

### T1 to T5

All wound using 1cm square ferrite toroid with 0.25mm wire. The wire is passed through the holes in the manner of a conventional transformer.

- T1** Eight turns centre tapped
- T2** Four turn primary, two turn secondary
- T3** As T2
- T4** Four turn primary, four turn centre tapped secondary
- T5** Four turn primary centre tapped, four turn secondary
- L8,9** 20 turns 0.56mm en Cu wire on T50-2 core.

- L10,11** 14 turns en Cu wire on T50-2 core.
- L12,12** 26 turns 0.56mm en Cu wire on T50-2 core.

(L12 & L13 are mounted directly across the band-switch.)

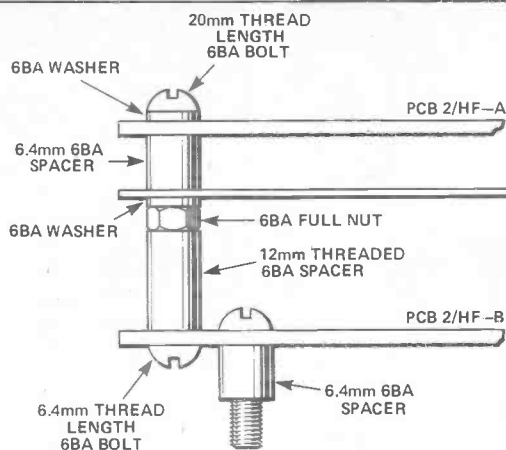
### Additional Attenuator Pad Details

For 100mW O/P, R1, 2

= 33R, R3 = 22R, all 0.25 watt.  
For 300mW o/p rig, R1, 2 = 39R, R3 = 10R, all 0.5 watt.

Note that all the components marked with a \* are for just the oscillator, and you will need to order three of each of these (you will also need to make three each of L5 and L6).

### Original method of mounting Transverter PCBs.



PROP: A L BAILEY G3WPO 07918 6149

20 FARNHAM AVENUE HASSOCKS  
WEST SUSSEX BN6 8NS

## WPO COMMUNICATIONS

This month, we thought we would give a resume of all our products — if you want more data, please ring, or drop us an s.a.e. (9 x 4" or larger).

**2 METRE FM RECEIVER** — one of our early and popular kits, costing only £30.65. For this you get a 6 channel monitor receiver with <0.2uV sensitivity, no coils to wind (all pre-wound), 3 filters used and it works off +12v. We have a matching Transmitter to follow soon.

**CAPACITY-ADD-ON UNIT** — What's this? A clever design which enables a Digital Frequency Meter to turn into a Digital Capacitance Meter. Measures from 1pF to lots of uF's. Only two connections needed to your DFM. Complete kit with case & pcb only £14.50. Works off +5 — — 15v supply.

**VHF PRESCALER** — the cheapest kit on the market @ £6.50! Divide by 10 prescaler which will raise the upper limit of your counter to 150MHz plus (typically 200MHz). Small, and comes with case.

**ANTENNA MATCHING UNIT** — the only kit on the market. Suitable for SWL's or QRP (up to 5 watts). Covers 1.5MHz, and intended for end-fed antennas or G5RV types. Match your aerial to your Rx and get more signals through. Easy to build and complete with case. £25.32.

**SIX METER CONVERTER** — this one isn't available until December, but to whet your appetite it has a 28MHz i.f., is very sensitive, 20dB gain (variable) and easy to align. All coils prewound. PCB and components mounted on it are £14.00, or complete with diecast box and BNC connectors @ £19.00.

**LOW COST TRANSCEIVERS** — OUR MOST POPULAR kits with hundreds sold. Two versions — the DSB80 for 3.5-3.8MHz, and the DSB160 for 1.8-2.00MHz. Superb receiver (lots of people have been very complimentary about it) with on-board audio amplifier (1 watt). Double sideband (DSB) transmitter and CW with 3 watts or more output. VFO controlled and +12v operation. All built on one pcb and the kit is complete with slow motion drive, but no speaker or mic (crystal). Price for either kit is £37.45. We also have a punched case for the rig @ £21.65 including hardware, and if you want to go all the way, a Digital Readout (ready built and which will fit the case) @ £24.10 including mounting bezel. All three items for £77.00. IDEAL FOR BEGINNERS or QRP enthusiasts, comprehensive instructions are included. DISCOUNTS for Club purchases of 5 or more.

**GET ON TO HF WITH OUR TRANSCEIVERS** — if you have a 2 metre multimode transceiver, then you can use all its facilities (memories, scan etc) on the HF bands BOTH TRANSMIT AND RECEIVE. We have two versions, one for 160/80 & 40 metres, and the other for 20, 15 & 10 metres. Either version just plugs in to the VHF rig, and the unit converts to 2 metres on receive, and down to HF on transmit. RF sensing for changeover avoids any mods to your rig. Very sensitive (average is <0.5uV at HF when used with most 2M rigs) and offers 2 watts minimum on Transmit — usually 3 watts (any mode your 2M rig has). compact unit built on 2 printed circuit boards. It also offers direct frequency translation from your VHF rig dial i.e. 14.213=44.213MHz. Kits come complete with the 3 crystals required. Priced at £72.75 for the 20-10M version, and £74.00 for the 160-40M type. (pcb pair only for either version @ £8.50).

**PROJECT OMEGA** — we have had an overwhelming response to these kits for a High Performance HF Transceiver, as being described in this magazine, and over 100 people are well into constructing it. It's a bit too complex to describe in full, but offers all HF bands in 1MHz segments, and most of the facilities found on far more expensive rigs. Intended for full break-in CW, but SSB option also available. If you would rather know what goes on in a Black Box, then try building this project. We would not suggest that raw beginners attempt building it though! It is not cheap, but you should be proud of the result. Briefly, kits available so far are: Central IF Processing Unit (69.50), Preset selector (11.00), Notch Filter (11.20), Active Filter (15.45), Synthesised VFO (104.00 inc crystals), Frequency Display (31.00), QRP PA (21.00), Logic/Antenna Switch (solid state — 15.45) and Low Pass Filters (29.50). To come are the SSB adaptor, 100W PA, FM and AM units, VHF transverter, In-Line SWR bridge, and a ready punched and screened case. Diecast boxes for modules are available separately. PCB's are also available separately for all modules. Full instructions and corrections included. We have a MAILING LIST/NEWSLETTER for this project — ask to be put on it if you are interested.

**70CM PREAMP** — a low noise, very small preamp which could be built into most rigs if needed. Either built @ £7.90 or a kit @ £5.90.

**2 METRE PREAMP** — again, very small and low noise. Kits at £4.50 or ready built for £6.50. Ideal for Phase III satellite reception.

All prices include VAT & Post/Packing. Allow 1-4 weeks for delivery if not ex-stock. All kits are complete with components, pcb's (drilled and tinned), wire and comprehensive instructions. Alignment/debug service available. EXPORT — please write for prices. CASH WITH ORDER — MAIL ORDER ONLY. Catalogue and more details on receipt of s.a.e. (large), or phone us.