

Nissan shows safety features, electronic steering

October 17 2012, by Yuri Kageyama



In this Friday, Oct. 12, 2012 photo, a Nissan staff driver, partially seen at left, of a Leaf electric vehicle, releases his hands from the steering wheel as he shows automated steering parking technology at the Japanese automaker's test ground in Yokohama, south of Tokyo. In the demonstration the vehicle turned on its own and backed into a charging station. The car is potentially capable of parking itself, even without a driver, according to Nissan. (AP Photo/Yuri Kageyama)

Electronically managed steering that completely bypasses the mechanical link of a clutch is among the new safety technology from Japanese

automaker Nissan. Other vehicles are smart enough to park themselves. And some swerve automatically to avoid pedestrians.

[Nissan Motor](#) Co. Executive Vice President Mitsuhiko Yamashita said the latest safety advancements are proactive, unlike air-bags and other "passive" features that are triggered by a crash.

Next-generation steering uses [electronic signals](#) to control tires, not a mechanical link. It's set to be introduced in an Infiniti luxury model within a year, and would be a world first for a commercially produced car. In the auto industry, the technology is being touted as the biggest innovation in steering since the widespread adoption of power-assisted steering, which uses hydraulics to make turning the wheels easier.

Nissan executives say electronic steering is safer because drivers tend to overcompensate, such as when traveling in gusty wind, and veer off too much. They say the feature also adds to the psychological sense of security for the driver, which in turn contributes to safety because stress is often behind accidents.



In this Friday, Oct. 12, 2012 photo, a Nissan staff driver, left, of a Leaf electric

vehicle, releases his hands from the steering wheel as he shows automated steering parking technology at the Japanese automaker's test ground in Yokosuka, south of Tokyo. In the demonstration the vehicle turned on its own and backed into a charging station. The car is potentially capable of parking itself, even without a driver, according to Nissan. (AP Photo/Yuri Kageyama)

With the technology, sensations of bumpy roads get mitigated and steering becomes super-quick and fine-tuned, Nissan said.

Vehicles equipped with electronic steering will still come with a mechanical clutch as a backup that kicks in if the electronic system fails.

Nissan also showed "autonomous emergency steering," designed to avoid collisions through turns when braking would be too late.

Although many automakers, including Volkswagen AG, [Toyota Motor Corp.](#) and [Ford Motor Co.](#), offer automatic braking, Nissan's still experimental system takes the idea a step further to steer away in unexpected situations such as a pedestrian suddenly moving into the path of a vehicle.



In this Friday, Oct. 12, 2012 photo, a Nissan car, right, tries to avoid a pedestrian dummy, second left, being pushed out by a Nissan worker, to a street behind the parked vehicles during a demonstration of "autonomous emergency steering" at the Japanese automaker's test ground in Yokosuka, south of Tokyo. The new safety technology is designed to avoid collisions through turns when braking would be too late. (AP Photo/Yuri Kageyama)

But Yamashita acknowledged the technology, which relies on radars and cameras, is still incomplete, and the vehicle still could crash into something else just as it steers away from the pedestrian.

Nissan also showed nifty parking technology that senses if the driver mistakenly steps on the gas pedal instead of the brakes, and corrects that.

Another was automated steering so the car parks without the driver lifting a finger. In a recent demonstration for reporters at a Nissan facility, a Leaf electric vehicle turned on its own and backed into a charging station.



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Toru Hatano, analyst at IHS Automotive, believes that safety technology such as automatic stopping before crashes will become more popular even in cheaper models. He said the feature that detects when a driver pushes on the accelerator by mistake would likely be a hit in aging societies such as Japan.

"It's an effective way for automakers to differentiate themselves and appeal to consumers," he said.

Nissan said it was well on its way to achieving its target of halving deaths and serious injuries from traffic accidents involving Nissan vehicles by

2015, compared with 1995 data. Making that zero is Nissan's goal. Some 1.3 million people die in car wrecks every year.

More information: www.nissan-global.com/EN/NEWS/...ORY/121017-02-e.html

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