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FLIGHTGEAR

GEAR REVIEW

ZAON XRX PRICE: £1056.33 (INC VAT)

There's the traffic!

Zaon's new traffic awareness unit links with Garmin 496

THE XRX is the latest in a line of portable traffic awareness systems from Zaon Flight Systems and features the ability to indicate the direction of detected traffic as well as range and relative altitude.

The latest version of the firmware also supports a data interface that allows traffic information to be sent to and displayed on a Garmin 496.

The system is designed as an aid to visual detection of traffic. As well as showing traffic information on screen, it can output audio traffic alerts. It will track up to 10 target aircraft simultaneously, and display the three most 'threatening'.

Even though the XRX has a built-in LCD screen we were keen to try out the interface to the Garmin 496. This requires the use of the optional power and data cable to connect the two units together and to connect both to a power outlet.

HOW IT WORKS

The XRX is a transponder-based passive detection system, which means it listens for the replies from nearby transponders that have been interrogated by

ground-based radar or by active airborne systems such as TCAS.

This transponder signal is then processed and decoded to provide range, bearing and relative altitude of the target aircraft.

However, there are so many ways in which the received signal can be distorted – everything from multipath echoes and airframe shadowing, to a dirty transponder antenna on the target aircraft – that some sophistication is required to adequately compensate.

To that end, the XRX includes a built-in solid-state compass and altimeter, bank angle sensor, temperature monitoring and a cooling fan.

I have to admit to having been a bit sceptical that all this wizardry, packaged up in a cockpit-mounted, self-contained unit weighing 250gm, would hang together well enough to provide usable accuracy and reliability.

ON TEST

We installed the XRX in a



CAP-10, and to ensure that we could verify the traffic information displayed by the unit we flew in company with an RV-6A. We used GPS-measured distances along a common course line to check the accuracy of the range information.

Getting the best out of the XRX requires a little more than just slapping it up on the glareshield and switching it on. The unit needs to be placed at least 6in away from obstructions (including the magnetic compass) and must be horizontal. A number of

different sized silicone feet are provided to facilitate this, but in the CAP the glareshield itself is horizontal so we only needed a couple of the provided Velcro 'buttons'.

A simple menu system is used to set the size of the 'detection window' that the XRX monitors for traffic. The maximum size corresponds to a radius of 6nm and an altitude of 2500ft above and below.

The Garmin displays traffic information using simplified TCAS-style symbols – a

FIRST LOOK

AL6000 BREATHALYSER
PRICE: £78.99 (INC VAT)

How much can you drink?



NOW is the season of fly-ins, rallies and touring. Arrive, park up, enjoy yourselves. You're not flying until tomorrow so relax and enjoy a good social dinner.

There's an odd contradiction with aviators that dates back to WWII, where drinking and singing round the piano into the early hours was expected, but reporting the next morning unfit to fly through drink was a serious chargeable offence.

None of us would ever fly when over the limit, would we? But what is the limit for pilots? Smart cookies will correctly answer 20mg alcohol in 100ml of blood.

Fine, but what does 20mg actually mean (apart from being a quarter of the UK's