



If you ride or drive like I do, then there is a good chance you probably already own a radar detector. We all know that the street isn't a racetrack, but even the best of us like to push that gas pedal or twist the throttle to see what our machines can do. Bikeland.org spent the last nine months testing three of the best radar detectors that money can buy. We wanted to know what your money got you, and specifically which radar detector was the best for motorcycle use.

I've always owned a radar detector of some sort. When I was a teenager my friends and I would spend many hours at night tormenting the local police, generally misbehaving and driving as fast as possible. Since we didn't want our parents to know what we were up to, we came up with codes for things. We definitely didn't want them to know that we were speeding in their daily commuters, so we named the radar detector that we shared amongst us "Gary", after Gary Burghoff (aka "Radar" from M*A*S*H). We would always make sure to ask or check if "Gary was coming along", if our trusting parental units were in earshot. One time my friend John had made the mistake of leaving Gary on the kitchen table all day long. On his way out the door his mother intercepted him, holding Gary in her hand, and gave it to him.... "Here John, you forgot your box," she said handing it to him. Confused, we realized that in this time well before cell phones and the Internet, that our aged parents had no idea what a radar detector was! We certainly did back then, and still do today...

Helping us keep the man from getting any extra cash from us in the event that we slip up.

Fast forward to now. Using a radar detector with a motorcycle takes a little extra effort, certainly more

than simply sticking it to the windscreen. Motorcycles have some different needs, and we wanted to find out what had changed in radar detector technology in the last few years.

In the summer of 2006 we contacted the three top manufacturers of radar detectors in the world, Escort, Beltronics, and of course Valentine One, to ask them if they would participate in our test. We planned on testing the Escort X50, the Bel RX65 and the V1.

Both the Beltronics and Escort corporations agreed to take part, while Valentine Research refused. We thought this was very interesting since according to Pete Kaufman from V1, Valentine Research bases 100% of its sales from the Internet and mail order, and they were proud to stress this in telephone conversations with us.

Since we're the Internet, and we have our own money (MasterCard's great, eh?) we bought one anyways (unbeknownst to them). Whether Valentine One wanted to play in the sandbox or not, they didn't have much choice. It's a free market and their product is extremely heavily advertised, especially anecdotally in most enthusiast motoring forums (this is probably their main form of marketing).

Even though V1 doesn't seem to value your opinion as a reader of this site, they do want your money, and lots of it. In fact the Valentine One was the most expensive unit in this test at least \$115 more than the Bel RX65 and a whopping \$148 more than the Escort X50 when you discover that you need to buy an additional 2" x 2" x 1" box to plug into the V1 so that you can use your headphones. To top this off, if you do some basic number crunching, you can begin to get a feel for the profit margin in the V1 product line. Since V1 only sells direct, there is no distribution network, no middleman, no percentages lost. In fact the price spread between the units is therefore even greater because we didn't including the cost of

shipping charges you'd pay if you bought a V1 since you can't buy it in a store.

At first we planned on releasing this review at the end of the summer, immediately after our trip to Laguna. Then we thought we'd live with the units a bit more. Then life got in the way, new product releases, and this review was pushed back, becoming a bit of an albatross. Unable to complete it between the everyday running of the site and the press intros we had to attend, this review has sat on my desktop unreleased. The Bel and Escort guys began to figure us for the Internet slacker crackheads that we are, but in the end we're glad we had more time to play with the detectors. The three of us had a solid six months to thoroughly test these units, both on bikes and in cars. It's been an eye opener to see how they work, don't work and what they lack.

Bikeland doesn't have any fancy testing equipment. We don't own a radar gun and we aren't scientists or researchers. We're average consumers just like you, and we're always looking to see where our hard earned (or borrowed) money should be spent. Initially we had banked on cooperation from local law enforcement agencies to help us in this test. Several police departments expressed interest in helping us, but when they realized that we were actually serious about our tests, they all backed out. That made us chuckle. In the end we weren't that worried. Our experiences with the units were so consistent between the three of us that we decided to defer to a more reliable source for actual empirical data.

After gathering our own data, Bikeland then spoke with Radartest.com, regarded by many as the single most reliable radar detector resource online. Radartest.com has tested almost every radar detector made, and has the test facilities and equipment needed to provide the Internet tech-head with the numerical raw data that they want when they debate each other over who's unit is better.

To us, in the end this meant little, as surprisingly or not our Joe Average results and notes fell almost directly in line with the accurately measured metrics from Radartest.com.

Beyond sheer performance, we were interested in actual everyday usage, durability, ease of use and ease of operation. What good is a radar detector if

you can't figure it out or read the display? Not much in our books.

Recently rival Escort purchased the Beltronics Corp. Previously located in Ontario, Canada, Beltronics Corp. now shares facilities with its parent company Escort. This may come as a relief to many Beltronics customers as the majority of the complaints reported by Bikeland readers over the years dealt with warranty and repair issues, and flaky "Canadian" customer service. Hopefully this is now ancient history.

Consumers often benefit from companies merging in this manner. Trade secrets are shared and one can only hope that better products are created.

Overall Ergonomics

Since we had the three units in hand we had the luxury of opening and closely examining all three at once, including their packaging and associated componentry. It is at this point where the line between the Beltronics Corp. and the Escort Corp. begins to blur. One might wonder if they should rename themselves "Belcorp" or "Estronics".

The packaging of the two products is extremely similar. Spare the company logos; the power cords supplied are identical, as are the owner's manuals (albeit with some additional specifics for each unit). Also identical are the windshield mounting cleats, and mechanisms.

Both the Bel RX65 and the Escort X50 retain their company's signature physical shapes. The Escort is long and thin. The Bel is short and slightly fat. The button locations for the units are identical, as is the method for entering the programming modes. The Bel has an electronic volume control while the Escort has a rheostatic control.

Both displays are very similar. The Bel offers a few additional programming features and display options which the Escort lacks. The car mounting mechanism for the Bel and Escort are identical, and perform flawlessly. Removing the unit from the cleat that sticks to your windshield is as easy as pushing a release button on top of the units.

As much as we can appreciate why the companies are sharing resources, we felt that a bit more separation could be given between the brand names. Since the average consumer would rarely purchase



both at the same time, they would never see the crossovers. Since we had both units sitting in front of us, we did, and we felt that for the consumer's sake Escort needs to either absorb Bel completely or make an effort to help retain its partner's identity a bit better.

The V1 is another story. The V1 looks kind of cool, but honestly it seems dated sitting next to the X50 and the RX65. The V1 is heavy, bulky and its styling looks to be about 15 to 20 years out of date. For use in the car, the V1's mounting mechanism sucked. Both the Bel and Escort were clear winners in this category. The V1's extra weight combined with its slightly short cord, and its wimpy suction cups meant that at least once a day the V1 would launch itself off the windshield and land somewhere in the car.

The Display

This is where these top of the line detectors really start to define themselves. The Bel RX65 was the clear winner for both motorcycle and car use. The Bel's easy to read full English display was the only one that had some sort of thought put into it for motorcycle use. The display was tilted at about a 30° angle, which meant that you could easily read it's full English display when looking down at the unit (say mounted on your gas tank or on a bracket such as a Techmount.

The full English display clearly indicated, "laser", "ka band" etc depending on the threat. A nice added feature was the easy to read multiple threat display, that allowed you to see more than one radar source if present. This was particularly useful for daily commute situations where you might encounter falses caused by alarm systems or other sources. The unit saved our testers more than once in situations just like this, where the sneaky local PoPo

had set up their radar traps in areas that caused frequent falsing in hopes of catching speeders who would ignore the false signals on their single signal display units. Nice! The strength of the signal was configurable in either horizontal bars or a numerical display. Both modes were easy to use and interpret.



The displays of the Escort X50 and the V1 tied for second in our test. They both had pros and cons. The biggest negative for both units was that their displays were straight up and down (perpendicular to the units). In a car this meant little, but on a motorcycle it made seeing the display on either the Escort X50 or the V1 next to impossible without moving your head quite a bit. We felt this robbed the rider of the precious split second used to assess a radar threat.



The Escort's full English display was easy to read. Even though it shared similar display modes for showing multiple threats, it was not as easy to interpret as the Bel version of this feature. The full English display clearly indicated "laser", "ka band" etc depending on the threat with a horizontal bar showing strength and or a numerical display, but was next to pointless on a bike as you couldn't see it clearly, or often at all as the LED text is slightly inset into the unit making it virtually impossible to see off axis.



The V1's display was irritating to say the least. Without its signature "directional arrow feature", display wise this unit would be in dead last. The directional arrows are the big redeeming feature for this unit, and we loved them. They worked like a charm, and we found it especially useful when determining when you could start to pick the pace up again after taking a radar hit. For example, was the cop following you, in front of you, or was he gone? The arrows told



the tale and seemed to be relatively accurate in our daily use. They were easy to interpret and we were disappointed that neither the Bel RX65 nor the Escort X50 had this feature.

If they did both Bel and Escort would hit a grand slam. This is because the rest of the V1's display licks (for lack of a better term). I hate to use such strong wording, but we found it really hard to use and next to impossible on a bike in our opinion. In a car, with full and clear frontal view of the V1 it isn't much easier (certainly in comparison to its competition). The display uses a tiny series of vertical red dots about a 1/8 of an inch apart to indicate the type of radar, and another series of dots horizontally to indicate strength. These dots are small, crowded and hard to see. The V1 also has a single character display the flashes different patterns of dashes for you to decipher (laser etc). It was all Greek to us, and we were really surprised that in the year 2007 the V1 didn't have a better version out on the market. It felt like they were selling us 1940's Harley Davidson style technology and trying to pass it off as modern and current. A really hard pill to swallow when you put it next to the other units.

Audio

Again the Bel is the clear winner in this category, and by a mile. The Bel comes equipped with a headphone jack and a volume control that for some reason didn't control the headphone jack's audio output. To date we

have still not heard back from Bel as to whether this is intentional or not (and it's not for the lack of trying).

Luckily we were plugging the unit into our chatterbox, which offered some volume control. The really nice bonus feature for the Bel was voice synthesis (you can turn it off if you don't want it). Initially we thought this was kind of cheesy, but it turned out to be invaluable on the bikes. With the feature turned on, the Bel actually calls out "Laser" or "Ka" etc when connected to headphones or a Chatterbox in your helmet. Saved us so many times we lost count. Definitely much easier than interpreting different beeps etc.

Second for audio came the Escort, not because it was any easier to interpret than the V1, but because at least the Escort X50 had an audio jack as standard equipment. Both the Escort and the V1 require you to interpret different series of beeps and braps and blips which all represent different threats. This is okay in a car when you have the display as a visual reinforcement to accompany the chirps and blips, but not so okay on a bike when you can't see the display of the unit.

The kicker that put the V1 in last was that they had the nerve to soak you for a \$49 box to plug in to get an audio out jack. On top of this the cord they gave you to plug this box in to the main unit was about 5 feet long, so we had to go to the local electronics store and buy an RJ11 crimper and ends to make our own little 1.5 inch jumper cable. They could have easily added the audio jack to the main unit, especially at their price point. Having to add the auxiliary box made the bulky V1 even bulkier on the bike, and it also made it feel more and more like a cash grab on their part.

Accuracy

We tested the units independently, on daily commutes, both on bike and in car for over 6 months. In the car we used the power cords that came with each unit. Both the Bel RX65 and Escort X50 were identical and included a convenient mute button on the cigarette lighter adapter to that let you mute out any annoying falses. The V1 's cord lacked this, but did come out at a right angle to the lighter socket so that it sat tighter to the dashboard. We thought this was a nice addition, but we did miss the mute button featured on the Bel and Escort adapters. The V1 could be muted, but to mute it you had to reach up to the unit itself and push the main control knob. Not a big deal, but simply not as convenient as either the X50 or the RX65.

In addition to this we tested the three detectors for over 4000 miles of group motorcycle riding. For the group ride, we fitted our 3 test bikes with hard power from the fuse box. All three detectors share a standard telephone RJ11 jack for power. This is nice as it is a positive locking connector and does not jiggle out like connectors from models past. Also nice is that all three companies use the same standard wiring pattern, red being positive and green being negative. At least they consulted each other on this!

For our group ride we set up three bikes equipped with Techmounts, hardwired power and Chatterboxes. Each day we traded radar detectors and made notes on our impressions of the units. During the days riding (about 500 miles / day) the Chatterboxes allowed us to communicate with each other and alert each other if we had a hit on one of the detectors. As we were riding in close groups we could also tell how quickly each detector picked up the specific type of signal first. We also traded places with different bikes/detectors in the lead. We ran all the detectors with no filtering of any sort turned on as we were riding extremely rural areas, so no other radar sources were present (read: great motorcycling roads... no cars, no towns, but sneaky cops hiding in bushes)

This is how it shook down for us:

X Band

Bel was most sensitive in this case. On the Interstate I picked up an X Band signal well before the other riders. When they picked it up everyone collectively (via Chatterbox) dismissed it as a false signal. Much to my chagrin, I came up on the ass of a State Trooper who was driving a marked car in the fast lane, running X Band radar. Good thing I slowed down! Heck.. who uses X Band nowadays?? I guess some police do just to mess with you.

K and Ka Band

Sensitivity went to the Escort, and then the V1 and Bel, although experiences varied and were so close to call, basically all the units could be considered equal.

Laser

Off Highway 9 near Santa Cruz we split into two groups. I was riding with the Bel and PK was directly behind me with the V1. On a long straight stretch I was hit 4 specific individual times with Laser, and PK's V1 had no reading. 5 minutes later the second part of our group rode through the same area, with freck in

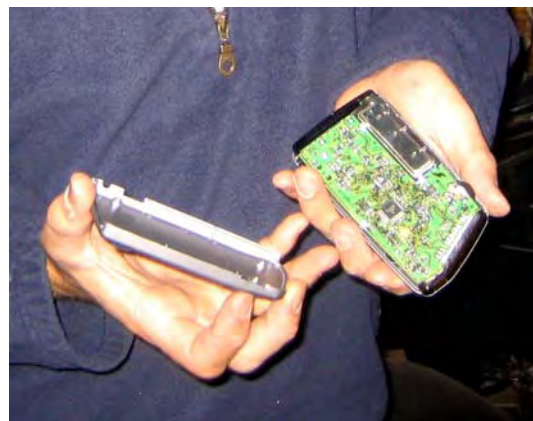


the middle of the pack using the Escort. He also took several individual distinct Laser hits. Basically the V1 didn't work as well in our findings when it came to Laser. This same experience was repeated two other times during our trip.

Reverse Radar Sensing

All units performed equally. There was no advantage between either detectors in our test.

Reliability



We dropped, tossed and generally knocked all the units around. From the "oops it fell out of my hand" to the "shit it fell off my bike when I was buying gas". This had some effect on the Bel as eventually (after 6 months) it developed an interesting symptom; it displayed laser ALL the time. There might as well

have been an alien space ship flying over your head because the laser warning was on 24/7. The Escort's audio jack went weird on us. You had to jiggy jiggy your audio cable to get it to sound right. Both units were sent back for repair, and well... they never came back... That's not to say that Bel and Escort's service department doesn't fix radar detectors, but probably more to do with the fact that they thought we were crackheads out to get a free detector or two and never write this story.

Our Choice...

These units performed their radar sensing duties so equally in our opinion that what separates them is ease of use, pricepoint and ergonomics. As stated at the beginning of this piece, what good is a radar detector if you can't see the display, or interpret the readings?

Our rankings are as follows: *for motorcycle use the hands down winner is the Bel RX65.*

You can pretty much tell which unit is the best when from a few days into the trip everyone "volunteers" to ride with the Bel. "Oh... I'll use the Bel today" or "Don't worry... I'll take that off your hands".

No one fought over the other two.

The Bel RX65's easy to read display, multitude of programming modes and voice synthesis feature make this the "must have" for motorcyclists. We're serious when we give it this recommendation! The headphone jack and digitally set audio levels are a welcome bonus. The price point helps this unit take the cake. It gets a gold star.

Second is the Escort X50, but not because it is volumes better than the third place finisher, the V1. Honestly the V1 would be in second place if the tight wads built in an audio jack, but we felt so bilked for extra cash because of this that the V1 really can't win, even though we LOVE (seriously) the directional arrows.

So there you have it. The long awaited "radar" review. We hope all of this helps you make an informed purchasing decision.



Personal Impressions: Princesskiwi on the V1

The Valentine One is big, heavy and square. It looks and feels like archaic technology. I tested it on my bike and in the car. On the bike it was mounted easily to my Techmount and wired into my Chatterbox so I could hear it going off. We had to buy an external adapter box for the V1 so that we could get an audio jack out of it. This box was velcro'd to the top on the V1. This made the unit even larger than its original 'super' size.

On the bike, the controls were hard to see on the V1's flat face. The V1 has arrows that are designed to tell you if your radar alert is coming from in front of you, behind you or right at you. The arrows were handy. It helped to know what direction to look in to see what was making it go off. Most of the time the gadget had you looking at a mall with automatic doors. On my bike, to see the arrows I had to crouch down in my seat. A manoeuvre that could cost you seconds, seconds that could turn a warning into a ticket.

In the car the arrows were easy to see. I used it in my Subaru, which is a small car and still I found the cigarette lighter cord was too short. The tension on the cord would pull the unit off of its suction mount on the

window. The V1 was so heavy that it was hard to get the unit to stick to the window. It would start to come unstuck and the cord would pull it the rest of the way off and fling the unit across the car into the passenger seat. The plug on the end of the cord has come delaminated because of the stress on it. As silly as a flying radar detector sounds, it happened with such regularity it was more and more annoying and no longer humorous.

I tried everything. Cleaning my window, warming up my window before trying to mount the suction unit, licking the suction unit, not licking the suction unit, none of it made a difference. The truth is the unit is too heavy and the cord is too short. It is hard to test a radar detector that is hard to mount.

I also had a hard time deciphering what all the other little red dots on the display meant. I didn't really use them. They were so small they were too hard to use so I usually ignored them.

The Bel RX65 retails for \$329.95
[click here to find out more and buy it online](#)

The Escort X50 Retails for \$299.95
[click here to find out more and buy it online](#)

The V1 retails for \$399.00 and the "motorcycle
headphone box" retails for \$49.00
[click here to find out more and buy it online](#)