

FTDX5000 – good but not the best.

If your main interest in ham radio is ragchewing under reasonably good band conditions with little interest in hard-core DXing and contesting, or having a weekly chat on your “warts and bunions” net on 75m, then please don’t read further if you are considering buying an FTDX5000. Read the good reviews of the radio and be content with your purchase. If however your main joy is dragging marginal signals out of noise on the low bands, and serious contesting, then you may be interested in my comments.

What a disappointment this radio was after the eHam reviews, the various magazine reviews and the Sherwood measurements. My overall verdict is "A good radio but not up to the mark". This review may seem to consist of nit-picking in parts but if I am spending over \$6000 on a radio then damn right, nit-picking it will be. It could be I had a Friday afternoon job or a lemon. Maybe, but spending that sort of money then it just should not be possible. If someone wants to lend me a known-good FT5000 for further tests, or bring theirs here for a head to head with my K3, then I will have a chocolate K3 made, and eat it if the FT5000 is better.

Having spent a lot of money one doesn’t want to admit to bad judgement in a purchase. You feel such a fool. I have dithered long and hard about buying the FT5000 as apart from the arcane ergonomics of the K3, I am a very happy user. What drove me over the edge to make a commitment to purchase the FTDX5000 was the magazine reviews (of which more later) and the recent earthquake in JA which seriously has affected production at the Yaesu facility. I was concerned that further dithering might mean no availability for months. An old saying comes to mind about deciding in haste and then repenting at one’s leisure. However, it seemed like a good idea at the time.

I have never been terribly enthusiastic about lab reviews. Signal generators and hybrid combiners are fine in a test lab. The bands aren’t like that. Copy is often combating a mess of competing stations, QRN, fading, multipath, noise and other factors. What governs deriving intelligence from the mess is a mixture of receive filter and synthesiser performance, AGC and audio characteristics. Really the only test that works is careful and lengthy A/B comparisons on the air against a good radio of known standard.

With regard to the published numbers and the magazine reviews, yes they are a guide. Having read them my only concerns were the poor 100Khz rejection in the Sherwood review and a report I had had from a well-respected UK DXer that there were bad key clicks when using QSK and also internally generated spurii on 160m. I noticed neither in my tests. Incidentally, can anyone tell me why Rob Sherwood put it in 1st place ahead of the K3 when the numbers are pretty head-to-head apart from the 100 KHz rejection and ultimate filter rejection for the FT5000, surely reason for demotion to third or lower place?

Just a word about what I expect about a radio.... Although I expect the usual things from the transmit side, it, what I expect above all in a good radio is excellent receive

performance in challenging conditions. The main interests are CW DXing and contesting on the low bands, and 160 in particular. A receiver has to be top-class so already the IC7700 and 7800 have been assigned to the "not quite good enough" category. Well, the 7700 was quite good on receive but ICOM's amazing decision not even to put dual-watch on it ruled it out totally. Kenwood's latest TS-590 might be a contender but without a second receiver then it is unlikely to please.

Anyway, enter the "wonderful" FTDX5000. I see so many 5/5 reviews of this radio believe me, my tests have been long and extensive, as in the first evening of tests I did think "This has to be me and not this expensive radio." After spending close to the price of a small car, and having seen what many prominent DXers have said about this radio, I really tried to like it.

My main interest being CW, I installed the 300Hz roofing filter and had the radio on an A/B switch with the K3 to allow direct comparisons to be made. Same antenna, same headphones. The K3 has the 400Hz and 250Hz filters in the main RX so the comparisons have been made with 250Hz bandwidths on both radios with the 300Hz roofer in the FT5000 and the DSP bandwidth set to 250 Hz too. Only the main receivers were compared, with AGC, passband and filter bandwidths as close to identical as could be achieved. I've seen in other reviews that the second RX of the FT5000 is rather poor. My K3 second receiver seems pretty good, but no A/B tests were made there.

I put it on the bench beside the K3 as one might, and immediately noticed how difficult it was to read the signal path part of the FT5000 display for VFO A without bringing my head down to the level of the radio, even with the front legs raised to present a better viewing angle. The display is slightly recessed unlike the K3 and the irritation was immediate. With such an expensive radio this is an astounding ergonomic error.

Some of the legends on the controls are also difficult to read from a normal viewing position. Many of the controls are dual-concentric and protrude to such an extent that the top row of knobs on the left obscure the legends of the bottom row from a normal viewing angle. At least with the K3 the most used functions of a particular multi-function knob are assigned a legend ON THE TOP of it, which allows better viewing from the normal position of the operator's head, which for most of us is above the radio. The FT5000 light grey legends on a dark grey case background seem fairly idiotic contrasted with the K3's excellent clear white on black. These might appear to be rather petty observations but when you are shattered after 40 hours of non-stop contesting then anything adding to difficulty of operating really does matter. Congratulations Elecraft - what you did with the knobs and colours did not happen by accident, but the lack of proper band buttons was quite frankly an act of madness.

During the testing, which was done on 160, 80 and 40M mainly CW, there was never a time on either CW or SSB when the FT5000 gave better copy than the K3, measured by the ability to read the received CW. Indeed there was never a time when it was as good as the K3 on weak and difficult signals, and I can say that without any doubt at all, and after having tried everything (even reading the manual) to optimise FT5000 receive performance. Considerable time was spent listening to ZS2CX and YC0LOW on 160m. These signals would have merited 449 on peaks. I would put the

copy percentage as 80% with the K3 and 50% with the FT5000. Similar results were seen on HS0ZEE on 80m and V85SS on 40. All these on CW, and all these tests were made over several hours with many changes to and fro eliminating QSB and conditions effects. Hard to describe why copy was so much poorer with the FT5000 but signals seemed mushy and mucky with the FT5000 with considerably more background noise. The dots and dashes of the copied CW were not as separate, clear and distinct as they were with the K3. Sometimes the difference was stunning, and always in favour of the K3.

Another thing that was extremely noticeable was that there was some kind of ringing or phase distortion on received CW signals with the FT5000 if there were many in the filter passband, and no I was not using the audio peak filter. Hard to describe this more precisely, but when listening to the pile ups for the ZS and YC on 160, signals from the many callers merged into a ringing mess on the FT5000 whereas they could be separated and copied with the K3. This would be a killer in a pile-up situation on receive. Some have said that there are AGC and filter group delay problems with the K3 when receiving in a pile-up. Those people should try this FT5000 in that context!

.Some brief tests were made on SSB on 80m and the K3 recovered audio was much clearer than the FT5000 every time. Comparative tests were made to assess the bandwidth down the skirts on both modes. The K3 was again the winner, but this was much less noticeable on CW than on SSB. I don't use SSB much and I was surprised how good the K3 stock 2.7KHz filter is, or disappointed in how poor the FT5000 skirts were compared with the K3 and with the published filter slope diagrams.

All is not bad though. The K3's principal ergonomic problem is the insane absence of proper band buttons and a band-stacking register. The FT5000 was a delight in that respect. Over time I have become used to the multi-function buttons on the K3 but still make mistakes and end up by for instance invoking a different VOX setting when I press the BAND button. I did think that the control set of the FT5000 would allow for better operation but after an evening or two I found that once I had set up the radio to my preferences, the multiplicity of buttons and knobs became rather superfluous. Fine if you want your radio to look like the control panel of the Space Shuttle, but I just want mine to hear stations well and have frequently used controls available.

Although it is of no consequence to my buying decisions, I didn't much like the styling of the FT5000, particularly compared to ICOM radios for instance. OK, the K3 sucks from the point of view of the control knobs and the homebrew appearance of the cabinet, but all is forgiven on account of the receiver.

The other major disadvantage of the K3 is that the CW keying characteristics are rather soft. There is no menu setting to shorten the rise time, although Elecraft have talked about making that an option. This means that other stations can come right close to a K3 user with their often-clicky signals. Nobody can convince me that those clicks are not deliberately engineered on many occasions, and seem to appear in the major contests, particularly where a club callsign is being used and a personal callsign is not fingered as a result.. There is no defence as the clicks are within the excellent receive passband of the K3 and one just has to suffer them. Frankly, one of the attractions of buying an FT5000 was that if necessary, I would at last have

been able to fight fire with fire, as some of the stations in some of the contests take no notice of polite requests to check if their transmitter is clean and only respond to a dose of the medicine they themselves mete out to others. With the FT5000 it is rather useful to be able if required to shorten the rise time to 1mS which makes for a very dirty clicky signal, which sorry to say is the only thing some of those guys will take note of. However, the ability to generate a dirty signal isn't what I buy a radio for, but it would be quite handy sometimes.

The other major irritation I found with the FT5000 was the poor sidetone which was mushy and full of audio artefacts when compared with the purer tone of the K3. I know it shouldn't be, but a poor sidetone puts at risk the quality of my CW, which sadly can deteriorate badly if I am tired and have to listen to a sidetone that is unpleasant.

Anyway, in conclusion....I bought the FT5000 on the basis of what others said about it and the plan was to have it as my main transceiver with the K3 being used as a second radio/spare. However, having tried the radio over many hours for nearly a week, it just is not good enough to be used as the main radio, and is far too expensive to be sitting on the shack table as a reserve radio. The K3 is still the best. Contrary to what others have said, the king is not dead. Long live the king!