

(a)

Fig.7. Suggested front panel layout.



(b)

Fig.8. Suggester rear panel layout.



a nominal quarter wave of wire thrown over a tree (ie 20m), with another quarterwave laid out on the ground as a counterpoise. Carry a much shorter length of wire with a crock clip on one end for using barbed wire fences and other 'natural structures' for a counterpoise when out 'in the field'.

By all means go for a full size dipole fed with thin coax, but trying to erect a dipole without proper supports can be interesting in the extreme!

Component Suppliers

Toroids:

Cambridge QRP Components 340 Rookery Close St Ives

Cambridge PE17 4FX

QRP Calling freq crystals: Golledge Electronics Merriott Somerset TA16 5NS

Please send SAE with enquiries.

Fig.5. Tuning led 'truth table'.

Lx and Cx

To save cluttering the circuit diagram (Fig.1) Lx and Cx are drawn merely as variable components.

Lx comprises 30t of 24 swg PVC covered wire, tapped every three turns. This is wound, like L2 on a T-50-2 toroid (Fig. 2). Dress the taps down the side of the toroid such that they solder directly onto the pins of a 12 position, single-pole rotary switch. Fig. 3.

Cx is another 12 position, single-pole rotary switch, selecting a range of miniature ceramic capacitors(Fig. 4).

Parts List

Resistors

(All ¼ W) R1 100k

R2,6 1k R3 100R R4 10k

R5 560R R7.8 470R

RV1 470R min trimpot RV2,3 1k min trimpots

Capacitors All ceramic

C1 82pF C2.3.4 150pF

C5,12,13 1nF C6,8 100n C7.9 10n

C10,11 820pF Cx See text

Inductors

- L1 6t 30swg enamel copper wire on ferrite bead
- L2 20t 24swg pvc/ptfe covered single stranded connecting wire wound on T-50-2 toroid
- L3 See text

Semiconductors

Q1 BC108

Q2,4,5 Any small Si npn Q3 VN66AF Power fet

ZD1 5.6 Zener 100mW D1,2,3,4 1N4148 or similar D5,6 Leds (one red, one

green)

Miscellaneous

phono socket.

SW2 on-off-on min toggle SW3 on-off min toggle SW4 pole 2-way toggle Suitable case, 2 BNC sockets,

LOAD	Current Led	Voltage Led
Open Circuit	Out	Very Bright
High Impedance	Dim	Bright
Medium Impedance	Bright	Bright
Low Impedance	Bright	Dim
Short Circuit	Very Bright	Out