

Getting rid of the woodpecker. An actual scope shot of blanking signal at Q2

the bottom of the box, and the hole positions marked through, before drilling four 3mm holes. The board mounts on four 6mm spacer pillars (or three 6BA nuts) to space it from bottom of the box, using 6BA bolts.

The four controls mount on the front of the box, and eventually against the front panel of the rig. The box specified has a pillar which will have to be filed or ground off to allow the central control to be fitted. The four holes are drilled with 31mm spacing between them, 13mm below the box top.

You will also need to drill a series of holes around the outside edges of the box, 13mm from the top edge and of a diameter to suit the 1000pF feedthrough capacitors for the following connection points: +12V, +12V RX, +12V TX, Z, Y, AA, J, L, N, P, Q and R. If you can't find any screw-in feedthroughs, you can use solder-in ones by using strips of tinplate or PCB as a carrier, bolted to the inside of the case. Alternatively you can use insulated feedthrough terminals with ln ceramics across them for decoupling.

The speaker connections from point V should be taken to a feedthrough using screened cable, with the braid earthed at the feedthrough via a solder tag. The output then goes to the speaker cable, which has one lead earthed by another solder tag on the outside of the box. All connections should be as near to the points they go to as possible, and a suitable legend written at each on the outside of the box. A double row of feedthroughs was used on the righthand side of the box illustrated, 10mm below the first row to avoid crowding.

Coaxial inputs

In addition, coaxial sockets are required, one for the LO, and one for RF — use Belling Lee, miniature Belling Lee, BNC or whatever you prefer, located above the terminal pins they connect to and wired to the PCB using miniature coaxial cable.

If you are going to be using the IF notch filter, two more coaxial sockets will be needed, with a temporary coaxial link between them, again connected to the PCB using coaxial cable (points B and C).

For those who will be adding the SSB adaptor, another pair of coaxial sockets are needed, going to points M and K. Thus there will be six sockets required if the complete unit is being built. The photograph will show the approximate locations for each if you follow the wiring (full details in a later part).

Audio filter

If you are going to use the audio filter, this mounts on the underside of the lid, with the front edge of the PCB 26mm from the front of the lid (to clear the internal switch). All connections to it are made with screened AF cable with both ends of the braid earthed. (If a 12 way 1 pole switch is used, locked to the 8 positions required, one of the spare tags can be used as a braid anchor point.) The input of the filter (A) goes to point E, and the output (from the switch via point L on the filter) goes to point F (remove the link between E & F!). An additional IMO resistor (not shown on the circuit diagram but R73) should be connected from the input of the filter (A) to earth. Power comes from +12V on the main PCB.

Next month: The IF Notch Filter and Preselector Filter modules.