



**User Manual
Clarion Mobile Map
Navigation software for Clarion NP509
(Stand-alone Mode)**

NP509

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Thank you for choosing the Clarion NP509 as your in-car navigator. This document is the detailed description of the navigation software when connected to an external display other than a Mobile MultiMedia Station (Stand-alone mode). When you have a Mobile MultiMedia Station connected to your Clarion NP509, please, refer to the separate document describing the System operating mode of Clarion Mobile Map.

You can easily discover Clarion Mobile Map while you are using it; however, we still recommend that you read this manual to understand the screens and the features of Clarion Mobile Map.

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1 Warnings and Safety information

Clarion Mobile Map is a navigation system that helps you find your way to your destination with its GPS receiver. Clarion Mobile Map does not transmit your GPS position; others cannot track you.

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

You must obey the traffic signs and follow the road geometry. If you deviate from the route that Clarion Mobile Map recommended, Clarion Mobile Map changes the instructions accordingly.

Never place any part of the navigation system where it obstructs the driver's view, where it is in the deployment zone of an airbag or where it might cause injuries in an accident.

For more information, consult the End User License Agreement (page 50).

2 Getting started with Clarion Mobile Map

Clarion Mobile Map can plan routes throughout the whole installed map set; you do not need to change maps or switch to a poorly detailed general map to navigate between map segments or countries.

Start using Clarion Mobile Map

When Clarion Mobile Map is started the first time, you need to do the following:

1. Select the written language of the application interface. Later you can change it in [Settings](#) (page 44).
2. Select the language and speaker used for voice guidance messages. Later you can change it in [Settings](#) (page 44).
3. Read and accept the End User License Agreement (page 50).
4. Read and accept the road safety warning.

After this, the Map screen appears and you can start using Clarion Mobile Map.

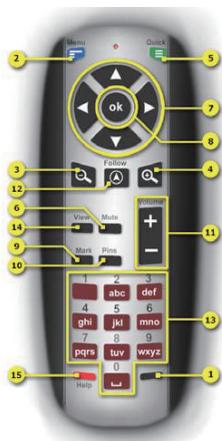
The typical way of using Clarion Mobile Map is to select a destination, and start navigating. You can select your destination in the following ways:

- Use the selected location on the map (the Cursor) (page 20).
- Enter a full address or a part of an address, for example a street name without a house number or the names of two intersecting streets (page 21).
- Enter an address with ZIP code (page 26). This way you do not need to select the name of the city and the search for street names might be faster as well.
- Use a coordinate (page 29)
- Use a saved location:
 - a Favorite (page 27)
 - a POI (page 27)
 - the History of previously set destinations and waypoints (page 28)

2.1 Remote control unit

All functions of the Clarion NP509 can be accessed using the Remote control unit.

The functions of the Remote control buttons are as follows:



Button	Function
1	Switches between PAL and NTSC video modes (press and keep depressed for a few seconds)
2	Opens the Menu (press again to return to the Map screen)
3	Zooms out the map
4	Zooms in the map
5	On the Map screen: opens the Quick menu (press again to close the Quick menu) On menu screens: : opens a list of advanced options when indicated (press again to close the newly opened menu)
6	Mutes all sounds (press again to re-enable sounds)
7	These buttons have multiple functions: <ul style="list-style-type: none"> On the Map screen when navigating: they rotate and tilt the map On the Map screen when browsing the map: they move the map in four directions In menus: they move the highlight up and down, open the selected menu or return to the parent menu On keyboard screens: they move the highlight in four directions
8	This button has multiple functions: <ul style="list-style-type: none"> On the Map screen when navigating: it opens the Position menu On the Map screen when browsing the map: it opens the Cursor menu

Button	Function
	<ul style="list-style-type: none"> In menus: it selects/activates the highlighted menu item On keyboard screens: it appends the highlighted letter to the input string
9	Marks the map with a drawing-pin at the Cursor
10	Cycles among map points marked with drawing-pins
11	Increases or decreases sound volume
12	<p>Moves the map back to the current GPS position. If the map has been rotated, automatic map rotation is also re-enabled.</p> <p>When the map is at the current GPS position, this button toggles between two screens:</p> <ul style="list-style-type: none"> Map screen for navigation (the Cursor is at the current GPS position) Map screen for map browsing (the Cursor is displayed as a radiating red dot) 
13	Enters letters or numbers on keyboard screens (entering letters is the same as writing an SMS with a cell phone)
14	<p>Cycles among map view modes:</p> <ul style="list-style-type: none"> 3D rotated map 2D rotated map 2D North oriented map
15	Opens the list of nearby emergency and roadside assistance services.

2.2 Virtual keyboards

You only need to enter letters or numbers in Clarion Mobile Map when you cannot avoid it. You can type with the numeric buttons of the Remote control, or by selecting the buttons one by one on the virtual keyboard (move the highlight with the direction buttons and then press OK to select the highlighted button). For the latter method, you can switch between various keyboard layouts, for example ABC, QWERTY, or numerical.

Task	Details
Switching to another keyboard layout, for example from an English QWERTY keyboard to a Greek keyboard	<p>Move the highlight on the  button, press , and select from the list of available keyboard types.</p> <p>Clarion Mobile Map remembers your last keyboard choice and offers it the next time you need to enter data.</p>
Correcting your entry on the keyboard	<p>Select  to remove the unneeded character(s).</p> <p>Keep the  button depressed to delete the entire input string.</p>

Task	Details
Entering a space, for example between a first name and a family name or in multi-word street names	Select  .
Entering symbols	Select  and then  to switch to a keyboard offering symbol characters.
Finalising the keyboard entry	Select  .

2.3 Using the map

The map screen is the most frequently used screen of Clarion Mobile Map. Clarion Mobile Map starts with displaying the map. From menus you can return to the map by pressing the  button on the Remote control.



For further information about the map screen, see page 32.

2.3.1 Manipulating the map

Position markers on the map:

- Current GPS position:  (page 13)
- Selected location (Cursor):  (page 13)

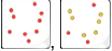
To modify the map view to suit your actual needs the best:

- Press  to zoom out
- Press  to zoom in
- Press  to move the map back to the current GPS position (Navigation mode). If the map has been rotated, automatic map rotation is also re-enabled

- If the map is at the current GPS position, press  to stop the map, and place the Cursor (Map browsing mode)
- In Navigation mode, press the direction buttons to rotate or tilt the map
- In Map browsing mode, press the direction buttons to move the map in any direction

2.3.2 Status information and on the map

The following information appears in the field in the top left corner, the Turn Preview field.

Icon	Information	Details
	There is no valid GPS position.	If an active route exists, and there is no valid GPS position, the view of the sky above you is shown with colored dots for each satellite. Some dots need to turn green to be able to navigate.
	Route calculation is in progress	Clarion Mobile Map is calculating or recalculating the route.
	Next route event (next maneuver)	GPS position and an active route are available, and you navigate the recommended route. This area gives you information about the type and distance of the next route event.

Next to the Turn Preview field, the following information is displayed.

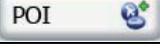
Icon	Information	Details
	Second route event (maneuver after the next maneuver)	When GPS position and an active route are both available, this field shows the route event that follows the next route event shown in the above described area.
	Route recalculation progress	During route recalculation, this field shows the recalculation progress between 0% and 100%.

2.3.3 Using the Cursor (the selected map location)

First, place the Cursor at the desired map location with one of the following options:

- Use the Find menu to select a location. The map returns with the selected point (the Cursor) in the middle, and the Cursor menu appears with the available options.
- Press , and move the map with the direction buttons to place the Cursor at the desired position. Now press  to open the Cursor menu.

You can perform the following actions (use the up and down direction buttons to see all options):

Button	Action
 Set as Destination 	Creates a new route with the Cursor as the destination. The previous route (if exists) is deleted.
 Insert as Via 	In the active route, uses the Cursor as a via point (an intermediate destination) preceding the destination
 Routing Methods 	Shows the different routes calculated by the available routing methods. Choose the one that suits your needs the best
 Continue 	In the active route, uses the Cursor as the destination while keeping the previous destination as a via point
 Place Pin 	Marks the map with a Pin at the Cursor
 Add to Favorites 	Saves the Cursor as a Favorite destination
 Save as Camera 	Saves the Cursor as a Road Safety Camera location This button is not displayed when GPS position is not available or if you are in certain countries where Road Safety Camera warning is prohibited. Even if the button is available, you are responsible for checking whether it is legal to use this feature at your location.
 POI 	Saves the Cursor as a POI

2.4 Clarion Mobile Map concepts

2.4.1 Smart Zoom

Smart Zoom provides much more than just a usual automatic zoom feature:

- **While following a route calculated by Clarion Mobile Map:** when approaching a turn, it will zoom in and raise the view angle to let you easily recognize your maneuver at the next junction. If the next turn is at a distance, it will zoom out and lower the view angle to be flat so you can see the road in front of you.
- **While driving without an active route in Clarion Mobile Map:** Smart Zoom will zoom in if you drive slowly and zoom out when you drive at high speed.

2.4.2 Position markers

2.4.2.1 Current GPS position and Lock-on-Road

When your GPS position is available, Clarion Mobile Map marks your current position with the  icon on the map.

The  icon may not show your exact GPS position and heading. If roads are near, it is aligned to the nearest road to suppress GPS position errors, and the direction of the icon is aligned to the direction of the road.

To use the current GPS position, press . The Position menu appears and you can save the GPS position as one of the following:

- a Favorite
- a Road Safety Camera
- a POI
- a map marker Pin

2.4.2.2 Returning to normal navigation

When GPS position is available, and you have moved the map (the  icon is moving or is not even visible), or you have rotated the map in 3D mode, press  to move the map back to the GPS position and re-enable automatic map rotation.

 **Note!** Even if you move the map while you are driving, Clarion Mobile Map continues navigating if there is an active route: it plays the voice instructions and displays the turn preview icons according to your current GPS position.

2.4.2.3 Selected location (Cursor)

If you select a location in the Find menu, or you move the map with the direction buttons, the Cursor appears at the selected point on the map. Clarion Mobile Map displays the Cursor with a radiating red

dot () to make it visible at all zoom levels and any map density.

When the Cursor is set, press . The Cursor menu appears and you can use the Cursor as one of the following:

- a via point in a route
- the destination of a route

Or you can save the location of the Cursor as:

- a Favorite

- a Road Safety Camera
- a POI
- a map marker Pin

2.4.3 Daytime and night color profiles

Clarion Mobile Map uses different color profiles during the day and during the night.

- Daytime colors are similar to paper road maps.
- The night color profiles use dark colors for large objects to keep the average brightness of the screen low.

Clarion Mobile Map offers different daytime and night color profiles. It can also switch automatically between the daytime and the night schemes based on the current time and GPS position a few minutes before sunrise, when the sky has already turned bright, and a few minutes after sunset, before it becomes dark.

2.4.4 Color scheme in tunnels

When entering a tunnel, the colors of the map change. All buildings disappear, large objects (such as surface waters or forests) and empty areas between roads become black.

However, roads and streets keep their original colors from the daytime or night color scheme currently used.

After leaving the tunnel, the original colors return.

2.4.5 Route calculation and recalculation

Clarion Mobile Map calculates the route based on your preferences.

Vehicle types:

- Car
- Taxi
- Bus
- Emergency vehicles

Road Types Used for Route Planning:

Type	Description
Unpaved Roads	Clarion Mobile Map excludes unpaved roads by default: unpaved roads can be in a bad condition and usually you cannot reach the speed limit on them.
Highways	You might need to avoid freeways when you are driving a slow car or you are towing another vehicle.

Type	Description
Ferries	Clarion Mobile Map 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.
Cross-border Planning	In some cases the route calculated according to your other navigation and route preferences would lead through another country. If you wish to always stay within the same country, turn this option off.
Permit Needed	You might need a permit or permission from the owners to use certain roads or to enter certain areas. Clarion Mobile Map excludes these roads from the route calculation by default.
Per-use Toll	By default Clarion Mobile Map includes toll roads (pay roads where there is a per-use charge) in the routes. If you disable toll roads, Clarion Mobile Map plans the best toll-free route.
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.
Carpool Lanes	This control appears only when navigating in the USA. You should check whether you are allowed to use carpool lanes before enabling this road type.

Route Calculation Method types:

Option	Description
Fast	Gives the quickest possible route if you can travel at or near the speed limit on all roads. Usually the best selection for fast and normal cars.
Short	Gives a route that has the smallest total distance of all possible routes between the route points. It can be practical for slow vehicles.
Economical	Combines the benefits of Fast and Short: Clarion Mobile Map calculates as if it were calculating the Fast route, but it takes other roads as well to save fuel.
Easy	Results in a route with fewer turns. With this option, you can make Clarion Mobile Map to take, for example, the freeway instead of series of smaller roads or streets.

Clarion Mobile Map automatically recalculates the route if you deviate from the proposed itinerary.

2.4.6 Itinerary

The Itinerary is the list of the route events, that is, the driving instructions.



You can display the Itinerary from the Route menu.

2.4.7 Route demonstration

A simulation drives you through the route, following the driving instructions (page 30). The simulation is run at normal driving speed.

A rectangular button with a light blue gradient and a dark blue border. The word 'Simulate' is written in a dark blue, sans-serif font in the center of the button.

Route demonstrations can be started from the Route menu by selecting

2.4.8 POI (Points of Interest)

A point of interest (POI) is a location that someone might find useful or interesting. Clarion Mobile Map is delivered with thousands of POIs and you can also create your own POIs in the application.

POI locations are marked on the map with special icons. POI icons are quite large so you can easily recognize the symbol. The icons are semi-transparent: they do not cover the streets and intersections behind them.

POIs are grouped into several levels of categories and subcategories. The icon of a POI that comes with the map shows the symbol of the POI category. If you save your own POI, you can select an icon for it independently of the POI category you have put it in.

Saving POIs

To save a POI, place the Cursor () at the desired location, press  , and then select



from the Cursor menu.

2.4.9 Road Safety Cameras

The location of a Road Safety Camera is a special POI. These cannot be searched like other POIs, and there is a special proximity warning only for cameras.

Is Clarion NP509 shipped with a built-in database of Road Safety Cameras?	No
Can you upload Road Safety Camera locations from POI Warner?	Yes
Can Road Safety Camera locations be uploaded in a text file?	Yes
Can you save the Cursor as the location of a Road Safety Camera?	Yes

You can use the POI Warner update tool that is on the enclosed DVD. The first update of fixed Road Safety Cameras is free of charge.

Saving Road Safety Cameras

To save the location of a Road Safety Camera, place the Cursor () at the desired location, press  , and then select  .

 **Note!** This button is not displayed when GPS position is not available or if you are in certain countries where Road Safety Camera warning is prohibited. Even if the button is available, you are responsible for checking whether it is legal to use this feature at your location.

Camera warning

The warning for Road Safety Cameras can be turned on in Settings. Press  , and then select :   .

When you approach a Road Safety Camera with the warning enabled, the following happens:

- **Visible Warning:** The type and distance of the camera is displayed on the map (for example ).
- **Audible Warning:** If there is no speed limit specified for the camera, or your speed is under the specified speed limit, single beeps warn you about the camera.
- If you exceed the speed limit of the camera, the following also happens:
 - **Visible Warning:** A symbol with the speed limit appears in the corner of the map (for example: ),
 - **Audible Warning:** A special alert sound is played.

2.4.9.1 Camera types

There are different types of Road Safety Cameras.

Icon	Type	Description
	Fixed	Some speed cameras stand by the roadside, looking in one direction, measuring one or both directions of the traffic. They measure your current speed. For these speed cameras you can specify the controlled traffic direction and the speed limit. Clarion Mobile Map warns you when you approach these speed cameras in the measured direction. If your speed exceeds the speed limit near the speed camera, Clarion Mobile Map plays a special warning sound.
	Mobile	Some speed cameras are operated from vehicles. They do not always work and they are not set to check a preset speed limit. The warning is similar to fixed speed cameras, but as there is no speed limit given, only the proximity is announced.
	Built-in	Some speed cameras are built into traffic lights. They work like fixed speed cameras, but they are difficult to spot. The warning for proximity and speeding is the same as for the fixed speed cameras.
	Section control	<p>These speed cameras work in pairs, and do not measure your current speed but your average speed between the two speed cameras. Both identify your car and record the exact time you pass them. They use the difference between the two points in time to calculate your average speed.</p> <p>Clarion Mobile Map warns you when you approach one of these speed cameras, but as you pass by, the warning stays on, and your average speed is measured until you reach another speed camera of this type. If your average speed exceeds the speed limit between the two speed cameras, you receive the same special warning sound as with the other speed camera types.</p> <p>In the rare case Clarion Mobile Map cannot register the moment you pass the second speed camera (for example, it is placed at the exit of a tunnel where GPS position is not yet available) the warning continues.</p>
	Red light	These cameras check if you obey traffic lights. The warning is similar to mobile speed cameras: as there is no speed limit given, only the proximity is announced.

2.4.9.2 Camera directions

A speed camera can measure the speed of one direction of the traffic, both directions, or even several directions in an intersection, when they are mounted on a rotating base. The same directions apply to red light cameras. Clarion Mobile Map warns you only if you drive in a measured or possibly measured direction. The measured direction of the camera appears with the following symbols:

Icon	Description
	The camera checks speed in the direction into which you are driving.
	The camera checks speed in the opposite driving direction.
	The camera checks speed in both directions on the road.
	The camera can check speed in any direction.

2.4.10 Speed limit warning

Maps sometimes contain information about the speed limits of the road segments. This information may not be available for your region (ask your local dealer) or may not be fully correct for all roads on the map.

You can configure Clarion Mobile Map to warn you if you exceed the current limit. Press  , and then select  ,  .

When you exceed the speed limit, the following happens:

- Visible Warning: A symbol with the speed limit appears in the corner of the map (for example:



- Audible Warning: A voice message is played using the selected voice guidance profile.

3 Navigating with Clarion Mobile Map

You can set up your route in Clarion Mobile Map in several ways:

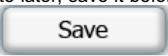
- if you need a simple route (a route with only one destination, without any intermediate via points), you can select the destination and start navigating to it right away
- you can plan a multi-point route

3.1 Selecting the destination of a route

Clarion Mobile Map offers you several ways of choosing your destination and via points (intermediate destinations):

- Use the selected location on the map (the Cursor) (page 20).
- Enter a full address or a part of an address, for example a street name without a house number or the names of two intersecting streets (page 21).
- Enter an address with ZIP code (page 26). This way you do not need to select the name of the city and the search for street names might be faster as well.
- Use a coordinate (page 29)
- Use a saved location:
 - a Favorite (page 27)
 - a POI (page 27)
 - the History of previously set destinations and waypoints (page 28)

☼ Tip!

If you are going to use a route later, save it before you start navigating. Press  and then select .



3.1.1 Selecting the Cursor as the destination

1. Locate your destination on the map: move and scale the map as needed (page 10).

2. Move the Cursor () at the location that you want to select as your destination.

3. Press  to open the Cursor menu.

4. The map appears with the selected point in the middle. Select  from the Cursor menu. The route is then automatically calculated, and you can start navigating.

☼ Tip!

If you know that you will use a destination later, when the Cursor menu appears, save it as a POI, or put it on the list of your Favorites first. The Cursor menu returns automatically with the same point. Now you can use it as a route point.

3.1.2 Entering an address or part of an address

If you know at least a part of the address, it is the quickest way to select the destination of the route.

Using the same screen, you can find an address by entering:

- the exact address, including house number
- the center of a city
- an intersection
- the midpoint of a street
- any of the above, starting the search with the ZIP code (page 26)

3.1.2.1 Entering an address

The parts of the address are shown on buttons. Start reading from the top, and if you want to change any of them, select the button.

1. Press , and then select , .
2. By default, Clarion Mobile Map proposes the country, state and city where you are. If needed, use the button with the name of the country, and select a different one from the list. If you select a new country, you also need to select the state, or select  to search for a city regardless of the state it is in.
3. If needed, change the city: highlight the button with the name of the city, or if you have changed the country/state, highlight . Now you have two options:

- Press  and select from the list of recent cities.
- Press  and start entering the city name on the keyboard. Get to the list of search results:
 - After entering a couple of characters, the names that match the string appear in a list.

- Select  to open the list of results before it appears automatically.
- Select the city from the list.

4. Enter the street name:

1. Select .
2. Start entering the street name on the keyboard.
3. Get to the list of results:
 - After entering a couple of characters, the names that match the string appear in a list.
- Select  to open the list of results before it appears automatically.

4. Select the street from the list.
5. Enter the house number:

1. Select .
2. Enter the house number on the keyboard.
(To enter symbols, select  and then .
3. Select  to finish entering the address.

6. The map appears with the selected point in the middle. Select  from the Cursor menu. The route is then automatically calculated, and you can start navigating.

3.1.2.2 Entering an address if house numbering is restarted

There are long roads where house numbering is restarted at some point. This way the same house number can appear twice or even more times on the same road. If this is the case, after entering the house number, you need to select the appropriate address by the district/suburb information.

1. Press , and then select  .
2. By default, Clarion Mobile Map proposes the country/state and city where you are. If needed, select the button with the name of the country/state, and choose a different one from the list.
3. If needed, change the city: highlight the button with the name of the city, or if you have

changed the country/state, highlight . Now you have two options:

- Press  and select from the list of recent cities.
- Press  and start entering the city name on the keyboard. Get to the list of search results:
 - After entering a couple of characters, the names that match the string appear in a list.
 - Select  to open the list of results before it appears automatically.

Select the city from the list.

4. Enter the street name:

1. Select .
2. Start entering the street name on the keyboard.
3. Get to the list of results:
 - After entering a couple of characters, the names that match the string appear in a list.
 - Select  to open the list of results before it appears automatically.

4. Select the street from the list.
5. Enter the house number:

1. Select .
2. Enter the house number on the keyboard.
(To enter symbols, select  and then .

3. Select  to finish entering the address.
6. A list appears with the matching addresses. Select the desired one.

7. The map appears with the selected point in the middle. Select  from the Cursor menu. The route is then automatically calculated, and you can start navigating.

3.1.2.3 Entering an address without knowing the district/suburb

Long roads can run across several districts or suburbs. You may not know what particular house number is located where. In this case, follow the instructions below:

1. Press , and then select  .
2. By default, Clarion Mobile Map proposes the country/state and city where you are. If needed, select the button with the name of the country/state, and choose a different one from the list.
3. If needed, change the city: highlight the button with the name of the city, or if you have changed the country/state, highlight . Now you have two options:

- Press  and select from the list of recent cities.
- Press  and start entering the city name on the keyboard. Get to the list of search results:
 - After entering a couple of characters, the names that match the string appear in a list.
 - Select  to open the list of results before it appears automatically.

Select the city from the list.

4. Enter the street name:
 1. Select .
 2. Start entering the street name on the keyboard.
 3. Get to the list of results:
 - After entering a couple of characters, the names that match the string appear in a list.
 - Select  to open the list of results before it appears automatically.

4. Instead of selecting one of the streets, press , and then select .
5. Enter the house number:
 1. Select .
 2. Enter the house number on the keyboard.
(To enter symbols, select  and then .
 3. Select  to finish entering the address.
6. A list appears with the matching addresses. Select the desired one.
7. The map appears with the selected point in the middle. Select  from the Cursor menu. The route is then automatically calculated, and you can start navigating.

3.1.2.4 Selecting an intersection as the destination

1. Press , and then select , .
2. By default, Clarion Mobile Map proposes the country/state and city where you are. If needed, select the button with the name of the country/state, and choose a different one from the list.
3. If needed, change the city: highlight the button with the name of the city, or if you have changed the country/state, highlight . Now you have two options:
 - Press  and select from the list of recent cities.
 - Press  and start entering the city name on the keyboard. Get to the list of search results:
 - After entering a couple of characters, the names that match the string appear in a list.
 - Select  to open the list of results before it appears automatically.
4. Enter the street name:
 1. Select .
 2. Start entering the street name on the keyboard.
 3. Get to the list of results:
 - After entering a couple of characters, the names that match the string appear in a list.
 - Select  to open the list of results before it appears automatically.

4. Select the street from the list.

5. Select , and then .

- If only a few intersecting streets exist, their list appears immediately.
- In case of a longer street, a keyboard screen appears. Start entering the name of the intersecting street on the keyboard. As you type, if the matching streets can be shown on one screen, their list appears automatically.

6. Select the desired intersecting street in the list.

7. The map appears with the selected point in the middle. Select  from the Cursor menu. The route is then automatically calculated, and you can start navigating.

3.1.2.5 Selecting a city center as the destination

The City Center is not the geometric center of the city but an arbitrary point the map creators have chosen. In cities and villages, it is usually the most important intersection; in larger cities, it is an important intersection.

The procedure is explained starting from the Navigation menu.

1. Press , and then select , .

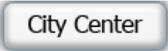
2. By default, Clarion Mobile Map proposes the country/state and city where you are. If needed, select the button with the name of the country/state, and choose a different one from the list.

3. If needed, change the city: highlight the button with the name of the city, or if you have

changed the country/state, highlight . Now you have two options:

- Press  and select from the list of recent cities.
- Press  and start entering the city name on the keyboard. Get to the list of search results:
 - After entering a couple of characters, the names that match the string appear in a list.
 - Select  to open the list of results before it appears automatically.

Select the city from the list.

4. Select , and then .

5. The map appears with the selected point in the middle. Select  from the Cursor menu. The route is then automatically calculated, and you can start navigating.

 **Tip!** To immediately create a new route to the selected city without opening the Cursor menu, select  instead of .

3.1.2.6 Entering an address with a ZIP code

All of the above address searching possibilities can be performed with entering the ZIP code instead of the city name. Find below an example with a full address:

1. Press , and then select , 
2. By default, Clarion Mobile Map proposes the country/state and city where you are. If needed, select the button with the name of the country/state, and choose a different one from the list.
3. Select the button with the name of the city, and enter the ZIP code:
 1. Start entering the ZIP code on the keyboard.
 2. Get to the list of results:
 - After entering a couple of numbers, matching results appear in a list.
 - Select  to open the list of results before it appears automatically.
 3. Select the city from the list.
4. Enter the street name:
 1. Select 
 2. Start entering the street name on the keyboard.
 3. Get to the list of results:
 - After entering a couple of characters, the names that match the string appear in a list.
 - Select  to open the list of results before it appears automatically.
 4. Select the street from the list.
5. Enter the house number:
 1. Select 
 2. Enter the house number on the keyboard.
 3. (To enter symbols, select  and then ).
 4. Select  to finish entering the address.
6. The map appears with the selected point in the middle. Select  from the Cursor menu. The route is then automatically calculated, and you can start navigating.

3.1.2.7 Tips on entering addresses quickly

- When you are entering the name of a city or a street, Clarion Mobile Map only displays those characters that appear in possible search results. The other characters are grayed out.
- When entering the city name or the street name, select the  button after a couple of letters; Clarion Mobile Map lists the items that contain the specified letters.

- You can speed up finding an intersection:
 - Search first for the street with a less common or less usual name; fewer letters are enough to find it.
 - If one of the streets is shorter, search for that one first. You can then find the second one faster.
- You can search for both the type and the name of a road. If the same word appears in several names, for example in the name of streets, roads and avenues, you can obtain the result faster if you enter the first letter of the street type: For example, enter **PI A** to obtain **Pine Avenue** and skip all **Pine Streets** and **Pickwick Roads**.
- You can also search in ZIP codes. This is useful when a street name is common and it is used in several districts of a city.

3.1.3 Selecting the destination from your Favorites

You can select a location that you have already saved as a Favorite to be your destination.

1. Press , and then select , .
2. Select the Favorite that you want to set as your destination.
3. The map appears with the selected point in the middle. Select  from the Cursor menu. The route is then automatically calculated, and you can start navigating.

3.1.4 Selecting the destination from the POIs

You can select your destination from the POIs included with Clarion Mobile Map or from the ones you have previously created.

1. Press , and then select , .
2. Select the area around which the POI should be searched for:
 -  : The POI will be searched for around a given city.
 -  : The POI will be searched for around the current GPS position.
 -  : The POI will be searched for around the destination of the active route.
 -  : The POI will be searched for not around a given point, but by the size of the detour it adds to the active route. This can be useful if you search for a later stopover that causes only a minimal detour, for example upcoming gas stations or restaurants.
3. You can narrow the search with the following:
 - Select the POI group (e.g. Accommodation), and after that, if needed, select the POI subgroup (e.g. Hotel or Motel).

- To find the POI by its name, press , and then press .
 - To list all POIs in a given POI group, press , and then press .
4. [optional] When finally the list of results appear, press  for advanced options:
 -  : sort the list alphabetically
 -  : review the details of the highlighted POI
 -  : save the search criteria for later use
 5. Select the desired POI from the list.
 6. The map appears with the selected point in the middle. Select  from the Cursor menu. The route is then automatically calculated, and you can start navigating.

3.1.5 Selecting the destination with saved POI search criteria

POI search criteria can be saved when searching for a POI, but Clarion Mobile Map is already shipped with some saved criteria you can use instantly when searching for a POI.

1. Press , and then select , .
2. Select .
3. Select one of the saved criteria, and the list of matching POIs appears.
4. Select the desired POI from the list.
5. The map appears with the selected point in the middle. Select  from the Cursor menu. The route is then automatically calculated, and you can start navigating.

3.1.6 Selecting the destination from the History

The destinations that you have set earlier appear in the History.

The procedure is explained starting from the Navigation menu.

1. Press , and then select , .
2. If necessary, scroll down to see earlier destinations.
3. Select the desired item.
4. The map appears with the selected point in the middle. Select  from the Cursor menu. The route is then automatically calculated, and you can start navigating.

3.1.7 Selecting the destination by entering its coordinates

1. Press , and then select , .
2. [optional] Select  to change the format of the displayed coordinates.
3. Select the latitude or longitude value to change the coordinates.
4. Enter the coordinate values in WGS84 format on the keyboard: the latitude (N or S) and the longitude (E or W).
5. When both latitude and longitude are set, select .
6. The map appears with the selected point in the middle. Select  from the Cursor menu. The route is then automatically calculated, and you can start navigating.

3.2 Creating a multi-point route (inserting a via point)

Multi-point routes are created from simple routes, so a route must be active first. One of the ways of expanding the route is to keep the destination, and to add via points (intermediate destinations).

1. Select a new location as you did in the previous sections. This will be the additional destination in the route.
2. The map appears with the selected point in the middle, and the Cursor menu opens automatically.
3. Select  to add the point as an intermediate destination preceding the final destination of the route.
4. [optional] To add more points to the route, repeat the above steps as many times as you like.

If you insert a via point in a route that is already a multi-point route, you will automatically be taken to the Edit Route screen where you can determine the position of the intermediate route point. When you enter the screen, the new via point is placed as the first via point to be reached. The new point is the highlighted point in the list. To edit the route, see page 30.

Every time a new point is added, the route is recalculated automatically, and you can start navigating right away.

3.3 Creating a multi-point route (appending a new destination)

destination Multi-point routes are created from simple routes, so a route must be active first. One of the ways of expanding the route is to add a new destination. The previous destination becomes the last via point of the route.

1. Select a new location as you did in the previous sections. This will be the additional destination in the route.
2. The map appears with the selected point in the middle, and the Cursor menu opens automatically.

3. Select  to add the point as a new final destination demoting the previous one to the last intermediate destination.
4. [optional] To add more points to the route, repeat the above steps as many times as you like.

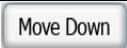
Every time a new point is added, the route is recalculated automatically and you can start navigating right away.

3.4 Editing the route

Press , and then select , .

The list of route points appear with the start point at the top of the list and the final destination at the bottom. If several via points exist, you might need to scroll between pages.

Highlight one of the route points in the list, and then press . You have the following options:

Button	Action
	The selected point moves up in the list (becomes a via point to be reached earlier). Select this button repeatedly, and the point becomes the first via point to reach.
	The selected point moves down in the list (becomes a via point to be reached later). Select this button repeatedly, and the point becomes the final destination of the route.
	Select this button to optimize the route. The start point and the destination remain at their position, but the via points are reordered to make the shortest possible route.
	Select this button to remove the selected point from the route.

As soon as you leave this screen, the route is recalculated automatically, and you can start navigating right away.

3.5 Watching the simulation of the route

1. Press , and then select , .
2. The simulation can be aborted any time by pressing .

3.6 Pausing the active route

You do not need to pause the active route: when you start driving again, Clarion Mobile Map restarts the voice instructions from your position.

3.7 Deleting the active route

The easiest way to delete the active route is opening the Quick menu from the Map screen by pressing , and selecting .

You can also delete the active route through the menu system. Press , and then select , and then select .

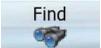
3.8 Saving the active route

1. Press , and then select , and then select .
2. Enter a name for the saved route, and then select .

When you save a route, Clarion Mobile Map not only saves the route points but the whole itinerary:

- If you updated your map since you first saved the route, Clarion Mobile Map recognizes the change, and recalculates the driving instructions according to the latest available map information.
- If you want to save the route, you need to save it before you start navigating. During navigation, Clarion Mobile Map deletes any via points that you already left behind together with the road segments used to reach it.

3.9 Loading a saved route

1. Press , and then select , and then select .
2. Select the route you wish to navigate.
3. To keep the current GPS position as the start point, the route will be recalculated starting from your current position.
4. The map appears, and you can start navigating.

4 Reference Guide

On the following pages you will find the description of the different menu screens of Clarion Mobile Map.

4.1 Map screen

Clarion Mobile Map is primarily intended for land navigation. That is why maps in Clarion Mobile Map look similar to paper road maps. However, Clarion Mobile Map provides much more than regular paper maps: you can customize the look and the content of the map.

The most important and most often used screen of Clarion Mobile Map is the Map screen.



The Map screen shows route information and trip data.

Symbol	Name
	Turn Preview, that is, the next route event
	Second upcoming route event (below the Turn Preview field)
	Trip data
Bottom row	Current street and house numbers on left and right
Row on top of bottom row	Next street or Next city
	Current GPS position (on nearest road)
	Cursor (selected map location)
	Lane information
Blue line	Active route
	Speed limit

4.1.1 Next two route events (Turn Preview fields)

There are two fields reserved on the Map screen to display the next two maneuvers (route events that are listed in the Itinerary). Both the type of the event (turn, traffic circle, exiting freeway, etc.) and its distance from the current GPS position is displayed.

Most of these icons are very intuitive and you also know them as road signs. The following table lists some of the frequently shown route events. The same symbols are used in both fields:

Icon	Description
	Turn left.
	Turn right.
	Turn back.
	Bear right.
	Turn sharp left.
	Keep left.
	Continue straight in the intersection.
	Enter traffic circle. The number of the exit is shown in the circle, but only for the next turn.
	Enter freeway.
	Exit freeway.
	Board ferry.
	Leave ferry.
	Approaching the next via point.
	Approaching the destination.

In certain situations when route events are not important, these fields show other useful pieces of information. They are described here: page 11.

4.1.2 Objects on the map

4.1.2.1 Streets and roads

Clarion Mobile Map shows the streets in a way that is similar to how the paper road maps show them. Their width and colors correspond to their importance: you can easily tell a freeway from a small street.

 **Tip!** If you prefer not to see street names during navigation, turn them off (page 40).

4.1.2.2 3D object types

Clarion Mobile Map supports the following 3D object types:

Type	Description
3D landmarks	Landmarks are 3D artistic or block representations of prominent or well-known objects. 3D landmarks are only available in selected cities and countries.
Elevation model	Hills and mountains are shown in the background of the 3D map view, and illustrated by color on the 2D map.
Elevated roads	Complex intersections and vertically isolated roads (such as overpasses or bridges) are displayed in 3D.
3D buildings	Full 3D city building data that represents actual building size and position on the map. Building data is limited to the city centers of major cities in the US and Europe.
3D terrain	3D terrain map data shows changes in terrain, elevations or depressions in the land when you view the map, and use it to plot the route map in 3D when you navigate.

To fine-tune 3D visualization on the map, press  , and then select:  ,

 ,  .

4.1.2.3 Elements of the active route

Clarion Mobile Map shows the route in the following way:

Symbol	Name	Description
	Current GPS position	Your current position displayed on the map. If roads are near, it is aligned to the nearest road.
	Cursor (selected map location)	The location selected in the Find menu, or a map point selected by moving the map.
	Start point	The first point of the route. Normally if GPS position is available, it is the start point of the route. If there is no valid GPS position, Clarion Mobile Map uses the last known GPS position as the start point.
	Via point	A via point is an intermediate destination. You can place as many via points as you want.
	Destination (end point)	The last point of the route, the final destination.
	Route color	The route always stands out with its color on the map, both in daytime and in night color mode. The active leg of the route is always displayed in a brighter shade than the inactive (upcoming) legs.

Symbol	Name	Description
	Active leg of the route	The section of the route on which you are driving. If you have not added any via points (only a destination), the entire route is the active leg. If you have added via points, the active leg is the part of the route from your current location to the next route point (the next via point, or the destination if there are no more via points to reach).
	Inactive legs of the route	The future sections of the route; each of them becomes active when you reach the via point at its beginning.
	Streets and roads that are excluded from the navigation	You can choose whether you want to use or avoid certain road types (page 41). However, when Clarion Mobile Map cannot avoid such roads, the route will include them and it will show them in a color that is different from the route color.

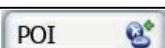
4.1.3 Cursor menu

As soon as you select one point in the Find menu, the map appears with the Cursor menu, a menu with possible actions for the selected point.

Alternatively when you move the map with the direction buttons in Map browsing mode (press  if you are in Navigation mode), you also place the Cursor, a radiating red dot. Now press , and the Cursor menu opens with a list of options.

You can perform the following actions:

Button	Description
	Executes the highlighted menu item.
	Closes the Cursor menu, and returns to the Map screen.
	Displayed at the Cursor.
	Creates a new route with the Cursor as the destination. The previous route (if exists) is deleted.
	If the Cursor is at or near the destination, this button replaces the previous one, and deletes the current destination from the route. The last via point is promoted as destination, or if there are no via points, the route is deleted.
	The Cursor is added to the active route as an intermediate route point, a point to be reached before the destination. If there is already a via point in the route, the Edit Route screen opens to let you decide where the new via point is to appear in the route.
	If the Cursor is at or near one of the via points, this button replaces the previous one, and deletes the selected via point from the route. The route is recalculated without the deleted point.
	Map locations can be marked with Pins. Unlike POIs, a Pin has no name and other details, only a color to let you tell one from another on the map.

Button	Description
	If the Cursor is at or near a Pin, this button replaces the previous one, and deletes the Pin the Cursor is near to.
	The Cursor is appended at the end of the route as the new destination. The previous destination is demoted, and becomes the last via point.
	 This button is similar to the  button, but a new screen opens, and the route is calculated with all the possible route calculation methods (Fast, Short, Economical and Easy). Observe the results, and choose one of the routes to navigate.
	The location of the Cursor is added to the list of frequently visited destinations, the so called Favorites. You can give a name for the Favorite.
	The Cursor is saved as a user POI. Select the POI group and give a name for the POI, then select a suitable icon, enter a phone number, and additional information if you like.
	<p>The Cursor is saved as the location of a Road Safety Camera (speed camera or red light camera). A new screen appears where you can set the type of the camera, the direction of the measured traffic, and the speed limit checked for (if applicable).</p> <p>This button is not displayed when GPS position is not available or if you are in certain countries where Road Safety Camera warning is prohibited. Even if the button is available, you are responsible for checking whether it is legal to use this feature at your location.</p>
	If the Cursor is at or near a Road Safety Camera, this button replaces the previous one, and opens a new screen where you can edit the details of the camera.

4.1.4 Position menu

When you follow the recommended route on the map (the Cursor is the current GPS position), the Position menu replaces the Cursor menu. It does not contain buttons that modify the current route, as the GPS position is not useful as a route point.

4.1.5 Route Information screen

The Route Information screen has all the data and some of the functions you need while you navigate.

To open the Route Information screen, press  , and then select: 





On this screen you see information about the current route. The fields on this screen are continuously updated while you keep the screen open.

You have the following data and functions on this screen:

Name	Description
Route line	The upper part of this screen shows your planned route as a horizontal line. Its leftmost point is the start of the route, the rightmost one is the final destination, and you can see your via point flags along the line, spaced in proportion to their distance.
Estimated Arrival	Shows the estimated arrival time at the final destination of the route based on information available for the remaining segments of the route. The calculation cannot take into account traffic jams and other possible delays.
Distance Left	Shows the distance you need to travel on the route before reaching your final destination.
Time Left	Shows the time needed to reach the final destination of the route based on information available for the remaining segments of the route. The calculation cannot take into account traffic jams and other possible delays.
Method	This field shows how the route was calculated. It either displays the Route Calculation Method or the Vehicle field from the Route Planning options.

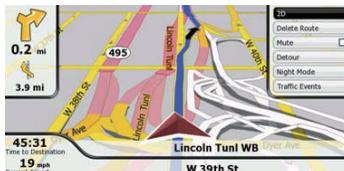
4.1.6 Quick menu

The Quick menu is a selection of controls that are frequently needed during navigation. Its content is not always the same. The buttons that appear in the menu depend on the functions that are available on the screen where opened.



To open the Quick menu, press

The content of the Quick menu on the Map screen is the following:



The buttons from top to bottom:

Name	Function
3D	Cycles through map view modes: <ul style="list-style-type: none"> • 3D rotated map • 2D rotated map
2D	

Name	Function
2DN	<ul style="list-style-type: none"> 2D North oriented map
Delete Route	Deletes the active route.
Mute	Mutes all sounds of Clarion Mobile Map. Select again to unmute sounds.
Detour	Create a detour to avoid road blocks or traffic jams.
Day Mode Night Mode	Switches between the daytime and night color schemes manually. This will not disable the automatic switching between the two schemes: the other color scheme returns at the next scheduled time.

Besides opening the Quick menu on the Map screen, the  button can also be used in some parts of the menu system. Check the top of the screen for this message:



Whenever this message is displayed, pressing the  button opens a list of advanced options.

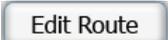
4.2 Find menu

Select the destination of your route. Press , and then select .

Button	Description	Reference
Address	If you know at least a part of the address, this is the quickest way to find the location.	page 21
POI	You can select your destination from the thousands of POIs included with Clarion Mobile Map or from the ones you have previously created.	page 27
Favorites	You can select as your destination a location that you have already saved as a Favorite.	page 27
History	The destinations that you have already entered in Clarion Mobile Map are available in the History list.	page 28
Coordinate	You can select your destination by entering its coordinates.	page 29
Load Route	You can load a previously saved route for navigation.	page 31

4.3 Route menu

Save, load and edit your routes. Press , and then select .

Button	Description	Reference
	Opens a screen with useful route data.	page 36
	You can browse the driving instructions that Clarion Mobile Map follows during navigation. You can exclude maneuvers or streets to adjust the route to your preferences.	page 16
	You can modify the route: remove route points or change their order.	page 30
	Erase the active route with all its route points (start point, via points and destination). If you later decide that you need the same route, you will have to rebuild it from scratch.	page 31
	You can run a demonstration of the route at normal speed.	page 16
	You can save the active route for later use.	page 31

4.4 Settings menu

You can configure the program settings, and modify the behavior of Clarion Mobile Map. Press , and then select .

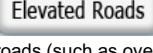


Button	Description	Reference
	You can fine-tune the appearance and content of the Map screen.	page 40
	You can adjust the sounds of Clarion Mobile Map.	page 44
	These settings determine how routes will be calculated.	page 41
	These settings allow you to customize the application for your local language, measurement units, time and date settings and formats, as well as to choose the voice guidance profile you prefer.	page 44

Button	Description	Reference
	You can control how Clarion Mobile Map behaves during navigation.	page 43
	You can enable a speed warning feature to avoid exceeding the speed limit.	page 45
	You can enable a road safety camera warning feature that alerts you when you are approaching known speed and red light camera locations.	page 45
	You can modify the look and behavior of the Menu screens.	page 46
	You can manage the data you have saved (e.g. POIs, Favorites or History) and the settings you have made in the program.	page 46
	You can fine-tune device related settings in this menu.	page 47
	This screen has no navigation feature. It merely provides information about the maps and licenses included with your navigation system.	

4.4.1 Map Screen settings

You can fine-tune the appearance and content of the Map screen. Press  , and then select   .

Button	Description
	<p>Use 3D settings to determine which of the present 3D objects are shown on the map, and adjust the level of 3D visual detail. The options are as follows:</p> <ul style="list-style-type: none">  : Full 3D city building data that represents actual building size and position on the map. Building data is limited to the city centers of major cities in the US and Europe.  : 3D terrain map data shows changes in terrain, elevations or depressions in the land when you view the map, and use it to plot the route map in 3D when you navigate.  : Landmarks are 3D artistic or block representations of prominent or well-known objects. 3D landmarks are only available in selected cities and countries.  : Complex intersections and vertically isolated roads (such as overpasses or underground tunnels) are displayed

Button	Description
	in 3D.
	Some maps contain lane information to help you position your car in the upcoming intersection. This setting tells Clarion Mobile Map whether to display this information.
	Clarion Mobile Map is able to show the map and the menus in different colors during the day and during the night. Select the color profiles to be used in each mode, and select the automatic or manual switching between the daytime and night color profiles.
	Select the values to display in the trip data fields on the Map screen.
	2D maps can also display 3D information. These top-down maps can display elevation by colors and shading.
	Street names and POI icons can be disturbing on the map during navigation. With this switch you can suppress these map elements when Clarion Mobile Map is following your position on the map. If you move the map, both the street names and POI icons reappear immediately.

4.4.2 Route Planning options

These settings determine how routes will be calculated. Press  , and then select .



Button	Description
	You can set the type of vehicle you will use to navigate the route. Based upon 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.
	To let the route fit your needs, you can also set which road types are to be considered for or to be excluded from the route if possible. 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 will be used but only as much as necessary. In this case a warning icon will be shown on the Route Information screen, and the part of the route not matching your preference will be displayed in a different color on the map.
	You can choose from different route types. The routing method can be changed temporarily while creating the route: when the destination is selected, press  in the Cursor menu.

Vehicle types:

- Car
- Taxi
- Bus
- Emergency vehicles

Road Types Used for Route Planning:

Type	Description
Unpaved Roads	Clarion Mobile Map excludes unpaved roads by default: unpaved roads can be in a bad condition and usually you cannot reach the speed limit on them.
Highways	You might need to avoid freeways when you are driving a slow car or you are towing another vehicle.
Ferries	Clarion Mobile Map 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.
Cross-border Planning	In some cases the route calculated according to your other navigation and route preferences would lead through another country. If you wish to always stay within the same country, turn this option off.
Permit Needed	You might need a permit or permission from the owners to use certain roads or to enter certain areas. Clarion Mobile Map excludes these roads from the route calculation by default.
Per-use Toll	By default Clarion Mobile Map includes toll roads (pay roads where there is a per-use charge) in the routes. If you disable toll roads, Clarion Mobile Map plans the best toll-free route.
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.
Carpool Lanes	This control appears only when navigating in the USA. You should check whether you are allowed to use carpool lanes before enabling this road type.

Route Calculation Method types:

Option	Description
Fast	Gives the quickest possible route if you can travel at or near the speed limit on all roads. Usually the best selection for fast and normal cars.
Short	Gives a route that has the smallest total distance of all possible routes between the route points. It can be practical for slow vehicles.

Option	Description
	Combines the benefits of Fast and Short: Clarion Mobile Map calculates as if it were calculating the Fast route, but it takes other roads as well to save fuel.
	Results in a route with fewer turns. With this option, you can make Clarion Mobile Map to take, for example, the freeway instead of series of smaller roads or streets.

4.4.3 Navigation settings

You can control how Clarion Mobile Map behaves during navigation. Press  , and then select  , and then select .

Button	Description
	If you have moved or rotated the map during navigation, this feature moves the map back to your current GPS position and re-enables automatic map rotation after the given period of inactivity.
	This feature allows car drivers to always correct GPS position errors by matching the vehicle position to the road network. By turning off this feature you also turn off the GPS position error filtering. The position shown on the map will be subject to all position errors and position fluctuations.
	This feature switches the map view to Overview mode when the next route event is at a distance. Overview is a zoomed out 2D view to let you see the surrounding area. You have the following controls for Automatic Overview: <ul style="list-style-type: none"> •  : The map view switches to Overview mode if the next route event is at least as far as this value. •  : Overview mode will appear with this zoom level. You can scale the map in Overview mode but next time Overview appears again, this zoom level will be applied.

4.4.4 Sound settings

You can adjust the sounds of Clarion Mobile Map. Press  , and then select  ,



Button	Description
	Use the switch to mute all sounds of the device and then to re-enable them again. The position of the slider determines the volume level.
	The slider adjusts the loudness of voice prompts. In its leftmost position, the voice guidance is suppressed; in its rightmost position, the master volume applies.
	Key sounds provide audible confirmation of either pressing hardware buttons or tapping the touch screen. The switch turns key sounds on or off. Key sounds are played at the master volume level.

4.4.5 Regional settings

These settings allow you to customize the application for your local language, measurement units, time and date settings and formats, as well as to choose the voice guidance profile you prefer. Press

 , and then select  , 

Button	Description
	This button displays the current written language of the Clarion Mobile Map user interface. By tapping the button, you can select a new language from the list of available languages. The application will restart if you change this setting; you are asked to confirm this.
	This button shows the current voice guidance profile. By tapping the button, you can select a new profile from the list of available languages and speakers. Press any of these to hear a sample voice prompt. Just press OK when you have selected the new spoken language.
	You can set the distance units to be used by the program. Clarion Mobile Map may not support all the listed units in some voice guidance languages. If you select a measurement unit not supported by the chosen voice guidance language, a warning message will appear.
	You can set the date and time format. Various international formats are available.
	You can access time and time zone settings. Clarion Mobile Map helps you with correcting the device time to the ever accurate GPS time. Clarion Mobile Map can also help you set the time zone based on your current GPS position.

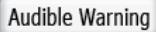
Time and Time Zone Settings:

Button	Description
	Use this feature to synchronize the clock of your device to the highly accurate time provided by the GPS receiver.
	Use this feature to synchronize the time zone of the clock of your device to the time zone based on your current GPS position. This is useful if you travel abroad.
	Set time zone manually if you do not want to synchronize the time zone automatically. This allows you to use Auto Time Correction and apply a time zone offset to obtain the desired time.

4.4.6 Warn when speeding

You can enable some useful warnings, and disable the touch screen in a moving vehicle with Safety

Mode. Press , and then select , .

Button	Description
	Maps may contain information about the speed limits of the road segments. Clarion Mobile Map is able to warn you if you exceed the current limit. This information may not be available for your region (ask your local dealer), or may not be fully correct for all roads in the map. This setting lets you decide whether you wish to receive the warnings.
	A voice message is played using the selected voice guidance profile.
	A symbol with the speed limit appears in the corner of the map (for example:  ,).
	You can set the relative speeding level at which the application warns you (100% represents the current speed limit): <ul style="list-style-type: none">  : in cities and cities  : at all other locations

4.4.7 Speed camera warning

You can enable some useful warnings, and disable the touch screen in a moving vehicle with Safety

Mode. Press , and then select , .

Button	Description
	This feature allows you to receive a warning when approaching a Road Safety Camera. You must ensure on your own liability that using this feature is legal in the country where you intend to use it.
	Beeps can be played while you are approaching the camera, or just an alert sound if you exceed the speed limit while approaching one of these cameras.
	The type of the camera and the monitored speed limit appear on the Map screen while you are approaching one of these cameras.

4.4.8 Menu settings

You can modify the look and behavior of the Menu screens. Press ,

and then select , .

Button	Description
	When this feature is active, menus will open automatically as you navigate among them with the direction buttons. When disabled, you need to press  to open the highlighted menu.
	You can choose the image to be used as the menu background image.

4.4.9 User Data Management

You can manage the data you have saved (e.g. POIs, Favorites or History) and the settings you have

made in the program. Press , and then select , .

Button	Description
	Map locations can be marked with Pins using the  button in the Cursor menu. Select this button to remove all your Pins from the map.

Button	Description
	All user data and the current settings will be saved on the inserted memory card. There is always one backup file. If you perform a backup later, the previous backup will be overwritten with the new information.
	All user data and settings will be overwritten with the information stored in the backup file. Data and settings created after the latest backup will be lost.
	All user data will be deleted, and settings will return to their factory defaults. The application needs to restart.
	All settings will return to their factory defaults, but no user data will be deleted. The application needs to restart.

4.4.10 Device settings

You can fine-tune device related settings in this menu. Press  , and then select .



Button	Description
	You can fine-tune the position of the screen content on the display. Select this button, and use the arrows to reposition the application window.
	This field indicates whether the external GPS antenna is connected to your Clarion NP509.

5 Glossary

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.

Active route

The currently navigated route. You can save and load routes in Clarion Mobile Map, but only one route can be active at any given time, and it is always active until you delete it, reach your destination or you quit Clarion Mobile Map. See also: Route.

City Center

The City Center is not the geometric center of the city but an arbitrary point the map creators have chosen. In cities and villages, it is usually the most important intersection; in larger cities, it is an important intersection.

GPS accuracy

Several factors have 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.

Map

Clarion Mobile Map works with digital maps which are not simply the computerized versions of traditional paper maps. Similarly to the paper road maps, the 2D mode of digital maps show you streets, roads, and elevation is also shown by colors.

In 3D mode, you can see the altitude differences, for example valleys and mountains, elevated roads, and in selected cities 3D landmarks and 3D buildings are also displayed.

You can use digital maps interactively: you can zoom in and out (increase or decrease the scale), you can tilt them up and down, and rotate them left and right. In GPS-supported navigation, digital maps facilitate route planning.

North-up map orientation

In North-up mode the map is rotated so its top always faces North. This is the orientation in 2D map view mode and in Overview mode. See also: Track-up map orientation.

Overview mode

You can instruct Clarion Mobile Map to automatically switch to Overview mode if the next route event is in a distance. In Overview mode the map is shown in 2D but scaled down to a predefined zoom level. When you approach the next route event, the previous 2D or 3D map view returns automatically.

Route

A series of destinations to be reached one after the other. A simple route contains one start point and only one destination. Multi-point routes contain one or more via points (intermediate destinations). The last route point is the final destination and the route is cut into different legs (from one destination to the next).

Scheme

Clarion Mobile Map comes with different color schemes for the map for daytime or night use. Schemes are custom graphic settings for the map and they can have different colors for streets, blocks or surface waters in 2D and 3D modes, and they display shades or shadows in different ways in 3D mode.

One daytime scheme and one night scheme is always selected. Clarion Mobile Map uses them when it switches from day to night and back.

Track-up map orientation

In Track-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. See also: North-up map orientation.

Road Safety Camera

A special POI type for speed cameras and red light cameras. Different data sources are available, and you can also mark the position of a Road Safety Camera on the map.

You can configure Clarion Mobile Map to warn you when you approach one of these cameras.

Detecting the location of Road Safety Cameras is prohibited in certain countries. It is the sole responsibility of the driver to check whether this feature can be used during the trip.

6 End User License Agreement

1 The contracting parties

1.1 This Agreement has been entered into by and between PDAMILL Kft. (registered seat: 23 Bérc utca, H-1016 Budapest, Hungary; Company reg.no.: 01-09-709980) as Licensor (hereinafter: Licensor) and You as the User (hereinafter: User; the User and the Licensor jointly referred to as: Parties) in subject of the use of the software product specified in this Agreement.

2 Conclusion of the Agreement

2.1 The Parties hereby acknowledge that this Agreement shall be concluded by implicit conduct of the Parties without signing the Agreement.

2.2 The User hereby acknowledges that following the lawful acquisition of the software product constituting the object of this Agreement (Section 4), any degree of use, installation into a computer or other hardware, installation of such hardware into a vehicle, pressing of the "Accept" button displayed by the software during installation or use (hereinafter referred to as Use) shall mean that the User has accepted the terms and conditions of this Agreement as legally binding.

2.3 This Agreement shall by no means authorise use of the software product by those persons having unlawfully acquired the software product or having unlawfully installed it on a computer or in a vehicle.

3 Relevant laws and regulations

3.1 To all issues not regulated by this Agreement, the laws of the Republic of Hungary, with specific reference to Act IV of 1959 on the Civil Code and to Act LXXVI of 1999 on Copyrights shall apply.

3.2 The original language version of this Agreement is the Hungarian version. This Agreement has versions in other languages as well. In case of dispute the Hungarian version shall prevail.

4 Object of the Agreement

4.1 The object of this Agreement shall be the navigation guidance software product of Licensor (hereinafter referred to as the Software Product).

4.2 The Software Product shall include the operating computer program, its complete documentation, the map database pertaining thereto and any third-party content and services accessible through the Software Product (hereinafter: Database).

4.3 Any form of display, storage, coding, including printed, electronic or graphic display, storage, source or object code, or any other as yet undefined form of display, storage, or coding, or any medium thereof shall be deemed parts of the Software Product.

4.4 Error corrections, additions, updates used by the User following the conclusion of this Agreement shall also be deemed parts of the Software Product.

5 Rights under copyright

5.1 Unless otherwise provided by law or contractual provisions, the Licensor is the sole and exclusive owner of all material copyrights vested in the Software Product.

5.2 Copyrights extend to the whole Software Product and to its parts separately as well.

5.3 The owner(s) of the copyrights of the Database forming part of the Software Product is (are) the natural person(s) or corporate entity(ies) listed in the Appendix to this Agreement or in the "About" menu item of the operating computer program (hereinafter referred to as Database Owner). The user's manual of the Software Product includes the name of the menu option where all the owners of the Database items are listed. The Licensor hereby states that it has obtained sufficient usage and representation rights from the Database owners in order to utilize the Database, to offer it for utilization and to transfer it for utilization as set forth in this Agreement.

5.4 Pursuant to this Agreement, all rights vested in the Software Product shall remain in the ownership of the Licensor, except for those to which the User is entitled under law or by virtue of this Agreement.

6 Rights of the User

6.1 The User is entitled to install the Software Product into one hardware device (desktop, handheld, portable computer, navigation device), and to run and use one copy of the Software Product or a preinstalled copy of the Software Product thereon.

6.2 The User is entitled to make one backup copy of the Software Product. However, if the Software Product operates after installation without the use of the original media copy, then the original media copy shall be deemed to be a backup copy. In all other cases, the User is only entitled to use the backup copy if the original media copy of the Software Product has been ascertainably and unequivocally rendered unsuitable for its lawful and intended use.

7 Limitations of use

7.1 The User is not entitled

7.1.1 to duplicate the Software Product (to make a copy thereof);

7.1.2 to lease, rent or lend it or to transfer it to a third person for any reason;

7.1.3 to translate the Software Product (including translation (compilation) to other programming languages);

7.1.4 to decompile the Software Product;

7.1.5 to evade the protection of the Software Product or to modify, circumvent or obviate such protection through technological or by any other means;

7.1.6 to modify, extend, transform the Software Product (in whole or in part), to separate it into parts, combine it with other products, install it in other products, utilize it in other products, not even for the purpose of achieving interoperability with other devices;

7.1.7 apart from using the computer program, to obtain information from the Database as a part of the Software Product, to decompile the Database, to use, copy, modify, extend, transform the Database in whole or in part or the group of data stored therein, or to install it in other products or otherwise, utilize it in other products or to transfer it, not even with the aim of achieving interoperability with other products.

7.2 The User may only use the contents available through the Software Product and provided by third parties and the data received through the services provided by third parties (including but not limited to the traffic data received from the RDS TMC traffic information service) for his/her own personal benefit and at his/her own risk. It is strictly prohibited to store, to transfer or to distribute these data or contents or to disclose them in full or in part to the public in any format or to download them from the product.

8 No warranty or limitation of responsibility

8.1 The Licensor hereby informs the User that although the greatest care was taken in producing the Software Product, given the nature of the Software Product and its technical limitations, the Licensor does not provide a warranty for the Software Product being completely error-free, and the Licensor is not bound by any contractual obligation whereby the Software Product obtained by the User should be completely error-free.

8.2 The Licensor does not warrant that the Software Product is suitable for any purpose defined either by the Licensor or the User, and does not warrant that the Software Product is capable of interoperating with any other system, device or product (e.g. software or hardware).

8.3 The Licensor does not assume any responsibility for damages incurred due to an error in the Software Product (including errors of the computer program, the documentation and the Database).

8.4 The Licensor does not assume any responsibility for damages incurred due to the Software Product not being applicable for any defined purpose, or due to the error or incompatibility of the Software Product with any other system, device or product (e.g. software or hardware).

8.5 The Licensor also draws the attention of the User to the fact that, when using the Software Product in any form of vehicle, observing the traffic regulations and rules (e.g. use of obligatory and/or reasonable and suitable security measures, proper and generally expected care and attention in the given situation, and special care and attention required due to the use of the Software Product) is the exclusive responsibility of the User. The Licensor shall not assume any responsibility for any damages occurred in relation to use of the Software Product in a motor vehicle.

8.6 By concluding the Agreement, the User shall, in particular, acknowledge the information stated in Section 8 above.

9 Sanctions

9.1 The Licensor hereby informs the User that, if the Licensor finds its rights under the Copyright Act to be breached, the Licensor may

9.1.1 seek judicial recognition of this breach;

9.1.2 demand that the breach cease and order the person in breach to refrain from continuing such actions;

9.1.3 demand that the person under breach give proper compensation (even by way of publicity at the expense of the person in breach);

9.1.4 claim the return of the increase of assets due to the breach;

9.1.5 demand the cease of the wrongful action and, demand restitution to its state before the breach was committed at the expense of the person in breach, and may demand the destruction of instruments and materials used to commit the breach as well as of the products created by the breach;

9.1.6 claim for damages.

9.2 The Licensor hereby also informs the User that the breach of copyrights and related rights is a crime under Act IV of 1978 on the Hungarian Criminal Code, which may be sentenced of two years in prison in basic cases and up to eight years in prison in aggravated cases.

9.3 Contents and services provided by third parties

The Licensor hereby excludes any liability of its own for the Database in the Software Product and for any content or service provided by a third party by using the Database. The Licensor does not warrant the quality, suitability, accuracy, fitness for a specific purpose or territorial coverage of the product or service or the availability of the service, and it specifically excludes any liability for the suspension of the service, and any damage arising in relation to the service or for complete cancellation of the service.

The relevant information and data in connection with the contents and services provided by third parties are available at www.navngo.com. The User hereby acknowledges that the contents and services provided by third parties may only be used at the risk of the User and for the personal benefit of the User.

9.4 Contents and services provided by the Licensor or an agent of the Licensor

The Licensor or a contractual partner may offer various products and services to the User through www.naviextras.com. The User may only use these services when the User has read and understood the relevant end user license agreement(s) at www.naviextras.com and the User is obliged to use the services in line with the terms and conditions thereof.

9.5 The parties hereby agree that - depending on the nature of the dispute - either the Pest Central District Court (Pesti Központi Kerületi Bíróság) or the Metropolitan Court of Budapest (Fővárosi Bíróság) will have exclusive jurisdiction to rule on any disputes arising in connection with this Agreement.

Clarion Co., Ltd.

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QY-5012B
2009/1