WARNINGS

⚠ ***The usage of the navigation system does NOT exempt the driver from his responsibilities. Pay attention to the local traffic regulations. Watching the road is more important than watching the screen.***

⚠ ***If the current traffic situation and the advice or the navigation system is in contradiction, traffic regulations always have priority over advice given by the system.***

⚠ ***We recommend you to change system settings or enter new destinations only when the car is not moving or let it be done by your passenger.***

⚠ ***To avoid faulty operation or interference of the system do not cover the GPS aerial.***

⚠ ***CD's are constantly being updated and mapping may not be as detailed as expected in some areas. If you encounter difficulties in identifying a minor road use the nearest main road name.***

GENERAL INFORMATION

NOTE: *After transport of the car by a car train or a car ferry the navigation system may need some minutes for exact repositioning.*

NOTE: *After the car battery has been disconnected, the system may need up to 15 minutes for exact repositioning. The car has to be situated outdoors and the system has to be switched on to receive the GPS satellites.*

NOTE: *The system is fully operational even without valid GPS data, but the accuracy of positioning may decrease.*

NOTE: *As soon as sufficient GPS data is received the colour of the satellite icon in the GPS window changes from red to green.*

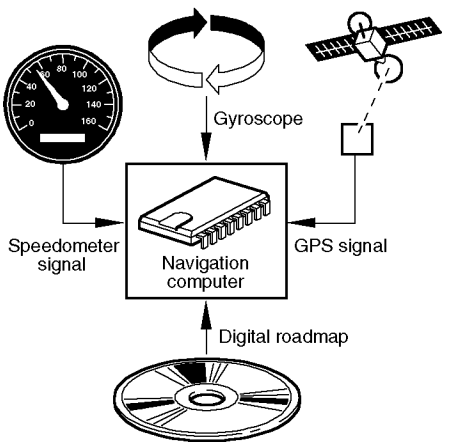
NOTE: *On motorways the distance indicators of the system for exits are different from those on the motorway signs. The motorway signs refer to the distance to the beginning of the exit, whereas the system refers to the end of the exit. This is the point where you have to turn.*

NOTE: *When using the* ***Rotary Switch*** *for selecting any of the navigation items, the switch must always be pressed to confirm selection.*

THE NAVIGATION SYSTEM

The **Navigation System** is a powerful tool in assisting the driver. By automating route planning and guidance you can concentrate on the essential things in today's growing traffic - especially in congested areas.

Complicated and time-consuming planning with conventional city and road maps is no longer required. You simply enter the destination before driving off and activate ***Guidance*** and the system does the rest.
Guidance advice is given in both a visual and acoustical way. Three controls and a simple menu structure ensure ease of operation.



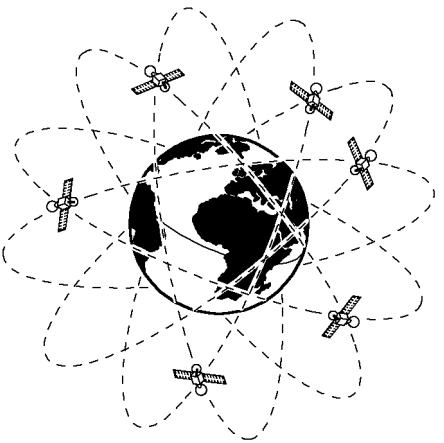
Navigation system

Determination of the vehicle position

The sensors that are integrated into the system measure the movement of the vehicle. The distance driven is recorded by an electronic signal from the speedometer and the rotary movements of bends by the gyroscope (a rotary measurement system). The information from these sensors is, however, not always exact as the values can be affected by the skidding of the wheels, varying tyre pressure due to changes in temperature, etc.
By comparing these signals with the digitised map it is possible to correct any inaccuracies produced by the sensors and to determine the position of the vehicle quite precisely. In order to correct the data, a signal from the GPS satellites is required for a period of several minutes.

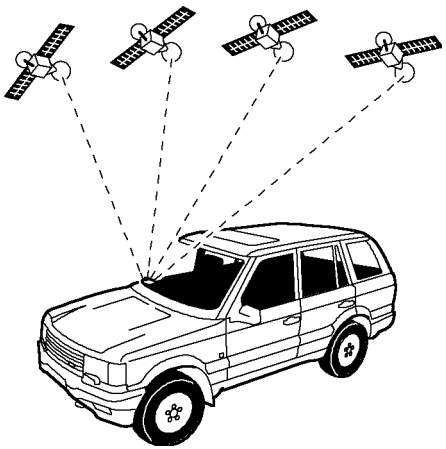
GPS (Global Positioning System)

The GPS is based on the reception of signals from a total of 24 GPS satellites at a height of 21000 km (13050 miles). The GPS receiver can handle up to 8 satellite signals simultaneously. This allows an accuracy of about 30 M (98 ft.) to 100 M (328 ft.) which is further improved by the other sensors.



Global Positioning System

To determine the position with sufficient accuracy, signals from at least 4 satellites must be received.



Receiving signals

When the vehicle is parked for long period of time, the satellites will move on during this period due to earth rotation. Therefore, when the ignition is turned on again it can take a few minutes before the system can pick up enough satellites and evaluate the signals being received.

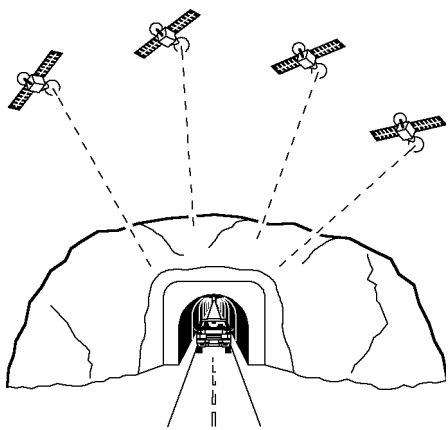
NOTE: *You can recognise when reception is acceptable, the satellite symbol turns to green in the display. If the reception is not acceptable, the satellite symbol remains red.*

When starting up, CARIN may tell you**,** ***You are now leaving the digitised area***. The monitored map will then show the vehicle in a position off the road. If there are other roads in this position, it may send inappropriate messages, meaning that it supposes the vehicle is on one of the other roads.

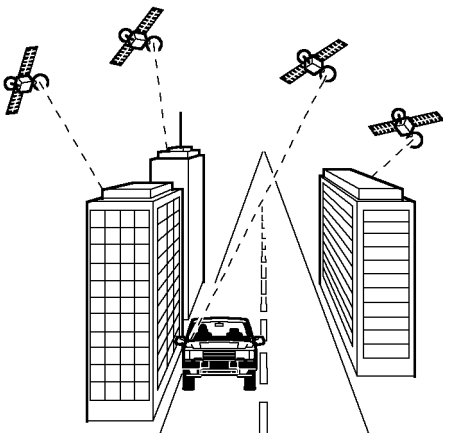
NOTE: *When the vehicle has been at standing still for a long period of time, the system may be temporarily inhibited. It will operate reliably again once the GPS reception is at an acceptable level.*

Limited GPS Reception

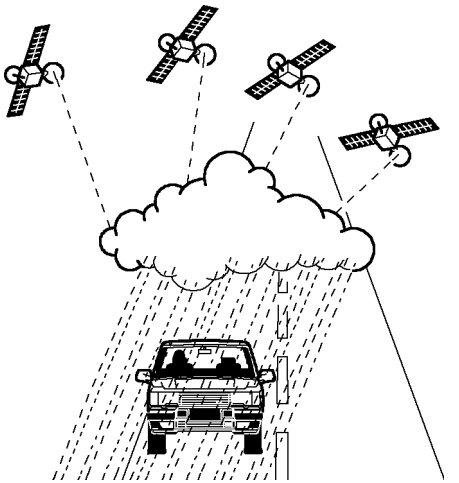
GPS disturbance may also occur if the reception is interrupted or interference occurs over a distance of several miles. Reception may be interrupted or interference can occurs as follows:



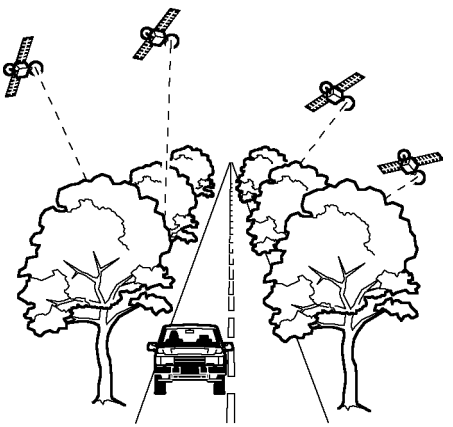
In multi-storey car parks, garages, in tunnels and under bridges



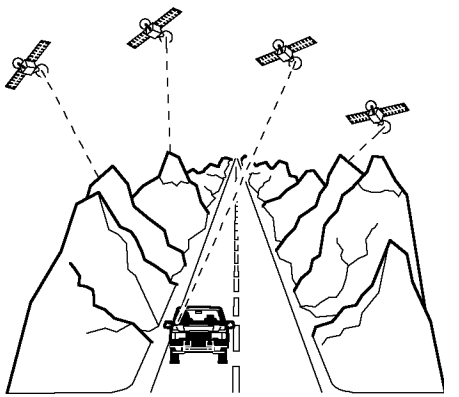
In between high buildings.



During heavy rain showers and thunderstorms.



In forests or tree-lined avenues.



In valleys and in mountainous regions.