of the route the same way as described in the previous sections.



6. When the selected location appears on the map, tap Select as Destination and the list returns. If needed, you can add further intermediate destinations.



7. To add more route points, tap Insert Waypoint + or tap Final Destination + to change the final destination. The Add to Route... menu appears again, where you can select the new route point the same way as you have set the destination before.

8. (optional) Tap ^ to optimise the whole route or the order of waypoints. You can also delete all the destinations.

9. When you have added all the route points, tap Calculate Route and the planned route is automatically calculated.

3.2 Checking route information and alternatives

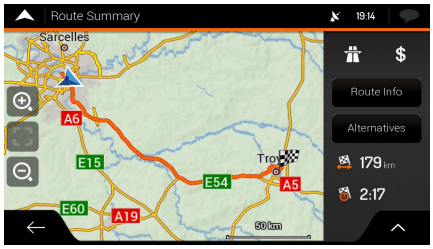
To get a map overview of the planned route and check different parameters of the planned route, perform the following steps:

1. Tap ☰ on the ***Navigation view*** to access the ***Navigation menu***.

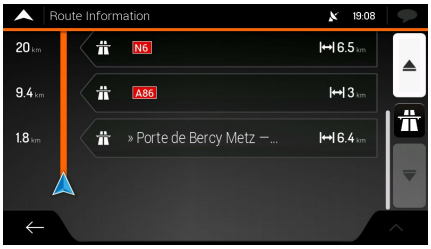
2. In the Navigation menu, tap Route Summary.

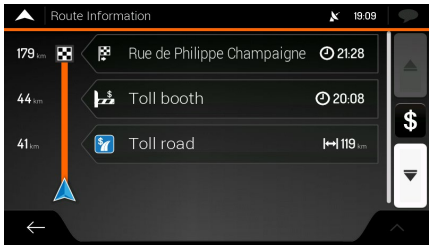
   The planned route is displayed in its full length on the map with the following additional information:

   - The total length of route
   - The total time of route.

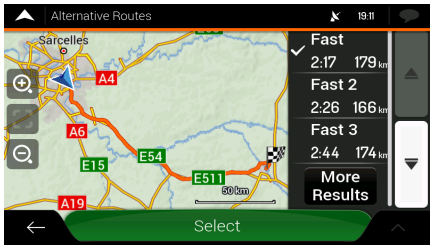


By tapping Route Info, you can check detailed information about the route. If you tap All on the right side of the screen, you can narrow the route information, for example to show only motorway sections or toll roads.





By tapping Alternatives, your can see a list of route alternatives and select the most suitable route.



3. Tap on the Route Summary screen to carry out additional actions, for example edit your route preferences or display the itinerary.

3.3 Checking Traffic Events

Offline statistical traffic information (historical speed information or traffic patterns) can be taken into account in the route calculation based on the time of day and the day of week if suitable data can be found on the device. In addition, real-time traffic information can help you avoid current traffic events like temporary road closures or traffic jams caused by an accident. Both functions are subject to data availability.

For information on traffic icons, see page 19.

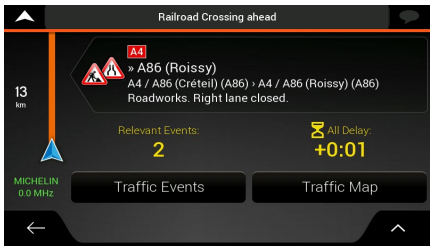
Road segments affected by traffic events are displayed in a different colour on the map, and small symbols above the road show the nature of the event.

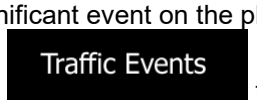
To check the traffic summary, perform the following steps:

1. On the Navigation view, tap the traffic icon in the corner (for example,

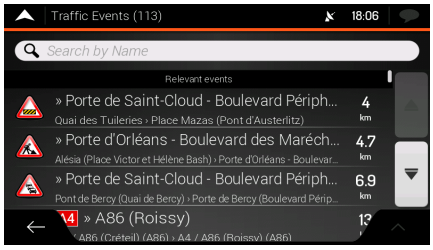
) to open the Traffic Summary screen, or tap and

.

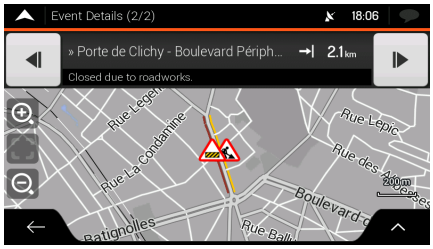


2. If there is at least one significant event on the planned route, a description is displayed about the next event. Tap 

to see the list of all events.



3. Tap any of the list items to see its details and to display the affected road segment in its full length on the map.



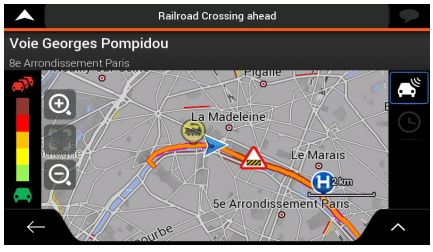
To display real-time traffic information on the map, perform the following steps:

1. On the Navigation view, tap the traffic icon (for example,

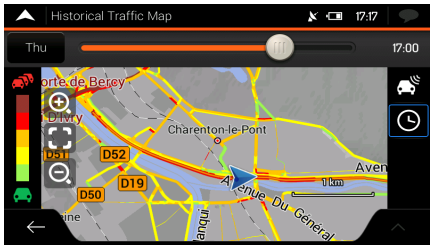
) to open the Traffic summary screen and tap

.

2. Tap to display real-time traffic information on the map. A 2D map is displayed with road segments coloured by the impact on the traffic flow.



3. Tap to display historical traffic information. A 2D map is displayed with road segments coloured by the likely density of the traffic in the given period. The information relevant for the current period is shown when you open the screen. If necessary, you can browse the map for a better view of certain road segments. Modify the day of week and the time of day to see the desired period.



3.4 Editing the route

When navigation has already started, there are several ways to modify the planned route. You have the following options:

- Setting a new starting point, see page 49
- Adding an additional destination, see page 50
- Modifying the list of destinations, see page 51
- Saving the planned route, see page 51
- Deleting the planned route, see page 52
- Selecting a route alternative when planning the route, see page 52
- Selecting a route alternative for an existing route, see page 53
- Pausing guidance, see page 55.

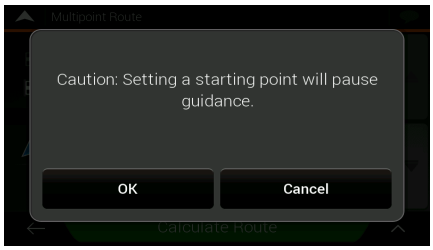
3.4.1 Setting a new starting point

For normal navigation, all routes are calculated from the current position. You can pause navigation to check future routes, simulate them or see their length in time and distance. Then you can set the starting point of the route to a location other than the current GPS position.

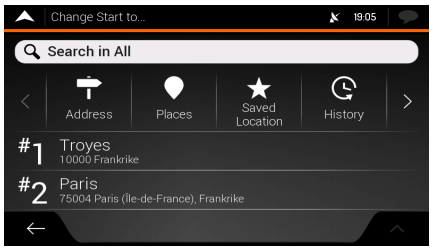
1. Tap on the ***Navigation view*** to access the ***Navigation menu***.

2. In the Navigation menu, tap Multipoint Route.

3. The first line from the bottom is the start of the route, normally the current GPS position. Tap Current GPS Position, select Set Start Point, and confirm your action at the warning message.



4. The Change Start to... screen appears. Select the starting point of the route the same way you select a destination.



5. You can see the new starting point on the map. Tap Set Start Point and the Multipoint Route screen appears where you can continue adding a destination to your route.
6. Tap to continue. The route will be saved with the starting point that you have just set. You can use the saved route later to plan a route. (See page 44.)

3.4.2 Adding an additional destination

If you already have a planned route and you select a new destination as described in the above sections, the route to the previous destination is deleted and a new route is calculated.

To add a new intermediate destination to the planned route, perform one of the following actions:

- Tap the map anywhere to browse it. After selecting the location on the map, tap and Select as Waypoint to add the selected location to your route as an intermediate destination. The other destinations of the route remain intact.

- Tap on the Navigation view and tap

. Add a destination to your route as described on page 45.

3.4.3 Modifying the list of destinations

To edit your route, perform the following steps:

1. Tap on the ***Navigation view*** to access the ***Navigation menu***.
2. In the Navigation menu, tap

.

You have the following options on this screen:

- Tap to delete all the destinations, or optimise the waypoints or the route.
- Tap the name of the intermediate destination to move it up or down in the list, to save the location, or to delete it from the list.
- If you have a route with at least one intermediate destination, you can delete the waypoint from the list right from the Main menu. Tap

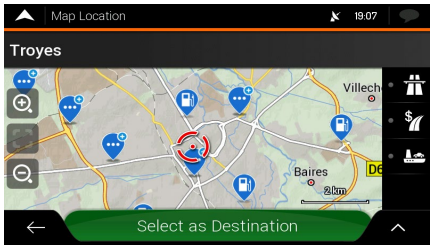
, then confirm the deletion.

3.4.4 Saving the planned route

To save the planned route, perform the following steps:

1. Select a destination as described earlier and tap

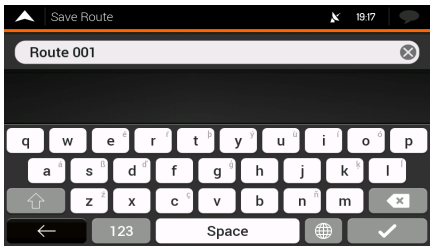
.



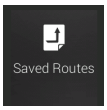
2. Tap and

.

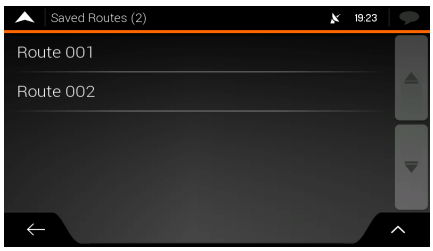
3. Type in a name and tap .



4. The route is saved and it is available in

, 

.



By selecting a previously saved route, XZENT recalculates the route using the saved destination and/or the waypoints.

3.4.5 Deleting the planned route

You have the following two options to delete the navigated route:

- If you already have a planned route and you select a new destination as described in the above sections, the route to the previous destination is automatically deleted and a new route is calculated.
- In the Navigation menu, tap

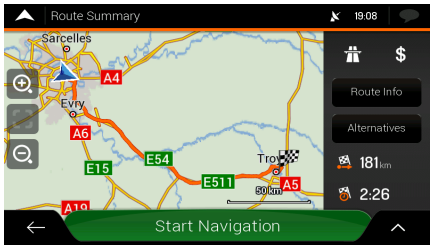
or

. If there are no waypoints, the planned route is deleted after a confirmation. If you have waypoints, you can choose to delete the whole route, or only the next waypoint.

3.4.6 Selecting a route alternative when planning the route

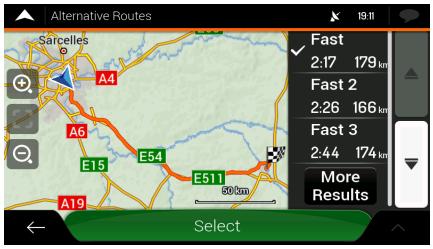
To select from different route alternatives or change the route planning method after you have selected a new destination, perform the following steps:

1. Select a destination as explained earlier, and go to the route confirmation screen.

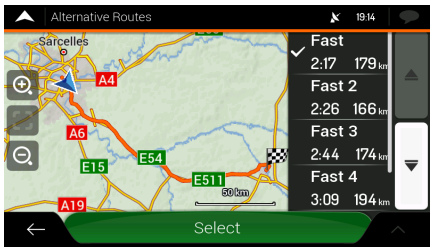


2. Tap Alternatives.

3. You can see the basic details of route alternatives. Tap any of them to see it on the map.



4. To view more suggestions, tap More Results and scroll down for other alternative routes with different route planning methods.



5. Select one of the route alternatives and tap Select to return to the previous screen. XZENT recalculates the route. Tap Start Navigation to start your journey. The orange line now shows the new planned route.

3.4.7 Selecting a route alternative for an existing route

To recalculate the planned route with a different route planning method and to compare different route alternatives, perform the following steps:

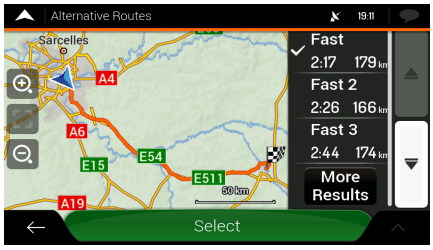
1. Tap ☰ on the ***Navigation view*** to access the ***Navigation menu***.
2. You can access the list of route alternatives from the Navigation menu in one of the following ways:
   - Tap Detours & Alternatives and Alternative Routes.

- Tap

and

.

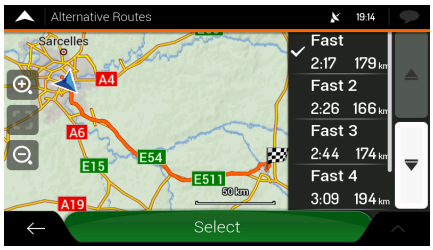
3. You can see the basic details of a few route alternatives. Tap any of them to see it on the map.



If there are suitable alternatives calculated with the route planning method that is selected in Route preferences (page 68), they are shown on top of the list. Routes with other route planning methods are shown at the bottom of the list.

4. If there are more than a few suggestions, you can tap

and scroll down for routes.



5. Select one of the route alternatives and tap

to return to the previous screen. XZENT replaces the original route. Tap

to start your journey. The orange line now shows the new planned route.

3.4.8 Setting a detour

1. Tap on the Navigation view to access the Navigation menu.
2. In the Navigation menu, tap

.

You can set up a detour for your route in the following ways:

- Tap

to open a list of special sections of the planned route such as stretches of motorway, toll road or ferry trips. Tap any of these items on the itinerary to avoid a special section.

- Tap

to open the full list of roads on the planned route. Tap any of these items on the itinerary to avoid that specific road.

- Tap

to avoid a part of the planned route that is right ahead of you on the itinerary. You can set the distance for which you want to avoid the road ahead.

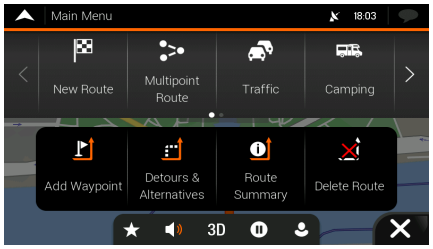
- Tap

to delete all detours that you have set up for the planned route,

3.4.9 Pausing guidance

When you are driving a planned route but you do not need guidance for a certain part of the route, you can suspend it and continue when it is needed again.

In the Navigation menu, tap to suspend guidance.



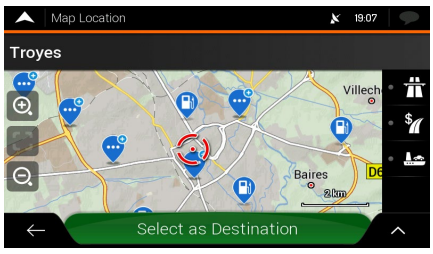
Tap to resume guidance.

3.5 Saving a location

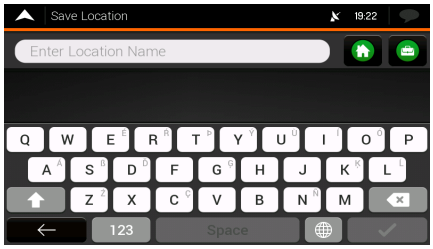
To add any location to the saved locations (the list of frequently used destinations), perform the following steps:

1. Select a destination as described before. It can be an address, a Place, any location on the map, a previously used destination from History, and so on.

2. When the map appears with the selected location in the middle, tap .



3. Tap Save Location.
4. (optional) Using the keyboard, you can change the name offered for the Saved Location.



5. Tap ✓ to save the location.

To add your home and work address to the saved locations, perform the following steps:

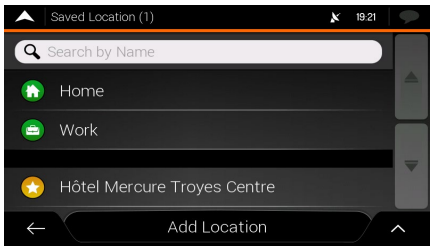
1. On the Navigation view, tap ☰, New Route, and Saved Location.
2. Tap Home or Work. Tap OK to confirm your selection.
3. You can search for the address as described on page 24.

Planning a route to one of the saved locations is described on page 39.

3.5.1 Editing a saved location

To edit a location that you have already added as a Saved Location, perform the following steps:

1. On the Navigation view, tap ☰, New Route, and Saved Location.
2. The list of Saved locations is displayed.



3. Tap ^ and Edit.
4. Tap the location you want to edit, tap Rename and enter the name of the location on the keyboard, then tap ✓.

Note! In Saved Locations, Home and Work cannot be renamed. To change your home or work location, tap Home or Work, and confirm the address change.

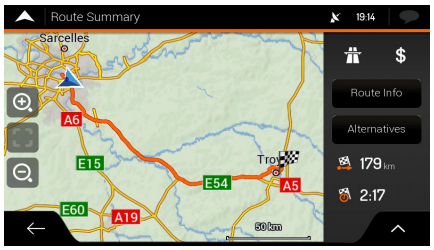
5. Tap Done.

Adding a location to the list of saved locations is described on page 55.

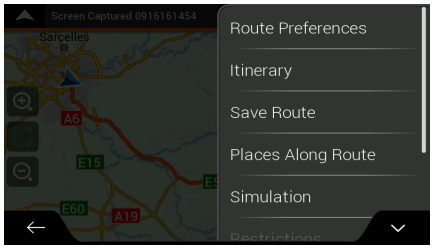
3.6 Running a Simulation

To run a simulated navigation that demonstrates the planned route, perform the following steps:

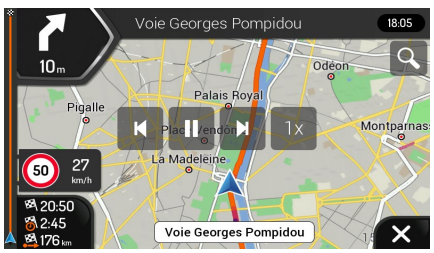
1. Tap on the ***Navigation view*** to access the ***Navigation menu***.
2. In the Navigation menu, tap Route Summary.



3. Tap .



4. Tap Simulation. The simulation starts from the starting point of the route and leads you through the whole planned route using a realistic speed.



(optional) You have the following controls during the simulation (the control buttons disappear after a few seconds but you can open them again if you tap the map):

- : Jump to the next route event (manoeuvre).
- : Pause the simulation.
- : Jump to the previous route event (manoeuvre).
-

: Tap to increase the speed of the simulation to 4, 8 or 16 times faster. Tap again to return to normal speed.

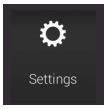
5. Tap to stop the simulation.

3.7 Off-road navigation

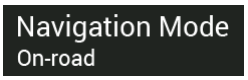
When first started, XZENT calculates routes using the road network of the maps provided with the product. If you want to disregard roads during navigation, you can switch to off-road mode, for example when driving in a desert.

3.7.1 Switching to off-road navigation

To switch to off-road navigation, perform the following steps:

1. On the Navigation view, tap , 

, and

.
2. Tap 

and select

.

Most of the procedures described for on-road navigation also apply to off-road navigation. However, there are some that are not available in this navigation mode. For example:

- You cannot open the itinerary as you have no manoeuvres just route points and straight lines between them.
- There are no route alternatives and route planning method.
- Vehicle settings are disabled.

3.7.2 Selecting the destination in off-road mode

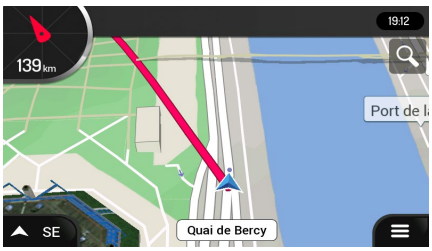
Selecting a destination (waypoint or final destination) is the same as described in the previous sections. The only difference is that route points are linked to form a route with straight lines regardless of the road network and traffic regulations.

3.7.3 Navigating in off-road mode

The real difference between on-road and off-road modes is the navigation itself. When you are on the Navigation view with an off-road route:

- Your position and heading is not aligned to the nearest road.
- There is no turn-by-turn navigation, just a recommended direction.

You can see an orange line drawn between your current position and the next destination to reach. The Turn Preview field in the top left corner shows a compass with your bearing and the distance of the next destination.



When you reach the final destination, the navigation ends.

Note! If you do not want to use off-road navigation, switch back to on-road navigation by tapping Navigation Mode On-road and On-road.

4 Reference guide

The following sections describe the different concepts and menu screens of XZENT.

4.1 Concepts

The following sections describe and explain navigation-related concepts.

4.1.1 2D/3D GPS reception

The GPS receiver uses satellite signals to calculate its (your) position and needs at least four signals to give a three-dimensional position, including elevation. Because the satellites are moving and because objects can block the signals, your GPS device might not receive four signals. If three satellites are available, the receiver can calculate the horizontal GPS position but the accuracy is lower and the GPS device does not give you elevation data; only 2D reception is possible.

Several factors have an impact on the deviation between your real position and the one given by the GPS device. For example, signal delay in the ionosphere or reflecting objects near the GPS device have a different and varying impact on how accurately the GPS device can calculate your position.

4.1.2 Natural and TTS voices

Natural voices are the traditional type of voice instructions. Every phrase that occurs in voice guidance messages is recorded in a studio with a real person. The advantage of pre-recorded voice is that it sounds really natural, but the range of instructions that can be given this way is limited. Location-specific information such as street names cannot be announced.

TTS technology provides a machine-generated way to give voice instructions. The advantage of TTS is that it can announce street names, traffic events, route summary, and traffic rules.

The voice profiles can be changed in the Regional Settings. (See page 75.)

4.1.3 Route calculation and recalculation

A route is a sequence of route events, that is, manoeuvres (for example, turns and roundabouts) to reach the destination. The route contains one starting point and one or more destinations. The starting point is the current (or last known) position by default. If you need to see a future route, the starting point can be replaced with any other given point. See page 49.

Once the destination has been selected, XZENT calculates the route based on your preferences. These preferences are the route planning method, the vehicle type, and the road types used or avoided when calculating the route. For detailed information on all the preferences, see Route preferences settings, page 68.

Real-time traffic events are also taken into account, which sometimes greatly modify the route. See page 62.

XZENT automatically recalculates the route if you deviate from the proposed itinerary.

If traffic services are enabled, XZENT considers real-time dynamic traffic information in route calculation and may also recalculate the route if the traffic situation changes during navigation.

Intelligent data (captured historical speed information based on probe data) is used for optimal routing depending on the day of the week and time of day. Route segments where traffic flow is typically slow at the given time of day and day of the week are avoided if a suitable alternative can be found. When calculating the optimal route, the data relevant for the time of the estimated arrival of the vehicle at the given route point is taken into account. As a result, XZENT may suggest a different route during the weekday rush hours, especially in major cities with frequent traffic jams. See page 62.

4.1.4 Smart Zoom

Smart Zoom provides the following features:

- **While following a route:** When approaching a turn, it zooms in and raises the view angle to let you easily recognise your next manoeuvre. If the next turn is at a distance, it zooms out and lowers the view angle to be flat so you can see the road in front of you.
- **While driving without a planned route:** Smart Zoom zooms in if you drive slowly and zooms out when you drive at a high speed.

4.1.5 Speed limit warning

Maps may contain information about the speed limits of the road segments. XZENT is able to warn you if you exceed the current limit. This information may not be available for your region, or may not be fully correct for all roads on the map.

Speed warning can be fine-tuned in Warnings. See page 72.

You can also set the relative speed tolerance above which the application initiates the warning.

The following warning types are available:

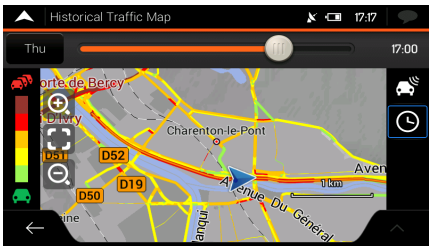
- Audio warning: You receive a verbal warning when you exceed the speed limit with the given percentage.
- Visual warning: The current speed limit is shown on the map when you exceed it (for example

).

You can also choose to see the speed limit sign on the map all the time.

4.1.6 Historical traffic

If statistical traffic information is stored with the map data, XZENT can take them into account when planning a route. In normal cases, these statistics help you avoid usual traffic jams on the given day of week in the given hour but in some cases like on public holidays that fall on normal weekdays, they can be misleading. You can enable or disable this feature in Traffic settings. See page 76.



4.1.7 Real-time traffic (depending on your hardware model)

Real-time traffic information can provide you with the current status of the traffic. Route calculation can avoid road blocks or unexpected traffic jams caused by an accident.

The following data sources are available:

- Traffic Message Channel (TMC) and Transport Protocol Expert Group (TPEG)

  TMC and TPEG are respectively a specific application of the FM Radio Data System (RDS), and a service of Digital Audio Broadcasting (DAB+) used for broadcasting real-time traffic and weather information.

  If public Traffic data is broadcast at your location, XZENT automatically searches the FM/DAB stations for TMC/TPEG data, and the decoded information is immediately used in route planning. The reception of FM-TMC or DAB-TPEG depends on your specific hardware model.

Note! TMC/TPEG is not a global service. It may not be available in your country or region. Ask your local dealer for coverage details.

The application automatically takes account of the traffic events received. You do not need to set anything in XZENT.

When XZENT receives traffic information that may affect your route, it warns you that it is recalculating the route. The navigation continues with a new optimal route considering the most up-to-date traffic conditions.

For information on traffic icons, see page 19.

To fine-tune this service, you have the following options in Traffic settings (page 76):

- Set the minimum amount of time that you think is worth saving at the cost of a detour.
- Instruct XZENT to have you confirm the new planned route before it takes effect.

Note! If there are traffic events on the planned route that the application has not bypassed, the

icon opens the list of significant traffic events to let you quickly check them.

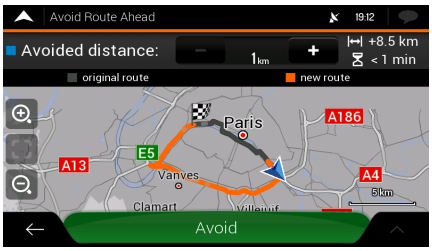
4.1.8 Intelligent navigation

With the help of intelligent navigation, the planned route can adapt to traffic and other changes during navigation. The following sections describe these features.

4.1.8.1 Congestion detour on highways

XZENT may offer a detour when you slow down on a highway due to a traffic jam. The Potential congestion detour window appears and shows the length and duration of the detour.

You can ignore this message and keep the original route by tapping Dismiss or you can check the suggested route by tapping Preview.



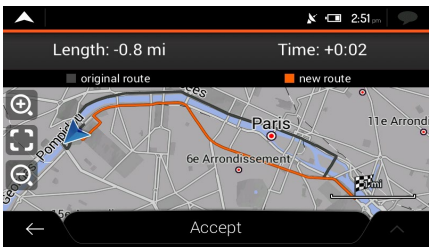
By tapping the plus/minus signs, you can increase or decrease the distance to avoid on the highway.

You can accept the recommended detour by tapping Avoid.

4.1.8.2 Real-time alternative routes

XZENT may offer an alternative route on normal roads in case of a traffic jam. The possible alternative route window appears and shows the length and duration of the detour.

You can ignore this message and keep the original route by tapping Dismiss or you can check the suggested route by tapping Preview. You can accept the recommended detour by tapping Accept.



4.1.8.3 Parking around destination

If you leave the planned route by exiting a motorway, XZENT tries to guess the reason for making a detour. By tapping P, you can open a top-down map with the recommended

parking Places around the destination. By tapping the arrows on the sides, you can switch between the recommended parking facilities.

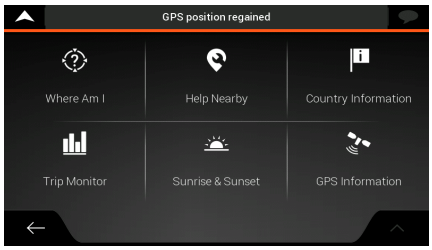
By tapping Select and Park Here, the selected parking place becomes your destination.

4.1.8.4 Hints upon detour

If you leave the planned route by exiting a motorway, XZENT tries to guess the reason for making a detour. The Reason for detour window appears and shows available petrol stations, restaurants or other Places around the current position. Also, if there are avoidable parts of the original route ahead (like a tunnel, a toll road or a ferry), you can find them in the list, in case you want to bypass them.

By tapping one of the Places, XZENT creates a waypoint and navigates you to the selected place. You can ignore them by tapping Cancel.

4.2 Useful Information menu



The Useful Information menu provides various additional functions. It can be found in the Navigation menu.

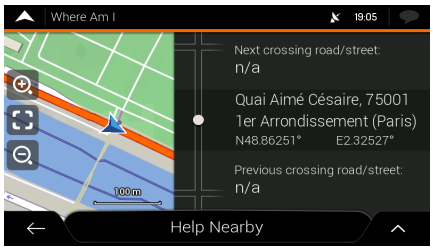
Button	Description
Where Am I?	Shows information on the current position (latitude, longitude, nearest town, next crossing street, and so on) or the last known position if GPS reception is not available. See page 65.
Help Nearby	Offers assistance near your current position. See page 38.
Country Information	Offers a list of countries with useful driving information about the selected country (for example speed limits, maximum blood alcohol level).
Trip Monitor	Shows statistical data of your trips, like the start time, end time and average speed, see page 66. Track logs, the sequence of the positions given by the GPS receiver, can be saved together with the trip logs. They can later be displayed on the map.

	Shows the exact sunrise and sunset times for all your route points.
	Shows the GPS Information screen with satellite position and signal strength information.

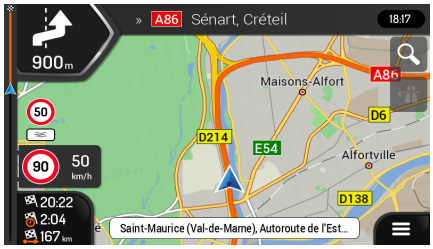
4.2.1 Where Am I

This screen contains information about the current position (or about the last known position if GPS reception is not available). You can access it the following two ways:

- By going to the Navigation menu and tapping and .



- By tapping the current street name if it is displayed below the current position marker on the map.

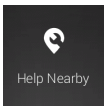


The following information is shown on the Where Am I screen:

- Address details (when available) of the current position
- Latitude and Longitude (coordinate of the current position in WGS84 format)
- The nearest town
- Next crossing road/street
- Previous crossing road/street.

You can also perform some actions on this screen.

Tap and to add the current position to the saved locations and to check the country information.

You can also search for assistance near your current position. Tap 

to open a new screen for quick search and select a category. For detailed information, see page 38.

4.2.2 Trip Monitor

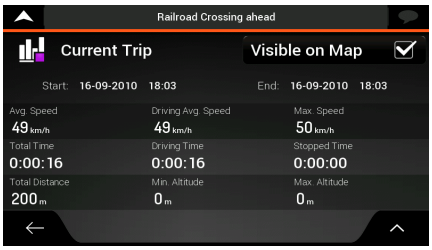
Trip Monitor logs information about your route.

You can record a new trip by tapping Start New Recording and stop it by tapping Stop Recording.

By tapping on the Trip Monitor screen, you can select the following options:

Button	Function
Edit	By selecting a recorded trip, you can delete, rename, or change the colour of the recorded route.
Export All	You can export all logs into the **\navi\userdata** folder.
	You can access the Trip Monitor Settings, where you can enable saving the trip logs automatically or you can save the trip logs manually. See page 77.

By tapping your recorded trip on the Trip Monitor screen, you can check information such as time, speed, altitude and distance.



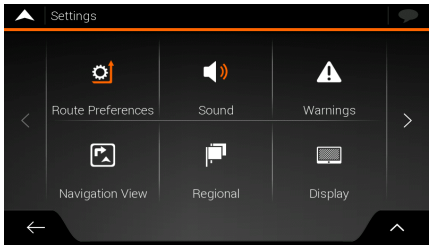
By tapping on the Trip Data Details screen, you can view the trip on the map, export track logs, and check the elevation and speed profiles.

4.3 Settings menu

You can configure the navigation settings, and modify the behaviour of XZENT, by tapping and

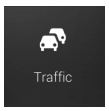
.

Tap the arrows to view the content of other pages.



Note! Changing some of these settings may not have an effect in your current region if the map data do not contain the required information.

The Settings menu provides the following options:

Button	Function
	Select the type of vehicle you are driving, the road types used in route planning, and the route planning method.
	Adjust the different sound volumes.
	Enable and set up warnings for speed limit.
	Fine-tune the appearance of the Navigation view or adjust how the software helps you navigate with different kinds of route-related information on the Navigation view.
	Change the voice guidance language, set the time zone, the measurement units, the time and date formats, and customise the application for your local language.
	Enable or disable menu animations.
	Enable or disable traffic information and modify detour settings.
	Turn the automatic trip log saving on or off and check the current size of the trip database.

	Modify the basic software parameters set during the initial set-up process. See page 5.

4.3.1 Route preferences settings

The following settings determine how routes are calculated:

Button	Function
Vehicle	Set the type of vehicle you want to use to navigate the route. Based on this setting, some of the road types can be excluded from the route, or some of the restrictions may not be taken into account in route calculation.
Route Planning Method	Optimise the route calculation for different situations and vehicle types by changing the planning method. See page 68.
Navigation Mode On-road	Select on-road or off-road navigation. See page 58.
Road types	Select your preferred road types for the route. See page 69.

4.3.1.1 Route Planning Method types

You can select from the following route planning method types:

Button	Description
Fast	Gives a quick route if you can travel at or near the speed limit on all roads. Usually, the best selection for fast and normal cars.
Easy	Results in a route with fewer turns and no difficult manoeuvres. With this option, you can make XZENT take, for example, the motorway instead of a series of smaller roads or streets.
Short	Gives a short route to minimise the travel distance. It can be optimal for slow vehicles. Searching for a short route regardless of the speed, this route type is rarely optimal for normal vehicles.
Green	Gives a quick but fuel-efficient route based on the fuel consumption data. Travel cost and CO_2 emission calculations are estimations only. They cannot take elevations, curves and traffic conditions into consideration.

Economical	For vehicle types where Green routing is not available, this method combines the benefits of Fast and Short. XZENT calculates as if it were calculating the Fast route, but it takes other roads as well to save fuel.

Note! Depending on the vehicle type, some methods may not be available.

4.3.1.2 Navigation Mode

You can switch between on-road and off-road navigation by tapping Navigation Mode On-road and selecting On-road or Off-road (page 58).

4.3.1.3 Road types

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.

Excluding a road type is a preference. It does not necessarily mean total prohibition. If your destination can only be accessed using some of the excluded road types, they are used only as much as necessary. In this case, a warning icon is shown on the Route information screen, and the part of the route not matching your preference is displayed in a different colour on the map.

The following road types are available:

Button	Description
Motorways	You might need to avoid motorways when you are driving a slow car or you are towing another vehicle.
$ Road With Period Charge	Charge roads are pay roads where you can purchase a pass or vignette to use the road for a longer period of time. They can be enabled or disabled separately from toll roads.
$ Road With Per-use Toll	Per-use toll roads are pay roads where there is a per-use charge in the routes by default. If you disable toll roads, XZENT plans the best toll-free route.
Ferries	XZENT includes ferries in a planned route by default. However, a map does not necessarily contain information about the accessibility of temporary ferries. You might also need to pay a fare on ferries.
Car Shuttle Trains	Car shuttle trains are used to transport vehicles for a relatively short distance and they usually connect places that are not easily accessible on a road, for example, in Switzerland.
Unpaved Roads	XZENT excludes unpaved roads by default. Unpaved roads can be in a bad condition and you usually cannot reach the speed limit on them.

4.3.2 Sound settings

You can modify the following settings:

Button	Function
Voice	Adjust the volume of the guidance sounds (verbal instructions) or mute it.
Alert Beeps	Adjust the volume of the non-verbal alert sounds (beeps) or mute it.
Ding	Turn off the attention tone preceding verbal instructions or adjust its volume.
Keys	Adjust the volume or mute the sound played when pressing the button.

You have the following options for each sound type:

Button	Function
Volume slider	Adjust the volume of the related sound.
	Mute the related sound. The slider becomes inactive. Tap again to re-enable it.

Button	Function
Voice guidance	Disable verbal instructions. This function is enabled by default.
Announce Streets and Roads in Native Language Area	Choose from the following options: • Announce the street names in the native language area of the selected voice guidance language. • Announce the road numbers only. • Announce the manoeuvres only. This requires a TTS voice profile (see Regional Settings on page 75

Announce Streets and Roads in Foreign Language Area	Street names sound correct only if you use a native voice profile for the country. Choose from the following options: • Try to read the street names in a foreign country. • Announce the road numbers only. • Announce the manoeuvre only. This requires a TTS voice profile (see Regional Settings on page 75
Early Indication of Manouevres	Set whether you want an immediate announcement for the next manoeuvre after each turn, or it is enough to receive the information when the turn is near.
Verbosity Level	Set the verbosity of the voice instructions, that is how much they tell and how often they speak. • Minimal: the voice instruction is given once right before the next manoeuvre. • Medium: the voice instruction is given when approaching the next manoeuvre and it is repeated right before the manoeuvre. • Verbose: the voice instruction is given first relatively far from the next manoeuvre, it is repeated when approaching the next turn, and it is repeated again right before the actual manoeuvre.
Announce Route Summary	Allow reading out a quick summary of the route whenever a route is calculated. This requires a TTS voice profile (see Regional Settings on page 75
Announce Country Info	Allow reading out information about the country you have entered, when you cross country borders. This requires a TTS voice profile (see Regional Settings on page 75
Announce Traffic Info	Allow reading out real-time traffic messages. This requires a TTS voice profile (see Regional Settings on page 75
Announce System Messages	Allow announcing system messages. This requires a TTS voice profile (see Regional Settings on page 75

4.3.3 Warnings settings

You can enable and modify the following settings:

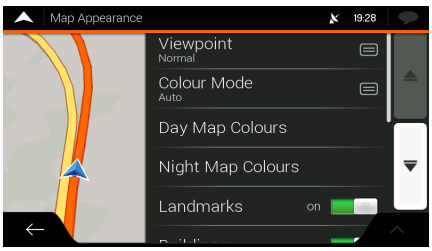
Button	Description
Speed Limit	XZENT is able to warn you if you exceed the current speed limit. This information may not be available in your region, or may not be fully correct for all roads on the map. This setting lets you decide whether you wish to receive visible and/or audible warnings. The following warning types are available: • Visual warning: the current speed limit is shown on the map when you exceed it. • Audio and Visual warning: besides the current speed limit being shown on the map, you also receive a verbal warning when you exceed the speed limit with the set percentage. If you prefer to see the speed limit sign on the map all the time (normally, it is shown only if you exceed the limit), you can set it here. You can also set the relative speed above which the application initiates the warning by adjusting a slider. The value can be different within and outside towns.
Permanently Confirm Attention Notes	If this setting is on, you will be asked to confirm the general attention message shown at startup only once. This does not affect the specific warnings that you can set up on this screen.

4.3.4 Navigation View settings

Note! Some buttons, fields, or icons may not be available in your product version.

These settings allow you to fine-tune the appearance of the Navigation view. You can also adjust how the software helps you navigate with different kinds of route-related information on the Navigation view.

Tap **Map Appearance** to adjust the navigation view to your needs, choose suitable colour themes from the list for both daytime and nighttime use, show or hide 3D buildings, landmarks, and manage your Place visibility sets (which Places to show on the map).



You can modify the following settings:

Button	Function
Viewpoint Normal	Adjust the basic zoom and tilt levels to your needs. Three levels are available.
Colour Mode Auto	Switch between daytime and night colour modes or let the software switch between the two modes automatically a few minutes before sunrise and a few minutes after sunset.
Day Map Colours	Select the colour scheme used in daytime mode. Daytime colours are bright and similar to paper road maps.
Night Map Colours	Select the colour scheme used in night mode. Night colours are darker to keep the average brightness of the screen low.
3D terrain	Show or hide the 3D elevation of the terrain.
Place Markers	Select which Places to show on the map while navigating. Too many Places make the map crowded so it is a good idea to keep as few of them on the map as possible. Tap the name of the Place category to show/hide it or to open the list of its subcategories.

You can modify the following additional settings on the Navigation View screen:

Data Fields	If you are navigating with a planned route, you can set three data fields to be displayed on the Navigation view. You can choose from the time of arrival at destination, distance to destination, time to destination, time of arrival at waypoint, distance to waypoint, time to waypoint, heading, or altitude. Without a planned route, there is only one data field that can be set to show the heading or the altitude.
Route Progress Bar	Turn the Route Progress Bar on or off. If turned on, an orange line is displayed on the side of the screen, and a blue arrow on it shows your progress.

Offer Motorway Services	Turn it on to get motorway service information (for example petrol stations, restaurants) or turn it off if you do not need it.
Services Displayed	Select the service types displayed for the motorway exits. Choose from the Places categories.
Automatic Overview	Zoom out and show an overview of the surrounding area if the next manoeuvre is far and you are driving on a motorway. When you get close to the event, the normal map view returns.
Signposts	Whenever adequate information is available, lane information similar to the real ones on road signs above the road is displayed at the top of the map. Tap it to turn this feature on or off.
Junction View	If you are approaching a motorway exit or a complex intersection and the needed information exists, the map is replaced with a 3D view of the junction. Tap it to turn this feature on or let the map be displayed for the whole route.
Tunnel View	When entering tunnels, the surface roads and buildings can be disturbing. Tap it to show a generic picture of a tunnel instead of the map. A top-down overview of the tunnel and the remaining distance are also displayed.
Offer Congestion Detour on Highways	In certain situations, XZENT offers a detour when there is a traffic jam on a highway. See page 63.
Offer Real Time Alternative Routes	In certain situations, XZENT offers an alternative route when there is a traffic jam on the road. See page 63.
Offer Parking Around Destination	In certain situations, XZENT offers parking Places when you approach your destination. See page 63.
Offer Hints Upon Detour	In certain situations, XZENT offers different route alternatives when you leave the planned route and suddenly exit the motorway. See page 64.

4.3.5 Regional settings

You can modify the following settings:

Button	Description
Language	It displays the current written language of the user interface. Tap it to select a new language from the list of available languages. The application restarts after you change this setting and confirm it.
Voice Language	It shows the current voice guidance profile. Tap it to select a new profile from the list of available languages and speakers. Tap any of these to hear a sample voice prompt. Just tap when you have selected the new spoken language. Different voice profiles are capable of different levels of service: • Natural Voice (street names not announced): These pre-recorded sounds can only tell you basic information about turns and distances. • TTS Voice (street names announced): These computed voices can read out complex instructions, street names or system messages. Note! This function requires a TTS voice profile. Depending on your Hardware Platform, you may be able to select one in Settings / Regional. On some platforms, only natural voices are available.
Units and Formats	You can set the measurement units and time/date format to be used. XZENT may not support all the listed units in some voice guidance languages.
Time Zone	By default, the time zone is taken from the map information and adjusted by your current location. Here you can manually set the time zone and the daylight saving time.

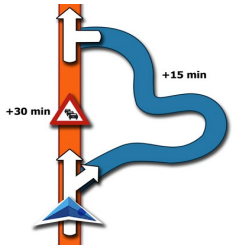
4.3.6 Display settings

You can modify the following settings:

Button	Function
Menu Animation	When animation is turned on, buttons on menus and keyboard screens, and screen transitions are animated.

4.3.7 Traffic settings

You can modify the following settings:

Button	Function
	Enable or disable the Traffic reception that can receive real-time traffic information. The rest of the buttons below are all related to the Traffic function and are available only if the receiver is enabled.
Data source Radio & Online	Select what data source you want to use for receiving real-time traffic information: • Radio: uses an FM receiver
Use Real-time Traffic	Tap it if you want to use real-time traffic information to avoid road blocks or unexpected traffic jams.
Show Traffic Info Color And Icon	If you want to see traffic events (for example closures, accidents, lane restrictions) on the map, you can choose to show the events with a different colour or to display an icon too. This feature can also be disabled.
Show Free Traffic Flow As Well	Receive information about normal traffic as well, not just special conditions or events.
Use Historical Traffic	Enable or disable historical traffic data and traffic patterns. This locally stored information can be very useful in normal circumstances but for example on public holidays it may be better to turn it off in order not to take account of normal weekday traffic jams.
Offer detour if it saves at least: 5 minutes	Set the minimum amount of time that you think is worth saving at the cost of making a detour. For example, in the figure below, the orange route shows a traffic event that causes a 30-minute delay. The blue route is a detour that is 15 minutes longer than the original route (not counting the traffic jam). If you set the Offer detour feature to 10 minutes, XZENT recalculates the route because it saves 15 minutes, which is more than the 10 minutes you set. If you set it to 20 minutes, the original route is kept because the detour would save you only 15 minutes.  Calculations are based on information received about traffic events.

Confirm Detours Manually	Enable or disable the manual confirmation of every recalculation due to traffic events.

4.3.8 Trip Monitor settings

Trip logs contain useful information about your recorded trips. You can enable and modify the following settings:

Button	Description
Enable auto-saving	Trip monitor can record statistical data of your trips. If you need these logs later, you can let the application save them automatically for you.
Trip database size	This is not a button. This line shows the current size of the trip database, the sum of all trip logs saved.

5 Troubleshooting

This section offers possible solutions to issues that may occur during the operation of XZENT.

5.1 GPS signal cannot be received

Issue: The current location is not available, because GPS signal cannot be received.

Cause 1: GPS signal is weak or may not be available if you are between tall buildings, in garages or tunnels as the signal weakens or distorts as it travels through solid material.

Solution 1: Go to a place where there is a clear sight of the sky or at least a bigger part of the sky is visible.

Cause 2: It may take several minutes to receive GPS signals when first using XZENT, or when your last known position is farther away from your current position.

Solution 2: Wait a few minutes for the GPS signal.

5.2 Address cannot be found

Issue: XZENT cannot find the address you entered.

Cause: The digital map data may not include every single address.

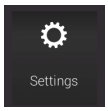
Solution 1: If the house number is not known or XZENT cannot find it, select only the street name. This way, XZENT will navigate you to the midpoint of the street, where you can find the exact address more easily.

Solution 2: Search for another address that is close to the destination.

Solution 3: Search for the coordinates or a nearby Place of Interest.

5.3 The calculated route is not optimal

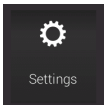
Issue: The planned route is too long or includes several minor roads.

Cause: In 

,

the route planning method is not set to the optimal parameter.

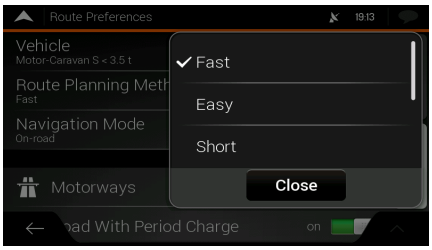
Solution: Select your preferred route planning method by performing the following steps:

1. Tap , 

, and

.

2. Tap Route Planning Method and select your preferred route, for example Fast or Easy. See Page 68.



5.4 Disabling the speed limit warning

Issue: The speed limit warning is signalling even when the actual speed limit is kept.

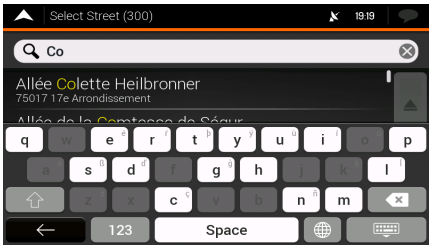
Cause: The speed limit in the digital map data might differ from the actual speed limit of your current location.

Solution: Disable the speed warning by performing the following steps:

1. Tap , Settings, and . Warnings .
2. Tap Speed Limit, Warn When Speeding Audio and Visual and Disabled.

5.5 Keyboard buttons are greyed out

Issue: Some keyboard buttons are greyed out and cannot be used.

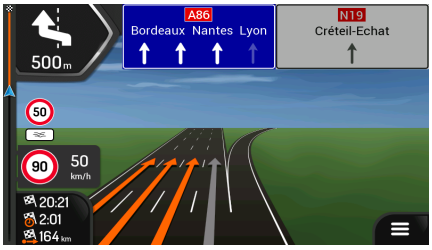


Cause: XZENT has a smart keyboard for address search, which means that only those buttons are active that can be used to type a name that is available on the map.

Solution: Check if you entered the name correctly. If the name is correct, then the address you are looking for is not available in the digital map data.

5.6 The map is hidden behind an image of a junction

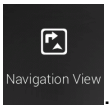
Issue: The map is not visible because it is hidden behind an image of a junction.



Cause: If you are approaching a motorway exit or a complex intersection and the needed information exists, the map is replaced with a 3D view of the junction. The lanes you need to take are displayed with arrows.

Solution: If you want to hide the currently displayed junction and return to the Navigation view, tap the picture. To turn off this feature, perform the following steps:

1. Tap ,

, and 

.
2. Tap

. Now the junction view will not appear again.

6 Copyright note

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XZENT

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