

when T3 is correctly adjusted.

8. Connect an aerial. If you have a freguency counter, adjust the channel trimmer for correct frequency output at three times the crystal frequency (connect to the counter at one end of C10). Alternatively, find a local signal, or use a signal generator, and adjust the trimmer for maximum perceived signal strength (maximum quieting of the receiver). If the signal is too strong to do this easily then use a shorter aerial — for less signal pickup. It is possible to swing the crystal over several different channels using the trimmer, so you may be able to find a signal on other than the correct frequency for this part of the alignment.

9. Adjust the cores of L1, T1 for maximum signal strength (again reducing the signal if needed so that it is not fully limited ie it is still noisy while peaking). DO NOT ADJUST THE HELICAL FILTER — this is supplied prealigned. 10. Adjust the core of T4 for best audio quality — this normally coincides with maximum high frequency hiss accompanying the signal.

11. Finally, carefully re-peak all the transformer cores, including T2 and T3, for best signal strength. If you have aligned the crystal frequency 'by ear' some slight adjustment may be needed to the trimmer for best results. 12. Check operation of the squelch control. This should silence the

receiver with no signal present at about one-quarter clockwise rotation, and then 'open' as soon as a signal is received. If the receiver stays muted (squelched) all the time, a very slight adjustment of T4 will cure this. The control should normally be set just past the muting point — it can be advanced to prevent weak signals from opening the muting, but then audio signals will tend to operate the squelch on some audio peaks if overadvanced.

Multi-channel

If you are using one crystal, then the link already connected can be left in place. For up to 6 channels, a rotary

