Tony Kainuma, Cobra Electronics Senior Product Manager, Navigation and Detection Products, shows off the new freestanding SL3 Safety Locator during our Phoenix test. Safety is its middle name.

Robocams gotcha down? Knowledge equals safety

Two things about radar detectors and their ilk: [1] it's surely prudent to doubt they are always right and never wrong (which are two different things: catching everything, with no false alarms); and [2] it can be a little dicey to talk about law evasion, though everybody's more or less satisfied if the concept is simply to ensure safety.

Photo enforcement is a dicey topic in its own right: some people, alarmed by the traditionally libertarian behavior on Arizona's freeways, have welcomed photo speed enforcement, while others see it as a draconian revenue-enhancement scheme that ruins an enjoyable day every few miles. As for red-light photo enforcement, not as meny people object to keeping things legal, but there are serious issues about accuracy and whether qualified-paranoid caution about the systems may actually cause a few rear-enders.

Arizona, in fact, has more speed cameras than any state in the US, not surprisingly, since the whole concept and most of the cameras themselves originate here. Over 52% of all cameras in the US are in Arizona, and over 56% of those are concentrated in metro Phoenix. Including red-light cameras as well as speed enforcement cameras, Arizona ranks sixth in the US.

There is a body of statistical information on accidents before and after photo enforcement is installed, but there are always other variables in a state with this much growth: not only are there more people driving every day, but counterintuitively, there are engineering improvements and alternate routes introduced that reduce the burdens on trouble spots. For lack of a statistical "control group" (the same spot, at the same time, with and also without the programs in place), various parties are free to state their versions of fact and perception. Public (and even professional) opinion is highly polarized on this topic, and indeed it has led to extreme violence. Red-light enforcement and speed enforcement are different animals, but the gut reactions and arguments are somewhat similar.

At a minimum, most people would like to know when and where they may get a surprise. Enter Cobra.

Speed. Red-light. Fixed. Mobile. Scheduled. Random. Does photo enforcement save lives? Arguably. Is it annoying? In most cases. Does it reduce driving enjoyment? For most people. Would the world be a better place if you were always surprised by them, or if you knew where they were? Cobra has some definite ideas about that.

We were hesitant to even get involved in this, since the whole photo enforcement debate is so highly charged. But Cobra emphasized that their products aren't just about evading the law. Here's their angle: Cobra figures an informed driver will drive more safely and avoid panicky responses to the presence of photo enforcement, if they know it's there. So, if the cameras are really about safety and not revenue, then if drivers are informed and drive legally, everyone should be happy. Yes?

Cobra says their gear helps drivers avoid accidents as well as tickets from speed cameras, red-light cameras and radar or laser traps. In other words, safety first.

The makers of speed radar detectors have stuck their necks out, in a sense, for years—offering their customers a way to fend off a guilty speed reading that may come just because their concentration has lapsed or been redirected (or because they're going for a new land speed record to Tucson). Detectors (which are illegal to operate, or even to possess, in some places) have never made law enforcement particularly happy, but they've saved the bacon of many a lead-foot at times. But imagine the confidence of the detector companies as they do their best to promise (and variously back up) ticket-free driving. A tall order. There has been an ongoing development leapfrog between detector makers and radar guns for decades.

Cobra Electronics introduced their 2009 line of radar detectors in January, with six of their 12 units including a new technology called AURA™ (for Advanced Universal Road Alert), with thousands of pieces of embedded information intended to avoid both "unintended traffic violations" (is there another kind?), as well as compromised safety. The Cobra AURA database stores GPS coordinates of speed and red-light cameras, as well as driving hazards, accessed by drivers online daily to download via USB flash drive, a special GPS locator stick that is then connected to compatible detectors, synchronizing coordinates. It is intended to have the most current camera information possible. Drivers can also add up to 1000 location-based alerts about temporary or moveable "driving threats" and set their own speed limit warnings.

The AURA system was introduced in 2008, but for 2009 they add two new technologies: Intelliscope™ and Intelliview™, the first using GPS to specify the direction of location-based alerts relative to your moving vehicle, and the other providing a picture-in-picture view so you can see radar alerts simultaneously.

Introduced in June is the SL3 Safety Locator, a standalone GPS-enabled AURA device using a series of LED lights and tones to alert the driver to both the type of threat and its relative proximity. The 3-Zone Notification System escalates its alerts based on vehicle speed, attempting to provide adequate reaction time before an intersection or other situation is reached. Cobra says the SL3 is legal in all states (and Canadian provinces), even where radar detectors are not.

Just another red light? Or a "special" one? AURA™ technology can help you identify the difference. In addition to the freestanding SL3, Cobra's AURA is also available in several of the line's full radar detectors.

At our test drive in Phoenix, Cobra reminded us that locations which have been deemed worthy of photo enforcement were basically deemed more unsafe than average in some way. Cobra says AURA-equipped drivers have heightened situational awareness—courtesy of a tool that can keep them aware of what's around them, and what's ahead. "There are significant financial and safety benefits to being aware of the growing number of photo enforcement cameras," said Tony Mirabelli, Senior VP of Marketing and Sales for Cobra. "Being an AURA-equipped driver helps you avoid the dreaded feeling of receiving an expensive traffic ticket in the mail for a violation you might not even know you committed. It also means you will be aware of accident-prone intersections."

Our test route, which started near the Biltmore and included surface streets and freeways, did bear out the effectiveness of the unit on a preplanned route. We didn't test it by speeding or red-light-running to see whether anything may have been missed. But known enforcement sites were clearly delineated in time to become a responsible driver before it's too late. Not bad for fixed cameras. Not bad even for photo vans that were identified before the information was last updated, downloaded and fed to the unit. But might there not be other situations lurking? Weren't we just sure we saw a radar van when we drove to the post office, but it was gone on the way back? Can we count on this?

Given the rate at which new cameras are being installed, daily updates are critical to providing the most reliable information. Research teams working out of Cobra's Chicago headquarters (and in its European office) use a systematic verification process to minimize false alerts and maximize the dependability of their database. In North America, Cobra verifies 100 percent of the database's speed and red-light cameras, as well as dangerous intersections, by communicating directly with municipal police departments, traffic bureaus, state transportation agencies and proprietary data partners to guarantee every single alert is accurate. (Interestingly, this process also pretty well forces these agencies to imply that these programs are in place to encourage safe driving, not to rake in the dough.)

Fun with anagrams: "Robocop camera" equals "Cobra ace promo"

The GPS locator and lifetime AURA database subscription are included with the Cobra XRS 9960G and XRS R10G radar detectors at $389 and $439, respectively, and as an add-on purchase with four additional detectors ranging from $209 to $339. The standalone SL3 has an introductory price of $99.95 including one year of free updates to the AURA database. ■ *– JS*