



What you should know about Radar Detectors

Are radar detectors legal?

Yes! Radar detectors are completely legal to use in non-commercial vehicles in 49 states. Only Virginia and Washington D.C. currently ban radar detector use in the United States.

Radar detectors are illegal to use in commercial vehicles over 10,000 lbs. and in most Canadian provinces.

How do radar and laser guns work?

Understanding Radar

Radar is very easy to understand if we use a flashlight example. Think of a guard performing his security check at night. From hundreds and hundreds of yards away we are able to see his progress as he searches back and forth in the dark - yet, the guard can't see us. In fact, the guard can turn the flashlight directly at us and still never see us! Why? Because in order for us to become visible to the guard, there must be sufficient light reflected off of our clothing and returned to his eyes before he can see us. Notice - we can always see the flashlight even though the guard can't see us. That's because we need only a small amount of light from the flashlight to see it in the dark. We have the advantage.

A good radar detector works the same way. From far away and from any direction, a good radar detector can detect the energy from a radar gun, (like the light from the guards flashlight) - but the radar gun will never see us until it is much closer and is aimed directly at us. Again, just like we are able to see a guard's flashlight from a great distance even though he can't see us, a good radar detector has the advantage - we can see the radar gun from any direction and from much farther away before the officer ever sees us.

Radar Note:

- There are over 100,000 radar guns in use in the United States. Used every day, across multiple shifts in multiple vehicles, there are potentially 100 million radar traps in the United States every year.
- Radar guns operate on three bands: X band (10.525 GHz), K band (24.150 GHz) and Ka band (33.4 - 36.0 GHz). X band is becoming obsolete and almost all radar guns manufactured today operate on the newer K and Ka bands - a good radar detector must be capable of receiving these newer technologies.

Understanding Laser

Laser guns rely on a very narrow beam of light, (or small pulses of light) to target vehicles. This beam of light is fired at a vehicle at the speed of light. Once the light hits the target, the light bounces (reflects) off the object and back to the laser gun. As the reflected light pulses are received by the laser gun, it can calculate a vehicles speed based on the amount time it takes for the light pulses to come back to the gun. Multiple pulses are sent in less than a second.

While the officer is firing the laser gun, the light bounces off of the target vehicle, and other objects around it. A good laser detector can easily see the laser source, and the reflected light signals that bounce off other objects. That's because the laser beam is scattered into thousands of sharp, bright, piercing beams of pencil light streaking out in thousands of directions when it hits any object in its path, including any part of a car. Usually, when a group of cars is targeted, a good laser detector will alert to the threat.

Laser Note:

- There are approximately 35,000 laser guns in use today.
- Unlike radar, laser must be used from a stationary position. For this reason, laser is increasingly being used by police near highway overpasses and from interstate medians - ESCORT radar detectors can readily 'see' this aggressive threat.
- Laser guns are affected by rain, fog and in most cases cannot be used through the glass.

Do radar detectors really work?

Absolutely! ESCORT radar and laser detectors are sophisticated receivers designed to detect the presence of radar and laser energy at great range.

ESCORT detectors, like the flashlight example above, can receive the signal well before the transmitted signal can bounce off its object and return to the transmitter. (One exception to this is if the officer is using a method called "instant on." In this case, the officer waits until a vehicle is within its range, and then turns on the transmitter. Under this scenario, a good detector will warn you ahead of time since it is sensitive enough to detect this burst of signal when the officer targets the vehicles in front of you).

Yes, ESCORT radar detectors really work. And, we offer a 30-day money-back guarantee so you can test it yourself.

How many radar bands are there?

There are a total of four traffic monitoring bands in use in the United States - three radar bands and one laser (infrared light) band.

Radar bands are governed by the FCC (Federal Communications Commission) and include:

Actual Frequencies:

- X band (10.525 GHz)
- K band (24.150 GHz)
- Ka band (33.4 - 36.0 GHz)

Laser is governed by the FDA (Food & Drug Administration).

Laser is infrared light (332 THz, 904 nm).

Are radar detectors easy to use?

Yes. All ESCORT radar detectors are ready to go right out of the box - just plug your ESCORT detector in and drive! Or you can customize your radar detector to match your specific driving needs with ESCORT's exclusive "EZ-programming" option. It's simple and intuitive - no manual needed.

Which radar detector is right for me?

Its easy - select your particular driving style and then match the radar detector that's right for you.

Driving Style 1

Car Enthusiast - *defined.* the art of driver and machine as one; from sporting to speed; passion for performance; open road thrill seeker...or all the above.

Commuter - regularly running the familiar, hectic ground; always where you need to be, on time!

Matching Radar Detector

Conventional Windshield Mount: High performance drivers continually on the move need constant reliability. Corded radar detectors powered by the vehicle's +12V accessory socket will provide the most dependable, highest rated performance of any detector models available. Corded radar detectors combine high performance and comprehensive selectable features designed to help you overcome your urban attack - choose [Passport 8500 X50](#)

Driving Style 2

Business Traveler - city to city, rental car to rental car; never in the same place twice.

Multiple Car Owner - will it be this car today or the 'other' favorite?

Matching Radar Detector

Cordless Windshield Mount: Don't know which city you'll be in next week? Or maybe your efforts have paid off in twice the car as the guy next door and you get to choose between two or more favorite cars to drive. Either way, when you won't be in the same car twice, you need portable convenience. And a cordless radar detector is just the answer. Powered by batteries, a cordless radar detector goes wherever you go, without the trouble of a cord. Without any sacrifice in performance, the "world's best cordless" is the right fit - choose [Solo S2](#)

Driving Style 3

Car Enthusiast, Aficionado - love cars? Is your car worth more than the house next door? Does 'so many cars, so little time' sound familiar? Then you must see the best...(Custom installed radar detectors are sold exclusively through high-performance car dealers and car audio specialists – see your local dealer for details.)

Custom-installed: If your car has a national club named in its honor, then only the most distinguished add-on is acceptable. Just as a one-of-a-kind leather interior individually fits you, a custom installed radar detector uniquely fits your car. And a custom detector is the pinnacle of performance. Installed as a seamless, integrated addition to your car's interior, it becomes as discreet as your morning drive slipping through traffic - you'll be protected from any trap yet no one will know you are driving with a detector. Completely effective against all radar and laser, a custom detector is quite easy to use. For the driver who wants the ultimate in discreet radar detection - choose [Passport SR7 Plus](#)

Which brand is best?

It is important to understand that frequently the difference between a good detector and a cheap detector is the level of technology that you are using. Like other technology that you rely on, your level of protection is only as good as the technology you choose. Like cheap cell phones that are often more frustrating than helpful, an inexpensive radar detector will not protect you from all forms of radar and laser gun situations. Unfortunately, choosing a cheap radar and laser detector will most likely result in a citation, not a dropped call.

When it comes to radar and laser, you need the best technology available. Here are some facts you should know:

Fact: ESCORT owns over 85% of all radar and laser detector patents in use today. That leaves approximately 15% for all of the other manufacturers combined. Result: ESCORT is the leading expert in radar and laser detection.

Fact: ESCORT detectors have won more independent third party tests and reviews than any other brand. Auto enthusiast magazines (Motor Trend, Automobile and AutoWeek for example) and websites (RadarTest.com and SpeedZones.com) consistently rank ESCORT radar and laser detectors first for performance, reliability, design, and value.

Where should I mount my radar detector?

For maximum performance, your detector should be mounted level on your windshield, with a clear view of the road.

Note: Do not mount your detector behind the tinted area at the top of your windshield. This will reduce its laser performance dramatically.

How much do I need to spend?

In order to be fully protected against all forms of radar and laser threats, you should consider your purchase as you would any investment. At ESCORT, we suggest you consider the full cost of a citation. This includes the citation itself, points on your license, and what that would mean for your insurance rate. Typically this is far more expensive than the cost of a great detector.

Why do insurance companies hate detectors?

Insurance companies fear losing revenue in the form of increased premiums. That's because a single ticket can lead to additional premiums. The fine of a ticket can be several hundred dollars or more plus the points added to your driving record. And there's the rub. Insurance companies see your points as increased risk on their part and thereby they justify increases in your premiums. Owning a radar detector reduces your chance of being ticketed and in turn, eliminates the opportunity of insurance companies to increase your premiums. Your insurance rates are high enough - you don't need the added risk of increases in your premiums and additional expenses. You need a good radar detector.

Where are ESCORT Radar Detectors made?

ESCORT Radar Detectors are designed, marketed and manufactured right here in North America.