
Spurious Or False Detection

Posted by kberna1376 - 2009/06/09 15:25

I have my XRX connected to a Garmin 495. I often get warning of 1 to 3 targets very close, behind, and below or at the same altitude as my aircraft. It will happen generally cruising. The targets move around a bit, then go away for a while. The first few times this happened it was really startling until I realized they were false detections.

Is there a problem with my unit, or am I doing something wrong in the setup?

Any suggestions appreciated...Ken

Re:Spurious Or False Detection

Posted by stevemcd - 2011/04/24 19:10

I fly a PA28R-200, XRX attached to Garmin GPSMap 496. I have this issue too. Scary alerts during approach to airport, +/-100 ft, right above/below me. Now I assume they are spurious, making me wonder how much to trust my XRX.

No reply to the previous poster for almost two years. Any ideas?

Re:Spurious Or False Detection

Posted by rachel - 2011/04/26 10:46

The short answer is the "spurious" target is actually your transponder being picked up as traffic. The most common solution to that issue is to calibrate the XRX's altimeter to within 100ft. of pressure altitude. (Altitude indicated when adjusted to 29.92)

If there is more than 100ft. difference between the XRX's altimeter and your transponder then the XRX will assume the traffic to be another aircraft and not yours.

The altimeter adjustment steps are in the owners' manual, pg.43.

If you need assistance just call our tech support line and we can walk your through the process.(800-496-9430)

Re:Spurious Or False Detection

Posted by stevemcd - 2011/05/01 12:14

Thanks. I checked yesterday. The pressure altitude on the field was 780'. Zoon XRX was showing 007 and 008, the best it could be. On my flight, I had one legitimate alert and one false one shortly after (showing 200' below me).

Steve

Re:Spurious Or False Detection

Posted by rachel - 2011/05/02 11:09

Can you give more details on the conditions you were flying in and location of the targets in relation to your plane?

How exactly did you verify that one target was legitimate and the other was not?

Re:Spurious Or False Detection

Posted by stevemcd - 2011/05/08 21:20

I could see the one airplane in approximately the location and altitude indicated by the XRX.

The other one showing two hundred feet below me was not there.

- 1) I could not see it.
- 2) I was in controlled airspace and received no indication from tower that anyone else (besides the legitimate target) was in my area.

This is the pattern (self-targeting) that recurs. A target within 100-200 feet above or below me. Very disconcerting when it happens.

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Re:Spurious Or False Detection

Posted by rachel - 2011/05/17 08:22

All you need to do is calibrate the XRX's internal altimeter to match pressure altitude(29.92). The procedure only takes a few seconds, the directions are in the users manual starting on page 43. (sub-heading Additional Menus: Administrative Mode)

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Re:Spurious Or False Detection

Posted by stevemcd - 2011/05/17 20:39

Um. You recommended that previously and I replied:

The pressure altitude on the field was 780' (with 29.92 setting). Zaon XRX (internal altimeter) was showing 007 and 008, the best it could be. On my flight, I had one legitimate alert and one false one shortly after (showing 200' below me).

Steve

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Re:Spurious Or False Detection

Posted by rachel - 2011/05/19 10:09

The only other thing that can be done with out sending the unit in for evaluation is to adjust the digital suppression.

This is best done over the phone as the written directions can be confusing.

Have your XRX powered up and give us a call so we can walk you through the suppression change. 800-496-9430

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Re:Spurious Or False Detection

Posted by Airdog - 2011/07/29 21:33

First thank you for developing a really promising product.

I fly a Mooney m20j, with the xrx interfaced to a 696.

First time I flew it worked flawlessly.

I haven't flown for a few weeks, and recently went out again...and basically the xrx,, is really not working well at all. I would say its detection rate in class C airspace near YVR, is 10%. Its false detection is also elevated.

I can't imagine that there are that many AC flying without Mode C. And I can't understand what has changed. I have made six additional flights, with all the same results.

I have checked all connections, and the manual. Nothing seems out of ordinary. I will attempt to re calibrate, alt and

hdg. I will also attempt a flight without connection to the 696.
I was impressed by my first flight,,,and eager to have that functionality and safety back. I know it works well..because I saw it with my own eyes.

The AC is stored in a hangar,,,, so no moisture or heat could be a problem.

Any suggestions..would be appreciated.

Kind regards
mark

Re:Spurious Or False Detection

Posted by rachel - 2011/08/02 10:06

Actually, you most likely will fix the issue by recalibrating the Altitude.
All traffic threat level is based on the XR's altimeter or, if it is in pressurized mode, your transponders pressure encoder.

If the Altitude indicated by the XR does not match the altitude when adjusted to 29.92, then all information is skewed by the difference between what is indicated and actual pressure altitude, resulting in missing traffic and showing you traffic you can't find.

Re:Spurious Or False Detection

Posted by stevemcd - 2011/08/02 11:27

I was finally able to "adjust the digital suppression" yesterday by calling in to support. I will report again when I have some results.

Re:Spurious Or False Detection

Posted by stevemcd - 2011/08/18 14:15

Unfortunately the first time I tried it after the adjustment I got similar self-targeting on climb-out. I'm wondering if a repair would make any difference, but as it is, I am pretty much turning it off anywhere near an airport (which is where the self-targeting happens most of the time)

Re:Spurious Or False Detection

Posted by rachel - 2011/08/18 15:28

The next step in eliminating "self-targeting" is to adjust the digital suppression. It is the screen right after the altimeter. Usually reads P00_009 the last number (009) is a suppression setting to help cancel out your transponder signal as traffic. Try increasing the number one at a time.
The max limit for effective suppression is 016.

Re:Spurious Or False Detection

Posted by stevemcd - 2011/08/18 15:50

Hmm. It was the suppression that I adjusted. I had to call Zaon support for instructions. The suppression level was raised by two though I cannot recall to what number.

Any chance I could get written instructions and try adjusting it myself? It's very challenging for me to be at my A/C during your working hours (since I work the same hours). The instructions didn't seem overly challenging to follow.

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Re:Spurious Or False Detection

Posted by rachel - 2011/09/22 12:58

It has been our policy to not post the instructions on how to adjust the suppression on the forum. This is because; miss adjusting the suppression greatly affects the performance of our system.

You can email a request or you can call and we can step you through the process again. When adjusting the suppression all you need is the device itself and a power source.

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