

clarion®

Owner's manual & Installation manual
Mode d'emploi et manuel d'installation
Manual de instrucciones y de instalación

NP401

FLASH MEMORY NAVIGATION SYSTEM
SYSTÈME DE NAVIGATION À MÉMOIRE FLASH
SISTEMA DE NAVEGACIÓN MEMORIA FLASH

CLARION PRODUCT REGISTRATION INFORMATION

For USA and Canada only

www.clarion.com

Dear Customer:

Congratulations on your purchase of a Clarion mobile electronic product. We are confident that you'll enjoy your Clarion experience.

There are many benefits to registering your product. We invite you to visit our website at www.clarion.com to register your Clarion product. We have made product registration simple with our easy to use website.

The registration form is short and easy to complete. Once you're registered, we can keep you informed of important product information.

Register at www.clarion.com - it's easy to keep your Clarion product up to date.

Thank you for choosing the Clarion NP401 as your in-car navigator. This document is the detailed description of the software.

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.

Copyright note

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1. PRECAUTIONS

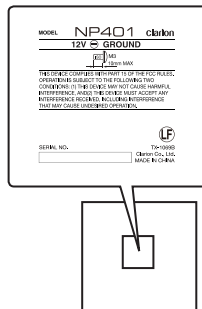


WARNING

- For your safety, the driver should not watch any video sources and/or operate the controls while driving. Please note that watching and operating any video sources while driving are prohibited by law in some countries. Also, while driving, keep the volume to a level at which external sounds can be heard.
- When using the navigation system, follow the precautions listed below. After reading this manual, be sure to keep it in a handy place (such as the glove box of your car).
- This navigation system should not be used to replace your own judgment. No itinerary suggested by this navigation system should ever override any highway regulations, your own judgment, or a knowledge of safe driving practices. Do not follow the navigation system's suggested itinerary if it would cause you to perform a dangerous or illegal act, place you in a dangerous situation, or take you into an area you consider unsafe.
- The advice provided by the navigation system is to be regarded as a suggestion only. There may be times when the navigation system displays the vehicle's location incorrectly, fails to suggest the shortest route, or fails to direct you to your desired destination. In such instances, rely on your own driving judgment, taking into account the driving conditions at the time.
- Do not use the navigation system to locate emergency services. The database does not contain a complete listing of emergency services such as police stations, fire halls, hospitals and walk-in clinics. Please show discretion and ask for directions in such instances.
- As the driver, you alone are responsible for your driving safety.
 - In order to avoid a traffic accident, do not operate the system while driving.
 - In order to avoid a traffic accident, operate the system only when the vehicle is stopped at a safe place and the parking brake is on.
 - In order to avoid a traffic accident or traffic offense, remember that actual road conditions and traffic regulations take precedence over the information contained on the navigation system.
 - The software may contain inaccurate or incomplete information due to the passage of time, changing circumstances, and the sources of information used. Please respect current traffic conditions and regulations at all times while driving.
 - Where actual road conditions and highway regulations differ from the information contained on the navigation system, abide by the highway regulations.
 - Keep the amount of time spent viewing the screen while driving to a strict minimum.
- The navigation system does not provide, nor represent in any way information on: traffic and highway regulations; technical aspects of the vehicle including weight, height, width, load and speed limits; road conditions including grade, percentage of incline and surface conditions; obstacles such as the height and width of bridges and tunnels; and other current driving or road conditions. Always rely on your own judgment when driving a car, taking into account current driving conditions.
- Do not disassemble or modify this unit. It may cause an accident, fire, or electric shock.
- Do not use this unit when a trouble exists, such as no screen content appears or no sound is audible. It may cause an accident, fire, or electric shock. For that case, consult your authorized dealer or a nearest Clarion service center.
- In case of a problem, such as foreign materials have entered in the unit, the unit gets wet, or smoke or strange smells come out of the unit, etc., stop using this unit immediately, and consult your authorized dealer or a nearest Clarion service center. Using it in that condition may cause an accident, fire, or electric shock.
- Use a fuse with the same specification only when replacing the fuse. Using a fuse with a different specification may cause a fire.
- For the installation of this unit or a change in the installation, ask your authorized dealer or a nearest Clarion service center for safety. Professional skills and experiences are required to do so.

1. Even in the event that trouble arises, never open the case, disassemble the unit, or lubricate the rotating parts.
2. This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to consult the dealer or an experienced radio/TV technician for help.

**INFORMATION FOR USERS:
CHANGES OR MODIFICATIONS TO THIS
PRODUCT NOT APPROVED BY THE
MANUFACTURER WILL VOID THE WARRANTY
AND WILL VIOLATE FCC APPROVAL**



2. CAUTIONS ON HANDLING

Navigation System

- To prevent discharge of the car battery, use this system with the engine of the vehicle running as much as possible.
- The housing of this unit may become hot because this unit has a high-speed CPU. Be careful to handle the unit during navigating or immediately after turning the power off.
- Turn off the power of the vehicle when connecting or disconnecting wires. Doing this while the power of the vehicle is turned on, may cause a trouble or malfunction.

Note:

- When using this unit first time after purchasing, or not used for long periods of time, it might take about 5 to 15 minutes until the current location is determined using GPS. Moreover, even when using it often, it may take about 2 to 3 minutes until the current location is determined according to the GPS measuring situation.

- When the route (path) cannot be calculated, move desired destination to a nearby main road and perform calculation again. It may be impossible to find a route in case the car location is too close to the desired destination.
- For vehicles equipped with an intelligent key, do not bring the intelligent key close to the unit of the navigation system. The navigation system may not operate correctly.
- If an electrical equipment that generates a strong electrical noise is used near this unit, the screen may be disturbed and noise may be generated. In this case, keep away such an electrical equipment or refrain from using it.

- Data saved to the flash memory may get lost in case of a breakdown, malfunction, or other trouble of this unit.
- Operation of the navigation system may be limited to

protect the unit if the temperature is extremely high or low. In such a case, please wait until temperature becomes normal again.

Cleaning

- **Cleaning the cabinet**

Use a soft, dry cloth and gently wipe off the dirt. For tough dirt, apply some neutral detergent diluted in water to a soft cloth, wipe off the dirt gently, then wipe again with a dry cloth. Do not use benzene, thinner, car cleaner, etc., as these substances may damage the cabinet or cause the paint to peel. Also, leaving rubber or plastic products in contact with the cabinet for long periods of time may cause stains.

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3. 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.

Clarion Mobile Map has a Safety Mode: if you turn on Safety Mode, you cannot change anything in Clarion Mobile Map while the vehicle is moving at a speed of 10 km/h (6 mph) or higher. Unless only passengers operate Clarion Mobile Map, we strongly encourage you to turn on Safety Mode.

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.


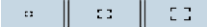






Never place any part of the navigation system where it obstructs the driver's view, where it is in the deployment zone of an airbag or where it might cause injuries in an accident.

For more information, consult the End User License Agreement (page 73).

4. Getting started with Clarion Mobile Map

Clarion Mobile Map is optimized for in-car use. You can use it easily by tapping the screen buttons and the map with your fingertips.

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.

Tasks	Instructions
Double tapping the screen	You do not need to tap the screen twice for any action. With buttons and controls, a single tap is enough.
Tapping and holding the screen	<p>You do not need this to access the basic navigation functions. Tap and keep pressing the following buttons to reach extra functions:</p> <ul style="list-style-type: none"> • Tap and hold  on the Map screen: you can set the minimum and maximum zoom level of Smart Zoom. • Tap and hold any of the  buttons on the Map screen: you can set or reset the zoom value of the button (2D map). • Tap and hold any of the  buttons on the Map screen: you can set or reset the tilt and zoom values of the button (3D map). • Tap and hold  on list and menu screens: the Navigation menu appears. • Tap and hold any of the  buttons on the Map screen: you can rotate, tilt or scale the map continuously. • Tap and hold  on keyboard screens: you can delete several characters quickly. • Tap and hold  or  in long lists: you can scroll pages continuously. • Tap and hold the buttons in the Quick menu to open screens related with the function of the button from the Manage menu or the Settings menu.

Start using Clarion Mobile Map

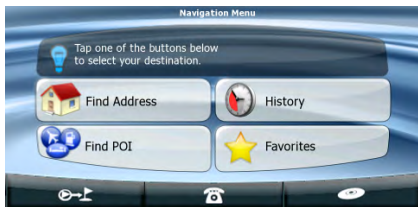
When Clarion Mobile Map is started the first time, you need to do the following:

1. Select the written language of the application interface. Later you can change it in Settings (page 68).

2. Select the language and speaker used for voice guidance messages. Later you can change it in Settings (page 67).
3. Read and accept the End User License Agreement (page 73).
4. Select whether to start the program in Simple mode or in Advanced mode. Later you can switch between the two operating modes in Settings.
5. Read and accept the road safety warning.

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

The Navigation menu in Simple mode:



The Navigation menu in Advanced mode:



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 (not all of them are available in):

- Use the selected location on the map (the Cursor) (page 29).
- 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 29).
- Enter an address with ZIP code (page 34). 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 37)
- Use a saved location:
 - a Favorite (page 35)
 - a POI (page 35)
 - the History of previously set destinations and waypoints (page 36)

4.1 Simple and Advanced modes

The two operating modes of Clarion Mobile Map mainly differ in the menu structure and the number of available features. The controls and screen layouts are the same.

- Simple mode: you have easy access to the most important navigation functions and the basic settings only. The rest of the settings are set to values that are optimal for typical use.
- Advanced mode: you have access to the full functionality of Clarion Mobile Map.

To switch from Simple mode to Advanced mode: on the startup screen (Navigation Menu), tap 

Advanced Mode

To switch from Advanced mode to Simple mode: on the startup screen (Navigation Menu), tap 

Simple Mode

The features and settings available in each mode are as follows:



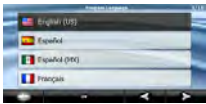

Type of action	Available in Simple mode	Available in Advanced mode	Explanation
Navigating to a selected map point	Yes	Yes	See page 29
Navigating to a street address	Yes	Yes	See page 30
Navigating to an incomplete address	Yes	Yes	See page 32
Navigating to an intersection	Yes	Yes	See page 32
Navigating to recent destinations (History)	Yes	Yes	See page 36
Navigating to Favorites	Yes	Yes	See page 35
Navigating to a POI	Yes	Yes	See page 35
Navigating to coordinates	No	Yes	See page 36
Creating a multi-point route	No	Yes	See page 37
Saving a map point as a Favorite destination	Yes	Yes	See page 23
Saving a map point as a POI	No	Yes	See page 23
Saving a map point as a location of a Road Safety Camera	No	Yes	See page 23
Mark a map point with a Pin	No	Yes	See page 23
Saving the active route	No	Yes	See page 40
Saving Track Logs	No	Yes	See page 40



Type of action	Available in Simple mode	Available in Advanced mode	Explanation
Map Screen settings	Only <i>color profiles</i> (from Quick Menu)	Yes	See page 64
Menu settings	Only background picture	Yes	See page 70
Sound settings	Yes (from Quick Menu)	Yes	See page 65
Route Planning options	Yes	Yes	See page 66
Regional settings	Only language selection	Yes	See page 67
Warnings	No	Yes	See page 69

4.2 Buttons and other controls on the screen

When you are using Clarion Mobile Map, you usually tap buttons on the touch screen.

You only need to confirm selections or changes in Clarion Mobile Map if the application needs to restart, it needs to perform a major reconfiguration, or you are about to lose some of your data or settings. Otherwise, Clarion Mobile Map saves your selections and applies the new settings without confirmation as soon as you use the controls.

Type	Example	Description	How to use it
Button		Tap it to initiate a function, to open a new screen, or to set a parameter.	Tap it once.
Icon		Shows status information.	Some icons also function as a button. Tap them once.
List		When you need to select from several options, they appear in a list.	Move between pages with the ◀ and ▶ buttons and tap the value that you want.1
Slider		When a feature has several different unnamed values, Clarion Mobile Map shows an indicator on a gauge that displays and sets a value from a range.	Drag the handle to move the slider to its new position. Tap the slider where you want the handle to appear; the thumb jumps there.


Type	Example	Description	How to use it
Switch		When there are only two choices, a checkmark shows whether the feature is enabled.	Tap it to turn the switch on or off.
Virtual keyboard		Alphabetic and alphanumeric keyboards to enter text and numbers.	Each key is a touch screen button.

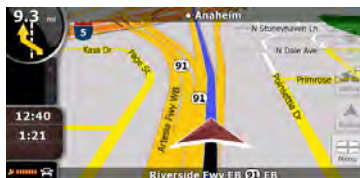
4.2.1 Using keyboards

You only need to enter letters or numbers in Clarion Mobile Map when you cannot avoid it. You can type with your fingertips on the full-screen keyboards and 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	Tap US English (QWERTY) and select from the list of available keyboard types. Clarion Mobile Map remembers your last keyboard choice and offers it the next time you need to enter data.
Correcting your entry on the keyboard	Tap ← to remove the unneeded character(s). Tap and hold the button to delete the entire input string.
Entering a space, for example between a first name and a family name or in multi-word street names	Tap Space .
Entering lowercase or capital letters	Tap ↵ to cycle through entering lowercase letters, initial capitals or all capitals.
Entering symbols	Tap @/! to switch to a keyboard offering symbol characters.
Finalising the keyboard entry	Tap Done .






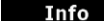
4.3 Using the map

The map screen is the most frequently used screen of Clarion Mobile Map. It can be accessed from the Navigation menu by tapping .





For further information about the map screen, see page 41.

4.3.1 Checking the details of a map location







- If you are interested in the details of your current position during navigation:
 1. Check the bottom line of the map. It shows the current street and house number information.
 2. For further details, tap  to open the Position menu.
 3. Tap . The address, the coordinate and the list of nearby POIs will be displayed.
- You can check the details of any other location by selecting it on the map:
 1. Tap the map anywhere to open the map control buttons.
 2. Tap the desired location on the map. The Cursor () appears there. The address of the location is displayed at the bottom of the map.
 3. For further details, tap  to open the Cursor menu.
 4. Tap . The address, the coordinate and the list of nearby POIs will be displayed.
 5. It is even easier if you select the desired point in the Find menu. Then the Cursor menu opens automatically. You only need to tap the  button.







4.3.2 Manipulating the map




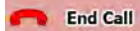

Position markers on the map:

- Current GPS position:  (page 23)
- Selected location (Cursor):  (page 23)

The following controls help you modify the map view to suit your actual needs the best. Most of these controls appear only if you tap the map once, and disappear after a few seconds of inactivity.

Action	Button(s)	Description
Moving the map	No buttons	<p>You can move the map into any direction. Tap the map at any desired location. The point you hit on the map moves to the center of the screen.</p> <p>If GPS position is available and you have moved the map, the  button appears. Tap this button to return to the GPS position.</p>
Opening/closing map control buttons		<p>Tap this button to show or hide the following map control buttons:</p> <ul style="list-style-type: none"> • Zoom in/out • Rotate left/right (3D map only) • Tilt up/down (3D map only) • Zoom preset buttons (2D map only) • Tilt and zoom preset buttons (3D map only) • Return to GPS position button • Smart Zoom button
Zooming in and out		<p>Changes how much of the map is displayed on the screen.</p> <p>Clarion Mobile Map uses high-quality vector maps that let you see the map at various zoom levels, always with optimized 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.</p> <p>Map scaling has different limits in 2D and in 3D map view modes.</p>
Tilting up and down		<p>Changes the vertical view angle of the map in 3D mode.</p>
Rotating left and right		<p>Changes the horizontal view angle of the map in 3D mode or in rotated 2D mode.</p> <p>When GPS position is available, Clarion Mobile Map always rotates the map so its top faces your direction of travel (Track-Up orientation). You can turn away from Track-Up with these buttons.</p> <p>If GPS position is available and you have rotated the map, the  button appears. Tap this button to re-enable the automatic map rotation.</p>

Action	Button(s)	Description
Viewing modes		<p>Gives you the following map perspectives in Clarion Mobile Map:</p> <ul style="list-style-type: none"> • classic top-down view (2D), the top of the map always faces North • top-down view (2D), the top of the map always points in the current driving direction • perspective view (3D), the top of the map always points in the current driving direction <p>The icon always shows the mode the button switches to: If you are in 3D mode, you can see the  button and you need to tap it to switch to 2D mode.</p>
Smart Zoom		<p>Clarion Mobile Map can automatically rotate, scale and tilt the map and give you the optimal view:</p> <ul style="list-style-type: none"> • When you are approaching a turn, Clarion Mobile Map zooms in and raises the view angle to let you easily recognize your maneuver at the next junction. • If the next turn is at a distance, Clarion Mobile Map zooms out and lowers the view angle to show you the road in front of you. <p><u>Tap this button once</u> to enable Smart Zoom.</p> <p><u>Tap&hold the button</u> to set the zoom limits of Smart Zoom.</p>
Returning to normal navigation (back to the GPS position with automatic map rotation)	 	<p>Tap this button to move the map back to the current GPS position. If the map has been rotated, automatic map rotation is also re-enabled.</p>
Zoom preset buttons (available in Advanced mode only)		<p><u>Tap one of the preset buttons</u> to set the zoom level to a fix, predefined value. Smart Zoom is disabled. These buttons are available in 2D mode.</p> <p><u>Tap&hold any of the buttons</u> to set its value to the current zoom level, or to reset it to its original value.</p>

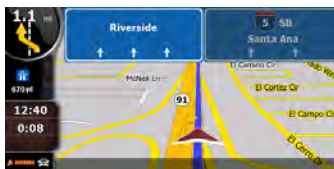
Action	Button(s)	Description
Tilt and zoom preset buttons (available in Advanced mode only)		<p>Tap one of the <u>preset buttons</u> to set the tilt and zoom levels to fix, predefined values. Smart Zoom is disabled. These buttons are available in 3D mode.</p> <p>Tap & hold any of the <u>buttons</u> to set its value to the current tilt and zoom levels, or to reset it to its original value.</p>
Map scale		Clarion Mobile Map shows the scale of the map in 2D mode.
Fit-to-screen		<p>This button does not appear on the Map screen. It is available on the following screens:</p> <ul style="list-style-type: none"> Plan on Map screen: When you have an active route, you can display it in its full length on the map. Track Information screen: A track log can be displayed in its full length on the map.
End Call		This button is displayed only during a phone call. Tap the button to hang up.
Repeat Voice Instruction		Tap this button to repeat the current voice instruction. The distance is updated to always describe the current situation.

4.3.3 Lane information and Signposts

When navigating on multilane roads, it is important to take the appropriate lane in order to follow the recommended route. If lane information is available in the map data, Clarion Mobile Map displays the lanes and their directions using small arrows either at the bottom or at the top of the map (the position of these arrows can be modified in Map Screen settings). Arrows in yellow represent the lanes you need to take.







Where there is additional information available, signposts substitute arrows. Signposts are always displayed at the top of the map. The color and style of the signposts are similar to the real ones you can see above road or by the roadside. They show the available destinations and the number of the road the lane leads to.

All signposts look similar when cruising (when there is no recommended route). When navigating a route, only that signpost is displayed in vivid colors that points to the lane(s) to be taken; all others are darkened out.











4.3.4 Status information and hidden controls on the map










The following information appears in the rounded field in the top left corner, the Turn Preview field. When tapping this area, the result depends on the information currently shown.

Icon	Information	Details	Action
	There is no active route in Simple mode	If there is no route to be navigated in Simple mode, this icon appears in the Turn Preview field.	Tap this area to open Find Address.
	There is no active route in Advanced mode	If there is no route to be navigated in Advanced mode, this icon appears in the Turn Preview field.	Tap this area to open Find.
	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.	Tap this area to open the Route Information screen.
	If the icon is a static picture, route calculation is needed	GPS position and an active route are available, but automatic off-route recalculation is switched off, and you deviated from the route.	Tap this area to make Clarion Mobile Map recalculate the recommended route.
	If the icon is animated, route calculation is in progress	Clarion Mobile Map is calculating or recalculating the route.	Nothing happens if you tap this area of the screen.
	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.	Tap this area to open the Route Information screen.

The following area appears next to the above described rounded area. When tapping this area, the result depends on the information currently shown.



Icon	Information	Details	Action
	There is no valid GPS position	If there is no valid GPS position, this symbol appears here.	Tap this area to open the GPS Data screen to check the signal status or the connection settings.
	Traffic restriction	When GPS position is available but there is no route to be navigated, the traffic restriction of the upcoming intersection is shown here if there is any.	Nothing happens if you tap this area of the screen.
	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.	Tap this area to open the Itinerary screen with the turn by turn guidance instructions.
	Approaching a Road Safety Camera	This icon appears when you are approaching a Road Safety Camera, and the warning for cameras is enabled in Settings.	Tap this area to suppress the audible camera warning. Tap again to display the second route event with the possibility to open the Itinerary.
	Stops the running simulation	This icon appears during Route Fly Over, Route Simulation, and Track Log playback.	Tap this area to stop the simulation.
	Route recalculation progress	During route recalculation, this field shows the recalculation progress between 0% and 100%.	Nothing happens if you tap this area of the screen.
	Indicator strip	 <ul style="list-style-type: none"> - sounds muted/enabled - Track Log recording - Bluetooth status 	Tap this area to open the Itinerary screen with the turn by turn guidance instructions.



The following symbols appear in the Indicator strip:

Icon	Color	Description
	White	The sound output of Clarion Mobile Map is muted.
	White	The sound output of Clarion Mobile Map is enabled.
	Red blinking	Clarion Mobile Map records a Track log when GPS position is available.
	Red	Tracklog recording is disabled.
	Gray	The Bluetooth radio is switched off.
	Purple	The Bluetooth radio is turned on but no telephone is connected.
	Red	There is an error in the Bluetooth connection.
	Green	Clarion Mobile Map is connected to a telephone as a handsfree set via Bluetooth.
	Blue	A phone call is in progress over the Bluetooth connection.



The following information can be seen in the three data fields shown on the map screen. Tap this area to open the Trip Information screen where you can select which values to be shown in these three fields.

When there is no active route, these fields show the following information: current speed, compass and the current time of day.

Icon	Type	More information
	Compass	Shows the direction of your heading both when the map is automatically rotated (3D) and when the map is always facing North (2D).
	Speed information	There are speed values that can be shown: <ul style="list-style-type: none"> • Current speed • Speed limit on the current road


Icon	Type	More information
	Time information	<p>There are time values that can be shown:</p> <ul style="list-style-type: none"> • Current GPS time • Time remaining to reach the destination • Time remaining to reach the next via point • Estimated arrival time at the destination • Estimated arrival time at the next via point
	Distance information	<p>There are distance type values that can be shown:</p> <ul style="list-style-type: none"> • Distance remaining to reach the destination • Distance remaining to reach the next via point • Current altitude

The next area is a combined status indicator field. Tap this area to open the Quick menu (page 54).



Icon	Status for	More information
	GPS position quality	A higher number of lit bars indicates better GPS position accuracy.
	Vehicle type	The symbol displays the vehicle type used for route calculation.

4.3.5 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.
- Tap the screen to place the Cursor at the desired location. Now tap  to open the Cursor menu.

You can perform the following actions in Simple mode:

Button	Action
 Navigate To	Creates a new route with the Cursor as the destination. The previous route (if exists) is deleted.
 Add to Favorites	Saves the Cursor as a Favorite destination.
Info	Opens a screen with the name, address and coordinate information of the Cursor, and the list of POIs near it.

The following options are available in Advanced mode only:

Button	Action
 Set as Start	In the active route, uses the Cursor as the start point by replacing the current GPS position (available in Advanced mode only)
 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 (available in Advanced mode only)
 Continue	In the active route, uses the Cursor as the destination while keeping the previous destination as a via point (available in Advanced mode only)
 Routing Methods	Shows the different routes calculated by the available routing methods. Choose the one that suits your needs the best (available in Advanced mode only)
 Place Pin	Marks the map with a Pin at the Cursor (available in Advanced mode only)
 Save as POI	Saves the Cursor as a POI (available in Advanced mode only)
 Save as Camera	Saves the Cursor as a Road Safety Camera location (available in Advanced mode only) 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.

4.4 Clarion Mobile Map concepts


4.4.1 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.

Enabling Smart Zoom


Tap the map to let the map control buttons appear, and then tap  to enable Smart Zoom.


Fine-tuning Smart Zoom


Tap the map to let the map control buttons appear, and then tap and hold  to open the Smart Zoom Settings window. Modify the zoom limits of Smart Zoom if necessary.

4.4.2 Position markers

4.4.2.1 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, tap . 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

4.4.2.2 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, the  button appears. Tap it to move the map back to the GPS position and re-enable Track-up map orientation (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.

4.4.2.3 Selected location (Cursor)

If you select a location in the Find menu, or you tap the map, 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, even when it is in the background of a 3D map view.

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


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


You can also search for POIs around the Cursor.



Or you can save the location of the Cursor as:

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

4.4.2.4 Original position in the Cursor menu

When the Cursor menu is open, a special icon () shows the Cursor position the menu was opened with.

You can move and zoom the map, and you can set the Cursor to a different place. The usual Cursor () appears, and the buttons of the Cursor menu initiate actions for this new location.

To return to the original Cursor position, tap . The map jumps back to the position with which the Cursor menu was opened, and the  icon appears again.

4.4.3 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 depending on the illumination setting.

4.4.4 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.

4.4.5 Route calculation and recalculation

Clarion Mobile Map calculates the route based on your preferences:

- Route calculation method:
 - 1-Fast. 2-Short. 3-Economical. 4-Easy
- Vehicle types :
 - 1-Car. 2-Taxi. 3-Bus. 4-Emergency vehicles
- Road types
 - 1-Unpaved Roads. 2-Permit Needed.
 - 3-Freeways. 4-Toll Roads. 5-Charge Roads

6-Ferries. 7-Cross-border Planning. 8-Carpool (appears only when used in the USA)

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


For further information about Route Planning options, (see page 66).

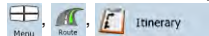
4.4.6 Itinerary

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





When you are on the Map screen, you can display the Itinerary in one of the following ways:

- Tap the area between the Turn preview and the Travel data fields where the symbol of the second next maneuver is displayed (for example ).
- In Advanced mode, tap the following buttons:







You have the following options on the Itinerary screen:

Button	Description
Any of the list items	Opens the map with the selected maneuver in the middle.
	Moves between pages for additional list items.

Button	Description
	<p>Changes the detail level of the Itinerary. The levels are as follows:</p> <ul style="list-style-type: none"> • Detailed Instructions: all intersections are listed • Itinerary: only significant intersections (the ones announced in voice guidance) are listed • Road list: the list of the roads used while navigating the route

When the map is open with a maneuver in the middle:

Button	Description
	Zooms in the map.
	Zooms out the map.
	Moves the map to show the previous or next maneuver.
	Opens a screen where you can avoid a part of the route starting from the selected maneuver.

4.4.7 Track Logs

Clarion Mobile Map can log the track that you drive (page 40).

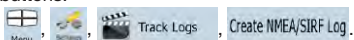
A Track Log is a recording of how your GPS position changed and it is independent of the route Clarion Mobile Map calculated.

Track Logs can be recorded, renamed, replayed, shown on the map, exported to a memory card in GPX format, and deleted. See page 59.

Independently of the normal track log, you can

instruct Clarion Mobile Map to record the native GPS data received from the GPS device. These logs are saved as separate text files on the memory card, and they cannot be shown or replayed in Clarion Mobile Map.

To turn on NMEA/SIRF log saving, tap the following buttons:



4.4.8 Route demonstration

A simulation drives you through the route, following the driving instructions (page 29). You can choose from a simulation at high speed or at normal driving speed.

You can use it, for example, to see which bridge Clarion Mobile Map planned for the route; if you do not want to take that bridge, you can avoid it.

Route demonstrations can be started from the Route menu by tapping the **Fly Over** (high speed simulation) or the **Simulate** (simulation at normal speed) button.

4.4.9 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.

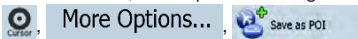
POI locations are marked on the map with special icons. POI icons are quite large so you can easily recognize the symbol. The icons are semi-transparent: they do not cover the streets and intersections behind them.

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, then tap the following buttons:



Managing POIs

You can select which POI groups to show and which ones to hide on the map, and from which zoom levels POI icons are visible. At the same place you can manage your saved POIs. A saved POI can be renamed, moved to a different POI group, its icon can be changed, or a phone number and additional information can be added to it. Tap the following buttons:




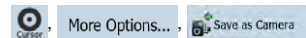
4.4.10 Road Safety Cameras

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 NP401 shipped with a built-in database of Road Safety Cameras?	No
Can you upload Road Safety Camera locations from navixtras.com?	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

Saving Road Safety Cameras

To save the location of a Road Safety Camera, place the Cursor () at the desired location, then tap the following buttons:



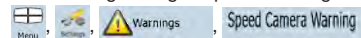
This button is not displayed when GPS position is not available or if you are in certain countries where Road Safety Camera warning is prohibited. Even if the button is available, you are responsible for checking whether it is legal to use this feature at your location.




Note!

Camera warning


The warning for Road Safety Cameras can be turned on in Warning Settings. Tap the following buttons:



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 in the secondary Turn Preview field (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.





4.4.10.1 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. Just tap the speed camera symbol displayed on the screen to stop the warning.</p> <p>Tap again to display the second route event with the possibility to open the Itinerary.</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.

4.4.10.2 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.

4.4.11 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. Tap the following buttons:



When you exceed the speed limit, a voice message is played using the selected voice guidance profile.

5. 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 (available in Advanced mode only)
- you can also plan a route independently of your current GPS position or even without GPS reception (available in Advanced mode only)

5.1 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 29).
- 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 29).
- Enter an address with ZIP code (page 34). 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 37)
- Use a saved location:
 1. a Favorite (page 35)
 2. a POI (page 35)

3. the History of previously set destinations and waypoints (page 36)







Tip!

If you are going to use a route later, save it before you start navigating. Tap the following buttons:



5.1.1 Selecting the Cursor as the destination

1. Locate your destination on the map: move and scale the map as needed (page 14).
2. Tap the location that you want to select as your destination. The Cursor  appears.
3. Tap  to open the Cursor menu.
4. The map appears with the selected point in the middle. Tap  (Simple mode) or  (Advanced mode) 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 (in Advanced mode only), 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.

5.1.2 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 34)

5.1.2.1 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, tap the button.



The procedure is explained starting from the Navigation menu.

1. Tap the following buttons: Find Address (Simple mode), or , (Advanced mode).
2. By default, Clarion Mobile Map proposes the country, state and city where you are. If needed, tap 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 tap to search for a city regardless of the state it is in.
3. If needed, change the city:
 - To select the city from the list of recently used ones, tap the button.




- To enter a new city:
 1. Tap the button with the name of the city, or if you have changed the country/state, tap <City Name>.
 2. Start entering the city name on the keyboard.
 3. Get to the list of search results:
 - After entering a couple of characters, the names that match the string appear in a list.
 - Tap Done to open the list of results before it appears automatically.
 4. Select the city from the list.
- 4. Enter the street name:
 - a) Tap <Street Name>.
 - b) Start entering the street name on the keyboard.
 - c) Get to the list of results:
 - After entering a couple of characters, the names that match the string appear in a list.
 - Tap Done to open the list of results before it appears automatically.
 - d) Select the street from the list.
- 5. Enter the house number:
 - a) Tap <House Number>.
 - b) Enter the house number on the keyboard. (To enter letters, tap Numbers and select an alphabetic keyboard layout. To enter symbols, tap 1/!.)
 - c) Tap Done to finish entering the address.
- 6. The map appears with the selected point in

the middle. Tap  **Navigate To** (Simple mode) or  **Set as Destination** (Advanced mode) from the Cursor menu. The route is then automatically calculated, and you can start navigating.

5.1.2.2 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.


The procedure is explained starting from the Navigation menu.

1. Tap the following buttons:  **Find Address** (Simple mode), or  **Find**,  **Advanced** (Advanced mode).

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

3. If needed, change the city:


- To select the city from the list of recently used ones, tap the  button.
- To enter a new city:

1. Tap the button with the name of the city, or if you have changed the country/state, tap  **<City Name>**.

2. Start entering the city name on the keyboard.


3. Get to the list of search results:

- After entering a couple of characters, the names that match the string appear in a list.

- Tap  **Done** to open the list of results before it appears automatically.

4. Select the city from the list.


4. Enter the street name:

a) Tap  **<Street Name>**.

b) Start entering the street name on the keyboard.


c) Get to the list of results:



- After entering a couple of characters, the names that match the string appear in a list.

- Tap  **Done** to open the list of results before it appears automatically.

d) Select the street from the list.



5. Enter the house number:

a) Tap  **<House Number>**.

b) Enter the house number on the keyboard. (To enter letters, tap  **Numbers** and select an alphabetic keyboard layout. To enter symbols, tap  **1/!**).

d) Tap  **Done** to finish entering the address.






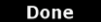
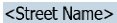
6. A list appears with the matching addresses. Tap the desired one.

7. The map appears with the selected point in the middle. Tap  **Navigate To** (Simple mode) or  **Set as Destination** (Advanced mode) from the Cursor menu. The route is then automatically calculated, and you can start navigating.

5.1.2.3 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:


The procedure is explained starting from the Navigation menu.

1. Tap the following buttons:  (Simple mode), or   (Advanced mode).
2. By default, Clarion Mobile Map proposes the country/state and city where you are. If needed, tap the button with the name of the country/state, and select a different one from the list.
3. If needed, change the city:
 - To select the city from the list of recently used ones, tap the  button.
 - To enter a new city:
 - a) Tap the button with the name of the city, or if you have changed the country/state, tap .
 - b) Start entering the city name on the keyboard.
 - c) Get to the list of search results:
 - After entering a couple of characters, the names that match the string appear in a list.
 - Tap  to open the list of results before it appears automatically.
 - d) Select the city from the list.
4. Enter the street name:
 - a) Tap .

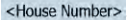
b) Start entering the street name on the keyboard.



c) Get to the list of results:

- After entering a couple of characters, the names that match the string appear in a list.
- Tap  to open the list of results before it appears automatically.

d) Instead of selecting one of the streets, tap .



5. Enter the house number:

a) Tap .

b) Enter the house number on the keyboard. (To enter letters, tap  and select an alphabetic keyboard layout. To enter symbols, tap .




c) Tap  to finish entering the address.

6. A list appears with the matching addresses. Tap the desired one.

7. The map appears with the selected point in the middle. Tap  (Simple mode) or  (Advanced mode) from the Cursor menu. The route is then automatically calculated, and you can start navigating.


5.1.2.4 Selecting an intersection as the destination

The procedure is explained starting from the Navigation menu.

1. Tap the following buttons:  (Simple mode), or   (Advanced mode).

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

3. If needed, change the city:

a) To select the city from the list of recently used ones, tap the  button.

b) To enter a new city:

- Tap the button with the name of the city, or if you have changed the country/state, tap **<City Name>**.

- 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.

- Tap **Done** to open the list of results before it appears automatically.

- Select the city from the list.

4. Enter the street name:

a) Tap **<Street Name>**.

b) Start entering the street name on the keyboard.

c) Get to the list of results:

- After entering a couple of characters, the names that match the string appear in a list.

- Tap **Done** to open the list of results before it appears automatically.



d) Select the street from the list.

5. Tap the **Intersection** button.

a) If only a few intersecting streets exist, their list appears immediately.

b) 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. Tap the desired intersecting street in the list.

7. The map appears with the selected point in the middle. Tap  (Simple mode) or  (Advanced mode) from the Cursor menu. The route is then automatically calculated, and you can start navigating.

5.1.2.5 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 towns 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. Tap the following buttons:  (Simple mode), or  ,  (Advanced mode).

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

3. If needed, change the city:



a) To select the city from the list of recently used ones, tap the  button.

b) To enter a new city:

- Tap the button with the name of the city, or if you have changed the country/state, tap **<City Name>**.

- Start entering the city name on the keyboard.
- Get to the list of search results:
 - 1) After entering a couple of characters, the names that match the string appear in a list.
 - 2) Tap **Done** to open the list of results before it appears automatically.
- Select the city from the list.




4 Tap the **City Center** button.

5 The map appears with the selected point in the middle. Tap  **Navigate To** (Simple mode) or  **Set as Destination** (Advanced mode) from the Cursor menu. The route is then automatically calculated, and you can start navigating.

5.1.2.6 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:

The procedure is explained starting from the Navigation menu.

1. Tap the following buttons:  **Find Address** (Simple mode), or  **Find**,  **Set Address** (Advanced mode).
2. By default, Clarion Mobile Map proposes the country/state and city where you are. If needed, tap the button with the name of the country/state, and select a different one from the list.
3. Tap the button with the name of the city, and enter the ZIP code:
 - a) Start entering the ZIP code on the keyboard.
 - b) Get to the list of results:

- After entering a couple of numbers, matching results appear in a list.
- Tap **Done** to open the list of results before it appears automatically.

c) Pick the city from the list.

4 Enter the street name:

a) Tap **<Street Name>**.

b) Start entering the street name on the keyboard.

c) Get to the list of results:

- After entering a couple of characters, the names that match the string appear in a list.
- Tap **Done** to open the list of results before it appears automatically.



d) Select the street from the list.

5. Enter the house number:

a) Tap **<House Number>**.

b) Enter the house number on the keyboard. (To enter letters, tap **Numbers** and select an alphabetic keyboard layout. To enter symbols, tap **1/!**).

c) Tap **Done** to finish entering the address.

6. The map appears with the selected point in the middle. Tap  **Navigate To** (Simple mode) or  **Set as Destination** (Advanced mode) from the Cursor menu. The route is then automatically calculated, and you can start navigating.





5.1.2.7 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, tap the **Done** button after a couple of letters; Clarion Mobile Map lists the items that contain the specified letters.
- You can speed up finding an intersection:
 - 1). Search first for the street with a less common or less usual name; fewer letters are enough to find it.
 - 2). 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.

5.1.3 Selecting the destination from your Favorites

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








The procedure is explained starting from the Navigation menu.

1. Tap the following buttons:  (Simple mode) or  (Advanced mode).
2. Tap the Favorite that you want to set as your destination.
3. The map appears with the selected point in the middle. Tap  (Simple mode) or  (Advanced mode) from the Cursor menu. The route is then automatically calculated, and you can start navigating.

5.1.4 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.

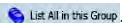
The procedure is explained starting from the Navigation menu.

1. Tap the following buttons:  (Simple mode), or  (Advanced mode).
2. Select the area around which the POI should be searched for:
 - : The POI will be searched for around a given address.
 - : The map appears with the Cursor in the middle. Modify the location of the Cursor if necessary, then tap **OK**. The POI will be searched for around the given location.
 - : 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, tap **Search** and use the keyboard to enter a part of the name.
- To list all POIs in a given POI group, tap



4. [optional] When finally the list of results appear, you can sort the list:

- **Order by Name**: sort the list alphabetically (available when you search around a single location)
- **Order by Distance**: sort the list by the distance from your current position in a straight line (available when you search around a single location)
- **Order by Distance**: sort the list by the distance to drive on route from your current position (available when you search along the active route)
- **Order by Detour**: sort the list by the size of the needed detour (available when you search along the active route)

5. Tap the desired POI in the list.

6. Review the details of the selected item and tap **Select**.

7. The map appears with the selected point in the middle. Tap (Simple mode) or

(Advanced mode) from the Cursor menu. The route is then automatically calculated, and you can start navigating.

5.1.5 Selecting the destination with saved POI search criteria

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

The procedure is explained starting from the Navigation menu.

1. Tap the following buttons: (Simple mode), or (Advanced mode).

2. Tap **Saved Search Criteria**.

3. Select one of the saved criteria, and the list of matching POIs appears.

4. Tap the desired POI in the list.

5. The map appears with the selected point in the middle. Tap (Simple mode) or




(Advanced mode) from the Cursor menu. The route is then automatically calculated, and you can start navigating.

5.1.6 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. Tap the following buttons: (Simple mode), or (Advanced mode).

2. If necessary, move between pages with  to see earlier destinations.
3. Tap the desired item.
4. The map appears with the selected point in the middle. Tap  **Navigate To** (Simple mode) or  **Set as Destination** (Advanced mode) from the Cursor menu. The route is then automatically calculated, and you can start navigating.

5.1.7 Selecting the destination by entering its coordinates

This feature is available in Advanced mode only.


The procedure is explained starting from the Navigation menu.

1. Tap the following buttons:  **Find Coordinate**.
2. [optional] Tap  **Coordinate Display Format** to change the format of the displayed coordinates.
3. Tap 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. Tap **Done**.
6. The map appears with the selected point in the middle. Tap  **Navigate To** (Simple mode) or  **Set as Destination** (Advanced mode) from the Cursor menu. The route is then automatically calculated, and you can start navigating.

5.2 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).

This feature is available in Advanced mode only.

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. Tap  **Insert as Via** 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.

You have the following options:

Button	Action
	The selected point moves up in the list (becomes a via point to be reached earlier). Tap this button repeatedly, and the point becomes the start point of the route (when routing from a given location) or the first via point to reach (when routing from the GPS position).
	The selected point moves down in the list (becomes a via point to be reached later). Tap this button repeatedly, and the point becomes the final destination of the route.
	Tap this button to reverse the route. The start point becomes the destination, the destination becomes the start point, and all via points are to be reached in the opposite order than before.
Optimize	Tap 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.
Remove	Tap this button to remove the selected point from the route. The route remains as it was before adding the new point.


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

5.3 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.

This feature is available in Advanced mode only.

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. Tap **More Options...** to open the full Cursor menu with the additional functions.
4. Tap  **Continue** to add the point as a new final destination demoting the previous one to the last intermediate destination.
5. [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.






5.4 Editing the route

This feature is available in Advanced mode only.

Tap the following buttons:    **Edit Route**.

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.

Tap one of the route points in the list. You have the following options:







Button	Action
	The Action see Page38
	The Action see Page38
	The Action see Page38
	The Action see Page38
	The Action see Page38

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

5.5 Viewing the entire route on the map (Fit-to-Screen)

The map can be moved and scaled to show the whole line of the route. You do not need to manipulate the map manually. The Plan on Map feature does it for you.

In **Advanced mode** you have the following options to enter Plan on Map:




- Via the Find menu: tap  , **Plan on Map**.
- Via the Route Information screen: tap  ,  **Plan on Map**.
- Via the Route Information screen using a shortcut: tap  **Plan on Map**.

In **Simple mode** the last option is available only.

5.6 Watching the simulation of the route

This feature is available in **Advanced mode** only.

The procedure is explained starting from the Map screen.

1. Tap the following buttons:  .
2. The Route menu appears. There are two ways of running the route simulation:
 - Tap **Fly Over** to run the simulation at high speed to give you a quick overview of the route.
 - Tap **Simulate** to run the simulation at normal speed and with voice guidance instructions announced. This option is for demonstration purposes, or for checking difficult parts of the route in advance.
3. The simulation can be aborted any time by tapping .

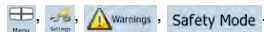
5.7 Enabling Safety Mode

This feature is available in **Advanced mode** only.

Safety Mode disables the touch screen above 10 km/h (6 mph) to keep your attention on the road. While driving, you will not be able to set a new destination or to change settings. The only screen control that remains enabled is the gesture that puts you back on the Map screen.

The procedure is explained starting from the Map screen.


Tap the following buttons:




5.8 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.


5.9 Deleting the next via point from the route

The easiest way to delete the upcoming route point (the next via point) is to open the Route Information screen by tapping the Turn Preview field  on the Map screen, and then tapping **Skip Next Via**.

Alternatively, you can do it through the Navigation menu:  **Skip Next Via**.

5.10 Deleting the active route

The easiest way to delete the active route in both Simple mode and Advanced mode is to open the Route Information screen by tapping the Turn Preview field  on the Map screen, and then tapping **Delete Route**.

In Advanced mode, you have another option. Tap the following buttons:  **Delete Route**.



Note!

If via points exist in the active route, you cannot delete the route immediately on the Route Information screen. Tap **Skip Next Via** repeatedly until all via points disappear and the **Delete Route** button appears. Tap it to cancel the whole route.

5.11 Using Track Logs

Clarion Mobile Map can record the track (how your GPS position changed) that you drive.





Tip! You do not need to select a destination and create a route for this; you can also record your driving path while cruising.

This feature is available in Advanced mode only.




The procedure is explained starting from the Map screen.

Recording the traveled path (creating a Track Log)


1. Start driving.
2. Tap the following buttons:  **Track Logs**.
3. Start the recording: tap the **Record** button.
4. You return to the map and you can continue driving.
5. Repeat the above steps, then tap **Stop Recording** later to stop the recording. Clarion Mobile Map labels the Track Log with a time stamp.

(As an alternative, you can tap the  button in the Quick menu to start, and later to stop the Track Log recording.)

Simulating a Track Log on the map

1. Tap the following buttons:  **Track Logs**.
2. Locate the desired Track Log, and then tap the  button next to it.
3. The map returns, and the Track Log simulation (a life-like replay) begins.
4. You can stop the replay any time by tapping the  button.




Changing the color of a Track Log

1. Tap the following buttons:  **Track Logs**.
2. Tap the desired Track Log and then tap one of the color buttons.

5.12 Saving the active route

This feature is available in Advanced mode only.

The procedure is explained starting from the Map screen.

1. Tap the following buttons:   .
2. Enter a name for the saved route, and then tap **Done**.




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.

5.13 Loading a saved route

This feature is available in Advanced mode only.








The procedure is explained starting from the Map screen.

1. Tap the following buttons:   .
2. Tap the route you wish to navigate.
3. In the very likely case when the start position of the saved route is different from the current GPS position, you need to confirm whether you want to stop navigating from the current GPS position to use the start point of the loaded route.
 - If you choose this option, automatic off-route recalculation will be disabled.
 - If you choose 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.

6. Reference Guide (Advanced mode)

On the following pages you will find the description of the different menu screens of Clarion Mobile Map in Advanced mode. In Simple mode, these functions work the same way, but only a few of them are available.

The Navigation menu: Clarion Mobile Map starts with the Navigation menu. From there you can access the following screens:

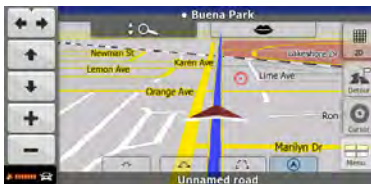
Screen	Button	Description
Map		This button opens the Map screen.
Find		Selecting the destination (for example an address or a POI) or using the search engine of Clarion Mobile Map for any other reason (for example to look for the phone number of a POI).
Route		Managing the active route (obtaining information about it, changing or deleting it or parts of it) or planning a route without GPS reception.
Manage		Managing user data, such as saved locations (POIs, Favorites, Pins, and History items), Saved Routes, and Track Logs.
Settings		Managing the behavior of Clarion Mobile Map, for example the map layout during navigation, the used languages or the warnings.
Bluetooth		This button opens the phone application. You can pair your Clarion NP401 with your cell phone as a hands-free device.
Audio Visual		This button opens the Audio Visual screen. You can operate the Audio Visual functions of your Clarion NP401.

6.1 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.















During navigation, the screen shows route information and trip data (left screenshot), but when you tap the map, additional buttons and controls appear for a few seconds (right screenshot). Most parts of the screen behave as buttons.

Symbol	Name	Action
	Turn Preview, that is, the next route event	Opens the Route Information screen
	Second upcoming route event	Opens the Itinerary
	Trip data	Opens the Trip Information screen
	GPS position quality	Opens the Quick menu
	Vehicle used in route calculation	Opens the Quick menu
Top row	Next street or Next city	Additional buttons and controls appear for a few seconds
Bottom row	Current street and house numbers on left and right	Additional buttons and controls appear for a few seconds
	Map view modes	Switches between 2D and 3D map modes: <ul style="list-style-type: none"> • 2D North-up • 2D rotated • 3D rotated
	Menu	Opens the Navigation menu
	Detour	Opens the Detour screen, offering two ways of modifying the route: <ul style="list-style-type: none"> • the list of Saved Search Criteria • a button to avoid parts of the route

Symbol	Name	Action
	Position menu (appears when navigating a route)	Opens the Position menu
	Cursor menu (appears when there is no GPS position or the Cursor is not at the current GPS position)	Opens the Cursor menu
	Open/Close Map control buttons	<p>Tap this button to show or hide the following map control buttons:</p> <ul style="list-style-type: none"> • Zoom in/out • Rotate left/right (3D map only) • Tilt up/down (3D map only) • Zoom preset buttons (2D map only) • Tilt and zoom preset buttons (3D map only) • Return to GPS position button • Smart Zoom button
	Rotate left, rotate right	Rotates the 3D map left or right
	Tilt up, tilt down	Tilts the 3D map
	Zoom in, zoom out	Scales the map
	Return to GPS position (appears when GPS position is available and you have moved the map)	Tap this button to move the map back to the current GPS position. If the map has been rotated, automatic map rotation is also re-enabled.
	Enable Smart Zoom (replaces the previous button if there is no GPS position or the map has not been moved)	<p><u>Tap this button once</u> to enable Smart Zoom.</p> <p><u>Tap&hold the button</u> to set the zoom limits of Smart Zoom.</p>

Symbol	Name	Action
	Zoom preset buttons (available in Advanced mode only)	<u>Tap one of the preset buttons</u> to set the zoom level to a fix, predefined value. Smart Zoom is disabled. These buttons are available in 2D mode. <u>Tap&hold any of the buttons</u> to set its value to the current zoom level, or to reset it to its original value.
	Tilt preset buttons (available in Advanced mode only)	<u>Tap one of the preset buttons</u> to set the tilt and zoom levels to fix, predefined values. Smart Zoom is disabled. These buttons are available in 3D mode. <u>Tap&hold any of the buttons</u> to set its value to the current tilt and zoom levels, or to reset it to its original value.
	Current GPS position (on nearest road)	n/a
	Cursor (selected map location)	n/a
	Lane information	n/a
	Signpost information	n/a
Blue line	Active route	n/a
	Map scale (2D map only)	n/a
	Speed limit	n/a
 End Call	Phone call in progress	This button is displayed only during a phone call. Tap the button to hang up.
	Repeat Voice Instruction	Tap this button to repeat the current voice instruction. The distance is updated to always describe the current situation.

6.1.1 Icons on the map

There are several status icons on the map. Most of them also function as a button. The information they provide is as follows:

- GPS position quality
- Vehicle type used for route calculation
- Sound status (muted or enabled)
- Track log recording status

- Bluetooth connection and communication status

6.1.1.1 GPS position quality and Vehicle type indicator

This area is a multiple status indicator, and also acts as a button that opens the Quick menu.

GPS reception quality shows the current accuracy of the position information.

Icon	Description
	Clarion Mobile Map has no connection to the GPS receiver: GPS navigation is not possible.
	Devices with a built-in GPS receiver are permanently connected. On such devices, the icon does not appear in normal circumstances.
	Clarion Mobile Map is connected to the GPS receiver, but the signal is too weak and the receiver cannot determine the GPS position. GPS navigation is not possible.
	Only a few satellites are received. Position information is available, but elevation (altitude) cannot be calculated.
	GPS navigation is possible, but the position error may be significant.
	Altitude information is available, the position is a 3D position. GPS navigation is possible.

The remaining part of the field shows the vehicle type used for route calculation.


Icon	Vehicle type
	Car
	Taxi
	Bus
	Emergency vehicles

6.1.1.2 Status indicator strip

This is a multiple status indicator. It indicates the following status information on a single strip:

Icon	color	Description
	White	The sound output of Clarion Mobile Map is muted.
	White	The sound output of Clarion Mobile Map is enabled.
	Redblinking	Clarion Mobile Map records a Track log when GPS position is available.
	Red	Track log recording is disabled.
	Gray	The Bluetooth radio is switched off.
	Purple	The Bluetooth radio is turned on, but no telephone is connected.
	Red	There is an error in the Bluetooth connection.
	Green	Clarion Mobile Map is connected to a telephone as a handsfree set via Bluetooth.
	Blue	A phone call is in progress over the Bluetooth

6.1.1.3 Phone call in progress

When connected to a cell phone as a hands-free device with a phone call in progress, the  button appears on the Map screen. Tap this button to hang up the call.

6.1.1.4 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.

Icon	Description
	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 38.

6.1.2 Objects on the map

6.1.2.1 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 63](#)).

6.1.2.2 3D object types

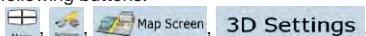
Clarion Mobile Map supports the following 3D object types:

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.

Type	Description
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.





Type	Description
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, tap the following buttons:




6.1.2.3 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 tapping the map.
	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.
	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.

Symbol	Name	Description
	Streets and roads that are excluded from the navigation	You can choose whether you want to use or avoid certain road types (page 65). 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.
	Start point	<p>The first point of the route.</p> <p>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.</p> <p>When you are using a saved route, Clarion Mobile Map asks you if you want to use your GPS position or the first point in the saved route as the start point.</p> <p>You can also modify the start point in the Cursor menu. If you do so, automatic off-route recalculation needs to be turned off to keep the selected point as the start point.</p> <p>If automatic off-route recalculation is disabled for any of the above, tapping the  icon in the Turn Preview field not only initiates route recalculation from the current GPS position, but it will re-enable the automatic off-route recalculation as well.</p>

6.1.3 Detour menu

This screen contains quick detour possibilities during navigation. It can be opened directly from the Map screen by tapping .

You have the following options:


- On the main part of the screen you can see the first page of Saved Search Criteria. Select any of the criteria to quickly receive the list of nearest matching POIs, and instantly plan a new route to the desired one, or insert it as a via point in your active route.
- In Advanced mode more buttons appear at the bottom:
 - 1) **Avoid** : If you want to bypass a part of the route starting from the next intersection, tap

this button, and select a distance to bypass.










- 2) **Delete Avoids** : If you have used the above function before, tap this button to clear the restrictions from the map.

6.1.4 Cursor menu


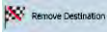

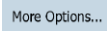
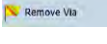

As soon as you select one point in the Find menu, the map appears with the Cursor menu, a menu with possible actions for the selected point.


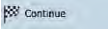
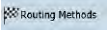
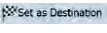
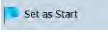

Alternatively when you tap the map, control buttons appear. Tap again to place the Cursor, a radiating red dot. Now tap , and the Cursor menu opens with a list of options.


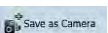
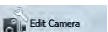
You can perform the following actions in Simple mode:

Button	Description
	Closes the Cursor menu, and returns to the previous screen.
	Zooms out the map.
	Zooms in the map.
	With the Cursor menu open, you can still move or scale the map, and tap the map anywhere to place the Cursor to a new location, but when you use this button, the Cursor jumps back to the place where it was at the time when you opened the Cursor menu.
	Displayed at the Cursor if it is at the same location with which the Cursor menu was opened.
	Displayed at the Cursor if it has been relocated since the Cursor menu was opened.
	Creates a new route with the Cursor as the destination. The previous route (if exists) is deleted.
	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.
	Opens a new screen with the address and coordinate of the Cursor, and the list of nearby POIs.

The following options are available in Advanced mode only:

Button	Description
	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.
	Opens the full-screen Cursor menu with all the possible options.
	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 Cursor becomes the start point of the route. This means that the route is not started from the current GPS position, and Automatic Off-route Recalculation needs to be turned off to keep the selected point as the start point.
	If the Cursor is at or near the selected start point, this button replaces the previous one and deletes the start point from the route. The current GPS position is used again as the start point, and Automatic Off-route Recalculation is re-enabled.

Button	Description
	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.
	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). 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.
	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.




6.1.5 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.

To open the Position menu, tap .

6.1.6 Route Information screen

The Route Information screen has all the data and some of the functions you need while you navigate. There are two ways to open this screen:

- It can be opened directly from the Map screen by tapping the Turn Preview field .
- In Advanced mode, from the Navigation menu tap the following buttons:   Route Info.

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



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

You have the following data and functions on this screen:

Name	Description	Function
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.	Tap this field to change the content of all data fields to via point information.
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.	Tap this field to change the content of all data fields to via point information.
Distance Left	Shows the distance you need to travel on the route before reaching your final destination.	Tap this field to change the content of all data fields to via point information.
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.	Tap this field to change the content of all data fields to via point information.
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.	Tap this field to change the content of all data fields to via point information.

Name	Description	Function
Warning icons	In these square fields graphical symbols are displayed in case warnings are attached to the planned route. These are warnings, so icons always show information for the whole route, even if the data fields display values from your current position to a via point only.	Tap any of the icons for an explanation.
Settings		Opens the Route Planning options screen from theSettings menu.
Plan on Map		Opens the map screen designed for route planning.
Skip Next Via	Appears only if at least one via point exists.	Deletes the next via point from the route.
Delete Route	Appears only if there are no via points in the route.	Deletes the active route.

6.1.7 Trip Information screen





The Trip Information screen has both route and travel data you might need during your journey. It can be opened directly from the Map screen by

tapping the Trip Data field **4:04**.


The fields on this screen are continuously updated while you keep the screen open.





When you open the screen, all route data fields contain information about reaching your final destination. Tap **Next Via Point** and the fields concerning your route display data for the next via point. Tap the button repeatedly to toggle between the two options.

You have the following data and functions on this screen:


Name	Description	Function
 or 	Shows whether the route data fields show information about the final destination (checked flag) or about the next via point (yellow flag) .	
Field next to the flag	Shows the name or number of the current street or road.	
Turn Preview	Shows the type and distance of the next route event.	

Name	Description	Function
Compass	Shows the current heading.	Tap this field to show it on the map screen in one of the Trip Data fields.
Speedometer	Shows the current speed both graphically and as a number.	Tap this field to show it on the map screen in one of the Trip Data fields.
Distance Remaining	Shows the distance you need to travel on the route before reaching your final destination.	Tap this field to show it on the map screen in one of the Trip Data fields.
Time Remaining	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.	Tap this field to show it on the map screen in one of the Trip Data fields.
Arrival Time	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.	Tap this field to show it on the map screen in one of the Trip Data fields.
GPS Time	Shows the current time corrected with time zone offset. The accurate time comes from the GPS satellites, and the time zone information comes from the map or it can be set manually in Regional settings.	Tap this field to show it on the map screen in one of the Trip Data fields.
Altitude	Shows the elevation if it is provided by the GPS receiver.	Tap this field to show it on the map screen in one of the Trip Data fields.
Speed Limit	Shows the speed limit of the current road if the map contains it.	Tap this field to show it on the map screen in one of the Trip Data fields.
Trip Computer		Opens a new screen with three resettable Trip Computers.
Next Via Point		Tap this button to change the content of the Route Data fields to show information about the next via point.
Destination	If you tap the previous button, this one replaces it.	Tap this button and the Route Data fields show information about the final destination again.

Most of the fields on this screen have a  symbol next to them. This symbol shows whether the field it is attached to is shown on the map as a Trip Data. It also shows the position of the data as follows:

Symbol	Description
	This value is not shown on the map screen.
	This value appears on the map screen in the Trip Data area. This is the value at the top.
	This value appears on the map screen in the Trip Data area. This is the value in the middle.
	This value appears on the map screen in the Trip Data area. This is the value at the bottom.





6.1.7.1 Trip Computer screen

The Trip Computer screen provides collected trip data. It can be opened from the Trip Information screen by tapping .


The fields on this screen are continuously updated while you keep the screen open.

You can switch between the trips, pause then resume them, or reset their data.

You have the following functions on this screen:










Button	Description
	Cycles through all trips.
	Pauses the trip currently shown on the screen. Values on the screen stop changing.
	This button replaces the previous one if it has been activated. Tap it to resume collecting trip data.
	Resets all counters of the currently shown trip. Collecting trip data is restarted only when Clarion Mobile Map receives a position from the GPS.

6.1.8 Quick menu

The Quick menu is a selection of controls that are frequently needed during navigation. It can be opened directly from the Map screen by tapping .










If you tap any of the switches in the Quick menu except for the Vehicle type, the Map screen immediately returns. A switch is on if its lamp is lit. The Vehicle type button is different. It is a multi-value button. It opens a list of available choices, and the symbol of the selected vehicle is shown on the button.

Button	Main function (single tap)	Function (tap and hold)
	Adjusts the sound volume of the device. All sounds of the application are affected.	n/a
	If you only adjust the volume, you need to use this button to return to the Map screen.	Opens the Navigation menu.
	Mutes all sounds of Clarion Mobile Map.	Opens Sound settings.
	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 later.	Opens Color Profiles settings.
	3D buildings can be displayed on the map. Use this switch to suppress them temporarily. Please note that 3D landmarks are displayed regardless of this button wherever they are available.	Opens 3D Settings.
	Tap this button and select the Vehicle type to be used for route calculation. Otherwise it is selected in Route Planning options in Settings (page 64). Changing the Vehicle type triggers an automatic route recalculation.	Opens Route Planning options.
	Turns track log recording on or off otherwise controlled on the Manage Track Logs screen.	Opens Manage Track Logs.
	Opens the GPS Data screen with satellite information, data coming from the GPS receiver, and a shortcut to the GPS Settings screen if needed (GPS receiver detection is automatic).	n/a
	This button opens the phone application. You can pair your Clarion NP401 with your cell phone as a hands-free device.	n/a

6.1.9 GPS Data screen

Tap the following buttons: , and then  to open the GPS Data screen and to see the status of GPS reception.









Icon	Color	Name	Description
	Green	GPS position quality indicator	Clarion Mobile Map has a connection to the GPS receiver and GPS position information is available in 3D: Clarion Mobile Map can calculate both your horizontal and vertical GPS position.
	Yellow		Clarion Mobile Map has a connection to the GPS receiver and GPS position information is available in 2D: only the horizontal position is calculated, Clarion Mobile Map cannot calculate your vertical GPS position.
	Gray		Clarion Mobile Map has a connection to the GPS receiver but GPS position information is not available.
	Red		Clarion Mobile Map has no connection to the GPS receiver. Since the device has a built-in GPS receiver, this status should not appear under normal circumstances.
	Green, blinking	GPS connection quality indicator	Clarion Mobile Map is connected to the GPS receiver.
	Yellow, blinking		Clarion Mobile Map has no connection to the GPS receiver but it is still trying to establish a connection.
	Red, blinking		Clarion Mobile Map has no connection to the GPS receiver and is not trying to establish a connection.



Icon	Color	Name	Description
		Sky view circle	The virtual sky shows the visible part of the sky above you, with your position as the center. The satellites are shown at their current positions. The GPS receives data from both the green and yellow satellites. Signals from the yellow satellites are only received, while green ones are used by the GPS receiver to calculate your current location.
n/a		Coordinates	Your current GPS position in WGS84 format.
n/a		Status bar for the satellites	Dark bars are for the yellow and lit bars are for the green satellites. The more satellites your GPS tracks (the green ones), the better is your calculated position.







6.2 Find menu

Select the destination of your route. Tap the following buttons:  

Button	Description	Reference
	If you know at least a part of the address, this is the quickest way to find the location.	page 29
	You can select your destination from the thousands of POIs included with Clarion Mobile Map or from the ones you have previously created.	page 35
	The destinations that you have already entered in Clarion Mobile Map are available in the History list.	page 36
	You can select your destination by entering its coordinates.	page 36
	You can select as your destination a location that you have already saved as a Favorite.	page 35
	Opens a special 2D map screen optimized for route planning. Only the Zoom in and Zoom out buttons and the route modification buttons of the Cursor menu appear.	






6.3 Route menu



Save, load and edit your routes. Tap the following buttons:  

Button	Description	Reference
 Route Info	Opens a screen with useful route data.	page 39
 Itinerary	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 24
 Edit Route	You can modify the route: remove route points or change their order.	page 38
 Delete Route	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 40
 Save Route	You can save the active route for later use.	page 40
 Load Route	You can load a previously saved route for navigation.	page 41
Settings	Opens the Route settings screen with controls to modify the vehicle, the road types used for route calculation, or the route calculation method.	page 66
Fly Over	You can run a demonstration of the route at high speed.	page 39
Simulate	You can run a demonstration of the route at normal speed.	page 39

6.4 Manage menu

You can manage the content that Clarion Mobile Map stores. Tap the following buttons:  .





Button	Description	Reference
 Saved Routes	Renaming or deleting saved routes	page 60
 History	Deleting History items	page 60
 Track Logs	Recording, simulating, renaming or deleting track logs, assigning color to them to be shown on the map	page 60
 Favorites	Renaming or deleting Favorites	page 61
 POI	Creating, updating or deleting POIs Creating, updating or deleting POI groups Modifying POI visibility settings	page 61

Button	Description	Reference
	Creating, renaming or deleting Saved Search Criteria	page 62
	You can manage the data you have saved (e.g. POIs, Favorites or History) and the settings you have made in the program.	page 62

6.4.1 Manage Saved Routes

You can manage the previously saved routes. Tap the following buttons:






Button	Description
	Opens the selected route for editing.
	Deletes the selected route.
	Clears the list of saved routes.
	Moves between pages for additional list items.

6.4.2 Manage History

You can manage the list of locations you used lately. Tap the following buttons:








Button	Description
	Deletes the selected item in the History.
	Deletes the entire History.
	Moves between pages for additional list items.



6.4.3 Manage Track Logs



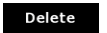

You can record Track Logs, then play them back, display them on the map, and view their details. Tap the following buttons:



Button	Description
	Starts recording the track that you drive. (You can also start recording a track log in the Quick menu.)
	Stops the ongoing Track Log recording. (You can also stop track log recording in the Quick menu.)
	Shows the details of the selected Track Log.
	Starts a simulated playback of the selected Track Log on the map.
	Moves between pages for additional list items.

When track log details are shown:

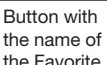

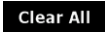

Button	Description
	Opens a keyboard screen to let you rename the Track Log.
	Tap this button to hide the Track Log on the map. No color will be assigned to the Track Log.

Button	Description
	Tap one of the colored buttons to assign a color to the Track Log. The Track Log will be shown on the map with this color.
	The map returns with the Track Log. The map is scaled to show the whole Track Log.
	Deletes the selected Track Log.
	Saves the Track Log on the inserted memory card in GPX format.

6.4.4 Manage Favorites

You can manage the list of your Favorites. Tap the following buttons:

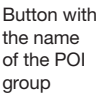
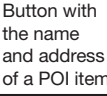











Button	Description
	Opens the selected Favorite for editing.
	Deletes the selected item in the list of Favorites.
	Clears the list of Favorites.
	Moves between pages for additional list items.


6.4.5 Manage POIs





You can manage your POIs, and set POI visibility for both your POIs and the ones that came with the product. Tap the following buttons:





Button / Icon	Description
	Opens the list of the subgroups of this POI group. The new list behaves the same as this one.
	Opens the selected POI for editing. Only the POIs you have created appear in this list.
	Opens the selected POI group for editing.
	Tap to filter the list to contain only the POIs that you saved.
	Tap to see all POIs in the list.
	Creates a new POI group at the given group level.
	Moves between pages for additional list items.
	This POI group is not shown on the map.
	This POI group and all its subgroups are shown on the map.
	This POI group and some of its subgroups are shown on the map.
	This POI group contains POIs that you saved.

When a POI group is open for editing:

Button	Description
	Items in the POI group will not be shown on the map.

Button	Description
	The distance buttons set the zoom level from which the items in the POI group will be shown on the map.
	
	Subgroups under the edited POI group will inherit the visibility settings of the POI group.
Button with the icon of the POI group	Tap this button to select a new icon for the POI group.
	Deletes the edited POI group. You are only allowed to remove POI groups that you have created.




When a POI item is open for editing:

Button	Description
Button with the name of the POI	Tap this button to rename the POI.
Button with the icon of the POI	Tap this button to select a new icon for the POI.
	Tap this button to modify the location of the POI. Select a new location on the map and tap Select to relocate the POI.
	Tap this button to enter a telephone number for the POI.

6.4.7 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. Tap the following buttons:




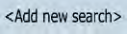








Button	Description
	Tap this button to enter additional information for the POI.
	Tap this button to delete the selected POI.
	Tap this button to move the POI to another POI group or subgroup.

6.4.6 Manage Saved Search Criteria

You can manage the list of search criteria previously saved to easily find frequently searched POI types. Tap the following buttons:



Button	Description
Button with the name of the Saved Search Criteria	Tap to rename the saved query.
	Deletes the selected item in the list.
	Deletes the entire list.
	Moves between pages for additional list items.
	Tap to save a new search criteria. Similar to how you search for a POI, select the search reference first, then select the POI group or subgroup to search in.

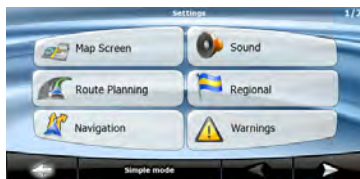
Button	Description
 Remove Pins	Map locations can be marked with Pins using the  Place Pin button in the Cursor menu. Tap this button to remove all your Pins from the map.
 Backup User Data	All user data and the current settings will be saved on the inserted memory card. There is always one backup file. If you perform a backup later, the previous backup will be overwritten with the new information.
 Restore User Data	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.
 Delete User Data	All user data will be deleted, and settings will return to their factory defaults. The application needs to restart.
 Reset All Settings	All settings will return to their factory defaults, but no user data will be deleted. The application needs to restart.






6.5 Settings menu







You can configure the program settings, and modify the behavior of Clarion Mobile Map. Tap the following buttons:



The Settings menu has two pages of submenus. Tap  to access the other options.



Button	Description	Reference
 Map Screen	You can fine-tune the appearance and content of the Map screen.	page 64
 Sound	You can adjust the sounds of Clarion Mobile Map.	page 65
 Route Planning	These settings determine how routes will be calculated.	page 66
 Regional	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 67
 Navigation	You can control how Clarion Mobile Map behaves during navigation.	page 68

Button	Description	Reference
	You can enable some useful warnings, and disable the touch screen in a moving vehicle with Safety Mode.	page 69
	You can modify the look and behavior of the Menu screens.	page 70
	You can fine-tune device related settings in this menu.	page 71
	You can set up automatic Track Log saving and fine-tune related settings.	page 71
	This screen has no navigation feature. It merely provides information about the maps and licenses included with your navigation system.	
	You can switch to Simple mode. In Simple mode only a few of the above settings are available. The rest of the settings are set to values that are optimal for typical use.	page 11

6.5.1 Map Screen settings

You can fine-tune the appearance and content of the Map screen. Tap the following buttons:



Button	Description
3D Settings	<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"> • Landmarks: Landmarks are 3D artistic or block representations of prominent or well-known objects. 3D landmarks are only available in selected cities and countries. • Elevated Roads: Complex intersections and vertically isolated roads (such as overpasses or underground tunnels) are displayed in 3D. • Building Visibility: 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. • Terrain Detail Level: 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.
Color Profiles	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.

Button	Description
Elevation on 2D Map	2D maps can also display 3D information. These top-down maps can display elevation by colors and shading.
Street Names During Navigation	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.
Lane Information	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 at the top or at the bottom of the map.
Interrupt AV	When Clarion Mobile Map is working in the background, the map can be displayed on the screen when approaching a maneuver.

6.5.2 Sound settings

You can adjust the sounds of Clarion Mobile Map. Tap the following buttons:




Button	Description
Master Volume	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.
Voice Guidance Volume	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	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.
Dynamic Volume	When driving at high speed, the noise in the car may be too loud to clearly hear the voice guidance and other sounds. Using Dynamic Volume you can instruct Clarion Mobile Map to increase the volume when your speed exceeds a certain minimum, and reach its highest volume at the given maximum speed.
Trigger Tone	A special sound played before voice instructions.

6.5.3 Route Planning options

These settings determine how routes will be calculated. Tap the following buttons:



Button	Description
Vehicle	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.
Road Types Used for Route Planning	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.
Route Calculation Method	You can choose from different route types. The routing method can be changed temporarily while creating the route: when the destination is selected, tap  in the Cursor menu.

Road Types Used for Route Planning:

Type	Description
Freeways	You might need to avoid freeways when you are driving a slow car or you are towing another vehicle.
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.
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.
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.
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.

Type	Description
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.
Carpool/HOV	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.

6.5.4 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. Tap the following buttons:



Button	Description
Program Language	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.
Voice Profile	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. Tap any of these to hear a sample voice prompt. Just tap OK when you have selected the new spoken language.
Units	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.

Button	Description
Set Date & Time Format	You can set the date and time format. Various international formats are available.
Time and Time Zone Settings	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
Auto Time Correction to GPS	Use this feature to synchronize the clock of your device to the highly accurate time provided by the GPS receiver.
Use Auto Time Zone	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	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.
Compare GPS and device times	The current time of the GPS receiver and the device clock are displayed. Please note that the GPS clock is only available with GPS reception. This allows you to check whether any correction is needed.

6.5.5 Navigation settings

You can control how Clarion Mobile Map behaves during navigation. Tap the following buttons:



Button	Description
Keep Position on Road	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.
Restore Lock-to-Position	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.

Button	Description
Off-route Recalculation	<p>This switch tells Clarion Mobile Map whether to automatically recalculate the route when you deviate from it. If this feature is turned off, you need to initiate route recalculation manually otherwise navigation will be stopped until you return to the originally recommended route.</p> <p>Setting another point than the current GPS position as the start point of the active route will automatically disable this feature.</p>
Automatic Overview	<p>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:</p> <ul style="list-style-type: none"> • Turn Distance for Overview: The map view will be switched to Overview mode if the next route event is at least as far as this value. • Default Zoom Level: 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.

6.5.6 Warning settings

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

Tap the following buttons:



Button	Description
Warn When Speeding	<p>Maps may contain information about the speed limits of the road segments Clarion . Mobile Maps 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 them(), ap. This setting lets you decide whether you wish to receive the warnings You can set the relative speeding level at which the application warns you represents the current speed (limit 100%):</p> <ul style="list-style-type: none"> • In Built up Areas in cities and town- s: • Elsewhere at all other: locations <p>The warning itself is a voice message that is played using the selected voice guidance profile.</p>
Safety Mode	<p>Safety Mode disables the touch screen above 10km/h(6mph) to keep your attention on the road. While driving, you will not be able to set a new destination or to change settings. The only screen control that remains enabled is the gesture that puts you back on the Map screen.</p>
Speed Camera Warning	<p>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. You have the following options:</p> <ul style="list-style-type: none"> • Audible Warning: beeps can be played while you are approaching the camera, or just alert sounds if you exceed the speed limit while approaching one of these cameras. • Visible Warning: the type of the camera and the monitored speed limit appear on the Map screen while you are approaching one of these cameras. <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>

6.5.7 Menu settings

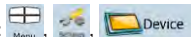
You can modify the look and behavior of the Menu screens. Tap the following buttons:



Button	Description
Animation	You can activate and deactivate the Menu animations. When animation is turned on, buttons on Menu and keyboard screens appear in an animated way.
Background	You can choose the image to be used as the menu background image.

6.5.8 Device settings

You can fine-tune device related settings in this menu. Tap the following buttons:



Button	Description
Screen Calibration	You can fine-tune the position of the screen content on the display. Tap this button, use the arrows to reposition the application window, and then tap Done to save the changes and exit.
GPS Antenna	This field indicates whether the external GPS antenna is connected to your Clarion NP401.

6.5.9 Track Log settings

You can set up automatic Track log saving, and fine-tune related settings. Tap the following buttons:



Button	Description
Update Interval	This determines how often track points will be saved. Position information is normally received once a second from the GPS. If you do not need such a detailed log, you can increase this number to save track log space.
Enable Auto-saving	When auto-saving is enabled, you do not need to turn track log saving on and off manually. Clarion Mobile Map will automatically start recording the track log as soon as GPS position is available.
Track Log Database Size	This figure shows how much memory is used by the automatically saved track logs.
Track Logs Max. Size	You can set the maximum database size for the automatically saved track logs. When the limit is reached, the oldest automatically saved track logs will be deleted.
Create NMEA/SIRF Log	Independently of the normal track log, you can instruct Clarion Mobile Map to record the native GPS data received from the GPS device. These logs are saved as separate text files on the memory card, and they cannot be shown or replayed in Clarion Mobile Map.

7. 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 towns 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.

8. End User License Agreement

1 The contracting parties

1.1 This Agreement has been entered into by and between Nav N Go Kft. (registered seat: 23 Bérc utca, H-1016 Budapest, Hungary, Company reg no.:01-09-891938) 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.

9. Troubleshooting

GENERAL

Problem	Cause	Measure
Power does not turn on. (No sound is produced.)	Fuse is blown.	Replace with a fuse of the same amperage. If the fuse blows again, consult your store of purchase.
	Incorrect wiring.	Consult your store of purchase.
Nothing happens when buttons are pressed. Display is not accurate.	The microprocessor has malfunctioned due to noise, etc.	Turn off the power and open the operation panel. Press the reset button with a thin rod. Note: When the Reset button is pressed, turn off the ACC power. * When the Reset button is pressed, stored in memory are cleared.**

10. Specifications

Navigation

Memory: NAND Flash Memory

Upgrade Platform: USB

TTS (Text to Speech): Street Announcements

Find Menu: Address, POI, History, Coordinates, Favorites, Plan on map

POI: 12 million

Road Selection: Unpaved, Permit needed, Motor ways, Toll, Ferries, Border crossing, Carpool lanes

General

Power source voltage:

14.4 V DC (10.8 to 15.6 V allowable)

Ground: Negative

NP401 dimensions:

6-9/16" (166mm) width, 1-1/4" (30mm) height,

4-5/8" (117mm) depth

NP401 weight: 1lb (454g)

Note:

- Specifications and design are subject to change without notice for further improvement.

11. Installation / Wire connection guide

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1. Before Starting

1. This set is exclusively for use in cars with a negative ground 12V power supply.
2. Read these instructions carefully.
3. Be sure to disconnect the battery" "terminal before starting. This is to prevent short circuits during installation. (Figure 1)

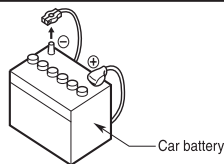


Figure 1

2. Package Contents

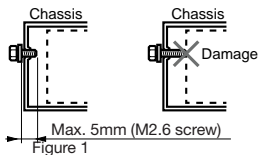
Main Unit	1
GPS Antenna.....	1
Connector Cable.....	1
Installation Brackets.....	2
Warranty Card.....	1
Owner's Manual and Installation Manual.....	1

3. General Cautions

1. Do not open the case. There are no user- serviceable parts inside. If you drop anything into the unit during installation, consult your dealer or an authorized Clarion service center.
2. Use a soft, dry cloth to clean the case. Never use a rough cloth, thinner, benzene, or alcohol etc. For tough dirt, apply a little cold or warm water to a soft cloth and wipe off the dirt gently.

4. Cautions on Installation

1. Prepare all articles necessary for installing the source unit before starting.
2. If you have to do any work on the car body, such as drilling holes, consult your car dealer before hand.
3. Use the enclosed screws for installation. Using other screws can cause damage. (Figure 1)



5. Cautions on Wiring

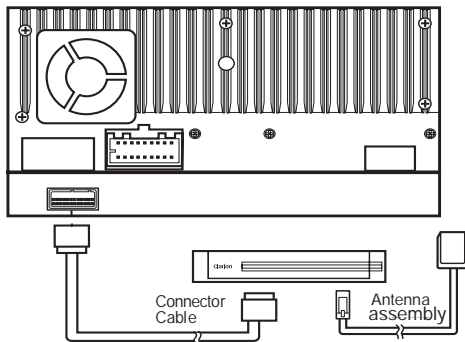
1. Be sure to turn the power off before wiring.
2. Be particularly careful where you route the wires. Keep them well away from the engine, and exhaust pipe, etc. Heat may damage the wires.
3. If the fuse should blow, check to see if the wiring is correct.
If a fuse is blown, replace it with a new one of the same amperage rating as the original.

6. Wire Connections

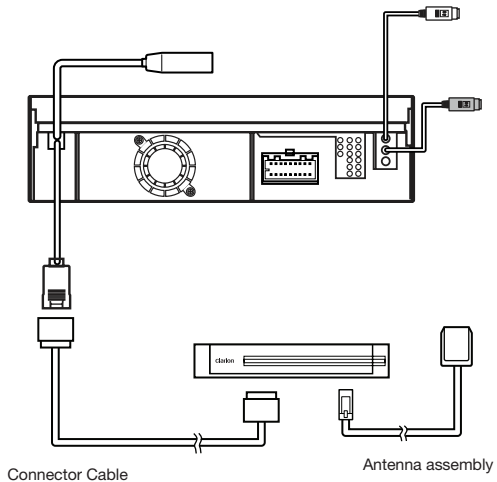
Note:

- Before installing, be sure to disconnect the negative cable of the car battery.

VX401



VZ401



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