

# Why don't traffic lights in the US have a second counter?

In the US, almost all traffic lights do not have a second counter. If the light is still green, traffic participants can comfortably continue to drive. The light will know that someone is coming and will not change status suddenly thanks to a simple technology installed below the road surface.

In the US, almost all traffic lights do not have a second counter. If the light is still green, traffic participants can comfortably continue to drive. The light will know that someone is coming and will not change status suddenly thanks to a simple technology installed below the road surface.

This technology is called 'Inductive Loop Detector' - 'Inductive Loop', helps the signal lights know when a vehicle is coming or is stopped at a red light, from there the system automatically adjusts the status of the vehicle. lights in the most suitable way.



This induction loop operates based on the phenomenon of electromagnetic induction. Below the road surface, the coils are installed into trenches about 10-15cm deep. Concrete or cement is poured over the grooves to secure them. The wire loop is connected to the central control system, along with the signal light processor. This system is accurate and works well for 15-20 years continuously, and has cheaper installation and operating costs than other sensor systems.

When there is no vehicle, these rings always emit a stable magnetic field. If a vehicle (metal) appears above, this magnetic field will change and create an induced current inside the coil. A signal will be sent to the light controller and it will understand that there is a car waiting or passing by.



For example, if a car is approaching an intersection and sees a green light, the ring will recognize that the vehicle's direction is still moving, so it will continue to maintain the green state until the traffic flow reduces or disappears. In case there is no waiting vehicle at the intersection or around the other side of the road, the controller will continue to maintain the green light on the side of the moving car. In case, the roadside circle detects that there is a car waiting, then after the car passes through the intersection, it will turn on the green light for the waiting car to move.

With this technology, the driver does not have to worry about whether or not he needs to prepare to stop when approaching the intersection unless he sees a yellow light. If you are moving about 100 meters away from the road markings and the light is still green, the driver can still rest assured holding the gas, the light will not change suddenly, avoiding the situation where the driver has to brake suddenly and get hit by the car.

You finished reading the article "**Why don't traffic lights in the US have a second counter?**" edited by the [TipsMake](#) team. We hope this article has provided you with many useful tech tips and tricks. You can search for similar articles on tips and guides. Thank you for reading and for following us regularly.