

Fastest - A Useful Feature

One of the more useful new features that has been added to police radar is the ability to measure the Fastest Vehicle. This feature allows an officer to measure a vehicle that is traveling faster than the strongest target. A common example would be when a sports car is passing an 18-wheeler. Without the fastest vehicle feature, the radar could only measure the speed of the 18-wheeler, and the speeding sports car would be missed.

Two Different Approaches to Displaying Fastest Targets

- **Single Window Approach (Radar 1)**
Uses only one target window to display EITHER the strongest or fastest target,
- **Two Window Approach (Radar 2)**
Uses two windows to display BOTH the strongest and the fastest targets simultaneously.

The single window approach (Radar 1) seriously compromises the operator's ability to correctly identify which vehicle is generating a speed-reading on the radar.

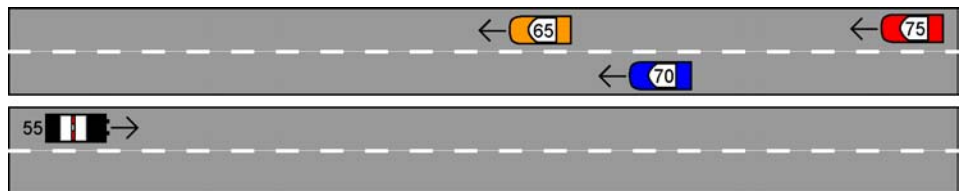
The two window approach (Radar 2) improves the ability to identify proper targets and build a tracking history that is even superior to a radar without any fastest mode.

Case Law Concerns

Current radar case law is based on the "Lead Vehicle Theory" which specifies that measuring the vehicle out in front, by itself, and nearest to radar is required. The fastest vehicle mode allows the officer to measure the fastest target independently of the strongest target. A single window fastest mode radar fails to abide by the courts established guidelines. A two window fastest mode radar retains the required elements plus it adds the ability to build an extended tracking history.

Why Should You Insist That Your Radar Have Dedicated Displays for Strongest & Fastest Targets?

A Typical Encounter with Two Faster Vehicles



Limited Information

With these three vehicles approaching the patrol car, Radar 1 simply shows the reading of the fastest vehicle. Radar 2 is tracking the strongest target (the 65 MPH lead orange car) and showing the fastest. The operator may very well believe that the blue vehicle passing the lead car is going 75 MPH.



Radar 1 (Fastest Window Only)



Radar 2 (Strongest & Fastest Windows)



Mistaken Identity

Even after the 70 MPH blue car has passed the 65 MPH orange car, the operator of Radar 1 could easily mistake the first faster vehicle for the distant fastest vehicle. Radar 2 clearly shows the abrupt change of the strongest target as the 70 MPH blue car pulls into the front. Now the operator can see that the new lead car was NOT the 75 MPH target, and can conclude that the 75 MPH red car farther back is the fastest vehicle.



Radar 1 (Fastest Window Only)



Radar 2 (Strongest & Fastest Windows)

A traffic scenario like this is not at all unusual. Radar systems with only one target display window are extremely prone to fool the operator into making a target identification error.

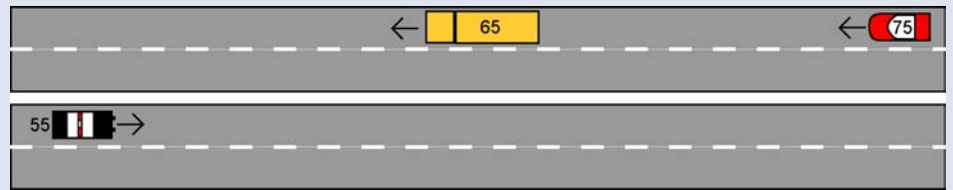
Dedicated Displays Improves Tracking History

The two window fastest approach not only ensures that these types of mistakes are not made, but this method improves the tracking history and makes the radar a better and more accurate tool for law enforcement.

A Simple Encounter With One Faster Vehicle

Who is the Radar Clocking?

In this case as the two vehicles are approaching the patrol car, Radar 2 shows both the strongest and the fastest target. The officer can clearly see that the truck is traveling 65 MPH and there is a faster car going 75 MPH, which is probably the red car. The Radar 1 merely shows the fastest reading. The officer cannot tell by looking at the radar if 75 MPH reading is from the truck or from the car.



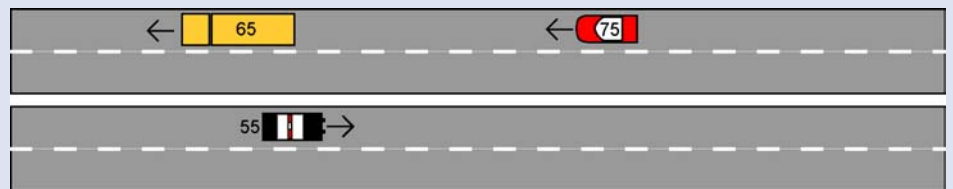
Radar 1 (Fastest Window Only)



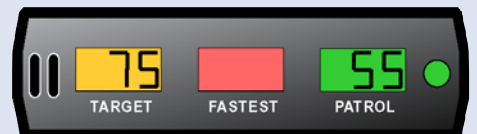
Radar 2 (Strongest & Fastest Windows)

The Fastest to Strongest Transition

Now as the truck passed the patrol car, Radar 2 shows the 75 MPH fastest target transition into the strongest target window, and as the truck went past the radar it's speed dropped off the radar. The officer has confirmed that the 65 MPH reading was from the truck, and the 75 MPH reading is now coming from the lead red car. The operator of Radar 1 may be able to conclude that the 75 MPH reading was not from the truck, however the 75 MPH reading could still possibly be generated by a distant target.

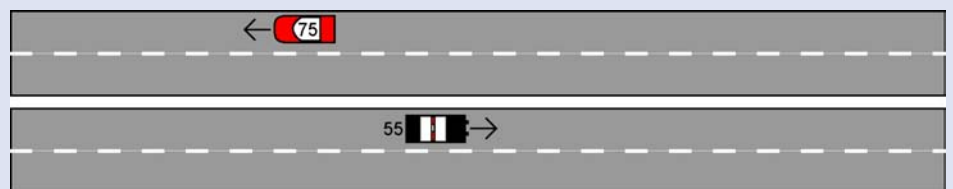


Radar 1 (Fastest Window Only)



Radar 2 (Strongest & Fastest Windows)

As the red car passes by Radar 2, the 75 MPH reading drops off of the radar at the same time. The operator of Radar 2 was able to build a superior and absolutely provable tracking history on the red car. The operator of Radar 1 can only conclude that the 75 MPH reading was the speed of the red car if no other targets come into view before the red car passes. If another car happens to come into the radar's range, then Radar 1 would have difficulty in proving that the 75 MPH reading was from the red car.



Radar 1 (Fastest Window Only)



Radar 2 (Strongest & Fastest Windows)

Even in the simplest of traffic encounters, Radar 1 is very questionable on its ability to associate a fastest speed-reading with any specific vehicle.

Radars with BOTH strongest and fastest displays improve the tracking history, and safeguard against incorrect target identification.

When You are Buying Radar Systems for Your Department, Make Sure to INSIST That Your Radars Display Strongest and Fastest Targets Simultaneously.