

PHILIPS

“ PERSONIC ”

Model LIG75T

General Description: Seven-transistor, pocket portable receiver. All components, together with batteries and loudspeaker, are mounted on a paxolin plate (conventionally wired), and sockets for the connection of high-impedance headphones are included.

Power Supply: 6 volts (four 1.5 volt cells, Type D14, U12, V0030 or V0028). No signal consumption 6-9 mA.

Waveband: M.W. 185-580 m. only.

Transistors: (Tr1) OC44; (Tr2) OC45; (Tr3) OC45; (Tr4) OC71 (Tr5) OC71; (Tr6, Tr7) Matched pair OC72; (X1) OA95.

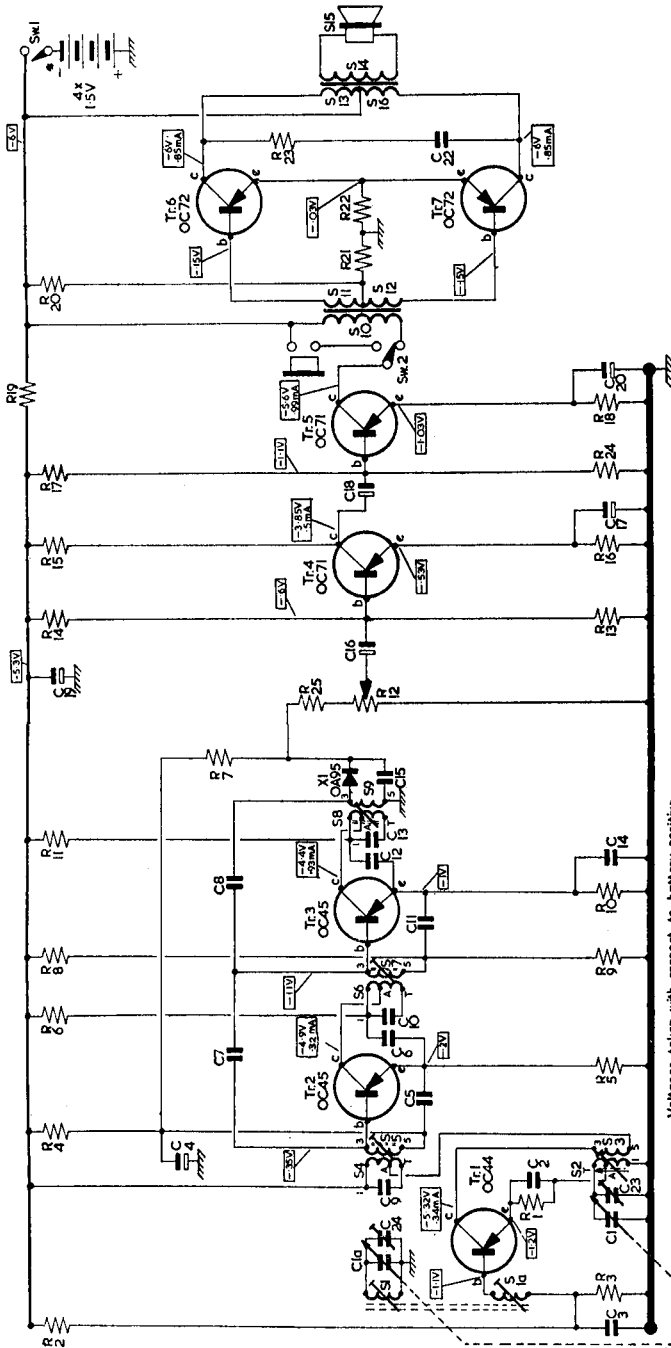
Alignment Procedure: Disconnect loudspeaker and connect output meter in parallel with a 5-ohm load resistor across leads. Output level of 50 mW. Trimming tool can be made by cutting slot in end of insulated No. 10 knitting needle.

I.F.: With gang fully open, inject a 470-kc/s. signal to base of Tr1 via a 0.047- μ F. capacitor and adjust S8, S6 and S4.

R.F.: Inject signals by winding two or three turns of wire round the “Ferroceptor” rod aerial and connecting the generator lead to one end of the wire. Turn gang to maximum. Inject a 512-kc/s. signal and adjust S2. Turn gang to minimum, inject a 1630-kc/s. signal and adjust C23. Repeat sequence until calibration is correct. Inject a 600-kc/s. signal, tune to signal and adjust S1/S1a. Inject a 1500-kc/s. signal, tune to signal and adjust C24. Repeat as necessary.

Removing Case: Remove rear panel (coin-slotted screws). Remove knurled screw in centre of scale, tuning knob, spring washer, felt washer and scale. Remove three countersunk fixing screws under scale and slide receiver out of case.

Servicing Notes: The usual precautions should be taken to prevent the application of excessive heat or voltages to the transistors.



Voltages taken with respect to battery positive using a 20,000ΩV voltmeter.

CIRCUIT DIAGRAM—PHILIPS "PERSONIC" MODEL LiG75T

- Capacitors.**
- C2 3,300 pF.
 - C3 47,000 pF. (10%)
 - C4 25 (6 v.)
 - C5 47,000 pF. (10%)
 - C6 47,000 pF. (10%)
 - C7 54 pF. (4%)
 - C8 18 pF. (2%)
 - C9 91 pF.
 - C10 91 pF.
 - C11 47,000 pF. (10%)

- Resistors.**
- R1 3.3k (5%)
 - R2 12k (5%)
 - R3 3.3k (5%)
 - R4 3.3k (5%)
 - R5 590 (5%)
 - R6 8 (6 v.)
 - R7 8 (6 v.)
 - R8 80 (6 v.)
 - R9 8 (6 v.)
 - R10 47k (5%)
 - R11 3.3k (5%)
 - R12 12k (5%)
 - R13 3.3k (5%)
 - R14 3.3k (5%)
 - R15 4.7k
 - R16 15k (5%)
 - R17 4.7k (5%)

- R18 1k (5%)
- R19 220
- R20 3.6k (5%)
- R21 100 (5%)
- R22 10 (5%)
- R23 270
- R24 3.3k
- R25 680

