



Satellite navigation systems for cars

Satellite navigation systems have made life comfortable for us on several fronts. Among various satellite navigation systems, automotive navigation systems, or satellite navigation systems for cars, are gaining wide popularity among people from all walks of life¹. Basically, the introduction of satellite navigation systems for cars have made driving a pleasant activity for us, especially for those who are bad at reading maps or getting directions.

A satellite navigation system is the generic term for the Global Navigation Satellite System (GNSS). It is a navigational system meant to provide autonomous geo-spatial positioning, with the help of several satellites placed in space. The system uses time signals which are transmitted along the line of sight by radio, from a satellite, in order to establish the exact location of the electronic receivers back on Earth.

Accuracy is a key factor when it comes to GPS tracking. Over a period of time, accuracy of satellite navigation systems have come down to the 1-meter mark, and this is expected to shrink² even more in the future.

A variant of satellite navigation systems, automotive navigation systems are basically navigation systems designed for vehicles. In these systems, GPS tracking devices located in the car acquire the position data of the user in order to establish his location. After the position is acquired the system displays it as a map on the GPS device. This navigation device is designed to give directions, route updates, traffic updates, and other such facilities. Most present day satellite navigation systems for cars come with a monitor wherein the location is displayed on the map. High-end³ systems don't just give a graphic representation of your whereabouts, but also give a vocal update about your location and directions to follow. You can also customize these devices by downloading maps and other software in order to suit your preferences. Although many auto manufacturers provide built in GPS navigation devices in their cars, these can also be bought separately from a store.



GLOSSARY

- 1 social classes
- 2 to decrease
- 3 sophisticated

ACTIVITIES

1 Answer the following questions.

- 1 Why are satellite navigation systems extremely useful for car drivers?
- 2 How does a satellite navigation system work?
- 3 How accurate are satellite navigation systems?
- 4 What do present day satellite navigation systems for cars consist of?

2 In the text, find the English equivalents of the following Italian adjectives.

- | | |
|-------------------|---------------------|
| 1 Comodo | 5 Grafico |
| 2 Piacevole | 6 Vocale |
| 3 Autonomo | 7 Generico |
| 4 Esatto | 8 Elettronico |

3 Match each verb in the first column with a term in the second one. Then provide the Italian equivalents.

- | | |
|----------------|-----------------|
| 1 To gain | a Route updates |
| 2 To read | b Software |
| 3 To get | c Popularity |
| 4 To establish | d Directions |
| 5 To acquire | e Maps |
| 6 To give | f Data |
| 7 To download | g The location |