

With the covers off, under... I encountered a gap between 590 and 670MHz where the receiver synthesiser was apparently not working.

Hot Little Receiver

As one of my colleagues from Exeter University often says to me "What's that in real microvolts?", and to give you some idea of the level of signals you will hear, -117dBm is equivalent to 0.3 μ V p.d. and that makes the RD500 a hot little receiver. Connected to a small log periodic I could hear signals over really long distances, and had the experience of tuning around during a sporadic-E opening when the

band between 50 and 80MHz was simply awash with broadcast and TV signals from Italy to the Baltic States. Mind you, the same opening meant that I couldn't carry out any EMC measurements on the open area test site, but that's another story. Great fun.

For those who may want to tune s.s.b. signals at v.h.f., I did find that the demodulated signal became more 'wobbly' as I tuned higher in frequency, which I put down to noise from the synthesiser, but on the 144MHz and 432MHz amateur bands there were no problems. I wouldn't

The front panel of the RD500 contains rather small buttons for direct frequency control. Small perhaps, but at least it has them - unlike some of the competition!

Table 1:

MHz	FM(N)	AM(N)
1040	-118	-112
940	-116	-111
840	-118	-113
740	-118.5	-114
540	-120	-116
440	-122	-118
340	-123	-120
240	-122	-119
140	-123	-119
80	-121	-117
50	-119	-115.5

however recommend trying to listen to s.s.b. or c.w. on 1296MHz - but who does? I suppose that may trigger a letter from a keen v.h.f. contest operator but I'll take a chance.

I did encounter one barnstorming internal spurious carrier on 600MHz, but that's the only one I fell over. I didn't have the time to tune the entire 1700MHz range in 100Hz steps, so if you find another sproggy, I'm sorry I missed it. Overall, I couldn't fail to be impressed by the performance of the RD500, and I find it hard to guess how it all fits in that tiny box.

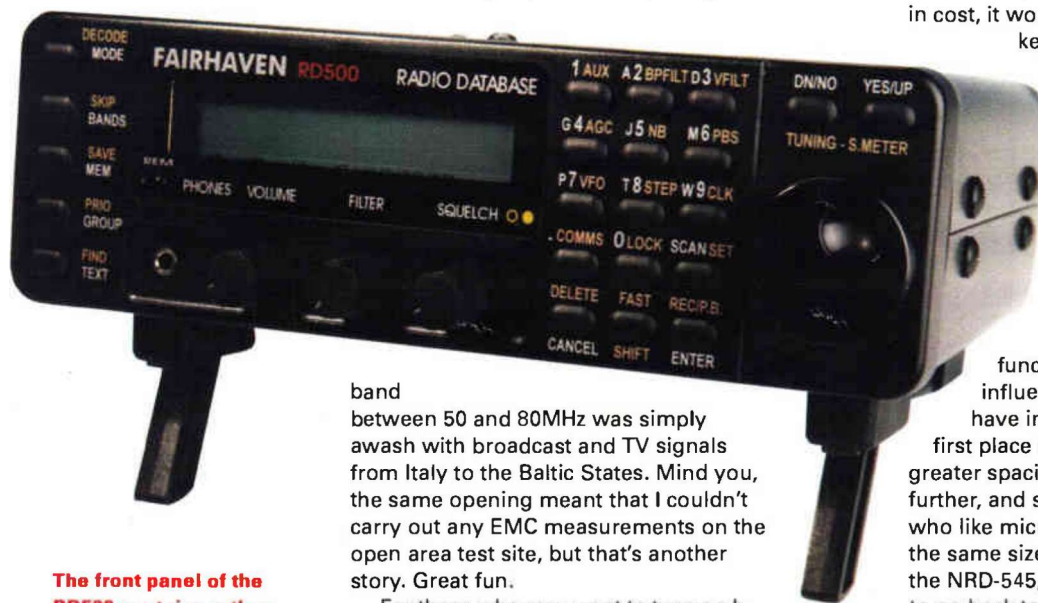
Symmetry

Since the first i.f. filtering had been changed, I went back and re-measured the 3rd order intercept point at h.f. and found that the response was now symmetrical with a figure of +10dBm easily attained at 20kHz spacing, just as the handbook says. I also found that operating the RD500 became very easy once I had mastered the triple function keypad, and I do prefer this approach to the Zen simple layered menu system, even though that is ultimately more flexible and extendible. The RD500 keypad in particular can be a mite confusing when you have a single key labelled as 'A', '2', and 'BP FILT' or 'W', '9', 'CLK'. Despite the obvious increase in cost, it would have been better to engrave the

key tops with the numbers so that they were unmistakable, and had the second and third functions on the panel alongside. Don't get the idea that operation is very difficult, it isn't, but at first encounter you have to be very careful in determining which key is which.

Having said that, it's a delight to have all the receiver functions available right there on the panel, even with second and third

functions, but if I had been in a position to influence the design of the RD500 I would have insisted on a larger front panel in the first place so that all the controls could have had greater spacing between them. Going one step further, and suggesting the ultimate heresy to those who like micro styled receivers, if the RD500 was the same size and shape as, say an Icom receiver or the NRD-545, it would be an absolute stunner. But to go back to the keypad; Fairhaven can provide a small laptop type of keyboard which will plug into the PC interface socket on the rear panel, and this enables easy entry of data in a more familiar format. I haven't had the opportunity to try out the Windows based software from Fairhaven, but this



would probably fulfil all needs for easy operation of the receiver, as well as great flexibility in entering database details. It's worth mentioning that with two megabytes of memory fitted, you can store simply huge amounts of information and use it to drive the receiver. Imagine having the whole of "Passport to World Band Radio" or the Klengenfuss Guide right there in the receiver...what power.

It's British

As far as the million other functions and features which embellish the RD500 are concerned, I suggest that you go back to my original review rather than have the pages of the magazine filled with the same information this time around. All I can

say is that I was impressed with the RD500 at our first meeting, and I'm even more impressed

now. This is really innovative design and deserves success. I

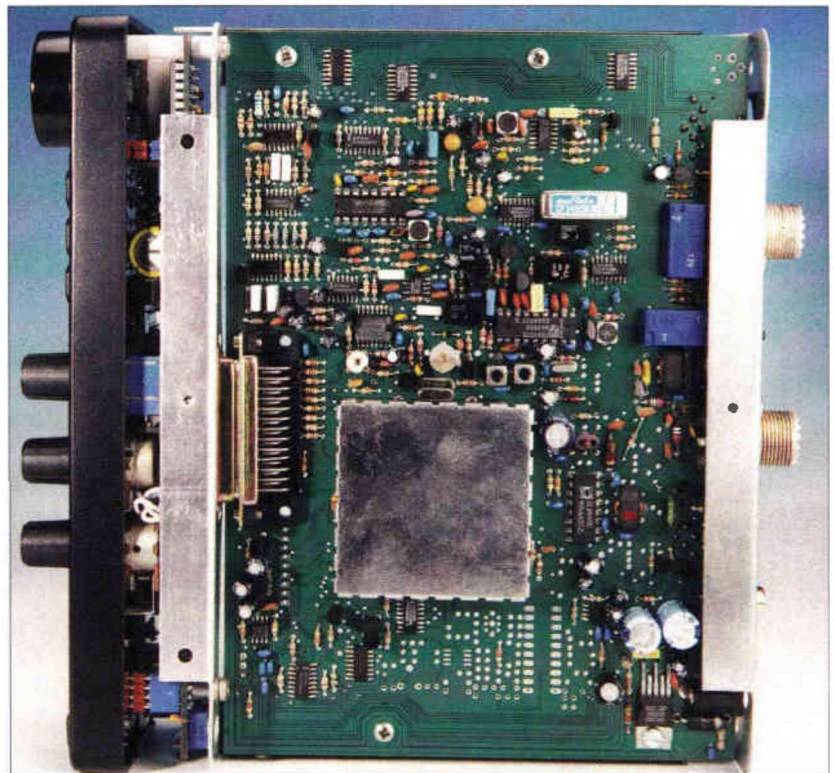
know of no other

receiver which



The infra-red remote control, yet more small buttons. This time including the alpha's too. Database programming has to be easier via a PC.

combines all the features found in the RD500, and this, coupled with the very wide frequency coverage, makes the RD500 a very tempting prospect for anyone looking for a single receiver to use as an entire listening system. And it's British, so there are people here who do things



other than spray beer over Belgian football fans and kick policemen unconscious.

Thanks again go to **Clive Buxton** at Fairhaven for supplying the review receiver.

You can contact **Fairhaven** at **47 Dale Road, Spondon Deby D21 7DG. Tel: and FAX: (01332) 670707** or **E-mail:**

sales@fair-radio.demon.co.uk For more information on the RD500, those of you who are Internet connected can take a look at **www.fair-radio.demon.co.uk**

Prices for the Fairhaven radios are as follows: RD500 - 500KB memory, h.f. receiver - £679; RD500V - 500KB memory, h.f./v.h.f./u.h.f. receiver - £799 and RD500VX - 2MB extended memory, h.f./v.h.f./u.h.f. receiver - £899. The V and VX models include video output and wideband f.m.). **SWM**

...and over.

We asked Clive Buxton to comment on John's review here's what he said:

"The range 590 to 670MHz is now catered for in all modes. The Synthesiser performance has been tweaked at u.h.f., since the prototype was sent out for review. We had hoped to send a later version to John but the SWM deadline prevented it. As with any receiver a few sprogies exist and if you spend a day or two tuning the whole 1.75GHz in 5Hz steps you will find a few, the important thing is that sprogies are kept away from amateur bands and away from 12.5kHz steps, so you can 'tune for miles' without experiencing problems." - **CB**.

If you missed John's first look at the RD500, don't despair, back issues are available from the SWM Book Store at £2.75 each. - **Ed**.

On Another tack...

To those who think I have vanished like smoke from a hookah, bad news. I have simply moved house here in Devon and can't find my computer among the hundreds of boxes stacked in the barn.

We took the decision this time not to send out hundreds of change of address cards but to have the mail redirected for a year, during which time all the senders of letters will get my new address by return. Having also

lost the TV set in the chaos, I have now had three weeks of not being told about world disasters I can do nothing about and best of all have lived in a football free environment. I can strongly recommend it. In the process of ordering some new whizzy and expensive equipment from Rohde & Schwarz to extend my measurement capabilities up to 40GHz, I noticed in their catalogue an antenna called the TFD. Guess what - it's the T2FD in commercial form,

and the accompanying text extols the virtues of the antenna for NVIS use. That stands for Near Vertical Incident Signals (See page 39 May SWM - Ed.), and makes the T(2)FD perfect for h.f. communication within UK. It's always been said that for 80 metre working within UK and Europe, it's best to have a poor dipole which sends the signal straight up - I really must get one going on 80, but I have to find a high power resistive termination first. Any ideas? **JW**