

HAM

RADIO TODAY

NEXT MONTH

WINTER TIME IS CONSTRUCTION TIME!

A rugged low-cost 2m FM 'Talkbox' project

Designed by Tony Bailey, G3WPO, suitable for both newcomers and experienced amateurs. Chat cross-town and country — talk it walking, 'fox hunting' or even shopping.

40m Yagis don't have to be big!

Build this design for a super-compact helical beam antenna — to fit the average suburban plot. Seriously!

PLUS

RTTY with the BBC model 'B' computer and the G3LIV interface

Semiconductors explained for the RAE examination

Mobile antenna multiplexer — 2m, 10m and LW/MW from one antenna

Addendum

G4DHF TRANSVERTER 2m to 160,80 and 40m

The following are corrections and after-thoughts to this design: L1,L2: to guarantee sufficient coupling between L1 and L2 on 160m, extra capacitor, C55/47pF should be connected between the two non-earthly ends of L1 and L2; on the PCB this is probably best achieved by simply attaching the capacitor across the two pins adjacent to L1 and L2. More times than not, the transverter will work normally without this mod, but on those that don't work, the symptom will be lack of output, on receive and transmit, on 160m.

Oscillator/LPF PCB (p13) 160 and 80m oscillators have low inductance (blue) coils.

Misprint The paragraph near the top of column two P13 should begin: "Two of the six-turn coils and four five-turn coils are required."

Filter overlay diagram (P14) Please ignore the coil reference numbers given in the note.

Driver PCB(p15) Three faults here: first and VERY IMPORTANT, D1 is shown the wrong way round — the cathode (banded end) should be to D2, C2, etc. Secondly, the two points As on the overlay diagram should be joined, but the dotted line from the A on the left is a screen and is not attached to the point A. Finally, the source of Q5 should be soldered directly to the top foil of the PCB.

Components Listing Q5 is 3SK45; the switch listed under Miscellaneous

should read "Switch 4 pole 3 way rotary"; C52 is 1n5 polystyrene and C53 is 3n3 polystyrene; finally, the note at the very end should read "Note that all the components marked with a * are for just *one* oscillator...." (our typesetter was having fun that day!).

Coil Data L3 and 4 for 160 and 80m: L3 is Toko type 301KN0600 (blue - 6.5 turns). For 40m L3 is 301KN800 (white - 8.5 turns). For 160, 80 and 40m L4 is 301KN0800 with two cores used inside. L5 and 6 for 40m are six turns 18 swg; for 80/160m they are five turns 18swg, in both cases wound on 7/32" diameter. T5 has a four-turn primary, centre-tapped, and a four-turn secondary. L10,11 use 0.56mm diameter wire.