Eagle 3 Wireless Speed Sensing (WSS)

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Vehicle Speed Sensing (VSS) Background
Kustom Signals has been delivering our patented TruTrak™ Vehicle Speed Sense feature with our RADAR for more than 20 years. TruTrak takes the pulses from the patrol vehicle’s speedometer and syncs with the Kustom RADAR. This feature has many benefits including an independent verification of the Doppler patrol speed which eliminates common RADAR anomalies like shadowing, batching, and combining. It also enables the popular feature for automatic mode switching from stationary to moving operations and vice versa. The Eagle 3 RADAR with the patent pending Wireless Speed Sensing (WSS) delivers the benefits of the wired vehicle integration with none of the headaches of locating and connecting into the electronic speedometer signal.

The Issue
A growing number of police vehicles no longer have a VSS signal easily accessible to be integrated with the RADAR. Additionally, the automotive manufactures have long said that the OBD II port should not be used for auxiliary equipment and the upfitter’s guides clearly indicate the risks associated with this type of connection. Regardless of these warnings, some RADAR manufactures are using the OBD II port for power and to query the VSS signals. Some manufactures are even warning customers that they will void their RADAR warranty if they move equipment to a new vehicle and utilize the wrong OBD II cable!

The Solution
The Eagle 3 is the first RADAR to provide a method to independently verify the Doppler patrol speed without an electrical connection to the patrol vehicle. The Eagle 3 with Wireless Speed Sensing has an integrated antenna that utilizes satellite signals as an independent speed source to verify the patrol vehicle’s Doppler ground speed. That means the Eagle 3 wireless technology is built-in so no customer IT support is required. Only the actual Doppler signal is used for the Patrol Speed reading. The satellite signals are used to guide the RADAR DSP to search for the Patrol Doppler signal in a specific area. The result is the Eagle 3 with WSS features Automatic Mode Switching and eliminates common RADAR anomalies like shadowing, batching, and combining without the need for a wired connection from the RADAR to the patrol vehicle.