

BMW shows hands-free driving on Autobahn (w/ video)

January 24 2012, by Nancy Owano



(PhysOrg.com) -- Move over, Google, or better still, stay off the Autobahn, best not to interfere with the main show, which now stars BMW and its technology feats with self-driving cars. BMW has been drawing press interest in its recent show of what will be possible in self-driving cars 10 to 15 years from now. BMW had announced in August its “ConnectedDrive Connect (CDC) system. This week, a video was

released showing a BMW on CDC realtime. BMW put it on the Autobahn, along with a human driver who nonetheless kept hands off the wheel of the car, a BMW 5 series model.

The video message was that the car was capable of [driving](#) on its own in certain circumstances but the driver is the one responsible, and the driver must be able to take over the driving task at all times.

“The car adheres to all traffic laws,” assured the moderator. With the CDC system, the car can brake, accelerate and pass other vehicles while analyzing the traffic conditions. This BMW system uses radar, cameras, laser scanners, and ultrasound distance sensors to get the information it needs.

According to BMW the system can also steer the car to pass a slower vehicle. If the car senses there’s a slow mover in front of it, it will search for an open lane where it can safely merge, pass the slow car, and return to the original lane.

“Our main challenge was to develop algorithms that can handle entirely new situations. In principle, the system works on all freeways that we have mapped out beforehand with [a] centimeter accuracy,” said Nico Kaempchen, project manager of Highly Automated Driving. at BMW Group Research and Technology.

This is no out of the box prototype destined for car showrooms in 2013, however. The video, with its cautious comments about driverless driving and a needed driver, is nowhere near showoff mode as to how the driver can just leave the driving to the vehicle tomorrow. The Autobahn feat was to show a system that might be available ten to 15 years from now, or, as the BMW put it, a “technology study” for use in advancing existing technologies.

Overall, the European vendor approach in self-driving cars is not an aggressive play for headlines but rather a promotion of “driver-assistance” technologies that will incrementally lead to more and more driving automation.

Driverless technology, say industry observers, will first show its face as a luxury option for high end cars before settling into the mainstream marketplace.

Auto makers are selling cars with adaptive cruise control which applies the brakes during highway driving if traffic slows. [BMW](#), according to [Technology Review](#), will work on that kind of capability in its upcoming i3 series of electric cars.

The company will offer a “traffic-jam feature” that allows the [car](#) to speed up, slow down, and steer on its own at speeds of up to 25 miles per hour, as long as the driver leaves a hand on the wheel.

© 2011 PhysOrg.com

Citation: BMW shows hands-free driving on Autobahn (w/ video) (2012, January 24) retrieved 19 April 2024 from <https://phys.org/news/2012-01-bmw-hands-free-autobahn-video.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--