

Wheels: Dr. P. of Centerville asks, “I have an older BMW that has a navigation system. I recently saw a navigation system that used voice commands. Is it possible to upgrade my system through a software change to include this feature?”

Halderman: Most factory navigation systems can be updated to include new points of interest (POI) and streets. However, the voice command feature would require that a speaker and associated circuits also be added making the upgrade either very expensive or impossible. If the vehicle is equipped with a hands-free cellular telephone, the microphone may already be installed. BMWs, like some newer vehicles, use communications network to operate almost all electrical and electronic components. The switches, such as the wiper switch, are simply a signal sent to the closest electronic control module. From the module, the request is sent through the communications network to the wiper module, which then operates the wiper motor. This means that there is more to it besides a software change to achieve the upgrade you would like to see.

Wheels: This sounds very complex. What can Dr. P. do if he wants a voice command navigation system?

Halderman: Dr. P. could check the BMW forum on the Internet for details about what upgrades are possible.

