Take a ride on Tesla's self-driving car and watch the self-driving Tesla car video on the real road

Is Tesla's self-driving car really as safe and admirable as what people chant or just a curious phenomenon? Let's find out in the article below.

Self-driving cars have become a new target for many automakers and technology. Tesla pioneered this field and received a warm welcome from users. New models of cars always received a huge number of orders. So is Tesla's self-driving car really as safe and admirable as what people chant or just a curious phenomenon? Let's find out in the article below.

To get a car with complete self-driving ability, Tesla had to research very carefully from hardware to software, improve it, test it many times and continuously add features before launching the product. complete. This article will give you a glimpse of Tesla's self-driving cars and an original visualization of how the car works.

The current CEO of Tesla is Elon Musk, if you want to learn more about this personality leader, you can refer to: All about the lives, career paths and success of Elon Musk

Fully self-driving hardware on all Tesla vehicles

All Tesla cars manufactured (including Model 3) have the necessary hardware with a completely higher level of self-driving safety than humans.

The sensor surrounds the car extremely advanced:

Eight cameras around the vehicle provide 360-degree viewing capabilities, within a range of up to 250m. Twelve new ultrasonic sensors enhance visibility, by detecting both hard and soft objects at close distances. A forward-facing radar with enhanced processing capabilities, provides additional data on the surrounding environment, operates at long wavelengths, it can see through heavy rain, fog, dust and even vehicles. front.

Picture 1 of Take a ride on Tesla's self-driving car and watch the self-driving Tesla car video on the real road

(Click on image to see larger size)

The tiny dot between the picture is Tesla car, the color of the bow with the color of the camera, the sensor, the radar, the width and the length of the main bow are the observation range of the camera, sensor and radar. application.

Tesla cars are equipped with computers with extremely high processing capacity:

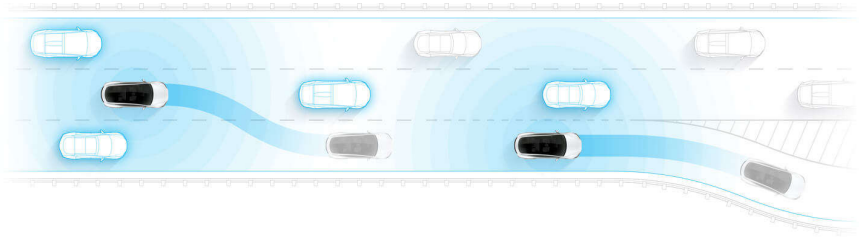
In order to understand all the data sent by sensors, cameras, radar, Tesla cars are equipped with a computer with high computing power, using new neural network technology, developed by Tesla for the soft image processing, sonar and radar. When operating together, this system provides a comprehensive view of the surrounding environment, something that an ordinary driver cannot observe. This system sees every direction simultaneously and on wavelengths that go beyond human vision. This is an important factor that governs the safety of self-driving vehicles, thanks to the ability to look at many directions simultaneously, the vehicle can provide timely handling, avoiding potential accidents that can be exported. show.

Tesla Vision:

To use the powerful camera above, the Tesla hardware has a completely new and powerful image processing tool developed by Tesla, Tesla Vision. Built on deep neural network technology, Tesla Vision has decoded the environment around the car with higher reliability than classical image processing techniques.

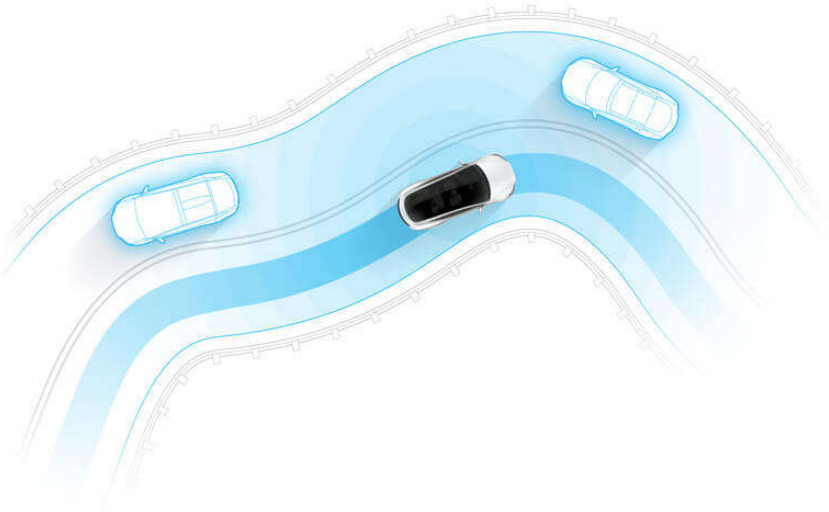
Autopilot mode:

Tesla is more likely to drive automatically to fit actual traffic conditions such as keeping the right lane, automatically changing lanes without the driver's intervention, moving from one highway to another other speed, exit the highway when approaching the destination, self-parking when getting to the park and can drive in / out the garage. These features are still being developed and added in the future with the hope that their cars will be safer and more practical for users.



When on the highway, Tesla will determine which lane you need to enter and when to enter. In addition to making sure to take you to the designated exit, the vehicle will track the chances of moving to a faster lane when the road is east. When coming to the exit, Tesla started off the highway, slowed down and controlled the rear.

With Tesla Vision, Tesla can turn more firmly, driving safer on complex roads.

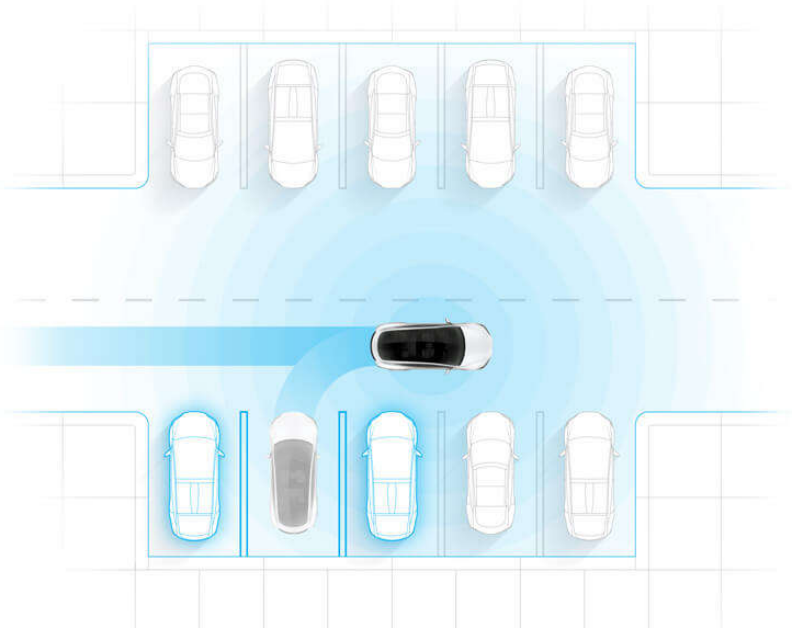


Smart Summon: Thanks to this feature, the vehicle can move in a more complex environment, parking in vacant positions even around the necessary items to reach the user's location.

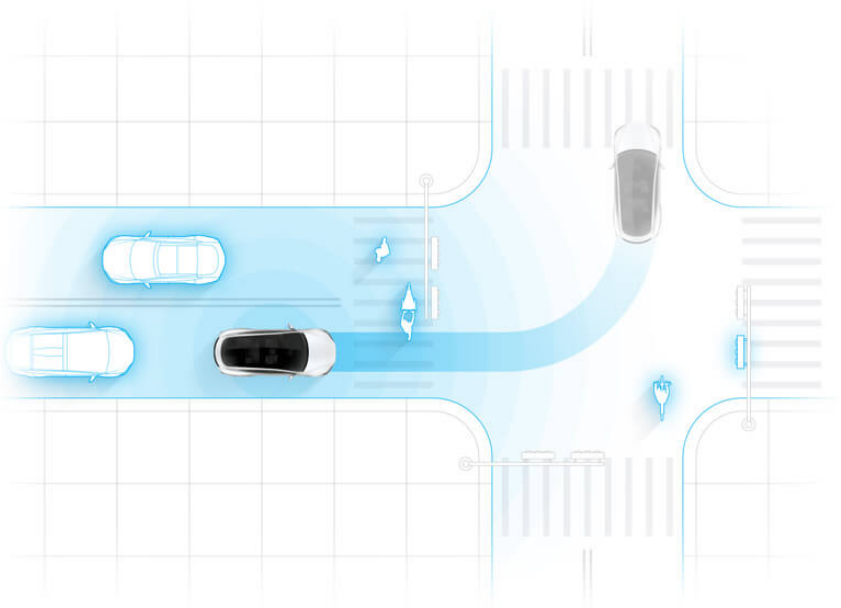
What do you do to drive a car?

All you need to do is get in the car and tell him where you want to go. If you don't say anything, the car will look at your calendar and take you there as a hypothetical destination or stay in the garage if there's nothing in the schedule. Tesla will find the optimal path, move in crowded streets (even without lanes), control complex intersections with traffic lights, stop signs and loops. It can drive safely on busy highways with cars moving at high speeds.

When you want to arrive, just step out of the car and the vehicle will switch to automatic parking search by finding parking lots and parking spaces.



Just a touch on the phone, the car will automatically find you.



Standard safety features:

1. Automatic emergency braking: Designed to detect objects that the vehicle can hit and select the appropriate brake timing.
2. Vehicle collision warning: Warn drivers about potential collisions with objects next to the vehicle.
3. Front collision warning: Helps alert collisions that may occur because vehicles that are moving ahead are slow or do not move.
4. Adjust remote / near headlights automatically as required.

And this is all that the above technologies show in the real world:

After this information, how do you feel Tesla cars? Safety may still have to be verified in practice, but the convenience and the ability to operate smoothly on such a great road is worth it to be admired, loved and ordered by people. ? Please share your comments with us below this article.