

Pye VHF3D

Ever since I got interested in valve radios I've been after one of these. A mate had got one in his shed that he wasn't likely to get 'round to fixing-up for a good while so he said I could do it and keep it for an unspecified period thereafter. Now this chum knows more about electronics than I want to but this set was also in something of a state cosmetically and in that area I out-rank him.

They are something of an oddity in that they are basically a radiogram with the gramophone removed. It says "Stereophonic" on the front but this only applies to the Gram socket; there's no stereo de-coder for VHF and, of course, SW, MW and LW have always been mono.

There's also a paucity of technical information. I've never heard of either a Trader Sheet for it or service data produced by Pye themselves. It's scantily covered in the Radio and Television Servicing books, the total information being:—

Model VHF3D: Nine-valve (including rectifier and tuning indicator), four-waveband (L.W./M.W./S.W./V.H.F.), A.M./F.M. stereo table model. The early stages will be found similar (apart from a few minor modifications) to the circuit given in the 1959-60 volume for Model VHF3DRG, while the audio stages closely resemble those of Model VHF3DSG (early version), also given in the 1959-60 volume. Valves: (V1) ECH81; (V2) EF89; (V3) EF80; (V4) ECC83; (V5) EL84; (V6) EL84; (V7) EZ81; (V8) EM84; (V9) ECC85.

We knew that one of the EL84s looked like a bottle of sour milk but nothing of its electronic condition beyond that.

It worked after a fashion with a replacement so at least there was nothing terminal amiss.

Electronically there wasn't much to do as most of the caps are ceramics. The Grid Couplers were leaky MetalMites and the Cathode Bypass electrolytics on the ECC83 and EL84s were all shot.

Changing these greatly improved it's performance: it even worked on VHF.

The only other fault I could find was the EM84 tuning indicator flashing on and off but that was a root vegetable of no import as I could hear when it was tuned in.

The cabinet needed re-finishing and the old finish took a lot of shifting. A cabinet scraper was just skidding over the top so I had to resort to chemicals and it took three goes with that to fully shift it. Mind, I was using 'safe' paint stripper from Wickes.

After that it was a pretty straight-forward shellac job.

The two small knob brights were AWOL so I made a couple of replacements for those.

After putting the chassis back in the cabinet I switched it on, which lead to three questions:—

- 1) Why haven't the dial lights come on?
- 2) Why is it crackling when it hasn't had time to warm up?
- 3) Why is smoke coming out of it?

Lack of lights indicated LT problems but I couldn't find any shorts and the transformer seemed OK. I eventually found a wire which links the EZ81 heater to the chassis had melted. I changed it and all was well, but not liking faults that clear themselves I added a 5A fuse straight after the transformer.

I put it back in the case and switched it on via the lamp limiter which came on like a floodlight.

It couldn't be shorting to the cabinet as it's wooden so pondering was called for.

I found that the problem occurred when the EM84 was put back in its proper place. Its LT is tapped off one of the dial lamps. The holder is in a rubber grommet that sits in a U-shaped bracket on the chassis and this (the grommet) had split across. I hadn't got a replacement so swapped it with the one on the other dial lamp and put some tape around the edge of that ones bracket. All was then well.

The EM84 still played up and after bench-testing I was sure that the valve itself was at fault. I suspected it was alright when cool but failed when it got hot, then came back when it had cooled before repeating the cycle.

This work was done at the back end of 2013 and a few weeks ago (late 2016) its owner turned up an EM84 in his stash. While I was fitting this I took the chance to fit a new grommet on the dial lamp and fit new filter capacitors on the transformer HT secondary — I hadn't been prepared to trust the originals and, as I didn't have suitable replacements at the time, had simply removed them.

The 'new' EM84 worked but wasn't very responsive. This proved to be a down to a couple of resistors associated with it having gone high in value.

Despite its reputation of being one of the ugliest radios ever made it has been admired by everybody who's seen it since I've had it. Even its owner says it looks very at home on my sideboard.

