

VivaTech is a technology conference in Paris founded three years ago for startups and innovators. This year, Citroën were there with their symbolic 19\_19 long-range electric AV concept. As DVN [reported](#) last week, the 19\_19 blends futuristic design and capabilities with homage to Citroën's storied past. This week we bring more details.



Dual lidar sensors mounted at the rooftop complement the array of sensors enabling the vehicle to drive autonomously; besides the lidars, they include radar and camera sensors.

Conventional elements of a human-machine interface like touchscreens and buttons are deliberately omitted; instead, a personal assistant is activated via voice control, a function developed in partnership with the Silicon Valley-based start-up SoundHound.

The control is based on a "Deep Meaning Understanding" technology which, much like humans, can answer different questions simultaneously in the same sentence. When the wizard is activated, a colour interface screen displays a graphic in blue, white and red. To establish better visual contact with the passengers, phases in which the assistant speaks or "thinks" are accompanied by graphic animations. A large centre screen replaces the usual instrument cluster; the upright screen in the middle allows users to visually participate in the thinking processes of the car's AI.

The missing instrument cluster is replaced by a HUD with augmented reality on the windscreen giving driving information as well as supplementary information such as indications of deviations, traffic jams or hazards.

There's also a cylindrical audio head restraint and a backrest reinforcement in the seats to make the journey a pleasure. Passengers in the rear seats can lean their heads against a kind of hammock. In addition, the occupants can retreat into a personalised "sound bubble" where they hear their own music or receive messages without disturbing other passengers.